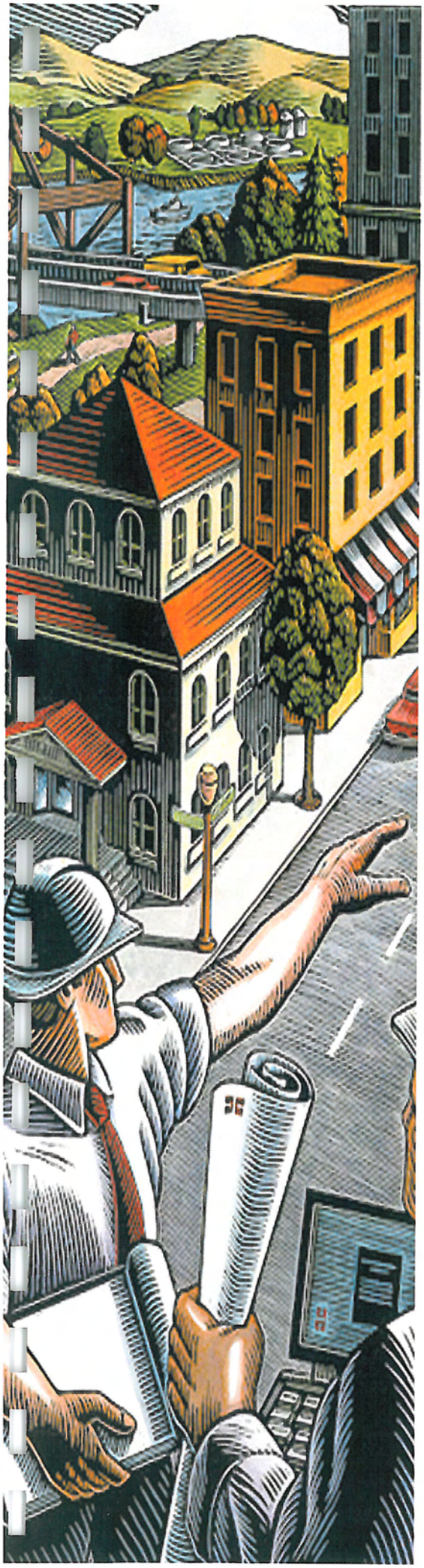

AB 1600 Development Impact Fee Study

(General Government, Public Safety, Storm Drainage, & Traffic Fees)

for the

Town of Moraga

Prepared by:

Harris & Associates

April 2008

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Chapter 1
Development Impact Fee Study

Introduction and Summary

This AB1600 impact fee study presents an analysis of the need for development to accommodate new growth and future infrastructure and improvements in the Town of Moraga. This "nexus" study will serve as the basis for requiring development impact fees under AB1600 legislation, as codified by California Code Government Section 66000 *et seq.* This code sets forth the procedural requirements for establishing and collecting development impact fees. These procedures require that a "reasonable relationship" or nexus, exist between the improvements and facilities required to mitigate the impacts of new development and the impact fee. This study addresses the following Town development impact fee programs:

- **General Government Fee** – Funds the improvements of facilities related to the general administration and management of the Town and Library facilities.
- **Public Safety Fee** – Funds the improvements of police facilities and purchase of equipment benefiting public safety.
- **Storm Drainage Fee** – Funds the improvement of drainage facilities including pipes and culverts.
- **Traffic Fee** – Funds the improvements of roadway and traffic signals.

This study also includes reference to the Lamorinda Fee and Financing Authority (LFFA) regional transportation fee that is used to improve traffic facilities in Lafayette, Orinda and Moraga.

The Town currently imposes the LFFA fee and Quimby fee on new development. This study incorporates new development impact fees for *general government, public safety, storm drainage* and *traffic*. The Town has used general funds and other applicable funds to fund improvements in the past. In order to maintain the existing level of service within the Town, a development impact fee program needs to be established.

This chapter explains the study approach and summarizes the impact fees within each program.

Study Objective

The Town of Moraga is a community currently consisting of 9.54 square miles and a current population of about 16,400 people. The town completed an update to its General Plan in 2002. The approved development project of Palos Colorados will add approximately 123 new residential units. It was considered as completed for the purpose of this study because it has an existing agreement with the Town to mitigate its impacts. Residential and commercial growth is anticipated over the next 25 to 50 years in Moraga. The estimated increase in population is approximately 2548 people, with 894 new dwelling units and 70,000 square feet of new commercial space.

The objective of this study is to establish a development impact fee program to mitigate the impacts of the anticipated new development on the Town of Moraga.

Mitigation Fee Act

Over the last 20 years, the changing fiscal situation in California has steadily undercut the financial capacity of local governments to fund infrastructure. Faced with these changes, many cities have had to adopt a policy of "growth pays its own way", shifting the burden of funding infrastructure expansion onto new development. This funding shift has been accomplished primarily through the imposition of public facilities fees, also known as development impact fees.

As a result of widespread imposition of public facilities fees, the State legislature passed the *Mitigation Fee Act*, starting with Assembly Bill 1600 in 1988. The *Act*, contained in *California Government Code* Section 66000 *et seq.*, established ground rules for the imposition and ongoing administration of impact fee programs. The *Act* became law in January 1989 and requires local governments to document the following when adopting an impact fee:

1. Identify the purpose of the fee;
2. Identify the use of fee revenues;
3. Determine a reasonable relationship between the fee's use and the type of development paying the fee;
4. Determine a reasonable relationship between the need for the fee and the type of development paying the fee; and
5. Determine a reasonable relationship between the amount of the fee and the cost of the facility attributable to development paying the fee.

In summary, the fee cannot be more than the reasonable cost of the public facility needed to accommodate the development paying the fee, and the fee revenues can only be used for their intended purpose.

Organization of the Report

The first step in determining an impact fee program begins with the selection of a planning horizon and the identification of projects needed to support the projected population and employment. These projections are used throughout the analysis of various facility categories.

Chapters 2 through 4 are devoted to documenting the following fees:

- Chapter 2 – General Government Fee
- Chapter 3 – Public Safety Fee
- Chapter 4 – Storm Drainage Fee
- Chapter 5 – Traffic Fee

Each chapter is organized under the following sections to clearly document the requirements of the *Mitigation Fee Act* discussed above:

- The chapter begins with a statement identifying the purpose of the fee by stating the types of facilities that would be funded.

- The *Service Population* section defines what type of development requires this type of facility and whether only residents or both residents and businesses benefit and gives service population projects
- The *Existing Facilities Inventory* section summarizes the investment the Town has made in this type of facility to date.
- The *Facility Standards and Fee Schedule* section establishes a reasonable relationship between the need for the fee and type of development paying the fee. This section also establishes a reasonable relationship between the amount of the fee and the cost of the facility attributable to development paying the fee. Using a common factor for facility costs per capita, the schedule ensures that each development project pays its fair share of total facility costs.
- The *Facility Costs to Accommodate Growth* section establishes a reasonable relationship between the use of the fee revenues and the type of development paying the fee. This section estimates the total facility costs associated with new development over the planning horizon. These costs equal the revenues that would be collected through the impact fee. Programming of revenues to specific projects would be done through the Town's annual capital improvement planning and budget process.
- The *Implementation* section provides recommendations for the ongoing administration of the fee. The recommendations are meant to ensure compliance with the *Act*, and to ensure that fees are updated for facility cost inflation.

