# CFF Documentation

## Documentation of Justification for Impact Fee Mitigation

For the

## CITY OF MODESTO

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# Chapter I
# INTRODUCTION AND SUMMARY

## OVERVIEW

Community Facility Fees (CFF) is a program whereby new development in Modesto contributes to the costs of the public facilities necessary to accommodate it, thus mitigating its impact. The City of Modesto has the power to implement this program on constitutional grounds, but it must be implemented consistent with constitutional protections, including those to which the U. S. Supreme Court called attention in the Nollan and Dolan decision, and with the regulations in Sections 66000 *et sec* of the California Government code.

The imposition of development impact fees requires identification of the facilities to be provided and the fee amounts imposed must not exceed the cost of the necessary facilities. To fulfill this requirement the City has undertaken a study to identify the facilities needed and their costs, similar to studies undertaken in 1988-89 and 1997-98. This report describes the study and its findings, providing a basis for the City Council and the Modesto Community to update the facilities to be constructed and the fee amounts.

The preparation of the CFF program described in this report is a result of nine months of work. A "task force" guided the preparation of information regarding the public facilities to be in the CFF program. Representatives of each department using public capital facilities in the provision of its services — engineering and transportation, fire, parks, police, operations and maintenance — participated in the task force meetings whenever their facility needs were being considered. Representatives of the Building Inspection Department, the City Attorney's office, the City Manager's office, the Finance Department, and the Community and Economic Development Department were members of the task force. Finally, staff of Town Hall Services and Omni-Means, Inc., the consultants to the City on the update, were members of the task force.

The information prepared by the various City departments and the consultants was put in the form of decision packages. These were considered by the Finance Committee in both regular meetings and in special public meetings called specifically to review the CFF information. These decision packages are available as a supplemental report, *Information Details*. After revisions under the direction of the Committee, the packages were forwarded to the City Council with the recommendation that the Council consider and adopt an updated CFF program.

This report is provided so it can be reviewed and considered by the City Council and the citizens of Modesto. Assuming the Council adopts an update to the present program, this document, together with all of its exhibits, appendices, and supplemental reports, will be the document justifying its decision.

## STUDY PROCEDURE

The procedure of designing this capital facilities fee program was composed of the following steps:

(1) projecting residential and commercial/industrial development;

(2) identifying the facilities necessary to accommodate this development;

(3) estimating the costs of these facilities;

(4) equitably allocating these costs among types of development;

(5) determining the appropriate fee schedule.

**Development Projections**

This CFF study was undertaken from the perspective of the development that would occur in the CFF study area and the facilities necessary for this growth. The CFF study area is the area in the City's General Plan, with the exception of a couple of small areas that the City Council has indicated are unlikely to ever become part of the City of Modesto. The unincorporated community of Salida is the most important of the areas in the General Plan but not included in the CFF study area; the remaining area not included is Kiernan/Carver North. An area essentially equivalent to the General Plan area was chosen for several reasons. The General Plan area is that area for which the City legally must plan. The General Plan is adopted City policy; its land use designations provide a basis for projecting the type of development that will occur. The City's traffic model provided information about the street improvements needed for buildout of this area. Finally, the study area is large enough to avoid distortions that could result from analysis of the needs of only growth in a small area; most of the facilities used by growth in a small area would be located outside of the area and the majority of the need for facilities in that area would result from growth outside of it.

The need for facilities to accommodate buildout, rather than development over a specified period of time, e.g. a decade, was selected for similar reasons. The City's General Plan was based on buildout forecasts; addressing facility need's for a shorter period would have required not only City-wide growth projections, but growth projections for small areas and a traffic analysis of the facilities needed for this pattern of development. And the extent to which the period's development contributed to the need for longer term projects and the use longer term development would make of facilities necessary for near term growth would be difficult to consider.

The land use designations and the traffic model information were analyzed and the characteristics of the development that would likely take place in the CFF study area at buildout were determined. The amount of residential development in terms of number of land area, units, and population were projected. The population of the City is projected to increase from about 198,600 at the present time to about 371,000 when and if buildout of the total area were to take place. Similarly, the amount of commercial/industrial development was projected in terms of land area, building area and employment. Employment is projected to increase from the present 71,000 employees to a total of 293,000 at buildout.

It should be understood that, while the buildout of the CFF study area is perhaps the most credible scenario for the calculation of fees, the scenario does not have to play out completely for the fees to be reasonable. In particular, the entire study area will probably not be annexed into the City, at least within a foreseeable time frame. The scenario is reasonable, however, as essentially all of this area will be developed, public facilities to serve it will be needed, and almost all of it will be within the City of Modesto.

**Facilities Needed**

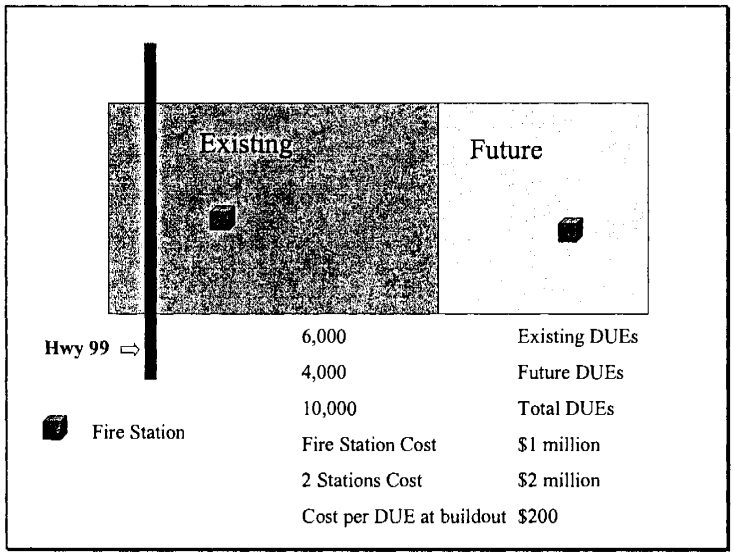
The determination of the facilities needed by each department to accommodate new development was, as noted above, a joint effort of City staff of that department, the consultant team, the task force and the Finance Committee of the City Council. The facilities needs expressed in this report include input from all of those participating and for the most part reflect a consensus among them.

There are two alternative approaches to determining the facilities needed to serve projected development. Each is used as appropriate in this study. One is to calculate directly the facilities impacts of new development. The additional streets that will be needed to maintain appropriate traffic standards is the most important example. This approach is often referred to as the marginal approach.

In most cases, it is more appropriate to picture the facilities that will be needed to serve the City at buildout and then to calculate new development's appropriate share of this total. The new City Hall is a good example, as it will serve not only the present City, but also, with some additional space, future development to a City the size of General Plan buildout. As another example, the Fire Department's resources are utilized as a system, with carefully designed involvement by multiple stations in every structural fire. Police facilities are also analyzed as a total operation serving both existing and new development. This approach is sometimes termed a systems approach.

Because of the importance of this concept, it is worthwhile to demonstrate the calculations in a simple example. Figure I-1 shows a small city with one existing fire station on the more developed side of town with another station needed as development is spreading over the other half of the city. At a per station cost of $1.0 million, the total cost of the system will be $2.0 million. Allocating this cost among 10,000 single family home equivalents (among development equal in the need for fire services of that number of single family homes) yields a cost of $200 per home, which could justify an impact fee of that amount. It should be noted that it would be unfair (and illegal) to allocate the $1.0 million cost of a second station solely to the 4,000 home equivalents remaining to be constructed, as existing homes already contribute to the need for the new station.

**Figure I-1**
**Fire Stations**




*Note: A DUE is the service need resulting from one single family detached home (See Chapter II).*

Whichever approach is used, facilities standards play a major role in the determination of needed facilities. Sometimes the standards are "direct," such as the example of neighborhood park area per 1,000 residents. In other situations, the standard is less direct, as in the Fire Department, where the facilities needed are determined by the standard of a response time of six minutes or less on 90 percent of calls. The standards relevant to facilities for each department were discussed extensively with the task force and the Council Finance Committee and attention is called to them in the chapters describing the facility needs of each department.

**Cost Estimates**

The cost estimates for the needed facilities come from several sources. In a few cases they are the budgets for facilities about to be constructed; fire stations and park improvements are examples. In some cases they came from a study; the planning for corporation yard facilities is an example. In some cases they reflected cost analyses by department staff; in almost all of these cases they were based on actual costs of comparable structures or equipment. Cost estimates for fire stations and fire engines are examples.

The estimates of street improvement costs are by far the most critical of cost estimates. The costs of street improvements constitute the majority of the costs of needed facilities. Even more important, they can differ significantly depending on assumptions regarding how the improvements will be made in circumstances where some of the desired right-of-way is already developed. The majority of the cost of this study was devoted to the estimation of the costs of street improvements, including preliminary designs for each of the 257 intersections and road segments included in the CFF program.

All of the costs are present construction costs; yet, the facilities will be built over the next couple of decades, presumably at gradually inflating costs. It would be an almost impossible task to estimate when each facility would be constructed and its inflated cost at that time. Even if this information were available, it would still be more equitable to base current fees on current costs. The problem of inflating costs in the future is met by escalating the cost impact amounts annually by an appropriate index of inflation. The City has used, and presumably will continue to use, the Engineering News Record construction cost index for the San Francisco Bay Area. The cost of land is a major share of the cost of needed facilities. If history is a guide, land costs will continue to escalate faster than the cost of construction. If the CFF fees are increased by this inflation index, they will probably gradually fall below the actual costs. It is thus likely that development will gradually be paying a little less than the actual costs (rather than being overcharged) until the next CFF update.

**Equitable Cost Allocation**

One aspect of cost allocation has already been described. **The cost of the share of facilities needed by existing development is not included in the cost impact of new development, whether it is the share of a system wide facility, such as the City Hall, or existing deficiencies, such as undeveloped neighborhood parks.**

The principal task referred to here is the allocation between different types of development (residential and commercial/industrial) and, eventually, to the development included in each individual building permit. The principle governing the analysis is as follows:

> For each type of capital facilities, each type of development is analyzed as to whether is contributes to the needs for such facilities and, if so, the relationship between the amount of that type of development and that type of facilities.

Three different allocations are used to apportion costs among types of development:

> Parks and Air Quality. The first method of allocation is used when facilities are necessary essentially because of residential development; therefore, their costs are appropriately allocated to residential development based on the average number of residents. Parks and recreation and air quality facilities are the only categories of facilities allocated in this fashion. The parks and air quality components of the CFF for various housing types is based on the average number of residents in each type of housing: single family detached units, and multiple family units.
>
> Other Facilities (except Transportation). All other facilities—for police, fire, general City functions, etc.—are needed to serve both residential and commercial/ industrial and are therefore allocated between them. Research findings generally conclude that residential development contributes significantly more than commercial/industrial development to the need for these facilities, i.e., that a resident should be weighted more heavily than an employee in estimating the need for services. The calculations in this report are based on the assumption that the impact of an employee is 40 percent of the impact of a resident. (This relationship is discussed more fully in Chapter II.) Using this ratio, the cost impact (per person and per employee) is determined. The fees on residential developments for these facilities are determined based on the number of residents in each housing

unit type, the same as for the parks component. The CFF schedule for non-residential development includes three commercial/industrial categories: office and other high density, retail and other medium density and industrial and other low density. The fee is calculated for each based on the density of employees times the cost impact per employee.

Transportation. Transportation related facilities are allocated based on the number of trips generated, whether the type of development is residential or commercial/industrial. In other words, the total cost is allocated based on the trips generated by each project determined by its land use type. The rates of trip generation are expressed in terms of units for the types of residential development and in terms of square feet of space for about two dozen categories of non-residential development and the fee amounts are expressed in the same terms. It is fortunate that a good indicator of contribution to the need for street facilities is available, as they are by far the largest share of the costs.

## FACILITIES NEEDED FOR NEW DEVELOPMENT

### Fire

Fire facilities at buildout will total 15 stations, including existing city stations and new stations built in the future. (The Salida station is not included.) Maintenance facilities, vehicles and equipment will be added as well, commensurate with the future level of fire prevention and emergency response needs.

The fire department operates as a system in which stations and their vehicles provide backup for neighboring areas beyond the immediate response radius. Similarly, maintenance and training facilities support the system as a whole. Buildout facilities needs are allocated evenly to existing and new development using a system-wide approach.

The fire department presently has only a modest existing deficiency under the allocation method of this analysis. New developments share of the system's cost is $17.4 million, including future annexed stations. The fee per DUE is $255.

**Police**

Until the construction of the new police building, completed in the year 2000, the Police Department was severely short of space. Its ability to house its current officers and support staff is much improved. The City is deficient, however, in that police staffing is far below the level deemed necessary as the City is changing from a modest sized town in a remote agricultural valley to a larger city on the periphery of a very large metropolitan area. The City Council has indicated its intent to raise the level of police staffing. Housing a larger police force results in a higher cost and hence higher fees for new development. However, the portion of the facilities needed to house existing development's share of the additional staff cannot be made the responsibility of new development; it is the major cause for the large existing deficiency in police capital facilities the City must acknowledge.

Subsequent additions will be necessary, including a parking structure, to accommodate buildout needs. These needs are calculated on a space standard of 263 square feet per department employee; at least one national standard is 300 square feet per employee.

Existing and new development will benefit similarly from the aggregate police facilities at buildout. Accordingly, the future inventory of buildings and equipment (primarily vehicles) is allocated on a system-wide basis, assigning new development a share of cost proportional to its share of buildout DUEs. New development's share of facilities at buildout is $56.7 million, and the fee per DUE is $830. There is a significant deficiency in police facilities, to a large part due to the intent to increase the staffing standard.

**Parks and Recreation Facilities**

Facilities managed by the Parks, Recreation and Neighborhoods Department include parks, open space, community centers, pools, sports centers and other recreational resources. The City standard is a total of three acres of parks, neighborhood and community, per 1,000 residents.

Park facilities are viewed from a system-wide approach, in which the estimated facilities are allocated to new development on the basis of buildout residential DUEs. The City currently has a large existing parks deficiency.

Facilities expansions are projected to total $348.1 million; the cost of the entire parks system at buildout is $506.4 million. New development's share of this cost is $194.2 million. The CFF fee is $4,384 per residential DUE

**General Government Facilities**

This category of facilities included in the "General Government" component of the CFF program includes (1) City Hall (the City's administrative space), (2) the City's corporation yard (the City's "industrial space"), and (3) other facilities supporting City operations not included in any other category.

The costs "not included in any other category" include the City's future information technology expansions. At buildout the City plans to provide an extensive fiber optic cable and wireless network to facilitate improved communications between city services.

Almost all general government facilities serve all development in the City; since it would be difficult to analyze them in terms of the facilities needed solely due to new development, they are analyzed as a citywide system. The government services clearly benefit both residential and non-residential development. Both types of development are therefore expected to contribute to their construction costs.

The buildout cost of the general government facilities is $72.0 million. Of this cost, $59.7 million consists of expansions of future facilities plus future costs incurred to service the City Hall bonds. New development's share of the total cost is $32.3 million, and the CFF fee is $474 per DUE.

**Air Quality**

The San Joaquin Valley air basin has been designated as a non-attainment area. This component of the CFF funds projects expected to mitigate the air quality impacts of new development. The projects include park and ride lots and a comprehensive system of Class I non-motorized bike trails.

The report identifies future facilities expansions with a cost of $65.0 million resulting in a total system value of $78.4 million. New developments' share of the cost is $30.1 million. A fee component of $679 per residential DUE will contribute new residential development's share of the total funding.

**Streets**

Street improvements are by far the largest component of the CFF program. The improvements needed had been projected as part of the preparation of the General Plan using the City's traffic model. These needs were evaluated in more detail in this study and extensive analysis was undertaken with regard to the costs of the improvements. This work was guided by a working committee of City staff and consultant team members.

It is necessary to view streets from a marginal perspective, as it would be very difficult to put a replacement value on the existing streets. The concept of traffic level-of-service is used to identify existing deficiencies that will be the responsibility of the City rather than new development.

The need for additional street facilities by buildout is determined based on trip generation projections for the land uses as specified in the City's General Plan. The allocation of the cost of the improvements is based on the same criterion, each type of development's responsibility for trips generated.

The portion of street costs to be funded with CFF revenues depends on the contributions required of developers of adjacent property. These contributions are referred to as exactions and adoption of this CFF program assumes implementation of the exaction policies included in the appendix.

A total of $1.19 billion was estimated as the cost of the street improvements identified in the General Plan exclusive of exactions. It is projected that $276 million of this amount will be funded from Federal and State sources, from direct developer exaction, and from the City funding existing deficiencies, for a net CFF cost of $914 million. The cost per single family home is $8,000.

**Public Transportation**

The Public Transportation component of the CFF funds the capital costs of the bus system operated by the City. Over $20 million in facilities is projected in necessary improvements. Federal transportation grants are expected to fund a proportion of some of the facilities. New development's responsibility of the remainder of these costs is estimated to be $10.4 million. The cost per DUE is $91.

**Fee Administration**

A modest expense is involved in the administration of the CFF program. The funding required is primarily for staff and consultants planning for the facilities needed to accommodate growth and monitoring the program's implementation. The fee component that funds such expenditures is set at 1.5 percent of the other fee components. The fee is set at this level with the proviso that it will be reviewed periodically to insure that it was neither too large nor too small an amount. There are plans to update the fees more often and to undertake more complete accounting of the funds. To date the revenue has just about matched the expenditures, as the current update study will exhaust the funds available. The annual review will provide an opportunity for continued review of the adequacy of this amount.

# CFF FEES

## Cost of Needed Facilities

The costs of the facilities needed to serve the new development anticipated in the City's General Plan is shown in Table I-1. The total cost is $1.25 billion. Over 70% of this amount is in street improvements. Parks accounts for half of the remainder. This is the total cost responsibility of new development of funding facilities. This is not the entire cost required to fund needed public facilities. To maintain the citywide standard at buildout, there is an existing deficiency of about $200 million that will need to be funded from sources other than developer mitigation.

**Table I-1**
**Capital Facilities Fees Costs**

| Category of Cost | 2002-03 Update Study |
|---|---|
| Community Facilities CFF | |
| Fire | $ 17,387,000 |
| Police | 56,714,000 |
| Parks | 194,227,000 |
| General Government | 32,347,000 |
| Air Quality | 30,073,000 |
| Subtotal | $ 330,748,000 |
| | |
| Transportation CFF | |
| Streets | 913,800,000 |
| Public Transportation | 10,359,000 |
| Subtotal | $ 924,159,000 |
| | |
| Total | $ 1,254,907,000 |

## Fee Schedule

The cost impact of single family detached homes, the CFF that would have to be levied to fully mitigate its impact, is shown in Table I-2 and I-3. The mitigation from each single family home

that the City would have to recover to fund the CFF improvements is $14,934. This amount is compared in the table with the current CFF. The cost impact far exceeds the current fees.

**Table I-2**
**CFF Full Recovery Costs for Single Family Detached Homes (DUEs*)**

| Category of Cost | Current Fees | 2003 Update |
|---|---|---|
| Community Facilities CFF | | |
| Fire | $ 158 | $ 255 |
| Police | 392 | 830 |
| Parks | 2,291 | 4,384 |
| General Government | 471 | 474 |
| Air Quality | 63 | 679 |
| Subtotal | $3,375 | $6,622 |
| | | |
| Transportation CFF | | |
| Streets | 3,088 | 8,000 |
| Public Transportation | 109 | 91 |
| Subtotal | $3,197 | $8,091 |
| | | |
| Sub Total | $6,572 | $14,713 |
| Administration | 105 | 221 |
| Total | $6,677 | $14,934 |

* A "DUE" is a single family home or other development with the same facility cost impact.

Table I-3 shows the fees schedule necessary for full recovery of capital facilities costs associated with the three categories into which commercial/industrial development is broken out for the Community Facilities CFF.

**Table I-3**
**CFF Fees for Non-Residential**
**Per 1,000 Square Feet**

| | General Office | Medium Size Retail* | Manufacturing, Industrial |
|---|---|---|---|
| Community Facilities | $ 644 | $ 386 | $ 276 |
| Transportation | $8,125 | $12,267 | $3,150 |
| Administrative | $ 132 | $ 190 | $ 51 |
| Total | $8,901 | $12,842 | $3,477 |

* 50-100,000 square feet.

The full fee schedule for specific land use types is shown below in Table I-4.

**Table I-4**
**Fee Schedule for Specific Land Use Categories**

| **Residential (per unit)** | **Fee** |
|---|---|
| Single Family | $14,934 |
| Multi Family | $9,789 |
| Senior Housing | $7,754 |
| | |
| **Non-residential (per 1,000 sq. ft.)** | |
| Hotel/Motel (per room) | $4,958 |
| Retail | |
| <50,000 | $15,426 |
| 50-100,000 | $12,842 |
| 100-300,000 | $10,873 |
| >300,000 | $10,158 |
| Medical Office | $19,866 |
| General Office | $8,901 |
| Hospital | $12,519 |
| Daycare | $7,195 |
| Church | $2,032 |
| Nursing Home | $2,679 |
| Business Park (Service) | $6,345 |
| Business Park (Manufacturing) | $3,934 |
| Industrial (Manufacturing) | $3,477 |
| Industrial (Warehousing) | $2,523 |

**New Information**

The CFF program is, as required by State law, reviewed each year. The fee schedule should be adjusted at the time of this review if new information suggests such changes are appropriate. Inflation is one type of information that will indicate appropriate changes in the fee schedule. It is anticipated that the fee amounts will be increased (or decreased) each year to reflect inflation (or deflation).

The City's annual review of its Capital Improvements Program (CIP) is another source of such information. The CIP includes projects planned for construction/purchase over the next ten years. The funding for each, including any portion to be funded by CFF, is identified. Discussions about and changes in the CIP may indicate changes in the facilities needed to accommodate new development. Furthermore, the actual cost of capital projects will either confirm CFF cost estimates or suggest that some adjustment is appropriate. It should be understood that the costs of individual projects or even a half dozen projects are not necessarily an indication that the costs should be adjusted. Streets, for example consists of several hundred projects, each with some different characteristics yet almost all with the cost estimated based on a prototype estimate. In some cases a single project can indicate that some cost assumptions need to be revised. In other cases, it is the gradual appearance of a pattern that will be the key.

The majority of the information on which the updated CFF program is based comes from the departments that provide the services. City departments sometimes prepare (or have prepared) studies as to the facilities that will be needed and their costs. The study analyzing corporation yard needs is an example. When such studies are finalized the information should be used to adjust the CFF schedule as appropriate.

Finally, new information about alternative funding sources could indicate a change in the fee schedule. The most obvious example is the passage of a sales tax for street improvements. Some improvements currently in the CFF program would be funded from such a tax, necessitating changes in the fee schedule.

# Chapter II
# GROWTH PROJECTIONS

The amount of new development in a community bears a relationship to the facilities expansions required, as new homes and their residents and business activity and its employees contribute to the demand for public services. In this chapter projections of new development are provided as a basis for the public facilities needs discussed throughout the CFF report.

## INTRODUCTION

Information about growth is needed for impact fee documentation. The amount and nature of new development indicates the amount and cost of facilities needed in the future. Information about existing development is also necessary. For some facilities it is used to determine present service standards; in other cases it is also needed to calculate the share of facility costs that are not the responsibility of new development.

Modesto's General Plan is used as the basis for projecting growth to maintain consistency among the City's planning efforts. As was explained in the first chapter, the CFF study area is almost all of the land area in the General Plan. Only a couple of areas, principally the community of Salida, are not included. All the land within the CFF study area boundaries is assumed to be developed. Although the potential for development exists beyond the General Plan boundaries, the General Plan level of development represents more than a doubling of the existing City of Modesto; it thus provides a sufficient indication of facility needs for many years into the future. The question of the CFF study area "buildout year" is taken up later in the chapter.

After a discussion of the geographic considerations relevant to this study, this chapter reviews the existing level of development in the City of Modesto and the remainder of the CFF study area, followed by projections of residential and non-residential development. The growth projections rely on a variety of available data sources, including information contained in the City's General Plan and related documents, as well as State and Federal Census information. The projections developed here are coordinated with the numbers used in the City's traffic model that, in turn, is a representation of the streets and traffic aspects of the General Plan. The projections used in the traffic model are discussed in the Streets section.

## STUDY AREA BOUNDARIES

Several geographic designations are relevant for this study. From the perspective of the General Plan, growth is divided into two principal areas. First is the current incorporated area of the City of Modesto. This area is covered under City zoning land use designations such that future development patterns can be reasonably foreseen.

The remainder of the study area consists of annexation areas, currently unincorporated land assumed to be annexed to the City at some time in the future. The General Plan indicates land uses and acreages for comprehensive planning districts comprising the annexation areas. This information is used to project growth in these areas.

The growth scenario constructed for fee purposes, therefore, observes the following geographic categories:

Present City
- Existing Development
- New Development

Annexation Areas
- Existing Development
- New Development

Existing development within the existing City boundaries generally constitutes the City of Modesto's existing service area. As the General Plan area builds out, it is assumed that the City will become responsible for serving these areas, and they are included in the future year service demand. Some development has already occurred before becoming part of the City; much of this development in the annexation areas would not have paid CFF fees (no provision exists for retroactive development fees). On the other hand, unincorporated existing development in some areas could possibly bring some facilities, such as a fire station (station 10 owned by the Industrial Fire District) or a park, with it as it annexes. To the extent that facilities are lacking in the annexation areas, they will become a deficiency to the City.

# EXISTING DEVELOPMENT

Existing development estimates are sometimes useful for determining existing service levels, though they are prepared primarily to provide a basis for allocating public facilities costs in situations where these costs are appropriately shared between new development and the existing City. Development is estimated in terms of housing units and population for residential, and employment for non-residential development. Development estimates are prepared for both the existing City limits and the developed portions of the growth areas presently outside of the City of Modesto.

## Within the Present City Limits

Table II-1 shows existing population and housing units. According to the Planning Department, Modesto's total population is 198,600. Housing units totaled nearly 70,000. Employment in the City of Modesto is also shown in the table, estimated at 71,000 according to the State Economic Development Department's estimates and data from the Planning Department.

**Table II-1**
**Existing Development Within the Present City Limits**

| | |
|---|---|
| **POPULATION** | |
| Population | 198,600 |
| | |
| **HOUSING UNITS** | |
| Single Family | 53,922 |
| Multiple Family | 15,926 |
| Total | 69,848 |
| | |
| | |
| **EMPLOYMENT** | |
| Employment | 70,898 |

*Sources: California State Department of Finance; State Department of Economic Development; Town Hall Services.*

## Annexation Areas

Some development exists in parts of the CFF study area outside of the City limits. For the purposes of determining existing service standards, these areas need to be excluded since they are not presently the responsibility of the City. Eventually, however, the General Plan assumes that

the unincorporated pockets of the planning areas would be absorbed into the City of Modesto and served by City departments. Estimation of the future facilities needs, therefore, should take into account the demands from the existing unincorporated development.

**Table II-2**
**Existing Development in Future Annexation Areas**

| | |
|---|---|
| **POPULATION** | |
| Population in Annex Areas | 29,900 |
| | |
| **HOUSING UNITS** | |
| Single Family | 6,984 |
| Multi Family | 2,016 |
| Total | 9,000 |
| | |
| **EMPLOYMENT** | |
| Employment in Annexation Areas | 30,756 |

*Sources: Modesto General Plan and related background documents; Town Hall Services.*

Existing development in these areas is estimated in General Plan background documents at around 9,000 housing units, with a corresponding population of 29,900. Substantial employment exists outside of the City limits. According to background information to the General Plan, employment in this area totals 30,800, including jobs at the Gallo facilities and at the businesses in the Beard Industrial Tract. Table II-2 summarizes the estimated development, population and employment, outside of the City limits.

## GROWTH PROJECTIONS

This section anticipates new development in the City of Modesto. Buildout development capacity for residential and non-residential development are estimated from General Plan information; these are, in other words, the development levels at buildout within the CFF study area boundaries. The growth is the difference between the present level of development and development at buildout.

# Chapter II
# GROWTH PROJECTIONS

The amount of new development in a community bears a relationship to the facilities expansions required, as new homes and their residents and business activity and its employees contribute to the demand for public services. In this chapter projections of new development are provided as a basis for the public facilities needs discussed throughout the CFF report.

## INTRODUCTION

Information about growth is needed for impact fee documentation. The amount and nature of new development indicates the amount and cost of facilities needed in the future. Information about existing development is also necessary. For some facilities it is used to determine present service standards; in other cases it is also needed to calculate the share of facility costs that are not the responsibility of new development.

Modesto's General Plan is used as the basis for projecting growth to maintain consistency among the City's planning efforts. As was explained in the first chapter, the CFF study area is almost all of the land area in the General Plan. Only a couple of areas, principally the community of Salida, are not included. All the land within the CFF study area boundaries is assumed to be developed. Although the potential for development exists beyond the General Plan boundaries, the General Plan level of development represents more than a doubling of the existing City of Modesto; it thus provides a sufficient indication of facility needs for many years into the future. The question of the CFF study area "buildout year" is taken up later in the chapter.

After a discussion of the geographic considerations relevant to this study, this chapter reviews the existing level of development in the City of Modesto and the remainder of the CFF study area, followed by projections of residential and non-residential development. The growth projections rely on a variety of available data sources, including information contained in the City's General Plan and related documents, as well as State and Federal Census information. The projections developed here are coordinated with the numbers used in the City's traffic model that, in turn, is a representation of the streets and traffic aspects of the General Plan. The projections used in the traffic model are discussed in the Streets section.

## STUDY AREA BOUNDARIES

Several geographic designations are relevant for this study. From the perspective of the General Plan, growth is divided into two principal areas. First is the current incorporated area of the City of Modesto. This area is covered under City zoning land use designations such that future development patterns can be reasonably foreseen.

The remainder of the study area consists of annexation areas, currently unincorporated land assumed to be annexed to the City at some time in the future. The General Plan indicates land uses and acreages for comprehensive planning districts comprising the annexation areas. This information is used to project growth in these areas.

The growth scenario constructed for fee purposes, therefore, observes the following geographic categories:

Present City
- Existing Development
- New Development

Annexation Areas
- Existing Development
- New Development

Existing development within the existing City boundaries generally constitutes the City of Modesto's existing service area. As the General Plan area builds out, it is assumed that the City will become responsible for serving these areas, and they are included in the future year service demand. Some development has already occurred before becoming part of the City; much of this development in the annexation areas would not have paid CFF fees (no provision exists for retroactive development fees). On the other hand, unincorporated existing development in some areas could possibly bring some facilities, such as a fire station (station 10 owned by the Industrial Fire District) or a park, with it as it annexes. To the extent that facilities are lacking in the annexation areas, they will become a deficiency to the City.

# EXISTING DEVELOPMENT

Existing development estimates are sometimes useful for determining existing service levels, though they are prepared primarily to provide a basis for allocating public facilities costs in situations where these costs are appropriately shared between new development and the existing City. Development is estimated in terms of housing units and population for residential, and employment for non-residential development. Development estimates are prepared for both the existing City limits and the developed portions of the growth areas presently outside of the City of Modesto.

## Within the Present City Limits

Table II-1 shows existing population and housing units. According to the Planning Department, Modesto's total population is 198,600. Housing units totaled nearly 70,000. Employment in the City of Modesto is also shown in the table, estimated at 71,000 according to the State Economic Development Department's estimates and data from the Planning Department.

**Table II-1**
**Existing Development Within the Present City Limits**

| | |
|---|---|
| **POPULATION** | |
| Population | 198,600 |
| | |
| **HOUSING UNITS** | |
| Single Family | 53,922 |
| Multiple Family | 15,926 |
| Total | 69,848 |
| | |
| | |
| **EMPLOYMENT** | |
| Employment | 70,898 |
| | |

*Sources: California State Department of Finance; State Department of Economic Development; Town Hall Services.*

## Annexation Areas

Some development exists in parts of the CFF study area outside of the City limits. For the purposes of determining existing service standards, these areas need to be excluded since they are not presently the responsibility of the City. Eventually, however, the General Plan assumes that

the unincorporated pockets of the planning areas would be absorbed into the City of Modesto and served by City departments. Estimation of the future facilities needs, therefore, should take into account the demands from the existing unincorporated development.

**Table II-2**
**Existing Development in Future Annexation Areas**

| | |
|---|---|
| **POPULATION** | |
| Population in Annex Areas | 29,900 |
| | |
| **HOUSING UNITS** | |
| Single Family | 6,984 |
| Multi Family | 2,016 |
| Total | 9,000 |
| | |
| **EMPLOYMENT** | |
| Employment in Annexation Areas | 30,756 |

*Sources: Modesto General Plan and related background documents; Town Hall Services.*

Existing development in these areas is estimated in General Plan background documents at around 9,000 housing units, with a corresponding population of 29,900. Substantial employment exists outside of the City limits. According to background information to the General Plan, employment in this area totals 30,800, including jobs at the Gallo facilities and at the businesses in the Beard Industrial Tract. Table II-2 summarizes the estimated development, population and employment, outside of the City limits.

## GROWTH PROJECTIONS

This section anticipates new development in the City of Modesto. Buildout development capacity for residential and non-residential development are estimated from General Plan information; these are, in other words, the development levels at buildout within the CFF study area boundaries. The growth is the difference between the present level of development and development at buildout.

## Residential

Tables II-3 and II-4 show the housing unit and population projections. Existing development, including that in the annexation areas, is discussed above. The General Plan identifies all of the development areas in the study area and provides indications of land uses and acreage for each planning area sufficient to estimate growth.

**Table II-3**
**Buildout Housing Units**

| | Single Family | Multi Family | Total | Percentage at Buildout |
|---|---|---|---|---|
| **Existing Development** | | | | |
| Existing City | 53,922 | 15,926 | 69,848 | 54% |
| Annexation Areas | 6,984 | 2,016 | 9,000 | 7% |
| | | | | |
| Subtotal | 60,906 | 17,942 | 78,848 | |
| | | | | |
| **New Development** | 33,506 | 16,809 | 50,315 | 39% |
| | | | | |
| **Buildout** | 94,412 | 34,751 | 129,163 | 100% |
| | | | | |

*Sources: Modesto Planning Department and Town Hall Services*

**Table II-4**
**Buildout Population**

| | Total | Percentage at Buildout |
|---|---|---|
| **Existing Development** | | |
| Existing City | 198,600 | 54% |
| Annexation Areas | 29,900 | 8% |
| | | |
| Subtotal | 228,500 | |
| | | |
| **New Development** | 142,321 | 38% |
| | | |
| **Buildout** | 370,841 | 100% |
| | | |

*Sources: Modesto Planning Department and Town Hall Services*

The annexation of 9,000 existing homes outside of the City boundaries will add 29,900 residents. Development of Modesto's growth areas is estimated to add 50,300 new housing units with a population of 142,300 in the existing City and planned urbanizing areas. All together, total development is estimated at 129,200 housing units with a population of 370,800 persons. The existing population in the City is 54% of the total future population. The estimated population in all existing homes, including annexations, is 228,500, represents 62 % of the total future population. The remaining 38 % is the 142,300 population projected to be residing in new development. This growth is significantly less than the current population in the CFF study area.

**Non-residential**

Non-residential development and employment are projected for the existing developed areas and for new development in Table II-5. Development is related to total land area assuming a land utilization of 80 percent to account for streets and other undevelopable areas and an average floor-area-ratio of 0.30-0.45. An average employment density of 300-900 square feet of building per employee is used to relate gross developed floor area to employment, depending on land use category of new development.

**Table II-5**
**Projected Employment**

| | Employment | | |
|---|---|---|---|
| | Existing Development | New Development | Total |
| **Within City Limits** | 70,898 | 51,937 | 122,835 |
| **Annexation Areas** | 30,756 | 140,330 | 171,086 |
| **Total** | 101,654 | 171,086 | 293,921 |

*Sources: Modesto Planning Department and Town Hall Services*

Development of new commercial and industrial space development is estimated to add approximately 192,000 employees. Including existing areas and annexation of areas within the general planning area, the buildout potential is estimated 294,000 employees. Relative to the existing employment in the City of 71,000, this represents an increase of 310%, though only a 190% increase above the employment in the CFF study area.

**Jobs-Housing Balance**

The population/housing and employment information above reflects the shift anticipated in the General Plan from Modesto as a city with a substantial out-commute (much of it to the Bay Area) to an urban center of its portion of the San Joaquin Valley. The common rule-of-thumb is 1.5 employees per household. The study area at the present time has a ratio of 1.3 employees per home. Growth per the land uses in the General Plan will result in 3.8 new jobs per additional home. At buildout, the ratio will be 2.3 employees per household. This information is summarized in Table II-6.

**Table II-6**
**Jobs/Housing Ratios**

| | Present | Growth | Total |
|---|---|---|---|
| **Employment** | 101,654 | 192,267 | 293,921 |
| **Household** | 78,848 | 50,315 | 129,163 |
| **Ratio** | 1.29 | 3.82 | 2.28 |

It is likely that the limited road capacity between Modesto and the Bay Area will limit the growth

in commuting to Bay Area jobs; more job opportunities in Modesto will limit the need for residents to look outside for jobs. However, whether the City can, or should, increase non-residential development to the extent assumed by the General Plan land use designations is a matter that needs to be investigated. The City plans to address jobs/housing balance in the soon to be undertaken General Plan update.

## NEXUS AND DWELLING UNIT EQUIVALENTS

**Nexus**

While it is clear in theory that new development results in the need for fire stations, parks, streets, etc., the calculation of fees depends on a reasonable quantification of this relationship. This relationship is not the same for all types of facilities. Parks are needed essentially to serve the residential population; fire stations, for example, are needed to serve both residential and non-residential buildings and populations. Streets is another category of improvements on which both residential and non-residential development depend, though information about trip generation provides a basis for precision in analysis of the relationship that is not available for other types of facilities.

The quantitative relationship between residential development and its need for public facilities, for all but streets and public transportation, is expressed in terms of population. In other words, the impact of different housing types can be calculated weighted based on their average occupancy. This choice reflects the strong role that population plays in determining service demands: the overwhelming majority of fire department calls are for medical emergencies and peoples lives are at risk in a fire; park adequacy versus overcrowding is based on the number of people using the parks; people cause the need for police services, either as perpetrators or victims, etc. Even where population is not directly related to the need for a public service, it is often a surrogate for the need: single family (detached) homes are larger and more valuable than apartments and also have a larger average occupancy.

Employment is similarly used as the indicator of need for non-residential services, with the impact of different type of development calculated based on their employment density. Again the purpose of protecting lives or just serving people supports such an allocation. Employment is also a "roughly proportional" indicator of the property protected. There is not a large difference in employment densities among land uses. Employment, and non-residential development in general, is unrelated to needs for some facilities. Parks are the primary example; even employer sponsored softball leagues primarily serve residents of Modesto. The same is true for Air Quality Mitigation facilities, which are primarily bike and hiking trails that offer an alternative for some recreational and reasonably short shopping and school trips.

The toughest call arises when both residential and non-residential development generate the need for public facilities. Research findings generally conclude that a resident should be weighted more heavily than an employee in estimating the need for the facilities. One perspective that contributes to this conclusion is that the non-working time of a resident is far greater than the working time of an employee. (Of course, a person can be both a resident and an employee in Modesto.) Another consideration is the role residents play in police and fire calls while patronizing non-residential businesses. We assume that weighting an employee at 40% of a resident is an appropriate balance; it is the weighting factor that has been used in Modesto's CFF program since about 1989.

Streets are another matter. Because extensive average trip generation factors are available from Institute of Traffic Engineering publications, all types of development can be analyzed in terms of the traffic each generates and, with suitable adjustments, its share of the costs based on this analysis. The availability of this information allows for a much more direct and precise allocation of costs than if the causal relationship were based on population and employment measures. This is fortunate because streets are by far the largest component of CFF facility costs.

**Dwelling Units Equivalents (DUEs)**

It is convenient to express amounts of development, whether they are residential or commercial/industrial, in terms of a common measure. The commonly used measure is a single family (detached) home - a dwelling unit equivalent (DUE). In the context of this study, therefore, we will be analyzing the impacts of development in terms of the equivalent number of single family homes that would have the same impact.

Other facilities are related to transportation needs. The overwhelming share of these, in terms of cost, are streets (including intersections). Public transportation facilities and improvements designed to enhance air quality are also included, the latter because traffic is the principal cause of key components of air pollution. Traffic impacts are calculated based on trips generated. A DUE for this category is therefore equal to the number of trips assigned to a single family detached unit. Calculations regarding the number of DUEs served by road improvements are set forth in the chapter on the Streets component of the CFF.

DUEs for facility needs related only to population and facility needs related to a combination of population and employment both depend on population. The DUE calculations therefore require an estimate of average household sizes. Single family detached dwelling units are projected to average 3.32 persons per household in the future. This calculates to about 3.21 persons per single family unit (accounting for vacancy at an average of 3.3%). The DUEs of other types of

residential units are calculated based on the average number of persons occupying the units compared to the average occupancy of single family detached units. Multiple family units (apartments and condominiums) are projected to average about 2.10 persons per household, based on data from the Planning Department. However, multi-family dwellings have a higher vacancy rate (assumed to be seven percent), and calculate to 1.95 persons per multiple family unit. Thus, we calculate that based on the projected number of residents in any given multi-family unit, each multi-family unit at buildout is weighted as 0.61 DUEs (1.95/3.21).

Table II-7 shows the calculation of existing DUEs in the City of Modesto. The numbers in the table only apply to existing development within the City limits, and are useful for determining service standards in later chapters. The first part of the table calculates service population by adding residential population to weighted employees. The second part of the table calculates DUEs by applying the single family household size and the occupancy rate to convert total service population to an equivalent number of single family detached housing units.

**Table II-7**
**Residential Development DUEs***

| | Existing Development | Annexations | New Development | Buildout |
|---|---|---|---|---|
| Residential Population | 198,600 | 29,900 | 142,341 | 370,841 |
| | *divided by* | *divided by* | *divided by* | *divided by* |
| Average SFD Housing Unit Occupancy** | 3.21 | 3.21 | 3.21 | 3.21 |
| | *equals* | *equals* | *equals* | *equals* |
| DUEs | 61,869 | 9,314 | 44,342 | 115,526 |
| *Round to* | **61,900** | **9,300** | **44,300** | **115,500** |

*Residential development DUEs, without any DUE's for non-residential development, are used for Parks and Air Quality analyses.
**Average household occupancy is 3.32 persons; occupancy rate assumed to be 96.7%, generating an average single family detached (SFD) housing unit occupancy of 3.21 persons.
*Source: State Department of Finance, Town Hall Services*

Future year DUEs are shown in the next table, Table II-8. The employee weights and occupancy relationships are applied to arrive at dwelling unit equivalents. Existing development applies to the existing City limits. Annexation areas are shown separately. The actual annexation number will probably be higher as some development continues in unincorporated areas before

annexations can occur. The amount of this development, however, depends on economic factors, as well as arrangements between the City and County, and is difficult to foresee. New development includes development within the existing city limits, and growth areas that are currently outside the City, but which will be annexed before development takes place. The existing development numbers in Table II-6 reflect annexation of unincorporated areas that are presently developed.

**Table II-8**
**Residential and Non-Residential Development***

| | Existing Development | Annexations | New Development | Buildout |
|---|---|---|---|---|
| Residents | 198,600 | 29,900 | 142,341 | 370,841 |
| Employees | 70,898 | 30,756 | 192,267 | 293,921 |
| Employee Weight | 40% | 40% | 40% | 40% |
| Weighted Employees | 28,359 | 12,302 | 76,907 | 117,568 |
| Total Service Population | 226,959 | 42,202 | 219,248 | 488,409 |
| | *divided by* | *divided by* | *divided by* | *divided by* |
| Average SFD Housing Unit Occupancy** | 3.21 | 3.21 | 3.21 | 3.21 |
| | *equals* | *equals* | *equals* | *equals* |
| DUEs | 70,694 | 13,145 | 68,292 | 152,132 |
| *Round to* | **70,700** | **13,100** | **68,300** | **152,100** |

*Total (residential and non-residential) DUEs are used for all facilities except Parks, Air Quality, Streets and Public Transportation.
**Average household occupancy is 3.32 persons; occupancy rate assumed to be 96.7%, generating an average single family detached (SFD) housing unit occupancy of 3.21 persons.
*Source: Town Hall Services*

## CONCLUSION

This chapter estimates the projected growth for the City of Modesto. The City's General Plan, and by extension the general plan traffic model, are used as underlying basis for the projections, supplemented with other available information where appropriate. The CFF study area boundaries are close to those of the General Plan, anticipating that all presently unincorporated

areas within the study area boundaries would be annexed as the City grows.

For the purposes of the fee study, existing and projected development are expressed in terms of equivalent single family dwelling units (DUEs). This permits (1) calculation of existing facilities standards and (2) allocation of the impacts and cost share to new development. Table II-9 summarizes the DUE estimates of this chapter.

**Table II-9**
**DUE Summary***

| **Buildout DUEs (residential and non-residential)** | | |
|---|---|---|
| Existing Development | 70,700 | 46.5% |
| Annexations | 13,100 | 8.6% |
| New Development | 68,300 | 44.9% |
| Subtotal | 81,400 | 53.5% |
| **Total** | 152,100 | 100.0% |

*DUEs calculated in this table are used for facilities other than Parks, Air Quality, Streets, and Public Transportation.
*Source: Town Hall Services*

# Chapter III
# FIRE

The purpose of the Fire component of the CFF is to fund an appropriate share of the capital facilities needed by the Fire Department to serve residents and businesses in the City of Modesto. Facilities needed by the Modesto Fire Department to serve buildout are the subject of this chapter. After an introduction of the Fire Department's functions and facilities, the chapter discusses the facilities needs and estimated costs. Allocation of costs follows with calculation of cost per DUE of new development.

The fire facilities cost allocation follows a system-wide approach. Although individual fire stations have a defined primary service area, the Fire Department operates as an integrated system with each station also providing services outside of its primary service area. Accordingly, costs are allocated on a system-wide basis, in which the facilities at buildout are assigned proportionally between existing and new development.

## OVERVIEW OF THE SYSTEM

The Modesto Fire Department provides fire suppression and emergency medical response throughout the City. In addition, the department presently contracts with the Industrial Fire District to protect the unincorporated industrial area, an area included in the CFF study area. Advanced life support medical response services is handled thorough a contract with a private company. Though fire prevention and suppression are critical functions, emergency services make up the large majority of the Department's calls.

The Department operates 10 fire stations. Station 14 is not included in the Department's count of capital facilities as it is located in Salida, an area that is not included in Modesto's CFF program area. Each of the stations is equipped with at least one fire engine; three stations carry extra vehicles and equipment. Station 8 has within its primary service area the Modesto airport, and is equipped with two crash-rescue vehicles. Station 5 has a second engine and is also equipped with a ladder truck. Station 1 is equipped with a ladder truck. Station 1 is also the location of the Department's administrative offices and equipment maintenance facility.

Station 9 was the last station built, completed in 1991 to add capacity to serve Empire North, part of Village 1 and surrounding existing development. The Department is in the process of planning to relocate Station 2. Station 10 is presently owned by the Industrial Fire District, but is operated by Modesto under the contract to serve the currently unincorporated industrial area. Other parts of Modesto are also in the primary service area of Station 10. The City also plans to construct a new Station 11 near Pelandale Avenue and Carver Road. Stations are staffed around-the-clock with three personnel per engine or truck, meaning that each vehicle has a total assignment of nine personnel covering three shifts.

The Department functions as a system in which station locations and vehicle assignments are designed to provide for multiple response capability and backup coverage. Each station has a primary service area within which it provides first response. At least two engines, thus usually at least one from another service area, respond to all structural fires. When two or more engines from one section of the City are responding to a fire, it is likely that an engine from further away will also be brought into that section to provide quick coverage. The adequacy of fire suppression and delivery of emergency services is closely related to response time. The Department targets a response time standard of 90 percent of responses within six minutes. The average response time is 4.5 minutes. In 1990 the department was upgraded from a class 3 to a class 2 Insurance Services Offices (ISO) insurance rating. The ISO rating is used to determine fire insurance rates; the improved rating results in savings to Modesto residents and businesses. This standard is clearly affected by distance and development density. The City will seek to optimize station locations and primary service areas to maintain the present standards.

Training is an important ongoing function of the Fire Department critical to its ability to provide services. The Department continues to invest in its training facilities and equipment. Under a joint powers agreement (JPA) with the Stanislaus county and Yosemite community college, Modesto has participated in the construction and operation of the regional training center. The Department's closed circuit television system and I-Net are maintained for instructional use as well.

## STATION STANDARDS

The Modesto Fire Department has updated its standard for current and future fire stations. The standard has been updated to provide adequate square footage for double-wide double-depth drive though apparatus bays, which improve response capability and allow the department to house multiple apparatus at each station. The updated standards also provide room for public meeting space, meet Americans with Disabilities Act requirements, and include separate gender separated facilities for male and female firefighters. Station 11 and the relocated Station 2 are

designed to meet the updated standard. These designs require approximately 7,000 square feet per station, housed on a land parcel about three-quarters of an acre in size.

Based on architectural estimates for Stations 2 and 11, the construction cost (not including design and furnishing) of stations at the 7,000 square foot standard is approximately $1.25 million. An additional 27% should be added for design, architectural and administration costs. The cost of furnishing a new station is about $121,000. The cost of land acquisition for a parcel within the city able to house a standard station is estimated at about $165,000 per acre. The total cost of a standard, furnished, 7,000 square foot station, housed on a three-quarter acre parcel, is projected at $1,832,500. This cost is assumed for new stations expected to meet Department standards. (Details about these cost items are included in a supplementry report *Information Details*.)

## EXISTING FACILITIES

A system-wide approach is taken to assigning fire department costs to new development. This involves assigning values to the existing capital inventory, determining future facility needs and their costs, and allocating the total facilities cost at buildout proportional to new and existing development. This section reviews the existing department capital and the cost of its replacement at current construction, last and equipment costs. The current Fire Department capital inventory is summarized in Table III-1 below. The cost items are grouped for fire stations, vehicles and other capital.

### Fire Stations

Eight of the Modesto Fire Department's stations are one-engine companies, equipped with a single fire engine. The Departments single engine stations do not meet its updated standard for station size. Most of these stations do not meet the department's standards for gender seperate facilities, ADA access, or drive through apparatus bays. The most recently constructed station, Station 9, is severely limited in its facilities due to the size of the parcel of land on which it is located.

As these existing stations do not meet the current Department standard, the cost of their replacement should not be equated with the cost of building a new station at the standard. The replacement cost of existing stations is discounted proportionally in relation to the size of the station. For instance, since a standard 7,000 square foot station has a cost of $1.83 million, an existing 3,500 square foot station would have a replacement cost of half that amount. The per square foot cost of fire stations is about $262 including all land, planning and construction. Existing station size and their corresponding replacement costs are shown in the table below.

**Table III-1**
**Existing Fire Stations**

| Station Number | Square Feet | Replacement Value |
|---|---|---|
| 1 | 16,187 | $0 |
| 2 | 1,600 | $0 |
| 3 | 3,976 | $1,041,000 |
| 4 | 5,358 | $1,403,000 |
| 5 | 7,738 | $2,026,000 |
| 6 | 4,496 | $1,177,000 |
| 7 | 2,775 | $726,000 |
| 8 | 4,668 | $1,222,000 |
| 9 | 3,158 | $827,000 |
| 10 | 5,148 | $0 |
| | | |
| Total Replacement Value | | **$8,421,000** |

*Source: City of Modesto and Town Hall Services*

In an effort to bring existing stations into compliance with the updated standards, the Department has determined that an additional 2,300 square feet would typically be necessary to meet the required standards. It has determined that future station expansion to meet standards is feasible in four of the eight existing single engine stations. Expansion and upgrade is not feasible in the other stations because of constraints due to land area and location. The cost of expansions to existing stations is included in the section that discusses future facilities costs.

The Station 2 relocation is not yet underway. Accordingly, Station 2 is assigned a replacement value of zero. Its future cost as a standard 7,000 square foot station is included in the section below. Station 10 also exists at this time, but is currently leased from the Industrial Fire Department. Therefore it currently has a replacement value of zero to the city. However its value is also included in the section below that discusses future capital, assuming that it would eventually become the property of the City.

The City of Modesto currently operates two ladder companies. Stations housing ladder trucks are larger than one-engine companies to accommodate both the engine and the larger truck. The two existing truck companies are large enough to meet the Department's updated size standards

for new and existing stations. Station 1 in Downtown Modesto totals 16,800 square feet, including the Department's administrative services and fire engine maintenance facilities. Station 1 was built in 1939, and is now in need of substantial renovation, specifically including seismic upgrades. The Department has estimated that it would cost approximately $5 million to rebuild Station 1 completely, along with an expanded administrative services area, together with renovating the Station's existing apparatus bay for use as an equipment maintenance and storage area. This is somewhat less expensive than the estimated cost of renovating and retrofitting Station 1 and separately providing new administrative and maintenance facilities. Accordingly, a zero existing value is assigned to the existing building. The estimated cost for the Station 1 rebuild is included in the section on future facilities costs. Station 5 also houses a ladder truck. Its replacement value is calculated commensurate to its size, based on the per square foot values determined above.

**Vehicles**

Vehicles include fire engines, ladder trucks, rescue and other special purpose vehicles, and staff cars. The mainstays of the Department vehicle fleet are the fire engines, at least one of which is located at each fire station. Presently the City of Modesto owns 14 fire engines. Eleven of these are front line engines, and the remaining three are held in reserve, used when the front line engines are down for repair or service. Only front-line engines are valued for CFF proposes; reserve engines are retired front-line engines that have been replaced. Engines cost about $409,000 each for a total of $4,500,000. The costs of engines and ladder trucks are based on vehicles recently purchased or on order.

In addition to the 11 fire engines, the Department owns two ladder trucks. Ladder trucks are used for structural fires in situations where access to the upper floors of multiple story buildings is needed. One truck is housed at Station 1, and the other is at Station 5. Ladder trucks cost about $743,000 each, for a total of $1,487,000 for the front-line ladder trucks.

Two crash/rescue vehicles are included in the department's inventory. Both are located at Station 8 for proximity to the airport. One has a replacement cost of $515,000, and the other $215,000. Also included in the inventory is a type III vehicle outfitted for combating grass fires. It is located at Station 3 and costs $75,000. Finally, 17 staff cars, valued at $20,000 each, are maintained by the City for Fire Department use. Staff cars thus have a total value of $320,000. (These are not outfitted with any special equipment.) Vehicles total $7.13 million in replacement costs.

**Training Facilities**

An ongoing training program is necessary to maintain the skills of firefighters, as well as prepare for the circumstances of a growing community. In 1993 the Modesto fire department entered into a joint powers authority with Stanislaus County and Yosemite college to construct a facility located at Carpenter and Bridgemore. Modesto's share of the cost is $888,000, excluding the interest costs involved in financing the project over 20 years. The existing facility is deemed adequate as the principal training site for the long term needs of the City, and no further major expansion of this training facility is anticipated. However, a smaller training facility is planned as an annex to one of the new stations; it is discussed later. Costs for the Department's closed circuit television system, which allows materials to be delivered to the individual stations without interfering with the readiness of station staff, is already included in station costs.

**Other Equipment**

Three additional cost items are shown at the bottom of the table. The Department's data management system is valued at $60,000. Traffic Signal Preemption devices allow fire vehicles to control traffic lights as they approach; devices installed on existing signals are valued at $253,000.

**Summary of Existing Capital**

The replacement value of existing facilities and equipment shown in Table III-2 is totaled at $16,757,000. This excludes values for Stations 1, which needs substantial retrofitting, Station 2, which is in the process of being relocated, and Station 10, which is at this time owned by the Industrial Fire District.

**Table III-2**
**Replacement Cost of Existing Facilities**

| | | |
|---|---|---|
| Fire Stations | | $8,421,000 |
| | | |
| Vehicles | | $7,135,000 |
| | | |
| Training Site | | $888,000 |
| | | |
| Other Facilities | | $313,000 |
| | | |
| Total Replacement Cost | | **$16,757,000** |

# FACILITIES EXPANSIONS

This section describes the anticipated expansions to the Modesto Fire Department to accommodate the development envisioned under the City's General Plan. Parallel to the format above, capital items are grouped by fire stations, vehicles, and other capital, and summarized below in Table III-4.

**Fire Stations**

The Modesto Fire Department will add fire stations to the system as the developed area it must protect increases in size. As noted above, the Station 2 relocation will result in the Station meeting the 7,000 square foot standard. Station 10 is currently owned by the Industrial Fire District, but is expected to be acquired by the City of Modesto at some point in time as the surrounding area annexes. Additionally, facilities are projected to be expanded at four existing stations. The upgrades and expansions planned for Stations 3, 6, 7 and 8 would require an average of 2,300 square feet of additional space each, at the standard cost of $262 per square foot. In addition, four new stations are anticipated at the following locations:

- Station 11 is planned to be located at the corner of Pelendale and Carver.
- Station 12 will be located in the Village III area.
- Station 13 is planned in the McHenry-Claribel area.
- Station 15 is planned for the Beckwith Dakota Triangle area.

New stations will be constructed per the Departments updated standard. At buildout, the city will require an additional two ladder companies. The third truck company will serve the northwest portion of the City and will be housed in Station 11. The fourth truck company is tentatively planned to be housed at Station 12. Since all new fire station are equipped with double wide, double depth drive through apparatus bays, Stations 11 and 12 will be equipped to house a truck company without construction beyond the 7,000 square foot standard. When Station 1 is rebuilt to include administrative facilities and a maintenance bay its total square footage will exceed the 7,000 square foot standard. The cost of rebuilding Station 1 and providing administrative and maintenance facilities is estimated at $5.0 million. The future cost of new stations and the expansion and/or replacement of existing stations are determined in the table below.

**Table III-3**
**Future Station Cost**

| New Stations | Square Feet | Facilities Cost |
|---|---|---|
| 1 | N/A | $5,000,000 |
| 2 | 7,000 | $1,832,500 |
| 10 | 5,148 | $1,347,673 |
| 11 | 7,000 | $1,832,500 |
| 12 | 7,000 | $1,832,500 |
| 13 | 7,000 | $1,832,500 |
| 15 | 7,000 | $1,832,500 |
| Station Expansions | | |
| 3 | 2,300 | $602,107 |
| 6 | 2,300 | $602,107 |
| 7 | 2,300 | $602,107 |
| 8 | 2,300 | $602,107 |
| Total Future Station Costs | | **$17,918,000** |

*Source: Town Hall Services*

**Vehicles**

New stations will need to be equipped with vehicles; each will need a fire engine. Modesto already owns the engines assigned to Stations 2 and 10. This leaves a net of four front line fire engines to be added to the City's fleet. An extra reserve engine will be needed at some point in time, which can be satisfied by using a retired front-line engine. At about $409,000 each, the cost of engines is $1,637,000. Two new ladder trucks will be needed at $743,000 each, for a cost of $1,487,000. An air/lighting vehicle will be required at a cost of $310,000. Exact assignment of these vehicles will depend on actual land use patterns and location of potential hazards. A mobile service truck, $56,000, will permit maintenance in the field.

With expanded personnel, a corresponding increase in the number of staff vehicles will be needed as well. The Fire Department is one area where facilities growth will be less than proportional to the population increase. The Department estimates that three additional staff cars should be added to the fleet by buildout. At $20,000 each, new staff cars will total $60,000. Together, the fleet expansions are estimated to add to $3,550,000.

**Remote Training Station**

To facilitate less travel time for training purposes, an additional area is projected to be added to Station 12 or 13, large enough to accommodate a remote training site. This site would be used by the northeast fire companies for basic training exercises. This could be accomplished with approximately three additional acres, which could provide 50% of the training needs for stations 3, 9, 11, 12 and 13. This site could also be used jointly by the Police Department. At $165,000 per acre land cost, the cost of land for the remote training site is estimated at $500,000.

**Summary of Facilities Expansions**

Table III-4 summarizes facilities and capital expansions needed through buildout. The total is $12 million, including costs for the relocation of Station 2, acquisition of Station 10, and renovation of Station 1.

**Table III-4**
**Future Facilities Cost**

| | |
|---|---|
| Fire Stations | $17,918,000 |
| Vehicles | $3,550,000 |
| Remote Training Site | $500,000 |
| Total Future Cost | $21,968,000 |

## NEW DEVELOPMENT COST ALLOCATION

The fire component of the CFF is one of three for which facilities costs are allocated to both residential and non-residential development and based on population and employment, with each employee counted as 40% of the impact of a resident. An explanation in greater detail of the basis for this allocation is given in Chapter 2. Here we address the reasons this allocation is appropriate specific to Fire Department facilities.

The total cost of fire facilities, including existing facilities and facilities to be built, are allocated among both existing and future development. Existing facilities will serve both existing and new development, as will the new facilities to be constructed. In other words, the Fire Department and its facilities are treated as a single system.

Fire services are required for all types of development, both residential and non-residential, as both bring persons and property needing protection by the department; this is the nexus between the development and the fire component of the CFF. The allocation based on population reflects not only the role the department plays in protecting lives in fire situations, but also its emergency medical services, which account for the large majority of its service calls. Employment is similarly often used as the indicator of need for non-residential services. Again the paramount purpose of protecting lives supports such an allocation. Employment is also a "roughly proportional" indicator of the property protected.

Most fire departments now track calls and the data shows the rough proportionality to employment, except for a few categories which evidence a much higher rate of fire calls; dry cleaners are an example. The problem in having a higher cost allocated to dry cleaners than to other retail is that dry cleaners are a building use rather than a type of building. There is no specific zoning for dry cleaners and space is often converted to such a use from other retail uses, and *vice versa*. The reasonable and standard solution is to treat all retail buildings the same. The fact that the department protects all lives and property, even though only a small percentage will actually call upon the department, also supports employee population as an indicator of services provided.

Table III-5 calculates the allocation between existing and new development based on buildout DUEs. The total cost of future facilities and the replacement cost of existing facilities is $38,721,000. Spread across the 152,100 DUEs projected at buildout, the cost per DUE becomes $255. New development is projected to amount to 68,300 new development DUEs, bringing growth's cost share to $17.4 million.

Comparing new development's cost allocation of the buildout facilities with the cost of future expansions, it can be seen that the Department is presently at a net facilities deficit under the allocation methodology of this analysis. Stated differently, existing facilities do not meet the needs of existing development. The difference is the City's existing deficit in its Fire Department facilities—a deficit that cannot be made up using funds collected for the CFF program.

**Table III-5**
**Fire Department CFF Summary**

| | |
|---|---|
| **Capital Costs** | |
| Existing | $16,757,000 |
| Future | $21,964,000 |
| **Total** | $38,721,000 |
| | |
| **Cost per DUE** | |
| Total Capital Cost | $38,721,000 |
| Buildout DUEs | 152,100 |
| **Cost per DUE** | $255 |
| | |
| **New Development Cost Allocation** | |
| Cost per DUE | $255 |
| New Development DUEs | 68,300 |
| **New Development's Share** | $17,387,000 |
| | |
| **Existing Development Cost Allocation** | |
| Existing Development DUEs | 70,700 |
| Existing Development's Share of Cost | $17,998,000 |
| Existing Capital | $16,757,000 |
| **Existing Deficiency** | $1,241,000 |

*Source: Town Hall Services*

# CHAPTER IV
# POLICE

This chapter discusses the facilities needs of the Modesto Police Department. The Police Department faces a significant existing facilities deficit, due mainly to the policy decision to increase citywide department service standards. This chapter, therefore, emphasizes not only the facilities needed to serve growth, but the requirements to bring the department's facilities to an adequate level to serve the existing demands. After an introduction, the chapter discusses facilities standards, and then inventories facilities needed to serve the City by buildout. Costs are the allocated to existing and new development, using a system-wide approach, such that the buildout needs are assigned proportional to new and existing development's shares of buildout DUEs.

## INTRODUCTION

For years the police department facilities were inadequate to support the existing city, much less the added demands associated with growth. Until recently the Police Department was housed in a 25,000 square foot station that it first occupied in 1964. That building was originally designed to house up to 160 employees, at density levels above the City's standard. As of 1997 police department staffing stood at 355 full time employees, excluding part time assistants, reserve officers and volunteers.

