Development Impact Fee Calculation Nexus Report

For the

City of El Segundo, California

May 11, 2022

Revenue & Cost Specialists

Serving Local Governments Since 1980

May 11, 2022

Honorable Mayor and City Council
Via Mr. Darrell George, Acting City Manager
City of El Segundo City Hall
350 Main Street
El Segundo, CA 90245

RE: 2021-22 Update to the Development Impact Fee (DIFs) Calculation and Nexus Report

Honorable Mayor, Council and Acting City Manager George:

The City recently committed to a major effort to identify all of the City's capital needs through General Plan build-out and calculate a full schedule of development impact fees (henceforth referred to as *DIFs*) with which to finance the proportional share of development-generated capital needs. The City's inventory of existing infrastructure is important because it determines the limits of the City's service levels to its residents and businesses.

Revenue & Cost Specialists, L.L.C., was contracted to provide their technical expertise both in the identification of capital projects and acquisitions as well as nexus distribution efforts. These capital additions are necessary in order to preserve the existing ***Levels of Service (LOS)*** currently offered to and enjoyed by the existing community from the diminution of those existing LOS due to the addition of new residential and business development in El Segundo and calculate the DIFs necessary to finance those required projects.

City Council and staff, responsible for providing services to a continually expanding residential and business community, must recognize that the magnitude of the DIFs is a direct function of the nearly $292.7 million cost of the capital projects that are identified in the Report's infrastructure chapters. Approximately 54.7%, or $161.1 million, of the $293.3 million in identified project costs could be financed by the imposition of these impact fees. Existing DIF fund balances will finance approximately $0.8 million (0.30%) of the total project costs. There remains a shortfall of $131.6 million (45.0%) that will need to be come from other financial sources such as utility rates, grants and general revenues to finance projects not eligible for Development Impact Fee financing.

The following DIF Report recalculates the three existing DIFs for the City of El Segundo as well as eight additional infrastructures not currently covered by an impact fee. All are based on the aforementioned changes and the City's General Plan and updated land use database and their effect upon requirements for public safety, circulation, storm drainage collection, utilities and the quality of life facilities (public use facilities, parks etc.).

The adoption of the updated DIFs will enable this City Council, as well as succeeding Councils, to continue to ensure that the City will be able to meet the ***basic*** infrastructure needs of new growth, without unduly burdening the existing population and business community for these development-generated capital costs. Adoption of the maximum DIFs contained herein and imposition upon the remaining development opportunities in El Segundo would generate

approximately $160.3 million in a combination of public improvement dedications and revenues limited for use on the many development generated capital expansion projects that could be expected over the General Plan build-out period (estimated to be an approximate 30 years).

A major element in this Report is the *proportional analysis*, or comparison of what is being asked of future residents and businesses, in the form of dedicated public improvements or in lieu impact fee payments, with the replacement cost of the City's existing infrastructure (land, improvement, facilities, and equipment), contributed by the existing population and business community. The dedications, taxes and assessments contributed to date by the existing community over numerous decades of development have generated just over $831.7 million (at current replacement costs) in spine or major infrastructure/capital improvements for the City. Removing land costs of $175.9 million, as they do not depreciate, reduces the total to $655.8 million. Be advised that the list below is limited to spine infrastructure and does not include (I.e. tract) utility pipes which if included, would likely nearly double the $655.8 million in depreciable (exclude land costs) spine streets, storm drainage, water and sewer system improvements for a total capital replacement cost of over $1.3 billion. The following table identifies the existing spine infrastructure capital improvement equity, by infrastructure.

Infrastructure Type	Existing Capital Improvements
Law Enforcement	$27,004,450
Fire Suppression	$34,953,965
Circulation System (1)	$247,839,677
Storm Drainage System (1)	$27,838,853
Water System (1)	$155,960,792
Sewer System (1)	$105,814,626
General Facilities	$26,572,360
Library Collection/Computers	$4,951,278
Public Use Facilities	$42,333,151
Aquatics facilities	$9,742,680
Park Land and Park Improvements	$148,700,364
Total City Spine Assets	$831,712,197

(1) NOTE: These infrastructure totals are limited to backbone systems and do not include "local" improvements.
(2) Some $175.9 million of the $831.7 million is in land assets that do not depreciate leaving roughly $655.8 million in depreciable major assets.

The recommended DIF schedules will not address all of the City's capital needs, as identified on the various schedules in this Report. As per Government Code §66000 et. seq. and fairness, DIFs cannot address existing capital deficiencies. The proposed DIFs will recognize and accommodate the needs generated by the City's growing population and business community. However, with the continued adoption of DIFs, other City discretionary revenue resources that may have been used to meet growth-generated needs for expanded services and facilities will remain available for those accumulating replacement and rehabilitation projects.

The DIFs contained herein calculate only the costs of infrastructure required to support services provided only by the City of El Segundo. They do not include development impact fees imposed by the school district(s) or any other government agency.

The information required to develop the City's capital costs and equity data was generated by the El Segundo staff, without whose help and cooperation, this Report would have been impossible to complete. In addition to the assistance of Joseph Lillio, Chief Financial Officer, in direction and in communicating to staff of the highest priority of this project, we wish to extend our appreciation to the management and technical personnel who were instrumental with RCS to generate the update information and data so critically necessary for the legal support of the DIFs.

Michael Allen - Development Services Director
Daisy Benoit - Accountant
Jaime Bermudez - Police Chief
Mark Hebert - Library Manager
Deena Lee - Fire Chief
Liz Lydic - Management Analyst, Fire
Dino Marsocci - Treasury & Customer Services Manager
Jason Martin - Geographic Information Systems Analyst
Melissa McCullum - Community Service Director (no longer with the City)
Liana Osborne - Administrative Technical Specialist
Nicole Pasqueira - Fire Marshall
James Rice - Associate Engineer
Elias Sassoon - Director, Public Works Department
Eduardo Schonborn, AICP - Planning Manager
Julissa Solano - Management Analyst, Police
Carol Lyn Urner, MPA - Senior Management Analyst, Fire
Lifan Xu - City Engineer

Without their hard work and willingness to provide the best data available, this Report could not have been completed to the degree of accuracy that it has. We would also like to highlight the efforts of Eduardo Schonborn, Planning Manager, in compiling the critical land-use database information and for his responses to RCS's many requests for demographic information. Additionally, the efforts of Jason Martin, GIS Analyst, for the GIS generated land use information and much needed actual police and fire calls-for-service were greatly appreciated and the quality of that information and the resulting calculations were directly improved by his efforts.

This *Development Impact Fee Calculation and Nexus Report* is now submitted for your review and consideration. RCS is prepared to assist in increasing the Council's and community's understanding of this very significant part of the City's revenue structure.