Land Use Assumptions

The land use assumptions for the Town of Moraga used for this fee study are shown in **Exhibit A**, in the appendix, and **Table 1.1**. The study area includes Moraga Center, Rheem Park, Indian Valley, Bollinger Canyon, Northwest Moraga, Northeast Moraga, Central Moraga, Southwest Moraga and various in-infill properties. The total estimated undeveloped acres in the Town are approximately 420 acres. The following types of new developments are anticipated to occur in the Town over the next 25 to 50 years:

- 624 new single family dwelling units (throughout the Town)
- 50 multi-family units (Moraga Center)
- 20 commercial mixed units (Moraga Center)
- 200 senior housing units (Moraga Center)
- 70,000 sf new commercial space (Moraga Center and Rheem Park)
- 80 unit hotel (Rheem Park)

This will potentially increase the Town's population from 16,400 to 19,366 people.

Table 1.1
Town of Moraga
Land Use Calculations

				Moraga Center[2]		Rheem Park		Indian Valley		Bollinger Canyon		Northwest Moraga		Northeast Moraga		Central Moraga		Southeast Moraga		Infill		Total New Development			
Residential Land Use	Existing Acres	Existing Units[1]	Existing Population[1]	Acres	Units	Acres	Units	Acres	Units	Acres	Units	Acres	Units	Acres	Units	Acres	Units	Acres	Units	Acres	Units	Acres	Units	Density[4]	Population by Land Use
Single Family Detached	3,452.50	4,142		28.00	231			136.00	134	40.50	39	19.00	19	65.00	65	10.90	1	35.00	35	65.00	100	399.40	624	3.40	2,122
Single Family Attached/ Townhome	197.42	968																				-	-	2.23	-
Multi-Family/ Duplex	25.10	788		8.00	50																	8.00	50	1.58	79
Mixed Use Commercial					20																	-	20	1.58	32
Senior Housing				6.00	200																	6.00	200	1.58	316
Total	3,675	5,898	16,818	42.00	501	-	-	136.00	134	40.50	39	19.00	19	65.00	65	10.90	1	35.00	35	65.00	100	413.40	894		2,549

				Moraga Center[2]		Rheem Park		Indian Valley		Bollinger Canyon		Northwest Moraga		Northeast Moraga		Central Moraga		Southeast Moraga		Infill		Total New Development			
Non-Residential Land Use	Existing Acres	Existing SqFt[3]	Existing Workers	Acres	Building (Sq Ft)	Acres	Building (Sq Ft)	Acres	Building (Sq Ft)	Acres	Building (Sq Ft)	Acres	Building (Sq Ft)	Acres	Building (Sq Ft)	Acres	Building (Sq Ft)	Acres	Building (Sq Ft)	Acres	Building (Sq Ft)	Acres	Building (Sq Ft)	Density[4]	Workers
Commercial	45.62	405,321	811	4.00	60,000	1.00	10,000															5.00	70,000	500	140
Office	4.17	89,500	298																			-	-	300	-
Hotel			-			2.20	80															2.20	8,800	600	15
Total	49.79	494,821	1,109	4.00	60,000	3.20	10,080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.20	78,800		155

1 *Data for existing Residential Units from Table 7(2005 column) and data for existing population and workers from Table 1, Town of Moraga Market Assessment, by EPS, February 2006. Approved projects, such as Palos Colorados are not included in this table, they are included as existing land use.*

2 *Acres for Mixed use Commercial within Moraga Center are accounted for in the non-residential commercial acreage.*

3 *Data for existing Non-residential building square footages from Table 17, Town of Moraga Market Assessment, by EPS, February 2006*

4 *Density in this table refers to "persons per dwelling unit" or "square foot per worker". Residential density values verified with the Town. Non-residential numbers are based on number of square feet per employee averages commonly used in the industry.*

2006 EPS Report: Population =	16,400
Palos Colorados: Population =	418
Total Existing Population =	16,818

Use Buildout Population - 16,818 + 2,548 = 19,366

Facility Standards

New development is asked to pay its "fair share" of new facilities to maintain a current level of service. They are not responsible to correct an existing facility deficiency.

By policy, the Town can adopt its own reasonable facility standard to reduce, maintain, or increase the existing facility standard. However, basing an impact fee on a standard that is higher than the existing standard is only fair to new development if the Town uses alternative funds to expand existing facilities to the same standard for existing development. The Town of Moraga has chosen to base this study on maintaining the existing level of service for public facilities.

This study uses existing facility standards, calculated based on existing facility inventory and the current service population. This method is called "equity buy-in" and assures fairness to new development and assures that new development is paying for maintaining the Town's existing level of services and is not paying for existing facility deficiencies. This methodology is used for the General Government and Public Safety fees. The methodologies to calculate the Storm Drainage fee and Traffic fee are described in the supporting documents referred to in Chapter 4 for storm drainage and Chapter 5 for traffic.

Fee Calculation and Growth Projections

Estimates of existing development and projections of growth are critical assumptions used throughout the public facility fee chapters that follow in this report. These estimates are used to determine existing facility standards, for example, square feet of Town Hall per capita. Growth projections are used to estimate the total fee revenue that would be collected at build-out of the planning horizon.

The number of residents and workers are used to measure existing development and future growth because public facilities are built primarily to serve these populations. The greater the population, the more facilities required to provide a given level of service.

The base year for this study is 2006. By calculating fees based on facility standards for 2006, we ensure that new development provides expanded facilities at the standard existing when the Town-wide fee is first imposed. The population projections are based on information obtained from the Town of Moraga. **Table 1.1** shows the current population and number of workers in 2006 and the estimated projections for the future build out of the town.

Residents and workers use public facilities at different rates in relation to each other, depending on the services provided. In each succeeding chapter, a specific service population is identified for each facility type to reflect this. The service population weighs workers in relation to residents based on the relative demand for services by nonresidential compared to residential development associated with a particular facility type.

Occupant densities ensure that a reasonable relationship exists between the increase in service population and the amount of the fee. Developers pay the fee based on the number of housing units or by building square feet of nonresidential use, so the fee schedule must convert service population estimates to these measures of project size. This conversion is done with the average occupant density factor by land use category, shown in **Table 1.1**. **Table 1.2** summarizes the development impact fees for residential properties and **Table 1.3** summarizes the development impact fees for non-residential properties.

AB 1600 - DEVELOPMENT IMPACT FEE STUDY

Table 1.2
Town of Moraga
Development Impact Fee Summary
RESIDENTIAL

Land Use	General Government Fee	Public Safety Fee	LFFA	Traffic Fee	Storm Drain Fee	Total Fee/ Unit
Residential						
Single Family Detached	$ 4,050	$ 682	$ 5,110	$ 476	$ 7,281	**$ 17,599/unit**
Multi-Family/ Duplex	$ 1,882	$ 317	$ 3,187	$ 238	$ 3,641	**$ 9,265/unit**
Mixed Use Commercial	$ 1,882	$ 317	$ 3,187	$ 238	See Note #1	**$ 5,624/unit**
Senior Housing	$ 1,882	$ 317	$ 3,187	$ 100	$ 869	**$ 6,355/unit**

1 The storm drainage fee for Mixed Use Commercial Residential is paid at $38,614 per acre under the Mixed Use Commercial for Non-Residential Fees because it is the same property.