The City undertook several interim measures to cope with overcrowding. In 1991 the Police Department rented the former county employment building located at 12$^{th}$ and F Streets, adding 4,200 square feet. The City also rented the 5,000 square foot former Modesto Auto Parts building for property and evidence storage as well as two portable trailers. The Department also has four storefront offices located throughout the City. These, however, are part time facilities staffed by force members who otherwise report to, and for the purposes of this analysis are associated with, the main facility.

In August of 2000 the City completed construction on a new police building. This largely eliminated the need for the temporary space measures utilized by the Police Department in the years before, and it allowed the City to renovate its original station, which has just recently been completed. The Department's facilities are no longer terribly overcrowded as they were in the

past. Department facilities are not, however, sufficient to accommodate the significant growth projected to occur in Modesto, nor a gradual increase in Department staffing standards.

## SERVICE STANDARDS

The Modesto Police Department's current staffing standards call for maintaining 1.3 sworn officers per thousand residential population. The Department is currently staffed somewhat below this standard. The Modesto Police and city staff have concluded that this staffing ratio is insufficient to meet the needs of a growing community. Were Modesto to remain at its current size, with minimal changes in its demographic make up, a staffing standard of 1.30 sworn officers per thousand might be sufficient. However, based on the projected growth characteristics of Modesto outlined in the general plan, and the comparable police staffing in other large California cities, it is clear that current standards will not allow the Department to provide its level of service as the city grows and transitions from a residential bedroom community to an urban hub.

As the City of Modesto grows, the ratio of officers to population should increase. Modesto currently serves as the urban center for the county and is the venue for federal and county services. Modesto is the business, medical, entertainment and sports hub for not only Stanislaus County, but for portions of Tuolomne, Calaveras, Amador, Merced and San Joaquin County as well. Modesto is transitioning into what Sacramento already is and Stockton is becoming; a major urban center with law enforcement needs outstripping its rural past. Stockton currently has a police staffing ratio of 1.53 sworn officers per thousand population while Sacramento has a standard of 1.69 per thousand. The other valley cities comparably sized or larger than Modesto generally fall between these ranges. From a more national perspective, due to funding constraints California as a whole is behind the rest of the nation in police staffing.

Modesto therefore seeks not only to match the standards set by its valley neighbors, but also to prepare for the growth and demographic changes expected in the City as it approaches General Plan buildout. Growth projections call for a greater percentage of high-density residential development—this type of development typically contributes to the heightened police demand found in urban centers. Also, the police staffing standard is pegged to residential population. Per the Modesto General Plan, a significantly greater proportion of non-residential development is projected to occur. This will require increase the staffing standard just to accommodate the added service need generated by non-residential growth.

The Modesto City Council, based on recommendations from the Police Department, thus

increased its police staffing standard to 1.85 sworn officers per thousand population. This policy standard is set as a target for buildout. It would be impossible for the City to increase it police staffing immediately as the manpower and funding needs will take some time to meet. Instead, the City plans on increasing its staffing ratio incrementally as the city grows, dynamically meeting the needs of an expanding, changing community. At residential and non-residential buildout, the City intends to reach its standard target of 1.85 sworn per thousand.

The number of police personnel at buildout is shown in the table below. At buildout, the residential population is projected to be about 370,000. The number of sworn officers is driven by the buildout standard, while the projected number of non-sworn employees is proportionally driven by the increase in sworn officers, as many of the non sworn employees act as support staff to sworn officers.

**Table IV-1**
**Police Staffing at Buildout**

| | Staffing at Buildout |
|---|---|
| Chief | 1 |
| Asst. Chief | 2 |
| Captain | 8 |
| Lieutenant | 24 |
| Sergeant | 86 |
| Corporal | |
| Detective | 83 |
| Computer Forensic | |
| Police Officer | 482 |
| | |
| TOTAL SWORN | 686 |
| | |
| CSO's | 98 |
| Identification Tech | 8 |
| Evidence & Property | 13 |
| Police Clerk | 113 |
| Police Support Supv. | 14 |
| Animal Control | 13 |
| Secretary | 8 |
| Executive Secretary | 3 |
| All other Civilian | 26 |
| | |
| TOTAL CIVILIAN | 296 |
| TOTAL EMPLOYEES | 982 |

# FACILITIES AT BUILDOUT

This section describes the police facilities at buildout. Cost allocation between existing and new development is based on a system-wide approach at buildout, recognizing that both present and future developed areas will receive the same nature of benefit from all police facilities. The inventory of major police capital items is shown in Table IV-2. The following discussion covers each of the items. Combined, the police department inventory of major capital items will total $53,691,799.

**Police Stations**

At buildout, the Modesto Police Department will require police station facilities to accommodate 982 projected employees at a 1.85 sworn officers per 1000 population standard. The RRM Design group advising the City estimates that each employee will require about 263 square feet, including office space, common areas, storage and gross calculation factor. This standard of 263 square feet per employee is the same adopted by the Fire Department for their administrative office space, and in the General Government component, in calculations for the future City Hall Annex. At 263 square feet per employee, the Modesto Police Department will require, at buildout, over 258,000 square feet of station space to accommodate its sworn and civilian force.

As mentioned earlier, the Department recently occupied the newly constructed main station facility. The final costs for this building have not yet been determined due to construction issues and ongoing arbitration. However, the current estimate, based upon expenditures and remaining encumbrances, is $300 per square foot. Beyond design and construction, the cost includes furnishings, infrastructure for the computer and communications systems, and other specific station equipment required by the police.

As a comparison, the Santa Clara Police Department recently constructed a new 51,500 square foot station. That building cost about $16 million, not including the cost of toxic waste removal and a million dollar three story glass atrium. The cost for the Santa Clara police station, with these exclusions, comes out to just over $310 per square foot.

At $300 per square foot, police station facilities at buildout are projected to cost about $77.5 million. It should be noted that the Department is also planning a police evidence and property facility. It is anticipated that the evidence and property facility will be included in the police facilities at buildout.

## Vehicles

The Police Department uses a large number of vehicles in the performance of its duties. The majority of the vehicles are used as patrol sedans or staff cars; for this they must be of good quality, and in excellent condition. Other department vehicles are usually former patrol sedans, which are no longer suitable for that use, animal control vehicles and motorcycles. Patrol sedans must be outfitted with expensive equipment; the cost of this equipment is the subject of the next category of police facilities. A total of 518 vehicles will be needed at buildout, assuming the fleet size is proportional to the number or sworn and non-sworn employees in the Department. The number, and cost of police vehicles are summarized in the table below.

**Table IV-2**
**Police Department Vehicles**

| **Vehicles** | | **At Buildout** | |
|---|---|---|---|
| Type | Cost | Quantity | Total Cost |
| Patrol | $26,000 | 222 | $5,772,000 |
| Detective/Staff | $16,500 | 119 | $1,963,500 |
| Community Service Officer | $20,000 | 25 | $500,000 |
| Animal Control Officer | $40,000 | 7 | $280,000 |
| Motorcycles | $14,000 | 41 | $574,000 |
| Others | $20,000 | 104 | $2,080,000 |
| | | | |
| Total Vehicles | | 518 | **$11,169,500** |

*Source: Police Department, City of Modesto*

## Vehicle Special Equipment

The equipment outfitting the police cars is included here. By buildout, the police fleet will total 518 vehicles. Police vehicles are equipped to different standards. Patrol vehicles are the most heavily equipped to handle the range of circumstances encountered by officers on the street. Mobile data computers, at a cost of $15,000 apiece, are installed in all Patrol, CSO, and ACO vehicles, as well as 25% of vehicles in the "other" category. Other special vehicle equipment installed in Patrol, ACO and CSO vehicles costs $6,000 per vehicles, while the additional equipment required for Detective, Staff and Other vehicles costs $1,500. The total buildout cost of equipping the Departments fleet of 518 vehicles is projected at $6,120,000.

## Parking Garage

The Modesto Police Department currently has inadequate parking facilities for its needs. At buildout new parking facilities will be required to accommodate both use of the police facilities and parking for its fleet of vehicles. The City of Modesto Community Development Department

has a parking standard of one space for every 300 square feet of office development to meet the needs of employee and visitor parking. At this standard, the City would have to provide 861 parking spaces to meet the need generated by the Police Department's 258,000 square feet of station space at buildout.

In addition to this standard, a parking space is required to house each police vehicle. However Detectives and some staff are provided department vehicles that they take to and from work. Thus these vehicles do not require parking spaces as both employee vehicles and as part of the police fleet. If we subtract the 119 Detective/Staff cars from the total fleet, and add that to the 861 parking spaces required to serve employees and visitors, the Police Department will require a total of 1260 parking spaces to serve its needs at buildout.

It costs an estimate $12,500 to construct a parking space, based of the cost of the parking facility for the new City Hall. The total cost of providing parking facilities for the Police Department at buildout is estimated to be about $15.75 million.

**Northeast Area Precinct**

The City of Modesto, especially including the areas to be annexed, is of considerable physical size. Given that a great deal of residential and commercial/industrial growth is projected to occur some distance from the downtown core, the Police Department sees the need for a fully staffed precinct office in the Northeast Area. This facility is needed in the short term to provide service coverage to the rapidly growing area near Village One.

This office is planned to be a joint facility with the Fire Department. The square footage construction needs for the police share of this facility are included in the cost of police station facilities calculated above. However, additional land for this facility will need to be purchased. An estimated two acres of additional land is required. Based on cost estimates from the Fire Department for land in the Northeast area of the city, land for a Northeast Area Precinct is projected to cost $330,000.

**Training Facility**

The Police Department does not currently have a full range training facility in the City. A full range training facility is necessary to provide the level of training needed for the department. The City has land available that is currently in the beginning stages of development as a regional training facility. In the future, the site will be used for required training for executive protection, tactical live fire simulation, homeland defense, hazardous materials, crowd control, etc. This facility will include classrooms, an equestrian area, a canine training course, caretaker residence,

defensive tactics facility, a shooting range with observation deck and a defensive driving course. The estimated cost for this facility is $5,065,000. A detailed cost breakdown is provided in the appendix.

**Modesto/Stanislaus Emergency Services Facility**

In 1999, the County Dispatch Center and Emergency Operations Center (EOC) moved into a city/county jointly owned facility on Oakdale Road. As the city grows, the 911 Dispatch Center and EOC will also require funding for new technology and systems upgrades as well as for housing additional employees related to growth. Future communications needs include:

- Computer Aided Dispatch (CAD) Hardware Servers
- CAD / GIS (Geographic Information System) Interface
- Additional 9-1-1 Base Radio System to Eliminate Dead Zones
- Phone System Enhancements to Support Wireless (Cell) 9-1-1 calls

Total cost estimates exceed $4 million for these upgrades. The City's share of costs for the Communications Center is based on usage and population. Its current share is approximately 57%. Modesto's share of these improvements at buildout is estimated at $2,000,000. This amount is a conservative estimate on the technological upgrades needed as the region grows. This item includes the total costs for the City of Modesto, which are actually paid 80% by Police and 20% by the Fire Department. For the purposes of CFF documentation, the entire cost is included within the police component, and excluded from the cost calculations in the fire component.

**Radio System**

The department's radio communications system "backbone" is also up for replacement, largely a result of new federal requirements reallocating radio frequencies. Most of the current radio system is 20 to 30 years old. A new 800 MHz radio system is planned, which will require replacement of the backbone and all mobile radio units. The cost of replacing the Department's existing 450 band UHF radio system with an 800 MHz radio system is estimated at $8.4 million. Costs include replacement radio transmitters, receivers and microwave radio backup relays for voter sites and installation and engineering of the new system. Replacement of the radio system for Police, Fire and Neighborhood Preservation Code Enforcement units are included in the cost calculation. Again these costs are not included in other components of the CFF fee program. Detailed costs are included in the attachment.

The buildout cost of the Department's capital facilities are summarized in the table below. The calculation assumes a Police Department staffing standard of 1.85 sworn officers per thousand

residential population.

**Table IV-3**
**Buildout Cost of Facilities**

| Component | Cost |
|---|---|
| Police Buildings | $77,479,800 |
| Vehicles | $11,169,500 |
| Vehicles Equipment | $6,120,000 |
| Parking Facilities | $15,748,600 |
| Northeast Area Precinct | $330,000 |
| Training Facility | $5,065,000 |
| Emergency services Facility | $2,000,000 |
| Radio System | $8,386,500 |
| **Total Buildout Cost** | **$126,299,400** |

## NEW DEVELOPMENT COST ALLOCATION

The previous section estimated the Modesto Police Department's major capital inventory to total $126 million by buildout of the City. The calculation of police fees views the capital requirements from a systemwide perspective on the basis that (1) police facilities must be expanded essentially in proportion to the level of development in the City and (2) the police department operates as an integrated system, such that it is not possible to identify individual components expressly with existing or new development. Accordingly, the cost per DUE is the total cost divided by the number of DUEs, or $830. Table IV.4 makes this calculation. With 68,300 DUEs of projected new development, the share of the cost that is the responsibility of new development is $57 million.

**Table IV-4**
**Cost per DUE**

| | |
|---|---|
| **COST PER DUE** | |
| Police Capital | $126,299,400 |
| Buildout DUEs | 152,100 |
| Capital Facilities Cost per DUE | $830 |
| | |
| **NEW DEVELOPMENT'S SHARE** | |
| Cost per DUE | $830 |
| New Development DUEs | 68,300 |
| New Development's Share | $56,714,000 |

*Source: Town Hall Services*

## EXISTING DEFICIENCY

Increasing the Police Department staffing ratio from 1.30 to 1.85 sworn officers per thousand population represents a significant increase in the Department's standards, targeted at buildout. Progress towards the increased standard will be incremental; with the goal of reaching 1.85 sworn per thousand by the time the City reaches General Plan buildout. The Department's standard will be increasing system wide, providing a higher level of service to both new and existing development. However, new development cannot be responsible for funding improvements beyond its fair share.

Higher standards create the need for additional facility cost to serve existing and new development. Because the Department's existing facilities are appropriate to serve the City at a staffing level of 1.30 sworn per thousand, as the staffing standard increases, so will the deficiency of the City's existing police facilities. The existing deficiency is calculated by comparing the replacement value of the departments existing facilities to existing development's share of facilities at buildout. Because the staffing standard at buildout is higher than it is today, the deficiency calculated is significant.

First we must calculate the replacement value of the Department's existing facilities.

### Existing Facilities

The Police Department's total existing building space covers about 65,000 square feet. At the

estimated new construction cost of $300 per square foot, the replacement cost of the existing police buildings would be $19.5 million.

The Police Department currently has 198 vehicles in its fleet. The replacement value of the Department's fleet is shown in the table below.

**Table IV-5**
**Replacement Cost of Police Vehicles**

| Type | Cost | Quantity | Total Cost |
|---|---|---|---|
| Patrol | $26,000 | 85 | $2,210,000 |
| Detective/Staff | $16,500 | 47 | $775,500 |
| CSO | $20,000 | 7 | $140,000 |
| ACO | $40,000 | 3 | $120,000 |
| Motorcycles | $14,000 | 16 | $224,000 |
| Others | $20,000 | 40 | $800,000 |
| Total Vehicles | | 198 | **$4,269,500** |

*Source: Police Department, City of Modesto*

The replacement cost of special equipment for existing police vehicles, including mobile data computers and other equipment is $2,209,500.

Finally, the replacement cost of the parking facilities currently serving the Department's employees and vehicle fleet is $4,312,500.

All in all, the replacement value of the Modesto Police Department's existing capital facilities totals $30,291,500.

**Existing Deficiency**

Of the 152,100 DUEs projected at buildout, 70,700 exist within the Modesto city limits. Thus, existing development within the incorporated city limits is responsible for approximately 46% of the buildout cost of police facilities. Another nine percent is the responsibility of existing development within the CFF study area, but outside of the city limits (annexations). The remaining balance is the responsibility of new development. The difference between existing development's share of the total cost, and the replacement value of existing facilities is the existing deficiency. This deficiency must be made up as the system moves towards buildout to provide existing development with the same level of service as new development. Furthermore this deficiency must be made up with funding other than new development mitigation.

**Table IV-6**
**Existing Deficiency**

| | |
|---|---|
| **EXISTING DEVELOPMENT'S SHARE** | |
| Existing DUEs | 70,700 |
| Cost per DUE | $830 |
| Existing Developments Share | $58,707,000 |
| | |
| **EXISTING DEFICIENCY** | |
| Existing Development's Share | $58,707,000 |
| Replacement Value of Existing Facilities | $30,291,500 |
| **Existing Deficiency** | **$28,415,500** |

*Source: Town Hall Services*

# Chapter V
# PARKS AND RECREATION FACILITIES

The Modesto Parks, Recreation and Neighborhoods Department provides a variety of facilities and services that contribute to the quality of life of the community. Neighborhood parks are located to serve the surrounding neighborhoods. Community and regional parks, with their pools, community centers and other facilities, serve larger portions of the City. After an introductory overview of issues related to the parks and recreation facilities analysis, this chapter inventories existing and proposed facilities before arriving at the buildout facilities needs and allocation of a fair share of the cost to new development.

## INTRODUCTION

The number of issues involved in the analysis of park facilities requirements warrants some additional introduction to allocation methods, residential dwelling unit equivalents (DUEs), service standards, and background information.

The allocation of parks costs involves a system-wide allocation approach. The localized service area of neighborhood parks would allow for a marginal cost analysis in which neighborhood parks costs are directly related to the level of new development. However, because the City is committed to providing the same service standard to existing and new neighborhoods throughout Modesto, the cost responsibility of new development for neighborhood parks is exactly the same whether the costs are considered through a marginal or a system wide approach. For the sake of consistency, neighborhood parks costs are calculated here as part of the parks system. The remaining parks facilities maintained by the Parks, Recreation and Neighborhoods Department should be viewed from a community-wide perspective, as they serve both existing and future development throughout the City. Thus, they are also allocated on a system-wide basis in which new and existing development are assigned cost responsibility proportional to their share of DUEs at buildout.

Dwelling unit equivalents were discussed in Chapter II, and are used throughout the CFF documentation as the common measure for the level of development. The Parks CFF is unusual in that it and Air Quality are the only components that assign facility costs solely to residential development. The DUE measurement used here, therefore, includes only the residential

population component. Table V-1 shows the residential DUE calculations as they were made in Chapter II. Existing DUEs are calculated directly from the 2002 Modesto City population. In the calculation of future DUEs, existing developed areas includes the City plus any presently developed unincorporated areas that presumably would be annexed later. New development is the projected growth. By buildout, the level of development in Modesto is projected to total 115,500 DUEs. Parks needs at buildout are equivalent to the needs of 115,500 single family homes.

**Table V-1**
**Residential DUEs**

| | **Existing Development** | **Annexations** | **New Development** | **Buildout** |
|---|---|---|---|---|
| Residents | 198,6000 | 29,000 | 172,241 | 370,841 |
| Persons per Single Family Household | 3.32 | 3.32 | 3.32 | 3.32 |
| Occupancy Rate | 96.7% | 96.7% | 96.7% | 96.7% |
| Residential DUEs | 61,900 | 9,300 | 44,300 | 115,500 |

The Department periodically reviews its mix of programs and facilities to supply those that are most responsive to prevailing community needs and interests. In preparation for this update of the CFF study, the Department has undertaken such a review, and has updated facilities and service standards in light of the community's present needs and future trends. The facilities needs discussed below are based upon the City's General Plan, Council approved Capital Improvement Programs, and specific park Project Master Plans. These documents provide background information on service standards and costs suitable for inclusion in the CFF. The City's Parks and Facilities inventory, and other sources of information, are used as well where appropriate.

The Subdivision Map Act (Gov. Code, §§ 66410-66499.37) allows the City to regulate land use when subdivisions are proposed for development. In the course of regulating the design and improvement of subdivisions, the City may require the dedication of land or the payment of fees in lieu thereof for park or recreational purposes made necessary by the subdivision. This provision is known as the Quimby Act (Government Code Section 66477). Any land or financial contribution made under the Quimby Act are treated as a credit against CFF park fees.

The City of Modesto General Plan has identified open space and recreation land as park land. In the General Plan, the Baseline Developed Area is assigned standards of 2.0 acres of neighborhood park and 1.0 acre of community park per 1,000 residents. In the Planned Urbanizing Area the acreages are reversed to 1.0 acre of neighborhood and 2.0 acres community parks per 1,000 residents. The standard assumed for the improvements in the CFF parks program is thus a total of 3.0 acres per thousand population. The mix of parks planned to fulfill this standard consist of almost two acres per thousand population of neighborhood parks and over one acre per thousand of community parks.

## LAND AND CONSTRUCTION COSTS

The Modesto Department of Parks, Recreation and Neighborhoods has provided a great deal of information regarding the costs of bringing the parks system to its General Plan standards at buildout. Hundreds of project estimates are provided, together with the detailed costs of individual phases. The information is too extensive to consider in detail in this text; all of it is included in *Information Details*, a supplemental report. Before we consider the components — existing and future — that make up the parks system, we should briefly address and summarize the cost assumptions that drive the replacement values of existing facilities and the future costs of planned expansions.

The costs of land for parks used in this report are based primarily on the last three parkland purchases made by the City. The costs are estimated at $140,000 for land for neighborhood park land and $120,000 for land for community parks. The lower cost for community park land reflects the larger site size (typically 25-40 acres) compared to neighborhood parks (typically seven acres); the larger size does not require as much infrastructure expense (access streets, for example) per acre.

These land cost estimates can be compared with the estimates used for fire station sites. These sites are estimated to cost $165,000 per acre, based on the experience of the Fire Department in seeking sites. The standard station site size is 0.75 acre; again, the higher price reflects the smaller site size.

It can be noted that the price of land in Modesto has increased rapidly over the past decade. This is particularly true of land in residential subdivisions, which is where parks are likely to be located. This suggests that the City should buy land as early as it can, securing parcels before home builders value it higher because it is ready for home construction. However, there are difficulties in doing so. Parks fees come along with development, rather than prior to it, with the result that funds are scarce. Furthermore, it is difficult for the Department to identify appropriate

park sites until street plans are known. Because land costs are such a large share of park costs, it would be helpful if these problems could be mitigated and with the result that earlier purchases resulted in lower land purchase costs.

For regional parks, most of the land exists within the 100-year flood plain. It is not feasible to have significant residential commercial or industrial development in these areas, and so, the price of land is considerably less. The Parks department estimates that the cost of land for regional parks within the 100-year flood plain is about $30,000 per acre.

The construction cost of developing parkland is calculated on a per acre basis. The average cost of full phase development varies from $250,000 per acre for neighborhood parks to $400,000 per acre for community parks. The Parks Department has provided a detailed cost summary leading to these per acre assumptions. This summary is included in the *Information Details* supplement.

For existing parks facilities, many parks were not fully developed per the General Plan guidelines. Furthermore, much of the development in the parks system is old and in need of replacement. From irrigation systems to buildings and trees, the capital infrastructure that goes into park improvements has a general life expectancy. Most of the components vary in life expectancy from 20-50 years. The average life expectancy of park improvements is between 30 and 40 years.

According to the Parks staff, there has been very little improvement or replacement of existing facilities in the last twenty years, due to funding constraints. Many of the City's existing parks have facilities that are dated and are badly in need of renovation and replacement. If these facilities cannot be expected to continue to provide service at buildout, then they should not be counted towards the existing value of the parks system, as they will have to be replaced soon with alternative funding methods.

The Parks Department conservatively estimates that 30% of the existing construction and improvements to the parks system needs to be renovated or replaced soon. Because these facilities will not last to buildout, they cannot be valued as existing facilities at buildout. They are given a zero value, and the cost of replacing these facilities is added to the future cost of the parks system. To illustrate this, in the calculations of the parks systems existing facilities, 30% of the replacement cost (only of construction) is not included in the value of existing facilities and is added to the cost of future expansions and improvements. Practically this serves to increase the deficiency of the existing parks system. New development is **not** disproportionately burdened by shifting the cost of aged improvements from existing facilities to future costs.

# EXISTING SYSTEM

This section describes the existing parks and recreation facilities. All major types of facilities, except golf courses, are evaluated below, and summarized in a table at the end of the section. Golf courses are excluded from the inventory due to (1) City's intention not to develop new courses or expand existing facilities and (2) the decision not to hold new development responsible for reimbursing the city for past golf course expenditures.

## Neighborhood Parks

Neighborhood parks are intended to be accessible within walking distance of local residences, preferably within a service radius of three-quarters of a mile. The process by which the City brings neighborhood parks on-line is fairly complex. It is desirable for parkland to be secured before a neighborhood is being developed; otherwise parcels of an appropriate size are quite expensive and may not even be available. The City therefore uses whatever funds are available to purchase land in anticipation of development, i.e. as long as possible before parks fees from that neighborhood are available. For this reason it currently owns several undeveloped park sites in neighborhoods either undeveloped or partially developed.

The City would like to make basic site improvements relatively early in the neighborhood's development, so useable park space is available when most of the new residents move in. Given the need for anticipatory purchases of parkland and the fact that the majority of fee revenue is not available until the majority of the neighborhood is occupied, the City usually lacks funds to accomplish this in a timely manner. This is why the City is frequently using CFF revenues to complete parks in recently developed or partially developed neighborhoods.

Presently, the City owns 45 developed neighborhood parks totaling about 249 acres. The desired park size is seven acres, though there are some undersized parks. The City also owns several undeveloped neighborhood park sites; some of these have funds appropriated for Phase I development, and are expected to be completed in the next several years. There are also tentative plans to continue construction on existing parks beyond Phase I. This construction is projected to occur as funds become available. The need for more construction on neighborhood parks in developed neighborhoods should be considered part of the existing deficiency. Funding for these projects should come from sources other than new development mitigation.

The replacement cost of the City's existing neighborhood park inventory is $76.2 million, after deductions of 30% for existing deficiency. Again the specific cost breakdown is detailed in the supplement.

## Community Parks

Community parks are larger, have more extensive facilities, and serve a larger area (1 to 1 ½ mile service radius) than neighborhood parks. The City owns six fully developed community parks, totaling 125.5 acres. The preferred size is 25-40 acres; several of the existing parks are smaller than this size. The replacement value of the existing community parks is $38.9 million.

**Regional Parks**

For years The City of Modesto has been a key player in the development of the regional park system. An agreement with Stanislaus County and the City of Ceres established the groundwork for implementing the Tuolumne River Regional Park portion of the regional system envisioned in the City's General Plan.

To date the regional park contains two facilities, Tuolumne River Regional Park (TRRP) and Dry Creek Regional Park. In total, the City has accumulated 539.3 acres of regional park land. For the purposes of this study, most of the regional park land is valued at $30,000 per acre for areas in the flood plain, though about 23 acres of Tuolumne River Park are above the flood plain, and are valued at a residential land value of $140,000 per acre. Since funding for Tuolumne River Park is shared with the other agencies, only the City of Modesto's share, 41.8 percent, is shown here. Dry Creek, the other regional park, is solely funded by the City. Currently, the City's regional park system is only minimally improved. Significant improvements to the land are planned as funding becomes available. The replacement value of the City's regional parks, including land, planning and minimal levels of construction, is $33.9 million.

**Community Centers**

The Modesto Parks Department has seven existing community centers. These are summarized in detail in the *Information Details* report. Community centers, for the most part, are located on community park lands. Accordingly the value of the land on which the community centers are built is included in the community parks component of the CFF. The City's seven community centers currently total 64,367 square feet of floor space. The Department has estimated that the construction cost of new community buildings is about $160 per square foot. Due to the extent of deferred maintenance, this figure is reduced by 30%, to $112 per square foot. At this replacement cost,
the value of the City's existing community centers is $7,209,000. While only one new community center is planned, there are significant expansions and improvements to existing community centers as well. These costs are captured in the next section of future expansions.

**McClure Expansion**

McClure Country Place is a historical museum of sorts, providing a wide array of educational and cultural opportunities for the residents of Modesto, as well as visitors to the City. The parks and recreation CFF component also includes funding for the expansion of the McClure facilities.

Construction has yet to commence on the expansion and upgrade of the McClure facilities. However, the City has already purchased 18 acres of new land to accommodate the expansion. At the residential land price of $140,000 per acre, the replacement value of the existing land purchases for the McClure expansion is valued at just over $2.2 million. The City has conservatively decided not to include the value of the existing buildings and land in the inventory of existing facilities.

**Summary of Existing Facilities**

Table V-2 summarizes the City's existing parks and recreation facilities that are allocated system-wide. Much of the cost includes facilities that only consist of land purchased by the City well prior to development, as well as facilities developed through the beginning phases only. Scarcity of funding has slowed the development of many existing projects to full final phase construction.

**Table V-2**
**Summary of Existing Facilities**

| | |
|---|---|
| **CAPITAL INVENTORY** | |
| Neighborhood Parks | $76,174,000 |
| Community Parks | 38,855,000 |
| Regional Parks | 33,923,000 |
| Community Centers | 7,209,000 |
| McClure Expansion Land | 2,160,000 |
| Total | $158,321,000 |

*Source: Modesto Parks and Recreation Department; Town Hall Services.*

## FACILITIES EXPANSIONS

This section describes the parks and recreation facilities expansions envisioned through buildout, and is based on the recommended park development plan prepared for the purposes of the CFF update. The plan anticipates that neighborhood parks would be added in pace with new development to maintain the City's standard. In addition, at least two community parks would be added, and sized to maintain the park standard. The new community parks would each include a community center and would be the location of recreation-oriented swim centers. The City also anticipates continued development of regional park acreage as envisioned in the General Plan, as well as full development of remaining community centers and the regional sports complex.

**Neighborhood parks**

The City of Modesto expects to add neighborhood parks in proportion to new development to maintain a minimum standard of 1.0 city-owned acres per 1,000 residents in newly developing areas. New neighborhood parks will have a typical size of seven acres of city-owned land and will serve a local population of about 7,000 residents. This prototype represents a minimum size, and actual parks may be larger.

To serve the projected residential population, the City will add about 180 acres of neighborhood parks to serve new development. To do this the Department plans to construct another 26 neighborhood parks averaging about seven acres each. This excludes any neighborhood park acreage needed to serve existing development in annexed areas. The future cost of expanding the neighborhood park system to buildout is estimated as $107,352,000. This cost includes acquisition and development of the 26 new parks as well as full phase development of several existing parks.

**Community Parks**

In planning for growth, the City anticipates developing at least two more community parks, tentatively located in the Northwest and Southwest quadrants of the City. (This count does not include the Sports Complex.) The actual number and location of parks will depend on future decisions regarding park size and placement as well as growth patterns in Modesto. By buildout the City plans to add 80 community park acres at the two sites. The replacement cost of land acquisition and full development of two new community parks, as well as the expansion and full phase improvement of the City's six existing community parks is valued at $72,869,000.

**Regional Parks**

The City of Modesto expects to continue its plans to further expand the regional park system along the lines envisioned in the Modesto General Plan. The Plan includes expanded preservation of open space along the Tuolumne River, Dry Creek and the Stanislaus River. It also assumes that a variety of preservation mechanisms in addition to fee simple ownership may be used, such as purchasing conservation easements.

The City plans significant improvements along the regional park corridors. Funding constraints have prevented the City from moving beyond basic Phase I improvements, while much of the land earmarked for development remains unimproved altogether. At buildout the City expects to have funded the full development of the regional park system, in conjunction with the General Plan and preservation requirements.

As noted earlier, the Tuolumne River Regional Park is a joint venture with the county.

Modesto's share of funding the park has historically been about 41% and the expectation is that this cost sharing plan will continue. The Dry Creek and Stanislaus River parks will be fully funded by the City.

Under the regional parks expansion envisioned, Modesto's future expenditures for full phase improvements are $70,978,000.

**Sports Complex**

The City is in the planning stages for a large regional sports facility serving the entire community. The facility may be implemented either as a single facility, or as a combination of separate facilities in different locations in the City. The sports center, containing multiple ball fields at one or more locations, will be a supplement to the City's community park system. Under the existing system, ball fields are located at the individual community parks. The sports center will consolidate a number of ball fields, together with parking, at one or more locations, offering a number of advantages. The sports complex will total 110 acres and include 27 ball fields of different types and on-site maintenance facilities. The City has yet to purchase the land for the various sports facilities. The cost of the land is valued at $120,000 per acre. With land, planning and design, and construction costs, future cost of development of the regional sports complex is estimated at $73 million.

**Community Centers**

One new community center is planned for location other than at the site of a new community park. The center is expected to be 5,175 square feet. At $165 per square foot in construction cost, this new community center is projected to cost about $850,000, not including planning. In addition, there are four new community centers planned on community parkland– Grogan, Sutton, One in the Morrow Park Planning District, and one in the Vineyard Park Planning District. Each community center will cost approximately $2.42 Million – totaling $10 Million. However, these costs are included in the cost of community parks.

The remaining expansion and full phase improvements to the seven existing community centers in the parks system will have a significant cost. Future construction costs for these projects total over $5 million dollars. The cost of repairing/replacing the 30% deducted from the replacement cost of the centers is $3.1 million. Including planning, design and review, the total future cost to the city of additions and improvements to the community centers is estimated at $9,902,648.

**McClure Expansion**

The expansion of the McClure Country place is expected to involve development of the 18 acres previously purchased by the City. Additionally some 30 small structures are planned to be built, at the cost of $120,000 each. Six larger structures are also planned, at a cost of $750,000 each,

per Department data. The total future cost of construction and improvement to buildout of the McClure Country place is estimated at $14,040,000.

**Summary of Proposed Expansions**

Table V-3 summarizes the cost of the facilities expansions estimated though buildout.

**Table V-3**
**Future Expansions of the Parks System**

| **FUTURE COST OF EXPANSION** | |
|---|---|
| Neighborhood Parks | $107,352,000 |
| Community Parks | 72,869,000 |
| Regional Parks | 70,978,000 |
| Sports Complex | 72,930,000 |
| Community Centers | 9,903,000 |
| McClure Expansion | 14,040,000 |
| Total | $348,072,000 |

*Source: Modesto Parks and Recreation Department; Town Hall Services*

## BUILDOUT COST OF PARKS SYSTEM

Adding the replacement value of the existing parks system facilities to the future cost of expansion and improvements to the parks system, we can calculate the total cost of the entire parks system at buildout. The buildout cost is the responsibility of both existing and new development. New development is responsible to fund only its fair share of the buildout cost of the parks system through impact mitigation. Other funding beyond new development's share, necessary to fund fully the system at buildout becomes part of the system's existing deficiency. This deficiency must be funding by means other than developer mitigation.

Adding $158,321,000 in replacement value of the existing parks system to $348,072,000 in expansions and improvements of the system, the buildout cost of the entire parks system is $506,393,000.

## FEE PER DUE

The parks system cost per DUE is calculated in the table below. The buildout cost of the parks system is divided by the number of buildout residential DUEs. The ensuing amount is the cost per residential DUE. The fair share that new development will be expected to fund at buildout is also calculated.

**Table V-4**
**Parks, Recreation and Neighborhoods Department Facilities CFF Summary**

| | |
|---|---|
| **Capital Costs** | |
| Existing | $158,321,000 |
| Future | $348,071,000 |
| **Total** | $506,393,000 |
| | |
| **Cost per DUE** | |
| Total Capital Cost | $506,393,000 |
| Buildout DUEs | 115,500 |
| **Cost per DUE** | $4,384 |
| | |
| **New Development Cost Allocation** | |
| Cost per DUE | $4,384 |
| New Development DUEs | 44,300 |
| **New Development's Share** | $194,227,000 |
| | |
| **Existing Development Cost Allocation** | |
| Existing Development DUEs | 61,900 |
| Existing Development's Share of Cost | $271,392,000 |
| Existing Capital | $158,321,000 |
| **Existing Deficiency** | $113,070,000 |

*Source: Town Hall Services*

## EXISTING DEFICIENCY

This analysis of parks and recreation facilities indicates that the City of Modesto is presently operating at an existing deficiency if present facilities are compared with the projected inventory at buildout. A review of existing facilities shows that the replacement value of the system-wide facilities amounts to an investment of $158 million.

However, as was calculated in Table V-1, there are 61,900 residential DUEs from existing development. At $4,384 per DUE, existing development's responsibility for the system at

buildout is $271 million. The $113 million difference between the replacement value of existing facilities and the share of existing development is the existing deficiency. This amount will need to be made up, if the parks system is to be fully funded at buildout. Funding will have to come from sources other than new development, such as state and federal grants, or through the general fund.

The primary reason for this large deficiency is that the city plans several facilities, such as the sports complex, that will serve both existing and new development. However existing development has not funded its fair share of such facilities. Also, many of the City's parks and other facilities are not up to standard. Funding constraints have prevented existing parks from developing beyond the minimal levels of improvement. If the City expects all of its parks to be fully developed by buildout, the cost of improving existing parks adds to the existing deficiency significantly.

# Chapter VI
# GENERAL GOVERNMENT

All of the previous chapters have considered the facilities involved in a single department's provision of services. This chapter addresses facilities used by a number of Modesto departments; in fact it includes all the other (not covered in previous chapters) capital facilities involved in City services except those associated with transportation.

First, we will consider the value of the City's existing public facilities that can be included in the CFF program. City Hall is the most significant component of these facilities and it is addressed first. Also considered are the City's corporation yard and some specific computer facilities within City Hall.

Then, we will address the improvements and expansions required to serve the City, per standards, at buildout. This includes an annex to City Hall, satellite equipment yards, and other smaller facilities. Finally the City's plans for a fiber optic, and wireless communication network are included, along with other infrastructure necessary to serve the City's technology needs in the future.

## EXISTING FACILITIES

### City Hall

The current City Hall Building at Tenth Street Place was completed and occupied in late 1999. The complex was a joint project of Stanislaus County, the City of Modesto, and the Modesto Redevelopment Agency. Space in the City Hall building is shared between the City and County. Additionally, space occupied by departments within City Hall that earn revenue and pay rent to the City for office space cannot be included in the CFF program. These enterprise departments, such as sewer, collect enough revenue from residents through utility charges to fully fund their operational needs, including capital and office space. As the City's cost of providing space for enterprise departments is recouped from the department's themselves, it is not appropriate to include these facilities in the CFF fee program. The City's non-enterprise share of the Tenth Street Place office space costs approximately $18.5 million dollars, per the Modesto Finance Department.

**Financing**

Fee revenue from CFF was expected to be collected over approximately 30 years. However, the City incurred the full construction cost of its share of City Hall at the time of its construction. Borrowing to fund the construction solves that timing problem, but it also means that interest costs will be incurred on the debt. These interest costs are part of the cost of the project and are included in the CFF.

The complex issues involved in financing and its inclusion in CFF has been studied as part of the earlier CFF update. The calculations there determined that the inclusion of the cost of financing increased the facility's cost by 56% from $18.5 million to $28.9 million

Because it's been approximately five years since the construction of the new City Hall and because the cost of construction is expected to be collected over about 30 years, it is reasonable to assume that about one sixth of the cost of the City Hall, including debt service, has been paid. One sixth of $28.9 million is counted towards existing capital facilities cost, with a replacement value of $4.8 million. The balance is counted as future costs to be paid by the city totaling $24.0 million per the current CFF calculation.

**Corporation Yard**

In contrast to the offices of City Hall, this component consists of the facilities serving functions better located in a lower cost, more industrial neighborhood. The Corporation Yard currently houses the majority of such functions. Divisions with activities included in this group are:

| | |
|---|---|
| wastewater collections | electrical |
| fleet services | parks & recreation |
| store/supplies | streets |
| traffic meters | traffic signs |
| street striping | water |
| fire vehicle maintenance | |

The existing corporation yard is housed on a 10.5 acre parcel of industrial land. The replacement cost of this land is valued significantly below that of land developed for residential purposes. Also, because the parcel is large, the per acre cost of land is somewhat discounted. The per acre cost of land for the existing corporation yard is estimated to be about half that cost of new residential land. At $82,000 per acre, the replacement value of the corporation yard land parcel is $860,000.

The existing corporation yard consists of a variety of building types. It includes both offices and low-density warehouse and storage. The average cost of the building improvements to the corporation yard is estimated at $120 per square foot. At just over 54,000 square feet in floor space, the replacement cost of the corporation yard structures is valued at $6,487,000. The total of land and buildings is $7,347,000.

**City Hall Computer Room**

The City Hall building includes a city computer room which houses the information technology equipment used by the City necessary to maintain its computer system and network. The replacement value of infrastructure improvements to the computer room is calculated at about $146,000. This cost does not include the room itself, which is included in the total cost of the City Hall building. Also, this cost excludes any technology or computer equipment that is not a permanent fixture in the room and needs to be replaced and updated periodically.

The total replacement cost of the City's General Government capital facilities is calculated in the table below.

**Table VI-1**
**Replacement Cost of Existing Facilities**

| Component | Cost |
|---|---|
| City Hall (one sixth of total cost) | $4,810,000 |
| Corporation Yard | $7,347,000 |
| City Hall Computer Room | $146,000 |
| **Total Existing Facilities** | **$12,303,000** |

# FUTURE FACILITIES

## City Hall

As was discussed earlier, the City has only been able to fund a fraction of the construction costs of the City Hall building completed in 1999. The City will attempt to fund a substantial amount of the cost, plus debt service, over the next 25 years. The projected future cost to the City of debt service for the City Hall building is $24.05 million.

## City Hall Annex

The City Hall building at Tenth Street Place currently houses 332 employees in its non-enterprise city offices. Based on the employee density standards recommended by RRM Design group, working with the City, the existing facility can be expected to accommodate an additional 34 employees, for a total of 366.

If we assume that employee to population ratios are maintained as the City approaches buildout, the number of city employees requiring space in the City Hall building will be 615. This number may be conservative, as it does not take into account the needs of commercial and industrial development, which, at General Plan buildout, will have grown at a greater rate than residential development and population.

Additional space will be required for 249 city employees at buildout. At the recommended density standard of 263 square feet per employee, the City will require an annex to the City Hall building, providing an additional 65,500 square feet of office space. The City estimates that this additional space, including land, construction and associated expenses will cost about $300 per square foot, comparable to the per square foot cost estimates for the City's future police facilities. The total cost of a 65,500 square foot annex to the City Hall building is projected to cost about $19.65 million.

## Corporation Yard Expansions

In contrast to the offices of City Hall, this component consists of the facilities serving functions better located in a lower cost, more industrial neighborhood. The Corporation Yard currently houses the majority of such functions. Divisions with activities included in this group are:

| | | |
|---|---|---|
| wastewater collections | streets | traffic signs |
| electrical | street striping | water |
| fleet services | traffic meters | fire vehicle maintenance |
| parks & recreation | store/supplies | |

The City has undertaken a study of the future space needs of these divisions. Bus maintenance functions, not currently in the corporation yard, are also included in the study as its integration with the other city facilities would offer economies of operation. The study approach was to estimate the space needs of each division and then to determine the necessary additions to existing facilities to fulfill these needs. Alternative plans to provide the additional space were then identified and one option was recommended (option 4b). That alternative is used here as the basis for estimating the facilities needed for growth.

Satellite Yards

One of the principal considerations was whether the present corporation yard should be expanded or satellite yards established; the recommended alternative includes satellite yards. (The capital costs would not be significantly different for an expansion of the present yard.) These yards would be composed of crew reporting areas, material storage, vehicle and equipment storage and employee parking; their purpose would be to have these service facilities located more accessibly to various parts of the city. It was assumed that about two-thirds of the crews of the streets (except street sweeping), water and parks (except building services) would be relocated to satellite facilities, freeing up space for expansion of other divisions at the central corporation yard. The City has purchased some, but not all of the land required to house its planned satellite yards. The satellite yards are expected to require an additional five acres, at a cost of $165,000 per acre. This is the typical cost of land in residential areas. Industrial land is more typically used for a corporation yard—it generally costs somewhat less than land zoned for residential development. However, there are not sufficient lands zoned for industrial development within the City limits. Unless a satellite facility is located in a portion of the unincorporated outlying areas, it is likely the land costs will reflect the more expensive range within residential land use zones. Construction costs for the satellite yards are estimated to total about $2.0 million. With the $825,000 land cost, the total cost of the satellite yards is $2,825,000

Vehicle Maintenance Facility

A Vehicle Maintenance Facility is planned to be completed as the second phase of the Bus Maintenance Facility Project, currently in the planning and design stages. (Costs for the Bus Maintenance project are included in the Public Transportation component of the CFF update.) Using the same cost estimate of $150 per square foot being used for the Bus Maintenance Facility, the planned 20,000 square foot Vehicle Maintenance Facility will cost about $3.0 million to complete.

Wash and Fare Retrieval Facility

All of the alternatives considered included a new vehicle washing facility (not including maintenance, but including a secure fare retrieval capability) to be constructed at the existing corporation yard. Its cost is estimated at $200,000.

**Light Vehicle Facility**

Another City facility is included in this component of the CFF. The City operates a light vehicle maintenance facility on the same block as the Police Station. While the majority of the vehicles serviced there are police vehicles, it also services the City's other light vehicles. The facility will either need to be refurbished or replaced, either on the Police Station block or elsewhere. Planning for this project is currently underway, and the total cost is estimated at $425,000.

**Parking Facilities**

Finally, the addition of City employees in the Downtown Core of Modesto to accommodate public service needs at buildout will require additional parking facilities. The City Hall Annex, as planned, will create the need for parking facilities providing an additional 249 spaces. The per space cost is $12,500. The total cost of providing these new spaces in the Downtown Core is estimated at $3,112,500.

Additionally, the completion of the Bus Maintenance Facility and the Vehicle Maintenance Facility will displace some of the existing parking in the Corporation Yard. About 60 spaces will need to be relocated and replaced. Replacement costs are estimated at $1,000 per space, for a total cost of $60,000. The total cost of parking facilities is thus $3,172,500.

**Information Technology**

The City has included an information technology component to the General Government CFF fee. The city plans both a fiber optic cable network, as well as a wireless network, to connect the city and facilitate improved communication between centralized city services and public facilities in the field. The planned networks are also expected to improve response and communication between the City's public safety services. The City does not have the existing infrastructure to serve its needs and thus it will be responsible for providing new IT networking infrastructure to meet its standards for both existing and new development throughout the City.

The City's Information and Technology Department has provided detailed cost estimates and plans for serving and connecting the City at buildout. The specific costs are detailed in the supplement report *Information Details.*

Fiber Optic Communication

The City of Modesto plans an extended fiber optic cable network to meet the current and future service demands and technology needs of the City. This network would connect peripheral public facilities like community centers, historical buildings and fire stations, through a fiber optic network based and centralized through City Hall. The IT Department has calculated the total cost, including the cost of trenching and laying miles of fiber optic cable and providing the network infrastructure for the City's various facilities. The total cost of the fiber optic network at buildout is estimated at about $4.73 million.

Citywide Wireless Network

The citywide wireless network is projected to provide high-speed communications to mobile city and public safety services. Infrastructure for the wireless system includes network towers at locations dispersed throughout the city to ensure total coverage, and the equipment necessary to connect public safety facilities and other facilities used for field operations including building permit, code enforcement and maintenance operations. The estimated cost of the wireless network system is $931,000.

IT Training Facility Expansion

Plans for a future City Hall Annex include floor space for the purposes of technology training, as the City expands and becomes more reliant on technology. This site would be used by staff to train on city systems related to business workflow, upgrades, replacement systems, etc. Technology related improvements are estimated to cost $42,000. The cost of the office space required to house a training facility is included in the City Hall Annex cost calculations. Only the major permanent technology infrastructure improvements are included in the cost here. The cost does not include computers, servers, or other equipment that requires replacement and upgrade less than every ten years.

Computer Room Facilities

At buildout, expanded and improved computer room facilities are planned in both the City Hall Annex, and the Police Department. Expansion of these facilities is needed to accommodate growth, and the incorporation of fiber optic, and wireless network facilities. The estimated cost of improvements to the City Hall Annex computer room is about $146,000. Improvements to the Police computer room are estimated to cost about $286,000. Again, these costs, a total of $432,000, cover only the permanent technology infrastructure improvements—they do not include office space, or computer equipment.

Phone Room

The new City Hall Annex will require a phone system to support the new staff needed to serve residential and non-residential growth at buildout. Phone system costs include infrastructure for voice mail, call accounting, automated call distribution and general phone service to facilities in the annex. The estimated cost of $276,000 does not include floor space, or equipment that must regularly be replaced or upgraded.

## Total Cost of Future Facilities

Adding the City's Information Technology system costs to the cost of other facilities included in the General Government component, the total future cost of the City's General Government Facilities is estimated to be $72,027,000. The components are shown in Table VI-2.

**Table VI-2**
**Cost of Future Facilities**

| | |
|---|---|
| City Hall | $24,050,000 |
| City Hall Annex | $19,650,000 |
| Corporation Yard Expansion | |
| Satellite corporation yards | $ 2,825,000 |
| Vehicle maintenance facility | $ 3,000,000 |
| Wash and fare retrieval facility | $ 200,000 |
| Light Vehicle Facility | $ 425,000 |
| Parking Facilities | $ 3,172,000 |
| Information Technology | |
| Fiber Optic Communication | $ 4,727,000 |
| Citywide Wireless Network | $ 931,000 |
| IT Training Facility Expansion | $ 42,000 |
| Computer Room Facilities | $ 432,000 |
| Phone Room | $ 276,000 |
| **Total** | **$ 59,731,000** |

## NEW DEVELOPMENT COST ALLOCATION

The General Government component of the CFF is the last of the three for which facilities costs are allocated to both residential and non-residential development, with the allocation based on population and employment, each employee counted as 40% of the impact of a resident. An explanation in greater detail of the basis for this allocation is given in Chapter 2. Here we address reasons this allocation is appropriate specific to General Government facilities.

The total cost of public facilities, including existing facilities and facilities to be built, are allocated among both existing and future development. Existing facilities will serve both existing and new development, as will the new facilities to be constructed. For instance, the new wireless network will serve existing development within the City as well as new growth areas. Both existing and new development will similarly be served by facilities in the existing corporation yard. In other words, the General Government facilities are treated as a single system.

City government facilities are required to serve all types of development, both residential and non-residential, as both bring persons and property that require the services provided by the City; this is the nexus between the development and the General Government component of the CFF. As in the case of fire and police, the allocation of other city government costs among residential development is based on population. The measure results in an equitable, rough proportionality allocation.

Employment is similarly often used as the indicator of need for non-residential services. Again, employment is an indicator of persons involved, and also a "roughly proportional" indicator of the property involved.

Table VI-3 calculates the allocation between existing and new development based on buildout DUEs. The total cost of future facilities and the replacement cost of existing facilities is $72,034,000. Spread across the 152,100 DUEs projected at buildout, the cost per DUE becomes $474. New development is projected to amount to 68,300 new development DUEs, bringing growth's cost share to $32.3 million.

Comparing new development's cost allocation of the buildout facilities with the cost of future expansions, it can be seen that the Department is presently at a net facilities deficit under the allocation methodology of this analysis. The majority of the deficiency is due to the financing of City Hall. Stated differently, existing facilities do not meet the needs of existing development.

The difference is the City's existing deficit in its general government facilities — a deficit that cannot be made up using funds collected for the CFF program.

**Table VI-3**
**General Government Facilities Summary**

| | |
|---|---|
| **Capital Costs** | |
| Existing | $12,303,000 |
| Future | $59,731,000 |
| Total | $72,034,000 |
| | |
| **Cost per DUE** | |
| Total Capital Cost | $72,034,000 |
| Buildout DUEs | 152,100 |
| Cost per DUE | $474 |
| | |
| **New Development Cost Allocation** | |
| Cost per DUE | $474 |
| New Development DUEs | 68,300 |
| New Development's Share | $32,347,000 |
| | |
| **Existing Development Cost Allocation** | |
| Existing Development DUEs | 70,700 |
| Existing Development's Share of Cost | $33,483,000 |
| Existing Capital | $12,303,000 |
| Existing Deficiency | $21,180,000 |

*Source: Town Hall Services*

# Chapter VII
# AIR QUALITY MITIGATION

The Environmental Protection Agency (EPA) has designated the San Joaquin Valley air basin as a "non-attainment" area based on the standards set out in the Federal and State Clean Air Acts. Specifically, standards for ozone, carbon monoxide, and particulate matter have been exceeded on a broad basis and the Modesto urbanized area is in non-attainment of carbon monoxide standards. Ninety percent of the area's carbon monoxide problem is associated with automobile emissions and the ozone and particulate pollution are also to a large extent caused by automobile emissions. This component of the fee program therefore focuses on facilities that reduce automobile and transit travel by facilitating alternative non-gasoline modes of travel.

The San Joaquin Valley Unified Air Pollution Control District (SJVUACD) has authority over the monitoring of air quality and the development of a regional program to regulate sources of air pollution. The District is preparing a report "Guide for Assessing Air quality Impacts." It has also identified specific means of mitigating air quality impacts through projects that reduce existing source emissions (offsets).

The Air Quality component of the CFF is different from the City's other fees in that it has not been calculated by identifying the facilities (the type and the amount) necessary to directly mitigate the impact. The City cannot yet measure separately the impacts of new development on its existing level of air quality. It also cannot determine the cost of correcting its existing deficiency (the current non-attainment). The City therefore intends to continue to construct improvements designed to reduce automobile travel, funding them with both development fee revenues and monies from other sources. In so doing, together with the expansion of public transportation services, it expects to mitigate significantly the air quality impacts of new development and to improve current air quality.

## FACILITIES FOR MITIGATING IMPACTS

The City's Air Quality Mitigation fee will fund projects that reduce automobile and transit travel or make such travel more efficient. This fee, however, will not go towards capital improvements of the City's bus system. Another fee component, the Public Transportation fee, funds the additional capital facilities that the City's bus system requires to serve growth.

Two types of projects have been identified as appropriate to be funded by the City's fee. These are park and ride facilities and Class 1 bike trails. It is expected that over time analysis of the effectiveness of early projects will lead to a revised more definitive program. The following is a list of projects that now appear appropriate to be funded with revenues of the Air Quality fee component.

## FACILITIES AT BUILDOUT

**Park and Ride Lots**

These lots serve as a staging area for car and vanpools, shuttle busses and public transit. They provide a convenience to single passenger commuters to meet other commuters and thus are an incentive to rideshare. This incentive could be promoted further with high occupancy vehicle lanes designated on the major corridors. Standard costs for park and ride lots are $5 per square foot. There are on average 350 square feet per parking stall and 100 spaces per lot. At the cost of $1,750 per space, a 100-stall lot would cost approximately $175,000. The City is tentatively planning to construct four new park-and-ride lots for a total cost of approximately $700,000.

**Class I Bike Trails:**

Convenient and safe bike paths would allow many residents to replace short car trips and daily commuting to school (especially) or work with bicycle use. Extensive information is available regarding bikeways in the Modesto Non-Motorized Transportation Master Plan. The City has identified 13 Class 1 bike trails needed for its construction program at buildout. Class I (off-street) bike trails are planned to be situated throughout the city to provide both a recreational option for residents as well as a non-motorized alternative for commuters. They will also provide safe non-motorized routes to schools, shopping and recreation destinations.

Class II (on street) bike lanes are included as an integrated component in new (and widened) roads. Thus the cost for including on street bike lanes is incorporated into the streets component of the CFF update.

The Parks, Recreation and Neighborhoods Department provided detailed cost estimates for the construction of new bike trails. Because the location of each proposed bike trail varies significantly, the per acre cost of land acquisition varies a great deal as well. For land in the 100-year flood plain, the cost is about $30,000 per acre. For the 5 acres required to construct the Monterosso Trailhead bike trail, the cost of land was $200,000 per acre. For a small number of bike trails, the land is already owned and operated by the Parks and Recreation department, and was included in the cost of land of regional parks in the Parks component in Chapter 5. Land acquisition costs for these trails are assumed to be zero.

The construction costs also vary somewhat depending on the location and the facilities provided for each bike trail. Construction costs include landscape improvements, hardscape, lighting, trail amenities and signage. The average construction cost for Class I bike trails is approximately $400,000 per acre. This cost compares reasonably to the average cost per acre to construct neighborhood and community parks. Though bike trails do not have all of the amenities of neighborhood and community parks (i.e. sports and playground equipment), the cost per acre of bike trails is comparably high because bike trails have many more amendments spread over a linear area. There are more trees, lighting, landscaping and irrigation required. Trailheads are typically hardscaped and contain adequate lighting and signage in kiosks.

The total cost of the City's Class I bike trails, at buildout, is estimated at $77,708,000. A detailed breakdown of the costs per trail is included in the *Information Details* supplemental report.

With $700,000 for park and ride lots added, the buildout cost of public facilities for the City's Air Quality Mitigation program is $78,408,000.

## EXISTING FACILITIES

The City's Air Quality Mitigation program is comparably new, and so the City does not have many public facilities to promote air pollution mitigation. The City has not yet constructed any park and ride lots, and has begun construction on only a fraction of the Class I bike trails planned

at buildout. The city has already purchased, or otherwise owns the land for five of its planned bike trails. The City has begun significant land improvement on three of these trails. The total replacement cost of the existing program facilities is $13,480,000.

## FEE CALCULATION

The City has indicated that its existing Class I bike trail facilities are used primarily by residents for recreational purposes, or as an alternative means of transportation to retail and recreational facilities. It is less likely that the Class I bike trails system will replace car trips to and from work, because of the longer relative lengths of work commutes, and the fact that Class I trails do not extend to many places of business (as opposed to Class II street bike trails). For these reasons, it is reasonable to assume that residential development is primarily responsible for the need for and use of the Class I bike trail system. Accordingly, in calculating the Air Quality Mitigation fee, the total cost of facilities is shared amongst buildout residential DUEs. While it is true that future park and ride lots will serve work commuters, their proportionate cost as part of the Air Quality Mitigation program (less than one percent) makes the per DUE cost of park and ride lots almost negligible.

Because the bulk of the fee goes towards bike trail facilities, which primarily serve the residential population, and because the cost is shared amongst residential DUEs like the parks and recreation facilities, it could be argued that bike trails would be more appropriately included in the parks component rather than the Air Mitigation component. Even if this were the case, because the total cost and number of residential DUEs does not change, it would make no difference in the total fee charged to new residential development.

The total facilities cost of the Air Quality Mitigation program at buildout is $78,408,000. The responsibility for this cost is shared by the buildout stock of residential development, equivalent to 115,500 DUEs. The cost per DUE and new and existing development's share of the total is calculated in the table below.

**Table VII-1**
**Air Mitigation Facilities Summary**

| | |
|---|---|
| **Buildout Cost of Air Mitigation Capital Facilities** | |
| 13 class I trails | |
| Total Trail Cost | **$77,708,000.00** |
| Park and Ride | $700,000 |
| | |
| **Total Facilities Cost at Buildout** | **$78,408,000** |
| | |
| **Cost per DUE** | |
| Buildout DUEs | 115,500 |
| | |
| **Cost Per DUE** | **$679** |
| | |
| **New Development Cost Allocation** | |
| New Development DUEs | 44,300 |
| | |
| **New Development Share of Costs** | **$30,073,000** |
| | |
| **Existing Deficiency** | |
| Replacement Cost of Existing Facilities | $13,480,000 |
| Existing DUEs | 61,900 |
| Existing Development's Share of Total Cost | $42,021,000 |
| | |
| **Existing Deficiency** | **$28,541,000** |

## EXISTING DEFICIENCY

Because the Class I bike trail system is still in the early stages of development, there is a large existing deficiency in facilities currently serving the existing population. At a cost of $679 per residential DUE, existing development's share of the cost is over $42 million. However, the replacement value of the existing Air Quality Mitigation system is only $13.5 million. That leaves the City with an existing deficiency of over $28.5 million that it must make up with funds outside of CFF fees to provide facilities for the entire City.

# Chapter VIII
# STREETS

The generation of traffic is the aspect of new development that potentially impacts most directly the citizens and businesses of the City of Modesto. Mitigation in the form of street improvements is, not surprisingly, the dominant component of the CFF program. The net cost of CFF street improvements necessary to accommodate the traffic generated by new development is over $900 million; revenues from the streets component of CFF are projected to constitute over 70% percent of future CFF revenues.

The CFF component for public transportation has many structural similarities to streets. This is a separate component, however, and is described in Chapter IX following.

The determination of needed street improvements and the estimation of the costs of these improvements has been the responsibility of Omni-Means, Ltd., a firm of traffic engineers and planners. A separate supplemental report describes their work and the results in greater detail; it is entitled *Capital Facilities Fees — Street Projects Update.*

## INTRODUCTION

### Street Improvements Included in Streets CFF

Street facilities range from local neighborhood streets at the smallest to freeways at the largest. They include the stretches of roadway and the intersections where they come together, as well as the rights-of-way on which they are located.

CFF is a critical part of a funding package for street improvements, but only a minority of the total cost. Developers are directly responsible for providing local streets as specified in the tentative and final maps approved on the property. Off-site minor collectors are also the total responsibility of developers, often in the form of a community financing district (CFD). These streets are therefore not included in the CFF program. Another way to view the exclusion of most two lane streets from the CFF is to know that development is responsible for contributing right-of-way and making specified improvements to a CFF street that fronts their property. This requirement covers completely the smaller streets and two lanes of larger arterials and expressways. These requirements are known as street exactions. The street costs used to determine the streets CFF do not include the share of the cost covered by exactions.

No changes are planned for downtown streets; they are therefore also not included in the CFF program. Freeways are State facilities. They are not addressed in this study. Freeway interchanges include streets other than freeways and it is doubtful the State will undertake needed improvements; they are therefore included.

The remainder of street improvements - those other than local streets, downtown streets, freeways and those covered by exactions - are addressed in this report and reflected in the CFF calculations. These include expressways, arterials and major collectors, as well as their intersections. They are expensive components of Modesto's street system.

The CFF is calculated based on the cost of street facilities that need to be added in order to allow the street system to function at, or as close to as possible, the level specified in the City's General Plan. The facilities necessary to accommodate traffic at this standard are determined by the City's traffic model. This computerized tool allows the street planners to simulate traffic and to develop a street network adequate to accommodate that traffic. Such a network is specified in the General Plan. The work in this study by Omni Means verified the need for the 266 improvement projects necessary to complete the network; these are the streets improvements addressed in this study.

Some of street improvements necessary for a system adequate for traffic at buildout are improvements that would be needed even in the absence of any new development. These are referred to as existing deficiencies.

**Street Improvement Costs**

The single most expensive task, by far, in this CFF study is the estimation of the costs of street improvements. The estimating has been the responsibility of Omni Means engineers. It has been undertaken, however, with the direct involvement of the staff of the City of Modesto's Department of Engineering.

The first step consisted of mapping each of the 267 improvement projects (e.g. Carpenter from Kansas to Maze). Engineers then "conceptually designed" and estimated the cost of each of the projects on a preliminary basis. The costs were estimated for each component of each project, e.g. for additional traffic lanes and, as well, for the necessary right-of-way additions (including information about surface improvements or buildings located thereon) This is the first time the City has had preliminary cost estimates with this level of detail for all anticipated street projects to use in planning and budgeting.

It should be noted that the analysis indicated that some funding other than CFF revenues should be assumed for a few of the street projects included in the list of CFF street improvements. The principal other funding sources included in the analysis are state and federal funds (principally the State Transportation Improvement Program - STIP) which are allocated through the Stanislaus County Council of Governments (StanCOG).

**CFF Calculations**

The traffic to be accommodated was projected based on standard trip generation information. For example, each single family home was assumed to generate 9.57 trips per weekday. Adding together the trip generation of all categories of new development provides a total number of additional daily trips that will be generated by new development at buildout of the CFF study area.

The streets CFF cost per trip is calculated by dividing the total cost of street improvements to be funded by CFF by the number of trips. The streets CFF for each type of land use development is determined by multiplying the per trip CFF cost times the trips for which the development is responsible.

## STREET IMPROVEMENTS

**Approach/The Traffic Model**

The street improvements to be funded by the CFF program are identified using the following approach:

The City used its computerized traffic model which assigns vehicle trips to a street network; this allows measurement of the level-of-service (LOS) on each segment of the network by comparison of the traffic with each street's capacity.

Potential development - residential and non-residential, existing and new - is projected assuming buildout of the CFF study area. The trips that will be generated by this amount of development are projected and input into the model.