Sincerely,

Scott Thorpe,
Senior Vice President

Gregory Brown
RCS Associate

CITY OF EL SEGUNDO
DEVELOPMENT IMPACT FEE CALCULATION AND NEXUS REPORT

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Commonly Used Report Terms, Acronyms and AKA's

ADU's	Attached Dwelling Unit
Detached Dwelling	AKA Single Family Dwelling
Attached Dwelling	AKA Apartment, Condominium or Duplex
DIF	Development Impact Fee Calculation and Nexus Report
DOF	State Department of Finance
GIS	Geographic Information System
ITE	Institute of Transportation Engineers
KSF	Thousand Square Feet
LOS	Level of Service
Mitigation Fee Act or AB1600	Government Code § 66000
Quimby Act	Government Code 66477

Chapter 1
Background and Introduction

In 2021 the City of El Segundo retained Revenue and Cost Specialists, LLC to undertake a comprehensive calculation of the future development impact costs for the City. This report will address each the City's eleven separate infrastructure systems. The development impact cost calculations are intended to identify the cost of additional infrastructure necessary to accommodate long-term continued development within the City's existing limits in such a fashion as to not decrease the levels of service currently enjoyed by the City's existing residents and businesses. The development impact cost calculations, if adopted, can be formalized as a set of Development Impact Fee (henceforth referred to as DIFs) schedules by City Council.

In light of inflation and other changing development factors, a periodic review and adjustment of the City's DIFs would be appropriate and warranted in order to continue to assure that the City collects sufficient monies to construct the additional infrastructure needed to accommodate the anticipated growth demands of new residents and businesses expected to be developed in the City. Such has been completed with the submission of this *Development Impact Fee Calculation and Nexus Report.* The existing DIF schedules may have served the City well for many years, but only for those limited infrastructures currently with impact fees. However, after cumulative changes of DIF factors, the most significant being the effect of inflation on the older project cost estimates combined with General Plan amendments has combined to require a full update of all development assumptions, estimated demands and capital project costs was prudent. For this and other reasons, the City entered into the intensive effort to recalculate the amount of the existing and new DIFs.

This *Development Impact Fee Calculation and Nexus Report* effort remains consistent with the previous report's intent to quantify development costs. This document includes a greater amount of detail such as a complete list of all 31 proposed projects that may be financed (all or in part) by the proposed DIF schedules, by infrastructure as well as a comparison with the existing commitment of the existing community.

The Importance of Capital Infrastructure. The Levels of Service (LOS) of any one of the City's infrastructure is based upon and (and limited by) the capacity of that infrastructure to support the users, residents or businesses. The design of any municipal project has a finite capacity, such as a four lane road, a 30" storm drainage pipe or a 10,000 square foot library. Each can only meet the needs of a defined number of users. A four-lane street segment can only handle so many vehicles per hour, especially at a speed that makes it worth using for driving over longer distances. A storm drainage pipe that is 30" cannot handle storm flows twice its capacity. A library can hold just so many collection items and serve only so many people. A municipality with 0.40 square feet per resident of library space will be able to serve more residents than a municipality with only a 0.10 square feet standard per resident of library space. The following is a more precise example using law enforcement.

Consider the labor intensive service of law enforcement, regardless of the quality and capabilities of the City's sworn police officers, the Department remains highly dependent upon

its infrastructure capacity. A police station of 11,250 square feet will have capacity to support roughly thirty sworn police officers, at about 375 square feet per officer. If the station size remains the same at 11,250 square feet but the sworn compliment doubles to sixty police officers, the station will become exceedingly dysfunctional at 187.5 square feet per officer. The same holds true for police response vehicles and law enforcement specialty equipment. If a City adds thirty additional officers but cannot add station space, vehicles and specialty equipment, the City has dealt with only half of the service equation. They have achieved little.

Further, if you add 30 police officers:

- But the agency does not add police response vehicles the calls-for-services responses will be very poor.
- But the agency does not create any additional station square foot space the calls-for-services responses will be dysfunctional, and unpredictable.
- But the agency does not provide the sworn officers with the required personal and specialty equipment the calls-for-services responses will be dangerous, certainly for the new police officers.

On the opposite side, if you add all of the above capital needs, but do not add additional sworn officers, the result would probably be limited to a minor improvement in response times.

Good municipal service takes a balance of staff and infrastructure. However, make no mistake about it, the amount of and complexity of any infrastructure defines (in part or all) of the level of service (LOS). This makes the one-time DIF financing of any City's infrastructure that much more important. It takes a balance to accommodate development with the police responses within the desired standard. It will take additional properly equipped officers, law enforcement station space, response and support vehicles and specialty equipment. The importance of having a properly calculated and documented DIF schedule in order to accommodate development-related demands cannot be over-stated. The same concept holds true for the two labor-intensive public safety services and the infrastructure-intensive services such as circulation, storm drainage collection, water distribution et. al. and wastewater collection et. al. Of course, the DIFs can only be used for the capital acquisitions, the ongoing labor staffing costs will need to come from other sources.

PROPORTIONAL ANALYSIS

A helpful component of this Report is the proportional analysis of the infrastructure needs required to accommodate continued development of the City as compared to the existing infrastructure that has been generated through years of taxes and other contributions and currently serves the existing community. This proportional analysis is intended to recognize and reconcile the difference between the City's desired level of service required of new development, per statements in the various General Plan elements, with that of the *de-facto* or actual level of service provided to the existing community. The inclusion of the proportional analysis will assist the City Council in adopting a DIF structure that recognizes inter-generational equity and assists the Council in making the difficult policy decisions regarding the required capital additions needed to accommodate new development by increasing the lay-person's understanding of *fairness*.

The proportional analysis is important, if for no other reason, than for community inter-generational equity, i.e., fairness in the infrastructure investment that has been made by existing residents and businesses with those of new residents and businesses that wish to use the existing infrastructure. As an example, new development may be required to expand the number of arterial and collector lane miles in the City but new development also benefits from the immediate use of Maple Street constructed so many years ago just as an existing citizen can use a newly constructed arterial street segment. In short, previous generations of businesses and residents have contributed to the development of the City infrastructure and this fact should be recognized by future residents and businesses by contributing a similar amount of capacity towards completing the various infrastructure systems.

It is one thing to identify the many public improvement projects needed through build-out. It is an entirely different thing to assume that all of the identified improvements are required to meet the demands of the new development. Clearly, some projects will be *replacements* of the existing infrastructure while others will be *capacity increasing* projects. Within the category of the latter, they may also be further classified into two categories;

1. Projects dealing with existing deficiencies, i.e., projects required regardless of whether there is additional development or not. An example would be a traffic intersection currently controlled by stop signs that would meet demand warrants based upon continued development.