Table 1.3
Town of Moraga
Development Impact Fee Summary
NON-RESIDENTIAL

Land Use	General Government Fee	Public Safety Fee	LFFA	Traffic Fee	Total Fee/ 1000 sf	Storm Drain Fee
Non-residential						
Commercial	$ 399	$ 201	$ 2,160	$ 724	**$ 3,484/1000 sf**	**$ 37,235/acre**
Office	$ 666	$ 335	$ 2,160	$ 376	**$ 3,537/1000 sf**	**$ 37,235/acre**
Hotel	$ 333	$ 167	$ 2,160	$ 138	**$ 2,798/1000 sf**	**$ 37,235/acre**

AB 1600 - DEVELOPMENT IMPACT FEE STUDY

Chapter 2
General Government Fee

This chapter presents an analysis of the need for General Government facilities to accommodate new development in the Town of Moraga. A fee is presented based on the cost of these facilities to ensure that new development provides adequate funding to mitigate its impacts. This Chapter is supplemented by the "General Government Report" prepared by the Town Engineer dated March 21, 2008 referred to in this report as Exhibit E.

Service Population

The general government facilities fee includes town hall, public works and library facilities. Town Hall and Public Works facilities serve both homes and businesses. Consequently, a service population including both residents and workers reasonably represents the need for these facilities. Library facilities serve primarily residents in the Town. Consequently, a service population that only includes residents and not workers reasonably represents the need for these facilities

Table 2.1
Town of Moraga
General Government Facilities Service Population

Timeframe	Residents Service Population		Workers Service Population[1]		Weighting Factor		Total Town Hall/ Public Works Service Population	Total Library Service Population[2]
Total Existing Development[1]	16,818	+	1,109	*	0.24	=	17,084	16,818

1 Workers service population is determined by weighing workers at 0.24 (0.24 workers service population equals 1 worker). The 0.24 ratio is based on a 40 hour work week that is divided by a total 168-hour (7 days x 24 hours per day) week.

2 Library Service Population includes residents only

Table 2.1 shows the estimated service population for General Government facilities. In calculating the service population, workers are weighted less than residents to reflect lower per capita service demand. Nonresidential buildings are typically occupied less intensively than dwelling units, so it is reasonable to assume that average per worker demand for services is less than average per-resident demand. The 0.24-weighting factor for workers is based on a 40-hour workweek divided by a total of 168 hours in a week.

Existing Facilities Inventory

The current Town Hall facility consists of 6,200 square feet on the Hacienda facility and 4,978 square feet at the Rheem Facility for a total of 11,178 square feet on 5.84 acres. The town council utilizes the school auditorium for their public meetings; this area was not included in the calculations. The public works facilities consist of 1,800 square feet at the Hacienda facility and the shed located on 2 acres. The Town's Library facilities are comprised of a 10,913 square foot library located on 2.59 acres.

Table 2.2 summarizes the existing facilities for Town Hall and public works facilities, including vehicles and equipment that are associated with the various functions. It also summarizes the existing Library facilities.

Table 2.2
Town of Moraga
Summary of Existing General Government Facilities

Town Hall	Building Size (ft^2)	Land (acre)
Town Offices (1)	11,178	5.84
Total	**11,178**	**5.84**

Public Works	Building Size (ft^2)	Land (acre)
Hacienda Public Works Shed (2)	1,800	3.54
Total	**1,800.00**	**3.54**

Vehicles & Equipment		Unit Value		Value
1 Utility Body Truck	$	27,185	$	27,185
2 Conventional Pick-up	$	30,000	$	60,000
1 Dump Truck	$	40,000	$	40,000
1 Bobcat Loader	$	35,000	$	35,000
1 Ford Tractor	$	22,000	$	22,000
1 John Deere Riding Mower	$	7,999	$	7,999
Total			**$**	**192,184**

Library Facilities	Building Size (ft^2)	Land (acre)
Library	10,913	2.59
Total	**10,913**	**2.59**

Hacienda site = 8,000 sf building on 6.86 acres

Rheem Town Facility = 9,955 sf building on 1.04 acres

(1) Town Hall at Hacienda (8,000 sf - 1,800sf) + Rheem Town Facility (9,955sf/2) = 11,178 sf

Town Hall at Hacienda (6.86 acres - 1,800/8,000 x 6.86 acres) + Rheem Town Facility (1.04 acres/2) = 5.84 acres

(2) Public Works Facilities at the Hacienda = 1,800 sf

Public Works Facilities at the Hacienda = 2.0 acres (shed site) + 1,800/8,000 x 6.86 acres = 3.54 acres

Facility Standards and Fee

Per capita facility standards are used in calculating the impact fee to ensure a reasonable relationship exists between new development and the need for General Government facilities. The existing facilities were inventoried and a square footage associated with each resident was established. A survey of cities that recently constructed new City Halls was then undertaken to determine the replacement cost of the existing facilities. For Library facilities, the 2006 RS Means Square Foot Cost Manual was utilized.

Table 2.3 calculates the cost per capita and cost per worker based on the estimated value of the existing facilities owned by the Town of Moraga. **Table 2.4** calculates the development impact fee for **General Government Facilities** based on the estimated densities of people per unit for future residential units and estimated density of workers per square feet for future non-residential development in the town.

AB 1600 - DEVELOPMENT IMPACT FEE STUDY

Table 2.3
Town of Moraga
General Government Facilities Standards and Unit Costs

Description	Existing Facility Inventory	Service Population (Capita)	Unit Cost[1]	Calculations	Facility Expansion Cost per Capita
Town Hall and Public Works					
Land					
Town Hall	5.84 acres	17,084	$ 850,000	850,000 x 5.84/17,084 =	$ 290.39
Public Works	3.54 acres	17,084	$ 850,000	850,000 x 3.54/17,084 =	$ 176.30
Buildings[2]					
Town Hall	11,178 sq. ft.	17,084	$ 466	11,178 x 466/17,084 =	$ 304.89
Public Works	1,800 sq. ft.	17,084	$ 466	1800 x 466/17,084 =	$ 49.10
Vehicles & Equipment	192,184.00	17,084	Varies	192,184/17,084 =	$ 11.25
Sub-Total Cost per Capita					**$ 831.92**
Library					
Land	2.59 acres	16,818	$ 850,000	850,000 x 2.59/16,818 =	$ 130.90
Buildings[3]	10,913 sq. ft.	16,818	$ 352	10913 x 352/16,818 =	$ 228.41
Sub-Total Cost per Capita					**$ 359.31**
Total Cost per Resident				**831.91 + 359.31 =**	**$ 1,191.23**
Total Cost per Worker[4]				**831.91 x 0.24 =**	**$ 199.66**

1 Unit costs are per acre or per square foot, based on current market or replacement value.

2 Building unit cost based on survey of recent City Hall construction.

3 Library building costs from RS Means Square Foot Costs, 2006 - ENR adjusted values from January 2006 to June 2006 (BCI-San Francisco).

The cost per square foot was used to determine the facility expansion cost per capita. This cost was then multiplied by the density assumptions to come up with a fee, as shown in **Table 2.4**.