The capacities of all existing streets are input and the model is run to allocate the trips to the street network. This determines which street segments (especially intersections) are unable to accommodate the traffic, i.e. fail to meet the City's LOS standard.

Street improvements (providing additional traffic capacity) are added as needed to bring the network's performance up to the City's standards. The added street improvements are a tentative list of improvements needed for buildout of the City.

The list is reviewed to identify improvements that the transportation planners decide are unnecessary or are unjustified because of their cost, in dollar terms or in terms of the disruption to homes and businesses involved.

The running of the model and adding (or eliminating) improvements and evaluating the resulting network is an iterative process; it is continued until an appropriate street network is determined.

**The City of Modesto General Plan**

The City's present General Plan was adopted in August of 1995. Some amendments to the Plan along with a Master Environmental Impact Report (MEIR) were adopted in February 2003. The Plan is fundamental to this study in several ways. One is that the CFF study area includes almost all of the area in the General Plan. Only a couple of areas, most importantly the community of Salida, for which the City is unlikely to ever assume the responsibility for public facilities, are not included. The amount of development for which facilities are identified is buildout of the CFF study area consistent with the land use designations in the Plan. The use of this amount of development for analytic purposes is advantageous in that it is a comprehensive picture; spreading the cost of a relatively large street network among a correspondingly large amount of development minimizes the distortions that can occur in a smaller area. For example, a major intersection located in a smaller area may require expensive improvements due, to a large extent, to traffic generated outside of the area. Allocating the full cost of the improvements to the development in the smaller area would be unfair and contrary to the laws governing impact fees.

Buildout is used as a time frame for similar reasons, rather than, for example, ten years. The traffic generated by development in one decade could be sufficient to cause the need for several very expensive improvements. Assigning their cost sole to development in that decade would again be unfair and unlawful.

There is also a very practical consideration involved. The calculations of the amount of development allowed per the General Plan and the identification of the streets network required had already been completed and adopted by the City. Undertaking the task of specifying development and designing the necessary streets for a portion of the CFF study area or for partial

development (e.g. that that would occur in the next decade) would have been quite expensive and would have delayed the study for at least a year. Even more important, it would have raised the policy question as to whether (1) development is to be constrained to areas that can be efficiently served by a list of priority street improvements or (2) development is allowed throughout the City requiring a more extensive set of street improvements. The trade-off between fewer constraints on development and a higher streets cost (when planning for less than study area buildout) is obvious.

As well as approximating the territory to be analyzed, the General Plan is also fundamental in that its land use designations provided the basis for projections of the amount of development that would occur on the undeveloped land in each traffic analysis zone (TAZ). Residential development is projected in terms of single family and multi-family units, reflecting the General Plan designations. Non-residential development is projected in terms of retail, service, government and other employment. These projections of development are the basis for the projection of trips generated.

The General Plan defines the categories of streets and the development standards for each. The categories are as follows:

| | |
|---|---|
| Freeways | Principal Arterials |
| Class A Expressways | Minor Arterials |
| Class B Expressways | Major Collectors |
| Class C Expressways | Minor Collectors |
| | Local Streets |

The description of each category as given in the General Plan is included in the *Information Details* supplemental report. The CFF program includes freeway interchanges, expressways and principal arterials.

The General Plan is also critical in that it specifies the City's standard of performance for its street system. The common method of looking at system-wide conditions is to compare the traffic volume on the important facilities to the carrying capacity of those facilities. This comparison establishes a relationship between a roadway or intersection's capacity and the actual volume using that facility, the "volume/capacity" ratio. This can be translated into a "level-of-service," which is defined using letter grades ranging from "A" through "F." The General Plan sets level-of-service D as the City's standard. LOS D is a middle ground between "stable flow" (LOS C) and "unstable flow" (LOS E). Phrases used in the Highway Capacity Manual to

describe it include:

> "The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios."

Methods used to assess LOS and V/C (volume to capacity) ratios are described in the *1997 Highway Capacity Manual*. The capacities for various types of roadway (e.g. four lane undivided arterial) are given in a table on Page 16 of the Omni-Means report. It should be understood that the level-of-service standard refers to service at the period of peak traffic congestion. If it is level D at that time, it will presumably be at a higher level the rest of the day.

**Over-riding Considerations**

It is obvious to anyone driving on some Modesto streets at about 5 p.m. that some streets currently do not meet the LOS D standard during rush hour. The traffic resulting from buildout of the City will cause LOS D to be exceeded in some additional locations, even with the planned improvements. Modesto's traffic engineers have focused substantial attention on these situations. After years of study and consideration it became apparent that there existed specific situations in which building the improvements necessary to achieve LOS D would not be in the City's interest. Some improvements may simply cost too much for the relatively small amount of benefit they provide. More commonly, the addition of the improvements estimated as necessary to achieve the standard would require the removal of too many existing homes and/or businesses. (The southern end of McHenry is a prime example.) In some of these situations it was concluded preferable, based on these over-riding considerations, to add additional capacity in newer street facilities where possible and to endure some lower levels of service than to widen some streets along which development has already taken place.

Section 65302b of the California Government Code requires that each city's general plan include a circulation element indicating the major planned streets. In the case of Modesto these are the streets determined by the traffic model analysis to be necessary to meet the LOS D standard. These are shown on the *Circulation and Transportation Diagram* included in the Plan and are the basis of the street cost estimating and evaluation described in the next section. The Plan identifies the streets for which the City has determined that "over-riding considerations" justify not making the improvements that would be required to bring traffic conditions to Level D during peak hour.

**Existing Deficiencies**

Not all of the streets that currently fail to meet LOS D are affected by such over-riding considerations. Improvement in these situations is expected. The costs of improvements adequate to bring these situations up to LOS D are referred to as "existing deficiencies". The City study has identified $5 million in CFF program existing deficiencies. In addition, it should be remembered that existing deficiencies relative to the CFF program refer only to road segments included in the CFF program. Minor collectors and below and buildout downtown streets are not included. Finally, existing residents as well as new will benefit from the new overpass and freeway intersection, which will relieve some existing congestion. Much of the funding for these will come from sources other than CFF funding.

The cost of curing existing deficiencies cannot be made the responsibility of new development, as new development did not contribute to the deficiency situation. The funds required will need to come from the City of Modesto or from grants that they secure.

## COSTING METHODOLOGY

The key to the cost estimates was, as indicated earlier, the detailed descriptions of the 267 street projects. This information made it possible for each component of a project to be separately estimated. The specific methodology and cost assumptions utilized are fully described in the supplemental *Streets Projects Update* report to this document. Following is a partial list of the items considered in the cost estimating process.

- Roadway Excavation
- Roadway Structural Section
- Median Island Treatment
- Storm Drainage
- Sound Walls
- Right-of-Way
- Support Costs and Contingencies

# COSTS

## Street Improvements Costs

The product of the cost estimating described above is a list of the street improvements included in the CFF program together with their costs. This list is included here as Appendix VIII-A. The projects are grouped by type of improvement in the table below. Costs summarized by types are as shown in Table VIII-1. The table shows the allocation of the cost of CFF street improvements across the various land use categories together with funding responsibilities.

**Table VIII-1**
**Costs by Type of Project**

| | Total Cost | - Exactions | - StanCOG Funding | - City & Other Funding | CFF Cost |
|---|---|---|---|---|---|
| Intersection Projects* | $288,747,405 | $47,251,267 | | | $241,496,138 |
| Roadway Projects | $638,281,185 | $111,742,858 | | | $526,538,326 |
| Traffic Signal Projects | $9,893,505 | | | | $9,893,505 |
| Interchange and Fwy Projects | $256,361,152 | | $58,019,577 | | $198,341, |
| Existing Deficiencies* | | | | $4,587,669 | *-$4,587,669* |
| Adjustments | | | $57,878,309 | | *-$57,878,309* |
| | | | | | |
| Total Street Improvement Projects | $1,193,283,247 | $158,994,125 | $115,897,886 | $4,587,669 | **$913,803,566** |

*Includes existing deficiencies of CFF facilities only
*Source: Omni-Means, Ltd.*

## Adjacent Development Responsibility — Exactions

As part of the last update of the CFF program, the City adopted a set of street exactions policies. (A copy of the proposed exaction policies is included in the *Information Details* supplement.) These policies require a developer of adjacent land to contribute the cost of one traffic lane and associated frontage improvements, together with the land required for these improvements. In essence, the developer is responsible for the same improvements that would occur in a situation where only a two-lane road was required. In general, the policy states that a width of 40 feet shall be dedicated and improved (30 feet in from face of curb improvements plus 10 feet behind curb improvements); it is applicable to all CFF funded streets, except expressways. (Expressways do not provide access from adjacent property; property owners adjacent to

expressways dedicate the right-of-way, but are not required to make improvements.) In existing circumstances, where at least 40 feet of dedication and improvements have previously been made, and standards change requiring additional right-of-way, such additional right-of-way and improvements shall be acquired with reimbursement. Estimates were made of the cost of exaction improvements but, as Table VIII-1 shows, they are not included in the costs used as a basis for CFF fees.

**Alternate Funding Sources**

It was mentioned earlier that CFF is only part of a package of funding sources for street improvements. One task of the CFF update study has been to identify other sources of funding outside of CFF to which some of the identified projects could be assigned. Other possible funding sources include Stanislaus County public facilities fee (PFF) projects, contributions by adjacent cities for boundary streets, potential sales tax revenue, as well as review of StanCOG funding plans.

The largest source of alternative funds is the StanCOG, which allocates State Transportation Improvement Program (STIP) funds. This CFF update assumes $116 million in StanCOG funding, based on the projects in the Regional Transportation Plan and their budgeted StanCOG funding.

The most critical assumption made is with regard to the possibility of a Stanislaus County sales tax component for street funding (and perhaps for other purposes as well). Such a tax is common in California, having been approved by the voters in a majority of counties. (Neighboring San Joaquin County levies a half-cent sales tax for funding of transportation projects.) A quarter or half cent sales tax would generate a substantial amount of funding of revenue, with funding most likely for large projects that benefit both existing residents and new development. StanCOG is the designated agency developing information about such a tax. It is difficult to estimate how much would be available for funding projects on the CFF list; perhaps between 10 and 20 percent is a reasonable estimate. However, sales tax funding is assumed in this analysis.

Finally, it can be noted that some of the streets included in the CFF program lie on the border between Modesto and another city. It would appear reasonable, though not likely, that the fee program of the adjoining city would contribute one-half of the project costs in these situations. Also, Stanislaus County has a public facilities fee (PFF) program to fund regional street improvements. The only such contribution assumed in this analysis is funding for Pellendale ($10.0 million) and for Kiernan ($650,000), both of which are already budgeted in the PFF program.

This discussion has indicated that only exactions (project costs of $159 million), the projected StanCOG allocated funds ($116 million) and City expenditures for existing deficiencies not funded with StanCOG funds ($5 million) funding contributions are assumed as alternative funding for the CFF streets. Funding from these sources reduces the total cost of $1.2 billion for the projected improvements to CFF streets to $914 million. Unless some other sources of funds are identified, this is the amount needed from CFF fees if the improvements necessary to complete the buildout road system are to be completed.

## CALCULATION OF STREETS CFF

### Trip Generation

Trip generation was the basis for the determination of the street improvements needed to accommodate traffic at buildout. It is also the basis for the allocation of the costs among new development. Having the variable used to calculate the fee be the same variable used to determine the facilities to be built is the best possible nexus. It guarantees the proportionality that must be present in a fee program. This is fortunate because street fees are by far the largest component of the CFF program.

The traffic model inputs are, as described earlier, based on General Plan land use designations. The model allocates the trips for all existing and new development. We are interested here, however, in allocating the cost of future improvements needed for new development to the trips generated by new development. To identify the increase in development occurring over the life of the General Plan, current land use activity was subtracted from activity at buildout.

Current data for residential development was based on 2000 U. S. Census of Population and Housing information. The 2000 Census counts were increased by two percent to reflect development between 2000 and 2002. No single information source has comparable information for current commercial and industrial activity. Non-residential activity, expressed in terms of employment, was therefore estimated based on several data sources. These included the California Employment Development Department, the 1997 Economic Census, and employment counts estimated from City of Modesto Planning Department land use data. Subtracting current residential and non-residential activity from the activity counts in the traffic model, which is based on General Plan buildout, yielded the amounts of projected growth. This growth is used to project the count of trips generated by new development and, as described in the next section, to allocate the cost to the various land use activities.

**Allocation of Costs**

The calculation of the streets fee for the various categories of land use activity on trip generation for which each category is responsible is shown on Tables VIII-2 and 3. Each row in Table 2 represents a category of land use activity. The first information column shows the number of dwelling units (for the two residential categories) or employees (for the non-residential categories) associated with new development in that category.

A subsequent column shows the daily average trip generation per unit or per employee. It should be understood that each trip has two ends, one associated with the land use at its source and the other with the land use at its destination. The count of trips in the discussion here and in the tables is therefore actually a count of trip-ends, double the number of trips. (The results would be the same if we counted total trips and allocated half-trips to each end.)

The deduction of retail pass-by trips and the assignment of causal responsibility for neighborhood retail and medical trips to residential are shown in the following two columns. Trip reduction factors of 60%, 65%, 70% and 75% have been applied for retail "pass-by/multi-purpose" trips, the factor used depending on the size of the projected retail facility. The smaller the retail facility, the greater the trip reduction factor due to "pass-by/multi-purpose travel" (e.g. a stop at a gas station on the way home from work). Trips to a mall or to a big box retail are more likely to be to only one retail destination.

For most categories the count of trip ends is roughly proportional to the trips caused. For retail (and medical offices), however, the count distorts the situation. These activities exist at their locations to a large extent because of the shopping needs of the residential population. Said another way, the homes were not built because of the availability of retail outlets; the retail outlets were largely constructed because of the local residential population. It can also be noted that home to shopping strips are shorter than the average trip length. This study takes a step toward a better nexus by assigning approximately half of the retail (and medical office) trip ends beginning or ending at homes to those residences. More specifically, 13% of retail site trip ends are shifted to residential development, a 14% increase in residential trip ends. It can be noted that such an adjustment to improve the nexus is reasonably common. In particular, it has been a considered and acknowledged part of the two earlier City of Modesto fee justification studies and a much larger adjustment is used in the Stanislaus County fee program.

The number of daily trips generated is then shown, with the column showing a total of 1.25 million trips. The total cost of street improvements to be funded by CFF revenues is $913.8

million. Allocating this cost amount to the various land uses proportional to their percentage of daily trip generation yields the costs shown in the next to last column. Dividing each of these costs by the number of homes or employees in the first information column yields a cost/fee per home or per employee.

The cost amounts per home can be directly used as a basis for the CFF fee amount. The cost per employee amounts have to be converted (1) to reflect the typical mix of land use activities in typical projects and (2) to be expressed as cost per thousand of square feet of floor space, the basis on which the fees are levied. These conversions are shown in Table VIII-3. The rows here represent typical City of Modesto land use codes. For some land use codes these are the same land use activities shown in Table VIII-2. For others, the typical land use project is a mix of the activities shown in Table VIII-2.

The first information column in Table VIII-3 shows the employment density assumptions used in the traffic model. The following three columns show the estimated average share of each activity for projects in that land use category. The percentages in these three columns allow the calculation of the cost/fee per employee weighted by the percentages. The final step in the calculations is to convert the fee per employee to a fee per thousand square feet of floor space. The employment densities from the Institute of Traffic Engineering Handbook database are shown, followed by the final calculated fees.

**Streets Fees**

The calculation of the total trips generated by new development was accomplished using the land use code categories in the current CFF program. Having determined the average cost per trip, using these current categories, more precise determinations, and hence a better nexus, can be utilized recognizing that specific uses within each category may generate more or less trips than the average used for that category. The Institute of Traffic Engineering (ITE) Handbook provides information about trip generation for a large number of specific land uses. Thus, for example, we can use the average generation specifically for daycare centers rather than just for the broader category of service businesses. In this way, each use can more appropriately pay their fair share based on their anticipated trip generation characteristic rather than an average within their land use category. This approach does allow for the potential to generate more or less revenue than the projected average, however, over time and a presumed reasonable balance of potential uses within a category, the average should remain representative.

The final determination of fees that would provide the funds needed for the street facilities at buildout is shown in Table VIII-4. It utilizes the trip-generation data for more specific land uses

to improve the nexus between the impacts of each project and its share of the cost of the facilities needed. The table also shows the existing CFF streets fee and the percentage by which the costs developed in this study exceed the existing fee. (The large increase in the warehousing fee reflects the fact that the current fee assumes the warehouse buildings are used for storage of agricultural products.)

# Table VIII-2
# Fee Spread by Activity

| Land Use Activity | New Development ("Buildout -minus Existing") | Units | ITE-based Daily Trip Generation Rate[1] per Unit | Pass-by Adjustment Factor[2] | Trip Length/ Causality Factor[3] | Daily Trip Generation | Percentage Share of Daily Trips | Spread of CFF Improvement Costs | Fee per Unit |
|---|---|---|---|---|---|---|---|---|---|
| SFDU | 33,506 | D.U.'s | 9.57 | 100% | 114% | 366,801 | 29.3% | $ 268,056,703 | **$ 8,000** |
| MFDU | 16,089 | D.U.'s | 6.63 | 100% | 114% | 122,022 | 9.8% | $ 89,173,278 | **$ 5,542** |
| etail (lesser than 50,000 sq.ft.floor area) | 10,234 | Employees | 50.31 | 25% | 87% | 111,734 | 8.9% | $ 81,654,589 | **$ 7,979** |
| etail (50,000 sq.ft.to 99,999 sq.ft. floor area) | 10,234 | Employees | 33.99 | 30% | 87% | 90,586 | 7.2% | $ 66,200,107 | **$ 6,469** |
| etail (100,000 sq.ft.to 300,000 sq.ft. floor area) | 10,234 | Employees | 23.95 | 35% | 87% | 74,467 | 6.0% | $ 54,420,162 | **$ 5,318** |
| etail (greater than 300,000 sq.ft. floor area) | 10,234 | Employees | 19.31 | 40% | 87% | 68,617 | 5.5% | $ 50,145,104 | **$ 4,900** |
| Service (Medical Office) | 7,652 | Employees | 8.91 | 100% | 87% | 59,183 | 4.7% | $ 43,250,738 | **$ 5,652** |
| Service (General Office) | 30,609 | Employees | 3.32 | 100% | 100% | 101,622 | 8.1% | $ 74,264,856 | **$ 2,426** |
| Government (General Office) | 14,700 | Employees | 3.32 | 100% | 100% | 48,804 | 3.9% | $ 35,665,764 | **$ 2,426** |
| Other (Industrial) | 98,372 | Employees | 2.10 | 100% | 100% | 206,581 | 16.5% | $ 150,968,699 | **$ 1,535** |
| *Total Employees* | *192,269* | *Employees* | | | | | | | |
| *Population* | *171,000* | *Residents* | | | | | | | |
| **TOTAL TRIPS** | | | | **1,250,417** | | **1,250,417** | **100.0%** | **$ 913,800,000** | |

lotes:

. Daily trip-ends for which this category is a source on desitination

2. A 60%, 65%, 70% and 75% trip reduction factor has been applied for retail "pass-by/multi-purpose" trips based on the size of the projected retail facility.
The smaller the retail facility, the greater the trip reduction factor due to "pass-by/multi-purpose travel.

3. Responsibility for all home based trips to local retail and medical offices is assigned to residential development.

Source: Omni-Means

# Table VIII-3
## Conversion to General Plan Land Use Code Fees

| Land Use Code Category[1] | Model Employee Density (per gross acre) | Retail Employee Density Share | Service Employee Density Share | Other Employee Density Share | Weighted Fee per Employee | Density Factor (KSF per Employee)[2] | Final Weighted Fee per Unit | Unit |
|---|---|---|---|---|---|---|---|---|
| SFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 8,000 | D.U. |
| MFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 5,542 | D.U. |
| Retail (lesser than 50,000 sq.ft.floor area) | *24* | 75% | 25% | 0% | $ 6,591 | 0.450 | $ 14,646 | KSF |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | *24* | 75% | 25% | 0% | $ 5,458 | 0.450 | $ 12,129 | KSF |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | *24* | 75% | 25% | 0% | $ 4,595 | 0.450 | $ 10,211 | KSF |
| Retail (greater than 300,000 sq.ft. floor area) | *24* | 75% | 25% | 0% | $ 4,281 | 0.450 | $ 9,514 | KSF |
| Office (Medical Office) | *45* | 0% | 100% | 0% | $ 5,652 | 0.302 | $ 18,716 | KSF |
| Office (General Office) | *45* | 0% | 100% | 0% | $ 2,426 | 0.302 | $ 8,034 | KSF |
| Business Park (Service) | *25* | 0% | 25% | 75% | $ 1,758 | 0.317 | $ 5,544 | KSF |
| Business Park (Manufacturing) | *25* | 0% | 25% | 75% | $ 1,758 | 0.550 | $ 3,196 | KSF |
| Industrial (Manufacturing) | *18* | 0% | 20% | 80% | $ 1,713 | 0.550 | $ 3,115 | KSF |
| Industrial (Warehousing) | *18* | 0% | 20% | 80% | $ 1,713 | 0.784 | $ 2,185 | KSF |

1. Assuming average mix of activities for the General Plan land use codes.
2. Institute of Traffic Engineering handbook
Source: Omni-Means, Ltd.

# Table VIII-4
# Final Streets Fee Determination

| Landuse Code Category[1] | Density Factor (KSF per Employee) | Final Weighted Fee per Unit | Unit | Existing Streets Fee per Unit | Percent Increase in Fee |
|---|---|---|---|---|---|
| SFDU | N/A | $ 8,000 | D.U. | $ 3,168 | 153% |
| MFDU | N/A | $ 5,542 | D.U. | $ 2,172 | 155% |
| Senior Housing (37% of SFDU rate) | N/A | $ 2,960 | D.U. | $ 619 | 378% |
| Hotel/Motel (94% of SFDU rate, 60% occupancy factor) | N/A | $ 4,512 | Room | $ 538 | 739% |
| Retail (lesser than 50,000 sq.ft.floor area) | 0.450 | $ 14,646 | KSF | $ 4,500 | 225% |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | 0.450 | $ 12,129 | KSF | $ 3,989 | 204% |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | 0.450 | $ 10,211 | KSF | $ 3,799 | 169% |
| Retail (greater than 300,000 sq.ft. floor area) | 0.450 | $ 9,514 | KSF | $ 3,763 | 153% |
| Office (Medical Office) | 0.302 | $ 18,716 | KSF | $ 7,449 | 151% |
| Office (General Office) | 0.302 | $ 8,034 | KSF | $ 4,109 | 96% |
| Hospital (33% Med. Office, 67% Gen.Office) | 0.302 | $ 11,559 | KSF | $ 2,184 | 429% |
| Daycare Ctr.(92% of Retail 50K-100K rate per empl.,50% pass-by reduction) | 0.394 | $ 6,372 | KSF | $ 1,736 | 267% |
| Church (83% of Gen.Office rate per KSF used on per-employee basis) | 1.500 | $ 1,343 | KSF | $ 292 | 360% |
| Nursing Home (122% of Gen.Office rate per empl.) | 1.500 | $ 1,973 | KSF | $ 149 | 1224% |
| Business Park (Service) | 0.317 | $ 5,544 | KSF | | |
| Business Park (Manufacturing) | 0.550 | $ 3,196 | KSF | | |
| Industrial (Manufacturing) | 0.550 | $ 3,115 | KSF | $ 1,510 | 106% |
| Industrial (Warehousing) | 0.784 | $ 2,185 | KSF | $ 362 | 504% |

1. Assuming average mix of activities for the General Plan land use codes.

Source: Omni-Means

# CITY of MODESTO
# Capital Facility Fee

*Prepared By:*

omni · means
ENGINEERS · PLANNERS

## Street Improvement Projects Summary

| | Total Cost | - Exactions | - StanCOG Funding | - City & Other Funding | CFF Cost |
|---|---|---|---|---|---|
| Subtotal Intersection Projects* | $ 288,747,405 | $ 47,251,267 | | | $ 241,496,138 |
| Subtotal Roadway Projects | $ 635,281,873 | $ 108,743,547 | | | $ 526,538,326 |
| Subtotal Traffic Signal Projects | $ 9,893,505 | $ - | | | $ 9,893,505 |
| Subtotal Interchange & Fwy Projec | $ 256,361,152 | $ - | $ 58,019,577 | | $ 198,341,575 |
| Existing Deficiencies | | $ - | $ - | $ 4,587,669 | $ (4,587,669) |
| Adjustments | | | $ 57,878,309 | | $ (57,878,309) |
| Total Street Improvement Projects | $ 1,190,283,936 | $ 155,994,814 | $ 115,897,886 | $ 4,587,669 | $ 913,803,566 |

| No. | PROJECT ID | PROJECT EXTENTS | TOTAL COST | CFF COST |
|---|---|---|---|---|
| **Intersections** | | | | |
| 1 | XBECKWITH01 | NEW ROAD | $ 3,301,995 | $ 1,777,024 |
| 2 | XBECKWITH02 | DAKOTA | $ 14,126,495 | $ 12,665,686 |
| 3 | XBECKWITH03 | BRINK | $ 4,598,533 | $ 3,007,444 |
| 4 | XBRIGGSMORE01 | MCHENRY | $ 5,323,515 | $ 5,323,512 |
| 5 | XBRIGGSMORE02 | OAKDALE | $ 5,591,199 | $ 5,473,907 |
| 6 | XBRIGGSMORE03 | ROSELLE | $ 4,268,511 | $ 4,033,230 |
| 7 | XBRIGGSMORE04 | CLAUS | $ 7,389,509 | $ 6,217,140 |
| 8 | XCALIFORNIA01 | NEBRASKA | $ 4,003,871 | $ 2,467,938 |
| 9 | XCALIFORNIA02 | CARPENTER | $ 4,555,545 | $ 3,569,671 |
| 10 | XCARPENTER01 | BLUE GUM | $ 4,526,378 | $ 4,377,040 |
| 11 | XCARPENTER02 | KANSAS | $ 3,654,485 | $ 3,654,482 |
| 12 | XCLARATINA01 | COFFEE | $ 4,908,015 | $ 4,524,117 |
| 13 | XCLARATINA02 | OAKDALE | $ 5,031,150 | $ 3,286,750 |
| 14 | XCLARATINA03 | ROSELLE | $ 4,327,073 | $ 3,140,351 |
| 15 | XCLARIBEL01 | COFFEE | $ 3,092,774 | $ 2,706,932 |
| 16 | XCLARIBEL02 | OAKDALE | $ 2,739,693 | $ 1,512,918 |
| 17 | XCLARIBEL03 | ROSELLE | $ 3,070,807 | $ 2,033,224 |
| 18 | XCLARIBEL04 | CLAUS | $ 5,731,182 | $ 5,320,315 |
| 19 | XCROWSLANDING01 | 7TH | $ 9,207,633 | $ 9,228,413 |
| 20 | XDAKOTA01 | SALIDA | $ 3,504,273 | $ 1,970,440 |
| 21 | XFINCH01 | MITCHELL | $ 1,629,104 | $ 1,570,332 |
| 22 | XFINCH02 | GARNER | $ 7,344,729 | $ 6,707,427 |
| 23 | XFLOYD01 | OAKDALE | $ 256,050 | $ 256,050 |
| 24 | XFLOYD02 | ROSELLE | $ 256,050 | $ 256,050 |
| 25 | XFLOYD03 | CLAUS | $ 3,827,567 | $ 1,068,362 |
| 26 | XGARST01 | CLAUS | $ 3,389,022 | $ 2,816,149 |
| 27 | XHATCH01 | CARPENTER | $ 10,211,358 | $ 9,656,364 |
| 28 | XHATCH02 | CROWS LANDING | $ 6,437,168 | $ 6,437,166 |
| 29 | XHATCH03 | 7TH | $ 3,698,588 | $ 3,698,588 |
| 30 | XKIERNAN01 | CHAPMAN | $ 3,732,241 | $ 2,874,011 |
| 31 | XKIERNAN02 | DALE | $ 3,288,838 | $ 2,409,541 |
| No. | PROJECT ID | PROJECT EXTENTS | TOTAL COST | CFF COST |

| | | | | |
|---|---|---|---|---|
| 32 | XKIERNAN03 | PRESCOTT | $ 4,502,992 | $ 2,751,229 |
| 33 | XKIERNAN04 | TULLY | $ 2,811,376 | $ 1,952,930 |
| 34 | XKIERNAN05 | MCHENRY | $ 2,859,616 | $ 2,166,003 |
| 35 | XMAZE01 | MORSE | $ 4,034,615 | $ 1,980,426 |
| 36 | XMAZE02 | CARPENTER | $ 8,460,443 | $ 7,806,632 |
| 37 | XPARADISE01 | NEBRASKA | $ 4,081,494 | $ 2,303,479 |
| 38 | XPARADISE02 | CARPENTER | $ 9,623,373 | $ 8,868,985 |
| 39 | XPELANDALE01 | SISK | $ 882,870 | $ 846,682 |
| 40 | XPELANDALE02 | CHAPMAN | $ 745,844 | $ 711,609 |
| 41 | XPELANDALE03 | DALE | $ 1,620,129 | $ 1,550,759 |
| 42 | XPELANDALE04 | PRESCOTT | $ 2,462,753 | $ 2,175,924 |
| 43 | XPELANDALE05 | TULLY | $ 3,883,566 | $ 3,231,823 |
| 44 | XPELANDALE06 | MCHENRY | $ 2,933,947 | $ 2,631,775 |
| 45 | XSCENIC01 | COFFEE | $ - | $ - |
| 46 | XSCENIC02 | OAKDALE | $ 4,475,805 | $ 4,410,910 |
| 47 | XSCENIC03 | LAKEWOOD | $ 14,334,727 | $ 14,334,727 |
| 48 | XSCENIC04 | CLAUS | $ 4,225,284 | $ 3,947,404 |
| 49 | XSHOEMAKE01 | MORSE | $ 4,385,825 | $ 2,171,857 |
| 50 | XSHOEMAKE02 | BRINK | $ 2,121,800 | $ 1,506,041 |
| 51 | XSTANDIFORD01 | TULLY | $ 6,054,213 | $ 6,054,210 |
| 52 | XSTANDIFORD02 | MCHENRY | $ 8,031,822 | $ 8,031,820 |
| 53 | XSYLVAN01 | OAKDALE | $ 2,057,512 | $ 256,050 |
| 54 | XSYLVAN02 | ROSELLE | $ 4,184,465 | $ 288,952 |
| 55 | XSYLVAN03 | CLAUS | $ 3,592,541 | $ 1,519,038 |
| 56 | XWHITMORE01 | CARPENTER | $ 2,952,827 | $ 2,368,168 |
| 57 | XWHITMORE02 | CROWS LANDING | $ 1,962,386 | $ 1,289,835 |
| 58 | XWHITMORE03 | MORGAN | $ 2,422,502 | $ 975,736 |
| 59 | XYOSEMITE01 | EL VISTA | $ 13,200,515 | $ 13,200,512 |
| 60 | XYOSEMITE02 | LINCOLN | $ 1,845,623 | $ 1,842,136 |
| 61 | XYOSEMITE03 | CLAUS | $ 5,509,708 | $ 4,817,096 |
| 62 | XYOSEMITE04 | SANTA FE | $ 11,463,480 | $ 11,462,818 |
| **Road Segments** | | | | |
| 63 | R7TH01 | SIERRA TO RIVER | $ 23,169,209 | $ 23,161,987 |
| 64 | R7TH02 | CROWSLANDING TO HATCH | $ 8,918,436 | $ 8,918,436 |
| 65 | R9TH01 | CARPENTER TO NEEDHAM | $ 15,467,405 | $ 15,467,405 |
| 66 | RBANGS01 | TULLY TO MCHENRY | $ 5,511,741 | $ 1,835,932 |
| 67 | RBECKWITH01 | NEW ROAD TO DAKOTA | $ 1,880,979 | $ 937,202 |
| 68 | RBECKWITH02 | DAKOTA TO BRINK | $ 4,855,266 | $ 4,020,719 |
| 69 | RBLUEGUM01 | POUST TO ROSEMORE | $ 1,136,532 | $ 1,136,532 |
| 70 | RBRIGGSMORE01 | SISK TO MCHENRY | $ 18,341,954 | $ 18,341,954 |
| 71 | RBRIGGSMORE02 | MCHENRY TO OAKDALE | $ 11,940,687 | $ 11,940,687 |
| 72 | RBRIGGSMORE03 | OAKDALE TO ROSELLE | $ 4,437,016 | $ 4,437,016 |
| 73 | RBRIGGSMORE04 | ROSELLE TO CLAUS | $ 4,366,599 | $ 4,366,599 |
| 74 | RBRIGGSMORE05 | CLAUS TO CITY GEN. PLAN BDRY | $ 3,978,790 | $ 3,115,823 |
| 75 | RBRINK01 | PELANDALE TO DAKOTA | $ 3,190,479 | $ 2,568,403 |
| 76 | RBRINK02 | DAKOTA TO BECKWITH | $ 7,052,926 | $ 3,709,989 |
| 77 | RBRINK03 | BECKWITH TO SHOEMAKE | $ 8,201,401 | $ 3,656,514 |
| 78 | RBRINK04 | SHOEMAKE TO CARPENTER | $ 1,562,010 | $ 1,562,010 |
| 79 | RCALIFORNIA01 | NEBRASKA TO CARPENTER | $ 5,818,322 | $ 1,244,113 |
| 80 | RCARPENTER01 | 9TH TO BLUE GUM | $ 1,239,113 | $ 1,239,113 |
| 81 | RCARPENTER02 | BLUE GUM TO KANSAS | $ 6,115,400 | $ 6,392,441 |
| 82 | RCARPENTER03 | KANSAS TO MAZE | $ 2,853,071 | $ 2,853,071 |
| 83 | RCARPENTER04 | MAZE TO CALIFORNIA | $ 1,084,999 | $ 836,482 |
| 84 | RCARPENTER05 | CALIFORNIA TO PARADISE | $ 8,874,267 | $ 8,679,347 |
| 85 | RCARPENTER06 | PARADISE TO HATCH | $ 6,573,273 | $ 6,369,98 |
| **No.** | **PROJECT ID** | **PROJECT EXTENTS** | **TOTAL COST** | **CFF COST** |

| | | | | |
|---|---|---|---|---|
| | RCARPENTER07 | HATCH TO WHITMORE | $ 6,151,598 | $ 5,347,564 |
| 87 | RCHAPMAN01 | KIERNAN TO PELANDALE | $ 2,602,969 | $ 389,685 |
| 88 | RCLARATINA01 | MCHENRY TO COFFEE | $ 6,247,651 | $ 3,943,646 |
| 89 | RCLARATINA02 | COFFEE TO OAKDALE | $ 5,147,002 | $ 5,022,840 |
| 90 | RCLARATINA03 | OAKDALE TO ROSELLE | $ 6,875,844 | $ 5,246,645 |
| 91 | RCLARATINA04 | ROSELLE TO R/R TRACKS | $ 4,953,420 | $ 838,624 |
| 92 | RCLARIBEL01 | MCHENRY TO COFFEE | $ 5,451,513 | $ 4,322,451 |
| 93 | RCLARIBEL02 | COFFEE TO OAKDALE | $ 6,655,285 | $ 5,312,141 |
| 94 | RCLARIBEL03 | OAKDALE TO ROSELLE | $ 6,113,194 | $ 4,687,121 |
| 95 | RCLARIBEL04 | ROSELLE TO CLAUS | $ 9,684,132 | $ 8,493,487 |
| 96 | RCLAUS01 | CLARIBEL TO SYLVAN | $ 8,829,471 | $ 4,894,167 |
| 97 | RCLAUS02 | SYLVAN TO FLOYD | $ 2,102,917 | $ 632,767 |
| 98 | RCLAUS03 | FLOYD TO BRIGGSMORE | $ 2,595,319 | $ 1,099,010 |
| 99 | RCLAUS04 | BRIGGSMORE TO SCENIC | $ 3,017,734 | $ 3,017,734 |
| 100 | RCLAUS05 | SCENIC TO GARST | $ 1,012,421 | $ 873,119 |
| 101 | RCLAUS06 | GARST TO YOSEMITE | $ 1,973,268 | $ 1,729,179 |
| 102 | RCOFFEE01 | CLARIBEL TO CLARATINA | $ 5,581,381 | $ 2,010,887 |
| 103 | RCOFFEE02 | CLARATINA TO MABLE | $ 1,023,843 | $ 472,267 |
| 104 | RCROWSLANDING01 | 7TH TO 99 | $ 1,148,606 | $ 1,148,606 |
| 105 | RCROWSLANDING02 | 99 TO HATCH | $ 1,710,923 | $ 1,464,653 |
| 106 | RCROWSLANDING03 | HATCH TO WHITMORE | $ 4,404,816 | $ 4,156,588 |
| 107 | RDAKOTA01 | SALIDA TO BECKWITH | $ 7,362,871 | $ 6,153,891 |
| 108 | RDAKOTA02 | BECKWITH TO SR 132 | $ 23,084,705 | $ 22,730,885 |
| 109 | RDALE01 | KIERNAN TO PELANDALE | $ 4,364,781 | $ 1,218,045 |
| 110 | RDALE02 | PELANDALE TO VENEMAN | $ 1,794,493 | $ 1,155,426 |
| 111 | RELVISTA01 | SCENIC TO YOSEMITE | $ 8,392,215 | $ 8,392,215 |
| 12 | RFINCH01 | MITCHELL TO GARNER | $ 5,175,029 | $ 3,852,236 |
| 113 | RFLOYD01 | OAKDALE TO ROSELLE | $ - | $ - |
| 114 | RFLOYD02 | ROSELLE TO CLAUS | $ - | $ - |
| 115 | RGARNER01 | YOSEMITE TO FINCH | $ 5,047,588 | $ 3,507,101 |
| 116 | RGARNER02 | FINCH TO TOULUMNE RIVER | $ 4,496,997 | $ 2,919,612 |
| 117 | RGARST01 | CLAUS TO CHURCH | $ 9,564,819 | $ 7,676,385 |
| 118 | RHATCH01 | CARPENTER TO CROWS LANDING | $ 9,776,925 | $ 9,031,037 |
| 119 | RHATCH02 | CROWS LANDING TO 7TH | $ 5,931,912 | $ 5,931,912 |
| 120 | RKIERNAN01 | CHAPMAN TO DALE | $ 3,686,739 | $ 2,723,909 |
| 121 | RKIERNAN02 | DALE TO PRESCOTT | $ 8,491,831 | $ 7,052,294 |
| 122 | RKIERNAN03 | PRESCOTT TO TULLY | $ 6,949,279 | $ 5,194,977 |
| 123 | RKIERNAN04 | TULLY TO MCHENRY | $ 6,242,653 | $ 5,244,425 |
| 124 | RLAKEWOOD01 | BRIGGSMORE TO SCENIC | $ 1,223,986 | $ 1,223,986 |
| 125 | RLINCOLN01 | SCENIC TO YOSEMITE | $ 4,121,659 | $ 4,121,659 |
| 126 | RMAZE01 | MORSE TO CARPENTER | $ 4,893,137 | $ 1,698,935 |
| 127 | RMAZE02 | CARPENTER TO 99 | $ 8,987,425 | $ 7,981,495 |
| 128 | RMCHENRY01 | KIIERNAN TO PELANDALE | $ 1,722,185 | $ 1,240,377 |
| 129 | RMCHENRY02 | PELANDALE TO STANDIFORD | $ 1,872,769 | $ 1,872,769 |
| 130 | RMITCHELL01 | YOSEMITE TO FINCH | $ 5,047,588 | $ 3,507,101 |
| 131 | RMITCHELL02 | FINCH TO CITY LIMIT | $ 1,236,140 | $ 457,478 |
| 132 | RMORGAN01 | HATCH TO WHITMORE | $ 5,497,582 | $ 4,167,249 |
| 133 | RMORSE01 | NORTH TO SHOEMAKE | $ 4,873,502 | $ 2,468,665 |
| 134 | RMORSE02 | SHOEMAKE TO MAZE | $ 14,145,694 | $ 12,653,183 |
| 135 | RNEBRASKA01 | MAZE TO CALIFORNIA | $ 1,476,494 | $ 756,973 |
| 136 | RNEBRASKA02 | CALIFORNIA TO PARADISE | $ - | $ - |
| 137 | RNEWROAD01 | MURPHY TO BECKWITH | $ 7,520,229 | $ 4,968,211 |
| 138 | RNORSEMAN01 | CITY LIMIT TO YOSEMITE | $ 1,655,765 | $ 818,719 |
| 139 | ROAKDALE01 | CLARIBEL TO CLARATINA | $ 3,907,983 | $ 1,309,749 |
| 140 | ROAKDALE02 | CLARATINA TOO SYLVAN | $ 3,932,784 | $ 2,399,228 |
| **No.** | **PROJECT ID** | **PROJECT EXTENTS** | **TOTAL COST** | **CFF COST** |

| | | | | |
|---|---|---|---|---|
| 141 | ROAKDALE03 | SYLVAN TO FLOYD | $ - | $ - |
| 142 | ROAKDALE04 | FLOYD TO BRIGGSMORE | $ 3,343,291 | $ 3,343,291 |
| 143 | ROAKDALE05 | BRIGGSMORE TO SCENIC | $ 7,531,930 | $ 7,531,930 |
| 144 | RPARADISE01 | NEBRASKA TO CARPENTER | $ 6,822,359 | $ 5,427,703 |
| 145 | RPARADISE02 | CARPENTER TO MARTIN LUTHER KING | $ 4,364,147 | $ 4,364,147 |
| 146 | RPELANDALE01 | CHAPMAN TO DALE | $ 2,417,172 | $ 2,417,172 |
| 147 | RPELANDALE02 | DALE TO PRESCOTT | $ 3,413,092 | $ 3,156,752 |
| 148 | RPELANDALE03 | PRESCOTT TO TULLY | $ 4,236,779 | $ 3,718,642 |
| 149 | RPELANDALE04 | TULLY TO MCHENRY | $ 7,790,721 | $ 6,739,908 |
| 150 | RPRESCOTT01 | KIERNAN TO PELANDALE | $ 3,041,853 | $ 894,226 |
| 151 | RPRESCOTT02 | PELANDALE TO SNYDER | $ 508,432 | $ 508,432 |
| 152 | RROSELLE01 | CLARIBEL TO CLARATINA | $ 3,599,581 | $ 1,130,746 |
| 153 | RROSELLE02 | CLARATINA TO SLYVAN | $ 3,117,732 | $ 539,227 |
| 154 | RROSELLE03 | SLYVAN TO FLOYD | $ - | $ - |
| 155 | RROSELLE04 | FLOYD TO BRIGGSMORE | $ - | $ - |
| 156 | RSANTAFE01 | TOULUMNE RIVER TO YOSEMITE | $ 8,392,215 | $ 8,392,215 |
| 157 | RSCENIC01 | OAKDALE TO LAKEWOOD | $ 4,955,114 | $ 3,578,209 |
| 158 | RSCENIC02 | LAKEWOOD TO CLAUS | $ 5,371,439 | $ 5,405,859 |
| 159 | RSHOEMAKE01 | MORSE TO BRINK | $ 2,975,024 | $ 578,064 |
| 160 | RSTANDIFORD01 | DALE TO PRESCOTT | $ 8,917,529 | $ 8,917,529 |
| 161 | RSTANDIFORD02 | PRESCOTT TO TULLY | $ 8,058,596 | $ 8,058,596 |
| 162 | RSTANDIFORD03 | TULLY TO MCHENRY | $ 20,363,785 | $ 20,363,785 |
| 163 | RSYLVAN01 | MCHENRY TO OAKDALE | $ 21,170,355 | $ 21,170,355 |
| 164 | RSYLVAN02 | OAKDALE TO ROSELLE | $ - | $ - |
| 165 | RSYLVAN03 | ROSELLE TO CLAUS | $ - | $ - |
| 166 | RTULLY01 | KIERNAN TO PELANDALE | $ 3,655,746 | $ 762,564 |
| 167 | RTULLY02 | PELANDALE TO STANDIFORD | $ 5,772,266 | $ 5,422,889 |
| 168 | RWHITMORE01 | CARPENTER TO CROWS LANDING | $ 11,434,902 | $ 9,088,185 |
| 169 | RWHITMORE02 | CROWS LANDING TO MORGAN | $ 3,927,643 | $ 2,665,222 |
| 170 | WOODLAND01 | CARPENTER TO KEARNEY | $ 7,104,714 | $ 7,104,714 |
| 171 | RYOSEMITE01 | D TO EL VISTA | $ 16,399,417 | $ 16,399,417 |
| 172 | RYOSEMITE02 | EL VISTA TO LINCOLN | $ 12,319,173 | $ 11,662,728 |
| 173 | RYOSEMITE03 | LINCOLN TO CLAUS | $ 4,895,665 | $ 4,794,751 |
| 174 | RYOSEMITE04 | CLAUS TO SANTA FE | $ 6,029,240 | $ 5,254,894 |
| 175 | RYOSEMITE05 | SANTA FE TO CITY LIMIT | $ 1,021,024 | $ 821,105 |

| No. | PROJECT ID | Project Description | | CFF COST |
|---|---|---|---|---|
| **Traffic Signal Projects** | | | | |
| 176 | Carver Road and Future Road South of Kiernan Avenu | New Signal | | $ 155,090 |
| 177 | Prescott Road and Cheyenne Avenue | New Signal | | $ 195,910 |
| 178 | Coffee Road and Sylvan Meadows Drive | New Signal | | $ 195,910 |
| 179 | College Avenue and Bowen Avenue | New Signal | | $ 195,910 |
| 180 | Coffee Road and Brighton Avenue | New Signal | | $ 195,910 |
| 181 | Tully Road and Princeton Avenue | New Signal | | $ 195,910 |
| 182 | College Avenue and Princeton Avenue / Griswold Ave | New Signal | | $ 195,910 |
| 183 | Rosemore Avenue and Woodland Avenue | New Signal | | $ 155,090 |
| 184 | Coffee Road and East Morris Avenue | New Signal | | $ 146,933 |
| 185 | Rosemore Avenue and Kansas Avenue | New Signal | | $ 155,090 |
| 186 | Tuolumne Boulevard and Neece Drive | New Signal | | $ 146,933 |
| 187 | La Loma Avenue and Buena Vista Avenue | New Signal | | $ 155,090 |
| 188 | La Loma Avenue and Miller Avenue | New Signal | | $ 193,863 |
| 189 | Orangeburg Avenue and Sonoma Avenue | New Signal | | $ 116,318 |
| 190 | Orangeburg Avenue and Lillian Drive | New Signal | | $ 116,318 |
| 191 | Floyd Avenue and Dana Lane | New Signal | | $ 116,318 |
| 192 | Seventh Street and K Street | New Signal | | $ 155,0 |

| No. | PROJECT ID | Project Description | | CFF COST |
|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 193 | Sixth Street and K Street | New Signal | | $ | 155,090 |
| 194 | Sisk Road and Conant Avenue | New Signal | | $ | 146,933 |
| 195 | Snyder Avenue and Carver Road | New Signal | | $ | 155,090 |
| 196 | Snyder Avenue and Marsalia Way | New Signal | | $ | 116,318 |
| 197 | Sisk Road and Brenner | New Signal | | $ | 146,933 |
| 198 | Orangeburg Avenue and Rose Avenue | New Signal | | $ | 119,300 |
| 199 | Tully Road and Stoddard Avenue | New Signal | | $ | 146,933 |
| 200 | Eleventh Avenue and M Street | New Signal | | $ | 119,300 |
| 201 | Bangs Avenue and Carver Road | New Signal | | $ | 155,090 |
| 202 | Prescott Road and Sheldon Avenue | New Signal | | $ | 146,933 |
| 203 | Orangeburg Avenue and Enslen Avenue | New Signal | | $ | 195,910 |
| 204 | Orangeburg Avenue and Florida Avenue | New Signal | | $ | 146,933 |
| 205 | Sylvan Avenue and Esta Avenue | New Signal | | $ | 146,933 |
| 206 | Sylvan Avenue and Road F | New Signal | | $ | 146,933 |
| 207 | Sylvan Avenue and Litt Road | New Signal | | $ | 195,910 |
| 208 | Floyd Avenue and Lincoln Oak Dr. | New Signal | | $ | 146,933 |
| 209 | Floyd Avenue and Esta Avenue | New Signal | | $ | 195,910 |
| 210 | Oakdale Road and Road G | New Signal | | $ | 146,933 |
| 211 | Roselle Avenue and Road D | New Signal | | $ | 195,910 |
| 212 | Roselle Avenue and Kodiak Drive | New Signal | | $ | 195,910 |
| 213 | Roselle Avenue and Bellharbour Drive | New Signal | | $ | 195,910 |
| 214 | Roselle Avenue and Merle Avenue | New Signal | | $ | 195,910 |
| 215 | G Street and Seventh Street | High Cost Modification | | $ | 147,453 |
| 216 | H Street and Seventh Street | High Cost Modification | | $ | 147,453 |
| 217 | I Street and Seventh Street | High Cost Modification | | $ | 195,000 |
| 218 | Seventh Street and L Street | High Cost Modification | | $ | 168,090 |
| 219 | Needham Street and L Street | High Cost Modification | | $ | 152,978 |
| 220 | Needham Street and 14th Street | High Cost Modification | | $ | 152,978 |
| 221 | McHenry / Downey / Avenue and J Street | High Cost Modification | | $ | 277,388 |
| 222 | 10th Street and D Street | High Cost Modification | | $ | 156,000 |
| 223 | Bodem Street and Scenic Drive | High Cost Modification | | $ | 152,978 |
| 224 | Ninth Street and Tuolumne Boulevard | High Cost Modification | | $ | 221,910 |
| 225 | Yosemite Boulevard and Church Street | High Cost Modification | | $ | 152,978 |
| 226 | McHenry Avenue and Rumble Road | High Cost Modification | | $ | 210,860 |
| 227 | McHenry Avenue and Floyd Avenue | High Cost Modification | | $ | 210,860 |
| 228 | North Emerald Avenue and Kansas Avenue | High Cost Modification | | $ | 168,090 |
| 229 | Coffee Road and Scenic Drive | High Cost Modification | | $ | 166,433 |
| 230 | Tully Road and Caldwell Avenue | Low Cost Modification | | $ | 54,210 |
| 231 | Tully Road and West Roseburg Avenue | Low Cost Modification | | $ | 54,210 |
| 232 | Tully Road and West Granger Avenue | Low Cost Modification | | $ | 54,210 |
| 233 | Tully Road and Woodrow Avenue | Low Cost Modification | | $ | 54,210 |
| 234 | Tully Road and West Rumble Road | Low Cost Modification | | $ | 54,210 |
| 235 | Tully Road and Mount Vernon Drive | Low Cost Modification | | $ | 54,210 |
| 236 | College Avenue and Stoddard Avenue | Low Cost Modification | | $ | 54,210 |
| 237 | College Avenue and Caldwell Avenue | Low Cost Modification | | $ | 54,210 |
| 238 | College Avenue West Roseburg Avenue | Low Cost Modification | | $ | 54,210 |
| 239 | College Avenue and West Granger Avenue | Low Cost Modification | | $ | 54,210 |
| 240 | Ninth Street and G Street | Low Cost Modification | | $ | 53,170 |
| 241 | Ninth Street and H Street | Low Cost Modification | | $ | 53,170 |
| 242 | Ninth Street and I Street | Low Cost Modification | | $ | 65,520 |
| 243 | Ninth Street and J Street | Low Cost Modification | | $ | 65,520 |
| 244 | Ninth Street and K Street | Low Cost Modification | | $ | 65,520 |
| 245 | College Avenue and Orangeburg | Low Cost Modification | | $ | 65,520 |

| No. | PROJECT ID | PROJECT EXTENTS | TOTAL COST | CFF COST |
|---|---|---|---|---|
| **Interchanges** | | | | |
| 246 | IKIERNAN01 | SR99 | $ 26,130,000 | $ 17,190,789 |
| 247 | IPELANDALE01 | SR99 | $ 46,700,000 | $ 28,547,248 |
| 248 | IBECKWITH01 | SR99 | $ 29,400,000 | $ 13,116,923 |
| 249 | IBriggsmore Avenue | CLAUS | $ 14,299,764 | $ 14,299,764 |
| 250 | IFloyd Avenue | CLAUS | $ 15,520,590 | $ 15,520,590 |
| 251 | ISylvan Avenue | CLAUS | $ 16,576,500 | $ 16,576,500 |
| 252 | ISanta Fe Railroad OH | CLAUS | $ 9,089,760 | $ 9,089,760 |
| 253 | ICLARIBEL01 | COFFEE | $ 15,000,000 | $ 15,000,000 |
| 254 | ICLARIBEL02 | OAKDALE | $ 15,000,000 | $ 15,000,000 |
| 255 | IKIERNAN02 | MCHENRY | $ 15,000,000 | $ 15,000,000 |
| 256 | IPELANDALE02 | MCHENRY | $ 15,000,000 | $ 15,000,000 |
| 257 | SR132 from SR99 to Morse* | | $ 38,644,538 | $ 24,000,000 |
| **Existing Defieciencies** | | | | |
| 258 | SR 99 West Ramp (SB)/Pelandale Avenue | | | $ 180,078 |
| 259 | SR 99 West Ramp (SB)/Standiford Avenue | | | $ 306,515 |
| 260 | Standiford Avenue/Tully Road | | | $ 750,076 |
| 261 | Standiford Avenue - Sylvan Avenue / McHenry Avenu | | | $ 750,153 |
| 262 | Briggsmore Avenue/ McHenry Avenue | | | $ 631,300 |
| 263 | Carpenter Road/Woodland Avenue | | | $ 226,470 |
| 264 | Carpenter Road/Kansas Avenue | | | $ 283,711 |
| 265 | Carpenter Road/Maze Boulevard | | | $ 136,445 |
| 266 | El Vista Ave-Mitchell Road/Yosemite Boulevard | | | $ 936,952 |
| 267 | Oakdale Road/Scenic Drive | | | $ 385,967 |

# Chapter IX
# PUBLIC TRANSPORTATION

## EXISTING SYSTEM

The City of Modesto currently operates a public bus system covering 232 route miles for a service population of about 198,600 persons. In addition the City operates two commuter express routes—one to the Pleasanton/Dublin BART station and the other to the Manteca/Lathrop ACE Train station. These two express routes cover 132 one-way route miles. The system requires about 35 buses operating each day, necessitating a total of 46 buses as about 25% of the fleet is being rotated through either maintenance or reserve at any time. New buses, which are on order, will allow for replacement of some older buses and bring the number of system vehicles to 48.

The bus routes are laid out in a "radial" system, facilitating travel from the peripheral suburbs to the central areas and vice versa. The City currently has 64 bus shelters (one shelter for every 3,100 residents) and 775 fixed stops. The average speed of buses system-wide is currently 13 miles per hour. Transportation planners consider this type of configuration and service level appropriate for a city of Modesto's current population.

The current headway between on eleven routes is 30 minutes; its 60 minutes for five other routes. Staff would prefer to shorten the headways of the 60 minute routes to 30 minutes, and the 30 minute routes to 15 minutes, as the convenience would hopefully make the service much more attractive to users. However, unless other factors, such as much higher fuel costs or limited parking, made auto use less convenient, it is questionable whether the increased patronage would justify much of the expense. The present headway scheduling is therefore assumed to continue in this analysis.

The historical sources of funding for the system's capital facilities consist predominately of Federal Transit Administration (FTA) funds. Funding is apportioned annually by Congress and usually requires approximately a 20% local match. For matching FTA capital grants the city uses CFF revenues and the City's share of the quarter cent of the state sales tax, the latter a source that may be used for either capital or operating expenses. The FTA program has been undergoing changes. Most capital and operating support are now integrated into one program. The City of Modesto received FTA funding of $3.2 million in fiscal year 2002. This amount was expended approximately equally between operating and capital funding. City staff does not regard FTA

funding as secure over the next twenty years. It is vulnerable from 1) the budgetary discretion of Congress or the current administration and 2) competition for funding of streets and highways.

## EXPANSION TO ACCOMMODATE GROWTH

The existing radial route system will, with some route extensions and modification, provide appropriate service to the City's forecasted buildout population. City staff has prepared estimates of the facilities and their costs necessary to serve a city of 370,800 residents spread over 67 square miles with a mix of 30 minute headway for most of the system and 60 minute headway in some sparsely populated areas. The proposed system configuration and its ratio of buses to population will continue to be analogous to the Fresno public transit system.

A total of 75 buses would be needed (27 buses in addition to the existing fleet of 48). At $310,000 per bus the cost for the addition of 27 buses is $8.37 million (2002 dollars). The ultimate system will require 54 additional bus shelters, for a total of 118, and 664 more bus stops for a total of approximately 1,439. Shelters cost $3,500 each and bus stops cost $100.

The City is also planning a maintenance and bus storage facility. The City has received FTA earmarks beginning with the 1998 appropriation bill to cover a portion of the cost and expects to receive the remaining funds in the fiscal year 2004 federal budget. The cost of initial construction is estimated at $10.0 million. It is expected that this facility will accommodate a substantial increase in the bus fleet, but probably not the total 75 buses required at buildout. A future addition, estimated to cost $1.0 million, is therefore assumed.

Finally, a transit center (bus transfer) facility, similar to the downtown center on 9th Street, is planned for the growing northeast portion of the City. It is expected to be located in conjunction with a major shopping area north of Village 1. The cost is estimated at $800,000. Table IX-1 presents these calculations and the estimated costs for other auxiliary facilities.

The critical question remaining is the percentage of the eligible projects that will be funded, as the city generally qualifies for more funding than is available. It is assumed here that the funding available will be used for purposes such as the replacement of worn-out buses and not be available to expand the fleet. Funding is assumed for the bus maintenance facility and the Northeast Bus Transfer Station, because the funds for these facilities would come from a separate discretionary grant program. The maintenance facility is assumed to be funded at 70% of its cost; funding for the transfer station is less certain and therefore assumed for only 40% of the cost. It should be recognized, however, that there is no guarantee that any expansion of the

current system can be funded with federal or state assistance. If a substantial change in funding probabilities occurs, the fees should be recalculated consistent with the new circumstances.

**Table IX-1**
**Additional Public Transportation Facilities Needed**

| | Cost Each | Number Needed | Total Cost | Local Share* |
|---|---|---|---|---|
| Buses | $ 310,000 | 27 | $ 8,370,000 | $ 8,370,000 |
| Bus Shelters | $ 3,500 | 54 | $ 189,000 | $ 189,000 |
| Bus Stops | $ 100 | 664 | $ 66,400 | $ 66,400 |
| Bus Maintenance Facility** | $ 11,000,000 | 1 | $ 11,000,000 | $ 3,300,000 |
| Northeast Transfer Station | $ 800,000 | 1 | $ 800,000 | $ 480,000 |
| | | | **$ 20,425,400** | **$ 12,405,400** |

* An average of 70% grant funding is assumed for all facilities except the Northeast Transfer Station. Because the Transfer Station must compete for discretionary grants, only 40% funding is assumed.

** Ten million is to be expended for the initial construction. A later expansion is budgeted here at roughly $1.0 million.

*Sources: City of Modesto Transportation and Townhall Services*

## NEW DEVELOPMENT'S SHARE OF THE COST

Table IX-2 shows the local share of costs along with the share estimated to be paid with impact fees. The buses, shelters and stops added to the system are all needed solely to accommodate new development. A bus maintenance facility is needed even if no new development were to occur, though it could then be of a smaller size. It, therefore, is apportioned among existing and new development, with new development responsible for 38% of the cost. The Northeast Transfer Station is fully the cost of new development, as existing development has already contributed the relatively new Downtown Transfer Station to the system. The total share allocated to new development is $10.36 million.

**Table IX-2**
**New Development's Share of the Costs**

| | Total Costs | | New Share |
|---|---|---|---|
| Buses | $ 8,370,000 | 100% | $ 8,370,000 |
| Bus Shelters | $ 189,000 | 100% | $ 189,000 |
| Bus Stops | $ 66,400 | 100% | $ 66,400 |
| Bus Maintenance Facility | $ 3,300,000 | 38% | $ 1,254,000 |
| Northeast Transfer Station | $ 480,000 | 100% | $ 480,000 |
| | **$ 12,405,400** | | **$ 10,359,400** |

Sources: City of Modesto Transportation and Townhall Services

As the public transportation system acts as an alternative to motor vehicle trips, it is reasonable to assign responsibility for the costs of the public transportation improvements on the basis of trips generated. This is the same methodology for setting the streets fee. For a detailed explanation of this methodology refer to the chapter on streets fees.

The following tables calculate the appropriate Public Transportation fee for the residential and non-residential development types covered in the CFF program. The explanation for the tables is the same as that explaining the similar tables in the chapter in streets fees.

# Table IX-3
## Traffic Model Fee Spread by Activity (Transit)

| Landuse Category | Net New Development ("Buildout -minus Existing") | Units | Daily Trip Generation Rate per Unit | Trip Adjustment Factor | Trip Length/ Causality Factor | Daily Trip Generation | Percentage Share of Daily Trips | Estimated Spread of CFF Improvement Costs | Estimated Fee per Unit |
|---|---|---|---|---|---|---|---|---|---|
| SFDU | 33,506 | D.U.'s | 9.57 | 100% | 114% | 366,801 | 29.3% | $ 3,038,856 | $ 91 |
| MFDU | 16,089 | D.U.'s | 6.63 | 100% | 114% | 122,022 | 9.8% | $ 1,010,923 | $ 63 |
| Retail (lesser than 50,000 sq.ft.floor area) | 10,234 | Employees | 50.31 | 25% | 87% | 111,734 | 8.9% | $ 925,687 | $ 90 |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | 10,234 | Employees | 33.99 | 30% | 87% | 90,586 | 7.2% | $ 750,485 | $ 73 |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | 10,234 | Employees | 23.95 | 35% | 87% | 74,467 | 6.0% | $ 616,941 | $ 60 |
| Retail (greater than 300,000 sq.ft. floor area) | 10,234 | Employees | 19.31 | 40% | 87% | 68,617 | 5.5% | $ 568,476 | $ 56 |
| Service (Medical Office) | 7,652 | Employees | 8.91 | 100% | 87% | 59,183 | 4.7% | $ 490,317 | $ 64 |
| Service (General Office) | 30,609 | Employees | 3.32 | 100% | 100% | 101,622 | 8.1% | $ 841,912 | $ 28 |
| Government (General Office) | 14,700 | Employees | 3.32 | 100% | 100% | 48,804 | 3.9% | $ 404,329 | $ 28 |
| Other (Industrial) | 98,372 | Employees | 2.10 | 100% | 100% | 206,581 | 16.5% | $ 1,711,474 | $ 17 |
| *Total Employees* | *192,269* | *Employees* | | | | | | | |
| *Population* | *171,000* | *Residents* | | | | | | | |
| **TOTAL TRIPS** | | | | **1,250,417** | | **1,250,417** | **100.0%** | **$ 10,359,400** | |

*Notes:*

1. Daily trip-ends for which this category is a source on desitination
2. A 60%, 65%, 70% and 75% trip reduction factor has been applied for retail "pass-by/multi-purpose" trips based on the size of the projected retail facility. The smaller the retail facility, the greater the trip reduction factor due to "pass-by/multi-purpose travel.
3. Responsibility for all home based trips to local retail and medical offices is assigned to residential development.