2. Projects required as a result of the need to accommodate future development. An example of this would be a signal that is currently controlled quite adequately by stop signs, but because of development in the near and *downstream* areas will ultimately need to be signalized.

This Report provides the documentation of the City's costs which serve as the basis for calculating DIFs. The updated DIF Schedules and related information can be found in Chapters 3 through 13 and Appendices A, B, C and D of this Report.

RCS staff has worked with Finance, Police, Fire, Planning/GIS, Engineering and Quality of Life infrastructure management staff to generate and review the supporting data which forms the calculation of Development Impact Fee schedules. The results of this review can be found on the schedules located at the end of each Chapter.

Development Impact Fee Structure. The General Plan provides a range of potential densities for residential development, as such, the DIFs for residential uses need to be calculated on a per dwelling unit basis to reflect more accurately the impacts from a specific development. For example, a property zoned as detached dwelling residential development may contain from three to six units per acre. If fees are calculated on an acreage basis, the developer proposing three units per acre would pay the same amount as a developer constructing six units per acre. Similarly, fees are calculated on a square footage basis for business (retail/service, office and industrial, etc.) parcels to reflect the impacts of different building intensities for these types of development. Some of the infrastructures have optional fee structure recommended for unusual developments, such as a parking structure, which in itself does not create demand beyond additional storm drainage runoff, where the structure requiring the additional parking does.

A second reason for the proposed DIF fee structure recommended in this Report involves the issue of building expansion or intensification of retail, office and industrial areas. For example, if a property owner of commercial or industrial property proposes an expansion to his building, the question exists about how to charge this proposed expansion for its impact on the City's streets, storm drainage system, and other infrastructures. A fee calculated on a building square footage (and an average **F**loor **A**rea **R**atio).basis simplifies this calculation.

CALCULATION OF DEVELOPMENT IMPACT FEES

In California, State legislation sets certain legal and procedural parameters for the charging of these fees. This legislation was passed as AB1600 by the California Legislature and is now codified as California Government Code Sections 66000 through 66009. This State law went into effect on January 1, 1989.

Government Code §66000 requires documentation of projects to be financed by Development Impact Fees prior to their levy and collection, and that the monies collected actually be committed within five years to a project of direct benefit to the development which paid the fees. Many states have such controlling statutes. Specifically, Government Code §66000 requires the following process:

1. Delineation of the purpose of the fee.

2. Determination of the use of the fee.

3. Determination of the relationship between the use of the fee and the type of development paying the fee.

4. Determination of the relationship between the need for the facility and the type of development project. **NOTE: Numbers 2 & 4 will be reversed throughout the chapters in this Report because it is apparent that *need* should be identified before *use*.**

5. Determination of the relationship between the amount of the fee and the cost of the portion of the facility attributed to the specific development project.

This Report, with some additions, utilizes the basic methodology consistent with the above requirements of Government Code §66000. Briefly, the following steps were undertaken in the calculation of DIFs for the City:

1. Define the level of service desired within the General Plan area for each project or acquisition identified as necessary. In some areas, certain statistical measures are commonly used to measure or define an acceptable level of service for a category of infrastructure. Street intersections, for instance, are commonly rated based on a Level of Service scale of "A" to "F" developed by transportation engineers. Most agencies adopt a LOS of "C".

2. Review the Land use map and determine the existing mix of land-uses and amount of undeveloped and developed land. The magnitude of growth and its impacts can thus be determined by considering this land use data when planning needed infrastructure. This inventory can be found in Table 2-1 in Chapter 2 and Appendix B.

3. Identify all additions to the capital facilities or equipment inventory necessary to maintain the identified levels of services in the City. Then, determine the cost of those additions. An infrastructure *Master Plan* is the highest form of data.

4. Identify a level of responsibility, identifying, as termed in this Report, the relative need (or as referred to in the accompanying schedules as "PERCENT NEED") for the facility or equipment necessary to accommodate "growth" as defined, and as opposed to current needs.

5. Distribute the costs identified as a result of development growth on a basis of land use. Costs are distributed between each land use based on their relative use, or *nexus,* of the capital system. For example, future street costs were distributed to each land use based on their trip generation characteristics.

OTHER ASSUMPTIONS OF THE REPORT

In addition to the land use assumptions contained in the next Chapter of this Report, other important assumptions of this study include the following:

"Normal" Subdivision Improvements Omitted. "Local" public improvements generally associated with and identified as being the sole responsibility of the developer through the subdivision or development review process are not included in either of the project lists or consequent calculations. This type of "on site" and immediately adjacent improvement would include all such capital construction within the boundaries of any development, such as street lights, curb, gutter, sidewalks, neighborhood streets and all local utility pipes. These improvements would continue to be the direct responsibility of the developer, with or without the addition of DIFs.

Land Acquisition Costs. Land acquisition cost estimates have been developed after discussions with City officials over recent acquisitions, current negotiations or information about parcels similar to what is needed by the City. Arguments for higher or lower costs can be made; however, the herein contained per acre amounts appear to be the most appropriate current figure for the purposes of this study. However, City finance staff has indicated that land acquisition costs will be reviewed from time to time to adjust for any marked swings that can occur to land acquisition costs, as opposed to the more predictable construction costs.

Exclusion/Rejection of Any Type of "Credit" for Undeveloped Land. It has been argued by some that a credit for capital-related revenues, such as gas taxes, should be made against the DIFs calculated or imposed by a city. Using the state gas tax as an example, proponents of a DIF credit argue that a city will receive increased annual gas taxes because of the additional

population generated by future residential development. It is therefore argued that a developer should receive a credit for any associated gas tax revenues collected as a result of the residents or businesses that occupy the new dwellings against any Circulation DIF imposed by the City based on either of two separate arguments.

The first argument for a gas tax credit supposes that the additional gas taxes created by residential development are needed and dedicated for the maintenance of existing streets, which is the responsibility of existing development. Since the new streets constructed via DIFs will not require rehabilitation or reconstruction for another 10 to 20 years, the gas tax generated by new development is therefore a windfall to the City and should be credited against the DIF. What this argument fails to consider is that any new resident or business to the City will begin to contribute immediately to the use and deterioration of all City streets. A cursory review of City finances will reveal that the amount of the State gas tax received by cities falls far short of meeting the City's needed street improvements and repairs in any given year. The gas taxes *generated* by new development simply cannot meet the maintenance costs of either the new streets associated with the development or the existing streets used on a daily basis.