Table 2.4
Town of Moraga
General Government Facilities Impact Fee

Land Use	Cost per Capita	Density[1]	Calculations	Fee
Residential				
Single Family Detached	$ 1,191.23	3.40	1191.22 x 3.40 =	$ 4,050/unit
Multi-Family/ Duplex	$ 1,191.23	1.58	1191.22 x 1.58 =	$ 1,882/unit
Mixed Use Commercial	$ 1,191.23	1.58	1191.22 x 1.58 =	$ 1,882/unit
Senior Housing	$ 1,191.23	1.58	1191.22 x 1.58 =	$ 1,882/unit
Non-residential				
Commercial	$ 199.66	500	199.66 x 1000/500 =	$ 399/1000 sf
Office	$ 199.66	300	199.66 x 1000/300 =	$ 666/1000 sf
Hotel	$ 199.66	600	199.66 x 1000/600 =	$ 333/1000 sf

1 Density in this table refers to "persons per dwelling unit" or "square foot per worker".

This method of calculation assures that fairness exists between new and existing development and that new development only funds expanded facilities to maintain the current level of service standards.

AB 1600 - DEVELOPMENT IMPACT FEE STUDY

Facility Costs to Accommodate Growth

The Town will maintain a reasonable relationship between new development and the use of fee revenues by funding a variety of projects to expand Town hall, library and public works facilities in the future as funding becomes available.

Implementation

The General Government facilities impact fee will be collected at the time of building permit issuance. The Fee will be used to fund the following government facilities and equipment as proposed by the Town's Public Works Department. Not all projects will be fully funded by the impact fee. Additional funding sources will be required. The Town Public Works Department will determine the priority projects on an annual basis, as funding becomes available.

- EOC Improvements
- Back-up generators
- Seismic upgrade for 329 Rheem Building
- Storage
- Reception Area
- One-stop Permitting Center
- Maintenance Equipment
- Corporation Yard Expansion
- Additional Office Space and Equipment
- Additional Meeting/Program Space and Equipment

The General Government facilities impact fee will be collected at the time of building permit issuance. To implement the fee the Town should:

- Annually update a capital improvement plan to indicate the specific use of fee revenues for facilities to accommodate growth;
- Comply with the annual and five-year reporting requirements of *Government Code 66000 et seq.;* and
- Identify appropriate inflation indexes in the fee ordinance and allow an inflation adjustment to the fee annually.

For the inflation indexes, the Town should use separate indexes for land and construction costs. Calculating the land cost index may require use of a property appraiser every several years. The construction cost index can be based on the Town's recent capital project experience or taken from any reputable source, such as the *Engineering News Record* (ENR).

Nexus Findings

Purpose of Fee: Provide capital facilities and appurtenances for general administrative and library services in the Town.

Use of Fee: Acquisition and construction of general capital facilities and appurtenances required by the Town to provide general administrative services for a population of approximately 19,366 and non-residential growth as projected by the Town planning department.

AB 1600 - DEVELOPMENT IMPACT FEE STUDY

Relationship Between Use of Fee and Type of Development: The development of new residential, office and commercial land uses in the Town of Moraga will generate additional demands for general Town administrative services and libraries and the associated need for general capital facilities and appurtenances. The fees will be used to construct and acquire general facilities to accommodate new development.

Relationship Between Need for Facility and Type of Project: Each new development project (residential, office and commercial) will generate additional demands for general Town administrative services and the associated facilities and appurtenances needed to provide those services. Current general capital facilities are only adequate for the existing residents and businesses. The Town needs to acquire new facilities to meet the demands of new development.

Relationship Between Amount of Fee and Cost of Portion of Facility Attributed to New Development: The amount of general capital facilities and appurtenances needed by each land use had been estimated by an "equity buy-in" methodology by estimating the current value per capita of the existing facilities serving the existing population in the Town and applying that value per capita to the anticipated new development and growth in the Town.

Chapter 3
Public Safety Fee

This chapter presents an analysis of the need for public safety facilities to accommodate new development in the Town of Moraga. A fee schedule is presented based on the cost of these facilities to ensure that new development provides adequate funding to meet its needs. This Chapter is supplemented by the "Public Safety Report" prepared by the City Police Chief dated March 7, 2008 referred to in this report as Exhibit D.

Service Population

Public safety facilities serve both homes and businesses town wide. Consequently, a service population that includes both residents and workers reasonably represents the need for these facilities.

Table 3.1 shows the estimated service population for public safety facilities. In calculating the service population, workers are weighted less than residents to reflect lower per capita service demand. Nonresidential buildings are typically occupied less intensively than dwelling units, so it is reasonable to assume that average per worker demand for services is less than average per-resident demand. The 0.5-weighting factor for workers is based the estimated number of service calls compared to a resident.

Table 3.1
Town of Moraga
Public Safety Facilities Service Population

Timeframe	Residents		Workers		Ratio of Workers/ Resident		Total Service Population
Total Existing Development	16,818	+	1,109	*	0.50	=	**17,372**

1 Equivalent resident is determined by weighing workers at 0.50 based on the estimated number of service calls from a worker versus a resident

Existing Facilities Inventory

The Town's public safety facilities consist of the Rheem town facility and various vehicles and equipment.

Table 3.2 summarizes the existing facilities for the public safety facilities.

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Table 3.2
Town of Moraga
Summary of Existing Public Safety Facilities

Police	Building Size (ft^2)	Land (acre)
Rheem Town Facility (329 Rheem Blvd) (1)	4,978	0.52
Total	**4,978**	**0.52**

Vehicles & Equipment		Unit Value		Value
7 Ford Police Interceptor	$	43,500	$	304,500
1 Chevy Impala	$	41,290	$	41,290
2 Utility Trailers	$	1,460	$	2,920
2 Suzuki DR 350 Dual Purpose motorcycles	$	5,599	$	11,198
2 Trek Mountain Bikes	$	950	$	1,900
1 Mobile Command Unit	$	120,000	$	120,000
18 Misc. Duty Gear per Officer	$	4,700	$	84,600
Total				**566,407.96**

Rheem Town Facility = 9,955sf builidng on 1.04 acres

(1) Police Facility at Rheem Town Facility = 1/2 9,955 sf = 4,978sf
Police Facility at Rheem Town Facility = 1/2 1.04 acres = 0.52 acres

Facility Standards and Fee

Per capita facility standards are used in calculating the impact fee to ensure a reasonable relationship exists between new development and the need for additional public safety facilities. The existing facilities are inventoried and a square footage associated with each resident is established. A per capita cost was calculated based on the estimated cost of construction of a public safety facility. This cost was then multiplied by the density assumptions to come up with a fee, as shown in **Table 2.3.**

Table 2.4 calculates the development impact fee for **Public Safety Facilities** based on the estimated densities of people per unit for future residential units and estimated density of workers per square feet for future non-residential development in the town.

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Table 3.3
Town of Moraga
Public Safety Facilities Costs per Capita Calculation

Description	Existing Facility Inventory[1]	Service Population (Capita)	Unit Cost[2]	Calculations	Facility Expansion Cost per Capita
Existing Facilities					
Land	0.52 acres	17,372	$ 850,000	0.52X850,000/17,373 =	$ 25.44
Buildings	4,978 sq. ft.	17,372	$ 498	4978X 498/17,373 =	$ 142.69
Vehicles & Equipment	$ 566,408	17,372	varies	566,408/17,373 =	$ 32.60
Total Cost per Equivalent Resident					**$ 200.73**
Total Cost per Resident					**$ 200.73**
Total Cost per Worker[6]				**200.73 x 0.50 =**	**$ 100.37**

1 See Summary of Public Safety Facilities for inventory list

2 Unit costs are per acre or per square foot, building costs from RS Means Square Foot Costs, 2006 - adjusted values

3 Total cost per worker based on worker per capita weighting factor from Table 3.1

Table 3.4
Town of Moraga
Public Safety Facilities Development Impact Fee

Land Use	Cost per Capita	Density[1]	Calculations	Fee
Residential				
Single Family Detached	$ 200.73	3.40	200.73 x 3.4 =	$ 682/unit
Multi-Family/ Duplex	$ 200.73	1.58	200.73 x 1.58 =	$ 317/unit
Mixed Use Commercial	$ 200.73	1.58	200.73 x 1.58 =	$ 317/unit
Senior Housing	$ 200.73	1.58	200.73 x 1.58 =	$ 317/unit
Non-residential				
Commercial	$ 100.37	500	100.36 x 1000/500 =	$ 201/1000 sf
Office	$ 100.37	300	100.36 x 1000/300 =	$ 335/1000 sf
Hotel	$ 100.37	600	100.36 x 1000/600 =	$ 167/1000 sf

1 Density in this table refers to "persons per dwelling unit" or "square foot per worker".

This method of calculation assures that fairness exists between new and existing development and that new development only funds expanded facilities to maintain the current level of service standards.