Source: Omni-Means

# Table IX-4
# Corvenrsion to General Plan Land Use Codes (Transit)

| Landuse Category | Model Employee Density (per gross acre) | Retail Employee Density Share | Service Employee Density Share | Other Employee Density Share | Weighted Fee per Employee | Density Factor (KSF per Employee) | Final Weighted Fee per Unit | Unit |
|---|---|---|---|---|---|---|---|---|
| SFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 91 | D.U. |
| MFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 63 | D.U. |
| Senior Housing (37% of SFDU rate) | N/A | N/A | N/A | N/A | N/A | N/A | $ 34 | D.U. |
| Hotel/Motel (94% of SFDU rate, 60% occupancy factor) | N/A | N/A | N/A | N/A | N/A | N/A | $ 51 | Room |
| Retail (lesser than 50,000 sq.ft.floor area) | 24 | 75% | 25% | 0% | $ 75 | 0.450 | $ 166 | KSF |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | 24 | 75% | 25% | 0% | $ 62 | 0.450 | $ 138 | KSF |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | 24 | 75% | 25% | 0% | $ 52 | 0.450 | $ 116 | KSF |
| Retail (greater than 300,000 sq.ft. floor area) | 24 | 75% | 25% | 0% | $ 49 | 0.450 | $ 108 | KSF |
| Office (Medical Office) | 45 | 0% | 100% | 0% | $ 64 | 0.302 | $ 212 | KSF |
| Office (General Office) | 45 | 0% | 100% | 0% | $ 28 | 0.302 | $ 91 | KSF |
| Hospital (33% Med. Office, 67% Gen.Office) | | | | | $ 40 | 0.302 | $ 131 | KSF |
| Daycare Ctr.(92% of Retail 50K-100K rate per empl.,50% pass-by reduction) | | | | | $ 28 | 0.394 | $ 72 | KSF |
| Church (83% of Gen.Office rate per KSF used on per-employee basis) | | | | | $ 23 | 1.500 | $ 15 | KSF |
| Nursing Home (122% of Gen.Office rate per empl.) | | | | | $ 34 | 1.500 | $ 22 | KSF |
| Business Park (Service) | 25 | 0% | 25% | 75% | $ 20 | 0.317 | $ 63 | KSF |
| Business Park (Manufacturing) | 25 | 0% | 25% | 75% | $ 20 | 0.550 | $ 36 | KSF |
| Industrial (Manufacturing) | 18 | 0% | 20% | 80% | $ 19 | 0.550 | $ 35 | KSF |
| Industrial (Warehousing) | 18 | 0% | 20% | 80% | $ 19 | 0.784 | $ 25 | KSF |

# Information Details

## Addendum to

**CFF Documentation: Documentation of Justification for Impact Fee Mitigation**

For the

## CITY OF MODESTO

June 3, 2003

Prepared by:

Town Hall Services
830 Woodside Road
Redwood City, CA 94061

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**Modesto CFF Documentation**

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# Capital Costs Analysis

| | |
|---|---|
| **Replacement Cost of Existing Facilities** | **$16,756,995** |
| **Cost of Additional Facilities** | **$21,963,705** |
| **Total Cost** | **$38,720,700** |
| **Buildout DUES** | **$152,100** |
| **Cost Per DUE** | **$255** |
| **New Development DUES** | **$68,300** |
| **New Development's Share of Cost** | **$17,387,402** |
| **Existing Development DUES** | **$70,700** |
| **Existing Development's Share of Cost** | **$17,998,379** |
| **Existing Capital** | **$16,756,995** |
| **Existing Deficiency*** | **$1,241,385** |

* The share of the Total Cost allocated to existing development located outside of current city limits but within the CFF study is about $3.3 million. Upon annexation, this amount would be added to the existing deficiency, offset by any CFF improvements already in place at that time.

# Fire Department
# Replacement Cost of Existing Facilities

**Station Costs**

Standards for 7,000 sq ft station

| Construction | Land | Furnish & Tech | Total |
|---|---|---|---|
| $1,587,500 | $124,000 | $121,000 | $1,832,500 |

Per Square Foot Cost
$262

| Existing Station | sq ft | cost |
|---|---|---|
| 3 | 3976 | $1,040,860 |
| 4 | 5358 | $1,402,648 |
| 5 | 7738 | $2,025,698 |
| 6 | 4496 | $1,176,989 |
| 7 | 2775 | $726,455 |
| 8 | 4668 | $1,222,016 |
| 9 | 3158 | $826,719 |

Total Existing Station Replacement Cost **$8,421,385**

**Vehicle Costs**

| Type | Quantity | Price* | Total Cost |
|---|---|---|---|
| Fire Engine | 11 | $409,358 | $4,502,938 |
| Ladder Truck | 2 | $743,336 | $1,486,672 |
| Crash Rescue | 2 | $365,000 | $730,000 |
| Grass Fire | 1 | $75,000 | $75,000 |
| Staff Cars | 17 | $20,000 | $340,000 |

* Includes equipment for engines and ladder trucks

Total Existing Vehicle Replacement Cost **$7,134,610**

**Other**

| | |
|---|---|
| Carpenter and Bridgemont Training Facility Cost | $888,000 |
| Traffic Preemption Equipment | $253,000 |
| Data Management System | $60,000 |
| Total | **$1,201,000** |

**Total Existing Capital** **$16,756,995**

# Fire Department
# Cost of Additional Facilities

**Station Costs**

| New Stations | sq. ft. | cost |
|---|---|---|
| 2 | 7,000 | $1,832,500 |
| 10 | 5,148 | $1,347,673 |
| 11 | 7,000 | $1,832,500 |
| 12 | 7,000 | $1,832,500 |
| 13 | 7,000 | $1,832,500 |
| 15 | 7,000 | $1,832,500 |
| Station Expansions | | |
| 3 | 2,300 | $602,107 |
| 6 | 2,300 | $602,107 |
| 7 | 2,300 | $602,107 |
| 8 | 2,300 | $602,107 |

Total Future Station Costs **$12,918,601**

**Vehicle Cost**

| Type | Quantity | Price*** | Total Cost |
|---|---|---|---|
| Engine | 4 | $409,358 | $1,637,432 |
| Ladder Truck | 2 | $743,336 | $1,486,672 |
| Air Light & Rescue | 1 | $310,000 | $310,000 |
| Mobile Service | 1 | $56,000 | $56,000 |
| Staff Cars | 3 | $20,000 | $60,000 |

*** Includes equipment for engines and ladder trucks

Total Vehicle Cost **$3,550,104**

**Station 1 and Fire Administration**
(To replace Fire Prevention offices at 10th St. and Station 1 and to adapt existing Station 1 vehicle bay into a maintenance and repair facility.)

**$5,000,000**

**Remote Training Site** **$495,000**

**Total Cost of New Facilities** **$21,963,705**

# Community Facilities Fee Update

## Decision Package

## Fire Department

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 1. Fire Station Standard<br><br>*Revise to 7,000 square feet* | This design is the standard for current and future fire stations. The prior CFF report references Station 9, as that was the last station built. Station 9 is not a good example to use as the standard, as it was built on an undersized parcel and is inadequate to meet our needs. The design of Station 2 (relocated to Paradise Rd & Sutter Av) and Station 11 (Pelandale Av & Carver Rd) resembles that of the majority of our other stations (3, 4, 5, 6, 7 and 8) and provides for adequate square footage for drive-through apparatus bays, unisex facilities, public space and ADA requirements. The standard should be revised to reflect current needs:<br><br>Base Station – 5,500 sq ft<br>ADA Requirements (5% of base) – 300 sq ft<br>Unisex Restroom Facilities – 115 sq ft<br>Unisex Dormitory Facilities – 400 sq ft<br>Physical Fitness room – 320 sq ft<br>Shop Area – 150 sq ft<br>Public Restroom and lobby - 100 sq ft<br>**Total - 6,885 sq ft** | |
| 2. Fire Station Cost<br><br>*Revise cost to $1.59 Million (excluding land acquisition)* | The current CFF contains a cost of $487,000, which is based upon the cost for construction of Fire Station 9. We are presently designing Fire Stations 2 & 11. The average architectural estimate for construction of these new stations is $1.25 million. An additional 27% should be added for architectural and construction administration costs. Total station cost is $1,587,500. | |
| 3. Fire Apparatus<br><br>*Revise engine cost to $348,000, unequipped. Revise truck (ladder/rescue) cost to $631,000, unequipped* | Our most recent fire engine was purchased in 2001, at a cost of $324,000. We have budgeted for a new engine in 2002-03, at a cost of $348,000. We recently ordered a new fire truck (ladder/rescue), which was delivered in December 2002. The purchase price was $631,000. At build-out we will require:<br><br>2 additional trucks and 4 additional engines | |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 4. 3rd Truck Company<br><br>*Add third truck company at Fire Station 11 in 2005-06* | A third truck company, located in the new growth area of the City in the northwest, is needed. This was eliminated from the 10 year C.I.P. due to staffing cost impacts to the general fund. Station 11 is being built with room to house both an engine and a truck company, should funding be available | |
| 5. 4th Truck Company<br><br>*Add fourth truck company at Station 12* | At build out, an additional truck will be necessary in the northeast area in order to adequately provide fire and rescue services throughout this area. The most logical location for this would be Station 12. | |
| 6. Air Light & Rescue Unit<br><br>*Add one vehicle at $310,000, equipped* | An Air, light and Rescue unit is also needed to improve response capabilities and firefighter safety. This is quite likely to be combined with future Weapons of Mass Destruction needs, and one vehicle would be operationally functional. The estimated cost is $310,000. | |
| 7. Mobile Service Vehicle<br><br>*Add one mobile service vehicle at $56,000* | A service vehicle to provide mobile apparatus maintenance and repairs will be necessary to optimize fleet service. | |
| 8. New Facilities<br><br>*a. Fire Station 11 – 1.45 million (architect's estimate), excluding land*<br><br>*b. Fire Station 2 – $2 million excluding land cost*<br><br>*c. Fire Station 12*<br><br>*d. Fire Station 13* | Located at the corner of Pelandale Ave. and Carver Rd, Fire Station 11 is currently being designed and is anticipated to open in spring of 2004. Estimate includes 27% architectural and construction administration.<br><br>Relocation of Fire Station 2 is also in the design phase, slightly ahead of Station 11. This station should be ready to occupy in spring 2004.<br><br>Fire Station 12 will be located in the Village III area. This station will ultimately house both an engine and truck company. We are currently experiencing growth to the northeast at a similar rate to our experience in the Pelandale-Snyder area.<br><br>Fire Station 13 is planned in the McHenry-Claribel area. | |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| *e. Fire Station 15* | Station 15 (Dakota) is planned for the Beckwith Triangle area on the west side. In the absence of Salida as part of the City's fire system, Station 15 is necessary to provide adequate fire protection services to this area. | |
| 9. Remote Training Site<br><br>*Add Remote Training Facility to either Station 12 or 13 (3 acres), estimated cost - $495,000* | The site for either station 12 or 13 should be large enough to accommodate a remote training site. This site would be used by northeast fire companies for basic training activities. This could be accomplished with approximately 3 acres, which could provide 50% of the training needs for stations 3, 9, 11, 12, and 13 and could be used jointly by the Police Department. | |
| 10. Fire Station Furnishings & Technology<br><br>*Add furnishings and technology needs for new Fire Stations - $121,000 / station (estimate)* | Furnishings and computer and communications technology will cost $121,000 per new fire station. This includes fire fighter training equipment, office and living furniture, appliances, and phone and emergency communications equipment. Cost estimate details are included at Attachment 1. | |
| 11. Fire Administration & Station 1 Rebuild<br><br>*Add an administrative facility to plans to rebuild Station 1 - $5 million (estimate)* | Our administrative facilities are currently inadequate, and funding for a new facility needs to be addressed in this study. This issue is intertwined with the need to make major renovation to Station 1 and the need for improved apparatus maintenance facilities. These projects are likely best combined, and much more study will be required to determine long- term needs.<br><br>The total cost of the seismic retrofit and renovation of Station 1 and separate administrative and maintenance facilities is projected to be over $6 million dollars. The department is considering as an alternative, rebuilding Station 1 completely, combined with a new administrative building and housing the maintenance facility in existing space. This alternative is projected to cost about $5 million. Though this second estimate is less concrete, it is more likely to be implemented. | |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 16. Expansion of Existing Stations<br><br>*Add 2,300 square feet to Stations 3, 6, 7 and 8* | Many of the department's existing fire stations have inadequate facilities. The department, taking into consideration constraints such as land area and surrounding development, recommends that four existing stations could feasibly be expanded to meet existing standards, as well as ADA requirements, and the need for unisex facilities. These expansions would consist of about 2,300 square feet per station. | |

# Attachment 1

## Fire Department Technology Furnishings Cost Estimates

## STATION FURNISHINGS SUMMARY

| | |
|---|---|
| KITCHEN | $8,015 |
| DAYROOM | $10,330 |
| CAPTAIN'S OFFICE | $11,480 |
| CAPTAIN'S DORMS | $2,740 |
| ENGINEER'S DORM | $2,740 |
| FIREFIGHTERS DORM | $2,740 |
| EXERCISE ROOM | $16,330 |
| CONFERENCE ROOM | $4,180 |
| TURNOUT ROOM | $1,300 |
| MISCELLANEOUS | $2,000 |
| APPARATUS BAY | $8,250 |
| HOSE ROOM | $500 |
| FIRE STATION RADIO EQUIPMENT | $8,527 |
| VOTING RECEIVER | $5,165 |
| REPEATER | $10,382 |
| RADIO TOWER, 50 FT | $10,940 |
| WAG, LINE, INSTALLATION | $1,000 |
| COMPUTER SYSTEM | $4,950 |
| PHONE SYSTEM | $9,850 |
| **TOTAL COST:** | **$121,419** |

# Attachment 2

## Fire Department Equipment

---

## ENGINE INVENTORY SUMMARY

| | |
|---|---|
| ADMINISTRATIVE | $4,102 |
| EMS | $5,457 |
| FIRE FIGHTING TOOLS/EQUIPMNET | $49,329 |
| RESCUE | $2,420 |
| HAZMAT | $50 |
| **TOTAL COST:** | **$61,358** |

## TRUCK INVENTORY SUMMARY

| | |
|---|---|
| ADMINISTRATIVE | $7,775 |
| EMS | $6,080 |
| FIRE FIGHTING TOOLS/EQUIPMNET | $42,133 |
| RESCUE | $53,098 |
| HAZMAT | $3,250 |
| **TOTAL COST:** | **$112,336** |

# Attachment 3

## Fire Station Square Footages and Station Ages

| Station | Square Footage | Date Built | Comments |
|---|---|---|---|
| #1 | 16,817 | 1939 | Addition in 1975 |
| #2 | 1,600 | 1924 | |
| #3 | 3,976 | 1969 | |
| #4 | 5,358 | 1975 | |
| #5 | 7,738 | 1964 | Addition in 1973 |
| #6 | 4,496 | 1979 | |
| #7 | 2,775 | 1981 | |
| #8 | 4,688 | 1980 | |
| #9 | 3,158 | 1991 | |
| #10 | 5,148 | 1960 | |
| Administration | 2,238 | | |

## Modesto Police Department
## Capital Cost Analysis

| Sworn Officers per 1000 population | 1.85 Staffing | **1998 CFF** |
|---|---|---|
| Buildout Cost of Facilities | $126,299,383 | $53,692,000 |
| Replacement Cost of Existing Facilities | $30,291,500 | $14,456,000 |
| Costs to Complete System | $96,007,883 | $39,236,000 |
| Buildout DUES | 152,100 | 163,300 |
| Cost per DUE | **$830** | **$329** |
| New Development DUEs | 68,300 | 90,200 |
| New Development's Share | $56,714,319 | $29,657,186 |
| Existing Development DUEs | 70,700 | 61,400 |
| Existing Development's Share | $58,707,208 | $20,187,929 |
| Existing Capital | $30,291,500 | $14,456,000 |
| Existing Deficiency* | **$28,415,708** | **$5,731,929** |

# Police Department
# Buildout Capital Facilities

| Police Buildings | | 1.85 Staffing | |
|---|---|---|---|
| Standard sq. ft. per employee | | Employees | Size |
| | 263 | 982 | 258,266 |
| | Cost per sq. ft. | Total Cost | |
| | $300 | **$77,479,800** | |

| Vehicles | | 1.85 Staffing | |
|---|---|---|---|
| Type | Cost | Quantity | Total Cost |
| Patrol | $26,000 | 222 | $5,772,000 |
| Detective/Staff | $16,500 | 119 | $1,963,500 |
| CSO | $20,000 | 25 | $500,000 |
| ACO | $40,000 | 7 | $280,000 |
| Motorcycles | $14,000 | 41 | $574,000 |
| Others | $20,000 | 104 | $2,080,000 |
| Total Vehicles | | 518 | **$11,169,500** |

| Vehicle Equipment | | 1.85 Staffing | |
|---|---|---|---|
| | Cost | Quantity | Total Cost |
| Mobile Data Computers (in Patrol, CSO, ASO, .25 Other) | $15,000 | 280 | $4,200,000 |
| Special Equipment (Patrol, CSO, ACO) | $6,000 | 254 | $1,524,000 |
| Other Equipment (Detective, Staff, Other) | $1,500 | 264 | $396,000 |
| Total Vehicle Equipment | | | **$6,120,000** |

| **Parking Facilities** | | **1.85 Staffing** | |
|---|---|---|---|
| | Cost | Quantity | Total Cost |
| 1 space/ 300 sq ft buildings* | $12,500 | 742 | |
| 1 space/ dept. vehicle | $12,500 | 518 | |
| Total Parking | $12,500 | 1260 | **$15,748,583** |
| *based on 263 sq feet building space per employee less 150 spaces at 2.0 and 122 spaces at 1.6 for staff cars | | | |

| | |
|---|---|
| **Other Costs** (independent of staffing ratio) | |
| Training Facility | $5,065,000 |
| Land for Northeast Area Precinct 2 acres at $165,000/ acre | $330,000 |
| Modesto/Stanislaus Emergency Services Facility (Modesto share) | $2,000,000 |
| 800 MHz Radio System | $8,386,500 |
| Total | **$15,781,500** |

| | **1.85 Staffing** |
|---|---|
| **Total Cost of Buildout Capital Facilities** | **$126,299,383** |

# Police Department
# Replacement Cost of Existing Facilities

| Replacement Cost of Police Facility | | | |
|---|---|---|---|
| | Cost per sq. ft. | Size | Total Cost |
| | $300 | 65,000 | **$19,500,000** |

| Replacement Cost of Vehicles | | | |
|---|---|---|---|
| Type | Cost | Quantity | Total Cost |
| Patrol | $26,000 | 85 | $2,210,000 |
| Detective/Staff | $16,500 | 47 | $775,500 |
| CSO | $20,000 | 7 | $140,000 |
| ACO | $40,000 | 3 | $120,000 |
| Motorcycles | $14,000 | 16 | $224,000 |
| Others | $20,000 | 40 | $800,000 |
| Total Vehicles | | 198 | **$4,269,500** |

| Replacement Cost of Vehicle Equipment | | | |
|---|---|---|---|
| | Cost | Quantity | Total Cost |
| Mobile Data Computers (in 50% of Vehicles) | $15,000 | 99 | $1,485,000 |
| Special Equipment (Patrol, CSO, ACO) | $6,000 | 95 | $570,000 |
| Other Equipment (Detective, Staff, Other) | $1,500 | 103 | $154,500 |
| Total Vehicle Equipment | | | **$2,209,500** |

| Replacement Cost of Parking Facilities | | | |
|---|---|---|---|
| | Cost | Quantity | Total Cost |
| 1 space/ 2.5 employees | $12,500 | 147 | $1,837,500 |
| 1 space/ dept. vehicle | $12,500 | 198 | $2,475,000 |
| Total Parking | $12,500 | 345 | **$4,312,500** |

**Total Replacement Cost of Existing Capital Facilities** **$30,291,500**

Note: No existing value is given to the department's radio and communications system, as the entire system will be replaced at buildout.

## Community Facilities Fee Update

Decision Package

Police Department

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 1. Personnel Staffing Standard<br><br>*Revise to 2.0 sworn per 1,000 population.* | The existing CFF report references 2.0 total police personnel per 1,000 population as the standard. For California, the Law Enforcement Management and Administrative Statistics for 1999, show an average of 1.6 sworn per 1,000 population statewide. Staffing levels for several large police departments in California are appended as Attachment 1. Within the valley, from Bakersfield to Sacramento, the average is also 1.6 sworn per 1,000 population for police departments with more than 100 officers. However, 1.6 staffing is not sufficient for the needs of the future.<br><br>The Modesto Police Department sworn staffing is currently at 1.3 sworn per 1,000 population and is severely understaffed. The Chief of Police feels strongly that 2.0 sworn staffing ratio needs to be the standard for the future. California is behind the rest of the nation in staffing and, as the City of Modesto grows, the ratio of officers to population should also increase. Modesto currently serves as the urban center for the county and is the venue for all federal and county services. Modesto is the business, medical, entertainment, sports, theater and restaurant, and cultural hub for not only Stanislaus County but for Tuolumne, Calaveras, Amador, Merced and portions of San Joaquin counties. It is also the county center for interstate transportation and additional police services are needed. Modesto is transitioning into what Stockton and Sacramento already are – major urban centers with law enforcement needs that have outstripped our rural past. The impacts on equipment, space requirements and parking at standards of 2.0 sworn and 1.6 sworn standard are shown in Attachment 2. | ☐ Approve<br><br>☐ Disapprove<br><br>☐ Modify |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 2. Space Requirements<br><br>*Revise square footage standard from 200 sq. ft to 263 sq. ft. for each employee.* | The last CFF report used a standard of 200 sq. ft. per employee for determining future facility needs. The original report referred to a national standard of 300 sq. ft. per employee as stated by the National Clearing House for Criminal Justice Planning and Architecture. We have been unable to locate this source for current updated standards. From the 300 sq. ft. standard, 200 sq. ft. was used in the original report "given funding limitations". The revised 263 sq. ft. standard is based on the estimate by RRM Design Group architects of 100 to 150 sq. ft. standard per employee plus 35% for gross calculation factor and 75% for common areas – storage, restrooms, conference rooms, etc. This is the same standard adopted by the Fire Department for their administration office space. The Santa Clara Police Department recently constructed a new police building of 51,500 sq. ft. for its 202 employees, at a rate of 255 sq. ft. per employee. The 300 sq. ft. per employee general space requirement for police departments is lessened by the fact that many of the employees work in shifts, or are on patrol at any one time. However, police stations also require space for meeting rooms and public areas to interact with the citizenry. | ☐ Approve<br>☐ Disapprove<br>☐ Modify |
| 3. Square Footage Construction Costs<br><br>*Revise square footage costs from $177 per sq. ft. to $300 per sq. ft. (excluding land).* | The last CFF Report contains estimated construction costs. In 2000, the Police Department occupied the newly constructed 40,000 sq. ft. main facility. The final costs for building have not yet been determined due to construction issues and on-going arbitration. However, the current estimate, based upon expenditures and remaining encumbrances, is $300 per square foot. The cost includes office furnishings, telephones and necessary hardware to make connections to existing computer systems. The 51,500 sq. ft. Santa Clara police building cost about $16 million not including the costs of toxic waste removal and a million-dollar three-story glass atrium. This calculates to just over $310 per sq. ft. | ☐ Approve<br>☐ Disapprove<br>☐ Modify |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 4. Department Vehicles<br><br>*Revise total cost for department vehicles to reflect specific vehicle allocation and updated costs.* | The last report had a buildout department vehicle standard of 484 total vehicles at an average price of $15,400 for a total cost of $7.45 million. Standards have been updated to take into account the specific vehicle needs of the department based on new staffing standards. The updated costs of each type of new vehicle have also been updated. A detailed report on the need, number, and cost of department vehicles in appended to this document as Attachment 3 | ☐ Approve<br>☐ Disapprove<br>☐ Modify |
| 5. Parking Needs<br><br>*Revise standard for parking to 1 space for every 300 square feet of office space and 1 space for each department vehicle.* | The last report assumed 959 buildout employees would require 302 parking spaces. The City of Modesto Community Development has a standard of 1 space for every 300 square feet of office space to meet the needs of employee and visitor parking. In addition to this standard, a parking space is included for each city vehicle. Detectives and some other staff are provided city cars and therefore a space is included. So for the purpose of this report, a calculation of 1 space for each 300 sq. ft. was made and the number of detective/staff vehicles was deducted from the amount. Added in was a parking space for every department vehicle. The cost for each parking space was estimated at $12,500 based on the cost of building the 10th Street Place parking facility. | ☐ Approve<br>☐ Disapprove<br>☐ Modify |
| 6. Northeast Area Precinct<br><br>*Add land costs of $330,000 for a Northeast Area fully staffed precinct.* | In the last CFF report, all building needs for additional personnel are accommodated within the G.L. McKinsey Police Complex bordered by 11th, 10th, F and G Streets. The land is currently owned. Due to the challenges of serving a City of considerable physical size, staff now sees the need to have a fully staffed precinct office in the Northeast area. The office will be a joint facility with the Fire Department. The revised square footage construction costs provided within the report would cover the cost of the building and parking but there was never any provision for additional land. The estimate of $165,000 per acre is being used by the Fire Department for acreage in the NE area of the city. It is estimated that at least two acres would be required for a facility, and employee and department parking needs. | ☐ Approve<br>☐ Disapprove<br>☐ Modify |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 7. Training Facility<br><br>*Add Training Facility at a cost of $5,065,000.* | The last report had no provision for future training needs of the department. A full range training facility is necessary to provide the level of training needed for the department. The city has land available that is currently in the beginning stages of development as a regional training facility. In the future, the site will be used for required training for: executive protection, tactical live firing simulation, homeland defense, hazardous materials, crowd control, etc. The facility will include classrooms, an equestrian arena, a canine training course, caretaker residence, defensive tactics facility, a shooting range with observation deck and a defensive driving course. Estimated costs are $5,065,000 outlined in Attachment 4. | ☐ Approve<br>☐ Disapprove<br>☐ Modify |
| 8.Modesto Stanislaus Emergency Service Facilities<br><br>*Add City of Modesto's Share of Costs for Future Expansion of Dispatch and EOC Facilities -$2,000,000* | The last CFF contains no provision for future expansion costs for dispatch and EOC services. In 1999, the County Dispatch Center and Emergency Operations Center (EOC) moved into a city/county jointly owned facility on Oakdale Road. As the city grows, the 911 Dispatch Center and EOC will also require funding for new technology and systems upgrades as well as for housing additional employees related to growth. Future communications needs include:<br>• Computer Aided Dispatch (CAD) Hardware Servers<br>• CAD / GIS (Geographic Information System) Interface<br>• Additional 9-1-1 Base Radio System to Eliminate Dead Zones<br>• Phone System Enhancements to Support Wireless (Cell) 9-1-1 calls<br><br>Total cost estimates exceed $4 million for these upgrades. The City's share of costs for the Communications Center is based on usage and population. Its current share is approximately 57%. The amount of $2,000,000 we believe is a conservative estimate on the technological upgrades needed as the region grows. This item includes the total costs for the City of Modesto, which are actually paid 80% by Police and 20% by the Fire Department. | ☐ Approve<br>☐ Disapprove<br>☐ Modify |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 9. Convert Radio System to 800 MHz<br><br>*Replace existing 450 band UHF radio system at a cost of $8,408,000* | The Department's radio communication system will need to be replaced, due largely to new federal requirements reallocating radio frequencies. Most of the current radio system is 20 to 30 years old. Costs include replacement radio transmitters, receivers and microwave radio backup relays for voter sites, installation and engineering for the new system. Replacement of portable and mobile radio equipment for Police and Fire Departments as well as Neighborhood Preservation Code Enforcement units is also included. Attachment 5 outlines the cost for the replacement system for the City. | ☐ Approve<br><br>☐ Disapprove<br><br>☐ Modify |

## Attachment 1
## Police Department Staffing – California Departments

| **San Diego** | number authorized | population | staffing ratios per 1000 residents |
|---|---|---|---|
| Sworn Officers | 2100 | 1,250,700 | 1.68 |
| Total Personnel | 2875 | 1,250,700 | 2.30 |
| **San Jose** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 1379 | 918,800 | 1.50 |
| Total Personnel | 1838 | 918,800 | 2.00 |
| **Long Beach** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 913 | 473,600 | 1.93 |
| Total Personnel | 1459 | 473,600 | 3.08 |
| **Fresno** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 715 | 441,200 | 1.62 |
| Total Personnel | 1109 | 441,200 | 2.51 |
| **Sacramento** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 706 | 418,700 | 1.69 |
| Total Personnel | 1085 | 418,700 | 2.59 |
| **Oakland** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 757 | 408,800 | 1.85 |
| Total Personnel | 1202 | 408,800 | 2.94 |
| **Bakersfield** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 320 | 254,400 | 1.26 |
| Total Personnel | 447 | 254,500 | 1.76 |
| **Riverside** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 366 | 265,700 | 1.38 |
| Total Personnel | 547 | 265,700 | 2.06 |
| **Stockton** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 383 | 251,100 | 1.53 |
| Total Personnel | 572 | 251,100 | 2.28 |
| **Fremont** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 219 | 207,200 | 1.06 |
| Total Personnel | 345 | 207,200 | 1.67 |
| **Modesto** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 253 | 194,400 | **1.30** |
| Total Personnel | 358 | 194,400 | **1.84** |
| **Salinas** | number authorized | population | staffing ratios per 1000 residents |
| Sworn Officers | 166 | 156,500 | 1.06 |
| Total Personnel | 221 | 156,500 | 1.41 |

| **Ceres** | number authorized | population | staffing ratios per 1000 residents |
|---|---|---|---|
| Sworn Officers | 43 | 36,656 | 1.17 |
| Total Personnel | 68 | 36,656 | 1.86 |

| **Oakdale** | number authorized | population | staffing ratios per 1000 residents |
|---|---|---|---|
| Sworn Officers | 26 | 16,200 | 1.60 |
| Total Personnel | 38 | 16,200 | 2.35 |

| **Turlock** | number authorized | population | staffing ratios per 1000 residents |
|---|---|---|---|
| Sworn Officers | 64 | 59,400 | 1.08 |
| Total Personnel | 108 | 59,400 | 1.82 |

***Staffing data from telephone survey, Town Hall Services, October 7, 2002**
**Population data from California Department of Finance, January 1, 2001.**

# Attachment 2

## CFF Update Decision Package – Police Department

## Facilities & Equipment Cost Estimates for 2.0 and 1.6 Sworn Officers Standard

| | 2.0 Sworn Standard | 1.85 Sworn Standard |
|---|---|---|
| Total Personnel at Buildout | 1,061 | 982 |
| Number of Sworn | 741 | 686 |
| Facilities (263 sq. ft per employee) | 279,043 | 258,266 |
| Cost for Facilities ($300 per sq. ft.) | $83,712,900 | $77,479,800 |
| Parking Garage ($12,500 ea. Space) | $17,014,292 | $15,748,583 |
| Vehicles | $12,025,000 | $11,169,500 |
| Vehicle Equipment | $6,584,250 | $6,120,000 |
| **TOTAL COSTS DEPENDENT ON STAFF STANDARD** | $119,336,442 | $110,517,883 |
| **Difference Between 2.0 and 1.6 Staffing** | $8,818,559 | |

# Attachment 3

## CFF Update Decision Package – Police Department

## Vehicle Costs and Needs for 2.0 and 1.6 Sworn Officers Standard

**Department Vehicle Standards**

Patrol Vehicles – 43% of fleet

One vehicle for each Chief, Captain, Lieutenant and Detective

One vehicle for every four Community Service Officers

One vehicle for every two Animal Control Officers

Motorcycles – 8% of fleet

| Vehicles | Cost | Quantity at 2.0 | Quantity at 1.85 |
|---|---|---|---|
| Total Fleet | - | 558 | 518 |
| Patrol | $26,000 | 240 | 222 |
| Detective/Staff | $16,500 | 127 | 119 |
| CSO | $20,000 | 26 | 25 |
| ACO | $40,000 | 7 | 7 |
| Motorcycles | $14,000 | 45 | 41 |
| Others | $20,000 | 113 | 104 |
| | | **2.0** | **1.85** |
| **Total Vehicle Cost at Buildout** | | **$12,025,500** | **$11,169,500** |

# Attachment 4

## CFF Update Decision Package – Police Department

## Training Center Construction Costs

| | |
|---|---|
| EVOC (Emergency Vehicle Operations Center) Track 1.6 miles of 80' asphalt flat and banked for speeds up to 150 MPH | $ 1,600,000 |
| .75 mile of 40' asphalt roadway in 300' squares in a layout to resemble a typical residential street | 400,000 |
| Concrete skid pan | 349,000 |
| Range concrete work, landscaping, patio covering | 119,500 |
| Restrooms at Classroom and Equestrian areas | 75,000 |
| Range House/Classroom/Restrooms/Picnic tables and benches | 512,000 |
| Aeration System for Slough | 28,000 |
| Rifle Range Concrete Work and Landscaping | 26,000 |
| Caretakers Home | 100,000 |
| Tactical Live Fire House | 100,000 |
| Swat Training Area/Obstacle Course/Landscaping | 18,800 |
| Tactical Training Area and Obstacle Course | 30,700 |
| Maintenance Building and Area Improvements | 80,000 |
| Canine Training Course and Scent Building | 43,000 |
| Equestrian Covered Arena | 150,000 |
| Barn/Outbuildings/Stables | 84,000 |
| Bleachers for Equestrian and Range Areas, Landscaping | 99,000 |
| Gymnasium and Classrooms | 500,000 |
| Dining Hall | 750,000 |
| | $ 5,065,000 |

# Attachment 5

## CFF Update Decision Package – Police Department

## 800 MHz System – Summary of Equipment

| | |
|---|---|
| 2 Radio Transmitter sites at $80,000 each: | $ 160,000 |
| 2 Radio Antenna structures for transmitters at $38,000 each: | 76,000 |
| 20 Voter Receiver sites at $42,000 each (based upon receivers at 15 city fire stations, Mt. Oso, Mt. Rushmore, the Kraft Cereal plant, and a tall building structure in the downtown area): | 840,000 |
| 20 Microwave radio backup relays for voter sites at $10,000 each: | 200,000 |
| 20 Bi-Directional Broadband Amplifiers at $20,000 each for in-building repeating from basements and other large building structures: | 400,000 |
| 884 Portable Radios for all MPD sworn officers), 100 for Police support personnel, 196 portables for the Fire Dept, and 13 portables for Neighborhood Preservation Code Enforcement officers at buildout (1,193 @ $2,000) | 2,386,000 |
| 665 Mobile Radios for all Police vehicles, 56 for Fire and 6 for NPU (727 @ $2,500) | 1,817,500 |
| Install/program all radio's (either by shop or a vendor) at $150.00 each: | 288,000 |
| | $ 6,167,500 |
| Engineering and propagation study for new system: | 60,000 |
| Project Administration (10%) | 617,000 |
| Project Contingency (25%) | 1,542,000 |
| Total: | $ 8,386,500 |

## Modesto Parks Department
## Capital Cost Analysis

| | 2003 CFF | 1998 CFF |
|---|---|---|
| Buildout Capital Costs | **$506,392,992** | **$140,703,000** |
| Replacement Cost of Existing Facilities | **$158,321,394** | **$42,100,000** |
| Cost of Additional Facilities | **$348,071,598** | **$98,603,000** |
| Buildout Residential DUES | **115,500** | **128,000** |
| Cost per DUE | **$4,384** | **$1,955** * |
| New Development DUES | **44,300** | **65,600** |
| New Development's Share of Cost | **$194,226,922** | **$128,263,888** |
| Existing Development DUES | **61,900** | **52,000** |
| Existing Development's Share of Cost | **$271,391,569** | **$101,672,594** |
| Existing Capital | **$158,321,394** | **$42,100,000** |
| Existing Deficiency** | **$113,070,175** | **$59,572,594** |

*The 1998 report assumed a marginal cost for new neighborhood parks in additional to system wide buildout cost. With financing, neighborhood parks add $856 per new DUE to the system cost of $1099

** The share of the Total Cost allocated to existing development located outside of current city limits but within the CFF study is about $40.9 million. Upon annexation, this amount would be added to the existing deficiency, offset by any CFF improvements already in place at that time.

# Buildout Capital Facilities Cost - Parks

| **Neighborhood Parks** | | | Replacement Value | Future Cost |
|---|---|---|---|---|
| 45 existing parks - 5.8 acres average | | | | |
| land acquisition | 249 acres | $140,000 | $34,860,000 | |
| land acquisition (flood plain) | 11.5 acres | $30,000 | $345,000 | |
| planning and design | 260.5 acres | $30,000 | $7,815,000 | |
| current construction | 154 phases | | $33,153,750 | $14,208,750 |
| future construction | 59 phases | | | $17,362,500 |
| 26 planned parks - 6.9 acres average | | | | |
| land acquisition | 179.3 acres | $140,000 | | $25,102,000 |
| planning and design | 179.3 acres | $30,000 | | $5,379,000 |
| current construction | 0 phases | | | |
| future construction | 130 phases | | | $45,300,000 |
| **Total Neighborhood Parks** | | | **$76,173,750** | **$107,352,250** |

| **Community Parks** | | | Replacement Value | Future Cost |
|---|---|---|---|---|
| 6 existing parks - 22.3 acres average | | | | |
| land acquisition | 125.5 acres | $120,000 | $15,060,000 | |
| land acquisition | 8.4 acres | $140,000 | $1,176,000 | |
| planning and design | 88.9 acres | $30,000* | $3,847,680 | |
| current construction | 20 phases | | $18,771,676 | $8,045,004 |
| future construction | 6 phases | | | $19,768,000 |
| 2 planned parks - 40 acres average | | | | |
| land acquisition | 80 acres | $120,000 | | $9,600,000 |
| planning and design | 80 acres | $30,000 | | $2,400,000 |
| current construction | 0 phases | | | |
| future construction | 10 phases | | | $33,056,000 |
| *Planning and design for Grogan Park is a lump sum of $1.2 M | | | | |
| **Total Community Parks** | | | **$38,855,356** | **$72,869,004** |

| **Regional Parks** | | | Replacement Value | Future Cost |
|---|---|---|---|---|
| 2 Regional Parks - city's share of land costs vary between $12,000 and $30,000 per acre | | | | |
| land acquisition | 539.32 acres | | $9,004,440 | |
| planning and design | 539.32 acres | | $9,004,440 | |
| current construction | 16 phases | | $15,914,304 | $6,820,416 |
| future construction | 14 phases | | | $64,157,280 |
| **Total Regional Parks** | | | **$33,923,184** | **$70,977,696** |

| Sports Complex | | | Replacement Value | Future Cost |
|---|---|---|---|---|
| land acquisition | 110 acres | $120,000 | | $13,200,000 |
| planning and design | 110 acres | $30,000 | | $3,300,000 |
| current construction | 0 phases | | | |
| future construction | 5 phases | | | $56,430,000 |
| **Total Sports Complex** | | | **$0** | **$72,930,000** |

| Community Centers | | | Replacement Value | Future Cost |
|---|---|---|---|---|
| 7 existing community centers | | | | |
| community center value | 64,367 sq. ft. | $160 | $7,209,104 | $3,089,616 |
| future planning | | | | $1,766,342 |
| future construction | | | | $3,893,959 |
| 1 planned community center | | | | |
| planning and design | 5,175 | $57.75 | | $298,856 |
| future construction | 5,175 sq. ft. | $165 | | $853,875 |
| **Total Community Centers** | | | **$7,209,104** | **$9,902,648** |

| Historical Buildings | | | Replacement Value | Future Cost |
|---|---|---|---|---|
| McClure Expansion | | | | |
| land acquisition | 18 acres | $120,000 | $2,160,000 | |
| future planning and design | 18 acres | $30,000 | | $540,000 |
| future construction estimate | 18 acres | $300,000 | | $5,400,000 |
| small structures | 30 structures | $120,000 | | $3,600,000 |
| large structures | 6 structures | $750,000 | | $4,500,000 |
| **Total Historical Buildings** | | | **$2,160,000** | **$14,040,000** |

| | | |
|---|---|---|
| **Total Replacement Cost of Existing Capital Facilities** | **$158,321,394** | |
| **Total Cost of Future Capital Facilities** | | **$348,071,598** |
| **Total Capital Facilities Cost at Buildout** | | **$506,392,992** |

## Modesto Parks Department
## Capital Facilities Cost Summary

| | cost | cost per DUE |
|---|---|---|
| Neighborhood Parks | $183,526,000 | $1,589 |
| Community Parks | $111,724,360 | $967 |
| Regional Parks | $104,900,880 | $908 |
| Community Centers | $17,111,752 | $148 |
| Sports Complex | $72,930,000 | $631 |
| McClure Expansion | $16,200,000 | $140 |
| Buildout Cost of System | $506,392,992 | $4,384 |
| | | |
| Buildout DUES | 115,500 | |
| **Cost Per DUE** | **$4,384** | |

## Summary of Costs - Regional Parks

18-Nov-02

| Name | Acquisition | Design | Phase | Cost/Unit | Sub-Total | Total |
|---|---|---|---|---|---|---|
| **Tuolumne River Regional Park (TRRP)** | Land Acquisition | 268.75 | acre | $12,000.00 | $3,225,000.00 | |
| **(Remainder)** | Planning and Design | 268.75 | acre | $12,000.00 | $3,225,000.00 | |
| Note: reflects 40% of JPA resposibility | Construction to date | 0 | LS | $9,675,000.00 | $0.00 | |
| | Remaining Phases | 4 | LS | $9,675,000.00 | $38,700,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$45,150,000.00** |
| **Legion Park (TRRP)** | Land Acquisition | 12.3 | acre | $12,000.00 | $147,600.00 | |
| Note: reflects 40% of JPA resposibility | Planning and Design | 12.3 | acre | $12,000.00 | $147,600.00 | |
| | Construction to date | 1 | LS | $442,800.00 | $442,800.00 | |
| | Remaining Phases | 3 | LS | $442,800.00 | $1,328,400.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,066,400.00** |
| **Mancini Park (TRRP)** | Land Acquisition | 23.17 | acre | $12,000.00 | $278,040.00 | |
| Note: reflects 40% of JPA resposibility | Planning and Design | 23.17 | acre | $12,000.00 | $278,040.00 | |
| | Construction to date | 1 | LS | $834,120.00 | $834,120.00 | |
| | Remaining Phases | 3 | LS | $834,120.00 | $2,502,360.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,892,560.00** |
| **Gateway Parcel (TRRP)** | Land Acquisition | 90 | acre | $12,000.00 | $1,080,000.00 | |
| Note: reflects 40% of JPA resposibility | Planning and Design | 90 | acre | $12,000.00 | $1,080,000.00 | |
| | Construction to date | 0 | LS | $3,240,000.00 | $0.00 | |
| | Remaining Phases | 4 | LS | $3,240,000.00 | $12,960,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$15,120,000.00** |
| **Bellanita Park (TRRP)** | Land Acquisition | 4.4 | acre | $12,000.00 | $52,800.00 | |
| Note: reflects 40% of JPA resposibility | Planning and Design | 4.4 | acre | $12,000.00 | $52,800.00 | |
| | Construction to date | 0 | EA | $158,400.00 | $0.00 | |
| | Remaining Phases | 4 | EA | $158,400.00 | $633,600.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$739,200.00** |
| **Dry Creek Regional Park (DCRP)** | Land Acquisition | 106.4 | acre | $30,000.00 | $3,192,000.00 | |
| Baseline Developed Area | Planning and Design | 106.4 | acre | $30,000.00 | $3,192,000.00 | |
| | Construction to date | 3 | LS | $5,575,360.00 | $16,726,080.00 | |
| | Remaining Phases | 1 | LS | $5,575,360.00 | $5,575,360.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$28,685,440.00** |
| **East La Loma Park (DCRP)** | Land Acquisition | 12 | acre | $30,000.00 | $360,000.00 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Baseline Developed Area | Planning and Design | 12 | acre | $30,000.00 | $360,000.00 | |
| | Construction to date | 4 | EA | $628,800.00 | $2,515,200.00 | |
| | Remaining Phases | 0 | EA | $628,800.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,235,200.00** |
| **Kewin Park (DCRP)** | Land Acquisition | 10 | acre | $30,000.00 | $300,000.00 | |
| Baseline Developed Area | Planning and Design | 10 | acre | $30,000.00 | $300,000.00 | |
| | Construction to date | 3 | EA | $524,000.00 | $1,572,000.00 | |
| | Remaining Phases | 1 | EA | $524,000.00 | $524,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,696,000.00** |
| **Thousand Oaks Park (DCRP)** | Land Acquisition | 12.3 | acre | $30,000.00 | $369,000.00 | |
| Baseline Developed Area | Planning and Design | 12.3 | acre | $30,000.00 | $369,000.00 | |
| | Construction to date | 1 | EA | $644,520.00 | $644,520.00 | |
| | Remaining Phases | 3 | EA | $644,520.00 | $1,933,560.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,316,080.00** |
| **Total Acres (TRRP)** | | 398.62 | acres | | | |
| **TOTAL** | | | | | | **$104,900,880.00** |

## Summary of Costs - Community Parks

18-Nov-02

| Name | Acquisition | Design | Phase | Cost/Unit | Sub-Total | Total |
|---|---|---|---|---|---|---|
| **Beyer Park** | Land Acquisition | 20 | acre | $120,000.00 | $2,400,000.00 | |
| Baseline Developed Area | Planning and Design | 20 | acre | $30,000.00 | $600,000.00 | |
| | Construction to date | 4 | LS | $2,066,000.00 | $8,264,000.00 | |
| | Remaining Phases | 0 | LS | $2,066,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$11,264,000.00** |
| **Davis Park** | Land Acquisition | 19 | acre | $120,000.00 | $2,280,000.00 | |
| Baseline Developed Area | Planning and Design | 19 | acre | $30,000.00 | $570,000.00 | |
| | Construction to date | 4 | LS | $1,962,700.00 | $7,850,800.00 | |
| | Remaining Phases | 0 | LS | $1,962,700.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$10,700,800.00** |
| **Downey Park** | Land Acquisition | 17.5 | acre | $120,000.00 | $2,100,000.00 | |
| Baseline Developed Area | Planning and Design | 17.5 | acre | $30,000.00 | $525,000.00 | |
| | Construction to date | 4 | LS | $1,807,750.00 | $7,231,000.00 | |
| | Remaining Phases | 0 | LS | $1,807,750.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$9,856,000.00** |
| **Graceada Park** | Land Acquisition | 8.4 | acre | $140,000.00 | $1,176,000.00 | |
| Baseline Developed Area | Planning and Design | 8.4 | acre | $30,000.00 | $252,000.00 | |
| | Construction to date | 4 | LS | $867,720.00 | $3,470,880.00 | |
| | Remaining Phases | 0 | LS | $867,720.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$4,898,880.00** |
| **Mary E. Grogan Park** | Land Acquisition | 46 | acre | $120,000.00 | $5,520,000.00 | |
| future | Planning and Design | 1 | LS | $1,210,680.00 | $1,210,680.00 | |
| Planned Urbanizing Area | Construction to date | 0 | EA | $0.00 | $0.00 | |
| CFF commitment shown - CFD not shown | Remaining Phases | 1 | LS | $8,828,400.00 | $8,828,400.00 | |
| | Agricultural Buffer | 1 | LS | $220,000.00 | $220,000.00 | |
| | Street Improvements | 1 | LS | $1,216,000.00 | $1,216,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$16,995,080.00** |
| **Sutton Park** | Land Acquisition | 23 | acre | $120,000.00 | $2,760,000.00 | |
| Planned Urbanizing Area | Planning and Design | 23 | acre | $30,000.00 | $690,000.00 | |
| | Construction to date | 0 | LS | $2,375,900.00 | $0.00 | |
| | Remaining Phases | 4 | LS | $2,375,900.00 | $9,503,600.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$12,953,600.00** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Morrow Community Park (NW)** | Land Acquisition | 40 | acre | $120,000.00 | $4,800,000.00 | |
| future | Planning and Design | 40 | acre | $30,000.00 | $1,200,000.00 | |
| Planned Urbanizing Area | Construction to date | 0 | LS | $4,132,000.00 | $0.00 | |
| | Remaining Phases | 4 | LS | $4,132,000.00 | $16,528,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$22,528,000.00** |
| **Vineyard Community Park (SW)** | Land Acquisition | 40 | acre | $120,000.00 | $4,800,000.00 | |
| future | Planning and Design | 40 | acre | $30,000.00 | $1,200,000.00 | |
| Planned Urbanizing Area | Construction to date | 0 | LS | $4,132,000.00 | $0.00 | |
| | Remaining Phases | 4 | LS | $4,132,000.00 | $16,528,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$22,528,000.00** |
| **Total Acres** | | 213.9 | acres | | | |
| **TOTAL** | | | | | | **$111,724,360.00** |

## Summary of Costs - Neighborhood Parks

18-Nov-02

| Name | Acquisition | Design | Phase | Cost/Unit | Sub-Total | Total |
|---|---|---|---|---|---|---|
| **EXISITNG NEIGHBORHOOD PARKS** | | | | | | |
| **Aqueduct Park** | Land Acquisition | 5 | acre | $140,000.00 | $700,000.00 | |
| Baseline Developed Area | Planning and Design | 5 | acre | $30,000.00 | $150,000.00 | |
| | Construction to date | 3 | EA | $250,000.00 | $750,000.00 | |
| | Remaining Phases | 2 | EA | $250,000.00 | $500,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,100,000.00** |
| **Beard Brook Park** | Land Acquisition | 11.5 | acre | $30,000.00 | $345,000.00 | |
| Baseline Developed Area | Planning and Design | 11.5 | acre | $30,000.00 | $345,000.00 | |
| | Construction to date | 5 | EA | $575,000.00 | $2,875,000.00 | |
| | Remaining Phases | 0 | EA | $575,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,565,000.00** |
| **Brewer's Rose Park** | Land Acquisition | 9.1 | acre | $140,000.00 | $1,274,000.00 | |
| Baseline Developed Area | Planning and Design | 9.1 | acre | $30,000.00 | $273,000.00 | |
| | Construction to date | 3 | EA | $455,000.00 | $1,365,000.00 | |
| | Remaining Phases | 2 | EA | $455,000.00 | $910,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,822,000.00** |
| **Catherine Everette Park** | Land Acquisition | 4.6 | acre | $140,000.00 | $644,000.00 | |
| Baseline Developed Area | Planning and Design | 4.6 | acre | $30,000.00 | $138,000.00 | |
| | Construction to date | 5 | EA | $230,000.00 | $1,150,000.00 | |
| | Remaining Phases | 0 | EA | $230,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,932,000.00** |
| **Cezar E. Chavez Park** | Land Acquisition | 6.3 | acre | $140,000.00 | $882,000.00 | |
| Baseline Developed Area | Planning and Design | 6.3 | acre | $30,000.00 | $189,000.00 | |
| | Construction to date | 5 | EA | $315,000.00 | $1,575,000.00 | |
| | Remaining Phases | 0 | EA | $315,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,646,000.00** |
| **Charles M. Sharp Park** | Land Acquisition | 6.75 | acre | $140,000.00 | $945,000.00 | |
| Baseline Developed Area | Planning and Design | 6.75 | acre | $30,000.00 | $202,500.00 | |
| | Construction to date | 1 | EA | $337,500.00 | $337,500.00 | |
| | Remaining Phases | 4 | EA | $337,500.00 | $1,350,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,835,000.00** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Chysler 99 Park** | Land Acquisition | 5.5 | acre | $140,000.00 | $770,000.00 | |
| Baseline Developed Area | Planning and Design | 5.5 | acre | $30,000.00 | $165,000.00 | |
| | Construction to date | 2 | EA | $275,000.00 | $550,000.00 | |
| | Remaining Phases | 3 | EA | $275,000.00 | $825,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,310,000.00** |
| **Chrysler Park** | Land Acquisition | 6.7 | acre | $140,000.00 | $938,000.00 | |
| Baseline Developed Area | Planning and Design | 6.7 | acre | $30,000.00 | $201,000.00 | |
| | Construction to date | 5 | EA | $335,000.00 | $1,675,000.00 | |
| | Remaining Phases | 0 | EA | $335,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,814,000.00** |
| **Coleman Brown Park** | Land Acquisition | 4.9 | acre | $140,000.00 | $686,000.00 | |
| Baseline Developed Area | Planning and Design | 4.9 | acre | $30,000.00 | $147,000.00 | |
| | Construction to date | 5 | EA | $245,000.00 | $1,225,000.00 | |
| | Remaining Phases | 0 | EA | $245,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,058,000.00** |
| **Creekwood Park** | Land Acquisition | 5 | acre | $140,000.00 | $700,000.00 | |
| Baseline Developed Area | Planning and Design | 5 | acre | $30,000.00 | $150,000.00 | |
| | Construction to date | 3 | EA | $250,000.00 | $750,000.00 | |
| | Remaining Phases | 2 | EA | $250,000.00 | $500,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,100,000.00** |
| **Eisenhut Park** | Land Acquisition | 5 | acre | $140,000.00 | $700,000.00 | |
| Baseline Developed Area | Planning and Design | 5 | acre | $30,000.00 | $150,000.00 | |
| | Construction to date | 1 | EA | $250,000.00 | $250,000.00 | |
| | Remaining Phases | 4 | EA | $250,000.00 | $1,000,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,100,000.00** |
| **Enslen Park** | Land Acquisition | 8.2 | acre | $140,000.00 | $1,148,000.00 | |
| Baseline Developed Area | Planning and Design | 8.2 | acre | $30,000.00 | $246,000.00 | |
| | Construction to date | 5 | EA | $410,000.00 | $2,050,000.00 | |
| | Remaining Phases | 0 | EA | $410,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,444,000.00** |
| **Garrison Park** | Land Acquisition | 6.5 | acre | $140,000.00 | $910,000.00 | |
| Baseline Developed Area | Planning and Design | 6.5 | acre | $30,000.00 | $195,000.00 | |
| | Construction to date | 5 | EA | $325,000.00 | $1,625,000.00 | |
| | Remaining Phases | 0 | EA | $325,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,730,000.00** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Garst Road Park** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Baseline Developed Area | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 1 | EA | $350,000.00 | $350,000.00 | |
| | Remaining Phases | 4 | EA | $350,000.00 | $1,400,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **J.M. Pike Park** | Land Acquisition | 6.2 | acre | $140,000.00 | $868,000.00 | |
| Baseline Developed Area | Planning and Design | 6.2 | acre | $30,000.00 | $186,000.00 | |
| | Construction to date | 5 | EA | $310,000.00 | $1,550,000.00 | |
| | Remaining Phases | 0 | EA | $310,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,604,000.00** |
| **John Muir Park** | Land Acquisition | 3 | acre | $140,000.00 | $420,000.00 | |
| Baseline Developed Area | Planning and Design | 3 | acre | $30,000.00 | $90,000.00 | |
| | Construction to date | 1 | EA | $150,000.00 | $150,000.00 | |
| | Remaining Phases | 4 | EA | $150,000.00 | $600,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,260,000.00** |
| **Lakewood Park** | Land Acquisition | 5 | acre | $140,000.00 | $700,000.00 | |
| Baseline Developed Area | Planning and Design | 5 | acre | $30,000.00 | $150,000.00 | |
| | Construction to date | 5 | EA | $250,000.00 | $1,250,000.00 | |
| | Remaining Phases | 0 | EA | $250,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,100,000.00** |
| **Mark Twain Park** | Land Acquisition | 8 | acre | $140,000.00 | $1,120,000.00 | |
| Baseline Developed Area | Planning and Design | 8 | acre | $30,000.00 | $240,000.00 | |
| | Construction to date | 1 | EA | $400,000.00 | $400,000.00 | |
| | Remaining Phases | 4 | EA | $400,000.00 | $1,600,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,360,000.00** |
| **Marshall Park** | Land Acquisition | 6.8 | acre | $140,000.00 | $952,000.00 | |
| Baseline Developed Area | Planning and Design | 6.8 | acre | $30,000.00 | $204,000.00 | |
| | Construction to date | 5 | EA | $340,000.00 | $1,700,000.00 | |
| | Remaining Phases | 0 | EA | $340,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,856,000.00** |
| **Martone Tot Lot** | Land Acquisition | 1 | acre | $140,000.00 | $140,000.00 | |
| Baseline Developed Area | Planning and Design | 1 | acre | $30,000.00 | $30,000.00 | |
| | Construction to date | 1 | EA | $50,000.00 | $50,000.00 | |
| | Remaining Phases | 0 | EA | $50,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$220,000.00** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **McKinney Colony Park** | Land Acquisition | 5 | acre | $140,000.00 | $700,000.00 | |
| Baseline Developed Area | Planning and Design | 5 | acre | $30,000.00 | $150,000.00 | |
| | Construction to date | 1 | EA | $250,000.00 | $250,000.00 | |
| | Remaining Phases | 4 | EA | $250,000.00 | $1,000,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,100,000.00** |
| **Mellis Park** | Land Acquisition | 9.4 | acre | $140,000.00 | $1,316,000.00 | |
| Baseline Developed Area | Planning and Design | 9.4 | acre | $30,000.00 | $282,000.00 | |
| | Construction to date | 5 | EA | $470,000.00 | $2,350,000.00 | |
| | Remaining Phases | 0 | EA | $470,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,948,000.00** |
| **Mildred Perkins Park** | Land Acquisition | 6.1 | acre | $140,000.00 | $854,000.00 | |
| Baseline Developed Area | Planning and Design | 6.1 | acre | $30,000.00 | $183,000.00 | |
| | Construction to date | 3 | EA | $305,000.00 | $915,000.00 | |
| | Remaining Phases | 2 | EA | $305,000.00 | $610,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,562,000.00** |
| **Moose Park** | Land Acquisition | 4.7 | acre | $140,000.00 | $658,000.00 | |
| Baseline Developed Area | Planning and Design | 4.7 | acre | $30,000.00 | $141,000.00 | |
| | Construction to date | 2 | EA | $235,000.00 | $470,000.00 | |
| | Remaining Phases | 3 | EA | $235,000.00 | $705,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,974,000.00** |
| **Moran Estates Park** | Land Acquisition | 2.7 | acre | $140,000.00 | $378,000.00 | |
| Baseline Developed Area | Planning and Design | 2.7 | acre | $30,000.00 | $81,000.00 | |
| | Construction to date | 1 | EA | $135,000.00 | $135,000.00 | |
| | Remaining Phases | 4 | EA | $135,000.00 | $540,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,134,000.00** |
| **Muncy Park** | Land Acquisition | 3.7 | acre | $140,000.00 | $518,000.00 | |
| Baseline Developed Area | Planning and Design | 3.7 | acre | $30,000.00 | $111,000.00 | |
| | Construction to date | 4 | EA | $185,000.00 | $740,000.00 | |
| | Remaining Phases | 1 | EA | $185,000.00 | $185,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,554,000.00** |
| **Orchard Park** | Land Acquisition | 10.3 | acre | $140,000.00 | $1,442,000.00 | |
| Baseline Developed Area | Planning and Design | 10.3 | acre | $30,000.00 | $309,000.00 | |
| | Construction to date | 3 | EA | $515,000.00 | $1,545,000.00 | |
| | Remaining Phases | 2 | EA | $515,000.00 | $1,030,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$4,326,000.00** |

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|---|---|---|---|---|---|---|
| **Pierre Park** | Land Acquisition | 0.5 | acre | $140,000.00 | $70,000.00 | |
| Baseline Developed Area | Planning and Design | 0.5 | acre | $30,000.00 | $15,000.00 | |
| | Construction to date | 1 | EA | $25,000.00 | $25,000.00 | |
| | Remaining Phases | 0 | EA | $25,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$110,000.00** |
| **Ralston Towers Park** | Land Acquisition | 0.5 | acre | $140,000.00 | $70,000.00 | |
| Baseline Developed Area | Planning and Design | 0.5 | acre | $30,000.00 | $15,000.00 | |
| | Construction to date | 1 | EA | $25,000.00 | $25,000.00 | |
| | Remaining Phases | 0 | EA | $25,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$110,000.00** |
| **Revard Park** | Land Acquisition | 3.5 | acre | $140,000.00 | $490,000.00 | |
| Baseline Developed Area | Planning and Design | 3.5 | acre | $30,000.00 | $105,000.00 | |
| | Construction to date | 5 | EA | $175,000.00 | $875,000.00 | |
| | Remaining Phases | 0 | EA | $175,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,470,000.00** |
| **Riverside Park** | Land Acquisition | 12 | acre | $140,000.00 | $1,680,000.00 | |
| Baseline Developed Area | Planning and Design | 12 | acre | $30,000.00 | $360,000.00 | |
| | Construction to date | 3 | EA | $600,000.00 | $1,800,000.00 | |
| | Remaining Phases | 2 | EA | $600,000.00 | $1,200,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$5,040,000.00** |
| **Robertson Road Park** | Land Acquisition | 6.65 | acre | $140,000.00 | $931,000.00 | |
| Baseline Developed Area | Planning and Design | 6.65 | acre | $30,000.00 | $199,500.00 | |
| | Construction to date | 2 | EA | $332,500.00 | $665,000.00 | |
| | Remaining Phases | 3 | EA | $332,500.00 | $997,500.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,793,000.00** |
| **Roosevelt Park** | Land Acquisition | 8.5 | acre | $140,000.00 | $1,190,000.00 | |
| Baseline Developed Area | Planning and Design | 8.5 | acre | $30,000.00 | $255,000.00 | |
| | Construction to date | 5 | EA | $425,000.00 | $2,125,000.00 | |
| | Remaining Phases | 0 | EA | $425,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,570,000.00** |
| **Rose Avenue Park** | Land Acquisition | 4.5 | acre | $140,000.00 | $630,000.00 | |
| Baseline Developed Area | Planning and Design | 4.5 | acre | $30,000.00 | $135,000.00 | |
| | Construction to date | 5 | EA | $225,000.00 | $1,125,000.00 | |
| | Remaining Phases | 0 | EA | $225,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,890,000.00** |

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|---|---|---|---|---|---|---|
| **Sherwood Park** | Land Acquisition | 6.6 | acre | $140,000.00 | $924,000.00 | |
| Baseline Developed Area | Planning and Design | 6.6 | acre | $30,000.00 | $198,000.00 | |
| | Construction to date | 5 | EA | $330,000.00 | $1,650,000.00 | |
| | Remaining Phases | 0 | EA | $330,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,772,000.00** |
| **Sipherd Park** | Land Acquisition | 5.6 | acre | $140,000.00 | $784,000.00 | |
| Baseline Developed Area | Planning and Design | 5.6 | acre | $30,000.00 | $168,000.00 | |
| | Construction to date | 5 | EA | $280,000.00 | $1,400,000.00 | |
| | Remaining Phases | 0 | EA | $280,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,352,000.00** |
| **Sonoma Park** | Land Acquisition | 4.9 | acre | $140,000.00 | $686,000.00 | |
| Baseline Developed Area | Planning and Design | 4.9 | acre | $30,000.00 | $147,000.00 | |
| | Construction to date | 5 | EA | $245,000.00 | $1,225,000.00 | |
| | Remaining Phases | 0 | EA | $245,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,058,000.00** |
| **Standiford Park** | Land Acquisition | 4.9 | acre | $140,000.00 | $686,000.00 | |
| Baseline Developed Area | Planning and Design | 4.9 | acre | $30,000.00 | $147,000.00 | |
| | Construction to date | 5 | EA | $245,000.00 | $1,225,000.00 | |
| | Remaining Phases | 0 | EA | $245,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,058,000.00** |
| **Stockard Coffee Park** | Land Acquisition | 5 | acre | $140,000.00 | $700,000.00 | |
| Baseline Developed Area | Planning and Design | 5 | acre | $30,000.00 | $150,000.00 | |
| | Construction to date | 1 | EA | $250,000.00 | $250,000.00 | |
| | Remaining Phases | 4 | EA | $250,000.00 | $1,000,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,100,000.00** |
| **Sutter Park** | Land Acquisition | 3.9 | acre | $140,000.00 | $546,000.00 | |
| Baseline Developed Area | Planning and Design | 3.9 | acre | $30,000.00 | $117,000.00 | |
| | Construction to date | 4 | EA | $195,000.00 | $780,000.00 | |
| | Remaining Phases | 1 | EA | $195,000.00 | $195,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,638,000.00** |
| **Sylvan Park** | Land Acquisition | 5.2 | acre | $140,000.00 | $728,000.00 | |
| Baseline Developed Area | Planning and Design | 5.2 | acre | $30,000.00 | $156,000.00 | |
| | Construction to date | 5 | EA | $260,000.00 | $1,300,000.00 | |
| | Remaining Phases | 0 | EA | $260,000.00 | $0.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,184,000.00** |

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|---|---|---|---|---|---|---|
| **T.B. Scott Park** | Land Acquisition | 4.5 | acre | $140,000.00 | $630,000.00 | |
| Baseline Developed Area | Planning and Design | 4.5 | acre | $30,000.00 | $135,000.00 | |
| | Construction to date | 4 | EA | $225,000.00 | $900,000.00 | |
| | Remaining Phases | 1 | EA | $225,000.00 | $225,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,890,000.00** |
| **Wesson Ranch Park** | Land Acquisition | 9.3 | acre | $140,000.00 | $1,302,000.00 | |
| Baseline Developed Area | Planning and Design | 9.3 | acre | $30,000.00 | $279,000.00 | |
| | Construction to date | 4 | EA | $465,000.00 | $1,860,000.00 | |
| | Remaining Phases | 1 | EA | $465,000.00 | $465,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,906,000.00** |
| **Whitmore Park** | Land Acquisition | 5.4 | acre | $140,000.00 | $756,000.00 | |
| Baseline Developed Area | Planning and Design | 5.4 | acre | $30,000.00 | $162,000.00 | |
| | Construction to date | 4 | EA | $270,000.00 | $1,080,000.00 | |
| | Remaining Phases | 1 | EA | $270,000.00 | $270,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,268,000.00** |
| **Woodrow Park** | Land Acquisition | 5.1 | acre | $140,000.00 | $714,000.00 | |
| Baseline Developed Area | Planning and Design | 5.1 | acre | $30,000.00 | $153,000.00 | |
| | Construction to date | 4 | EA | $255,000.00 | $1,020,000.00 | |
| | Remaining Phases | 1 | EA | $255,000.00 | $255,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,142,000.00** |

## PLANNED NEIGHBORHOOD PARKS

| | | | | | | |
|---|---|---|---|---|---|---|
| **Claus Park** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Coffee-Claratina Park** | Land Acquisition | 7.5 | acre | $140,000.00 | $1,050,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7.5 | acre | $30,000.00 | $225,000.00 | |
| | Construction to date | 0 | EA | $375,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $375,000.00 | $1,875,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,150,000.00** |
| **Fairway Park** | Land Acquisition | 5 | acre | $140,000.00 | $700,000.00 | |
| Baseline Developed Area future park | Planning and Design | 5 | acre | $30,000.00 | $150,000.00 | |
| | Construction to date | 0 | EA | $250,000.00 | $0.00 | |

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|---|---|---|---|---|---|---|
| | Remaining Phases | 5 | EA | $250,000.00 | $1,250,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,100,000.00** |
| **Merle Park** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Orville Wright Park** | Land Acquisition | 3.8 | acre | $140,000.00 | $532,000.00 | |
| Baseline Developed Area future park | Planning and Design | 3.8 | acre | $30,000.00 | $114,000.00 | |
| | Construction to date | 0 | EA | $285,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $285,000.00 | $1,425,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,071,000.00** |
| **Ustach Park** | Land Acquisition | 9 | acre | $140,000.00 | $1,260,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 9 | acre | $30,000.00 | $270,000.00 | |
| | Construction to date | 0 | EA | $450,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $450,000.00 | $2,250,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,780,000.00** |
| **Morrow Park Area (56)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Stanislaus Park Area (57)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Kiernan Park Area (58)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Claribel Park Area (59)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |

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|---|---|---|---|---|---|---|
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Hetch-Hetchy Park Area (60)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Oakdale Park Area (61)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Plainview Park Area (63)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Mabel Park Area (62)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Santa Fe Park Area (64)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Lakewood East Park Area (72)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Empire East Park Area (69)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |

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|---|---|---|---|---|---|---|
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Gallo Park Area (47)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Shackleford Park Area (39)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Brete Harte Park Area (38)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Fairview Park Area (37)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Paradise West Park Area (33)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Vineyard Park Area (30)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Maze-Wren Park Area (29)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **West Maze Park Area (28)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **College West Park Area (48)** | Land Acquisition | 7 | acre | $140,000.00 | $980,000.00 | |
| Planned Urbanizing Area future park | Planning and Design | 7 | acre | $30,000.00 | $210,000.00 | |
| | Construction to date | 0 | EA | $350,000.00 | $0.00 | |
| | Remaining Phases | 5 | EA | $350,000.00 | $1,750,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,940,000.00** |
| **Total Acres of Future Development** | | 439.8 | acres | | | |
| **TOTAL** | | | | | | **$183,526,000.00** |

## Summary of Costs - Sports Complex

18-Nov-02

| Name | Acquisition | Design | Phase | Cost/Unit | Sub-Total | Total |
|---|---|---|---|---|---|---|
| **Sports Complex Sytem** | Land Acquisition | 110 | acre | $120,000.00 | $13,200,000.00 | |
| future | Planning and Design | 110 | acre | $30,000.00 | $3,300,000.00 | |
| | Construction to date | 0 | LS | $11,286,000.00 | $0.00 | |
| | Remaining Phases | 5 | LS | $11,286,000.00 | $56,430,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$72,930,000.00** |
| **Total Acres** | | 110 | acres | | | |
| **TOTAL** | | | | | | **$72,930,000.00** |

## Summary of Costs - Community Centers

18-Nov-02

| Name | Expenditure | Design | Phase | Cost/Unit | Sub-Total | Total |
|---|---|---|---|---|---|---|
| **Boy Scout Clubhouse** | Value | 2635 | SF | $160.00 | $421,600.00 | |
| Constructed | | | | | | |
| **TOTAL in 2002 Dollars** | | | | | | **$421,600.00** |
| **American Legion Hall** | Value | 13673 | SF | $160.00 | $2,187,680.00 | |
| Constructed 1952 | | | | | | |
| **TOTAL in 2002 Dollars** | | | | | | **$2,187,680.00** |
| **Recreation Office Building** | Value | 2520 | SF | $160.00 | $403,200.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$403,200.00** |
| **Senior Center** | Value | 10145 | SF | $160.00 | $1,623,200.00 | |
| Constructed 1968 | | | | | | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,623,200.00** |
| **Maddux Youth Center** | Value | 9451 | SF | $160.00 | $1,512,160.00 | |
| Constructed 1952 | Planning and Design (future) | 9451 | SF | $57.75 | $545,795.25 | |
| | Construction Estimate (future) | 9451 | SF | $165.00 | $1,559,415.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$3,617,370.25** |
| **King/Kennedy Multi-use Center** | Value | 9583 | SF | $160.00 | $1,533,280.00 | |
| Constructed 1969 | Planning and Design (future) | 1200 | SF | $57.75 | $69,300.00 | |
| | Construction Estimate (future) | 1200 | SF | $165.00 | $198,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,800,580.00** |
| **Modesto Westside Service Center** | Planning and Design (future) | 5175 | SF | $57.75 | $298,856.25 | |
| To be constructed 2004 | Construction Estmate (future) | 5175 | SF | $165.00 | $853,875.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$1,152,731.25** |
| **Modesto Community Service Center** | Value | 14760 | SF | $160.00 | $2,361,600.00 | |
| Constructed 1923 | Planning and Design (future) | 14760 | SF | $57.75 | $852,390.00 | |
| to be reconstructed in future | Construction Estmate (future) | 14760 | SF | $165.00 | $2,435,400.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$5,649,390.00** |
| **Tea House** | Value | 1600 | SF | $160.00 | $256,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$256,000.00** |
| **TOTAL** | | | | | | **$17,111,751.50** |

## Summary of Costs - Historical Buildings

18-Nov-02

| Name | Expenditure | Design | Phase | Cost/Unit | Sub-Total | Total |
|---|---|---|---|---|---|---|
| **McClure Country Place** | Value | 4000 | SF | $250.00 | | |
| Constructed 1881 | Land Acquisition | 18 | acre | $120,000.00 | $2,160,000.00 | |
| Remodeled 1940's | Planning and Design (future) | 18 | acre | $30,000.00 | $540,000.00 | |
| Future development to include | Construction Est. (future) | 18 | LS | $300,000.00 | $5,400,000.00 | |
| conference facility | Small Structures (future) | 30 | EA | $120,000.00 | $3,600,000.00 | |
| | Large Structures (future) | 6 | EA | $750,000.00 | $4,500,000.00 | |
| **TOTAL in 2002 Dollars** | | | | | | **$16,200,000.00** |
| **TOTAL** | | | | | | **$16,200,000.00** |

## REGIONAL PARK COST BRAKEDOWN

**Note: All prices are given in 2002 dollars**

**Land acquisition:** Average cost of $30,000/acre in the 100 year flood zone, $120,000/acre for large parcel and $140,000/acre for small parcel acq.