The second argument proposes that the developer pays his full share of constructing new roads when the developer pays the City's Circulation (streets, signals bridges and roadbed protection storm drainage) System Development Impact Fee and that the gas taxes generated by the additional residents in a development are unfairly used to make improvements to the existing street system. It is most cities experience that gas taxes are barely adequate to meet streets-related operational costs, and if they are sufficient to meet these costs, the remainder is used for capital-related maintenance projects.

For these reasons, credits of existing operational tax receipts are not considered for Circulation System DIFs in this Report. A similar discussion can be made for the other fees considered herein, and therefore no credits against any such fees are included in this calculation of development impact costs. Those annual operational tax receipts need to be dedicated to the maintenance of the existing system.

Appropriate Expansion. Debt service is a reasonable cost of construction of many, but not necessarily all, public facilities and infrastructure. The following example illustrates this. DIFs are collected in incremental amounts, but facilities are not expanded in those same incremental amounts. As an example, a community center fee, based upon a standard of 1.2 square feet per detached dwelling residence, may be collected for each residential dwelling in the City, but after collecting the fee for a 100-unit subdivision, it would be impractical to expand the community center 120 S.F. Fees are collected, placed in a separate fund, generating interest until such a time that a 2,000 to 3,000 S. F. expansion is possible. During that build-up time, the community center will experience some temporary overcrowding as the standard drops from 1.2 S.F./dwelling to about 0.9 S.F./dwelling. This "temporary overcapacity" clearly may be an inconvenience, bringing about some crowding and an increased unavailability for rental or reservation until enough DIFs have been collected for a practical expansion to bring the community center facility back up to the original standard. In short, a development of 120 residences may be occupancy approved and bring about a temporary reduction in community center facility standards without endangering the citizen's health and safety.

However, such a *temporary overcapacity* in storm water roadbed protection is not possible without the potential for damage to both private and public property. Capacity for the collection/removal of storm water must be available prior to the construction that increases the impervious surface (and thus storm water runoff) of the parcel. If the local storm collection line is currently at capacity (peak or otherwise), no additional units may be brought on line until additional collection capacity can be created. Again, there is a practical size of an addition to construct and it is not likely practical for developers to wait until there is enough added demand (and fees) to pay for the facility addition. As a result, financing through some type of debt instrument may be the only alternative. Circumstances vary from city to city as to what facility expansions are critical and which can absorb temporary overcapacity for limited periods of time.

OTHER ISSUES

There are those who claim that the addition of DIFs unfairly creates an inflated resale price for existing residences. The argument is that if the public agency adopts a $35,000 to $50,000 development impact fee per detached dwelling, then the price for an existing dwelling is *artificially* increased by the same amount. We will use the example of a detached dwelling detached unit that cost the developer $350,000 to construct and complete to a point that the occupancy permit is approved.

Full Cost of a Residential Dwelling. The $350,000 represents only the above ground costs. The true and actual cost of a new dwelling is the cost of acquiring the parcel, necessary government approvals and permits, construction supplies, labor, debt service on the above, on-site [1] public improvements, and the cost of extending public services to that dwelling.

These public service extension costs include (but are not limited to) [2]:

- The addition of law enforcement personnel requiring the expansion of the police station, response vehicles and specialty equipment.
- The additional fire stations, response vehicles and specialty rescue equipment.
- Widening of road segment of traffic arterials, collectors, bridge and additional signals.
- Additions to water delivery capability, including source, storage and delivery.
- Additions to the wastewater capability including collection lines.
- Additional library, aquatics center, public meeting and developed park space for recreational/social purposes. It must be stated here that these "Quality of Life" existing

[1] On-site improvements include local streets and medians, curbs and gutters, sewer lines, water lines, street lights, storm gutter or drainage pipes, electrical power lines and all of the other requirements of the City's development code on privately-held developments, hence the reference of "On-site". These improvements are not of "General Benefit" to the entire community.

[2] The City does not necessarily provide all of these services, they are only highlighted to make a point about the types of municipal services typically required to support a residential dwelling or business facility.

standards for City of El Segundo are the highest calculated or seen in any of the past 18 cities where RCS has conducted a complete development impact fee calculation study.

Thus while the cost of constructing the above ground portion of a detached dwelling unit may be $350,000, the previously identified "downstream" costs may be in the area of $35,000 to $50,000 per detached dwelling unit or in the area of 10% to 15% of the above ground cost.

If this argument is not clear, picture a 2,800 square foot detached dwelling, costing $350,000 to construct the above ground structure, located in the middle of an empty square mile, no roads, no utility service, no public safety response, no flood control and no recreational facilities. What is the market value of this detached dwelling? Probably not even the $350,000 that it cost to construct the structure. All of a sudden, a $35,000 to $50,000 impact fee for the infrastructure needed to make that one residential unit more marketable seems like a bargain. In short, new development needs an existing system of municipal infrastructure to hook up to, or it is not a viable development. In short, development requires a public agency that provides infrastructure-based system in order for that private development to be viable.

Thus, the true and complete *cost* of a new detached dwelling unit is the cost of constructing the structure and the cost of extending the municipal services to the dwelling regardless of who pays for the actual costs of extending those services. To some degree these service-related infrastructure costs have been recognized, the only question remaining is who should for pay them, existing or new residents?

Effect on Market Price. Again, let us assume that a cumulative $35,000 to $50,000 impact fee imposed upon *new* detached dwelling construction increases the market price of an *existing* detached dwelling unit. Wouldn't this just be the recognition that the existing detached dwelling already has those physical links to the municipal services? A slightly different way of looking at this argument is that the existing family residences each have a "share" in a municipal corporation[3] and the share is valued at the cost of the connection to the various municipal utilities, transportation system, flood protection and public safety. It is a logical step then to require any newly constructed detached dwelling to purchase a "share" at an equal cost.

CHAPTER ORGANIZATION

Within each "hard infrastructure" Chapter (Chapters Three through Nine) there will be a minimum of three fee/cost comparison tables. They will be:

The first schedule, the ***Allocation of Project Cost Estimates*** identifies the projects, their costs and the relationship, in an allocation percentage, to future development. These schedules will begin with the number x.1 as in 3.1, 4.1, 5.1 etc.).

Minimum Needs-based Impact Fee - This schedule will calculate the DIF schedule that would need to be adopted to meet the minimum capital needs identified in the Report (on the second schedule at the end of the Chapter, i.e., 3.2, 4.2, etc.) for that infrastructure but limited to the

[3] Not unlike a private corporation.

General City needs. Strictly speaking this schedule is a calculation of the development impact **costs**, suitable to be adopted as development impact **fees**, by the legislative body, in this case the El Segundo City Council.

With adoption of this level of DIFs, one could claim that new development is occurring without any additional cost to the existing residents and businesses. You could not, however, necessarily claim that new development is paying its fair share.