Facility Costs to Accommodate Growth

The Town will maintain a reasonable relationship between new development and the use of fee revenues by funding a variety of projects to expand public safety facilities during this period.

Implementation

The Public Safety facilities impact fee will be collected at the time of building permit issuance. The Public Safety Fee will be used to fund the following public safety facilities and equipment as proposed by the Town's Police Department. Not all projects will be fully funded by the impact fee. Additional funding sources will be required. The Town Police Department will determine the priority projects on an annual basis, as funding becomes available.

- Radio Command System
- Mobile Command Vehicle
- Safety Equipment
- Motorcycle
- Engineering and Traffic Surveys
- Two New Vehicles
- DVR – Camera System for Town Parks
- Storage

To implement the fee the Town should:

- Annually update a capital improvement plan to indicate the specific use of fee revenues for facilities to accommodate growth;
- Comply with the annual and five-year reporting requirements of *Government Code 66000 et seq.;* and
- Identify appropriate inflation indexes in the fee ordinance and allow an inflation adjustment to the fee annually.

For the inflation indexes, the Town should use separate indexes for land and construction costs. Calculating the land cost index may require use of a property appraiser every several years. The construction cost index can be based on the Town's recent capital project experience or taken from any reputable source, such as the *Engineering News Record* (ENR).

Nexus Findings

Purpose of Fee: Provide capital facilities and appurtenances for police services.

Use of Fee: Acquisition and construction of capital facilities and equipment required by the Town to provide police services for a population of approximately 19,366 and non-residential growth as projected by the Town planning department.

Relationship Between Use of Fee and Type of Development: The development of new residential, office and commercial land uses in the Town of Moraga will generate additional demands on police services and the associated need for police capital facilities and equipment. The fees will be used to construct and acquire police facilities and equipment to accommodate new development.

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Relationship Between Need for Facility and Type of Project: Each new development project (residential, office and commercial) will generate calls for police services the associated facilities and equipment are needed to provide those services. Current police facilities are only adequate for the existing residents and businesses. The Town needs to acquire new police facilities and equipment to meet the demands of new development.

Relationship Between Amount of Fee and Cost of Portion of Facility Attributed to New Development: The amount of police capital facilities and equipment needed by each land use had been estimated by an "equity buy-in" methodology by estimating the current value per capita of the existing police facilities and equipment serving the existing population in the Town and applying that value per capita to the anticipated new development and growth in the Town.

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Chapter 4
Storm Drainage Fee

This chapter presents an analysis of the need for storm drainage facilities to accommodate new development in the Town of Moraga. Storm Water Consulting, Inc completed this analysis. A fee schedule is presented based on the cost of these facilities to ensure that new development provides adequate funding to meet its needs.

Service Population and Percentage Fee Allocation

Storm drainage facilities serve both homes and businesses townwide. Consequently, a service population that includes both residential dwelling units and businesses reasonably represents the need for these facilities.

In the case of storm drainage, some of the Town's potential areas of new development drain directly to areas located outside of the Town limits and within watersheds located outside of the primary watershed upon which the Town resides (the Moraga Creek Watershed). These potential new development areas include Bollinger and the Eastern 2/3 Northeast Area identified as in the "Storm Drainage Needs Study" in Exhibit B (which both drain to Las Trampas Creek) and Indian Valley (which drains to San Leandro Creek). These potential new development areas have been excluded in the service population for the storm drainage facility upgrades identified herein, and site specific development requirements for these areas will need to be established at the time that their environmental and development review processes are initiated by the Town.

Table 4.1 shows the estimated service population and percentage fee allocation for storm drainage facilities. In calculating the percentage fee allocation for the different land uses in the service population, projected land uses have been weighted based on their differing rates of storm runoff production using a percent impervious approach. For example, an acre of commercial property will generate more storm runoff than an acre of single family detached residential development as the commercial property will absorb less rainfall, due to the presence of a greater amount of impervious surfaces (such as parking lots, rooftops and hardscape elements). Hence, an acre of commercial property has a greater impact on storm drainage needs and will have a proportionally greater fee responsibility than an acre of single family detached residential development. Each of the listed land uses in the estimated service population has been assigned an applicable average impervious cover value to accomplish the appropriate proportional weighting.

Table 4.1
Town of Moraga
Storm Drainage Facilities Service Population and Percentage Fee Allocation

Land Use Category	Acreage by Land Use Category	Proportional Land Use Area	Percent Impervious	Proportional Funding Factor (Land Use % times % Impervious)	Percentage Fee Allocation (Funding Factor % of Total)	Total Planned Residential Units
Single Family Detached Residential	179.5	89.44%	40%	0.3577	82.6%	408
Multi-Family Residential	8.0	3.99%	55%	0.0219	5.1%	50
Senior Housing	6.0	2.99%	70%	0.0209	4.8%	200
Commercial*	5.0	2.49%	90%	0.0224	5.2%	N/A
Hotel	2.2	1.10%	90%	0.0099	2.3%	N/A
	200.7	100.00%		0.4329	100.0%	

*Includes Mixed Use Commercial Units

Existing Facilities Inventory

The existing storm drainage facilities inventory has been limited to the storm drainage structures (bridges, culverts, and conduits) serving the Town's major creeks within the Moraga Creek Watershed. These consist of the creeks within the Moraga Creek Watershed that were evaluated by the Federal Emergency Management Agency (FEMA) in their published Flood Insurance Study performed for the Town of Moraga and include Laguna Creek, Moraga Creek, South Branch Moraga Creek, Larch Creek, Ivy Drive Tributary, Corliss Drive Tributary, and St. Mary's Road Tributary.

Table 4.2 summarizes the existing storm drainage facilities serving these major creeks.