**Planning and Design:** Average costs for planning, design, engineering, citywide overhead and staff costs are $30,000 per acre

**Construction to date:** LS = Lump sum - this value calculated on a per park basis

**Remaining Phases:** LS = Lump Sum - this is the estimated value of future construction costs to complete these projects

Regional Parks are to be constructed in phases divided as follows:

**Regional Parks Phases:**

| | |
|---|---|
| Phase I | project start up, rough grading, restoration, trails, electrical Work |
| Phase II | site preparation, grading, drainage, concrete and masonry, irrigation system, roads, shaded picnic area(s), landscaping, off-street parking, security lighting, restrooms, signage |
| Phase III | site furniture, play areas, specialized lighting |
| Phase IV | support structures - specialty structures |

**CIP:** costs listed below represent an avg. cost per component per acre. Each park varies in number and type of unit, which will affect overall costs.

| Phase | Park CIP Component: | Cost per acre | Average Life Span of Unit |
|---|---|---|---|
| I | project start up | $2,625.00 | * |
| I | rough grading | $8,000.00 | * |
| I | restoration | $6,500.00 | * |
| I | trails | $5,500.00 | 30 years |
| I | electrical work | $10,075.00 | 30 years |
| | **PHASE I TOTAL** | **$32,700.00** | |
| II | site prep | $4,468.50 | 30 years |
| II | grading | $6,356.25 | 30 years |
| II | drainage | $11,548.75 | 30 years |
| II | concrete and masonry | $8,731.25 | 30 years |
| II | irrigation system | $31,915.00 | 30 years |
| II | asphault/concrete work - road | $17,155.00 | 10 years |
| II | shaded picnic area(s) | $12,675.00 | 30 years |
| II | landscaping | $17,147.50 | 30 years |
| II | asphault/concrete work - 2 acre parking lot | $8,925.00 | 10 years |
| II | security lighting | $3,625.00 | 30 years |
| II | restrooms | $3,000.00 | 20 years |
| II | signage | $2,000.00 | 30 years |
| II | fencing and walls | $9,500.00 | 30 years |
| | **PHASE II TOTAL** | **$137,047.25** | |
| III | site furniture | $8,303.75 | 10 years |
| III | play areas | $3,146.25 | 20 years |

| | | | |
|---|---|---|---|
| III | specialized lighting - staging | $5,000.00 | 30 years |
| | **PHASE III TOTAL** | **$16,450.00** | |
| IV | out buildings | $12,500.00 | 30 years |
| IV | survey/geotech | $2,500.00 | 30 years |
| | **PHASE IV TOTAL** | **$15,000.00** | |
| | **TOTAL ALL PHASES** | **$201,197.25** | |
| | **Average cost per phase** | **$50,299.31** | |
| | **ADDITONAL SPECIALIZED FEATURES - TO BE INSTALLED IN PHASE IV** | | |
| Additional | interpretive center (TRRP) | $150,000.00 | 30 years |
| Additional | Dam Removal (TRRP) | $8,750.00 | * |
| Additional | bridge (DCRP) | $16,250.00 | 80 years |
| | TRRP COSTS | $359,947.25 | |
| | (x40%) | $143,978.90 | |
| | **Average cost per phase (TRRP) (40% contrib.)** | **$35,994.73** | |
| | DCRP COSTS | $209,947.25 | |
| | **Average cost per phase (DCRP)** | **$52,486.81** | |

**TYPICAL REGIONAL PARK COST ESTIMATE - 40 ACRE PARK - W/ ALLOWANCES FOR POTENTIAL EXISTING CONDITIONS**

| | DESCRIPTION | QTY | UNIT | UNIT COST | TOTAL | COLUMN TOTAL | COST PER ACRE |
|---|---|---|---|---|---|---|---|
| | PROJECT START UP | | | | | | |
| | Bonding and Mobilization | 1 | LS | $75,000.00 | $75,000.00 | | |
| | Tree Protection (allowance) | 50 | EACH | $500.00 | $25,000.00 | | |
| | Stormwater Pollution Measures (allowance) | 1 | LS | $5,000.00 | $5,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL PROJECT START UP** | | | | | **$105,000.00** | **$2,625.00** |
| | ROUGH GRADING | | | | | | |
| | Clearing & Grubbing | 40 | ACRE | $3,000.00 | $120,000.00 | | |
| | Rough Grading balance Cut/fill (allowance) | 40 | ACRE | $5,000.00 | $200,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL ROUGH GRADING** | | | | | **$320,000.00** | **$8,000.00** |
| | RESTORATION | | | | | | |
| | soils analysis, prep and planting | 40 | ACRE | $6,500.00 | $260,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL RESTORATION** | | | | | **$260,000.00** | **$6,500.00** |

| | | | | | | |
|---|---|---|---|---|---|---|
| | TRAILS | | | | | |
| | rough out trail alignment | 40 ACRE | $1,000.00 | $40,000.00 | | |
| | fine grade trails | 80000 SF | $0.25 | $20,000.00 | | |
| | Dec. Granite trails | 80000 SF | $2.00 | $160,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL TRAILS** | | | | **$220,000.00** | **$5,500.00** |
| | ELECTRICAL WORK | | | | | |
| | Traffic Signals (average allowance) | 1 EA | $250,000.00 | $250,000.00 | | |
| | Electircal Panel Box (service cabinet) | 1 EA | $2,500.00 | $2,500.00 | | |
| | Electrical Conduit | 7500 LF | $15.00 | $112,500.00 | | |
| | Streetlight Electrolier | 5 EA | $6,000.00 | $30,000.00 | | |
| | #3 1/2 Pullbox | 40 EA | $125.00 | $5,000.00 | | |
| | #5 Interconnect Pullbox | 15 EA | $200.00 | $3,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL ELECTRICAL WORK** | | | | **$403,000.00** | **$10,075.00** |
| | SITE PREPARATION | | | | | |
| | Demolition of Trees (average 10") | 50 EACH | $500.00 | $25,000.00 | | |
| | Removal of Turf & Groundcover (5 acre allowance) | 217,800 SF | $0.30 | $65,340.00 | | |
| | Demolition of Chain Link Fence (5 acre allowance) | 5000 LF | $3.00 | $15,000.00 | | |
| | Relocation of Trees (average 10") (allowance) | 5 EACH | $1,500.00 | $7,500.00 | | |
| | Demo of Irrig. Heads/Laterals (5 acre allowance) | 5 ACRE | $1,000.00 | $5,000.00 | | |
| | Demolition of P.C.C. Curb & Gutter (allowance) | 5000 LF | $2.50 | $12,500.00 | | |
| | Sawcutting of P.C.C. Pavement (4") (allowance) | 2000 LF | $1.50 | $3,000.00 | | |
| | Removal of Tree Stumps (allowance) | 50 EACH | $150.00 | $7,500.00 | | |
| | Removal of Soil ($1K/Day Min.) (allowance) | 200 CY | $7.00 | $1,400.00 | | |
| | Removal of Storm Inlet or Manhole (allowance) | 5 EACH | $700.00 | $3,500.00 | | |
| | Removal of Storm Drain Pipe (allowance) | 1000 LF | $20.00 | $20,000.00 | | |
| | Project Construction Sign (allowance) | 2 EACH | $1,500.00 | $3,000.00 | | |
| | Traffic Control (allowance) | 1 LS | $10,000.00 | $10,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL SITE PREPARATION** | | | | **$178,740.00** | **$4,468.50** |
| | GRADING | | | | | |
| | Grading/Earthwork (>5 acres) | 40 ACRE | $5,000.00 | $200,000.00 | | |
| | Fine Grading Only (allow 5 acres) | 217000 SF | $0.25 | $54,250.00 | | cost per acre |
| PHASE II | **SUBTOTAL GRADING** | | | | **$254,250.00** | **$6,356.25** |
| | DRAINAGE | | | | | |
| | Storm Laterals (12" R.C.P.) | 7000 LF | $15.00 | $105,000.00 | | |
| | Sanitary Laterals (4" V.C.P.) | 2000 LF | $8.00 | $16,000.00 | | |
| | Sanitary Laterals (6" V.C.P. in street) | 600 LF | $60.00 | $36,000.00 | | |
| | Storm Inlets (24" dia.) | 20 EA | $1,000.00 | $20,000.00 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Storm Inlets (play areas) | 6 EA | $1,200.00 | $7,200.00 | | |
| | Hooded Inlet | 5 EA | $1,100.00 | $5,500.00 | | |
| | Street Cuts (average 40' to 60') | 2 EA | $1,500.00 | $3,000.00 | | |
| | Manholes (up to 7' depth) | 5 EA | $2,000.00 | $10,000.00 | | |
| | Jack and Bore under Streets (allowance) | 50 LF | $75.00 | $3,750.00 | | |
| | Roadway Excavation (allowance) | 50 LF | $25.00 | $1,250.00 | | cost per acre |
| PHASE II | **SUBTOTAL DRAINAGE** | | | | **$461,950.00** | **$11,548.75** |
| | CONCRETE/MASONRY | | | | | |
| | PCC Walkways (3-1/2") | 30000 SF | $3.25 | $97,500.00 | | |
| | PCC Paving (6") | 7000 SF | $4.50 | $31,500.00 | | |
| | PCC Paving w/ Integral Color (3-1/2") | 2000 SF | $5.00 | $10,000.00 | | |
| | PCC Curb & Gutter | 6000 LF | $15.00 | $90,000.00 | | |
| | PCC Mowband (8") | 3000 LF | $9.00 | $27,000.00 | | |
| | PCC Separator Band (6") | 1500 LF | $7.00 | $10,500.00 | | |
| | Sitting Walls (12" X 17" high) | 2000 LF | $25.00 | $50,000.00 | | |
| | Sign Wall (12" X 42" high w/letters) | 30 LF | $150.00 | $4,500.00 | | |
| | Wheelchair Ramp | 5 EA | $800.00 | $4,000.00 | | |
| | Brick Pavers on PCC Base & Mortar | 1000 SF | $16.25 | $16,250.00 | | |
| | Concrete Bus Loading Pad (8" X 10' X 50') | 1 EA | $8,000.00 | $8,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL CONCRETE/MASONRY** | | | | **$349,250.00** | **$8,731.25** |
| | IRRIGATION | | | | | |
| | Irrigation of Turf Areas >3 Acres | 30 AC | $23,000.00 | $690,000.00 | | |
| | Irrigation of Small Turf Areas | 217000 SF | $1.30 | $282,100.00 | | |
| | Irrigation Groundcover Areas | 100000 SF | $1.60 | $160,000.00 | | |
| | Irrigation Median Islands (typical allowance) | 5000 SF | $2.25 | $11,250.00 | | |
| | Tree Bubblers (allowance) | 200 EA | $50.00 | $10,000.00 | | |
| | Class 315 Irrigation Main (4") | 5000 LF | $10.50 | $52,500.00 | | |
| | Strainer | 1 EA | $1,500.00 | $1,500.00 | | |
| | Backflow Prevention Unit | 1 EA | $2,300.00 | $2,300.00 | | |
| | Controller | 1 EA | $15,000.00 | $15,000.00 | | |
| | Controller Housing | 1 EA | $2,000.00 | $2,000.00 | | |
| | Quick Coupler Valves | 30 EA | $80.00 | $2,400.00 | | |
| | Remote Control Valves | 50 EA | $200.00 | $10,000.00 | | |
| | Potable Water Line (2") | 1000 LF | $4.00 | $4,000.00 | | |
| | Quick Coupler Line (1-1/2") | 3000 LF | $3.75 | $11,250.00 | | |
| | BFP Cage (>2-1/2") | 1 EA | $2,300.00 | $2,300.00 | | |
| | Well (allowance) | 1 EA | $20,000.00 | $20,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL IRRIGATION** | | | | **$1,276,600.00** | **$31,915.00** |
| | ASPHALT-CONCRETE WORK - ROAD | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | AC Paving (6") | 200000 SF | $3.20 | $640,000.00 | | |
| | Striping | 20000 LF | $1.50 | $30,000.00 | | |
| | "Petromat" (large areas) | 18000 SY | $0.90 | $16,200.00 | | cost per acre |
| PHASE II | **SUBTOTAL ASPHALT-CONCRETE WORK - ROAD** | | | | **$686,200.00** | **$17,155.00** |
| | SHADED PICNIC AREA | | | | | |
| | Gazebo (3600 sq. ft.) | 1 SF | $180,000.00 | $180,000.00 | | |
| | Picnic Table Shelter (120 sq. ft.) | 20 EA | $15,000.00 | $300,000.00 | | |
| | Pads for Large Gazebo | 3600 SF | $4.50 | $16,200.00 | | |
| | Pads for Table shelters | 2400 SF | $4.50 | $10,800.00 | | cost per acre |
| PHASE II | **SUBTOTAL SHADED PICNIC AREA** | | | | **$507,000.00** | **$12,675.00** |
| | LANDSCAPING | | | | | |
| | Tree - 24" Box | 20 EA | $300.00 | $6,000.00 | | |
| | Tree - 15 Gallon | 500 EA | $100.00 | $50,000.00 | | |
| | Shrub - 15 Gallon | 300 EA | $50.00 | $15,000.00 | | |
| | Shrub - 5 Gallon | 400 EA | $30.00 | $12,000.00 | | |
| | Shrub - 1 Gallon | 400 EA | $12.00 | $4,800.00 | | |
| | Groundcover - 1 Gallon | 400 EA | $1.50 | $600.00 | | |
| | Turf - Seeded | 30 AC | $6,000.00 | $180,000.00 | | |
| | Turf - Seeded (small areas) | 200000 SF | $0.20 | $40,000.00 | | |
| | Soil Preparation | 35 AC | $2,500.00 | $87,500.00 | | |
| | Soil Preparation (small areas) | 200000 SF | $0.20 | $40,000.00 | | |
| | Imported Topsoil (allowance) | 50000 CY | $5.00 | $250,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL LANDSCAPING** | | | | **$685,900.00** | **$17,147.50** |
| | ASPHALT-CONCRETE WORK - PARKING LOT - 2 ACRES | | | | | |
| | AC Paving (6") | 100000 SF | $3.20 | $320,000.00 | | |
| | Parking Lot Striping | 50000 LF | $0.40 | $20,000.00 | | |
| | Wheel Stops | 200 EA | $40.00 | $8,000.00 | | |
| | "Petromat" (large areas) | 10000 SY | $0.90 | $9,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL ASPHALT-CONCRETE WORK - PARKING LOT** | | | | **$357,000.00** | **$8,925.00** |
| | SECURITY LIGHTING | | | | | |
| | Security Lighting Fixtures (20' high) | 15 EA | $4,000.00 | $60,000.00 | | |
| | Parking Lot Lighting Double Luminaire (20' high) | 10 EA | $8,500.00 | $85,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL SECURITY LIGHTING** | | | | **$145,000.00** | **$3,625.00** |
| | RESTROOMS | | | | | |
| | Fairview Series | 2 LS | $60,000.00 | $120,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL RESTROOMS** | | | | **$120,000.00** | **$3,000.00** |

| | | | | | | |
|---|---|---|---|---|---|---|
| | SIGNAGE | | | | | |
| | Signage Package | 1 LS | $80,000.00 | $80,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL SIGNAGE** | | | | **$80,000.00** | **$2,000.00** |
| | | | | | | |
| | **FENCING & WALLS** | | | | | |
| | Chain Link Fencing w/black Vinyl Coating (6') | 10000 LF | $18.00 | $180,000.00 | | |
| | Wrought Iron Fencing (6') | 1000 LF | $40.00 | $40,000.00 | | |
| | Temporary Construction Fence | 10000 LF | $6.50 | $65,000.00 | | |
| | Concrete Block Wall (6' high) (allowance) | 1000 LF | $65.00 | $65,000.00 | | |
| | Concrete Block seat wall w/ cap | 1000 LF | $30.00 | $30,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL FENCING & WALLS** | | | | **$380,000.00** | **$9,500.00** |
| | | | | | | |
| | SITE FURNITURE/MISCELLANEOUS | | | | | |
| | Picnic Table ("Form") | 80 EA | $1,500.00 | $120,000.00 | | |
| | Barbecue Unit ("Iron Mtn. Forge") | 40 EA | $1,000.00 | $40,000.00 | | |
| | Bench w/Back ("Victor Stanley" or "DuMor") | 50 EA | $1,000.00 | $50,000.00 | | |
| | Drinking Fountain | 5 EA | $2,500.00 | $12,500.00 | | |
| | Removable Bollard | 8 EA | $800.00 | $6,400.00 | | |
| | Bicycle Rack ("Pipeline") | 3 EA | $750.00 | $2,250.00 | | |
| | Landscape Boulder | 25 EA | $200.00 | $5,000.00 | | |
| | Barbecue Area Counter Block Walls | 300 CF | $45.00 | $13,500.00 | | |
| | River-Washed Cobble (4" dia.) | 5000 SF | $6.00 | $30,000.00 | | |
| | Trash Receptacle | 50 EA | $750.00 | $37,500.00 | | |
| | Steel Edging | 5000 LF | $3.00 | $15,000.00 | | cost per acre |
| PHASE III | **SUBTOTAL SITE FURNITURE** | | | | **$332,150.00** | **$8,303.75** |
| | | | | | | |
| | PLAY AREAS | | | | | |
| | Sand for Play Area | 200 CY | $10.00 | $2,000.00 | | |
| | "Fibar" | 2500 SF | $4.50 | $11,250.00 | | |
| | Decomposed Granite Paving (Calif. Gold Fines) | 12000 SF | $2.00 | $24,000.00 | | |
| | Resilient Rubber Surface (w/PCC base) | 400 SF | $16.50 | $6,600.00 | | |
| | Horseshoe Pits (set of 2 each) | 2 SET | $6,000.00 | $12,000.00 | | |
| | Play Apparatus | 1 LS | $70,000.00 | $70,000.00 | | cost per acre |
| PHASE III | **SUBTOTAL PLAY AREAS** | | | | **$125,850.00** | **$3,146.25** |
| | | | | | | |
| | SPECIALIZED LIGHTING | | | | | |
| | Specialized lighting allowance | 1 LS | $200,000.00 | $200,000.00 | | cost per acre |
| PHASE III | **SUBTOTAL SPECIALIZED LIGHTING** | | | | **$200,000.00** | **$5,000.00** |
| | | | | | | |
| | OUT BUILDINGS | | | | | |
| | Out building allowance | 1 LS | $500,000.00 | $500,000.00 | | cost per acre |
| PHASE IV | **SUBTOTAL OUT BUILDINGS** | | | | **$500,000.00** | **$12,500.00** |

| | | | | | | |
|---|---|---|---|---|---|---|
| | SURVEY/GEOTECH | | | | | |
| | Survey/geotech allowance | 1 LS | $100,000.00 | $100,000.00 | | cost per acre |
| PHASE IV | **SUBTOTAL SURVEY/GEOTECH** | | | | **$100,000.00** | **$2,500.00** |
| | BRIDGE | | | | | |
| | Bridge Allowance | 1 LS | $350,000.00 | $650,000.00 | | cost per acre |
| DCRP | **SUBTOTAL BRIGDE** | | | | **$650,000.00** | **$16,250.00** |
| | INTERPRETIVE CENTER | | | | | |
| | Interperetive center allowance | 1 LS | $6,000,000.00 | $6,000,000.00 | | cost per acre |
| TRRP | **SUBTOTAL INTERPRETIVE CENTER** | | | | **$6,000,000.00** | **$150,000.00** |
| | DENNET DAM REMOVAL | | | | | |
| | Dennet Dam Removal allowance | 1 LS | $350,000.00 | $350,000.00 | | cost per acre |
| TRRP | **SUBTOTAL DENNET DAM REMOVAL** | | | | **$350,000.00** | **$8,750.00** |

| MAINTENANCE EQUIPMENT | Cost per unit | # acres per unit | area | # units required | total maint. equipment cost | Average Life Span of Unit |
|---|---|---|---|---|---|---|
| mower | $76,000.00 | 100 | 7 | 0.07 | $5,320.00 | 5 years |
| mechanics van | $40,000.00 | 50 | 7 | 0.14 | $5,600.00 | 10 years |
| mechanics equipment | $10,000.00 | 50 | 7 | 0.14 | $1,400.00 | 8 years |
| crew cab | $35,000.00 | 40 | 7 | 0.18 | $6,125.00 | 10 years |
| 1 ton dump truck | $35,000.00 | 100 | 7 | 0.07 | $2,450.00 | 10 years |
| trash compactor | $50,000.00 | 400 | 7 | 0.02 | $875.00 | 15 years |
| pick up & trailer | $30,000.00 | 100 | 7 | 0.07 | $2,100.00 | 10 years |
| pick up | $25,000.00 | 25 | 7 | 0.28 | $7,000.00 | 10 years |
| **Total Cost for one time maintenance equipment expenditure** | | | | | **$30,870.00** | |

## COMMUNITY PARK COST BRAKEDOWN

**Note: All prices are given in 2002 dollars**

**Land acquisition:** Average cost of $30,000/acre in the 100 year flood zone, $120,000/acre for large parcel and $140,000/acre for small parcel acq.

**Planning and Design:** Average costs for planning, design, engineering, citywide overhead and staff costs are $30,000 per acre

**Construction to date:** LS = Lump sum - this value calculated on a per park basis

**Remaining Phases:** LS = Lump Sum - this is the estimated value of future construction costs to complete these projects

Community Parks are to be constructed in phases divided as follows:

**Construction Phases:**

| | |
|---|---|
| Phase I | project start up, rough grading, electrical work, site preparation, grading, drainage, concrete and masonry, irrigation, road work, landscaping, parking lot, security lighting, restrooms, fencing and walls |
| Phase II | signage, shaded picnic area(s), site furniture, playareas, athletic court and field lighting, out buildings, survey/geotech |
| Phase III | Aquatics Center |
| Phase IV | Community Center (approx. 15,000 sq. ft. structure) |

**CIP:** costs listed below represent an avg. cost per component per acre. Each park varies in number and type of unit, which will affect overall costs.

| Phase | Park CIP Component: | Cost per acre | Average Life Span of Unit |
|---|---|---|---|
| I | project start up | $2,000.00 | * |
| I | rough grading | $7,000.00 | * |
| I | electrical work | $10,075.00 | 30 years |
| I | athletic fields | $64,150.00 | 5 years |
| I | game courts | $8,750.00 | 5 years |
| I | site prep | $435.00 | 30 years |
| I | grading | $1,356.25 | 30 years |
| I | drainage | $6,548.75 | 30 years |
| I | concrete and masonry | $8,731.25 | 30 years |
| I | irrigation system | $24,687.50 | 30 years |
| I | asphault/concrete work - road | $17,155.00 | 10 years |
| I | landscaping | $10,272.50 | 30 years |
| I | asphault/concrete work - 2 acre parking lot | $8,925.00 | 10 years |
| I | security lighting | $3,625.00 | 30 years |
| I | restrooms | $3,000.00 | 20 years |
| I | fencing and walls | $9,500.00 | 30 years |
| | **TOTAL PHASE I** | **$186,211.25** | |
| II | signage | $2,000.00 | 30 years |
| II | shaded picnic area(s) | $6,459.00 | 30 years |

| | | | |
|---|---|---|---|
| II | site furniture | $3,546.25 | 10 years |
| II | play areas | $2,846.25 | 20 years |
| II | athletic field and game court lighting | $46,250.00 | 30 years |
| II | out buildings | $12,500.00 | 30 years |
| II | survey/geotech | $2,500.00 | 30 years |
| | **TOTAL PHASE II** | **$76,101.50** | |
| III | aquatics center | $90,750.00 | 30 years |
| | **TOTAL PHASE III** | **$90,750.00** | |
| IV | community center | $60,500.00 | 30 years |
| | **TOTAL PHASE IV** | **$60,500.00** | |
| | **TOTAL ALL PHASES** | **$413,562.75** | |
| | **Average cost per phase** | **$103,390.69** | |

**TYPICAL COMMUNITY PARK COST ESTIMATE - 40 ACRE PARK - W/ ALLOWANCES FOR POTENTIAL EXISTING CONDITIONS**

| | DESCRIPTION | QTY | UNIT | UNIT COST | TOTAL | COLUMN TOTAL | COST PER ACRE |
|---|---|---|---|---|---|---|---|
| | PROJECT START UP | | | | | | |
| | Bonding and Mobilization | 1 | LS | $75,000.00 | $75,000.00 | | |
| | Stormwater Pollution Measures (allowance) | 1 | LS | $5,000.00 | $5,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL PROJECT START UP** | | | | | **$80,000.00** | **$2,000.00** |
| | ROUGH GRADING | | | | | | |
| | Clearing & Grubbing | 40 | ACRE | $2,000.00 | $80,000.00 | | |
| | Rough Grading balance Cut/fill (allowance) | 40 | ACRE | $5,000.00 | $200,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL ROUGH GRADING** | | | | | **$280,000.00** | **$7,000.00** |
| | ELECTRICAL WORK | | | | | | |
| | Traffic Signals (average allowance) | 1 | EA | $250,000.00 | $250,000.00 | | |
| | Electircal Panel Box (service cabinet) | 1 | EA | $2,500.00 | $2,500.00 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Electrical Conduit | 7500 LF | $15.00 | $112,500.00 | | |
| | Streetlight Electrolier | 5 EA | $6,000.00 | $30,000.00 | | |
| | #3 1/2 Pullbox | 40 EA | $125.00 | $5,000.00 | | |
| | #5 Interconnect Pullbox | 15 EA | $200.00 | $3,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL ELECTRICAL WORK** | | | | **$403,000.00** | **$10,075.00** |
| | ATHLETIC FIELDS | | | | | |
| | Soccer field - turf | 5 EA | $250,000.00 | $1,250,000.00 | | |
| | Baseball/softball fields | 2 | $250,000.00 | $500,000.00 | | |
| | Baseball backstop apparatus | 2 | $40,000.00 | $80,000.00 | | |
| | Bleachers | 16 | $6,000.00 | $96,000.00 | | |
| | Scoreboards | 8 | $5,000.00 | $40,000.00 | | |
| | synthetic turf field - soccer | 1 | $600,000.00 | $600,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL ATHLETIC FIELDS** | | | | **$2,566,000.00** | **$64,150.00** |
| | GAME COURTS | | | | | |
| | Tennis with net and fencing | 2 EA | $55,000.00 | $110,000.00 | | |
| | Basketball with hoops and standards | 2 | $50,000.00 | $100,000.00 | | |
| | Volleyball - hard surface | 2 | $40,000.00 | $80,000.00 | | |
| | Volleyball - soft surface | 1 | $12,000.00 | $12,000.00 | | |
| | Horseshoe pits | 8 | $6,000.00 | $48,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL GAME COURT** | | | | **$350,000.00** | **$8,750.00** |
| | SITE PREPARATION | | | | | |
| | Sawcutting of P.C.C. Pavement (4") (allowance) | 2000 LF | $1.50 | $3,000.00 | | |
| | Removal of Soil ($1K/Day Min.) (allowance) | 200 CY | $7.00 | $1,400.00 | | |
| | Project Construction Sign (allowance) | 2 EACH | $1,500.00 | $3,000.00 | | |
| | Traffic Control (allowance) | 1 LS | $10,000.00 | $10,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL SITE PREPARATION** | | | | **$17,400.00** | **$435.00** |
| | GRADING | | | | | |
| | Fine Grading Only (allow 5 acres) | 217000 SF | $0.25 | $54,250.00 | | cost per acre |
| PHASE I | **SUBTOTAL GRADING** | | | | **$54,250.00** | **$1,356.25** |
| | DRAINAGE | | | | | |
| | Storm Laterals (12" R.C.P.) | 7000 LF | $15.00 | $105,000.00 | | |
| | Sanitary Laterals (4" V.C.P.) | 2000 LF | $8.00 | $16,000.00 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Sanitary Laterals (6" V.C.P. in street) | 600 LF | $60.00 | $36,000.00 | | |
| | Storm Inlets (24" dia.) | 20 EA | $1,000.00 | $20,000.00 | | |
| | Storm Inlets (play areas) | 6 EA | $1,200.00 | $7,200.00 | | |
| | Hooded Inlet | 5 EA | $1,100.00 | $5,500.00 | | |
| | Street Cuts (average 40' to 60') | 2 EA | $1,500.00 | $3,000.00 | | |
| | Manholes (up to 7' depth) | 5 EA | $2,000.00 | $10,000.00 | | |
| | Jack and Bore under Streets (allowance) | 50 LF | $75.00 | $3,750.00 | | |
| | Roadway Excavation (allowance) | 50 LF | $25.00 | $1,250.00 | | cost per acre |
| PHASE I | **SUBTOTAL DRAINAGE** | | | | **$261,950.00** | **$6,548.75** |
| | CONCRETE/MASONRY | | | | | |
| | PCC Walkways (3-1/2") | 30000 SF | $3.25 | $97,500.00 | | |
| | PCC Paving (6") | 7000 SF | $4.50 | $31,500.00 | | |
| | PCC Paving w/ Integral Color (3-1/2") | 2000 SF | $5.00 | $10,000.00 | | |
| | PCC Curb & Gutter | 6000 LF | $15.00 | $90,000.00 | | |
| | PCC Mowband (8") | 3000 LF | $9.00 | $27,000.00 | | |
| | PCC Separator Band (6") | 1500 LF | $7.00 | $10,500.00 | | |
| | Sitting Walls (12" X 17" high) | 2000 LF | $25.00 | $50,000.00 | | |
| | Sign Wall (12" X 42" high w/letters) | 30 LF | $150.00 | $4,500.00 | | |
| | Wheelchair Ramp | 5 EA | $800.00 | $4,000.00 | | |
| | Brick Pavers on PCC Base & Mortar | 1000 SF | $16.25 | $16,250.00 | | |
| | Concrete Bus Loading Pad (8" X 10' X 50') | 1 EA | $8,000.00 | $8,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL CONCRETE/MASONRY** | | | | **$349,250.00** | **$8,731.25** |
| | IRRIGATION | | | | | |
| | Irrigation of Turf Areas >3 Acres | 30 AC | $23,000.00 | $690,000.00 | | |
| | Irrigation Groundcover Areas | 100000 SF | $1.60 | $160,000.00 | | |
| | Irrigation Median Islands (typical allowance) | 5000 SF | $2.25 | $11,250.00 | | |
| | Tree Bubblers (allowance) | 60 EA | $50.00 | $3,000.00 | | |
| | Class 315 Irrigation Main (4") | 5000 LF | $10.50 | $52,500.00 | | |
| | Strainer | 1 EA | $1,500.00 | $1,500.00 | | |
| | Backflow Prevention Unit | 1 EA | $2,300.00 | $2,300.00 | | |
| | Controller | 1 EA | $15,000.00 | $15,000.00 | | |
| | Controller Housing | 1 EA | $2,000.00 | $2,000.00 | | |
| | Quick Coupler Valves | 30 EA | $80.00 | $2,400.00 | | |
| | Remote Control Valves | 50 EA | $200.00 | $10,000.00 | | |
| | Potable Water Line (2") | 1000 LF | $4.00 | $4,000.00 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Quick Coupler Line (1-1/2") | 3000 LF | $3.75 | $11,250.00 | | |
| | BFP Cage (>2-1/2") | 1 EA | $2,300.00 | $2,300.00 | | |
| | Well (allowance) | 1 EA | $20,000.00 | $20,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL IRRIGATION** | | | | **$987,500.00** | **$24,687.50** |
| | ASPHALT-CONCRETE WORK - ROAD | | | | | |
| | AC Paving (6") | 200000 SF | $3.20 | $640,000.00 | | |
| | Striping | 20000 LF | $1.50 | $30,000.00 | | |
| | "Petromat" (large areas) | 18000 SY | $0.90 | $16,200.00 | | cost per acre |
| PHASE I | **SUBTOTAL ASPHALT-CONCRETE WORK - ROAD** | | | | **$686,200.00** | **$17,155.00** |
| | LANDSCAPING | | | | | |
| | Tree - 15 Gallon | 120 EA | $100.00 | $12,000.00 | | |
| | Shrub - 15 Gallon | 200 EA | $50.00 | $10,000.00 | | |
| | Shrub - 5 Gallon | 200 EA | $30.00 | $6,000.00 | | |
| | Shrub - 1 Gallon | 400 EA | $12.00 | $4,800.00 | | |
| | Groundcover - 1 Gallon | 400 EA | $1.50 | $600.00 | | |
| | Soil Preparation | 35 AC | $2,500.00 | $87,500.00 | | |
| | Soil Preparation (small areas) | 200000 SF | $0.20 | $40,000.00 | | |
| | Imported Topsoil (allowance) | 50000 CY | $5.00 | $250,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL LANDSCAPING** | | | | **$410,900.00** | **$10,272.50** |
| | ASPHALT-CONCRETE WORK - PARKING LOT - 2 ACRES | | | | | |
| | AC Paving (6") | 100000 SF | $3.20 | $320,000.00 | | |
| | Parking Lot Striping | 50000 LF | $0.40 | $20,000.00 | | |
| | Wheel Stops | 200 EA | $40.00 | $8,000.00 | | |
| | "Petromat" (large areas) | 10000 SY | $0.90 | $9,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL ASPHALT-CONCRETE WORK - PARKING LOT** | | | | **$357,000.00** | **$8,925.00** |
| | SECURITY LIGHTING | | | | | |
| | Security Lighting Fixtures (20' high) | 15 EA | $4,000.00 | $60,000.00 | | |
| | Parking Lot Lighting Double Luminaire (20' high) | 10 EA | $8,500.00 | $85,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL SECURITY LIGHTING** | | | | **$145,000.00** | **$3,625.00** |
| | RESTROOMS | | | | | |
| | Fairview Series | 2 LS | $60,000.00 | $120,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL RESTROOMS** | | | | **$120,000.00** | **$3,000.00** |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **FENCING & WALLS** | | | | | |
| | Chain Link Fencing w/black Vinyl Coating (6') | 10000 LF | $18.00 | $180,000.00 | | |
| | Wrought Iron Fencing (6') | 1000 LF | $40.00 | $40,000.00 | | |
| | Temporary Construction Fence | 10000 LF | $6.50 | $65,000.00 | | |
| | Concrete Block Wall (6' high) (allowance) | 1000 LF | $65.00 | $65,000.00 | | |
| | Concrete Block seat wall w/ cap | 1000 LF | $30.00 | $30,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL FENCING & WALLS** | | | | **$380,000.00** | **$9,500.00** |
| | SIGNAGE | | | | | |
| | Signage Package | 1 LS | $80,000.00 | $80,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL SIGNAGE** | | | | **$80,000.00** | **$2,000.00** |
| | SHADED PICNIC AREA | | | | | |
| | Gazebo (3600 sq. ft.) | 1 SF | $180,000.00 | $180,000.00 | | |
| | Picnic Table Shelter (120 sq. ft.) | 4 EA | $15,000.00 | $60,000.00 | | |
| | Pads for Large Gazebo | 3600 SF | $4.50 | $16,200.00 | | |
| | Pads for Table shelters | 480 SF | $4.50 | $2,160.00 | | cost per acre |
| PHASE II | **SUBTOTAL SHADED PICNIC AREA** | | | | **$258,360.00** | **$6,459.00** |
| | SITE FURNITURE/MISCELLANEOUS | | | | | |
| | Picnic Table ("Form") | 10 EA | $1,500.00 | $15,000.00 | | |
| | Bench w/Back ("Victor Stanley" or "DuMor") | 20 EA | $1,000.00 | $20,000.00 | | |
| | Drinking Fountain | 5 EA | $2,500.00 | $12,500.00 | | |
| | Removable Bollard | 12 EA | $800.00 | $9,600.00 | | |
| | Bicycle Rack ("Pipeline") | 3 EA | $750.00 | $2,250.00 | | |
| | River-Washed Cobble (4" dia.) | 5000 SF | $6.00 | $30,000.00 | | |
| | Trash Receptacle | 50 EA | $750.00 | $37,500.00 | | |
| | Steel Edging | 5000 LF | $3.00 | $15,000.00 | | |
| PHASE II | **SUBTOTAL SITE FURNITURE** | | | | **$141,850.00** | **$3,546.25** |
| | PLAY AREAS | | | | | |
| | Sand for Play Area | 200 CY | $10.00 | $2,000.00 | | |
| | "Fibar" | 2500 SF | $4.50 | $11,250.00 | | |
| | Decomposed Granite Paving (Calif. Gold Fines) | 12000 SF | $2.00 | $24,000.00 | | |
| | Resilient Rubber Surface (w/PCC base) | 400 SF | $16.50 | $6,600.00 | | |
| | Play Apparatus | 1 LS | $70,000.00 | $70,000.00 | | cost per acre |

| | | | | | | |
|---|---|---|---|---|---|---|
| PHASE II | **SUBTOTAL PLAY AREAS** | | | | **$113,850.00** | **$2,846.25** |
| | ATHLETIC FIELD AND GAME COURT LIGHTING | | | | | |
| | Soccer field lighting | 20 LS | $55,000.00 | $1,100,000.00 | | cost per acre |
| | Game court lighting | 10 LS | $75,000.00 | $750,000.00 | | |
| PHASE II | **SUBTOTAL ATHLETIC FIELD AND GAME COURT LIGHTING** | | | | **$1,850,000.00** | **$46,250.00** |
| | OUT BUILDINGS | | | | | |
| | Out building allowance | 1 LS | $500,000.00 | $500,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL OUT BUILDINGS** | | | | **$500,000.00** | **$12,500.00** |
| | SURVEY/GEOTECH | | | | | |
| | Survey/geotech allowance | 1 LS | $100,000.00 | $100,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL SURVEY/GEOTECH** | | | | **$100,000.00** | **$2,500.00** |
| | AQUATICS CENTER | | | | | |
| | Aquatics center allowance | 1 LS | $3,630,000.00 | $3,630,000.00 | | cost per acre |
| PHASE III | **SUBTOTAL AQUATICS CENTER** | | | | **$3,630,000.00** | **$90,750.00** |
| | COMMUNITY CENTER | | | | | |
| | Community center allowance | 1 LS | $2,420,000.00 | $2,420,000.00 | | cost per acre |
| PHASE IV | **SUBTOTAL COMMUNITY CENTER** | | | | **$2,420,000.00** | **$60,500.00** |

## NEIGHBORHOOD PARK COST BRAKEDOWN

**Note: All prices are given in 2002 dollars**

**Land acquisition:** Average cost of $30,000/acre in the 100 year flood zone, $120,000/acre for large parcel and $140,000/acre for small parcel acq.

**Planning and Design:** Average costs for planning, design, engineering, citywide overhead and staff costs are $30,000 per acre

**Construction to date:** LS = Lump sum - this value calculated on a per park basis

**Remaining Phases:** LS = Lump Sum - this is the estimated value of future construction costs to complete these projects

Neighborhood Parks are to be constructed in phases divided as follows:

**Construction Phases:**

Phase I

Site Prep, grading, drainage, paving (to include Curb, gutter and sidewalk, walks through park, bordered area for future play equipment, restroom pad with utility connection to sanitary sewer, pads for benches, shade structure pad, picnic table pads, landscaping (to include turf, ground cover, shrubs and trees), includes utility connections, irrigation system, security lighting, drinking fountains, site furnishings

Phase II Play Equipment, Water Play Feature

Phase III Restroom/Utility Building

Phase IV Game Courts, Athletic Fields (if included in Master Plan)

Phase V Picnic Facilities and Shelter

**CIP:** costs listed below represent an avg. cost per component per acre. Each park varies in number and type of unit, which will affect overall costs.

| Phase | Park CIP Component: | Cost per acre | Average Life Span of Unit |
|---|---|---|---|
| I | project start up | $5,000.00 | * |
| I | rough grading | $7,000.00 | * |
| I | electrical work | $7,710.71 | 30 years |
| I | site prep | $950.00 | 30 years |
| I | grading | $10,892.86 | 30 years |
| I | drainage | $21,192.86 | 30 years |
| I | concrete and masonry | $11,225.00 | 30 years |
| I | irrigation system | $49,477.14 | 30 years |
| I | asphault/concrete work - road | $3,980.71 | 10 years |
| I | landscaping | $4,972.86 | 30 years |
| I | fencing and walls | $24,485.71 | 30 years |
| I | signage | $2,142.86 | 30 years |
| I | site furniture | $6,200.00 | 10 years |
| | | **$155,230.71** | |
| II | play areas | $11,264.29 | 20 years |
| II | water play feature | $2,857.14 | |
| | | **$14,121.43** | |

| | | | |
|---|---|---|---|
| III | restrooms | $8,571.43 | 20 years |
| | | **$8,571.43** | |
| IV | game courts | $8,857.14 | |
| IV | athletic field | $37,285.71 | |
| | | **$46,142.86** | |
| V | security lighting | $9,142.86 | 30 years |
| V | shaded picnic area(s) | $17,451.43 | 30 years |
| | | **$26,594.29** | |
| | **TOTAL ALL PHASES** | **$250,660.71** | |
| | **Average Cost per Phase** | **$50,132.14** | |

**NEIGHBORHOOD PARK COST ESTIMATE - 7 ACRE PARK SITE - W/ ALLOWANCES FOR POTENTIAL EXISTING CONDITIONS**

| | DESCRIPTION | QTY | UNIT | UNIT COST | TOTAL | COLUMN TOTAL | COST PER ACRE |
|---|---|---|---|---|---|---|---|
| PHASE I | **PROJECT START UP** | | | | | | |
| | Bonding and Mobilization | 1 | LS | $30,000.00 | $30,000.00 | | |
| | Stormwater Pollution Measures (allowance) | 1 | LS | $5,000.00 | $5,000.00 | | cost per acre |
| | **SUB TOTAL PROJECT START UP** | | | | | **$35,000.00** | **$5,000.00** |
| PHASE I | **ROUGH GRADING** | | | | | | |
| | Clearing & Grubbing | 7 | ACRE | $2,000.00 | $14,000.00 | | |
| | Rough Grading balance Cut/fill (allowance) | 7 | ACRE | $5,000.00 | $35,000.00 | | cost per acre |
| | **SUB TOTAL ROUGH GRADING** | | | | | **$49,000.00** | **$7,000.00** |
| PHASE I | **ELECTRICAL WORK** | | | | | | |
| | Electircal Panel Box (service cabinet) | 1 | EA | $2,500.00 | $2,500.00 | | |
| | Electrical Conduit | 2000 | LF | $15.00 | $30,000.00 | | |
| | Streetlight Electrolier | 3 | EA | $6,000.00 | $18,000.00 | | |
| | #3 1/2 Pullbox | 15 | EA | $125.00 | $1,875.00 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | #5 Interconnect Pullbox | 8 EA | $200.00 | $1,600.00 | | cost per acre |
| | **SUBTOTAL ELECTRICAL WORK** | | | | **$53,975.00** | **$7,710.71** |
| PHASE I | **SITE PREPARATION** | | | | | |
| | Sawcutting of P.C.C. Pavement (4") (allowance) | 500 LF | $1.50 | $750.00 | | |
| | Removal of Soil ($1K/Day Min.) (allowance) | 200 CY | $7.00 | $1,400.00 | | |
| | Project Construction Sign (allowance) | 1 EACH | $1,500.00 | $1,500.00 | | |
| | Traffic Control (allowance) | 1 LS | $3,000.00 | $3,000.00 | | cost per acre |
| | **SUBTOTAL SITE PREPARATION** | | | | **$6,650.00** | **$950.00** |
| PHASE I | **GRADING** | | | | | |
| | Fine Grading Only | 305000 SF | $0.25 | $76,250.00 | | cost per acre |
| | **SUBTOTAL GRADING** | | | | **$76,250.00** | **$10,892.86** |
| PHASE I | **DRAINAGE** | | | | | |
| | Storm Laterals (12" R.C.P.) | 2500 LF | $15.00 | $37,500.00 | | |
| | Sanitary Laterals (4" V.C.P.) | 300 LF | $8.00 | $2,400.00 | | |
| | Sanitary Laterals (6" V.C.P. in street) | 200 LF | $60.00 | $12,000.00 | | |
| | Storm Inlets (24" dia.) | 6 EA | $1,000.00 | $6,000.00 | | |
| | Storm Inlets (play areas) | 2 EA | $1,200.00 | $2,400.00 | | |
| | Hooded Inlet | 3 EA | $1,100.00 | $3,300.00 | | |
| | Street Cuts (average 40' to 60') | 1 EA | $1,500.00 | $1,500.00 | | |
| | Manholes (up to 7' depth) | 1 EA | $2,000.00 | $2,000.00 | | |
| | Jack and Bore under Streets (allowance) | 50 LF | $75.00 | $3,750.00 | | |
| | Roadway Excavation (allowance) | 50 LF | $25.00 | $1,250.00 | | cost per acre |
| | **SUBTOTAL DRAINAGE** | | | | **$148,350.00** | **$21,192.86** |
| PHASE I | **CONCRETE/MASONRY** | | | | | |
| | PCC Walkways (3-1/2") | 4000 SF | $3.25 | $13,000.00 | | |
| | PCC Paving (6") | 500 SF | $4.50 | $2,250.00 | | |
| | PCC Curb & Gutter | 2000 LF | $15.00 | $30,000.00 | | |
| | PCC Mowband (8") | 1500 LF | $9.00 | $13,500.00 | | |
| | PCC Separator Band (6") | 400 LF | $7.00 | $2,800.00 | | |
| | Sitting Walls (12" X 17" high) | 80 LF | $25.00 | $2,000.00 | | |
| | Sign Wall (12" X 42" high w/letters) | 30 LF | $150.00 | $4,500.00 | | |
| | Wheelchair Ramp | 3 EA | $800.00 | $2,400.00 | | |
| | Brick Pavers on PCC Base & Mortar | 500 SF | $16.25 | $8,125.00 | | cost per acre |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **SUBTOTAL CONCRETE/MASONRY** | | | | **$78,575.00** | **$11,225.00** |
| PHASE I | **IRRIGATION** | | | | | |
| | Irrigation of Turf Areas | 5 AC | $23,000.00 | $115,000.00 | | |
| | Irrigation Shrub/Groundcover Areas | 96000 SF | $1.60 | $153,600.00 | | |
| | Tree Bubblers (allowance) | 120 EA | $50.00 | $6,000.00 | | |
| | Class 315 Irrigation Main (4") | 2000 LF | $10.50 | $21,000.00 | | |
| | Strainer | 1 EA | $1,500.00 | $1,500.00 | | |
| | Backflow Prevention Unit | 1 EA | $2,300.00 | $2,300.00 | | |
| | Controller | 1 EA | $7,500.00 | $7,500.00 | | |
| | Controller Housing | 1 EA | $2,000.00 | $2,000.00 | | |
| | Quick Coupler Valves | 8 EA | $80.00 | $640.00 | | |
| | Remote Control Valves | 25 EA | $200.00 | $5,000.00 | | |
| | Potable Water Line (2") | 500 LF | $4.00 | $2,000.00 | | |
| | Quick Coupler Line (1-1/2") | 2000 LF | $3.75 | $7,500.00 | | |
| | BFP Cage (>2-1/2") | 1 EA | $2,300.00 | $2,300.00 | | |
| | Well (allowance) | 1 EA | $20,000.00 | $20,000.00 | | cost per acre |
| | **SUBTOTAL IRRIGATION** | | | | **$346,340.00** | **$49,477.14** |
| PHASE I | **ASPHALT-CONCRETE WORK - ROAD** | | | | | |
| | AC Paving (6") | 8000 SF | $3.20 | $25,600.00 | | |
| | Striping | 1000 LF | $1.50 | $1,500.00 | | |
| | "Petromat" (large areas) | 850 SY | $0.90 | $765.00 | | cost per acre |
| | **SUBTOTAL ASPHALT-CONCRETE WORK - ROAD** | | | | **$27,865.00** | **$3,980.71** |
| PHASE I | **LANDSCAPING** | | | | | |
| | Tree - 15 Gallon | 120 EA | $100.00 | $12,000.00 | | |
| | Shrub - 15 Gallon | 30 EA | $50.00 | $1,500.00 | | |
| | Shrub - 5 Gallon | 75 EA | $30.00 | $2,250.00 | | |
| | Shrub - 1 Gallon | 120 EA | $12.00 | $1,440.00 | | |
| | Groundcover - 1 Gallon | 80 EA | $1.50 | $120.00 | | |
| | Soil Preparation | 7 AC | $2,500.00 | $17,500.00 | | cost per acre |
| | **SUBTOTAL LANDSCAPING** | | | | **$34,810.00** | **$4,972.86** |
| PHASE I | **FENCING & WALLS** | | | | | |
| | Chain Link Fencing w/black Vinyl Coating (6') | 800 LF | $18.00 | $14,400.00 | | |
| | Wrought Iron Fencing (6') | 1000 LF | $40.00 | $40,000.00 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Temporary Construction Fence | 3000 LF | $6.50 | $19,500.00 | | |
| | Concrete Block Wall (6' high) (allowance) | 1500 LF | $65.00 | $97,500.00 | | cost per acre |
| | **SUBTOTAL FENCING & WALLS** | | | | **$171,400.00** | **$24,485.71** |
| PHASE I | **SIGNAGE** | | | | | |
| | Signage Package | 1 LS | $15,000.00 | $15,000.00 | | cost per acre |
| | **SUBTOTAL SIGNAGE** | | | | **$15,000.00** | **$2,142.86** |
| PHASE I | **SITE FURNITURE/MISCELLANEOUS** | | | | | |
| | Picnic Table ("Form") | 8 EA | $1,500.00 | $12,000.00 | | |
| | Bench w/Back ("Victor Stanley" or "DuMor") | 8 EA | $1,000.00 | $8,000.00 | | |
| | Drinking Fountain | 2 EA | $2,500.00 | $5,000.00 | | |
| | Removable Bollard | 8 EA | $800.00 | $6,400.00 | | |
| | Bicycle Rack ("Pipeline") | 2 EA | $750.00 | $1,500.00 | | |
| | Trash Receptacle | 10 EA | $750.00 | $7,500.00 | | |
| | Steel Edging | 1000 LF | $3.00 | $3,000.00 | | cost per acre |
| | **SUBTOTAL SITE FURNITURE** | | | | **$43,400.00** | **$6,200.00** |
| PHASE II | **PLAY AREAS** | | | | | |
| | Sand for Play Area | 100 CY | $10.00 | $1,000.00 | | |
| | "Fibar" | 2500 SF | $4.50 | $11,250.00 | | |
| | Resilient Rubber Surface (w/PCC base) | 400 SF | $16.50 | $6,600.00 | | |
| | Play Apparatus | 1 LS | $60,000.00 | $60,000.00 | | cost per acre |
| | **SUBTOTAL PLAY AREAS** | | | | **$78,850.00** | **$11,264.29** |
| PHASE II | **WATER PLAY FEATURE** | | | | | |
| | Water play feature allowance | 1 LS | $20,000.00 | $20,000.00 | | cost per acre |
| | **SUBTOTAL WATER PLAY FEATURE** | | | | **$20,000.00** | **$2,857.14** |
| PHASE III | **RESTROOMS** | | | | | |
| | Fairview Series | 1 LS | $60,000.00 | $60,000.00 | | cost per acre |
| | **SUBTOTAL RESTROOMS** | | | | **$60,000.00** | **$8,571.43** |
| PHASE IV | **GAME COURTS** | | | | | |
| | Basketball with hoops and center standard | 1 | $50,000.00 | $50,000.00 | | |
| | Volleyball - soft surface | 1 | $12,000.00 | $12,000.00 | | cost per acre |
| | **SUB TOTAL GAME COURT** | | | | **$62,000.00** | **$8,857.14** |

| | | | | | | |
|---|---|---|---|---|---|---|
| PHASE IV | **ATHLETIC FIELDS** | | | | | |
| | Athletic field | 1 | EA | $250,000.00 | $250,000.00 | |
| | Bleachers | 1 | | $6,000.00 | $6,000.00 | |
| | Scoreboards | 1 | | $5,000.00 | $5,000.00 | cost per acre |
| | **SUB TOTAL ATHLETIC FIELDS** | | | | **$261,000.00** | **$37,285.71** |
| PHASE V | **SECURITY LIGHTING** | | | | | |
| | Security Lighting Fixtures (16' acorn) | 8 | EA | $8,000.00 | $64,000.00 | cost per acre |
| | **SUBTOTAL SECURITY LIGHTING** | | | | **$64,000.00** | **$9,142.86** |
| PHASE V | **SHADED PICNIC AREA** | | | | | |
| | Picnic Table Shelter (120 sq. ft.) | 8 | EA | $15,000.00 | $120,000.00 | |
| | Pads for Table shelters | 480 | SF | $4.50 | $2,160.00 | cost per acre |
| | **SUBTOTAL SHADED PICNIC AREA** | | | | **$122,160.00** | **$17,451.43** |

## SPORTS COMPLEX COST BRAKEDOWN

**Note: All prices are given in 2002 dollars**

**Land acquisition:** Average cost of $30,000/acre in the 100 year flood zone, $120,000/acre for large parcel and $140,000/acre for small parcel acq.