Existing Community Financial Commitment Comparison This schedule, while not an impact fee calculation, identifies the cost (in current nominal replacement dollar value) of the existing infrastructure, including land, physical improvements and capital equipment. The distribution of this replacement value equity total over the existing developed community is the average amount that has been invested by the current community of residents and businesses and is a good indication, or comparison, with what could be imposed upon new development. This financial commitment will be expressed in terms of the cost to construct or acquire the assets at current replacement costs. Significant differences between this schedule and the Minimum Needs-based DIF rate schedule would certainly be worth additional analysis. These Schedules would be numbered 3.3, 4.3, 5.3, etc.

If the average equity (for a detached dwelling for example) on this *Existing Commitment Financial Commitment Comparison* Table is greater than the average cost on the previous *Minimum Needs-based* Table, then that infrastructure system is front-ended with more of the system, say 80% of it has been constructed while only at 50% of General Plan build-out and it likely has excess capacity at that point in time. The excess capacity is the result of earlier residents and businesses of the community having put more of the system into place than will be necessary by the remaining un-built portions of the community. The existing community has advanced money to build capacity into the infrastructure system to meet the needs of residents and businesses not yet there. This table is intended to be instructive rather than legal.

Distribution of Existing Impact Fee Fund Balance. The existing City-wide DIFs have a combined Fund Balance of $0.78 million and each was created to finance various infrastructure needed as new residents and businesses locate in newly created residential dwellings and buildings. There are no specific restrictions on the monies, beyond the restriction that they be used on improvements within the Fund title and committed within a five-year time frame.

For the Quality of Life Infrastructure impact fees (Chapters 10 through 13) are limited to a one page calculation, also at the end of each Chapter.

END OF CHAPTER TEXT

Chapter 2
Demographics and Findings

This Chapter represents the beginning and end of the DIF calculation process. It begins with an inventory of fully developed, undeveloped and under-developed units and acreage within the City and concludes with a summary of recommended DIF schedules with detailed infrastructure explanations in the following chapters of this Report. El Segundo was incorporated in January of 1917 and has seen a great deal of development during that time. The City is experiencing what RCS has identified as a second General Plan "build-out". RCS staff has noticed that there are (at least) two General Plan "build-outs" a City will experience. The first occurs when most of the City's raw land or fully vacant parcels become developed. The second "build-out" occurs when private property owners look at their developed land and determine if that is their highest and best use of the property. Two examples of this would include (but would not be limited to):

- An owner of an acre-sized industrial zoned property wishes to upsize from an older 5,000 square foot industrial building to the probable maximum allowed 26,136 square foot industrial building allowed by a 0.60 floor area ratio, or FAR. In effect, there is no zone change but the application maximizes the amount of square foot allowed by the City's zoning code. The result is an increase in the demand on all City services.

- That same owner of the 5,000 square foot industrial building applies for a zone change to construct a 15,246 commercial establishment on that same acre. Industrial uses are one of the lowest demand generators of all of the City's land uses, commercial use is one of the highest demand generator land uses. The result is also increased demand on all of City's infrastructures/services. We are concerned about the net delta change in service demand.

The above are but two examples of how, what appears to be like a "built-out city", will continue to experience increases in service demand within each of the City's major infrastructures. Public safety calls-for service will increase, there will be additional daily trip-miles on the City's circulation system, increased water delivery and wastewater collection demand on the utility systems. The slight increase in the population will decrease the existing service levels of the City's existing Quality of Life standards (i.e. the 7.43 library collection items per resident and the 3.437 square feet of public use community center space per resident).

This is not a new concept for the City to accept, it already has recognized the continued development within the City's boundaries. These anticipated changes were highlighted in the City's 1992 adopted General Plan, Section 3 - Land Use Element, stating in part:

Summary of Issues *There are several issues for consideration, based on the trends researched in the Existing Conditions Report; the residential trends include:*

A. Increased multi-family development and reduced new single-family development. This trend is likely to continue under existing designations, increasing the City's density.

B. An increase in the size of single-family homes, both through additions to existing homes and the demolition of existing homes that are replaced with larger new homes. These trends tend to maximize the land values, but they do create some impacts that affect the

streetscape, number of curb cuts in the street, number of street trees, light and air, and private open space.

There are four important non-residential trends that should be addressed in El Segundo. They are:

A. The reduction of manufacturing and heavy industrial uses, not including Chevron.

B. The increase in commercial and professional uses such as hotels and offices.

C. Decreasing availability of vacant land.

D. Increasing commercial uses that serve the daytime population. The Economic Development Element has indicated that these types of uses may have limited potential. Such uses may, therefore, be best located on the ground floor of office buildings. Given the overall effect of these four important trends, the community has considered the possibility of mixed-use development. Mixed-use could mean any mixture of commercial, service-oriented uses, offices, or research and development. By allowing a mix of uses, the City may be able to effectively address solutions to future potential problems such as traffic management, infrastructure constraints, and parking.

This Report recognizes these anticipated changes, and they are reflected in the City's land use database provided by the City that is the basis for future demand calculations contained in this Report. The increased demands are then the basis for the projects required to maintain the City's existing very high levels of service afforded by the infrastructure accumulated since 1917.

LAND USE ASSUMPTIONS

This Report contains an inventory of fully developed, undeveloped and underdeveloped land within the City limits of El Segundo and is based upon the City's most recent General Plan update. The *Undeveloped* and the *Underdeveloped* delta land inventory, identified as *Potential Development,* combine to form the base for the distribution of the estimated costs of the service-expanding capital projects necessary to accommodate that same anticipated development. Without the expansion projects, the City would be unable to accommodate that new development, effectively halting it. The *developed* land inventory forms the base for distributing the replacement cost of the existing infrastructure. This action provides the basis for comparison with the proposed DIF schedules and for the *de facto* identification of the many existing Levels of Service (LOS) currently provided by the City's existing spine infrastructure which is conservatively valued at well above $830 million.

Table 2-1, is the inventory of all private land-uses contained within the current City limits in what is referred to as the **General City** area and is based on the General Plan's land use inventory, a planning staff analysis of privately held parcels in General Plan area (excludes the City's Sphere of Influence).

Table 2-1 consists of multiple horizontal blocks of information from the top to the bottom, they are:

Total - Land-use Database – Total of All Areas - This block of information identifies the amount of developed and undeveloped land in terms of acres and units for the City's entire City limits and is the sum of the two areas identified following.

Land-use Database within the City's General City Area - Net - This block of information identifies the existing development and development opportunities within the General City area of the City in terms of acres and appropriate units. The information in the *Existing Development* column will be used to identify the current investment to compare the proportionality of the proposed DIFs as previously described in Chapter One. The *Potential Development* column will be used as the denominator to distribute the cost of infrastructure improvements needed to accommodate development in the area to those generating the need for those same improvements. The area is the sum of four General City Sub-areas (Appendix B, LUDB - Sections A to C).