Table 4.2
Town of Moraga
Existing Storm Drainage Facilities

Stream Name	Location	Drainage Structure
Laguna Creek	Campolindo Dr.	1-48" RCP
	Woodford Dr. to N. Side Carroll Ranch	Varies, 1-36" RCP to 1-60" RCP
	N. Side Carroll Ranch to Donald Dr.	Varies, 1-78" RCP to 1-10'x8' CBC
	Hacienda/Pavilion	1-96" CMP
	Devin Dr.	1-12'x10' CBC
	Corliss Dr.	1-144" CMP
	Moraga Way	2-13'x10' CBCs
	Country Club Dr.	1-12'x10' CBC
Moraga Creek	Ivy Dr	1-172"x90" CMPA
	Miramonte Dr.	1-184"x103" CMPA
	St. Andrews Dr.	1-264"x96" CMPA
	Canyon Road	Bridge
Ivy Drive Tributary	Ivy Dr.	2-70"x45" CMPAs
	Moraga Way	1-66" RCP
Corliss Drive Tributary	Corliss Dr.	1-66" CMP
St. Mary's Road Tributary	Moraga Road	1-60" CMP
	St. Mary's Road	2-48" HDPE Pipes
	Stafford Dr.	1-36" HDPE Pipe
Larch Creek	Wandel Dr.	1-90"x51" CMPA
	Camino Pablo Rd.	2-66" CMPs
	Larch Avenue	1-10'x4' CBC
South Branch Moraga Creek	Tharp Dr.	1-102" CMP
	Camino Pablo Rd.	1-78" CMP

Facility Standards and Fee Schedule

A 100-year storm capacity was utilized as the level of service standard for storm drainage facilities. This is the standard that is applied to major creeks for which flood information has been mapped by FEMA and is the standard that is regulated in the Town's Flood Hazard Area Regulations (Moraga Municipal Code, Title 8, Chapter 8.108).

The Town has previously invested in the funding and construction of its existing storm drainage infrastructure, which includes many bridges, culverts and conduits. These facilities have been constructed using a variety of funding sources. New development will increase the rate, volume and/or duration of runoff production during the 100-year storm and various other storms by replacing natural ground cover with varying degrees of impervious surfaces, such as streets, buildings, parking areas, and hardscape features. New development for which storm drainage impact fees are proposed to be applied is scattered throughout the watershed for Moraga Creek (which includes all of the Town's major creeks listed on Table 4.2). In evaluating storm drainage upgrade needs, particularly in situations where new development is essentially "infill" within an existing developed community, it is appropriate to examine such needs using an overall watershed evaluation approach.

Storm drainage upgrades and replacements identified for impact fee purposes are those that are needed to achieve the 100-year storm capacity standard after new development has occurred in conformance with

adopted storm drainage regulations. At the same time, existing storm drainage facilities that are not proposed to be upgraded or replaced will benefit new development by facilitating the continued use of available capacity and excess capacity.

Table 4.3 provides a listing of the applicable storm drainage infrastructure upgrades and replacements, with a total estimated cost of $3,594,384.

Table 4.3
Town of Moraga
Proposed Storm Drainage Infrastructure Upgrades and Replacements
Preliminary Opinion of Probable Cost

Item	Linear Feet	Total Cost
Cross-Culverts and Conduits		
Laguna Creek		
Woodford Drive to SE Corner Campolindo HS (1 - 54" RCP)	400	180,000
SE Corner Campolindo HS to NE Corner Carroll Ranch (2 - 54" RCPs)	400 each	436,668
SE Corner Carroll Ranch to Rheem Blvd. (1 - 84" RCP)	600	803,886
North Portion Rheem Valley Shopping Center Parking Lot (1 - 8' x 8' CBC)	300	517,833
Hacienda/Pavillion (Add 2 - 96" RCPs)	230 each	460,000
Country Club Drive (2 - 10' x 8' CBCs)	30	54,120
St. Mary's Road Tributary		
Moraga Road (Add 1 - 60" CMP and Headwall)	150	75,000
Stafford Drive (Add 1 - 36" HDPE Pipe)	50	15,000
Ivy Drive Tributary		
Moraga Way (Add 1 - 48" RCP)	100	40,000
South Branch Moraga Creek		
Camino Pablo Road (Add 1 - 78" CMP)	100	80,000
Subtotal Construction		$ 2,662,507
Design and Planning @ 10%		266,251
Construction Management @ 10%		266,251
Contingency @ 15%		399,376
TOTAL ESTIMATED COST		$ 3,594,384

The cost of storm drainage infrastructure upgrades and replacements has been spread across the weighted percentage fee allocation for the estimated service population represented on **Table 4.1** in order to determine the storm drainage impact fees to be applied to the estimated service population as shown on **Table 4.4.**

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Table 4.4
Town of Moraga
Storm Drainage Impact Fees

Total Infrastructure Cost	Land Use Category	Acreage by Land Use Category	Percentage Fee Allocation	Total Fee Responsibility	Impact Fee (Per Acre)	Total Planned Residential Units	Impact Fee (Per Residential Unit)
	Single Family Detached Residential	179.5	82.6%	$ 2,970,497	$ 16,549	408	$ 7,281
	Multi-Family Residential	8.0	5.1%	$ 182,036	$ 22,755	50	$ 3,641
$ 3,727,510	Senior Housing	6.0	4.8%	$ 173,762	$ 28,960	200	$ 869
	Commercial*	5.0	5.2%	$ 186,173	$ 37,235	N/A	N/A
	Hotel	2.2	2.3%	$ 81,916	$ 37,235	N/A	N/A
		200.7	100.0%	$ 3,594,384			

*Includes Mixed Use Commercial Units

Facility Costs to Accommodate Growth

The Town will maintain a reasonable relationship between new development and the use of fee revenues by funding a variety of projects to upgrade and replace applicable storm drainage facilities during this period.

Implementation

The storm drainage facilities impact fee would be collected at the time of building permit issuance. To implement the fee the Town should:

- Annually update a capital improvement plan to indicate the specific use of fee revenues for facilities to accommodate growth;
- Comply with the annual and five-year reporting requirements of *Government Code 66000 et seq.;* and
- Identify appropriate inflation indexes in the fee ordinance and allow an inflation adjustment to the fee annually.

For the inflation indexes, the Town should use separate indexes for land and construction costs. Calculating the land cost index may require use of a property appraiser every several years. The construction cost index can be based on the Town's recent capital project experience or taken from any reputable source, such as the *Engineering News Record* (ENR).

Nexus Findings

This summary provides findings which comply with the requirements of California Government Code Section 66000, et seq. The capital improvements to be funded by storm drainage impact fees are required to mitigate the storm drainage impacts of new development within the Moraga Creek Watershed within the Town of Moraga, consistent with the land use and storm drainage policies set forth by the Town. The

the Town of Moraga, consistent with the land use and storm drainage policies set forth by the Town. The fee is based on a storm drainage and fair-share cost analysis which: 1) determines capital improvements required to mitigate the relative storm drainage impacts of the buildout of new development within the Moraga Creek Watershed within the Town limits, and 2) equitably distributes the costs of the improvements to the new development areas that cause the relative impacts, per the provisions of the Mitigation Fee Act.

The Mitigation Fee Act requires mitigation fee programs comply with the following basic requirements:

- *Identification of the purpose of the fee.*
- *Identification of how the fee will be used.*
- *Determination of how there is a reasonable relationship between the fee's use and the types of development projects on which the fee is imposed.*
- *Determination of how there is a reasonable relationship between the need for the public facilities and the types of development projects on which the fee is imposed.*
- *Determination of how there is a reasonable relationship between the amount of the fee and the cost of the public facilities (or portion of facilities) attributable to new development.*

The following findings relate to these five requirements on reasonable relationship:

Identify the purpose of the fee. The purpose of the fee will be to provide a source of funding to be used to construct storm drainage facilities to serve new development within the Moraga Creek Watershed within the Town limits or to mitigate impacts to existing storm drainage facilities.

Identify how the fee is to be used. The storm drainage impact fee will be used to construct the needed storm drainage facilities, including culverts, conduits, and appurtenant improvements.