**Planning and Design:** Average costs for planning, design, engineering, citywide overhead and staff costs are $30,000 per acre

**Construction to date:** LS = Lump sum - this value calculated on a per park basis

**Remaining Phases:** LS = Lump Sum - this is the estimated value of future construction costs to complete these projects

The Sports Complex is to be constructed in phases divided as follows:

**Construction Phases:**

| | |
|---|---|
| Phase I | project start up, rough grading, electrical work, site preparation, grading, drainage, concrete and masonry, irrigation, road work, landscaping, parking lot, security lighting, restrooms, fencing and walls |
| Phase II | signage, shaded picnic area(s), site furniture, playareas, athletic court and field lighting, out buildings, survey/geotech |
| Phase III | Aquatics Center |
| Phase IV | Indoor Sports Center (approx. 15,000 sq. ft. structure) |

**CIP:** costs listed below represent an avg. cost per component per acre. Each park varies in number and type of unit, which will affect overall costs.

| Phase | Park CIP Component: | Cost per acre | Average Life Span of Unit |
|---|---|---|---|
| I | project start up | $2,000.00 | * |
| I | rough grading | $7,000.00 | * |
| I | electrical work | $10,075.00 | 30 years |
| I | athletic fields | $64,150.00 | 5 years |
| I | game courts | $8,750.00 | 5 years |
| I | site prep | $435.00 | 30 years |
| I | grading | $1,356.25 | 30 years |
| I | drainage | $6,548.75 | 30 years |
| I | concrete and masonry | $8,731.25 | 30 years |
| I | irrigation system | $24,687.50 | 30 years |
| I | asphault/concrete work - road | $17,155.00 | 10 years |
| I | landscaping | $10,272.50 | 30 years |
| I | asphault/concrete work - 2 acre parking lot | $8,925.00 | 10 years |
| I | security lighting | $3,625.00 | 30 years |
| I | restrooms | $3,000.00 | 20 years |
| I | fencing and walls | $9,500.00 | 30 years |
| | **TOTAL PHASE I** | **$186,211.25** | |
| II | signage | $2,000.00 | 30 years |
| II | shaded picnic area(s) | $3,459.00 | 30 years |

| | | | |
|---|---|---|---|
| II | site furniture | $3,546.25 | 10 years |
| II | play areas | $2,846.25 | 20 years |
| II | athletic field and game court lighting | $46,250.00 | 30 years |
| II | out buildings | $12,500.00 | 30 years |
| II | survey/geotech | $2,500.00 | 30 years |
| | **TOTAL PHASE II** | **$73,101.50** | |
| III | aquatics center | $90,750.00 | 30 years |
| | **TOTAL PHASE III** | **$90,750.00** | |
| IV | community center | $60,500.00 | 30 years |
| | **TOTAL PHASE IV** | **$60,500.00** | |
| | **TOTAL ALL PHASES** | **$410,562.75** | |
| | **Average cost per phase** | **$102,640.69** | |

**SPORTS COMPLEX COST ESTIMATE - 40 ACRE PARK SITE - W/ ALLOWANCES FOR POTENTIAL EXISTING CONDITIONS**

| | DESCRIPTION | QTY | UNIT | UNIT COST | TOTAL | COLUMN TOTAL | COST PER ACRE |
|---|---|---|---|---|---|---|---|
| | PROJECT START UP | | | | | | |
| | Bonding and Mobilization | 1 | LS | $75,000.00 | $75,000.00 | | |
| | Stormwater Pollution Measures (allowance) | 1 | LS | $5,000.00 | $5,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL PROJECT START UP** | | | | | **$80,000.00** | **$2,000.00** |
| | ROUGH GRADING | | | | | | |
| | Clearing & Grubbing | 40 | ACRE | $2,000.00 | $80,000.00 | | |
| | Rough Grading balance Cut/fill (allowance) | 40 | ACRE | $5,000.00 | $200,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL ROUGH GRADING** | | | | | **$280,000.00** | **$7,000.00** |
| | ELECTRICAL WORK | | | | | | |
| | Traffic Signals (average allowance) | 1 | EA | $250,000.00 | $250,000.00 | | |
| | Electircal Panel Box (service cabinet) | 1 | EA | $2,500.00 | $2,500.00 | | |
| | Electrical Conduit | 7500 | LF | $15.00 | $112,500.00 | | |
| | Streetlight Electrolier | 5 | EA | $6,000.00 | $30,000.00 | | |
| | #3 1/2 Pullbox | 40 | EA | $125.00 | $5,000.00 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | #5 Interconnect Pullbox | 15 EA | $200.00 | $3,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL ELECTRICAL WORK** | | | | **$403,000.00** | **$10,075.00** |
| | ATHLETIC FIELDS | | | | | |
| | Soccer field - turf | 5 EA | $250,000.00 | $1,250,000.00 | | |
| | Baseball/softball fields | 2 | $250,000.00 | $500,000.00 | | |
| | Baseball backstop apparatus | 2 | $40,000.00 | $80,000.00 | | |
| | Bleachers | 16 | $6,000.00 | $96,000.00 | | |
| | Scoreboards | 8 | $5,000.00 | $40,000.00 | | |
| | synthetic turf field - soccer | 1 | $600,000.00 | $600,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL ATHLETIC FIELDS** | | | | **$2,566,000.00** | **$64,150.00** |
| | GAME COURTS | | | | | |
| | Tennis with net and fencing | 2 EA | $55,000.00 | $110,000.00 | | |
| | Basketball with hoops and standards | 2 | $50,000.00 | $100,000.00 | | |
| | Volleyball - hard surface | 2 | $40,000.00 | $80,000.00 | | |
| | Volleyball - soft surface | 1 | $12,000.00 | $12,000.00 | | |
| | Horseshoe pits | 8 | $6,000.00 | $48,000.00 | | cost per acre |
| PHASE I | **SUB TOTAL GAME COURT** | | | | **$350,000.00** | **$8,750.00** |
| | SITE PREPARATION | | | | | |
| | Sawcutting of P.C.C. Pavement (4") (allowance) | 2000 LF | $1.50 | $3,000.00 | | |
| | Removal of Soil ($1K/Day Min.) (allowance) | 200 CY | $7.00 | $1,400.00 | | |
| | Project Construction Sign (allowance) | 2 EACH | $1,500.00 | $3,000.00 | | |
| | Traffic Control (allowance) | 1 LS | $10,000.00 | $10,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL SITE PREPARATION** | | | | **$17,400.00** | **$435.00** |
| | GRADING | | | | | |
| | Fine Grading Only (allow 5 acres) | 217000 SF | $0.25 | $54,250.00 | | cost per acre |
| PHASE I | **SUBTOTAL GRADING** | | | | **$54,250.00** | **$1,356.25** |
| | DRAINAGE | | | | | |
| | Storm Laterals (12" R.C.P.) | 7000 LF | $15.00 | $105,000.00 | | |
| | Sanitary Laterals (4" V.C.P.) | 2000 LF | $8.00 | $16,000.00 | | |
| | Sanitary Laterals (6" V.C.P. in street) | 600 LF | $60.00 | $36,000.00 | | |
| | Storm Inlets (24" dia.) | 20 EA | $1,000.00 | $20,000.00 | | |
| | Storm Inlets (play areas) | 6 EA | $1,200.00 | $7,200.00 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Hooded Inlet | 5 EA | $1,100.00 | $5,500.00 | | |
| | Street Cuts (average 40' to 60') | 2 EA | $1,500.00 | $3,000.00 | | |
| | Manholes (up to 7' depth) | 5 EA | $2,000.00 | $10,000.00 | | |
| | Jack and Bore under Streets (allowance) | 50 LF | $75.00 | $3,750.00 | | |
| | Roadway Excavation (allowance) | 50 LF | $25.00 | $1,250.00 | | cost per acre |
| PHASE I | **SUBTOTAL DRAINAGE** | | | | **$261,950.00** | **$6,548.75** |
| | CONCRETE/MASONRY | | | | | |
| | PCC Walkways (3-1/2") | 30000 SF | $3.25 | $97,500.00 | | |
| | PCC Paving (6") | 7000 SF | $4.50 | $31,500.00 | | |
| | PCC Paving w/ Integral Color (3-1/2") | 2000 SF | $5.00 | $10,000.00 | | |
| | PCC Curb & Gutter | 6000 LF | $15.00 | $90,000.00 | | |
| | PCC Mowband (8") | 3000 LF | $9.00 | $27,000.00 | | |
| | PCC Separator Band (6") | 1500 LF | $7.00 | $10,500.00 | | |
| | Sitting Walls (12" X 17" high) | 2000 LF | $25.00 | $50,000.00 | | |
| | Sign Wall (12" X 42" high w/letters) | 30 LF | $150.00 | $4,500.00 | | |
| | Wheelchair Ramp | 5 EA | $800.00 | $4,000.00 | | |
| | Brick Pavers on PCC Base & Mortar | 1000 SF | $16.25 | $16,250.00 | | |
| | Concrete Bus Loading Pad (8" X 10' X 50') | 1 EA | $8,000.00 | $8,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL CONCRETE/MASONRY** | | | | **$349,250.00** | **$8,731.25** |
| | IRRIGATION | | | | | |
| | Irrigation of Turf Areas >3 Acres | 30 AC | $23,000.00 | $690,000.00 | | |
| | Irrigation Groundcover Areas | 100000 SF | $1.60 | $160,000.00 | | |
| | Irrigation Median Islands (typical allowance) | 5000 SF | $2.25 | $11,250.00 | | |
| | Tree Bubblers (allowance) | 60 EA | $50.00 | $3,000.00 | | |
| | Class 315 Irrigation Main (4") | 5000 LF | $10.50 | $52,500.00 | | |
| | Strainer | 1 EA | $1,500.00 | $1,500.00 | | |
| | Backflow Prevention Unit | 1 EA | $2,300.00 | $2,300.00 | | |
| | Controller | 1 EA | $15,000.00 | $15,000.00 | | |
| | Controller Housing | 1 EA | $2,000.00 | $2,000.00 | | |
| | Quick Coupler Valves | 30 EA | $80.00 | $2,400.00 | | |
| | Remote Control Valves | 50 EA | $200.00 | $10,000.00 | | |
| | Potable Water Line (2") | 1000 LF | $4.00 | $4,000.00 | | |
| | Quick Coupler Line (1-1/2") | 3000 LF | $3.75 | $11,250.00 | | |
| | BFP Cage (>2-1/2") | 1 EA | $2,300.00 | $2,300.00 | | |
| | Well (allowance) | 1 EA | $20,000.00 | $20,000.00 | | cost per acre |

| | | | | | | |
|---|---|---|---|---|---|---|
| PHASE I | **SUBTOTAL IRRIGATION** | | | | **$987,500.00** | **$24,687.50** |
| | ASPHALT-CONCRETE WORK - ROAD | | | | | |
| | AC Paving (6") | 200000 SF | $3.20 | $640,000.00 | | |
| | Striping | 20000 LF | $1.50 | $30,000.00 | | |
| | "Petromat" (large areas) | 18000 SY | $0.90 | $16,200.00 | | cost per acre |
| PHASE I | **SUBTOTAL ASPHALT-CONCRETE WORK - ROAD** | | | | **$686,200.00** | **$17,155.00** |
| | LANDSCAPING | | | | | |
| | Tree - 15 Gallon | 120 EA | $100.00 | $12,000.00 | | |
| | Shrub - 15 Gallon | 200 EA | $50.00 | $10,000.00 | | |
| | Shrub - 5 Gallon | 200 EA | $30.00 | $6,000.00 | | |
| | Shrub - 1 Gallon | 400 EA | $12.00 | $4,800.00 | | |
| | Groundcover - 1 Gallon | 400 EA | $1.50 | $600.00 | | |
| | Soil Preparation | 35 AC | $2,500.00 | $87,500.00 | | |
| | Soil Preparation (small areas) | 200000 SF | $0.20 | $40,000.00 | | |
| | Imported Topsoil (allowance) | 50000 CY | $5.00 | $250,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL LANDSCAPING** | | | | **$410,900.00** | **$10,272.50** |
| | ASPHALT-CONCRETE WORK - PARKING LOT - 2 ACRES | | | | | |
| | AC Paving (6") | 100000 SF | $3.20 | $320,000.00 | | |
| | Parking Lot Striping | 50000 LF | $0.40 | $20,000.00 | | |
| | Wheel Stops | 200 EA | $40.00 | $8,000.00 | | |
| | "Petromat" (large areas) | 10000 SY | $0.90 | $9,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL ASPHALT-CONCRETE WORK - PARKING LOT** | | | | **$357,000.00** | **$8,925.00** |
| | SECURITY LIGHTING | | | | | |
| | Security Lighting Fixtures (20' high) | 15 EA | $4,000.00 | $60,000.00 | | |
| | Parking Lot Lighting Double Luminaire (20' high) | 10 EA | $8,500.00 | $85,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL SECURITY LIGHTING** | | | | **$145,000.00** | **$3,625.00** |
| | RESTROOMS | | | | | |
| | Fairview Series | 2 LS | $60,000.00 | $120,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL RESTROOMS** | | | | **$120,000.00** | **$3,000.00** |
| | **FENCING & WALLS** | | | | | |
| | Chain Link Fencing w/black Vinyl Coating (6') | 10000 LF | $18.00 | $180,000.00 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Wrought Iron Fencing (6') | 1000 LF | $40.00 | $40,000.00 | | |
| | Temporary Construction Fence | 10000 LF | $6.50 | $65,000.00 | | |
| | Concrete Block Wall (6' high) (allowance) | 1000 LF | $65.00 | $65,000.00 | | |
| | Concrete Block seat wall w/ cap | 1000 LF | $30.00 | $30,000.00 | | cost per acre |
| PHASE I | **SUBTOTAL FENCING & WALLS** | | | | **$380,000.00** | **$9,500.00** |
| | SIGNAGE | | | | | |
| | Signage Package | 1 LS | $80,000.00 | $80,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL SIGNAGE** | | | | **$80,000.00** | **$2,000.00** |
| | SHADED PICNIC AREA | | | | | |
| | Picnic Table Shelter (120 sq. ft.) | 8 EA | $15,000.00 | $120,000.00 | | |
| | Pads for Large Gazebo | 3600 SF | $4.50 | $16,200.00 | | |
| | Pads for Table shelters | 480 SF | $4.50 | $2,160.00 | | cost per acre |
| PHASE II | **SUBTOTAL SHADED PICNIC AREA** | | | | **$138,360.00** | **$3,459.00** |
| | SITE FURNITURE/MISCELLANEOUS | | | | | |
| | Picnic Table ("Form") | 10 EA | $1,500.00 | $15,000.00 | | |
| | Bench w/Back ("Victor Stanley" or "DuMor") | 20 EA | $1,000.00 | $20,000.00 | | |
| | Drinking Fountain | 5 EA | $2,500.00 | $12,500.00 | | |
| | Removable Bollard | 12 EA | $800.00 | $9,600.00 | | |
| | Bicycle Rack ("Pipeline") | 3 EA | $750.00 | $2,250.00 | | |
| | River-Washed Cobble (4" dia.) | 5000 SF | $6.00 | $30,000.00 | | |
| | Trash Receptacle | 50 EA | $750.00 | $37,500.00 | | |
| | Steel Edging | 5000 LF | $3.00 | $15,000.00 | | |
| PHASE II | **SUBTOTAL SITE FURNITURE** | | | | **$141,850.00** | **$3,546.25** |
| | PLAY AREAS | | | | | |
| | Sand for Play Area | 200 CY | $10.00 | $2,000.00 | | |
| | "Fibar" | 2500 SF | $4.50 | $11,250.00 | | |
| | Decomposed Granite Paving (Calif. Gold Fines) | 12000 SF | $2.00 | $24,000.00 | | |
| | Resilient Rubber Surface (w/PCC base) | 400 SF | $16.50 | $6,600.00 | | |
| | Play Apparatus | 1 LS | $70,000.00 | $70,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL PLAY AREAS** | | | | **$113,850.00** | **$2,846.25** |
| | ATHLETIC FIELD AND GAME COURT LIGHTING | | | | | |
| | Soccer field lighting | 20 LS | $55,000.00 | $1,100,000.00 | | cost per acre |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Game court lighting | 10 LS | $75,000.00 | $750,000.00 | | |
| PHASE II | **SUBTOTAL ATHLETIC FIELD AND GAME COURT LIGHTING** | | | | **$1,850,000.00** | **$46,250.00** |
| | OUT BUILDINGS | | | | | |
| | Out building allowance | 1 LS | $500,000.00 | $500,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL OUT BUILDINGS** | | | | **$500,000.00** | **$12,500.00** |
| | SURVEY/GEOTECH | | | | | |
| | Survey/geotech allowance | 1 LS | $100,000.00 | $100,000.00 | | cost per acre |
| PHASE II | **SUBTOTAL SURVEY/GEOTECH** | | | | **$100,000.00** | **$2,500.00** |
| | AQUATICS CENTER | | | | | |
| | Aquatics center allowance | 1 LS | $3,630,000.00 | $3,630,000.00 | | cost per acre |
| PHASE III | **SUBTOTAL AQUATICS CENTER** | | | | **$3,630,000.00** | **$90,750.00** |
| | INDOOR SPORTS CENTER | | | | | |
| | Indoor Sports Center allowance | 1 LS | $2,420,000.00 | $2,420,000.00 | | cost per acre |
| PHASE IV | **SUBTOTAL INDOOR SPORTS CENTER** | | | | **$2,420,000.00** | **$60,500.00** |

## Community Facilities Fee Update

Decision Package

Parks Department

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 1. Historical Buildings<br><br>*Revise standard to include McClure Country Place as Parks System Capital Facilities.* | Buildings of Historical Interest provide and identity, cultural outlet, educational resource and beautification to the City of Modesto. They host a large number of events, both public and private.<br><br>The City is endeavoring to restore the McClure Country Place and adjoining acreage to a point of utilization for the citizenry of Modesto.<br><br>The current CFF funding policy for the McClure Country Place does not exist. Funding has come from The Museum Society, several community based groups, and parks funds. This funding has been extremely inadequate for the current needs of the system. In order to meet the needs of the current and proposed historical restoration process, the current policy must be changed to allow for CFF fees to contribute to the existing system, as well as future restoration efforts | ☐ Approve<br>☐ Disapprove<br>☐ Modify |
| 2. Land Cost<br><br>*Revise to $30,000 per acre for land in 100 year flood zone; for land outside flood zone, revise costs to $120,000 per acre for community park land and $140,000 per acre for neighborhood park land and smaller parcels.* | The cost of land outside the 100-year flood zone is currently estimated to be between $120,000 and $140,000 per acre. Economies of scale are assumed for larger parcels such as community parks. Recent land purchases by the Parks Department suggest that this figure may be conservative.<br><br>The cost of the Gateway parcel of the Tuolumne River Regional Park was $24,000 per acre. The Gomes Road acquisition was $40,000 per acre. These properties are in the flood plain, and reflect an average of about $30,000 per acre. | ☐ Approve<br>☐ Disapprove<br>☐ Modify |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 3. Planning and Design Costs<br><br>*Revise planning and design costs to $30,000 per acre for all facilities except regional parks at $12,000 per acre and 35% of construction costs for community centers.* | Design, planning, and City staff costs for Ustach, Orville Wright, and Coffee-Claratina Parks averaged about $30,000 per acre. These parks represent a good cross-section of design issues and elements that affect cost.<br><br>The same cost standard used in neighborhood and community parks is used in regional parks. In considering regional parks that are part of the Tuolumne River Regional Park, the City of Modesto shares the cost of these facilities with the City of Ceres and Stanislaus County. Modesto's share is 40%, and is reflected in the report.<br><br>Architects use a more formalized fee of 35% of the construction cost for planning, design, and City staff costs. This is reflected in the planning and design costs of city community centers. | ☐ Approve<br>☐ Disapprove<br>☐ Modify |
| 5. Construction Costs<br><br>*Revise replacement and future construction costs of facilities to reflect the per acre costs detailed in Attachment 1* | The most recent estimates given for new construction projects are as follows:<br><br>Neighborhood parks - $50,000 per phase, per acre<br><br>Community parks - $103,000 per phase per acre<br><br>Regional parks - $50,000 per phase per acre<br><br>Sports complex - $103,000 per phase per acre<br><br>A detailed description of the capital improvements that make up the construction phases of Parks System for each of these facilities is appended as Attachment 1. The per-acre cost of capital improvement construction is calculated. | ☐ Approve<br>☐ Disapprove<br>☐ Modify |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 6. Park Acreage Standards<br><br>*Revise park acreage standard from 3 acres per 1,000 residents to 5 acres per 1,000.* | Future recommendations for city parks policy will include an amendment to the General Plan that will provide for an increase in park acreage to 5 acres per 1000 population, as recommended by the National Recreation and Parks Association.<br><br>This would only affect future development of neighborhood and community parks. In effect, the cost of land acquisition, planning, and construction of future neighborhood and community parks would increase by about 67%. | |

# Attachment 1

## CFF Update Decision Package – Parks Department
## Capital Improvement Construction Costs for Parks System

### Neighborhood Parks

| Phase | Park CIP Component: | Cost per acre |
|---|---|---|
| I | project start up | $5,000.00 |
| I | rough grading | $7,000.00 |
| I | electrical work | $7,710.71 |
| I | site prep | $950.00 |
| I | grading | $10,892.86 |
| I | drainage | $21,192.86 |
| I | concrete and masonry | $11,225.00 |
| I | irrigation system | $49,477.14 |
| I | asphalt/concrete work - road | $3,980.71 |
| I | landscaping | $4,972.86 |
| I | fencing and walls | $24,485.71 |
| I | signage | $2,142.86 |
| I | site furniture | $6,200.00 |
| | | **$155,230.71** |
| II | play areas | $11,264.29 |
| II | water play feature | $2,857.14 |
| | | **$14,121.43** |
| III | restrooms | $8,571.43 |
| | | **$8,571.43** |
| IV | game courts | $8,857.14 |
| IV | athletic field | $37,285.71 |
| | | **$46,142.86** |
| V | security lighting | $9,142.86 |
| V | shaded picnic area(s) | $17,451.43 |
| | | **$26,594.29** |
| | **TOTAL ALL PHASES** | **$250,660.71** |
| | **Average Cost per Phase** | **$50,132.14** |

# Attachment 1 cont...

## CFF Update Decision Package – Parks Department
### Capital Improvement Construction Costs for Parks System

### Community Parks

| Phase | Park CIP Component: | Cost per acre |
|---|---|---|
| I | project start up | $2,000.00 |
| I | rough grading | $7,000.00 |
| I | electrical work | $10,075.00 |
| I | athletic fields | $64,150.00 |
| I | game courts | $8,750.00 |
| I | site prep | $435.00 |
| I | grading | $1,356.25 |
| I | drainage | $6,548.75 |
| I | concrete and masonry | $8,731.25 |
| I | irrigation system | $24,687.50 |
| I | asphalt/concrete work - road | $17,155.00 |
| I | landscaping | $10,272.50 |
| I | asphalt/concrete work - 2 acre parking lot | $8,925.00 |
| I | security lighting | $3,625.00 |
| I | restrooms | $3,000.00 |
| I | fencing and walls | $9,500.00 |
| | **TOTAL PHASE I** | **$186,211.25** |
| II | signage | $2,000.00 |
| II | shaded picnic area(s) | $6,459.00 |
| II | site furniture | $3,546.25 |
| II | play areas | $2,846.25 |
| II | athletic field and game court lighting | $46,250.00 |
| II | out buildings | $12,500.00 |
| II | survey/geotech | $2,500.00 |
| | **TOTAL PHASE II** | **$76,101.50** |
| III | aquatics center | $90,750.00 |
| | **TOTAL PHASE III** | **$90,750.00** |
| IV | community center | $60,500.00 |
| | **TOTAL PHASE IV** | **$60,500.00** |
| | **TOTAL ALL PHASES** | **$413,562.75** |
| | **Average cost per phase** | **$103,390.69** |

# Attachment 1 cont...

## CFF Update Decision Package – Parks Department
## Capital Improvement Construction Costs for Parks System

### Regional Parks

| Phase | Park CIP Component: | Cost per acre |
|---|---|---|
| I | project start up | $2,625.00 |
| I | rough grading | $8,000.00 |
| I | restoration | $6,500.00 |
| I | trails | $5,500.00 |
| I | electrical work | $10,075.00 |
| | **PHASE I TOTAL** | **$32,700.00** |
| II | site prep | $4,468.50 |
| II | grading | $6,356.25 |
| II | drainage | $11,548.75 |
| II | concrete and masonry | $8,731.25 |
| II | irrigation system | $31,915.00 |
| II | asphalt/concrete work - road | $17,155.00 |
| II | shaded picnic area(s) | $12,675.00 |
| II | landscaping | $17,147.50 |
| II | asphalt/concrete work - 2 acre parking lot | $8,925.00 |
| II | security lighting | $3,625.00 |
| II | restrooms | $3,000.00 |
| II | signage | $2,000.00 |
| II | fencing and walls | $9,500.00 |
| | **PHASE II TOTAL** | **$137,047.25** |
| III | site furniture | $8,303.75 |
| III | play areas | $3,146.25 |
| III | specialized lighting - staging | $5,000.00 |
| | **PHASE III TOTAL** | **$16,450.00** |
| IV | out buildings | $12,500.00 |
| IV | survey/geotech | $2,500.00 |
| | **PHASE IV TOTAL** | **$15,000.00** |
| | **TOTAL ALL PHASES** | **$201,197.25** |
| | **Average cost per phase** | **$50,299.31** |

# Attachment 1 cont...

## CFF Update Decision Package – Parks Department
## Capital Improvement Construction Costs for Parks System

### Sports Complex

| Phase | Park CIP Component: | Cost per acre |
|---|---|---|
| I | project start up | $2,000.00 |
| I | rough grading | $7,000.00 |
| I | electrical work | $10,075.00 |
| I | athletic fields | $64,150.00 |
| I | game courts | $8,750.00 |
| I | site prep | $435.00 |
| I | grading | $1,356.25 |
| I | drainage | $6,548.75 |
| I | concrete and masonry | $8,731.25 |
| I | irrigation system | $24,687.50 |
| I | asphalt/concrete work - road | $17,155.00 |
| I | landscaping | $10,272.50 |
| I | asphalt/concrete work - 2 acre parking lot | $8,925.00 |
| I | security lighting | $3,625.00 |
| I | restrooms | $3,000.00 |
| I | fencing and walls | $9,500.00 |
| | **TOTAL PHASE I** | **$186,211.25** |
| II | signage | $2,000.00 |
| II | shaded picnic area(s) | $3,459.00 |
| II | site furniture | $3,546.25 |
| II | play areas | $2,846.25 |
| II | athletic field and game court lighting | $46,250.00 |
| II | out buildings | $12,500.00 |
| II | survey/geotech | $2,500.00 |
| | **TOTAL PHASE II** | **$73,101.50** |
| III | aquatics center | $90,750.00 |
| | **TOTAL PHASE III** | **$90,750.00** |
| IV | community center | $60,500.00 |
| | **TOTAL PHASE IV** | **$60,500.00** |
| | **TOTAL ALL PHASES** | **$410,562.75** |

# 2002 CFF Update
# General Government

| **Replacement Cost of Existing Capital Facilities** | cost |
|---|---|
| City Hall | $4,810,000 |
| Corporation Yard | $7,347,000 |
| City Hall Computer Room | $145,756 |
| Total Existing | $12,302,756 |

| **Future Cost of Capital Facilities** | |
|---|---|
| City Hall | $24,050,000 |
| City Hall Annex | $19,650,000 |
| Satellite Yards | $2,825,000 |
| Vehicle Maintenance Facility | $3,000,000 |
| Wash Facility | $200,000 |
| Light Vehicle Facility | $425,000 |
| Parking | $3,172,500 |
| **IT Component** | |
| Fiber Optic Cable | $4,727,484 |
| Wireless Network | $931,436 |
| Training Facility | $42,320 |
| City Hall Computer Expansion | $145,756 |
| Police Computer Expansion | $285,756 |
| Phone Room | $276,000 |
| Total Expansion | $59,731,252 |

| | |
|---|---|
| **Total Buildount Cost** | **$72,034,008** |
| Total DUES | 152,100 |
| **Cost per DUE** | **$474** |
| New Development DUES | 68,300 |
| New Developments Share of Total Cost | $32,346,632 |
| Existing DUES | 70,700 |
| Existing Development's Share of Total Cost | $33,483,263 |
| Existing Deficiency | $21,180,507 |

# Community Facilities Fee Update

## Decision Package

## Operations & Maintenance Department

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 1. TSP Annex<br><br>*Consider including $19.65 Million for an Annex to Tenth Street Place to meet future employee growth needs* | Tenth Street Place was completed and occupied in November 1999. The City's non-enterprise share of the TSP office space is 96,200 square feet. Presently, there are 332 non-enterprise City employees housed at TSP. This equates to 290 square foot per employee.<br><br>Given the 263 square foot per employee standard utilized by the Police and Fire Departments, as recommended by RRM Design Group, the current facility can be expected to accommodate an additional 34 employees (total of 366). Once that threshold is reached, there will be inadequate growth space at TSP.<br><br>If existing population to employee ratios are maintained as the City grows, the number of City employees requiring TSP office space will be 615, slightly less than double the existing number. This equates to an additional office space requirement of 65,500 square foot.<br><br>TSP cost $300 per square foot to construct and furnish in 1999. To accommodate the additional employees required as the City grows, a new facility costing an estimated $19.65 Million in 2002 dollars is required. See Attachment 1. | |
| 2. Satellite Yards<br><br>*Revise cost to $2,825,000* | The current CFF contains a cost of $1.8 million for satellite yards. The City has purchased some, but not all, of the land required to accommodate satellite uses. The new cost reflects current land costs (5 acres at $165,000 / acre) plus construction costs estimated at $2 million, including landscape screening, security, etc. | |
| 3. Vehicle Maintenance Facility<br><br>*Revise cost to $3 Million* | The Vehicle Maintenance Facility will be completed as Phase II of the Bus Maintenance Facility project, which is presently in the Design Phase. Using construction cost estimates of $150 per square foot – from the Bus Maintenance Facility project – the new 20,000 square foot Vehicle Maintenance Facility will cost $3 Million to complete. | |
| 4. Wash Facility<br><br>*Revise cost to $200,000* | Delete "Fare Retrieval" from this project description, as that function will be accommodated by the new Bus Maintenance Facility. Cost estimates for a wash-only facility are $200,000. | |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 5. Land<br><br>*Revise land costs to $165,000 per acre* | The current CFF uses a figure of $45,000 per acre for estimating the cost of land associated with new corporation yard facilities. This figure is roughly 70% of the $65,000-figure used for calculating land costs throughout the remainder of the CFF document. The current CFF document reduces the value of land for corporation yards due to the fact that these yards are typically located on Industrial land. There are no lands zoned for Industrial development within the City limits. Unless a satellite facility is remotely located – in a portion of the County zoned appropriately – it is likely that the cost for additional facilities will mirror that of other land types. | |
| 6. Light Vehicle Facility<br><br>*Revise cost to $425,000* | The current CFF contains an estimate of $1 million for the purpose of refurbishing or replacing the existing light vehicle facility. This project is underway with total costs estimated at $425,000. | |
| 8. Parking Facilities<br><br>*Add costs for parking facilities for TSP Annex at $3,112,500 and for Corp Yard growth parking at $60,000.* | Adding City employees in the Downtown Core to accommodate growth-related service needs at build-out will require additional parking facilities. TSP Annex parking facility needs equate to 249 spaces at $12,500 per space or $3,112,500. In addition, the completion of the Bus Maintenance Facility and Vehicle Maintenance Facilities, anticipated in 2003-2004, will displace existing parking in the Corporation Yard. Replacement costs are estimated at $1,000 per space. | |

# Attachment 1

## Tenth Street Place Annex

## TENTH STREET PLACE ANNEX SUMMARY

| | TSP Employees |
|---|---|
| CITY ATTORNEY | 15 |
| CITY CLERK | 7 |
| CITY MANAGER | 16 |
| COMMUNITY & ECONOMIC DEVELOPMENT | 51 |
| ENGINEERING & TRANSPORTATION | 81.8 |
| FINANCE | 61 |
| FIRE | 8 |
| INFORMATION & TECHNOLOGY | 25.75 |
| OPERATIONS & MAINTENANCE | 4 |
| PARKS, RECREATION & NEIGHBORHOODS | 39 |
| PERSONNEL | 21.125 |
| TOTAL | 332 |
| CAPACITY AT 263 SQ. FT. / EMPLOYEE | 366 |
| GROWTH ROOM AVAILABLE IN FACILITY | 34 |
| # OF EMPLOYEES AT BUILDOUT | 615 |
| # OF ADDITIONAL EMPLOYEES NEEDING SPACE | 249 |
| TOTAL SPACE NEEDS FOR GROWTH (249 x 263) | 65,500 |
| COST PER SQUARE FOOT | $300.00 |
| **TOTAL COST:** | **$19,650,000.00** |

## General Government Component – Information Technology Department

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 1. Fiber Optic Communication Line Buildout<br><br>*Consider including $3,564,984 for communication lines and equipment to extend the City's Fiber Optic network to meet future service demands and technology needs.*<br><br>*Consider including $1,162,500 for network infrastructure equipment to connect the fiber optic network with the City's existing network.*<br><br>*Total = $4,727,484* | This CFF component provides for the extension of the City's fiber optic network to future City facilities. The current estimated cost to buildout the planned INET expansion to City sites is approximately $1,300,000 for fiber only.<br><br>The fiber buildout will provide the foundation for improved homeland security and "smart city" technologies. The costs associated with the fiber buildout are included in attachment "A". | |
| 2. City-wide Wireless Network<br><br>*Consider including $322,545 for mobile wireless technology equipment to support future public safety applications.*<br><br>*Consider including $608,891 for wireless infrastructure equipment to support future mobile, field and remote technology related service demands.*<br><br>*Total = $931,436* | The City-wide wireless network will provide high-speed communications to mobile Public Safety services, the remote Police training Center, improve the City's ability to provide Homeland Security, promote field related operations including building permit, code enforcement and maintenance operations via handheld devices.<br><br>The costs associated with the wireless buildout are included in Attachment "B". | |

| CFF Item | Discussion | Policy Decision |
|---|---|---|
| 3. Information Technology Training Room Improvements<br><br>*Consider including $42,320 for training room technology improvements.* | The technology training floor space included in the City Hall Annex provides for the future training needs of the City as it expands and becomes more reliant on technology. This site would be used by City staff to train on City systems related to business workflow, upgrades, replacement systems, etc. This request is for technology related improvements to the standard floor space.<br><br>Attachment "C" outlines the cost necessary for the new technology training facility. | |
| 4. IT Computer Room Facility<br><br>*Consider including improvements to the new computer room at the City Hall Annex.*<br><br>*Consider including expansion and improvement costs for the Police Dept.* | This will provide for improvements to the expansion of the City's computer room facilities into the planned City Hall Annex and at the Police Department to prepare for new technology equipment related to the growth within the City and the extension of the fiber optic INET and wireless networks. The current value of the City Hall computer facility improvements is estimated at $145,756 as well as the necessary improvements to the new City Hall Annex computer room. The Police computer room expansion is estimated at $285,756.<br><br>Attachment "D" outlines the cost for existing City Hall computer room equipment and attachment "E" outlines the Police Department cost. | |
| 5. IT Phone Room<br><br>*Consider including $276,000 for a City Hall Annex phone system.* | The new City Hall Annex will require a phone system to support the new staff addressed in the CFF study. The cost includes a phone, voice mail, call accounting, and automated call distribution system per attachment "F". Floor space is included in the City Hall Annex CFF request. | |

Attachment A

## CFF Update Decision Package - Information Technology

### City-wide Fiber Growth Extension

| CFF Fiber | Estimated Distance in Feet | Number of Facilities | Network Equipment |
|---|---|---|---|
| Community Parks | 8,405 | 2 | 25,000 |
| Regional Parks | 35,147 | 12 | 150,000 |
| Community Centers | 934 | 1 | 12,500 |
| Historical Buildings | 1,179 | 3 | 37,500 |
| Operations & Maintenance | 78,727 | 3 | 37,500 |
| Proposed Fire Stations | 104,706 | 4 | |
| Redundant INET Loop | 88,392 | | 900,000 |
| **Sub-Totals** | **317,490** | **25** | **$1,162,500** |

| Description | Unit | Quantity | Cost | Cost | Extended Description |
|---|---|---|---|---|---|
| Overhead Fiber Optic Cable | LF | 317,490 | $6.34 | $2,012,887 | Aerial |
| 3" Conduit (Bore and Jack) | LF | 10,000 | $75.50 | $755,000.00 | |
| Pullbox No.6 | EA | 10 | $555.00 | $5,550.00 | |
| Fiber Splice Box | EA | 10 | $7,028.00 | $70,280 | |
| Testing and Documentation and Manuals | per mile | 60 | $2,420.00 | $145,516 | Route Dependant |
| Traffic Control, Barricades, and any Relate | per mile | 60 | $3,135.00 | $188,510 | Includes Splices |
| Pole Rental | Per pole | 1,203 | $22.00 | $26,458 | |
| Make Ready Work, for Overhead | per mile | 60 | $6,000.00 | $360,784 | |
| **Sub-total:** | | | | **$3,564,984** | |

**Total Cost:** **$4,727,484**

Notes:

1. O&M satellite yard locations are unknown. The general areas are: Coffee and Claribel, Claus and Sharon, Beard Industrial park (lease).
2. These fiber and equipment costs are based on the lowest responsive bidder of the most recent ATMS fiber bid project.
3. The fiber buildout does not include Neighborhood Parks or Squares.
4. Assumes physical structures exist for Installation of Fiber and Network Equipment.
5. Proposed Fire stations include 2,11,12, and 13.
6. Includes Redundancy from Fire and Operations and Maintenance locations to the INET ring.

Attachment B

# CFF Update Decision Package - Information Technology

## Wireless Technology Cost

| Item No | Qty | Part Number | Description | Unit Price | Extended Price |
|---|---|---|---|---|---|
| Items 1 - 5 each required per vehicle | | | Includes Buildout Only | | |
| 1 | 237 | LA-4121-1020-US | 56 mbps DS, IEEE 802.11b High Rate Products - 100mW PC Card WLAN adapter with integrated end-cap antenna | $ 200.00 | $ 47,400 |
| 2 | 237 | Omni Antenna | 5.0 db Mobile Omni antenna | $ 69.00 | $ 16,353 |
| 3 | 237 | Mobile Cable Kits | Cable kits for mobile vehicles | $ 25.95 | $ 6,150 |
| 4 | 237 | AMP-250 | 250 milli-watt amplifier | $ 467.00 | $ 110,679 |
| 5 | 237 | Middle ware | Optional middleware software routes data between available networks (TCP/IP to 800 Mhz) in event one network fails | $ 599.00 | $ 141,963 |
| | | | | | |
| | | | **Total Vehicle Buildout:** | | **$ 322,545** |
| Items 6 - 15 are required for a City-Wide | | | Wireless Infrastructure | | |
| 6 | 17 | Antenna 360 | 360 degree wireless base station antenna and hardware including Access point | $ 20,000.00 | $ 340,000 |
| 7 | 8 | Remote Tower | 40 foot Tower to mount Antenna | $ 10,000.00 | $ 80,000 |
| 8 | 8 | Construction | Base, Fencing, Security | $ 5,000.00 | $ 40,000 |
| 9 | 17 | Electrical | Wiring for 120v System | $ 1,200.00 | $ 20,400 |
| 10 | 3 | Micro Base Station | Micro Cell base station and hardware | $ 5,225.00 | $ 15,675 |
| 11 | 3 | 5.7Ghz Point to Point | Point-to-point backhaul links | $ 7,300.00 | $ 21,900 |
| 12 | 600 | Install | Installation and training of entire system | $ 125.00 | $ 75,000 |
| 13 | 17 | 39-42892-01 | WNMS Enterprise Subnet License (1) 1-99 includes maintenance at 15% | $ 395.00 | $ 7,722 |
| 14 | 17 | 39-42897-01 | WNMS Trend & Threshold License (1) 1- 99 Includes maintenance at 15% annually | $ 125.00 | $ 2,444 |
| 15 | 40 | Site Survey | Initial site survey to survey each site and Modesto topology prior to build out | $ 125.00 | $ 5,750 |
| | | | **Total Wireless Infrastructure:** | | **$ 608,891** |
| Totals | | | | | **$ 931,436** |

1. Includes 16 for City and 1 for Main Street Public Safety Training Facility
2. Includes 8 Remote Towers for City Wireless
3. Attenna is 8 - 10 feet, 300 pounds
4. Requires 120v Power
5. Needs Existing Cable to Connect, INET will work
6. Speed Limited to Network Backbone
7. Includes Mobile Equipment for future buildout only

| Future CFF Vehicles | Quanity |
|---|---|
| Engine | 4 |
| Ladder Truck | 2 |
| Air Light & Rescue | 1 |
| Mobile Service | 1 |
| Fire Staff Cars | 3 |
| Police Patrol Cars | 175 |
| CSO | 22 |
| ACO | 5 |
| Other | 24 |
| Total | 237 |

Attachment C

## CFF Update Decision Package - Information Technology

### Training Facility Space and Equipment Cost

| Description | Quantity | Cost | Totals |
|---|---|---|---|
| Wiring Installation | 30 | 100 | 3,000 |
| Raised Floor + Installation | 1,280 | 19 | 24,320 |
| Overhead Projector | 1 | 15,000 | 15,000 |
| **Total:** | | | **$42,320** |

1. Cost per square foot includes construction and furnishings
2. Raised floor includes heavy duty 1500 pound computer room rating

Attachment D

# CFF Update Decision Package - Information Technology

## Computer Room Infrastructure

| **New Computer Room** | |
|---|---|
| Climate Control A/C | 26,000 |
| Fire Protection FM200 System | 52,000 |
| UPS Electrical Backup | 27,500 |
| Security | 2,500 |
| Generator, 520 Amps + Install | 16,780 |
| Raised Floor | 20,976 |
| **Total Computer Room** | **$145,756** |

1. Assumes using floor space of 1280 (40x32) square feet in new City Hall Annex.

Attachment E

# CFF Update Decision Package - Information Technology

## Police Computer Room Space and Infrastructure

| **Computer Room** | |
|---|---|
| 500 Sqr. Ft. expansion @300 ea. | 150,000 |
| Racks (5) | 12,000 |
| Climate Control A/C | 26,000 |
| Fire Protection FM200 System | 30,000 |
| UPS Electrical Backup | 27,500 |
| Security | 2,500 |
| Generator, 520 Amps + Install | 16,780 |
| Raised Floor | 20,976 |
| **Total Computer Room** | **$285,756** |

1. Assumes increase of computer room size by 500 square feet due to growth.

Attachment F

## CFF Update Decision Package - Information Technology

### City Hall Annex Phone Room

| Description | Quantity | Cost | Totals |
|---|---|---|---|
| UPS | 1 | 26,000 | 26,000 |
| Phone System | 1 | 250,000 | 250,000 |
| Includes: | | | |
| ACD | | | |
| Voice Mail System | | | |
| Call Accounting | | | |
| **Total** | | | **$276,000** |

1. Cost per square foot includes wiring
2. Phone system will share existing call accounting and voice mail system
3. Assumes computer room generator supports phone switch
4. The Phone switch size is estimated on the total number of staff at buildout of the new City Hall Annex, 249.

# Air Mitigation

**Buildout Cost of Air Mitigation Capital Facilities**

| | |
|---|---|
| 13 class I trails | |
| Total Trail Cost | **$77,708,000.00** |
| Park and Ride | $700,000 |
| **Total Facilities Cost at Buildout** | **$78,408,000** |

| | |
|---|---|
| Buildout Residential DUEs | 115,500 |
| Cost Per DUE | **$679** |
| New Development DUEs | 44,300 |
| New Develoment's Share of Facilities Cost | $30,073,371 |
| Replacement Cost of Existing Facilities | $13,480,000 |
| Existing DUEs | 61,900 |
| Existing Development's Share of Total Cost | $42,021,257 |
| Existing Deficiency | $28,541,257 |

## Summary of Costs - Non Motorized Development

| Name | Acquisition | Design | Phase | Cost/Unit | Sub-Total | Existing | Total |
|---|---|---|---|---|---|---|---|
| **Peggy Mensinger Trail** | Land Acquisition | 6 | acre | $30,000.00 | $180,000.00 | $180,000.00 | |
| | Planning and Design | 6 | acre | $30,000.00 | $180,000.00 | $180,000.00 | |
| | Construction to date | 1 | LS | $8,000,000.00 | $8,000,000.00 | $8,000,000.00 | |
| | Remaining Phases | 1 | LS | $6,000,000.00 | $6,000,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$14,360,000.00** |
| **Virginia Corridor Class 1 Trail** | Land Acquisition | 24 | acre | $0.00 | $0.00 | | |
| future | Planning and Design | 24 | acre | $30,000.00 | $720,000.00 | | |
| | Construction to date | 0 | LS | $0.00 | $0.00 | | |
| | Remaining Phases | 1 | LS | $13,000,000.00 | $13,000,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$13,720,000.00** |
| **Hetch Hetchy Corridor Class 1 Trail** | Land Acquisition | 18 | acre | $0.00 | $0.00 | | |
| Prescott to Semallon | Planning and Design | 18 | acre | $30,000.00 | $540,000.00 | $540,000.00 | |
| Semallon to Virginia Corridor | Construction to date | 1 | LS | $3,500,000.00 | $3,500,000.00 | $3,500,000.00 | |
| future | Remaining Phases | 1 | LS | $3,500,000.00 | $3,500,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$7,540,000.00** |
| **Prescott to Virginia Corridor Class 1 Trail** | Land Acquisition | 8 | acre | $120,000.00 | $960,000.00 | | |
| future | Planning and Design | 8 | acre | $30,000.00 | $240,000.00 | | |
| | Construction to date | 0 | LS | $0.00 | $0.00 | | |
| | Remaining Phases | 1 | LS | $3,500,000.00 | $3,500,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$4,700,000.00** |
| **Claus Expressway Class 1 Trail** | Land Acquisition | 20 | acre | $120,000.00 | $2,400,000.00 | | |
| future | Planning and Design | 20 | acre | $30,000.00 | $600,000.00 | | |
| | Construction to date | 0 | LS | $0.00 | $0.00 | | |
| | Remaining Phases | 1 | LS | $3,500,000.00 | $3,500,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$6,500,000.00** |
| **Briggsmore Class 1 Trail** | Land Acquisition | 30 | acre | $120,000.00 | $3,600,000.00 | | |
| future | Planning and Design | 30 | acre | $30,000.00 | $900,000.00 | | |
| | Construction to date | 0 | LS | $0.00 | $0.00 | | |
| | Remaining Phases | 1 | LS | $7,000,000.00 | $7,000,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$11,500,000.00** |
| **Kewin to TRRP Gateway Class 1 Trail** | Land Acquisition | 5 | acre | $140,000.00 | $700,000.00 | | |
| future | Planning and Design | 5 | acre | $30,000.00 | $150,000.00 | | |
| | Construction to date | 0 | LS | $0.00 | $0.00 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Remaining Phases | 1 | LS | $5,000,000.00 | $5,000,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$5,850,000.00** |
| **Legion Park to Mitchell Road Class 1 Trail** | Land Acquisition | 3 | acre | $30,000.00 | $90,000.00 | $90,000.00 | |
| future | Planning and Design | 3 | acre | $30,000.00 | $90,000.00 | $90,000.00 | |
| | Construction to date | 1 | LS | $500,000.00 | $500,000.00 | $500,000.00 | |
| | Remaining Phases | 1 | LS | $500,000.00 | $500,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$1,180,000.00** |
| **Monterosso Trailhead at Scenic** | Land Acquisition | 5 | acre | $200,000.00 | $1,000,000.00 | | |
| future | Planning and Design | 5 | acre | $30,000.00 | $150,000.00 | | |
| | Construction to date | 0 | LS | $500,000.00 | $0.00 | | |
| | Remaining Phases | 1 | LS | $2,000,000.00 | $2,000,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$3,150,000.00** |
| **MJC East to MJC West connection** | Land Acquisition | 12 | acre | $120,000.00 | $1,440,000.00 | | |
| future | Planning and Design | 12 | acre | $30,000.00 | $360,000.00 | | |
| | Construction to date | 0 | LS | $500,000.00 | $0.00 | | |
| | Remaining Phases | 1 | LS | $2,500,000.00 | $2,500,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$4,300,000.00** |
| Carver-Bangs to Virginia Corridor | Land Acquisition | 5 | acre | $60,000.00 | $300,000.00 | $300,000.00 | |
| future | Planning and Design | 5 | acre | $20,000.00 | $100,000.00 | $100,000.00 | |
| CFD is funding $900,000 in aqusition, planning | Construction to date | 0 | acre | $150,000.00 | $0.00 | | |
| and construction | Remaining Phases | 5 | EA | $150,000.00 | $750,000.00 | | |
| TOTAL in 2002 Dollars | | | | | | | $1,150,000.00 |
| **Lateral No. 2** | Land Acquisition | 1.8 | acre | $140,000.00 | $252,000.00 | | |
| | Planning and Design | 1.8 | acre | $30,000.00 | $54,000.00 | | |
| | Construction to date | 0 | acre | $240,000.00 | $0.00 | | |
| | Remaining Phases | 1.8 | EA | $240,000.00 | $432,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$738,000.00** |
| **Claus-Gomes Trailhead** | Land Acquisition | 12 | acre | $30,000.00 | $360,000.00 | | |
| future | Planning and Design | 12 | acre | $30,000.00 | $360,000.00 | | |
| | Construction to date | 0 | acre | $240,000.00 | $0.00 | | |
| | Remaining Phases | 1 | LS | $2,300,000.00 | $2,300,000.00 | | |
| **TOTAL in 2002 Dollars** | | | | | | | **$3,020,000.00** |
| **Total Acres** | | 149.8 | acres | | | | |
| **Total Existing** | | | | | | **$13,480,000.00** | |
| **TOTAL** | | | | | | | **$77,708,000.00** |

# Streets

Information Details regarding the Streets Component of the CFF Update are in another supplemental report: "Capital Facilities Fee – Street Projects Update"

This report includes information on Modesto's street exactions policy and definitions of street categories.

# Public Transportation

**Future Capital Facilities Cost**

| | cost | quantity | future cost |
|---|---|---|---|
| Buses | $310,000 | 27 | $8,370,000 |
| Bus Shelters | $3,500 | 54 | $189,000 |
| Bus Stops | $100 | 664 | $66,400 |
| Bus Maintenance Facility (70% federal grant assumed) (38% attributed to new development) | | | $1,254,000 |
| NE Transfer Station (40%federal grant assumed) | | | $480,000 |
| **Total Future Capital Facilities Cost** | | | **$10,359,400** |
| Cost per DUE | | | $99 |

CITY of MODESTO

# City of Modesto Capital Facilities Fees Street Projects Update

# FINAL DRAFT REPORT

*Prepared By:*

omni · means
ENGINEERS · PLANNERS

569CVR02.DSF (26FEB03) 25-4750-01

# City of Modesto Capital Facility Fee Update – Streets

## Final Draft Report

**Prepared for:**

## CITY OF MODESTO

**Prepared by:**

**OMNI-MEANS, LTD.**
**Engineers & Planners**
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**April, 2003**

**25-4750-01**
**R569RPT004**

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# Section 1 - Executive Summary

## Overview

The City of Modesto is in the process of updating their Capital Facilities Fee (CFF) Program. To that end, the City has retained the professional services of ***Town Hall Services*** to be the lead finance consultant, who is updating the following Capital Facilities Fees for ***Fire, Police, Parks, General Government, Public Transit, Air Mitigation and Administration.*** In addition, as a part of this update, the City of Modesto has also retained the professional services of ***OMNI-MEANS*** to prepare the update to the ***Street Projects*** component to the overall Capital Facilities Fee Program. OMNI-MEANS, which is a transportation engineering and planning firm, was retained separately, because a large task within the *Street Projects* update was to update the projected opinions of cost for the proposed transportation capital improvements. Additionally, to assure consistency with Sections 66000 et. seq. of the California Government Code (Assembly Bill 1600), OMNI-MEANS used the City's traffic model to analyze current and projected traffic conditions within the CFF Study Area, as shown in Figure ES-1 to help verify existing deficiencies and future need for transportation capital improvements. Lastly, OMNI-MEANS assisted in the allocation of cost among General Plan land use categories based on land use trip generation characteristics.

## Summary of Findings

The following is a summary of the findings of our study:

1. The intent of the General Plan appears to transform Modesto from a "bedroom community" to a "job center" for the Central Valley. Projected growth in employees (192,000 empl.) far exceeds growth in housing (49,500 du.) and population (170,000 pop.).

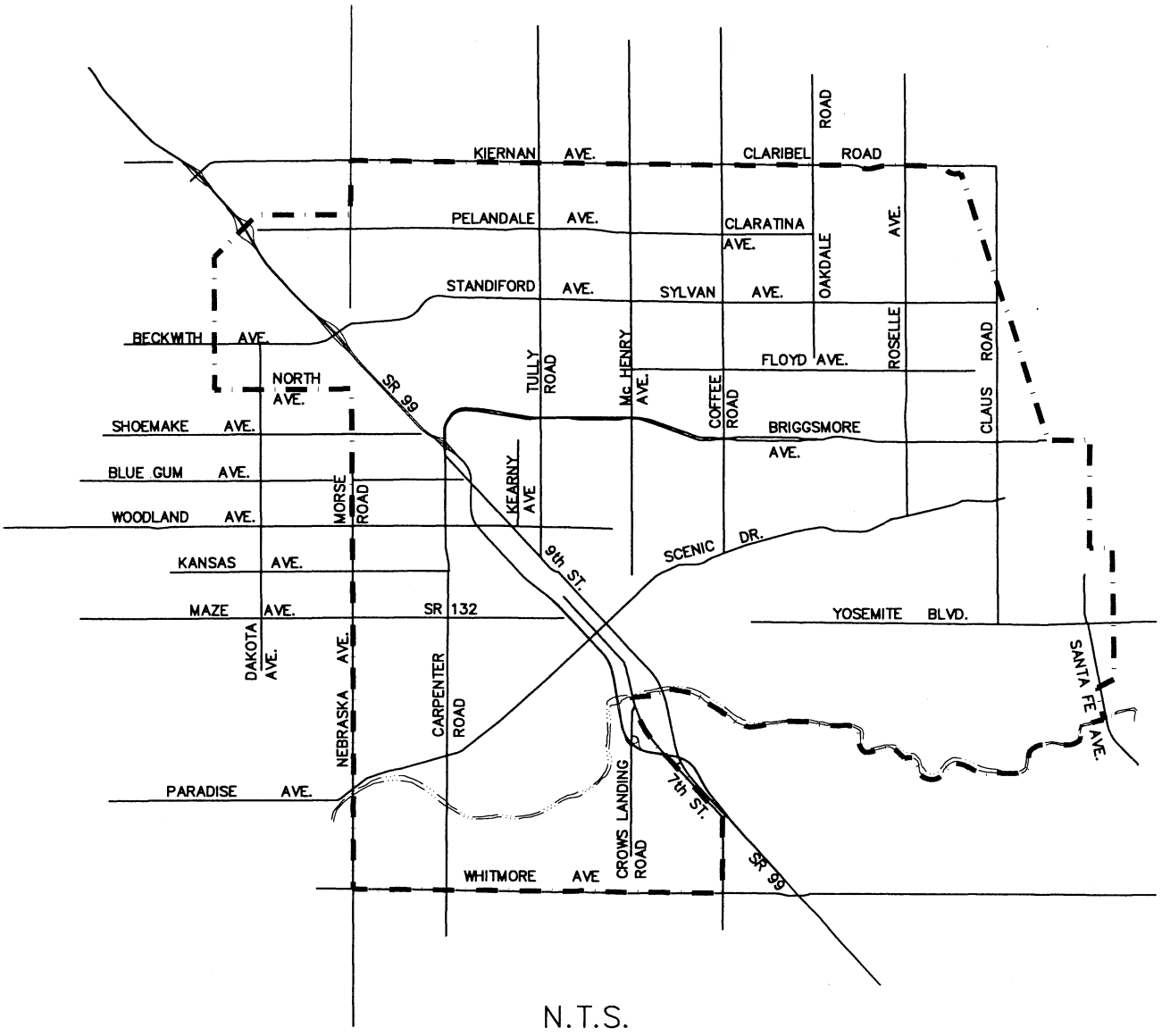
2. With a projected population increase to 370,000 people through General Plan buildout:
   - 33,500 new single family homes and,
   - 16,000 new multi-family homes will be built and occupied.

3. Through buildout of the General Plan, within the transportation modeling categories, the following new employment is anticipated:
   - 41,000 Retail Employees
   - 38,000 Service Employees
   - 14,700 Government Employees
   - 98,000 Other (Industrial) Employees
   - 192,000 Total New Employees

4. Regional transportation facilities throughout the City will need to be expanded to provide adequate capacity to access City employment centers to/from the Central Valley region.

5. Upon buildout of the General Plan Land Use Plan, even with planned circulation improvements in place, Citywide traffic levels will be at or near transportation system capacities.

6. Localized areas throughout the City, but particularly along the Highway 99 corridor, will experience traffic congestion.




N.T.S.

LEGEND:

— · — · — Capital Facilities Fee Boundary

**City of Modesto**
**Capital Facilities Fees - Street Projects Update**

Figure 1

# Study Area

File: 569VIN01.DWG (25FEB03) 25-4750-01

7. Given the City of Modesto's transportation modeling parameters, projected traffic impacts could be understated. To further reduce the potential for future traffic congestion, additional corridor improvements need consideration.

8. The overall estimated cost for Street Improvements is projected to cost over $1.2 Billion of which $913,800,000 is to be included in the CFF Street Projects Fee. Shown in Table ES-1 is the summary of cost and funding allocation.

9. In determining the projected costs for needed circulation improvements, a total of 267 separate cost estimates were prepared for roadway widening, intersection, signalization and interchange improvements using best available unit cost information. Shown in Figure ES 1 are the locations of all of the CFF Street Improvement Projects.

10. In calculating an update to the CFF Streets Fee, a fee spread concept was first presented to the City of Modesto Finance Committee in January, 2003. With input from the Finance Committee, the public and eventually the City Council, the proposed CFF Street Fee has been refined. This proposed refined CFF Street Projects Fee is as presented in ES -2.

CITY of MODESTO
Capital Facility Fee

*Prepared By:*

omni·means ENGINEERS·PLANNERS

# Street Improvement Projects Summary

| | Total Cost | - Exactions | - StanCOG Funding | - City & Other Funding | CFF Cost |
|---|---|---|---|---|---|
| Subtotal Intersection Projects* | $ 288,747,405 | $ 47,251,267 | | | $ 241,496,138 |
| Subtotal Roadway Projects | $ 635,281,873 | $ 108,743,547 | | | $ 526,538,326 |
| Subtotal Traffic Signal Projects | $ 9,893,505 | $ - | | | $ 9,893,505 |
| Subtotal Interchange & Fwy Projects | $ 256,361,152 | $ - | $ 58,019,577 | | $ 198,341,575 |
| Existing Deficiencies | | $ - | $ - | $ 4,587,669 | $ (4,587,669) |
| Adjustments | | | $ 57,878,309 | | $ (57,878,309) |
| Total Street Improvement Projects | $ 1,190,283,936 | $ 155,994,814 | $ 115,897,886 | $ 4,587,669 | $ 913,803,566 |

* Includes existing deficiencies (CFF faciliites only)

**Table ES-1**

*Prepared By:*

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# Fee Spread by Activity

| Land Use Activity | New Development ("Buildout -minus Existing") | Units | ITE-based Daily Trip Generation Rate[1] per Unit | Pass-by Adjustment Factor[2] | Trip Causality Factor[3] | Daily Trip Generation | Percentage Share of Daily Trips | Spread of CFF Improvement Costs | Fee per Unit |
|---|---|---|---|---|---|---|---|---|---|
| Single Family | 33,506 | D.U.'s | 9.57 | 100% | 125% | 400,816 | 32.1% | $ 293,001,036 | **$ 8,745** |
| Multiple Family | 16,089 | D.U.'s | 6.63 | 100% | 125% | 133,338 | 10.7% | $ 97,471,402 | **$ 6,058** |
| Retail (lesser than 50,000 sq.ft.floor area) | 10,234 | Employees | 50.31 | 25% | 77% | 99,113 | 7.9% | $ 72,452,785 | **$ 7,080** |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | 10,234 | Employees | 33.99 | 30% | 77% | 80,354 | 6.4% | $ 58,739,897 | **$ 5,740** |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | 10,234 | Employees | 23.95 | 35% | 77% | 66,056 | 5.3% | $ 48,287,456 | **$ 4,718** |
| Retail (greater than 300,000 sq.ft. floor area) | 10,234 | Employees | 19.31 | 40% | 77% | 60,867 | 4.9% | $ 44,494,161 | **$ 4,348** |
| Service (Medical Office) | 7,652 | Employees | 8.91 | 100% | 77% | 52,498 | 4.2% | $ 38,376,734 | **$ 5,015** |
| Service (General Office) | 30,609 | Employees | 3.32 | 100% | 100% | 101,622 | 8.1% | $ 74,286,833 | **$ 2,427** |
| Government | 14,700 | Employees | 3.32 | 100% | 100% | 48,804 | 3.9% | $ 35,676,319 | **$ 2,427** |
| Other (Office Industrial) | 98,372 | Employees | 2.10 | 100% | 100% | 206,581 | 16.5% | $ 151,013,376 | **$ 1,535** |
| *Total Employees* | *192,269* | *Employees* | | | | | | | |
| *Population* | *171,000* | *Residents* | | | | | | | |
| **TOTAL TRIPS** | | | | **1,250,417** | | **1,250,048** | **100.0%** | **$ 913,800,000** | |

*Notes:*

1. Daily trip-ends for which this category is a source on desitination
2. A 60%, 65%, 70% and 75% trip reduction factor has been applied for retail "pass-by/multi-purpose" trips based on the size of the projected retail facility. The smaller the retail facility, the greater the trip reduction factor due to "pass-by/multi-purpose travel.
3. Responsibility for all home based trips to local retail and medical offices is assigned to residential development.

*Source: Omni-Means, Ltd.*

**Table ES-2**

*Prepared By:*

# Conversion to General Plan Land Use Code Fees

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| Land Use Code Category[1] | Model Employee Density (per gross acre) | Retail Employee Density Share | Service Employee Density Share | Other Employee Density Share | Weighted Fee per Employee | Density Factor (KSF per Employee)[2] | Final Weighted Fee per Unit | Unit | Existing Streets Fee per Unit | Percent Increase in Fee |
|---|---|---|---|---|---|---|---|---|---|---|
| SFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 8,745 | D.U. | $ 3,168 | 176% |
| MFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 6,058 | D.U. | $ 2,172 | 179% |
| Retail (lesser than 50,000 sq.ft.floor area) | *24* | 75% | 25% | 0% | $ 5,916 | 0.450 | $ 13,148 | KSF | $ 4,500 | 192% |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | *24* | 75% | 25% | 0% | $ 4,912 | 0.450 | $ 10,914 | KSF | $ 3,989 | 174% |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | *24* | 75% | 25% | 0% | $ 4,145 | 0.450 | $ 9,212 | KSF | $ 3,799 | 142% |
| Retail (greater than 300,000 sq.ft. floor area) | *24* | 75% | 25% | 0% | $ 3,868 | 0.450 | $ 8,594 | KSF | $ 3,763 | 128% |
| Office (Medical Office) | *45* | 0% | 100% | 0% | $ 5,015 | 0.302 | $ 16,607 | KSF | $ 7,449 | 123% |
| Office (General Office) | *45* | 0% | 100% | 0% | $ 2,427 | 0.302 | $ 8,036 | KSF | $ 4,109 | 96% |
| Business Park (Service) | *25* | 0% | 25% | 75% | $ 1,758 | 0.317 | $ 5,546 | KSF | $ 4,109 | 35% |
| Business Park (Manufacturing) | *25* | 0% | 25% | 75% | $ 1,758 | 0.550 | $ 3,197 | KSF | $ 1,510 | 112% |
| Industrial (Manufacturing) | *18* | 0% | 20% | 80% | $ 1,713 | 0.550 | $ 3,115 | KSF | $ 1,510 | 106% |
| Industrial (Warehousing)[3] | *18* | 0% | 20% | 80% | $ 1,713 | 0.784 | $ 2,186 | KSF | $ 362 | 504% |

1. Assuming average mix of activities for the General Plan land use codes.
2. Institute of Traffic Engineering handbook

Source: Omni-Means, Ltd.