A greater level of detail is available in Appendix B – Expanded Land-use Database.

Table 2-1
Detailed Land Use Inventory

Total - Land-use Database Summary of A, B and C Below	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwelling Units (+)	1,390.20	3,822	3.64	20	1,393.84	3,842
Detached Dwelling Units (-)	0.00	0	(73.93)	(203)	(73.93)	(203)
Attached Dwelling Units	88.60	490	74.73	1,959	163.33	2,449
Commercial Lodging Units	33.10	2,691	2.00	232	35.10	2,923
Retail & Service Uses (SF) (+)	110.20	1,313,245	137.48	6,887,925	247.68	8,201,170
Retail & Service Uses (SF) (-)	0.00	0	(1.00)	(11,917)	(1.00)	(11,917)
Office Uses (SF)	574.80	9,493,945	85.26	2,985,602	660.06	12,479,547
Industrial Uses (SF) (+)	1,665.20	7,580,266	28.00	731,808	1,693.20	8,312,074
Industrial Uses (SF) (-)	0.00	0	(166.52)	(758,027)	(166.52)	(758,027)
Institutional Use (SF)	17.30	233,797	1.00	13,504	18.30	247,301
Total - All City	3,879.40		90.66		3,970.06	
Private Residences (+)	1,478.80	4,312.00	78.37	1,979	1,557.17	6,291
Private Residences (-)	0.00	0.00	(73.93)	(203)	(73.93)	(203)
Commercial Lodging Rooms	33.10	2,691.00	2.00	232	35.10	2,923
Business Square Feet (+)	2,367.50	18,621,253.00	250.74	10,618,839	2,618.24	29,240,092
Business Square Feet (-)	0.00	0.00	(166.52)	(769,944)	(166.52)	(769,944)
Total for General Facilities DIF	3,879.40		90.66		3,970.06	28,479,159.00

Due to the El Segundo's unique circumstances of likely upsizing of underused parcels the land use database depicted in Table 2-1 includes lines with (+) or (-) indicating a projected increase or decrease in that land-use. As an example, Detached Dwelling Units (+) indicates an additional 20 such units on vacant land but Detached Dwelling Units (-) indicates the removal of 203 detached dwellings, likely to be replaced with attached dwelling units. This recognizes the net reduction of infrastructure service demand from the 203 detached dwelling units being razed with the increased demand of the 20 detached dwellings to be constructed leaving a delta in demand from the net 183 less detached dwellings. In short the Police and Fire Departments will see a reduction in calls-for-service from the removed detached dwellings. Thus any line that is italicized and has a (-) in the tables included in Chapters 3 through 9 are only included to identify the net change in demand but do not calculate the actual impact fee.

DIF Land-use Types Definitions. This Report classifies private development into one of two residential *DIF Land-use Types* or one of five different business-based *DIF Land-use Types.* For purposes of the Report, the term *DIF Land-use Type* will refer to one of the seven broad types under which the City's specifically defined zoning code *land-uses* will fall into. These *DIF Land-use Types* are defined following:

Residential Land-uses:

- **Detached Dwelling Units** - This DIF Land-use Type is generally defined as a detached unit and corresponds to an allowable use within the City's land-use designation of ***Single-Family Residential (R-1), Two-Family Residential (R-2),*** *and* ***540 East Imperial Avenue Specific Plan.*** This category would include the construction of the unusual, detached condominium or townhome and a manufactured unit on an individual lot.

- **Attached Dwelling Units** - This larger category consists of apartments, townhomes, condominiums or any other living unit that is attached to any other unit. It generally corresponds to an allowable land-use designation of ***Two-Family Residential (R-2), Multi-Family Residential (R-3), Neighborhood Commercial (C-2), Downtown Commercial (C-RS), Smoky Hollow Mixed-Use, and 540 East Imperial Avenue Specific Plan.***

Business/Commerce Land-uses:

- **Commercial Lodging** (keyed) **Units** - This *DIF Land-use Type* is found in the **General Commercial (C-3), Corporate Office (CO), Urban Mixed-Use North (MU-N), Urban Mixed-Use South (MU-S),** and **199 North Continental Boulevard Specific Plan** zones.

- **Retail/Service/Office Uses** - As utilized in this Report, Commercial uses include the general type of retail services and thus includes outlets ranging from restaurants to auto repair shops to shopping centers. This category includes the **Neighborhood Commercial (C-2), Downtown Commercial (C-RS), Corporate Office (CO), Commercial Center (C-4), Urban Mixed-Use North (MU-N), Urban Mixed-Use South (MU-S), Downtown Specific Plan, Corporate Campus Specific Plan,** and **El Segundo South Campus Specific Plan** zones.

- **Industrial/Manufacturing Uses** - This *DIF Land-use Type* contains all businesses engaged in heavy to light manufacturing or industrial development. This category includes the **Light Industrial (M-1), Heavy Industrial (M-2), Smoky Hollow Mixed-Use, Urban Mixed Use-North (MU-N), Urban Mixed-Use South (MU-S), 124th Street Specific Plan, Aviation Specific Plan,** and **222 Kansas Street Specific Plan** zones.

- **Institutional Uses** - This *DIF Land-use Type*, based upon the specific use, may be approved in just about any of the City's previously mentioned zones. It consists of private schools, private meeting places, places of worship and similar private facilities and could be located within many of the land use categories.

Definitions of DIF Application Categories Status. For each of the DIF land-use categories detailed on Table 2-1, acreage is categorized as either *Existing Development* or *Potential Development*. Definitions regarding the status of each land use are as follows:

Existing Development - Acres/Units - This column title reference identifies land in the City which is developed or land which has received a building permit but may not yet be constructed. Acreage in this category may include non-conforming use areas of the City which contain extensive development prior to an annexation or before any changes to the General Plan.

Potential Development - Acres/Units - Refers to all non-public vacant acreage located within the City. This category also includes any fully vacant parcel and those that can be upsized in the future is it contains some remaining development potential on it.

POPULATION PROJECTIONS

A second component in determining the magnitude of impact of future development and the necessary facilities needed to mitigate that impact is a realistic assessment of the build-out population of the City. Many of the facilities contained in this Report are sized according to either the estimated population at theoretical "build-out" or upon service levels which are based in part upon an estimation of the population to be served. Library facilities, parks and recreation facilities and community center facilities and equipment are examples of cost areas which rely heavily on population projections to determine space and facility needs. Park standards are usually stated in terms of the number of acres of park land per 1,000 persons, for instance.