Determine a reasonable relationship between the fee's use and the types of development projects on which the fee is imposed. New development proposed within the Moraga Creek Watershed within the Town limits will generate additional runoff during storm events. The quantities, rates and durations of runoff generated from new development will greatly exceed the amounts of runoff generated under existing land uses. The establishment of fees to fund storm drainage improvements is directly related to the types of new development based on relative rates and volumes of runoff production.

Determine how there is a reasonable relationship between the need for the public storm drainage facilities and the types of development projects on which the fee is imposed. Hydrologic and hydraulic technical evaluations have been performed to determine quantities and rates of runoff that will be generated along the major creeks within the Moraga Creek Watershed within the Town limits. Based on these evaluations, relevant storm drainage infrastructure elements have been recommended to serve or offset the impacts new development.

Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facilities (or portion of the facilities) attributable to new development. Estimated costs of required storm drainage infrastructure upgrades and replacements have been developed. These are considered to be reasonable estimates of costs that will actually be incurred to construct the required improvements, and have been corroborated with actual bids and experiences on prior storm drainage improvement projects. The storm drainage impact fees reflect a proportionally fair share amount of the estimated storm drainage infrastructure upgrade and replacement costs.

Chapter 5
Traffic Fee

The purpose of this Chapter is to summarize the technical basis for the Town of Moraga Local Transportation Mitigation Fee (LTMF) program. The focus of the program is to support an overall transportation system in Moraga that serves the expected future demand, based on changes in local land use projections, planned and approved development projects, and associated changes to capital improvements and cost estimates.

This chapter summarizes the analytical approach for determining the nexus between the fees and the local impact created by anticipated development in Moraga. A traffic and fair-share cost analysis is conducted to equitably distribute the costs of the necessary improvements to development that causes the impacts, per the provisions of AB 1600. The most up-to-date versions of the available analytical tools and techniques have been used to ensure the highest level of consistency with current standards. A separate technical study was prepared that documents the methodological approach and resulting analysis to meet AB 1600 provisions. The study, *Town of Moraga Local Transportation Mitigation Fee Study*, was prepared in August 2007, included in Exhibit C

All roads within the Town of Moraga's jurisdiction are considered part of the local transportation network, and are thus eligible for funding through the LTMF program. However, while all facilities in the local transportation network are eligible for LTMF funding, not all improvements on all facilities will be part of the LTMF program. The projects selected for inclusion in the LTMF program are those that improve city-wide transportation conditions by serving traffic from multiple development areas, typically on major or minor arterial streets.

Identify Existing Deficiencies on Roadway Network

The traffic analysis in the technical study determined if deficiencies exist at key locations in the Town of Moraga. The standard used in this analysis is consistent with the Town of Moraga General Plan.

For Town of Moraga routes, acceptable operations at signalized intersections are defined as LOS C or better. For unsignalized intersections, acceptable operations are defined as LOS C or better for the overall intersection <u>and</u> LOS E or better for the side-street approaches, as outlined in the *Town of Moraga Available Capacity Study* (Robert L. Harrison Transportation Planning, January 1999).

Traffic counts at a number of study intersections throughout the Town were assembled and the results of the level of service analysis are shown in Table 4.1. All intersections currently operate within acceptable standards except two unsignalized intersections with side-street levels that operate at LOS F. These intersections include:

- *Moraga Road at Ascot Drive* – the side street operates at LOS F during both the weekday AM and PM peak hours.
- *Moraga Road at Corliss Drive* – the side street operates at LOS F during both the weekday AM and PM peak hours.

TABLE 5.1
EXISTING CONDITIONS LEVEL OF SERVICE ANALYSIS

ID	Intersection	Control[1]	AM Peak Hour		PM Peak Hour		Existing Deficiency?
			Delay[2]	LOS[3]	Delay[2]	LOS[3]	
1	Moraga Way/Moraga Road	Signal	26	C	34	C	No
2	Campolindo Drive/Moraga Road	Signal	22	C	15	B	No
3	Rheem Boulevard/Moraga Road	Signal	24	C	23	C	No
4	Moraga Road/St. Mary's Road (South)	Signal	13	B	13	B	No
5	Bollinger Canyon Road/St. Mary's Road	SSS	1 (20)	A (C)	1 (17)	A (C)	No
6	Rheem Boulevard/St. Mary's Road	SSS	4 (20)	A (C)	5 (25)	A (C)	No
7	St. Mary's Parkway/St. Mary's Road	SSS	3 (14)	A (B)	6 (14)	A (B)	No
8	Center Street/Rheem Boulevard	Signal	11	B	11	B	No
9	Moraga Road/Ascot Drive	SSS	24 (**>50**)	C (**F**)	5 (**>50**)	A (**F**)	Yes
10	Moraga Road/Donald Drive	Signal	13	B	7	A	No
11	Moraga Road/Corliss Drive	SSS	12 (**>50**)	B (**F**)	8 (**>50**)	A (**F**)	Yes
12	Moraga Way/St.Andrews Drive	Signal	12	B	12	B	No
13	Moraga Way/School Street	Signal	10	A	11	B	No

Notes: **Bold** = Exceeds acceptable Town level of service standards

1. SSS = Side-Street Stop
2. For signalized intersections information presented is intersection average control delay. For unsignalized intersections, information presented is intersection average control delay (followed by worst approach delay in parentheses) expressed in seconds per vehicle.
3. For unsignalized intersections, information presented is intersection average LOS (followed by worst approach LOS in parentheses).

Source: Fehr & Peers, 2007.

Identify Future Deficiencies on Roadway Network

The Town provided forecasts of future development including 624 single-family units, 70 multi-family units, 200 senior-housing units, 70,000 square feet of commercial space, and an 80-unit hotel.

For the analysis of future traffic conditions, peak hour trips from new development in the Town were generated using rates from two sources. The peak hour trip generation for the residential (single-family) land use was based on trip generation rates presented in the *Town of Moraga Available Capacity Study* (Robert L. Harrison Transportation Planning, January 1999). The peak hour trip generation for all other land uses was based on rates presented in the Institute of Transportation Engineers (ITE) *Trip Generation, 7th Edition*. The trips generated by all future growth were added to the existing traffic volumes. The purpose of this analysis was to confirm that traffic from the new developments in the Town would cause the need for improvements at the study intersections; in order to isolate the effects of new local development, no growth in traffic from outside Town was assumed.

The resulting future (or cumulative) peak hour traffic volumes were analyzed at each of the study intersections, both with and without the specified improvements. As described in the technical study, the results indicate that with the addition of traffic from the new development in Town, all signalized

intersections would operate at acceptable levels of service. The unsignalized intersections of Moraga Road with Ascot Drive and Corliss Drive would operate poorly, with side-street levels of service worse than LOS E.

Since these intersections are projected to operate at worse than acceptable standards, they are considered for improvements as part of the Fee Program. When the improvement measures were applied, these two intersections would operate at LOS C or better, which is consistent with the Town's standards. Thus, the capital improvements identified for inclusion in the LTMF will mitigate the traffic effects of new development on these facilities.

The improvement projects to be included in the proposed fee program are listed below and the total cost to construct the improvements is $979,900.

- Signalization of the Moraga Road/Ascot Drive intersection
- Signalization of the Moraga Road/Corliss Drive intersection

Calculate Equivalent Dwelling Units for New Development

As described in the technical study, the land use forecasts were converted to Equivalent Dwelling Units or EDUs to account for the fact that different development types generate traffic with different characteristics and levels of impact on the Town's transportation system. The anticipated development in the Town of Moraga (as defined by this study) would generate 830 EDUs.