**Table ES-3**

# Section 2 - Travel Demand Analysis and Capital Improvement Requirements

## Introduction

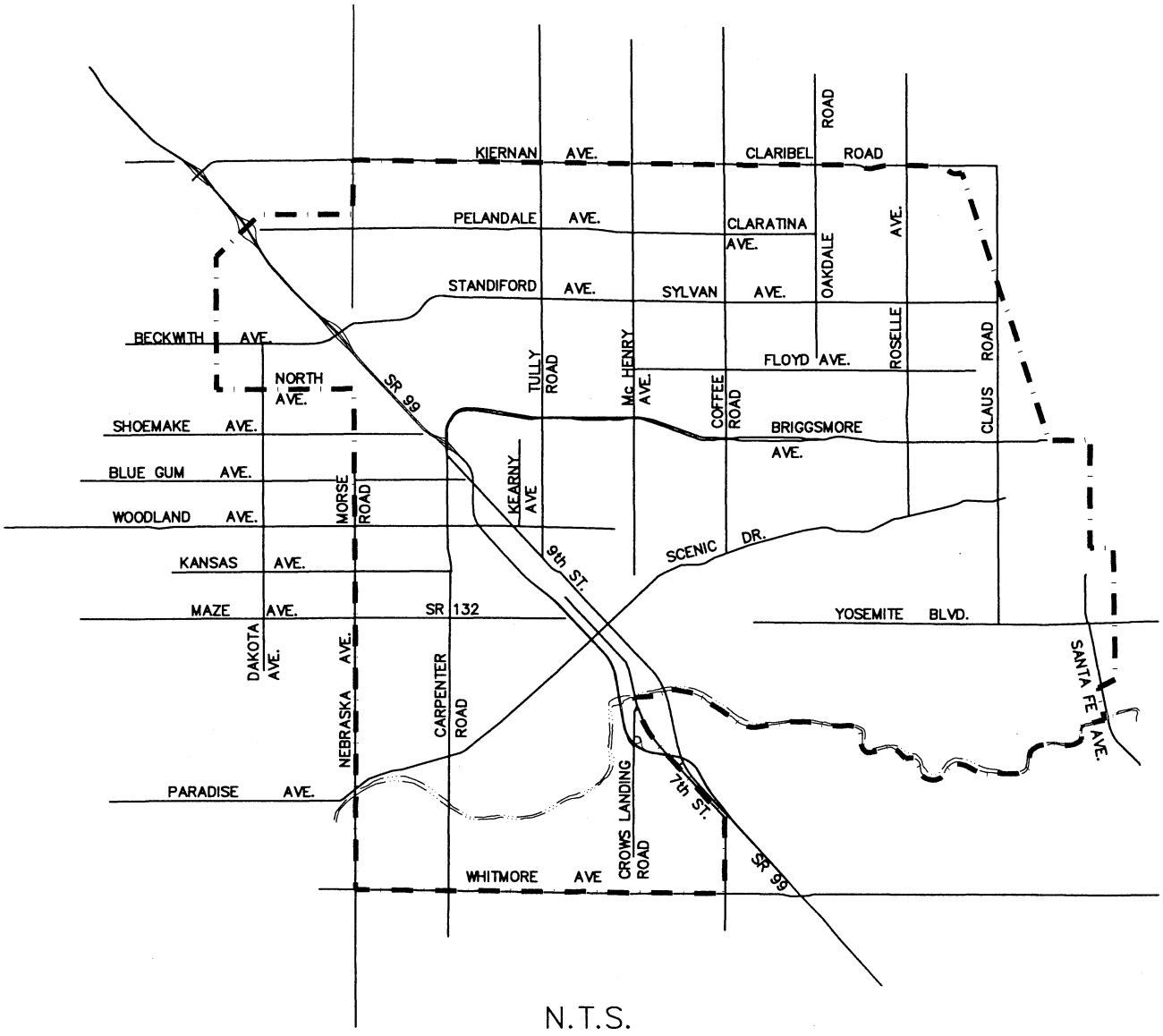
As part of the City of Modesto Capital Facility Fee (CFF) Program Street Projects' Update, a key analysis in fulfilling the requirements of Government Code 66000, is the verification of need for transportation capital improvements throughout the CFF Study Area, as shown in Figure 1, both currently and upon full General Plan build-out. Working with City staff, OMNI-MEANS utilized the City's Traffic Model and other available information to establish existing transportation deficiencies based on the City's Level of Service standards and the projected need for transportation capital improvements to serve future travel demand at acceptable Levels of Service upon build-out of the City's General Plan. The ***Draft Master Environmental Impact Report (MEIR) Update for the City of Modesto Urban Area General Plan and Related Amendments to the Urban Area General Plan*** *(State Clearinghouse #1999082041)* was the base document that was utilized to establish both projected land development and circulation improvements through General Plan build-out. This Draft MEIR document did not address in detail current transportation deficiencies. However, the findings from a study entitled, ***Traffic Signal Retiming and Coordination Project***, conducted by Minegar & Associates for the City, did identified such existing deficiencies. This study evaluated the major arterials throughout the City to improve traffic flow by retiming, minor intersection widening and signal coordination. For the study, an extensive database of daily and peak hour traffic were obtained. Based on these traffic counts, existing deficiencies on the major CFF arterial network were identified and mitigation measures and associated cost suggested.

## Existing Deficiencies

The purpose of identifying existing LOS deficiencies is critical to the CFF Fee Update process for by law existing deficiencies cannot be included in the CFF Fee. According to Government Code 66000, there is no 'nexus' relationship that can be drawn between new development and existing traffic congestion problems for new development did not cause the current problems. Therefore, mitigation of existing traffic problems or deficiencies is the responsibility of existing development, which often falls to the local agency, in this case, the City of Modesto.

To identify the existing transportation LOS deficiencies within the City of Modesto, the City provided OMNI-MEANS with the following report volumes of the ***Traffic Signal Retiming and Coordination Project.***

- *Traffic Signal Retiming and Coordination Project Outside of Modesto's Central Business District:* ***Intersection Geometries – ACAD Schematics*** *Volume I* (Minagar & Associates, Inc. – December 7, 2001);
- *Traffic Signal Retiming and Coordination Project Outside of Modesto's Central Business District:* ***Peak Hour Turning Movement Counts*** *– ACAD Schematics Volume II* (Minagar & Associates, Inc. – December 7, 2001);
- *Traffic Signal Retiming and Coordination Project Outside of Modesto's Central Business District:* ***24-Hour Machine Counts*** *– ACAD Schematics Volume III* (Minagar & Associates, Inc. – December 7, 2001); and
- *Traffic Signal Retiming and Coordination Project Outside of Modesto's Central Business District:* ***2-Hour Off-Peak Saturday Turning Movement Counts*** *– ACAD Schematics Volume IV* (Minagar & Associates, Inc. – December 7, 2001).




N.T.S.

LEGEND:

— · — · — Capital Facilities Fee Boundary

**City of Modesto**
**Capital Facilities Fees - Street Projects Update**

Figure 1

# Study Area

File: 569VIN01.DWG (25FEB03) 25-4750-01

In addition, OMNI-MEANS also obtained the *Synchro 5* traffic signal coordination software files used in the traffic signal retiming and coordination project. LOS values were given based upon the latest methodologies in the *2000 Highway Capacity Manual* and the Level of Service criteria for intersections is as shown in Table 1. The City of Modesto current General Plan LOS standard is "D"; therefore, all LOS values worse than "D" ("E" or "F") were documented and are shown on the Table 2.

A total of 121 signalized intersections within the City of Modesto, excluding the downtown area, were analyzed. Each signalized intersection was analyzed under peak hour conditions during the AM peak period (7:00 to 9:00 AM); midday peak period (11:00 AM to 1:00 PM); the PM peak period (4:00 to 6:00 PM); and the Saturday peak period (11:30 AM to 1:30 PM). The downtown area was excluded because these roadways are built-out and will not be utilizing CFF Fees.

Based upon the analysis and shown on Table 2, 7 of these signalized intersection reported a deficient LOS during one or more of the peak periods. In addition, 10 other intersections on the major street system experience LOS "D" conditions during one or more of the peak hour periods. For those intersections below LOS "D", Table 2 also identifies mitigation measures that would be required to achieve an acceptable level at each location. Although additions to multiple lanes may not be physically, socially, or economically possible, they have been provided in order to determine potential costs. If the mitigation is minor and the costs are deemed affordable, the City may wish to make the necessary improvements to the intersection so that in the future, CFF Fees would be eligible to be applied to that location. For example, if the intersection is widened on a particular approach and the LOS is improved to acceptable levels, in the future, the roadway could be further widened utilizing CFF Fees.

## Review of the City of Modesto General Plan Build-out Traffic Projections

The City's current General Plan projects a considerable amount of both residential and non-residential growth through full build-out of the City. As understood, the intent of the General Plan appears to transform the City from a "bedroom community" to a "job center" for the Central Valley. Through build-out, projected growth in employees would add upwards of 192,000 jobs, which is considerably more than the projected growth in housing of 49,500 new dwelling units and a population increase of 170,000 new people. As provided by the City, the following is a summary of projected new housing and employment.

**Housing**

- 33,500 new single family homes
- 16,000 new multi-family homes
- **49,500 New Homes**

**Employment**

- 41,000 Retail Employees
- 38,000 Service Employees
- 14,700 Government Employees
- 98,000 Industrial Employees
- **192,000 Total New Employees**

**TABLE 1**
**LEVEL OF SERVICE CRITERIA FOR INTERSECTIONS**

| Level of Service | Type of Flow | Delay | Maneuverability | Stopped Delay/Vehicle (sec) | | |
|---|---|---|---|---|---|---|
| | | | | Signalized | Unsignalized | All-Way Stop |
| A | Stable Flow | Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all. | Turning movements are easily made, and nearly all drivers find freedom of operation. | ≤ 10.0 | ≤ 10.0 | ≤ 10.0 |
| B | Stable Flow | Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay. | Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles. | >10 and ≤ 20.0 | >10 and ≤ 15.0 | >10 and ≤ 15.0 |
| C | Stable Flow | Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping. | Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted. | >20 and ≤ 35.0 | >15 and ≤ 25.0 | >15 and ≤ 25.0 |
| D | Approaching Unstable Flow | The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable. | Maneuverability is severely limited during short periods due to temporary back-ups. | >35 and ≤ 55.0 | >25 and ≤ 35.0 | >25 and ≤ 35.0 |
| E | Unstable Flow | Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences. | There are typically long queues of vehicles waiting upstream of the intersection. | >55 and ≤ 80.0 | >35 and ≤ 50.0 | >35 and ≤ 50.0 |
| F | Forced Flow | Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors. | Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions. | > 80.0 | > 50.0 | > 50.0 |

*References:* *Highway Capacity Manual, Special Report No. 209, Transportation Research Board, Third Edition, Updated December 1997.*

**TABLE 2**
**City of Modesto CFF Streets Projects Update**
**Intersections with Existing Deficiencies, Required Mitigations, Feasible Mitigations and Resulting Level of Service**

| INTERSECTION | AM | | | | MIDDAY | | | | PM | | | | MITIGATION MEASURE (Req'd for LOS D) | With Feasible Mitigation | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | EXISTING | | MITIGATED | | EXISTING | | MITIGATED | | EXISTING | | MITIGATED | | | | |
| | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY | | LOS | DELAY |
| 692 | --- | --- | --- | --- | --- | --- | --- | --- | D | 48 | C | 24.4 | WB-dual left turn pockets | --- | --- |
| SR 99 West Ramp (SB) / Standiford Avenue | D | 36 | C | 30.1 | --- | --- | --- | --- | --- | --- | --- | --- | EB-dual thru lanes,shared thru right lane, WB-dual left turn lanes, dual thru lanes | --- | --- |
| Standiford Avenue / Tully Road | --- | --- | --- | --- | D | 36 | --- | --- | F | 77 | C | 33.5 | EB-single left turn lane, dual thru lanes,shared thru right turn lane, NB-dual left turn lanes,dual thru lanes, shared thru right turn lane, WB-dual left turn lanes, dual thru lanes, shared thru right lane | | |
| | | | | | | | | | | | | | *Same mitigation as before except: WB-dual left, single thru, shared thru right* | *D* | *43.1* |
| Standiford Avenue - Sylvan Avenue / McHenry Avenue | --- | --- | --- | --- | D | 40 | --- | --- | D | 51 | C | 34.5 | EB-dual left turn lanes, three thru lanes, single right turn lane, NB-dual left turn lanes,three thru lanessingle right turn lane, WB-single left turn lane, dual thru lanes, single right turn lane, SB-dual left turn lanes, three thru lanes, single right turn lane | | |
| | | | | | | | | | | | | | *Same mitigation as before except: shared thru right on NB and SB approach* | *D* | *37.3* |
| Briggsmore Avenue / McHenry Avenue | D | 41 | --- | --- | --- | --- | --- | --- | F | 81 | C | 32 | EB-dual left turn lanes, dual thru lanes, single right turn lane, NB-dual left turn lanes, three thru lanes, single right turn lane, WB-dual left turn lanes, three thru lanes, single right turn lane, SB-dual left turn lanes, three thru lanes, single right turn lane | | |
| | | | | | | | | | | | | | *Same mitigation as before except: shared thru right on NB and WB approach* | *E* | *62.5* |
| Briggsmore Avenue / Coffee Road | --- | --- | --- | --- | D | 36 | C | 26.6 | --- | --- | --- | --- | SB-single left turn lane, dual thru, single right turn lane | --- | --- |
| Carpenter Road / Woodland Avenue | D | 39 | --- | --- | --- | --- | --- | --- | F | 144 | C | 34 | EB-dedicated thru, right, NB-dual thru lanes, thru right lane, SB-dual thru lanes, thru right lane | --- | --- |
| Carpenter Road / Kansas Avenue | --- | --- | --- | --- | --- | --- | --- | --- | D | 42 | C | 33.9 | NB-three thru lanes, SB-dual left turn lanes | --- | --- |
| Carpenter Road / Maze Boulevard | --- | --- | --- | --- | --- | --- | --- | --- | D | 39 | C | 30.7 | SB-dual thru lanes | --- | --- |
| W. Orangeburg Avenue / Carver Road | E | 76 | C | 32.6 | --- | --- | --- | --- | --- | --- | --- | --- | NB-dedicated through and right turn lane | --- | --- |
| SR 99 East Ramp (NB) / Kansas Avenue | D | 45 | B | 13.3 | --- | --- | --- | --- | --- | --- | --- | --- | NB-dual left turn lanes | --- | --- |
| Kansas Avenue / 9th Street | --- | --- | --- | --- | E | 58 | C | 32.1 | --- | --- | --- | --- | EB-thru right lane and dedicated right turn lane, NB-3 left turn lanes | --- | --- |
| Tully Road / Bowen Avenue | --- | --- | --- | --- | --- | --- | --- | --- | D | 43 | C | 25.7 | EB-dedicated left turn lane, shared thru right lane | --- | --- |
| McHenry Avenue - SR 108 / Orangeburg Avenue | --- | --- | --- | --- | D | 54 | C | 34.9 | D | 53 | --- | --- | EB-left, left thru, thru, and right turn lane | --- | --- |
| McHenry Avenue - SR 108 / E. Morris Avenue | --- | --- | --- | --- | D | 55 | --- | --- | F | 112 | C | 25.1 | EB-dedicated left turn lane, shared thru right, NB-dual thru lanes, shared thru right lane | --- | --- |
| El Vista Avenue - Mitchell Road / Yosemite Boulevard | --- | --- | --- | --- | D | 37 | C | 34.8 | --- | --- | --- | --- | NB-dual thru lanes and a dedicated right turn lane | | |
| | | | | | | | | | | | | | *mitigation is for the SB movement only: single left, dual thru, single right* | *C* | *33.1* |
| Oakdale Road / Scenic Drive | --- | --- | --- | --- | --- | --- | --- | --- | F | 75.4 | C | 32.8 | EB-dual left, four thru lanes, single right turn lane, NB-dual left turn lanes, three thru lanes, single right turn lane,WB-dual left turn lanes, three thru lanes, single right turn lane, SB-dual left turn lanes, three thru lanes, single right turn lane | --- | --- |
| | | | | | | | | | | | | | *The existing mitigation from Minigar & Associates requires 5 lanes total for the NB and SB approaches, and 4 lanes total for the EB and WB approaches.* | | |

Based on these above housing and employment growth projections through General Plan build-out, the City of Modesto furnished OMNI-MEANS with digital *MINUTP* network files containing Average Daily Traffic (ADT) traffic forecasts that were also utilized in the preparation of the City's recent MEIR on the General Plan. In addition, shown in Table 3, are the circulation network changes proposed as a part of the MEIR. These proposed network changes were largely prompted in an effort to reduce significant right of way requirements and associated costs. Given these circulation network changes, OMNI-MEANS reviewed the traffic model projections relative to the City's Level of Service criteria as shown in Table 4 using the following steps:

- A preliminary understanding was first obtained on the projected travel patterns within and through the City in terms of volume and directionality of traffic flow, and the relative traffic utilization of major travel corridors.

- The City standard street cross-sections and associated Level of Service criteria were reviewed for all of the major roadway facilities types within and through the City. Table 4 indicates capacity thresholds for each roadway facility type at various Levels of Service based on applying either a 10% or 8% K Factor (peak hour factor).

- Roadway traffic operations were estimated at a "planning level" for major travel corridors within and through the City, in terms of ADT-based "Levels of Service" (LOS). The City of Modesto's traffic model utilizes an eight (8) percent peak hour relationship to daily traffic volumes (ADT) for 2025 build-out. This eight percent factor is consistent with the currently observed traffic conditions on the Modesto major street system. When computing daily capacity thresholds based on per lane per hour capacities, the daily capacity thresholds increase by twenty-five percent (25%) over typical thresholds based on a more standard ten percent (10%) peak hour factor used in long range transportation planning. For traffic impact analysis purposes, both factors have been presented in Table 5. In the future, transitioning from current LOS 'C' policy for which existing deficiencies were identified, the City in the MEIR will utilize LOS "D" as the minimum acceptable LOS standard, applying daily traffic capacities consistent with the functional capacity classification system utilized within the City. For all travel corridors, those roadway segments that were projected to operate at worse than LOS "D" conditions on a daily basis with the planned capacities in place, were first identified.

## Findings

As can be seen from Table 5, several major arterial facilities within the City are expected to operate at "above-capacity" (LOS "E" or "F") conditions on a daily basis, under General Plan build-out traffic demands (consistent with MEIR), even with the currently planned circulation and capacity improvements in place. Several travel corridors are projected to need improvements above and beyond their planned cross-sections.

The following are the general findings from this analysis.

- Portions of the major east-west travel corridor represented by Beckwith Road, Standiford Avenue and Briggsmore Avenue are projected to experience build-out traffic demands on several segments that exceed currently planned capacities.

**TABLE 3**
**PROPOSED TRAFFIC AND CIRCULATION AMENDMENTS**

| No. | Road Downgrades |
|---|---|
| 1 | Downgrade Kiernan Avenue from the State Route 99 northbound ramp to Sisk 1 Road from an 8-lane Principal Arterial to a 6-lane Principal Arterial. |
| 2 | Downgrade McHenry Avenue from Standiford Avenue to the General Plan Boundary located 1/4 mile north of Kiernan Avenue from an 8-lane Principal Arterial to a 6-lane Principal Arterial. |
| 3 | Downgrade McHenry Avenue between Needham Avenue and Briggsmore Avenue from a 6-lane Principal Arterial to a 4-lane Minor Arterial. |
| 4 | Downgrade Pelandale Avenue between State Route 99 and Dale Road from a 6-lane Class C Expressway to a 6-lane Principal Arterial. |
| 5 | Downgrade Beckwith/Standiford Avenue between the future Brink Road extension and Dale Road from an 8-lane Principal Arterial to a 6-lane Principal Arterial. |
| 6 | Downgrade Carpenter Road between State Route 99 and Maze Boulevard from 6 a 6-lane Class C Expressway to a 6-lane Principal Arterial. . |
| 7 | Downgrade Briggsmore Avenue between State Route 99 and Prescott Road from a 6-lane Class C Expressway to a 6-lane Principal Arterial. |
| 8 | Downgrade Shoemake Avenue between future Morse Road and existing Brink Road from a 4-lane Class C Expressway to a 4-lane Minor Arterial. |
| 9 | Eliminate the connection of the Shoemake Road fly-over State Route 99 to Briggsmore Avenue. |
| 10 | Downgrade Kansas Avenue between Carpenter Road and 9 Street from a 4-lane Minor Arterial to a 2-lane Industrial Collector -Kansas Avenue will be closed west of the Southern Pacific Railroad tracks. |
| 11 | Change the roadway designations in or near the Salida Comprehensive Planning District to achieve consistency with the Circulation Element of the Stanislaus County General Plan. |
| 12 | Change State Route 132 west of Dakota Avenue from a 4-lane Class A Expressway to a 2-lane road. |
| 13 | Change to Sheet 2 of Figure V-1 of the General Plan, Sisk Road between Pelandale Avenue and Kiernan Avenue from a 6-lane Principal Arterial to a 4-lane Minor Arterial. |
| 14 | Change Parker Road between Claus Road and Santa Fe Avenue from a Class C Expressway to a 4-lane Minor Arterial. |
| **No.** | **Additions and Upgrades** |
| 15 | Change State Route 99 between Briggsmore Avenue and Kansas Avenue from a 15 6-lane Freeway to an 8-lane Freeway. |
| 16 | Improve State Route 99 between Crows Landing Road and the Stanislaus/Merced Count line from a 6-lane Freeway to an 8-lane Freeway |
| 17 | Change the State Route 99 northbound on-ramp at the Kiernan Avenue interchange o from 1 to 2 lanes. |
| 18 | Change Bangs Avenue between Tully Road and McHenry Avenue from a 2-lane Minor Collector to a 4-lane Major Collector |
| 19 | Change Claratina Avenue between McHenry Avenue and Oakdale Road from a 4-lane Expressway to a 6-lane Expressway. |
| 20 | Add a 4-lane Minor Arterial designation at new Needham/Kansas Avenue overpass. |
| 21 | Add a 4-lane Minor Arterial designation on the Tuolumne Boulevard extension from State Route 99 to Morton Boulevard. |
| 22 | Change Sisk Road to 3 lanes on the south bound direction between Pelandale Avenue and the Save Mart Shopping Center southern driveway. |
| 23 | Change Standiford Avenue between the State Route 99 north bound ramp and Dale Road from 4 lanes to 6 lanes. |
| 24 | Change Woodland/Coldwell Avenue between Carpenter Road to Kearney Avenue from a 2-lane Minor Collector to a 4-lane Major Collector. |
| 25 | Add Garst Road between Claus Road and Church Street as a 4-lane Minor Arterial. |
| 26 | Change Garner Road between Yosemite Boulevard and Hatch Road from a 4-lane Class B Expressway to a 6-lane Class B Expressway. |
| 27 | Add to Sheet 2 of Figure V-1 of the General Plan, the Pelandale/McHenry; Kiernan/McHenry; Claribel/Coffee; and Claribel/Oakdale interchanges. |
| 28 | Change in sheet 2 of Figure V-1 of General Plan, Service Road from a Class C Expressway to a Class B Expressway from Car enter Road to Faith Home Road |
| 29 | Change to Sheet 2 of Figure V-1 of the General Plan, Dakota Road between Salida Boulevard and the new alignment of State Route 132 from a Class C Expressway to a Class B Expressway. |
| 30 | Change Parker Road from Santa Fe Avenue to the eastern General Plan boundary from a 2-lane road to a 4-lane Minor Arterial. |
| 31 | Change in Sheet 2 of Figure V-1 of the General Plan, extend Floyd Avenue from Claus Road to the Santa Fe R.R. and designate it as a 4-lane Minor Arterial. |

**TABLE 4**
**LEVEL-OF-SERVICE (LOS) CRITERIA FOR ROADWAYS**

| Roadway Segment Type | ADT Capacities (Peak Hour Volumes to use 10% K-factor) | | | | | ADT Capacities (Peak Hour Volumes to use 8% K-factor) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LOS A | LOS B | LOS C | LOS D | LOS E | LOS A | LOS B | LOS C | LOS D | LOS E |
| 6-Lane Divided Freeway | 42,000 | 64,800 | 92,400 | 111,600 | 120,000 | 52,500 | 81,000 | 115,500 | 139,500 | 150,000 |
| 4-lane Divided Freeway | 28,000 | 43,200 | 61,600 | 74,400 | 80,000 | 35,000 | 54,000 | 77,000 | 93,000 | 100,000 |
| 6-lane "Class A" Divided Expressway | 53,300 | 63,300 | 69,300 | 83,700 | 90,000 | 66,600 | 79,100 | 86,600 | 104,600 | 112,500 |
| 6-lane "Class B" Divided Expressway | 44,400 | 52,800 | 57,800 | 69,800 | 75,000 | 55,500 | 66,000 | 72,200 | 87,200 | 93,700 |
| 6-lane "Class C" Divided Expressway | 35,500 | 42,200 | 46,200 | 55,800 | 60,000 | 44,300 | 52,700 | 57,700 | 69,700 | 75,000 |
| 6-lane Divided Arterial (with left-turn lanes) | 32,000 | 38,000 | 43,000 | 49,000 | 54,000 | 40,000 | 47,500 | 53,700 | 61,200 | 67,500 |
| 5-Lane Arterial (4-lane arterial with two-way left-turn median) | 22,000 | 25,000 | 29,000 | 32,500 | 36,000 | 27,500 | 31,200 | 36,200 | 40,600 | 45,000 |
| 4-Lane Arterial (four-lane undivided arterial) | 18,000 | 21,000 | 24,000 | 27,000 | 30,000 | 22,500 | 26,200 | 30,000 | 33,700 | 37,500 |
| 3-Lane Arterial (2-lane arterial with two-way left-turn median) | 11,000 | 12,500 | 14,500 | 16,000 | 18,000 | 13,700 | 15,600 | 18,100 | 20,000 | 22,500 |
| 2-Lane Arterial (two-lane undivided arterial) | 9,000 | 10,500 | 12,000 | 13,500 | 15,000 | 11,200 | 13,100 | 15,000 | 16,800 | 18,700 |
| 2-Lane Collector | 6,000 | 7,500 | 9,000 | 10,500 | 12,000 | 7,500 | 9,300 | 11,200 | 13,100 | 15,000 |

*ADT = Average Daily Traffic, LOS = Level of Service*

*Notes:*

1. *Capacity thresholds are based on Highway Capacity Manual, Fourth Edition, Transportation Research Board, 2000, and City of Modesto's standard capacities.*
2. *All volume thresholds are approximate and assume ideal roadway characteristics. Actual thresholds for each LOS listed above may vary depending on a variety of factors including roadway curvature and grade, intersection or interchange spacing, driveway spacing, percentage of trucks and other heavy vehicles, travel lane widths, signal timing characteristics, on-street parking, volume of cross traffic and pedestrians, etc.*

**TABLE 4**
**LEVEL-OF-SERVICE (LOS) CRITERIA FOR ROADWAYS**

| Roadway Segment Type | ADT Capacities (Peak Hour Volumes to use 10% K-factor) | | | | | ADT Capacities (Peak Hour Volumes to use 8% K-factor) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LOS A | LOS B | LOS C | LOS D | LOS E | LOS A | LOS B | LOS C | LOS D | LOS E |
| 6-Lane Divided Freeway | 42,000 | 64,800 | 92,400 | 111,600 | 120,000 | 52,500 | 81,000 | 115,500 | 139,500 | 150,000 |
| 4-lane Divided Freeway | 28,000 | 43,200 | 61,600 | 74,400 | 80,000 | 35,000 | 54,000 | 77,000 | 93,000 | 100,000 |
| 6-lane "Class A" Divided Expressway | 53,300 | 63,300 | 69,300 | 83,700 | 90,000 | 66,600 | 79,100 | 86,600 | 104,600 | 112,500 |
| 6-lane "Class B" Divided Expressway | 44,400 | 52,800 | 57,800 | 69,800 | 75,000 | 55,500 | 66,000 | 72,200 | 87,200 | 93,700 |
| 6-lane "Class C" Divided Expressway | 35,500 | 42,200 | 46,200 | 55,800 | 60,000 | 44,300 | 52,700 | 57,700 | 69,700 | 75,000 |
| 6-lane Divided Arterial (with left-turn lanes) | 32,000 | 38,000 | 43,000 | 49,000 | 54,000 | 40,000 | 47,500 | 53,700 | 61,200 | 67,500 |
| 5-Lane Arterial (4-lane arterial with two-way left-turn median) | 22,000 | 25,000 | 29,000 | 32,500 | 36,000 | 27,500 | 31,200 | 36,200 | 40,600 | 45,000 |
| 4-Lane Arterial (four-lane undivided arterial) | 18,000 | 21,000 | 24,000 | 27,000 | 30,000 | 22,500 | 26,200 | 30,000 | 33,700 | 37,500 |
| 3-Lane Arterial (2-lane arterial with two-way left-turn median) | 11,000 | 12,500 | 14,500 | 16,000 | 18,000 | 13,700 | 15,600 | 18,100 | 20,000 | 22,500 |
| 2-Lane Arterial (two-lane undivided arterial) | 9,000 | 10,500 | 12,000 | 13,500 | 15,000 | 11,200 | 13,100 | 15,000 | 16,800 | 18,700 |
| 2-Lane Collector | 6,000 | 7,500 | 9,000 | 10,500 | 12,000 | 7,500 | 9,300 | 11,200 | 13,100 | 15,000 |

*ADT = Average Daily Traffic, LOS = Level of Service*

*Notes:*

1. *Capacity thresholds are based on Highway Capacity Manual, Fourth Edition, Transportation Research Board, 2000, and City of Modesto's standard capacities.*
2. *All volume thresholds are approximate and assume ideal roadway characteristics. Actual thresholds for each LOS listed above may vary depending on a variety of factors including roadway curvature and grade, intersection or interchange spacing, driveway spacing, percentage of trucks and other heavy vehicles, travel lane widths, signal timing characteristics, on-street parking, volume of cross traffic and pedestrians, etc.*

TABLE 5
CITY OF MODESTO - MEIR TRAFFIC MODEL BASED BUILD-OUT ROADWAY CAPACITIES AND AVERAGE DAILY TRAFFIC (ADT) DEMANDS ON MAJOR ROADWAYS

| Street Segment | From | To | No. of Lanes (Two-way) | Capacity Class | MEIR Traffic Model Based Future Capacity Configuration | MEIR Traffic Model based Projected Buildout Two-Way ADT Demand | Projected LOS (assuming 10% K-factor) | Projected LOS (assuming K-factor) |
|---|---|---|---|---|---|---|---|---|
| Kiernan Avenue | SR 99 | Chapman Road | 6 | 3 | Six-lane Divided Arterial | 64,400 | F | E |
| | Chapman Road | Dale Road | 6 | 10 | Class B 6-Lane Expressway | 72,500 | E | D |
| | Dale Road | Tully Road | 6 | 10 | Class B 6-Lane Expressway | 74,000 | E | D |
| | Tully Road | McHenry Ave.(SR 108) | 6 | 10 | Class B 6-Lane Expressway | 67,600 | D | C |
| Claribel Road | McHenry Ave.(SR 108) | Coffe Road | 6 | 10 | Class B 6-Lane Expressway | 79,100 | F | D |
| | Coffe Road | Oakdale Road | 6 | 10 | Class B 6-Lane Expressway | 76,500 | F | D |
| | Oakdale Road | Claus Road | 6 | 10 | Class B 6-Lane Expressway | 46,000 | B | A |
| Pelandale Avenue | SR 99 | Dale Road | 6 | 3 | Six-lane Divided Arterial | 72,400 | F | F |
| | Dale Road | Prescott Road | 6 | 10 | Class B 6-Lane Expressway | 70,600 | E | C |
| | Prescott Road | Tully Road | 6 | 10 | Class B 6-Lane Expressway | 83,100 | F | D |
| | Tully Road | McHenry Ave.(SR 108) | 6 | 10 | Class B 6-Lane Expressway | 71,800 | E | C |
| | McHenry Ave.(SR 108) | Coffee Road | 6 | 10 | Class B 6-Lane Expressway | 69,200 | D | C |
| | Coffee Road | Oakdale Road | 6 | 10 | Class B 6-Lane Expressway | 62,200 | D | B |
| | Oakdale Road | Roselle Avenue | 4 | 10 | Class B 4-Lane Expressway | 33,300 | A | A |
| Beckwith Road | Dakota Avenue | Brink Avenue Extn. | 6 | 3 | Six-lane Divided Arterial | 51,100 | E | C |
| | Brink Avenue Extn. | SR 99 | 6 | 3 | Six-lane Divided Arterial | 101,300 | F | F |
| Standiford Avenue | SR 99 | Dale Road | 6 | 3 | Six-lane Divided Arterial | 90,400 | F | F |
| | Dale Road | Conant Ave | 6 | 3 | Six-lane Divided Arterial | 53,800 | E | D |
| | Conant Ave | Prescott Road | 6 | 3 | Six-lane Divided Arterial | 46,500 | D | B |
| | Prescott Road | Tully Road | 6 | 3 | Six-lane Divided Arterial | 35,200 | B | A |
| | Tully Road | McHenry Ave.(SR 108) | 6 | 3 | Six-lane Divided Arterial | 34,200 | B | A |
| Sylvan Avenue | McHenry Ave.(SR 108) | Coffee Road | 6 | 3 | Six-lane Divided Arterial | 37,800 | B | A |
| | Coffee Road | Oakdale Road | 6 | 3 | Six-lane Divided Arterial | 33,700 | B | A |
| | Oakdale Road | Roselle Ave | 6 | 3 | Six-lane Divided Arterial | 26,500 | A | A |
| | Roselle Ave | Claus Road | 4 | 3 | Four-lane Divided Arterial | 24,500 | B | A |
| Briggsmore Avenue | SR 99 | Sisk Road | 6 | 3 | Six-lane Divided Arterial | 96,000 | F | F |
| | Sisk Road | Prescott Road | 6 | 3 | Six-lane Divided Arterial | 67,600 | F | F |
| | Prescott Road | Tully Road | 6 | 6 | Class C 6-Lane Expressway | 51,400 | D | B |
| | Tully Road | McHenry Ave.(SR 108) | 6 | 6 | Class C 6-Lane Expressway | 53,700 | D | C |
| | McHenry Ave.(SR 108) | Coffee Road | 6 | 6 | Class C 6-Lane Expressway | 50,400 | D | B |
| | Coffee Road | Oakdale Road | 6 | 6 | Class C 6-Lane Expressway | 65,800 | F | D |
| | Oakdale Road | Roselle Ave | 6 | 10 | Class B 6-Lane Expressway | 54,000 | D | C |
| | Roselle Ave | Claus Road | 6 | 10 | Class B 6-Lane Expressway | 43,300 | C | A |
| SR 132 (Maze Blvd./Kans | Outside City | Dakota Avenue | 4 | 2 | 4-Lane Highway | 37,800 | B | B |
| | Dakota Avenue | Morse Road | 4 | 11 | Class A 4-Lane Expressway | 49,500 | A | A |
| | Morse Road | Carpenter Road | 4 | 11 | Class A 4-Lane Expressway | 51,300 | A | A |
| | Carpenter Road | SR 99 | 4 | 11 | Class A 4-Lane Expressway | 46,800 | A | A |
| Kansas Ave./Needham S | SR 99 | College Avenue | 4 | 14 | Four-lane Overpass | 54,000 | F | F |
| | College Avenue | 12th Street | 4 | 3 | Four-lane Divided Arterial | 36,900 | F | D |
| | 12th Street | McHenry Avenue | 4 | 3 | Four-lane Divided Arterial | 29,300 | D | B |
| Scenic Drive | Downey Avenue | Coffee Road | 4 | 3 | Four-lane Divided Arterial | 43,200 | F | E |
| | Coffee Road | Rose Ave | 4 | 3 | Four-lane Divided Arterial | 31,500 | D | C |
| | Rose Ave | Oakdale Road | 4 | 3 | Four-lane Divided Arterial | 24,800 | B | A |
| | Oakdale Road | Lakewood Ave | 4 | 3 | Four-lane Divided Arterial | 19,800 | A | A |
| | Lakewood Ave | Claus Road | 4 | 3 | Four-lane Divided Arterial | 9,200 | A | A |
| SR 132 (Yosemite Blvd.) | D Street | Morton St | 6 | 3 | Six-lane Divided Arterial | 40,200 | C | B |
| | Morton St | Santa Rosa Ave | 6 | 3 | Six-lane Divided Arterial | 51,800 | E | C |
| | Santa Rosa Ave | Mitchell Road | 6 | 3 | Six-lane Divided Arterial | 48,100 | D | C |
| | Mitchell Road | Claus Road | 6 | 3 | Six-lane Divided Arterial | 45,600 | D | B |
| | Claus Road | Outside City | 6 | 3 | Six-lane Divided Arterial | 54,200 | F | D |
| Hatch Road | Parkdale Drive | Carpenter Road | 2 | 4 | Two-lane Collector | 20,600 | F | F |
| | Carpenter Road | Crows Landing Rd. | 4 | 6 | Class C 4-Lane Expressway | 36,800 | E | C |
| | Crows Landing Rd. | SR 99 | 4 | 6 | Class C 4-Lane Expressway | 37,400 | E | C |
| | SR 99 | Herndon Road | 6 | 6 | Class C 6-Lane Expressway | 57,900 | E | D |
| | Herndon Road | Moffett Road | 6 | 6 | Class C 6-Lane Expressway | 57,300 | E | C |
| | Moffett Road | Mitchell Road | 6 | 6 | Class C 6-Lane Expressway | 59,100 | E | D |
| | Mitchell Road | Faith Home Road | 6 | 6 | Class C 6-Lane Expressway | 53,000 | D | C |
| | Faith Home Road | Santa Fe Road | 6 | 6 | Class C 6-Lane Expressway | 32,600 | A | A |
| Service Road | Dakota Avenue Extn. | Vivian Road | 4 | 6 | Class C 4-Lane Expressway | 20,400 | A | A |
| | Vivian Road | Carpenter Road | 4 | 6 | Class C 4-Lane Expressway | 24,400 | A | A |
| | Carpenter Road | Crows Landing | 4 | 10 | Class B 4-Lane Expressway | 21,300 | A | A |
| | Crows Landing | Central Avenue | 4 | 10 | Class B 4-Lane Expressway | 30,800 | B | A |
| | Central Avenue | Mitchell Road | 4 | 10 | Class B 4-Lane Expressway | 45,100 | D | C |
| | Mitchell Road | Faith Home Road | 4 | 10 | Class B 4-Lane Expressway | 30,000 | A | A |

TABLE 5
CITY OF MODESTO - MEIR TRAFFIC MODEL BASED BUILD-OUT ROADWAY CAPACITIES AND AVERAGE DAILY TRAFFIC (ADT) DEMANDS ON MAJOR ROADWAYS

| Street Segment | From | To | No. of Lanes (Two-way) | Capacity Class | MEIR Traffic Model Based Future Capacity Configuration | MEIR Traffic Model based Projected Buildout Two-Way ADT Demand | Projected LOS (assuming 10% K-factor) | Projected LOS (assuming 8% K-factor) |
|---|---|---|---|---|---|---|---|---|
| Dakota Avenue Extn. | Pelandale Road | Murphy Road | 4 | 6 | Class C 4-Lane Expressway | 66,800 | F | E |
| | Murphy Road | Beckwith Road | 6 | 10 | Class B 6-Lane Expressway | 73,900 | E | D |
| | Beckwith Road | SR 132 (Kansas Ave.) | 4 | 10 | Class B 4-Lane Expressway | 55,800 | F | D |
| | SR 132 (Kansas Ave.) | Maze Blvd. | 4 | 6 | Class C 4-Lane Expressway | 42,400 | E | D |
| | Maze Blvd. | California Ave | 4 | 6 | Class C 4-Lane Expressway | 34,200 | D | B |
| | California Ave | Paradise Road | 4 | 6 | Class C 4-Lane Expressway | 29,800 | C | A |
| | Paradise Road | Service Road | 4 | 6 | Class C 4-Lane Expressway | 20,400 | A | A |
| | | | | | | | | |
| Carpenter Road | SR 99 | Brink Avenue | 6 | 3 | Six-lane Divided Arterial | 73,500 | F | F |
| | Brink Avenue | Woodland Ave | 6 | 3 | Six-lane Divided Arterial | 60,400 | F | D |
| | Woodland Ave | SR 132 (Kansas Ave.) | 6 | 3 | Six-lane Divided Arterial | 56,100 | F | D |
| | SR 132 (Kansas Ave.) | Maze Blvd. | 6 | 3 | Six-lane Divided Arterial | 66,500 | F | E |
| | Maze Blvd. | California Avenue | 6 | 6 | Class C 6-Lane Expressway | 68,000 | F | D |
| | California Avenue | Paradise Avenue | 6 | 6 | Class C 6-Lane Expressway | 64,200 | F | D |
| | Paradise Avenue | Hatch Road | 6 | 6 | Class C 6-Lane Expressway | 76,900 | F | F |
| | Hatch Road | Whitmore Ave | 6 | 6 | Class C 6-Lane Expressway | 44,300 | C | A |
| | Whitmore Ave | Service Road | 4 | 6 | Class C 4-Lane Expressway | 32,300 | D | B |
| | | | | | | | | |
| Dale Road | Kiernan Avenue | Pelandale Avenue | 4 | 3 | Four-lane Divided Arterial | 28,500 | C | B |
| | Pelandale Avenue | Standiford Avenue | 4 | 3 | Four-lane Divided Arterial | 40,400 | F | D |
| | | | | | | | | |
| Prescott Road | Kiernan Avenue | Pelandale Avenue | 4 | 3 | Four-lane Divided Arterial | 23,700 | B | A |
| | Pelandale Avenue | Standiford Avenue | 4 | 3 | Four-lane Divided Arterial | 34,000 | E | C |
| | Standiford Avenue | Briggsmore Avenue | 4 | 3 | Four-lane Divided Arterial | 23,600 | B | A |
| | | | | | | | | |
| Tully Road | Kiernan Avenue | Pelandale Avenue | 6 | 3 | Six-lane Divided Arterial | 48,200 | D | C |
| | Pelandale Avenue | Standiford Avenue | 6 | 3 | Six-lane Divided Arterial | 51,600 | E | C |
| | Standiford Avenue | Briggsmore Avenue | 4 | 3 | Four-lane Divided Arterial | 37,800 | F | D |
| | Briggsmore Avenue | 9th Street | 4 | 3 | Four-lane Divided Arterial | 26,300 | C | A |
| | | | | | | | | |
| SR 108 (McHenry Ave.) | Outside City | Kiernan Rd./Claribel Rd. | 6 | 3 | Six-lane Divided Arterial | 43,200 | D | B |
| | Kiernan Rd./Claribel Rd. | Pelandale Avenue | 6 | 3 | Six-lane Divided Arterial | 54,900 | F | D |
| | Pelandale Avenue | Standiford Avenue | 6 | 3 | Six-lane Divided Arterial | 61,600 | F | E |
| | Standiford Avenue | Briggsmore Avenue | 6 | 3 | Six-lane Divided Arterial | 60,400 | F | D |
| | Briggsmore Avenue | Needham Street | 4 | 3 | Four-lane Divided Arterial | 45,700 | F | F |
| | | | | | | | | |
| Crows Landing Road | SR 99 | Hatch Road | 6 | 3 | Six-lane Divided Arterial | 63,500 | F | E |
| | Hatch Road | Whitmore Avenue | 6 | 3 | Six-lane Divided Arterial | 65,600 | F | E |
| | Whitmore Avenue | Service Road | 4 | 3 | Four-lane Divided Arterial | 42,100 | F | E |
| | | | | | | | | |
| Coffee Road | Claribel Road | Pelandale Avenue | 4 | 3 | Four-lane Divided Arterial | 33,300 | E | C |
| | Pelandale Avenue | Sylvan Avenue | 4 | 3 | Four-lane Divided Arterial | 45,100 | F | F |
| | Sylvan Avenue | Briggsmore Avenue | 4 | 3 | Four-lane Divided Arterial | 39,700 | F | D |
| | Briggsmore Avenue | Orangeburg Ave | 4 | 3 | Four-lane Divided Arterial | 36,800 | F | D |
| | Orangeburg Ave | Scenic Drive | 4 | 3 | Four-lane Divided Arterial | 28,500 | C | B |
| | | | | | | | | |
| Oakdale Road | Claribel Road | Pelandale Avenue | 6 | 3 | Six-lane Divided Arterial | 37,400 | B | A |
| | Pelandale Avenue | Sylvan Avenue | 6 | 3 | Six-lane Divided Arterial | 53,200 | E | C |
| | Sylvan Avenue | Briggsmore Avenue | 6 | 3 | Six-lane Divided Arterial | 51,700 | E | C |
| | Briggsmore Avenue | Scenic Drive | 6 | 3 | Six-lane Divided Arterial | 49,800 | E | C |
| | Scenic Drive | SR 132 (Yosemite Blvd.) | 6 | 3 | Six-lane Divided Arterial | 46,700 | D | B |
| | | | | | | | | |
| Mitchell Road | SR 132 (Yosemite Blvd.) | Hatch Road | 6 | 3 | Six-lane Divided Arterial | 45,700 | D | B |
| | Hatch Road | Fowler Rd. | 6 | 3 | Six-lane Divided Arterial | 51,300 | E | C |
| | Fowler Rd. | Whitmore Ave. | 4 | 3 | Four-lane Divided Arterial | 50,000 | F | F |
| | Whitmore Ave. | Service Road | 4 | 3 | Four-lane Divided Arterial | 44,400 | F | E |
| | | | | | | | | |
| Claus Road | Outside City | Claribel Road | 6 | 3 | Six-lane Divided Arterial | 56,800 | F | D |
| | Claribel Road | Sylvan Avenue | 6 | 11 | Class A 6-Lane Expressway | 55,500 | B | A |
| | Sylvan Avenue | Briggsmore Avenue | 6 | 11 | Class A 6-Lane Expressway | 72,400 | D | B |
| | Briggsmore Avenue | Scenic Drive | 6 | 6 | Class C 6-Lane Expressway | 88,800 | F | F |
| | Scenic Drive | SR 132 (Yosemite Blvd.) | 6 | 10 | Class B 6-Lane Expressway | 86,900 | F | D |
| | SR 132 (Yosemite Blvd.) | Hatch Road | 6 | 10 | Class B 6-Lane Expressway | 76,800 | F | D |
| | | | | | | | | |
| Faith Home Road | Hatch Road | Service Road | 4 | 10 | Class B 6-Lane Expressway | 49,000 | B | A |

- Similarly, the major north-south facilities represented by Carpenter Road, SR 108 (McHenry Avenue), Coffee Road, Oakdale Road, Crows Landing, Tully Road, Salida Boulevard and Claus Road are also projected to experience build-out traffic demands on several segments in excess of their currently planned capacities.

- As indicated in Table 5, it generally appears that several planned six-lane corridor segments would need to be upgraded by at least one capacity class (from six-lane arterial to Class C expressway, from Class C expressway to Class B expressway, from Class B expressway to Class A expressway, etc.) to sustain reasonably acceptable traffic operations. Similarly, it also appears that some of the planned four-lane divided arterial type facilities would need to be upgraded to six-lane arterial/expressway type facilities.

- Additionally, as a test, rather than incrementally changing the functional classification of the City's arterial and expressway system as indicated in Table 5, upgrading the Kiernan Road – Claribel Road Expressway Class B to a six-lane divided freeway was preliminarily evaluated. Based on the traffic model test, a significant diversion of traffic to a "Kiernan-Claribel freeway" was projected, with a commensurate reduction in traffic demands on parallel facilities such as Pelandale Avenue, Standiford Avenue and Briggsmore Avenue, improving their respective LOS conditions.

- In addition, OMNI-MEANS' review of the model-utilized hourly capacity thresholds for expressways (Classes A, B and C) revealed that the assumed hourly capacities for each expressway class, may be somewhat higher than what could be practically achievable on these facilities. Also, this potential disparity in practical to theoretical capacity is likely to be further aggravated by the fact that due to limited rights of way, full standards for planned improvements are not likely going to be achieved and potential additional driveways/intersections could further be added to planned arterials and expressways.

For the reasons above, OMNI-MEANS is generally concerned that the build-out traffic impacts and the resultant need for improvements could be understated. It is our opinion that "residual or unmitigated" build-out traffic impacts could persist with the currently planned improvements on a number of roadway segments, particularly in the vicinity of State Route 99, requiring a significant amount of additional improvements to achieve City desired Levels of Service. Suffice it to say, all of the General Plan circulation improvements, including the proposed MEIR changes, both additions and deletions, are needed to support future growth and associated increased traffic demand. Therefore, in the following section, all of the General Plan circulation improvements, as updated in the MEIR, need to be cost estimated so that an adequate cost can be determined and appropriately charged.

# Section 3 - Cost Estimate Methodology

Based on the travel demand analysis conducted in the previous section, all of the planned circulation improvements contained in the City's current General Plan and as updated in the current MEIR are needed to help achieve the City's future Level of Service (LOS) 'D' goal and policy. As discussed in the previous section, even with all of the planned circulation improvements, the City's LOS goal will not be achieved on a number of major thoroughfares within the City upon General Plan build-out. There were 267 improvements, including roadway widening, intersections, interchanges and signalization, that have been identified for which cost estimates will be determined for use in the Capital Facilities Fee (CFF) – Street Projects Fee Update.

## Existing Information

In order to update the existing costs, a clear understanding of the General Plan circulation improvements needed to be obtained, including the recent changes as proposed within the MEIR. To gain that understanding, past records and cost estimates also needed to be reviewed and understood. In the following is the data that was collected and reviewed relative to the CFF- Street Projects update.

- Reviewed the Streets Section (VII) of the Transportation Fee of the Final CFF Update Report, dated April 26, 1999, and documentation that was prepared by Town Hall Services and supporting consultants. Reviewed the planned street improvements and their projected costs contained in the existing Capital Improvement Program. Understood the methodology that was used in the impact fee calculations for the Citywide fees.

- Reviewed assumptions utilized in the City's traffic model, such as trip generation rates for various types of land uses and Levels of Service for City roadway facilities. Reviewed the land use categories in the City's current Streets Fee and determined if additional categories were needed.

- Obtained and reviewed Record drawings from Caltrans District 10 for State Route 99 interchanges at Kiernan Avenue, Standiford Avenue, Beckwith Avenue and Briggsmore Avenue.

- Aerial photographs - Digital aerial photographs of the City were obtained by the City. Resolution of the digital aerials was sufficient to identify most surface features.

- County Aerial Photographs – Obtained also from the City was a digital photograph of the City combined with the surrounding County. The resolution of this photograph was significantly less than that within the City, nonetheless, significant surface features were identifiable.

- City GIS database – The City maintains an extensive Geographic Information System (GIS) database of the City from which information was obtained. The information included parcel boundaries, roadway and canal rights-of-way and City limit lines.

## Application of City Street Exactions Policy

Determination of the projects or portions of projects to be funded by the CFF was determined through the application of the City's Street Exaction Policy. This Policy is defined by the City of Modesto, Engineering and Transportation Department Detail No. 323A (Figure 2). The detail defines the limits of

development's responsibility for the dedication of right-of-way dedication and frontage improvements required by a project fronting on a CFF identified roadway or intersection at the time of project construction.

The Streets Exactions Policy was applied to undeveloped property fronting on a CFF project. Exactions were not included for existing developed property, public property (parks, detention basins), utility corridors, railroads, and lands outside of the City's General Plan Boundary and for projects included in the Village 1 Community Facilities District. For large agricultural parcels, exactions were assumed for the parcel with the exception of those portions developed with structures.

## Information Organization

Once obtaining an understanding of the existing available transportation and cost data, to organize a process that is orderly, consistent and could easily be updated was the next challenge. The following is the step-by-step process that was formulated to systematically disaggregate the needed General Plan circulation improvements and generate the cost estimates in a logical format that could be maintained and viewed and understood by the public.

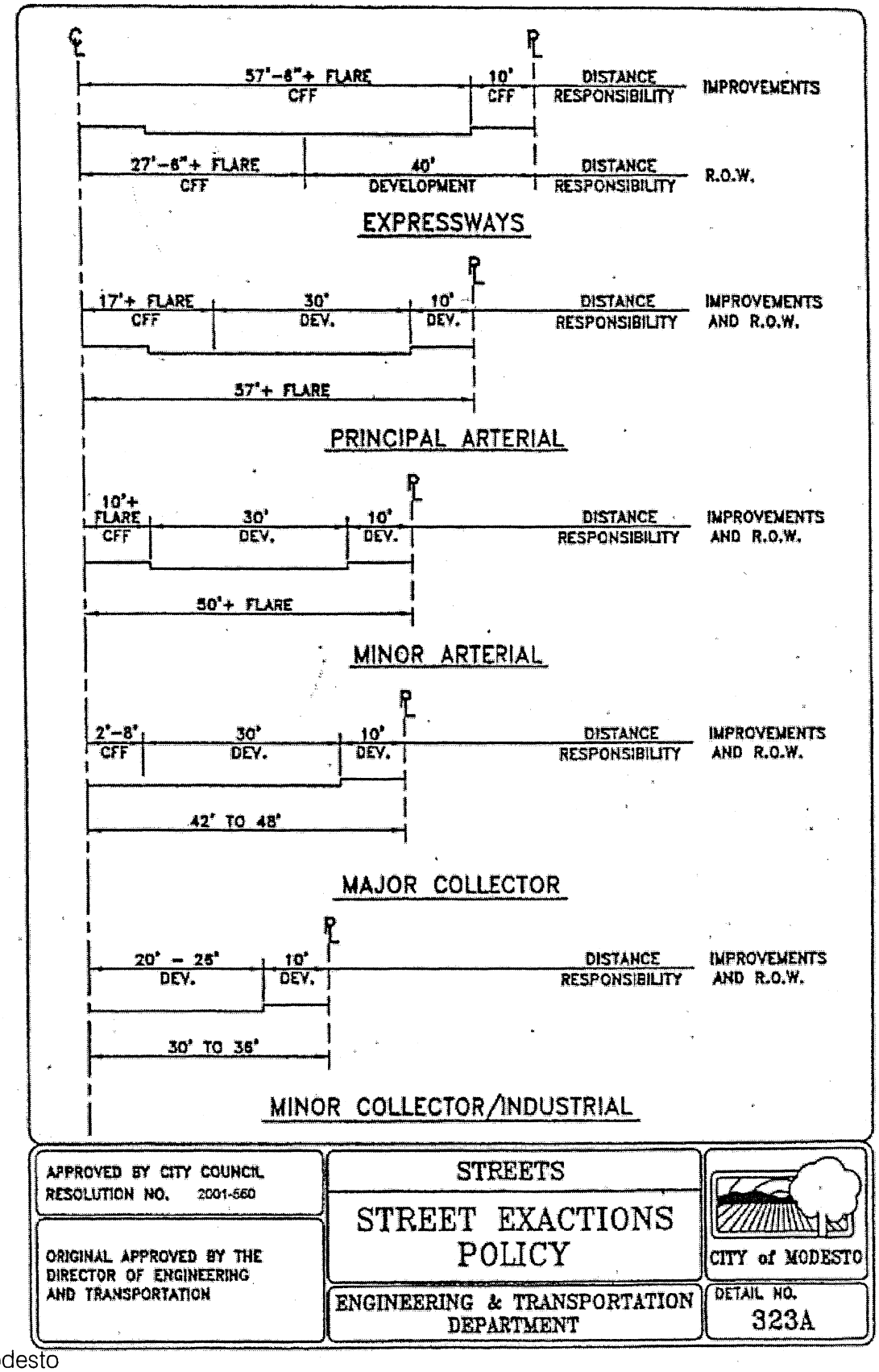
Facilities Map

As a first step, an area wide facilities map was created to visually identify and locate each project and it's limits (Figures 3 through 6). The map was developed using information provided by the City in both AutoCAD and ArcView data formats. Information included street, highway and utility right-of-ways, parcel boundaries, street centerlines and names, City limit lines, General Plan Boundary, etc. City wide aerial photographs supplemented this data.

Object data was next entered for each project type. The object type; rectangle, line, circle, etc, represented the approximate limits of each project; respectively an intersection, street, traffic signal, etc. This visual representation of the projects and their limits insured that areas were not counted more than once. Object data, defining the project name, type, limits, classification, number of lanes or intersection detail, as well as any special considerations was also entered with each object. This data was then extracted from the database to create a project list for each type of project.

Unit Cost Data

Unit prices for components of street projects can vary widely from project to project. Market forces, fuel costs, project location, project size and complexity can all affect a contractors bid price for a project. For the CFF Streets Update, unit cost data were developed using bid tabs from recently completed City street projects and Caltrans Cost Data for 2001 adjusted to 2003. A detailed listing of cost estimate items and descriptions is included in the separately bound Cost Estimate Appendix. Future adjustments to unit cost values is afforded by the application of a cost index based on the Engineering News Record Construction Cost Index (ENR CCI) for San Francisco within the Unit Cost Data spreadsheet. By updating the ENR CCI number, each unit cost item will be proportionally adjusted. Similarly, as the Unit Cost Data spreadsheet is linked to each of the project cost estimates, any change in unit costs will be reflected in the project cost estimates and the overall CFF cost estimate.

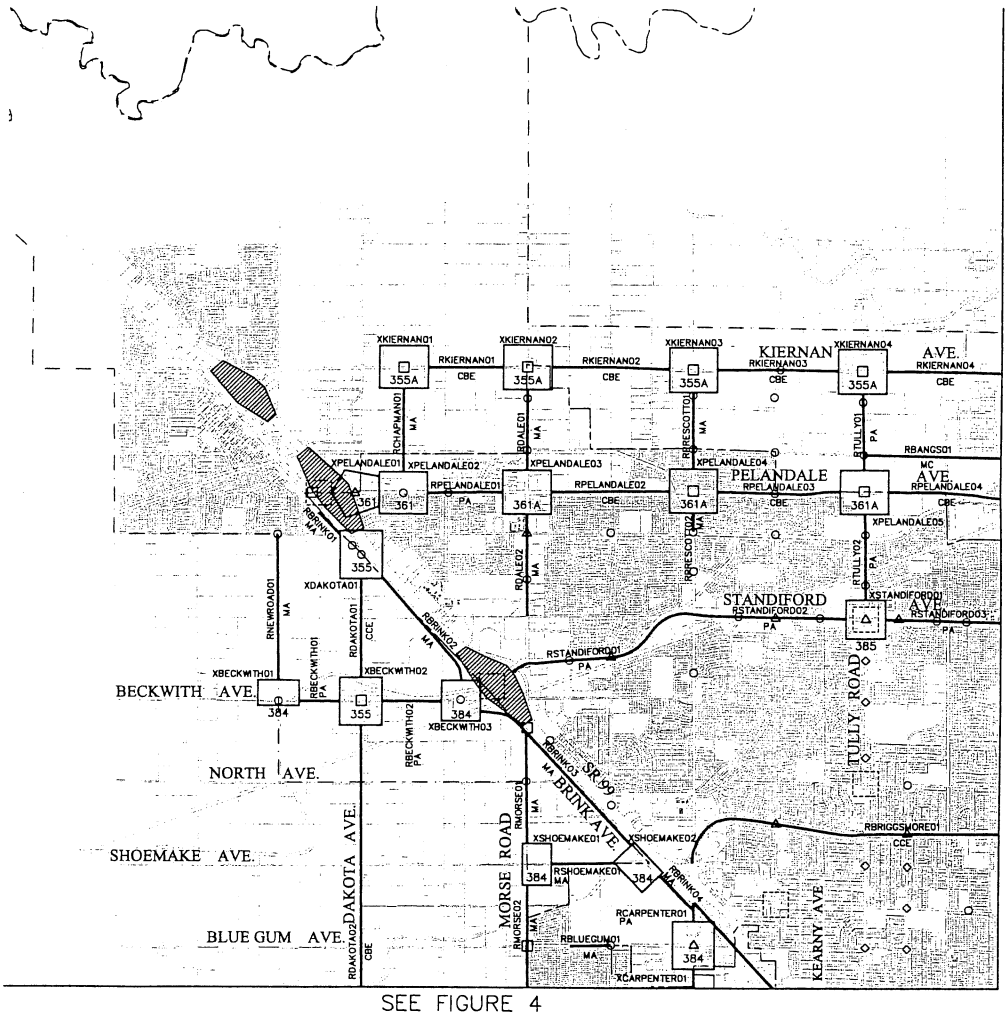



City of Modesto
Capital Facilities Fee - Street Projcts Update

FIGURE 2



DSF File: R569figure2.dsf (022603) 25-4750-01




## NORTHWEST QUADRANT - FIGURE 3

**CITY OF MODESTO CAPITAL FACILITY FEE UPDATE**

CITY of MODESTO

**CFF IMPROVEMENT PROJECTS**

- □ NEW TRAFFIC SIGNAL (HIGH COST)
- ○ NEW TRAFFIC SIGNAL (LOW COST)
- △ TRAFFIC SIGNAL MODIFICATION (HIGH COST)
- ◇ TRAFFIC SIGNAL MODIFICATION (LOW COST)
- ROAD IMPROVEMENT PROJECT
- INTERSECTION IMPROVEMENT PROJECT
- INTERCHANGE IMPROVEMENT PROJECT
- INTERSECTION WITH EXISTING DEFICIENCIES
- MODESTO CITY LIMIT
- CITY OF MODESTO GENERAL PLAN BOUNDARY

NORTH

SCALE: 1"=4000'

2000 0 2000 4000 6000

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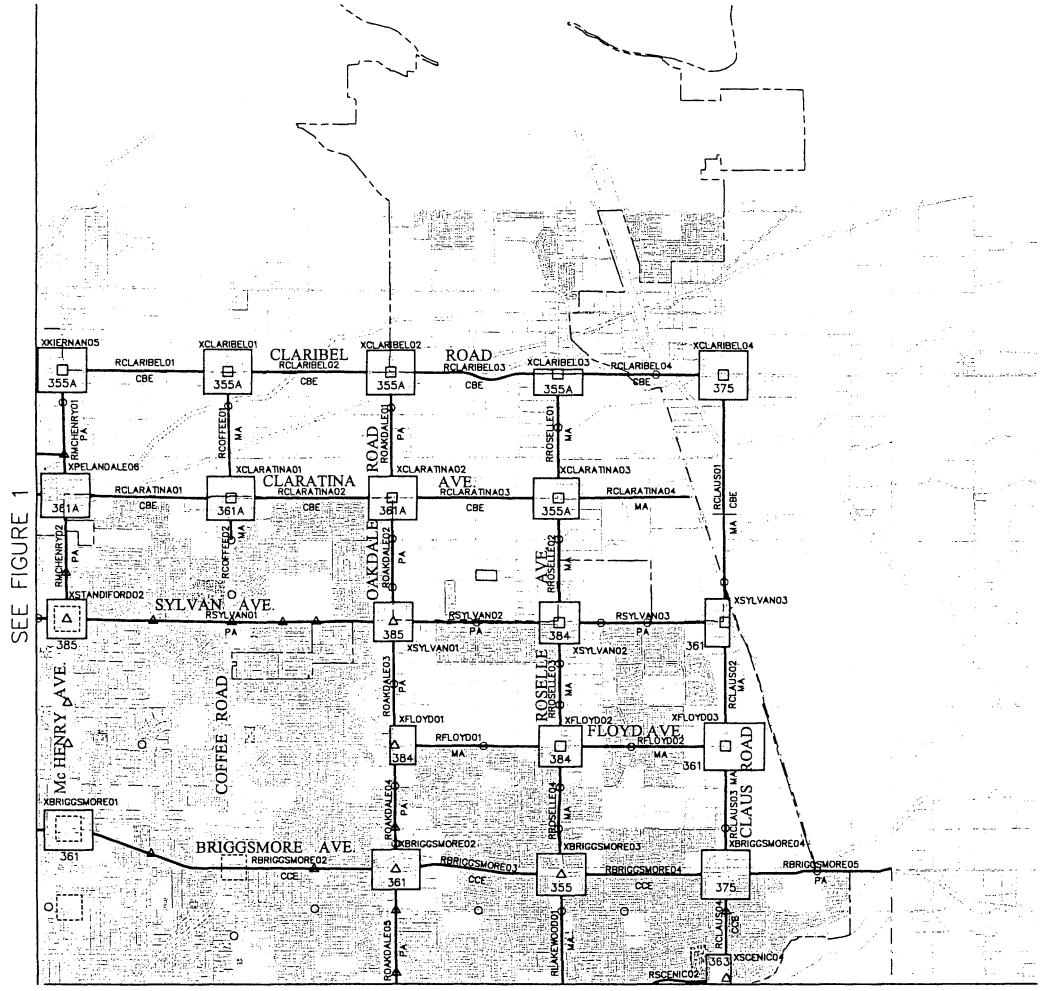



## NORTHEAST QUADRANT - FIGURE 4

**CITY OF MODESTO CAPITAL FACILITY FEE UPDATE**

CITY of MODESTO

**CFF IMPROVEMENT PROJECTS**

- □ NEW TRAFFIC SIGNAL (HIGH COST)
- ○ NEW TRAFFIC SIGNAL (LOW COST)
- △ TRAFFIC SIGNAL MODIFICATION (HIGH COST)
- ◇ TRAFFIC SIGNAL MODIFICATION (LOW COST)
- —— ROAD IMPROVEMENT PROJECT
- □ INTERSECTION IMPROVEMENT PROJECT
- ▨ INTERCHANGE IMPROVEMENT PROJECT
- ⬚ INTERSECTION WITH EXISTING DEFICIENCIES
- ----- MODESTO CITY LIMIT
- — — CITY OF MODESTO GENERAL PLAN BOUNDARY

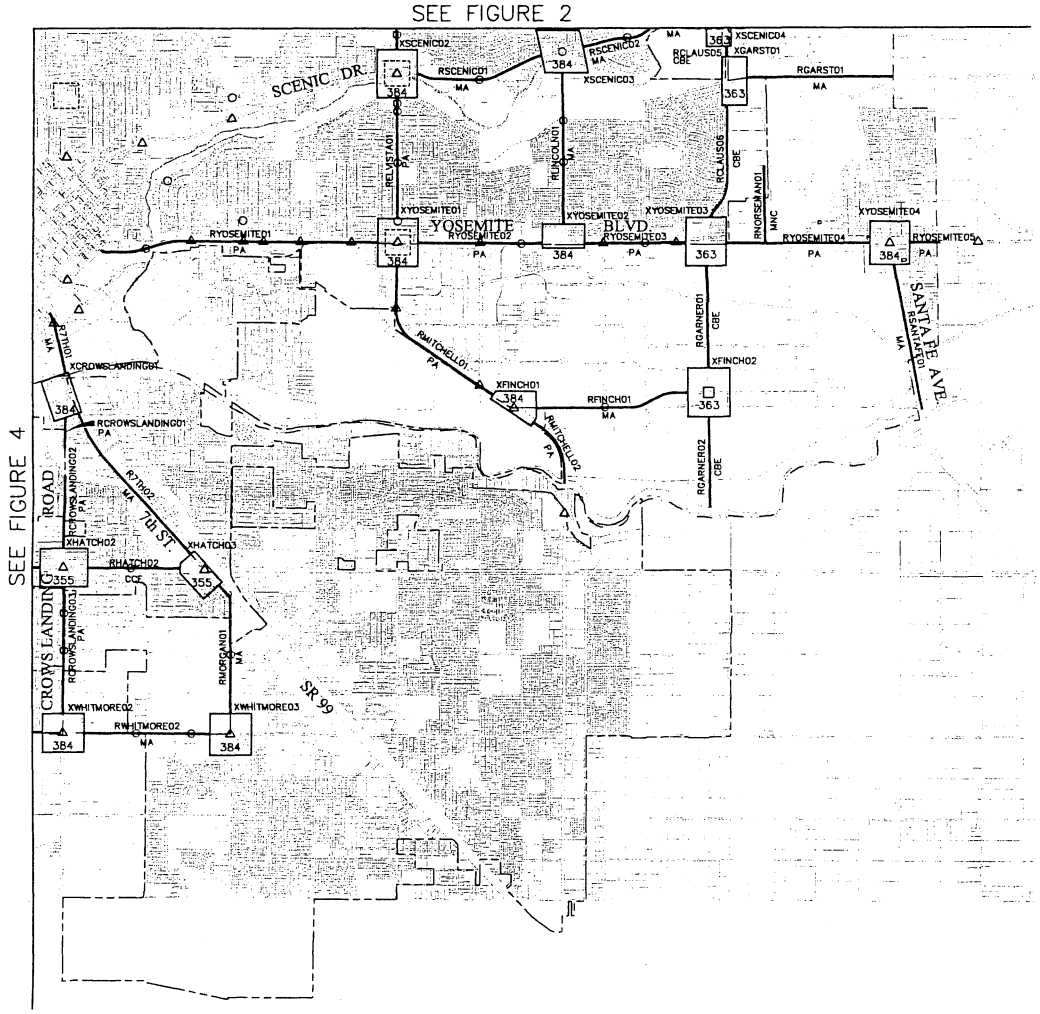
NORTH

SCALE: 1"=4000'

2000 0 2000 4000 6000

omni-means ENGINEERS-PLANNERS

SEE FIGURE 2




SEE FIGURE 4

SOUTHEAST QUADRANT - FIGURE 5

# CITY OF MODESTO CAPITAL FACILITY FEE UPDATE

CITY of MODESTO

**CFF IMPROVEMENT PROJECTS**

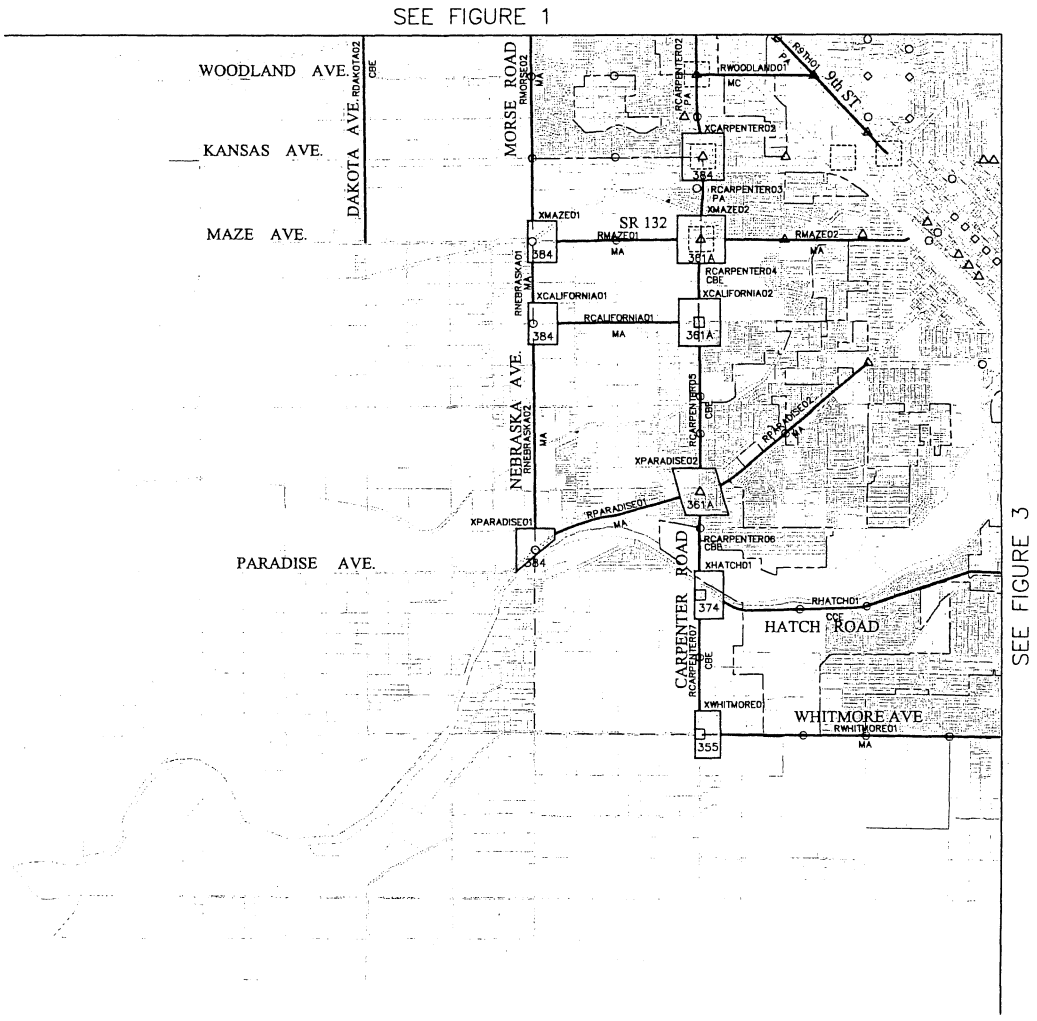
- NEW TRAFFIC SIGNAL (HIGH COST)
- NEW TRAFFIC SIGNAL (LOW COST)
- TRAFFIC SIGNAL MODIFICATION (HIGH COST)
- TRAFFIC SIGNAL MODIFICATION (LOW COST)
- ROAD IMPROVEMENT PROJECT
- INTERSECTION IMPROVEMENT PROJECT
- INTERCHANGE IMPROVEMENT PROJECT
- INTERSECTION WITH EXISTING DEFICIENCIES
- MODESTO CITY LIMIT
- CITY OF MODESTO GENERAL PLAN BOUNDARY

NORTH

SCALE: 1"=4000'

2000 0 2000 4000 6000

omni·means ENGINEERS PLANNERS




## SOUTHWEST QUADRANT - FIGURE 6

**CITY OF MODESTO CAPITAL FACILITY FEE UPDATE**

CITY of MODESTO

**CFF IMPROVEMENT PROJECTS**

- NEW TRAFFIC SIGNAL (HIGH COST)
- NEW TRAFFIC SIGNAL (LOW COST)
- TRAFFIC SIGNAL MODIFICATION (HIGH COST)
- TRAFFIC SIGNAL MODIFICATION (LOW COST)
- ROAD IMPROVEMENT PROJECT
- INTERSECTION IMPROVEMENT PROJECT
- INTERCHANGE IMPROVEMENT PROJECT
- INTERSECTION WITH EXISTING DEFICIENCIES
- MODESTO CITY LIMIT
- CITY OF MODESTO GENERAL PLAN BOUNDARY

NORTH

SCALE: 1"=4000'

2000 0 2000 4000 6000

omni·means ENGINEERS PLANNERS

Project Cost Estimates

Project cost estimates were developed for each of the projects identified on the Facilities Map. The types of projects included:

- Existing Deficiencies
- Intersections
- Roadways
- Traffic Signal Projects
- Freeway and Interchanges, including urban interchanges

Roadway and intersection project cost estimate file names were organized by project type and ordered from west to east and north to south. For example, the first road project (furthest west) along Briggsmore Ave is named RBriggsmore01, the first intersection XBriggsmore01, and so on. Project cost estimate files for existing deficiencies are proceed by an "E" and sequentially numbered. Traffic Signal Projects include only standalone traffic signal projects not associated with another roadway or intersection project. Individual cost estimate files were not prepared for these projects; rather they were summarized in a summary spreadsheet. Freeway and interchange project cost estimates were either prepared individually, as is the case for the State Route 99 interchanges, or derived from other existing estimates prepared by the City, State or others. These estimates include the intersecting roadway name preceded by an "I".