There are at least two generally accepted methods for projecting future population levels in a City: (A) past growth trends projected forward and (B) population holding capacity based on the General Plan land-use element. Each of these methods can be useful even though both possess certain limitations.

There are several serious flaws in projecting the build-out population of a community using the past growth trends methodology. While this method is relatively simple and therefore easy for the general public to understand, it does not give consideration to when an area is actually built out. Eventually there comes a point in time where the amount of available land to build on is negligible. This technique does not help explain when that point is reached.

Also, the past growth trends approach is not sensitive to policy changes made by Council or land use issues contained in the City's General Plan. For these reasons, this technique is more useful in projecting short-term population levels and should not be used to forecast the built-out population of an area.

This Report relies on the methodology of ***holding-capacity*** (described in the following section) to project future service levels and facility requirements.

Holding Capacity Analysis. The methodology used in this Report to forecast the built-out population of El Segundo is the current holding capacity approach. This method calculates the sum of existing development and potential development allowable under current land use regulations, using average densities found in the City.
The first step in projecting the City's population using the holding capacity approach is to inventory the remaining undeveloped acres within the City limits, which was previously accomplished in Tables 2-1 and 2-2 of this Chapter. The next step is to estimate the potential dwelling units allowed per acre and then multiply the potential number of units by the average number of residents per unit.

The number of persons per unit for new residential units is based on the 2000 U.S. Census and ranges from 3.025 and 2.876 persons for detached dwellings and attached dwelling respectively. The 2000 Census data was selected over the recently released 2020 Census due to a change in reporting the resulting data by eliminating the data.

Based on these 2000 Census dwelling density data, future residential development can be expected to generate somewhere from 4,794 and 5,080 additional residents[4] to the City of El Segundo, joining the 16,660 citizens already living in City, resulting in a total estimated population at build-out (based upon the inclusion of existing City limits) of approximately 21,740 residents. The higher number is based upon full occupancy of all new dwelling units and the lower figure is based upon the historical occupancy levels at the time of the census count. The 21,597 is the average of the two.

Table 2-2, following, uses the additional housing projected in the Land-use Database and estimates the additional potential population for the City of El Segundo through build-out. The number of potential new dwelling units was calculated by multiplying the amount of vacant acreage for each land use zone by the average densities (i.e., number of units allowed per acre) indicated in the City's General Plan.

The estimated GP build-out population of 21,597 (average between high and low) or more residents using this holding capacity approach is typically lower than the population forecasts based on the mathematical models previously described. This implies that either the City's period of residential build-out will actually take 25 to 30 years or that the City's growth rate will increase from recent historical levels. As the residentially zoned land remaining to be developed continues to be built on during the next thirty years, the City is likely to see the number of new dwelling units developed decrease each year.

4 Depending upon the vacancy factor based upon the average of 96.05% for all residences.

Table 2-2
City of El Segundo
Average Dwelling Occupancy, by Type
(2000 United States Census Data)

Existing Residential	Total Units	Vacant Units	Occupied Units	Total Number of Occupants	Average Occupancy	Percentage Occupied
Detached Dwelling Units						
Detached Dwellings	7,211	171	7,040	21,299	3.025	97.63%
Attached Dwelling Units						
Attached Dwelling Units	1,044	24	1,020	3,007	2.948	97.70%
Duplex to Quadplex Units	1,860	80	1,780	5,167	2.903	95.70%
Five to Forty-nine Units	2,173	165	2,008	5,652	2.815	92.41%
Fifty or More Units	397	7	390	790	2.026	98.24%
Average	5,077	269	4,808	13,826	2.876	94.70%
Other Dwelling Units						
Other Dwelling Units	43	14	29	32	1.103	67.44%

Existing - State Department of Finance 01/01/21 Population, excludes prison population	16,660
Existing - State Department of Finance 01/01/21 Prison Population	0
Existing - State Department of Finance 01/01/21 Population, excludes prison population	16,660

G.P. Build-out Population At Historic Occupancy Rates	*Anticipated Net Units*	*Occupancy Rate*	*Probable Occupancy*	*Dwelling Density*	*Anticipated Population*	
Potential Detached Dwellings (-)	(183)	97.63%	(179)	3.025	(541)	
Potential Attached Dwellings (+)	1,959	94.70%	1,855	2.876	5,335	
Population to be Added Via Development at Historic Occupancy Rates					4,794	4,794
Current State of California Department of Finance Population						16,660
Potential "Build-out" Population, at Historic Vacancy Rates.						21,454

G.P. Build-out Population At 100% Occupancy Rate	*Anticipated Net Units*	*Occupancy Rate*	*Probable Occupancy*	*Dwelling Density*	*Anticipated Population*	
Potential Detached Dwellings	(183)	100.00%	(183)	3.025	(554)	
Potential Attached Dwellings	1,959	100.00%	1,959	2.876	5,634	
Population to be Added Via Development at 100% Occupancy					5,080	5,080
Current State of California Department of Finance Population						16,660
Potential Maximum "Build-out" Population.						21,740

Population at General Plan Build-out @ Low per Dwelling Resident Densities	21,454
Population at General Plan Build-out @ High per Dwelling Resident Densities	21,740
Average Population at General Plan Build-out	21,597

SUMMARY OF FINDINGS

City staff and RCS have identified over $292.7 in needed and identified and planned capital improvement projects required through the City's General Plan build-out including both projects related to existing deficiencies and those needed solely to support future growth. Roughly 56.3% of the total project list can be financed with DIF receipts imposed upon new development. The proposed impact fees will generate just over $164.9 million from the DIF schedule applied Existing impact fee fund balances will support $0.78 million or 0.30% of the total. The remaining $127.0 million in project costs do not qualify for impact fee financing and will need to be financed from other sources. Table 2-3 indicates the development fee-related capital project costs by infrastructure.

Table 2-3
Total City-wide General Plan Build-out
Capital Requirements

Infrastructure Type	Total – All DIF Projects
Law Enforcement, Vehicles and Equipment	$40,491,360
Fire Suppression/Medic Facilities, Vehicles & Equipment	$1,861,500
Circulation (Streets, Signals, Bridges) Facilities	$35,175,000
Storm Drainage Collection Facilities	$3,850,000
Water Supply, Storage & Distribution Infrastructure	$10,316,667
Wastewater Collection System and Treatment	$5,601,250
General Government, Vehicles and Equipment	$1,303,116
Library Collection and Computer Stations	$1,599,183
Public Use (Community Center) Facilities	$12,907,305
Aquatics Center Facilities	$2,971,311
Park Land Acquisition & Facilities Improvement	$45,543,761
Sub-total DIF Related Project Costs	$161,080,453
Non-Development Generated Projects	$131,622,862
Total – Report Identified Projects	$292,703,315

DIFs for the General City Plan Area. Based on these costs and the schedules found at the end of each of the remaining chapters of this Report, costs attributable to future development were derived on a per unit basis for residential land-uses and on a per square foot of pad basis for business land-uses. Schedule 2.1, found at the end of this Chapter, provides a summary of the recommended DIF schedules for each type of infrastructure and land use category. The total recommended maximum DIFs for each of the seven DIF Land Use Types within General City area are summarized following.