Calculate Project Costs Attributable to New Development

If a facility is not subject to an existing deficiency, then the need for improvement is generated by new development rather than by existing transportation problems and all of the estimated improvement costs are included in the fee program. As shown in Table 5-1 above, there are currently two study locations that operate with existing deficiencies. The calculation to determine the proportion of the cost attributed to new development is $395,300, as described in the technical study.

Determine Fee Amounts

The fees have been calculated based on the complete list of projects included in the proposed LTMF program. The proportion of the cost attributable to new development ($395,300) was divided by the total number of Equivalent Dwelling Units (EDUs) expected in Moraga (830) to calculate the resulting fee per EDU ($476). These figures do not reflect any reductions or subsidies that the Town may choose to implement. This calculation considers the recently obtained funding for the Moraga Road / Ascot Drive intersection. Table 4-2 summarizes the fee calculations.

TABLE 5-2
FEE CALCULATIONS

Land Use Category	EDU	Recommended Fees
Single-Family	1.00	$476/D.U.
Multi-Family	0.50	$238/D.U.
Senior Housing	0.21	$100/D.U.
Commercial	1.52	$724/Thousand S.F.
Office	0.79	$376/Thousand S.F.
Hotel	0.29	$138/Thousand S.F.

Source: Fehr & Peers, 2006.

Nexus Findings

This chapter and the supporting technical study provides a detailed discussion of the elements of the proposed Moraga LTMF program and explains the analytical techniques used to develop this nexus study. The chapter addresses all the fee program elements required by AB 1600, as described below.

- *Identifying the purpose of the fee*

  If a facility is not subject to an existing deficiency, then the need for improvement is generated by new development rather than by existing transportation problems and all of the estimated improvement costs are included in the fee program. As shown in Table 4-1 above, there are currently two study locations that operate with existing deficiencies. The calculation to determine the proportion of the cost attributed to new development is $395,300, as described in the technical study.

- *Identifying how the fee will be used and the facilities to be funded through the fee*

  The fee will be used to help fund capital improvement projects necessary to accommodate future traffic demand in Moraga. The signalization of the Moraga Road/Ascot Drive and the Moraga Road/Corliss Drive intersections are the projects to be funded through the fee.

- *Determining a reasonable relationship between the fee's use and the type of development on which the fee is imposed*

  As described in the report, different types of development generate traffic with different characteristics. The calculations presented in the technical study account for these different characteristics by applying different per-unit fee factors to each type of development. These considerations account for the differential impacts on the local transportation system generated by different development types.

- *Determining a reasonable relationship between the need for the public facility and the type of development on which the fee is imposed*

  The need for the transportation facilities has been established through discussions with Town staff and the analysis in the technical study. The analysis shows there are some existing deficiencies to be included in this LTMF program. These deficiencies have been discounted from

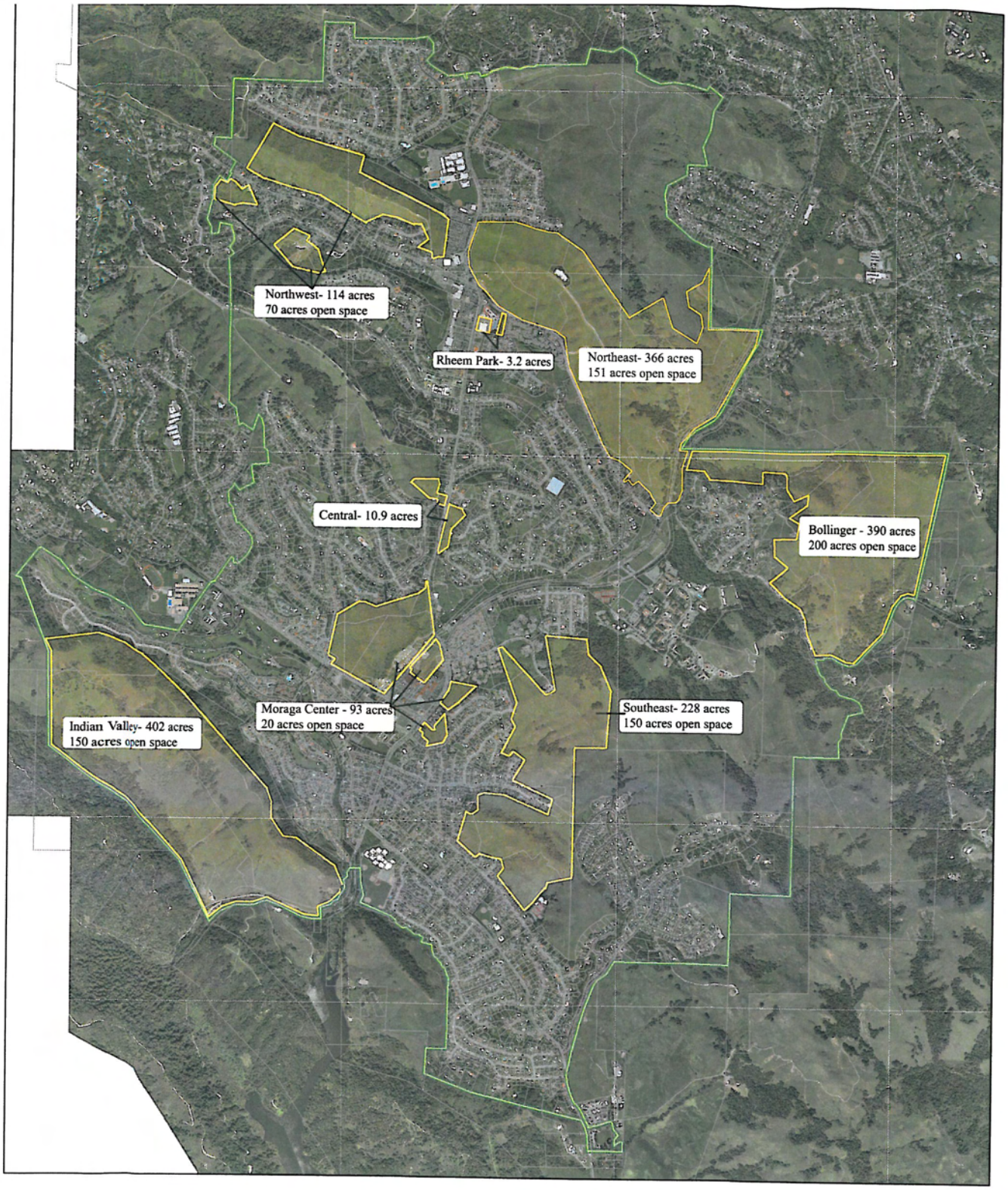
the calculated fee. The analysis of future conditions indicate that future local development will cause impacts and the proposed improvements mitigate those impacts to the Town's applicable operational standards.

- *Determining a reasonable relationship between the amount of the fee and the cost of the public facility (or portion of facility) attributable to new development*

  The nexus analysis presented in the technical study accounts for existing deficiencies in the local transportation system and does not include the costs of rectifying those deficiencies in the fee program. Thus, the LTMF program is targeted toward the costs of public improvements attributable to new development within Moraga.

Appendix

Exhibit A: Town of Moraga Land Use Map



TOWN OF MORAGA
VACANT ACRES

June 2006