All project cost estimates are linked to a master document containing summary sheets totaling each type of improvement. These summary sheets are in turn linked to a master summary sheet totaling the CFF Streets Improvement cost.

## Determination of Proposed Improvements and Estimated Costs

### Roadway Corridor Drawings

After identification of the limits of the various roadway and intersection projects, AutoCAD drawing files were created of each roadway corridor to facilitate the layout of, on a preliminary basis, the improvements for each roadway and intersection project. Each AutoCAD drawing file queried information from the base drawing (Facilities Map) and therefore included the limits of each project as well as all available information regarding parcel and right-of-way lines. The appropriate digital aerial photographs were also inserted into the computer drawing to aid in the layout and quantification of the proposed improvements and right-of-way impacts.

Each project was initially laid out utilizing standard right-of-way widths or intersection geometries as defined by the City standards for the classification of roadway and/or intersection. As was the case with many of the proposed projects, utilizing the standard roadway typical section, centered down the existing right-of-way, or the standard intersection template, centered over the existing intersection, resulted in excessive right-of-way impacts. In these instances, an initial attempt to minimize the impacts was made by adjusting the alignment of the roadway to maximize the use of existing right-of-way and minimize the impact to existing development.

In areas where adjustment to the roadway alignment alone was not sufficient to minimize the right-of-way impacts to a reasonable level, a non-standard typical section was developed. The guidelines for developing non-standard typical sections were based on the following:

- Assume a minimum lane width of 11' with the exception of the inside left turn lane of a dual left turn pocket which may be reduced to 10'.

- Where bike lanes are shown on the Master Plan, provide a minimum 4' wide bike lane where there is no curb and gutter, and 5' (including the gutter pan) where there is curb and gutter.

- Provide 6' from lip of gutter to back of walk minimum. This results in a minimum sidewalk width of 4'10".

- Where there is no bike lane or curb and gutter, provide a minimum 2' paved shoulder.

- A 4' median between left turn pockets and opposing traffic will be provided where possible.

- Where the roadway is adjacent to a railroad right-of-way, the sidewalk may be eliminated provided alternative pedestrian facilities are available.

Another consideration in the determination of the proposed roadway typical section includes the planned locations of Class 1 bike paths. The City of Modesto Non-Motorized Transportation Master Plan (July 1996) was referenced to determine whether a bike lane was proposed along within each project. Where Class 1 bike paths were determined to be required, the proposed typical section included the right-of-way for the bike path, however the cost to construct the bike path was not included in the project cost estimate.

Once a typical section was determined, the roadway was laid out in the corridor drawing between each major intersection. Additional points of access, such as minor intersections between major intersections, were then added to the drawing.

Finally, quantities of the various cost estimate items were measured in the drawings. In all cases, this task included application of the City's Streets Exaction Policy.

## Existing Deficiencies

As discussed in the previous section, which identified both existing deficiencies and their mitigations, preliminary layouts were developed for each CFF intersection identified as having an existing deficiency. The required traffic movements were added to the intersection utilizing the guidelines previously described for developing a non-standard typical section. Similar to the roadway and intersection projects, available aerial photography was used to identify major features that could influence the cost estimates and to layout the proposed mitigation to correct the existing deficiency.

## Traffic Signal Projects

Traffic signal costs may be stand-alone projects, included in intersection project costs or in the case of minor intersection improvements, included in roadway project costs. Where a cost for a signal improvement is included, the location was noted on the cost estimate spreadsheet. Guidelines for assigning costs for standalone traffic signal improvements were based on the following:

- New traffic signal projects were separated into high cost (large intersection) and low cost (smaller intersection)
- High cost was based on traffic signal for 6-lane by 6-lane intersection
- Low cost was based on traffic signal for 4-lane by 2-lane intersection

- Modified traffic signal based separated into high cost (large intersection) and low cost (smaller intersection)
- The cost for a high cost modification is determined by the number of quadrants affected where the cost per quadrant is equal to ¼ of the cost for a new signal (high cost). A quadrant is considered affected if the signal standard is relocated.
- A Low cost modification is measured by the number of legs affected (where there is no affect to the signal standard), cost is based on an estimated cost per leg for a fictitious standardized modification project.

## Freeway Interchange Concepts

As a first step, project daily traffic volumes for the ramps and over crossing roadways for each interchange location were obtained form the City of Modesto's traffic demand model. The daily projections were next reduced to estimate peak hour volumes using an 8% peak hour factor (consistent with the model). Due to the macro level of information provided by the model, it was necessary to estimate traffic volumes on some movements based on an overall balance of traffic volumes. These estimated peak hour volumes, essentially an indicator of traffic flow, were then used as a guide in the design of a proposed interchange concept.

To create a base map for the future interchange improvements, record drawings for the construction of State Route 99 were obtained from Caltrans and entered into an AutoCAD drawing. This information was further supplemented by information from the Facilities Base Map and digital aerial photographs.

One interchange concept was developed for each CFF freeway interchange. Each concept is intended to address the anticipated traffic volumes and directionality within the framework of Caltrans design standards and expectations. This is not say, however that Caltrans would approve the concepts, or that they address all potential issues that may be raised through a more thorough evaluation of alternatives. The concepts do, however, by utilizing the Caltrans' Preliminary Project Cost Estimate Summary Worksheets, represent an order of magnitude of potential cost.

## Cost Estimate Items

Multiple cost estimate items were considered in the development of the roadway and intersection cost estimates. Where possible, relationships between construction items were developed and incorporated into the cost estimate sheets to simplify the quantity take-off process and reduce the potential for errors. An example of such a relationship is the correlation between asphalt concrete, aggregate base and roadway excavation. A single measurement of new paved area is sufficient to derive a quantity for all three of these cost estimate items. Of course, many major items do not have a consistent relationship with other items and must be measured separately. Following is a partial list of items considered in the cost estimate process and the criteria for their measurement:

***Roadway Excavation*** – Categorized as either developed or undeveloped. Developed excavation carries a higher price tag due to the presence of existing improvements that must be protected, potential underground utilities, maintaining of traffic and access, off haul of concrete and the typical limitations on work area associated with street widening in an urbanized area. Undeveloped excavation cost is associated with construction of a new roadway in a rural or undeveloped setting. Typically larger equipment is utilized and fewer obstructions to its efficient use are encountered.

***Roadway Structural Section*** – An assumed R-Value of 30 and T.I. of 11 was used for all roadway projects resulting in a 0.55' Asphalt Concrete over 1.4' Aggregate Base structural section.

***Median Island Treatment*** – Three conditions were considered: landscaped medians, medians with barrier rail and paved medians within intersections. A unit cost, based on area, for each condition was determined based on a typical median section.

***Storm Drainage*** – The City of Modesto utilizes both piped drainage systems and rock well drainage systems. The determination of which type of drainage system to be used on each project, rock well or piped, was beyond the scope of this estimate. Therefore, for estimate purposes, storm drainage unit costs were based on a piped storm drainage system with inlets spaced at 400 ft. and on the replacement or addition of individual drain inlets. New, trunk line storm drain systems were only provided with new roadways, not roadway widening.

***Sound walls*** – Assumed required in locations where a roadway is widened into existing residential structure that will remain. The length of parcel frontage for the affected residence determined the length of sound wall. The per lineal footage cost for sound walls is based on a 9-foot high masonry wall.

***Right-of-way*** – Four categories of right-of-way were developed and measured as acquired through either the exactions policy or by the CFF Street Fee.

- *Undeveloped* – measured by the square foot.
- *Landscaped* – Property that has been improved and/or is in-use, such as landscaping, orchard, paved area, etc. measured by the square foot
- *Building* – measured by the total square footage of an individual building when any portion of a building is impacted by an improvement.
- *Parking Space* – measured by total number of parking spaces, or portions thereof, impacted by the improvement.

***Support Costs and Contingencies*** – Each cost estimate includes items that were measured or otherwise quantified directly from the roadway corridor drawings, however there are other items associated with each project that were not separately measured but nonetheless likely to be required. Therefore, the support costs and contingencies provided in each estimate represent project components that were not specifically measured, either due to the preliminary nature of the project plans, or represent known work items that typically fall within a percentage range of project construction costs. The following support costs and contingency values were added to the estimated construction cost as defined below:

- *20 % Construction Contingency* – Applied to the subtotaled construction cost, the construction item component includes any construction related item not specifically identified elsewhere. Items could include; mobilization, erosion control, unforeseen utility relocations, adjusting utility boxes, valves and manholes to grade, unsuitable material, import and export of material, demolition, increase in quantities; right-of-way costs such as providing access, relocating signage, repair to adjacent property (20%).

- *10% Construction Administration* – This component includes Construction Inspection and Resident Engineer services (5%), Soils and materials testing (1%), construction staking (2%), and City Administration (2%).

- *0% to 5% Traffic Control Contingency* – Applied to the subtotaled construction cost based on the amount of traffic within the project area and degree of existing development. For instance 0% for a new roadway, 5% for widening to a major urban expressway. Traffic control items may include;

flaggers, warning devices and signs, temporary striping, pavement, barriers and signs, pilot vehicles, temporary traffic signals, lighting and detours.

- *20% Engineering and Administration Support and Contingency* – Applied to the subtotaled construction cost, this contingency addresses the project development support costs including pre-design studies (2%), environmental studies, reports and permits (2%), topographic design surveys (1%), geotechnical reports (1%), engineering design and plan preparation (8%), and City Administration (1%), Scope Definition Contingency (5%).

- *10% Right-of-Way Acquisition Support Costs* – Applied to the subtotaled right-of-way costs, this contingency addresses the support costs required to acquire right-of-way including property appraisals and title reports (1.5%), Phase I Reports and Phase II hazardous material testing (1.5%), Title Insurance and escrow fees (1%) and Property Agent, legal description, staff support and legal support (6%).

Shown in Table 6 is the summary list of 267 circulation improvement costs that total $921,432,294. A separate appendix has been provided to the City that contains all of the opinions of cost.

**CITY of MODESTO**
**Capital Facility Fee**

*Prepared By:*

omni·means ENGINEERS · PLANNERS

# Street Improvement Projects Summary

| | Total Cost | - Exactions | - StanCOG Funding | - City & Other Funding | CFF Cost |
|---|---|---|---|---|---|
| Subtotal Intersection Projects* | $ 288,747,405 | $ 47,251,267 | | | $ 241,496,138 |
| Subtotal Roadway Projects | $ 635,281,873 | $ 108,743,547 | | | $ 526,538,326 |
| Subtotal Traffic Signal Projects | $ 9,893,505 | $ - | | | $ 9,893,505 |
| Subtotal Interchange & Fwy Projec | $ 256,361,152 | $ - | $ 58,019,577 | | $ 198,341,575 |
| Existing Deficiencies | | $ - | $ - | $ 4,587,669 | $ (4,587,669) |
| Adjustments | | | $ 57,878,309 | | $ (57,878,309) |
| Total Street Improvement Projects | $ 1,190,283,936 | $ 155,994,814 | $ 115,897,886 | $ 4,587,669 | $ 913,803,566 |

| No. | PROJECT ID | PROJECT EXTENTS | TOTAL COST | CFF COST |
|---|---|---|---|---|
| **ntersections** | | | | |
| 1 | XBECKWITH01 | NEW ROAD | $ 3,301,995 | $ 1,777,024 |
| 2 | XBECKWITH02 | DAKOTA | $ 14,126,495 | $ 12,665,686 |
| 3 | XBECKWITH03 | BRINK | $ 4,598,533 | $ 3,007,444 |
| 4 | XBRIGGSMORE01 | MCHENRY | $ 5,323,515 | $ 5,323,512 |
| 5 | XBRIGGSMORE02 | OAKDALE | $ 5,591,199 | $ 5,473,907 |
| 6 | XBRIGGSMORE03 | ROSELLE | $ 4,268,511 | $ 4,033,230 |
| 7 | XBRIGGSMORE04 | CLAUS | $ 7,389,509 | $ 6,217,140 |
| 8 | XCALIFORNIA01 | NEBRASKA | $ 4,003,871 | $ 2,467,938 |
| 9 | XCALIFORNIA02 | CARPENTER | $ 4,555,545 | $ 3,569,671 |
| 10 | XCARPENTER01 | BLUE GUM | $ 4,526,378 | $ 4,377,040 |
| 11 | XCARPENTER02 | KANSAS | $ 3,654,485 | $ 3,654,482 |
| 12 | XCLARATINA01 | COFFEE | $ 4,908,015 | $ 4,524,117 |
| 13 | XCLARATINA02 | OAKDALE | $ 5,031,150 | $ 3,286,750 |
| 14 | XCLARATINA03 | ROSELLE | $ 4,327,073 | $ 3,140,351 |
| 15 | XCLARIBEL01 | COFFEE | $ 3,092,774 | $ 2,706,932 |
| 16 | XCLARIBEL02 | OAKDALE | $ 2,739,693 | $ 1,512,918 |
| 17 | XCLARIBEL03 | ROSELLE | $ 3,070,807 | $ 2,033,224 |
| 18 | XCLARIBEL04 | CLAUS | $ 5,731,182 | $ 5,320,315 |
| 19 | XCROWSLANDING01 | 7TH | $ 9,207,633 | $ 9,228,413 |
| 20 | XDAKOTA01 | SALIDA | $ 3,504,273 | $ 1,970,440 |
| 21 | XFINCH01 | MITCHELL | $ 1,629,104 | $ 1,570,332 |
| 22 | XFINCH02 | GARNER | $ 7,344,729 | $ 6,707,427 |
| 23 | XFLOYD01 | OAKDALE | $ 256,050 | $ 256,050 |
| 24 | XFLOYD02 | ROSELLE | $ 256,050 | $ 256,050 |
| 25 | XFLOYD03 | CLAUS | $ 3,827,567 | $ 1,068,362 |
| 26 | XGARST01 | CLAUS | $ 3,389,022 | $ 2,816,149 |
| 27 | XHATCH01 | CARPENTER | $ 10,211,358 | $ 9,656,364 |
| 28 | XHATCH02 | CROWS LANDING | $ 6,437,168 | $ 6,437,166 |
| 29 | XHATCH03 | 7TH | $ 3,698,588 | $ 3,698,588 |
| 30 | XKIERNAN01 | CHAPMAN | $ 3,732,241 | $ 2,874,011 |
| 31 | XKIERNAN02 | DALE | $ 3,288,838 | $ 2,409,541 |
| No. | PROJECT ID | PROJECT EXTENTS | TOTAL COST | CFF COST |

| No. | PROJECT ID | PROJECT EXTENTS | TOTAL COST | CFF COST |
|---|---|---|---|---|
| 32 | XKIERNAN03 | PRESCOTT | $ 4,502,992 | $ 2,751,225 |
| 33 | XKIERNAN04 | TULLY | $ 2,811,376 | $ 1,952,930 |
| 34 | XKIERNAN05 | MCHENRY | $ 2,859,616 | $ 2,166,003 |
| 35 | XMAZE01 | MORSE | $ 4,034,615 | $ 1,980,426 |
| 36 | XMAZE02 | CARPENTER | $ 8,460,443 | $ 7,806,632 |
| 37 | XPARADISE01 | NEBRASKA | $ 4,081,494 | $ 2,303,479 |
| 38 | XPARADISE02 | CARPENTER | $ 9,623,373 | $ 8,868,985 |
| 39 | XPELANDALE01 | SISK | $ 882,870 | $ 846,682 |
| 40 | XPELANDALE02 | CHAPMAN | $ 745,844 | $ 711,609 |
| 41 | XPELANDALE03 | DALE | $ 1,620,129 | $ 1,550,759 |
| 42 | XPELANDALE04 | PRESCOTT | $ 2,462,753 | $ 2,175,924 |
| 43 | XPELANDALE05 | TULLY | $ 3,883,566 | $ 3,231,823 |
| 44 | XPELANDALE06 | MCHENRY | $ 2,933,947 | $ 2,631,775 |
| 45 | XSCENIC01 | COFFEE | $ - | $ - |
| 46 | XSCENIC02 | OAKDALE | $ 4,475,805 | $ 4,410,910 |
| 47 | XSCENIC03 | LAKEWOOD | $ 14,334,727 | $ 14,334,727 |
| 48 | XSCENIC04 | CLAUS | $ 4,225,284 | $ 3,947,404 |
| 49 | XSHOEMAKE01 | MORSE | $ 4,385,825 | $ 2,171,857 |
| 50 | XSHOEMAKE02 | BRINK | $ 2,121,800 | $ 1,506,041 |
| 51 | XSTANDIFORD01 | TULLY | $ 6,054,213 | $ 6,054,210 |
| 52 | XSTANDIFORD02 | MCHENRY | $ 8,031,822 | $ 8,031,820 |
| 53 | XSYLVAN01 | OAKDALE | $ 2,057,512 | $ 256,050 |
| 54 | XSYLVAN02 | ROSELLE | $ 4,184,465 | $ 288,952 |
| 55 | XSYLVAN03 | CLAUS | $ 3,592,541 | $ 1,519,038 |
| 56 | XWHITMORE01 | CARPENTER | $ 2,952,827 | $ 2,368,168 |
| 57 | XWHITMORE02 | CROWS LANDING | $ 1,962,386 | $ 1,289,835 |
| 58 | XWHITMORE03 | MORGAN | $ 2,422,502 | $ 975,736 |
| 59 | XYOSEMITE01 | EL VISTA | $ 13,200,515 | $ 13,200,512 |
| 60 | XYOSEMITE02 | LINCOLN | $ 1,845,623 | $ 1,842,136 |
| 61 | XYOSEMITE03 | CLAUS | $ 5,509,708 | $ 4,817,096 |
| 62 | XYOSEMITE04 | SANTA FE | $ 11,463,480 | $ 11,462,818 |
| **Road Segments** | | | | |
| 63 | R7TH01 | SIERRA TO RIVER | $ 23,169,209 | $ 23,161,987 |
| 64 | R7TH02 | CROWSLANDING TO HATCH | $ 8,918,436 | $ 8,918,436 |
| 65 | R9TH01 | CARPENTER TO NEEDHAM | $ 15,467,405 | $ 15,467,405 |
| 66 | RBANGS01 | TULLY TO MCHENRY | $ 5,511,741 | $ 1,835,932 |
| 67 | RBECKWITH01 | NEW ROAD TO DAKOTA | $ 1,880,979 | $ 937,202 |
| 68 | RBECKWITH02 | DAKOTA TO BRINK | $ 4,855,266 | $ 4,020,719 |
| 69 | RBLUEGUM01 | POUST TO ROSEMORE | $ 1,136,532 | $ 1,136,532 |
| 70 | RBRIGGSMORE01 | SISK TO MCHENRY | $ 18,341,954 | $ 18,341,954 |
| 71 | RBRIGGSMORE02 | MCHENRY TO OAKDALE | $ 11,940,687 | $ 11,940,687 |
| 72 | RBRIGGSMORE03 | OAKDALE TO ROSELLE | $ 4,437,016 | $ 4,437,016 |
| 73 | RBRIGGSMORE04 | ROSELLE TO CLAUS | $ 4,366,599 | $ 4,366,599 |
| 74 | RBRIGGSMORE05 | CLAUS TO CITY GEN. PLAN BDRY | $ 3,978,790 | $ 3,115,823 |
| 75 | RBRINK01 | PELANDALE TO DAKOTA | $ 3,190,479 | $ 2,568,403 |
| 76 | RBRINK02 | DAKOTA TO BECKWITH | $ 7,052,926 | $ 3,709,989 |
| 77 | RBRINK03 | BECKWITH TO SHOEMAKE | $ 8,201,401 | $ 3,656,514 |
| 78 | RBRINK04 | SHOEMAKE TO CARPENTER | $ 1,562,010 | $ 1,562,010 |
| 79 | RCALIFORNIA01 | NEBRASKA TO CARPENTER | $ 5,818,322 | $ 1,244,113 |
| 80 | RCARPENTER01 | 9TH TO BLUE GUM | $ 1,239,113 | $ 1,239,113 |
| 81 | RCARPENTER02 | BLUE GUM TO KANSAS | $ 6,115,400 | $ 6,392,441 |
| 82 | RCARPENTER03 | KANSAS TO MAZE | $ 2,853,071 | $ 2,853,071 |
| 83 | RCARPENTER04 | MAZE TO CALIFORNIA | $ 1,084,999 | $ 836,482 |
| 84 | RCARPENTER05 | CALIFORNIA TO PARADISE | $ 8,874,267 | $ 8,679,347 |
| 85 | RCARPENTER06 | PARADISE TO HATCH | $ 6,573,273 | $ 6,369,988 |

| No. | PROJECT ID | PROJECT EXTENTS | TOTAL COST | CFF COST |
|---|---|---|---|---|
| 86 | RCARPENTER07 | HATCH TO WHITMORE | $ 6,151,598 | $ 5,347,564 |
| 87 | RCHAPMAN01 | KIERNAN TO PELANDALE | $ 2,602,969 | $ 389,685 |
| 88 | RCLARATINA01 | MCHENRY TO COFFEE | $ 6,247,651 | $ 3,943,646 |
| 89 | RCLARATINA02 | COFFEE TO OAKDALE | $ 5,147,002 | $ 5,022,840 |
| 90 | RCLARATINA03 | OAKDALE TO ROSELLE | $ 6,875,844 | $ 5,246,645 |
| 91 | RCLARATINA04 | ROSELLE TO R/R TRACKS | $ 4,953,420 | $ 838,624 |
| 92 | RCLARIBEL01 | MCHENRY TO COFFEE | $ 5,451,513 | $ 4,322,451 |
| 93 | RCLARIBEL02 | COFFEE TO OAKDALE | $ 6,655,285 | $ 5,312,141 |
| 94 | RCLARIBEL03 | OAKDALE TO ROSELLE | $ 6,113,194 | $ 4,687,121 |
| 95 | RCLARIBEL04 | ROSELLE TO CLAUS | $ 9,684,132 | $ 8,493,487 |
| 96 | RCLAUS01 | CLARIBEL TO SYLVAN | $ 8,829,471 | $ 4,894,167 |
| 97 | RCLAUS02 | SYLVAN TO FLOYD | $ 2,102,917 | $ 632,767 |
| 98 | RCLAUS03 | FLOYD TO BRIGGSMORE | $ 2,595,319 | $ 1,099,010 |
| 99 | RCLAUS04 | BRIGGSMORE TO SCENIC | $ 3,017,734 | $ 3,017,734 |
| 100 | RCLAUS05 | SCENIC TO GARST | $ 1,012,421 | $ 873,119 |
| 101 | RCLAUS06 | GARST TO YOSEMITE | $ 1,973,268 | $ 1,729,179 |
| 102 | RCOFFEE01 | CLARIBEL TO CLARATINA | $ 5,581,381 | $ 2,010,887 |
| 103 | RCOFFEE02 | CLARATINA TO MABLE | $ 1,023,843 | $ 472,267 |
| 104 | RCROWSLANDING01 | 7TH TO 99 | $ 1,148,606 | $ 1,148,606 |
| 105 | RCROWSLANDING02 | 99 TO HATCH | $ 1,710,923 | $ 1,464,653 |
| 106 | RCROWSLANDING03 | HATCH TO WHITMORE | $ 4,404,816 | $ 4,156,588 |
| 107 | RDAKOTA01 | SALIDA TO BECKWITH | $ 7,362,871 | $ 6,153,891 |
| 108 | RDAKOTA02 | BECKWITH TO SR 132 | $ 23,084,705 | $ 22,730,885 |
| 109 | RDALE01 | KIERNAN TO PELANDALE | $ 4,364,781 | $ 1,218,045 |
| 110 | RDALE02 | PELANDALE TO VENEMAN | $ 1,794,493 | $ 1,155,426 |
| 111 | RELVISTA01 | SCENIC TO YOSEMITE | $ 8,392,215 | $ 8,392,215 |
| 112 | RFINCH01 | MITCHELL TO GARNER | $ 5,175,029 | $ 3,852,236 |
| 113 | RFLOYD01 | OAKDALE TO ROSELLE | $ - | $ - |
| 114 | RFLOYD02 | ROSELLE TO CLAUS | $ - | $ - |
| 115 | RGARNER01 | YOSEMITE TO FINCH | $ 5,047,588 | $ 3,507,101 |
| 116 | RGARNER02 | FINCH TO TOULUMNE RIVER | $ 4,496,997 | $ 2,919,612 |
| 117 | RGARST01 | CLAUS TO CHURCH | $ 9,564,819 | $ 7,676,385 |
| 118 | RHATCH01 | CARPENTER TO CROWS LANDING | $ 9,776,925 | $ 9,031,037 |
| 119 | RHATCH02 | CROWS LANDING TO 7TH | $ 5,931,912 | $ 5,931,912 |
| 120 | RKIERNAN01 | CHAPMAN TO DALE | $ 3,686,739 | $ 2,723,909 |
| 121 | RKIERNAN02 | DALE TO PRESCOTT | $ 8,491,831 | $ 7,052,294 |
| 122 | RKIERNAN03 | PRESCOTT TO TULLY | $ 6,949,279 | $ 5,194,977 |
| 123 | RKIERNAN04 | TULLY TO MCHENRY | $ 6,242,653 | $ 5,244,425 |
| 124 | RLAKEWOOD01 | BRIGGSMORE TO SCENIC | $ 1,223,986 | $ 1,223,986 |
| 125 | RLINCOLN01 | SCENIC TO YOSEMITE | $ 4,121,659 | $ 4,121,659 |
| 126 | RMAZE01 | MORSE TO CARPENTER | $ 4,893,137 | $ 1,698,935 |
| 127 | RMAZE02 | CARPENTER TO 99 | $ 8,987,425 | $ 7,981,495 |
| 128 | RMCHENRY01 | KIIERNAN TO PELANDALE | $ 1,722,185 | $ 1,240,377 |
| 129 | RMCHENRY02 | PELANDALE TO STANDIFORD | $ 1,872,769 | $ 1,872,769 |
| 130 | RMITCHELL01 | YOSEMITE TO FINCH | $ 5,047,588 | $ 3,507,101 |
| 131 | RMITCHELL02 | FINCH TO CITY LIMIT | $ 1,236,140 | $ 457,478 |
| 132 | RMORGAN01 | HATCH TO WHITMORE | $ 5,497,582 | $ 4,167,249 |
| 133 | RMORSE01 | NORTH TO SHOEMAKE | $ 4,873,502 | $ 2,468,665 |
| 134 | RMORSE02 | SHOEMAKE TO MAZE | $ 14,145,694 | $ 12,653,183 |
| 135 | RNEBRASKA01 | MAZE TO CALIFORNIA | $ 1,476,494 | $ 756,973 |
| 136 | RNEBRASKA02 | CALIFORNIA TO PARADISE | $ - | $ - |
| 137 | RNEWROAD01 | MURPHY TO BECKWITH | $ 7,520,229 | $ 4,968,211 |
| 138 | RNORSEMAN01 | CITY LIMIT TO YOSEMITE | $ 1,655,765 | $ 818,719 |
| 139 | ROAKDALE01 | CLARIBEL TO CLARATINA | $ 3,907,983 | $ 1,309,749 |
| 140 | ROAKDALE02 | CLARATINA TOO SYLVAN | $ 3,932,784 | $ 2,399,228 |

| No. | PROJECT ID | PROJECT EXTENTS | TOTAL COST | CFF COST |
|---|---|---|---|---|
| 141 | ROAKDALE03 | SYLVAN TO FLOYD | $ - | $ - |
| 142 | ROAKDALE04 | FLOYD TO BRIGGSMORE | $ 3,343,291 | $ 3,343,291 |
| 143 | ROAKDALE05 | BRIGGSMORE TO SCENIC | $ 7,531,930 | $ 7,531,930 |
| 144 | RPARADISE01 | NEBRASKA TO CARPENTER | $ 6,822,359 | $ 5,427,703 |
| 145 | RPARADISE02 | CARPENTER TO MARTIN LUTHER KING | $ 4,364,147 | $ 4,364,147 |
| 146 | RPELANDALE01 | CHAPMAN TO DALE | $ 2,417,172 | $ 2,417,172 |
| 147 | RPELANDALE02 | DALE TO PRESCOTT | $ 3,413,092 | $ 3,156,752 |
| 148 | RPELANDALE03 | PRESCOTT TO TULLY | $ 4,236,779 | $ 3,718,642 |
| 149 | RPELANDALE04 | TULLY TO MCHENRY | $ 7,790,721 | $ 6,739,908 |
| 150 | RPRESCOTT01 | KIERNAN TO PELANDALE | $ 3,041,853 | $ 894,226 |
| 151 | RPRESCOTT02 | PELANDALE TO SNYDER | $ 508,432 | $ 508,432 |
| 152 | RROSELLE01 | CLARIBEL TO CLARATINA | $ 3,599,581 | $ 1,130,746 |
| 153 | RROSELLE02 | CLARATINA TO SLYVAN | $ 3,117,732 | $ 539,227 |
| 154 | RROSELLE03 | SLYVAN TO FLOYD | $ - | $ - |
| 155 | RROSELLE04 | FLOYD TO BRIGGSMORE | $ - | $ - |
| 156 | RSANTAFE01 | TOULUMNE RIVER TO YOSEMITE | $ 8,392,215 | $ 8,392,215 |
| 157 | RSCENIC01 | OAKDALE TO LAKEWOOD | $ 4,955,114 | $ 3,578,209 |
| 158 | RSCENIC02 | LAKEWOOD TO CLAUS | $ 5,371,439 | $ 5,405,859 |
| 159 | RSHOEMAKE01 | MORSE TO BRINK | $ 2,975,024 | $ 578,064 |
| 160 | RSTANDIFORD01 | DALE TO PRESCOTT | $ 8,917,529 | $ 8,917,529 |
| 161 | RSTANDIFORD02 | PRESCOTT TO TULLY | $ 8,058,596 | $ 8,058,596 |
| 162 | RSTANDIFORD03 | TULLY TO MCHENRY | $ 20,363,785 | $ 20,363,785 |
| 163 | RSYLVAN01 | MCHENRY TO OAKDALE | $ 21,170,355 | $ 21,170,355 |
| 164 | RSYLVAN02 | OAKDALE TO ROSELLE | $ - | $ - |
| 165 | RSYLVAN03 | ROSELLE TO CLAUS | $ - | $ - |
| 166 | RTULLY01 | KIERNAN TO PELANDALE | $ 3,655,746 | $ 762,564 |
| 167 | RTULLY02 | PELANDALE TO STANDIFORD | $ 5,772,266 | $ 5,422,889 |
| 168 | RWHITMORE01 | CARPENTER TO CROWS LANDING | $ 11,434,902 | $ 9,088,185 |
| 169 | RWHITMORE02 | CROWS LANDING TO MORGAN | $ 3,927,643 | $ 2,665,222 |
| 170 | WOODLAND01 | CARPENTER TO KEARNEY | $ 7,104,714 | $ 7,104,714 |
| 171 | RYOSEMITE01 | D TO EL VISTA | $ 16,399,417 | $ 16,399,417 |
| 172 | RYOSEMITE02 | EL VISTA TO LINCOLN | $ 12,319,173 | $ 11,662,728 |
| 173 | RYOSEMITE03 | LINCOLN TO CLAUS | $ 4,895,665 | $ 4,794,751 |
| 174 | RYOSEMITE04 | CLAUS TO SANTA FE | $ 6,029,240 | $ 5,254,894 |
| 175 | RYOSEMITE05 | SANTA FE TO CITY LIMIT | $ 1,021,024 | $ 821,105 |

| No. | PROJECT ID | Project Description | | CFF COST |
|---|---|---|---|---|
| **Traffic Signal Projects** | | | | |
| 176 | arver Road and Future Road South of Kiernan Avenue | New Signal | | $ 155,090 |
| 177 | Prescott Road and Cheyenne Avenue | New Signal | | $ 195,910 |
| 178 | Coffee Road and Sylvan Meadows Drive | New Signal | | $ 195,910 |
| 179 | College Avenue and Bowen Avenue | New Signal | | $ 195,910 |
| 180 | Coffee Road and Brighton Avenue | New Signal | | $ 195,910 |
| 181 | Tully Road and Princeton Avenue | New Signal | | $ 195,910 |
| 182 | College Avenue and Princeton Avenue / Griswold Ave | New Signal | | $ 195,910 |
| 183 | Rosemore Avenue and Woodland Avenue | New Signal | | $ 155,090 |
| 184 | Coffee Road and East Morris Avenue | New Signal | | $ 146,933 |
| 185 | Rosemore Avenue and Kansas Avenue | New Signal | | $ 155,090 |
| 186 | Tuolumne Boulevard and Neece Drive | New Signal | | $ 146,933 |
| 187 | La Loma Avenue and Buena Vista Avenue | New Signal | | $ 155,090 |
| 188 | La Loma Avenue and Miller Avenue | New Signal | | $ 193,863 |
| 189 | Orangeburg Avenue and Sonoma Avenue | New Signal | | $ 116,318 |
| 190 | Orangeburg Avenue and Lillian Drive | New Signal | | $ 116,318 |
| 191 | Floyd Avenue and Dana Lane | New Signal | | $ 116,318 |
| 192 | Seventh Street and K Street | New Signal | | $ 155,090 |

| No. | PROJECT ID | Project Description | | CFF COST |
|---|---|---|---|---|
| 193 | Sixth Street and K Street | New Signal | | $ 155,090 |
| 194 | Sisk Road and Conant Avenue | New Signal | | $ 146,933 |
| 195 | Snyder Avenue and Carver Road | New Signal | | $ 155,090 |
| 196 | Snyder Avenue and Marsalia Way | New Signal | | $ 116,318 |
| 197 | Sisk Road and Brenner | New Signal | | $ 146,933 |
| 198 | Orangeburg Avenue and Rose Avenue | New Signal | | $ 119,300 |
| 199 | Tully Road and Stoddard Avenue | New Signal | | $ 146,933 |
| 200 | Eleventh Avenue and M Street | New Signal | | $ 119,300 |
| 201 | Bangs Avenue and Carver Road | New Signal | | $ 155,090 |
| 202 | Prescott Road and Sheldon Avenue | New Signal | | $ 146,933 |
| 203 | Orangeburg Avenue and Enslen Avenue | New Signal | | $ 195,910 |
| 204 | Orangeburg Avenue and Florida Avenue | New Signal | | $ 146,933 |
| 205 | Sylvan Avenue and Esta Avenue | New Signal | | $ 146,933 |
| 206 | Sylvan Avenue and Road F | New Signal | | $ 146,933 |
| 207 | Sylvan Avenue and Litt Road | New Signal | | $ 195,910 |
| 208 | Floyd Avenue and Lincoln Oak Dr. | New Signal | | $ 146,933 |
| 209 | Floyd Avenue and Esta Avenue | New Signal | | $ 195,910 |
| 210 | Oakdale Road and Road G | New Signal | | $ 146,933 |
| 211 | Roselle Avenue and Road D | New Signal | | $ 195,910 |
| 212 | Roselle Avenue and Kodiak Drive | New Signal | | $ 195,910 |
| 213 | Roselle Avenue and Bellharbour Drive | New Signal | | $ 195,910 |
| 214 | Roselle Avenue and Merle Avenue | New Signal | | $ 195,910 |
| 215 | G Street and Seventh Street | High Cost Modification | | $ 147,453 |
| 216 | H Street and Seventh Street | High Cost Modification | | $ 147,453 |
| 217 | I Street and Seventh Street | High Cost Modification | | $ 195,000 |
| 218 | Seventh Street and L Street | High Cost Modification | | $ 168,090 |
| 219 | Needham Street and L Street | High Cost Modification | | $ 152,978 |
| 220 | Needham Street and 14th Street | High Cost Modification | | $ 152,978 |
| 221 | McHenry / Downey / Avenue and J Street | High Cost Modification | | $ 277,388 |
| 222 | 10th Street and D Street | High Cost Modification | | $ 156,000 |
| 223 | Bodem Street and Scenic Drive | High Cost Modification | | $ 152,978 |
| 224 | Ninth Street and Tuolumne Boulevard | High Cost Modification | | $ 221,910 |
| 225 | Yosemite Boulevard and Church Street | High Cost Modification | | $ 152,978 |
| 226 | McHenry Avenue and Rumble Road | High Cost Modification | | $ 210,860 |
| 227 | McHenry Avenue and Floyd Avenue | High Cost Modification | | $ 210,860 |
| 228 | North Emerald Avenue and Kansas Avenue | High Cost Modification | | $ 168,090 |
| 229 | Coffee Road and Scenic Drive | High Cost Modification | | $ 166,433 |
| 230 | Tully Road and Caldwell Avenue | Low Cost Modification | | $ 54,210 |
| 231 | Tully Road and West Roseburg Avenue | Low Cost Modification | | $ 54,210 |
| 232 | Tully Road and West Granger Avenue | Low Cost Modification | | $ 54,210 |
| 233 | Tully Road and Woodrow Avenue | Low Cost Modification | | $ 54,210 |
| 234 | Tully Road and West Rumble Road | Low Cost Modification | | $ 54,210 |
| 235 | Tully Road and Mount Vernon Drive | Low Cost Modification | | $ 54,210 |
| 236 | College Avenue and Stoddard Avenue | Low Cost Modification | | $ 54,210 |
| 237 | College Avenue and Caldwell Avenue | Low Cost Modification | | $ 54,210 |
| 238 | College Avenue West Roseburg Avenue | Low Cost Modification | | $ 54,210 |
| 239 | College Avenue and West Granger Avenue | Low Cost Modification | | $ 54,210 |
| 240 | Ninth Street and G Street | Low Cost Modification | | $ 53,170 |
| 241 | Ninth Street and H Street | Low Cost Modification | | $ 53,170 |
| 242 | Ninth Street and I Street | Low Cost Modification | | $ 65,520 |
| 243 | Ninth Street and J Street | Low Cost Modification | | $ 65,520 |
| 244 | Ninth Street and K Street | Low Cost Modification | | $ 65,520 |
| 245 | College Avenue and Orangeburg | Low Cost Modification | | $ 65,520 |

| No. | PROJECT ID | PROJECT EXTENTS | TOTAL COST | CFF COST |
|---|---|---|---|---|
| **Interchanges** | | | | |
| 246 | IKIERNAN01 | SR99 | $ 26,130,000 | $ 17,190,789 |
| 247 | IPELANDALE01 | SR99 | $ 46,700,000 | $ 28,547,248 |
| 248 | IBECKWITH01 | SR99 | $ 29,400,000 | $ 13,116,923 |
| 249 | IBriggsmore Avenue | CLAUS | $ 14,299,764 | $ 14,299,764 |
| 250 | IFloyd Avenue | CLAUS | $ 15,520,590 | $ 15,520,590 |
| 251 | ISylvan Avenue | CLAUS | $ 16,576,500 | $ 16,576,500 |
| 252 | ISanta Fe Railroad OH | CLAUS | $ 9,089,760 | $ 9,089,760 |
| 253 | ICLARIBEL01 | COFFEE | $ 15,000,000 | $ 15,000,000 |
| 254 | ICLARIBEL02 | OAKDALE | $ 15,000,000 | $ 15,000,000 |
| 255 | IKIERNAN02 | MCHENRY | $ 15,000,000 | $ 15,000,000 |
| 256 | IPELANDALE02 | MCHENRY | $ 15,000,000 | $ 15,000,000 |
| 257 | SR132 from SR99 to Morse* | | $ 38,644,538 | $ 24,000,000 |
| **Existing Defieciencies** | | | | |
| 258 | SR 99 West Ramp (SB)/Pelandale Avenue | | | $ 180,078 |
| 259 | SR 99 West Ramp (SB)/Standiford Avenue | | | $ 306,515 |
| 260 | Standiford Avenue/Tully Road | | | $ 750,076 |
| 261 | Standiford Avenue - Sylvan Avenue / McHenry Avenue | | | $ 750,153 |
| 262 | Briggsmore Avenue/ McHenry Avenue | | | $ 631,300 |
| 263 | Carpenter Road/Woodland Avenue | | | $ 226,470 |
| 264 | Carpenter Road/Kansas Avenue | | | $ 283,711 |
| 265 | Carpenter Road/Maze Boulevard | | | $ 136,445 |
| 266 | El Vista Ave-Mitchell Road/Yosemite Boulevard | | | $ 936,952 |
| 267 | Oakdale Road/Scenic Drive | | | $ 385,967 |

# Section 4 - Capital Facilities Fee - Streets

Continued refinements to the cost estimates for the projected CFF Street Projects capital improvement program has resulted in a draft final total of $913,800,000. The reasons for the refinements were several-fold, including:

- Consistency with the recent draft of the MEIR for the Update to the Urban Area General Plan,
- Verification of the most current unit cost data based on 'bid tabs' on recent public works construction projects, and
- Verification of proposed projects adjacent to the current City limits.

In addition to working with City staff to assure reasonableness of the projected cost estimates of the CFF Street Projects capital improvement program, considerable review was also conducted on the reasonableness of traffic impact fee assumptions and methodologies and cost comparisons with adjacent jurisdictions.

The initial challenge in evaluating the updated traffic impact fees was first understanding and agreeing that the cost estimates for the update of the CFF Street Projects capital improvement program was in fact reasonable, recognizing that the estimates increased nearly $500,000,000 from around $420,000,000 to more than $913,800,000. Through the rigorous, well documented cost estimate process, the agreed upon and applied methodologies succinctly yielded nearly a $1.2 billion price tag for needed improvements to support new development that will house more 170,000 new people in the City and provide for more than 192,000 new jobs.

The primary reasons for the substantial rise in costs include:

- Inclusion of Right of Way, with unit costs for vacant lands, developed lands without structures and developed lands with structures.
- Increased in Unit Cost values.
- Expansion of the CFF Street Projects capital improvement program list.

The derived CFF Street Projects costs of $913,800,000 assumes that at least $115,000,000 in Federal and State funds will be available for use, that amount being approximately 10 percent of the total streets capital improvement budget.

One of the primary intents of the City is to seek and secure as much Federal and State funds to help the City with their sense of obligation to pay their share of anticipated costs for improvements to the Citywide street system.

Using the finalized draft total of $913,800,000, OMNI-MEANS, with input from the public and in coordination with Town Hall Services and City staff, refined the CFF Street Projects Fee by Land Use Category. Shown in Tables 7 and 8 are the refined traffic fee updates by Land Use Category, including their percentage increase over existing fees. As indicated, using industry standard procedures and generally accepted assumptions, the projected fees by land use category increase by varying percentages over existing fees.

# CITY of MODESTO
# Capital Facility Fee

*Prepared By:*

omni · means
ENGINEERS · PLANNERS

## Fee Spread by Activity

| Land Use Activity | New Development ("Buildout -minus Existing") | Units | ITE-based Daily Trip Generation Rate[1] per Unit | Pass-by Adjustment Factor[2] | Trip Causality Factor[3] | Daily Trip Generation | Percentage Share of Daily Trips | Spread of CFF Improvement Costs | Fee per Unit |
|---|---|---|---|---|---|---|---|---|---|
| Single Family | 33,506 | D.U.'s | 9.57 | 100% | 125% | 400,816 | 32.1% | $ 293,001,036 | **$ 8,745** |
| Multiple Family | 16,089 | D.U.'s | 6.63 | 100% | 125% | 133,338 | 10.7% | $ 97,471,402 | **$ 6,058** |
| Retail (lesser than 50,000 sq.ft.floor area) | 10,234 | Employees | 50.31 | 25% | 77% | 99,113 | 7.9% | $ 72,452,785 | **$ 7,080** |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | 10,234 | Employees | 33.99 | 30% | 77% | 80,354 | 6.4% | $ 58,739,897 | **$ 5,740** |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | 10,234 | Employees | 23.95 | 35% | 77% | 66,056 | 5.3% | $ 48,287,456 | **$ 4,718** |
| Retail (greater than 300,000 sq.ft. floor area) | 10,234 | Employees | 19.31 | 40% | 77% | 60,867 | 4.9% | $ 44,494,161 | **$ 4,348** |
| Service (Medical Office) | 7,652 | Employees | 8.91 | 100% | 77% | 52,498 | 4.2% | $ 38,376,734 | **$ 5,015** |
| Service (General Office) | 30,609 | Employees | 3.32 | 100% | 100% | 101,622 | 8.1% | $ 74,286,833 | **$ 2,427** |
| Government | 14,700 | Employees | 3.32 | 100% | 100% | 48,804 | 3.9% | $ 35,676,319 | **$ 2,427** |
| Other (Office Industrial) | 98,372 | Employees | 2.10 | 100% | 100% | 206,581 | 16.5% | $ 151,013,376 | **$ 1,535** |
| *Total Employees* | *192,269* | *Employees* | | | | | | | |
| *Population* | *171,000* | *Residents* | | | | | | | |
| **TOTAL TRIPS** | | | | **1,250,417** | | **1,250,048** | **100.0%** | **$ 913,800,000** | |

*Notes:*

1. Daily trip-ends for which this category is a source on desitination
2. A 60%, 65%, 70% and 75% trip reduction factor has been applied for retail "pass-by/multi-purpose" trips based on the size of the projected retail facility. The smaller the retail facility, the greater the trip reduction factor due to "pass-by/multi-purpose travel.
3. Responsibility for all home based trips to local retail and medical offices is assigned to residential development.

*Source: Omni-Means, Ltd.*

*Prepared By:*

# Conversion to General Plan Land Use Code Fees

| Land Use Code Category[1] | Model Employee Density (per gross acre) | Retail Employee Density Share | Service Employee Density Share | Other Employee Density Share | Weighted Fee per Employee | Density Factor (KSF per Employee)[2] | Final Weighted Fee per Unit | Unit | Existing Streets Fee per Unit | Percent Increase in Fee |
|---|---|---|---|---|---|---|---|---|---|---|
| SFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 8,745 | D.U. | $ 3,168 | 176% |
| MFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 6,058 | D.U. | $ 2,172 | 179% |
| Retail (lesser than 50,000 sq.ft.floor area) | 24 | 75% | 25% | 0% | $ 5,916 | 0.450 | $ 13,148 | KSF | $ 4,500 | 192% |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | 24 | 75% | 25% | 0% | $ 4,912 | 0.450 | $ 10,914 | KSF | $ 3,989 | 174% |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | 24 | 75% | 25% | 0% | $ 4,145 | 0.450 | $ 9,212 | KSF | $ 3,799 | 142% |
| Retail (greater than 300,000 sq.ft. floor area) | 24 | 75% | 25% | 0% | $ 3,868 | 0.450 | $ 8,594 | KSF | $ 3,763 | 128% |
| Office (Medical Office) | 45 | 0% | 100% | 0% | $ 5,015 | 0.302 | $ 16,607 | KSF | $ 7,449 | 123% |
| Office (General Office) | 45 | 0% | 100% | 0% | $ 2,427 | 0.302 | $ 8,036 | KSF | $ 4,109 | 96% |
| Business Park (Service) | 25 | 0% | 25% | 75% | $ 1,758 | 0.317 | $ 5,546 | KSF | $ 4,109 | 35% |
| Business Park (Manufacturing) | 25 | 0% | 25% | 75% | $ 1,758 | 0.550 | $ 3,197 | KSF | $ 1,510 | 112% |
| Industrial (Manufacturing) | 18 | 0% | 20% | 80% | $ 1,713 | 0.550 | $ 3,115 | KSF | $ 1,510 | 106% |
| Industrial (Warehousing)[3] | 18 | 0% | 20% | 80% | $ 1,713 | 0.784 | $ 2,186 | KSF | $ 362 | 504% |

1. Assuming average mix of activities for the General Plan land use codes.
2. Institute of Traffic Engineering handbook

Source: Omni-Means, Ltd.

Included among the trip adjustment assumptions was a 60,65, 70 and 75 percent trip reduction to retail uses based on its size, for 'pass-by' trips. In addition, another trip adjustment factor to specifically account for *cause of trip* has also been added. A separate column, entitled, Trip Causality Factor, allows more specific adjustment to reflect the shift in responsibility for the increased convenience to residential for the proximity of retail commercial and medical office facilities. The 25% increase in trip responsibility to residential directly corresponds to the additional 23% trip reduction in retail and medical office trips.

Lastly, in addition to adopting an update to the CFF fees, consideration still remains as to how to appropriately phase in the fees recognizing that new development is often "proforma-ed" several years in advanced before fees are actually paid. With such a substantial increase in fees, it has been determined that some form of phase in of fees may be appropriate and fair, so that near-term development can still profitably move forward and remain competitive with adjacent jurisdictions.

TABLE 1 - CITY OF MODESTO CFF AREA (INCLUDES KIERNAN BUSINESS PARK BUT EXCLUDES SALIDA AREA)
ESTIMATED IMPROVEMENT COST SPREAD AND FEE PER D.U.E WITH RESIDENTIAL WEIGHTING TO ENHANCE COMMUNITY

| Landuse Category | Net New Development ("Buildout -minus Existing") | Units | Daily Trip Generation Rate per Unit | Trip Adjustment Factor | Trip Length/ Causality Factor | Daily Trip Generation | Percentage Share of Daily Trips | Estimated Spread of CFF Improvement Costs | Estimated Fee per Unit |
|---|---|---|---|---|---|---|---|---|---|
| SFDU | 33,506 | D.U.'s | 9.57 | 100% | 115% | 368,750 | 29.4% | $ 268,727,607 | **$ 8,020** |
| MFDU | 16,089 | D.U.'s | 6.63 | 100% | 115% | 122,671 | 9.8% | $ 89,396,465 | **$ 5,556** |
| Retail (lesser than 50,000 sq.ft.floor area) | 10,234 | Employees | 50.31 | 25% | 87% | 111,985 | 8.9% | $ 81,609,161 | **$ 7,974** |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | 10,234 | Employees | 33.99 | 30% | 87% | 90,790 | 7.2% | $ 66,163,277 | **$ 6,465** |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | 10,234 | Employees | 23.95 | 35% | 87% | 74,634 | 6.0% | $ 54,389,886 | **$ 5,315** |
| Retail (greater than 300,000 sq.ft. floor area) | 10,234 | Employees | 19.31 | 40% | 87% | 68,771 | 5.5% | $ 50,117,206 | **$ 4,897** |
| Service (Medical Office) | 7,652 | Employees | 8.91 | 100% | 87% | 59,316 | 4.7% | $ 43,226,676 | **$ 5,649** |
| Service (General Office) | 30,609 | Employees | 3.32 | 100% | 100% | 101,622 | 8.1% | $ 74,057,176 | **$ 2,419** |
| Government (General Office) | 14,700 | Employees | 3.32 | 100% | 100% | 48,804 | 3.9% | $ 35,566,026 | **$ 2,419** |
| Other (Industrial) | 98,372 | Employees | 2.10 | 100% | 100% | 206,581 | 16.5% | $ 150,546,519 | **$ 1,530** |
| *Total Employees* | *192,269* | *Employees* | | | | | | | |
| *Population* | *171,000* | *Residents* | | | | | | | |
| **TOTAL TRIPS** | | | | **1,250,417** | | **1,253,924** | **100.0%** | **$ 913,800,000** | |

*Notes:*

1. A 60%, 65%, 70% and 75% trip reduction factor has been applied for retail "pass-by/multi-purpose" trips based on the size of the projected retail facility. The smaller the retail facility, the greater the trip reduction factor due to "pas-by/multi-purpose travel. These factors include an additional 10% trip reduction adjustment factor from Table 1 to reflect enhanced community value to residential neighborhoods.
2. Similar to the added trip reduction factor to the retail land use category, a 25% trip adjustment factor has been further added to the residential land use catagories to further help incentify non-residential uses to locate in the City of Modesto, enhancing quality of life and community value.

TABLE 2 - CITY OF MODESTO CFF AREA (INCLUDES KIERNAN BUSINESS PARK, BUT EXCLUDES SALIDA AREA)
ESTIMATED FEES WITH RESIDENTIAL WEIGHTING TO ENHANCE COMMUNITY

Draft

| Landuse Category | Model Employee Density (per gross acre) | Retail Employee Density Share | Service Employee Density Share | Other Employee Density Share | Weighted Fee per Employee | Density Factor (KSF per Employee) | Final Weighted Fee per Unit | Unit | Existing Streets Fee per Unit | Percent Increase in Fee |
|---|---|---|---|---|---|---|---|---|---|---|
| SFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 8,020 | D.U. | $ 3,168 | 153% |
| MFDU | N/A | N/A | N/A | N/A | N/A | N/A | $ 5,556 | D.U. | $ 2,172 | 156% |
| Senior Housing (37% of SFDU rate) | N/A | N/A | N/A | N/A | N/A | N/A | $ 2,968 | D.U. | $ 619 | 379% |
| Hotel/Motel (94% of SFDU rate, 60% occupancy factor) | N/A | N/A | N/A | N/A | N/A | N/A | $ 4,523 | Room | $ 538 | 741% |
| Retail (lesser than 50,000 sq.ft.floor area) | 24 | 75% | 25% | 0% | $ 6,586 | 0.450 | $ 14,635 | KSF | $ 4,500 | 225% |
| Retail (50,000 sq.ft.to 99,999 sq.ft. floor area) | 24 | 75% | 25% | 0% | $ 5,454 | 0.450 | $ 12,119 | KSF | $ 3,989 | 204% |
| Retail (100,000 sq.ft.to 300,000 sq.ft. floor area) | 24 | 75% | 25% | 0% | $ 4,591 | 0.450 | $ 10,202 | KSF | $ 3,799 | 169% |
| Retail (greater than 300,000 sq.ft. floor area) | 24 | 75% | 25% | 0% | $ 4,278 | 0.450 | $ 9,506 | KSF | $ 3,763 | 153% |
| Office (Medical Office) | 45 | 0% | 100% | 0% | $ 5,649 | 0.302 | $ 18,706 | KSF | $ 7,449 | 151% |
| Office (General Office) | 45 | 0% | 100% | 0% | $ 2,419 | 0.302 | $ 8,011 | KSF | $ 4,109 | 95% |
| Hospital (33% Med. Office, 67% Gen.Office) | | | | | $ 3,485 | 0.302 | $ 11,540 | KSF | $ 2,184 | 428% |
| Daycare Ctr.(92% of Retail 50K-100K rate per empl..50% pass-by reduction) | | | | | $ 2,509 | 0.394 | $ 6,367 | KSF | $ 1,736 | 267% |
| Church (83% of Gen.Office rate per KSF used on per-employee basis) | | | | | $ 2,008 | 1.500 | $ 1,339 | KSF | $ 292 | 358% |
| Nursing Home (122% of Gen.Office rate per empl.) | | | | | $ 2,952 | 1.500 | $ 1,968 | KSF | $ 149 | 1221% |
| Business Park (Service) | 25 | 0% | 25% | 75% | $ 1,753 | 0.317 | $ 5,529 | KSF | | |
| Business Park (Manufacturing) | 25 | 0% | 25% | 75% | $ 1,753 | 0.550 | $ 3,187 | KSF | | |
| Industrial (Manufacturing) | 18 | 0% | 20% | 80% | $ 1,708 | 0.550 | $ 3,106 | KSF | $ 1,510 | 106% |
| Industrial (Warehousing) | 18 | 0% | 20% | 80% | $ 1,708 | 0.784 | $ 2,179 | KSF | $ 362 | 502% |