Table 2-4
Summary of Proposed Development Impact Fees
for the City's Existing General Plan Area

DIF Land Use Type	Recommended Development Impact Fees
Detached Dwelling Unit	$56,246/Unit
Attached Dwelling Unit	$46,376/Unit
Commercial Lodging (Keyed) Unit	$4,802Unit
Retail & Service Uses Square Foot	$10.172/Unit
Office Uses Square Foot	$5.376/S.F.
Industrial Uses Square Foot	$5.077/S.F.
Institutional Use Square Foot	$6,176/S.F.

Specific DIF schedule rates for each land use can be found at the end of each chapter relating to each infrastructure. Schedule 2.1 at the end of this Chapter also identifies the probable development impact fee revenue of these proposed new development impact fees, the estimated capital cost total and the difference, by individual infrastructure type (e.g. fire).

Schedule 2.1 requires two pages to summarize the many infrastructures, identify the individual Infrastructure DIFs and combined DIFs by DIF Land-use Type and provide a calculation of the potential collection through build-out at the proposed *Minimum Needs*-based *DIF* schedules and the cost of the total infrastructure needs.

FORMAT OF THIS REPORT

The following chapters of this Report contain the detailed information relative to the calculation of DIFs recommended by RCS for the entire City. Appropriate textual explanations are contained in a specific chapter devoted to each of the eleven sets of differing infrastructure cost schedules for City boundaries. The infrastructure chapters are listed following along with four appendices, one of which contains a summary of DIF recommendations.

CHAPTER 3 - Law Enforcement Facilities, Vehicles, and Equipment
CHAPTER 4 - Fire Suppression/Medic Facilities, Vehicles & Equipment
CHAPTER 5 - Circulation (Streets, Signals and Bridges) Facilities
CHAPTER 6 - Storm Drainage Collection System
CHAPTER 7 - Water Distribution System
CHAPTER 8 - Wastewater Collection System
CHAPTER 9 - General Facilities, Vehicles & Equipment

CHAPTER 10 - Library Collection & Computer Stations
CHAPTER 11 - Public Use (Community Center) Facilities
CHAPTER 12 – Aquatics Facilities
CHAPTER 13 - Park Land Acquisition and Facilities Improvements

APPENDIX A - Summary of Recommendations.
APPENDIX B - Expanded Land-use Database.
APPENDIX C - Detailed Park Infrastructure Cost Schedule.
APPENDIX D - Application of Accessory Dwelling Units as a Function of a Detached Dwelling.

NOTE REGARDING TEXTUAL MATHEMATICS: It is important to note that the use of a computer provides for calculations to a large number extending over a large number of decimal points. Such data, when included in text and supporting textual tables, has often been rounded to usually no more than two or three decimals for clarity and thus may not be replicated to the necessary degree of accuracy as the spreadsheet schedules at the end of each chapter. If questions arise between the tables and schedules, the schedules at the end of each chapter will prevail as the more accurate. The schedules at the end of the Chapter are instructive to the recommendations. The tables within the chapters are text summaries of the schedules at the end of the chapter and are illustrative.

END OF CHAPTER TEXT

Schedule 2.1

City of El Segundo General Plan Maintenance Costs (Non-entitled Parcels)
Summary of Development Impact Fees By Type of Fee (continued on next page)
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Law Enforcement Facilities	Fire Protection Facilities	Streets, Signals and Bridges	Storm Drainage Facilities (1)	Water Distribution Facilities	Wastewater Collection Facilities	General Government Facilities
	Schedule 3.2	Schedule 4.2	Schedule 5.2	Schedule 6.4	Schedule 7.2	Schedule 8.2	Schedule 9.1
Calculated Development Impact Costs							
Detached Dwelling Units (+)	$964	$115	$1,893	$2,482	$6,405	$3,001	$201
Detached Dwelling Units (-)	*$964*	*$115*	*$1,893*	*$2,482*	*$6,405*	*$3,001*	*$201*
Attached Dwelling Units	$970	$276	$1,263	$1,297	$4,377	$2,625	$44
Commercial Lodging Units	$104	$52	$998	$89	$1,765	$1,750	$44
Retail & Service Uses (SF) (+)	$5.014	$0.133	$3.823	$0.340	$0.517	$0.225	$0.120
Retail & Service Uses (SF) (-)	*$5.014*	*$0.133*	*$3.823*	*$0.340*	*$0.517*	*$0.225*	*$0.120*
Office Uses (SF)	$1.375	$0.027	$2.185	$0.502	$0.739	$0.428	$0.120
Industrial Uses (SF) (+)	$0.327	$0.000	$1.172	$1.793	$0.900	$0.765	$0.120
Industrial Uses (SF) (-)	*$0.327*	*$0.000*	*$1.172*	*$1.793*	*$0.900*	*$0.765*	*$0.120*
Institutional Use (SF)	$0.199	$0.000	$2.495	$0.599	$1.916	$1.387	$0.120
Potential Collection with Recommended Impact Fee Schedule							
Detached Dwelling Units (+)	$19,280	$2,300	$37,860	$49,640	$128,100	$60,020	$4,020
Detached Dwelling Units (-)	*-$195,692*	*-$23,345*	*-$384,279*	*$59,568*	*-$1,300,215*	*-$609,203*	*-$40,803*
Attached Dwelling Units	$1,900,230	$540,684	$2,474,217	$31,128	$8,574,543	$5,142,375	$86,196
Commercial Lodging Units	$24,128	$12,064	$231,536	$10,324	$409,480	$406,000	$10,208
Retail & Service Uses (SF) (+)	$34,536,056	$916,094	$26,332,537	$923,132	$3,561,057	$1,549,783	$826,551
Retail & Service Uses (SF) (-)	-$59,752	-$1,585	-$45,559	$28,140	-$6,161	-$2,681	-$1,430
Office Uses (SF)	$4,105,203	$80,611	$6,523,540	$41,548	$2,206,360	$1,277,838	$358,272
Industrial Uses (SF) (+)	$239,301	$0	$857,679	$1,312,132	$658,627	$559,833	$87,817
Industrial Uses (SF) (-)	*-$247,875*	*$0*	*-$888,408*	*$24,213*	*-$682,224*	*-$579,891*	*-$90,963*
Institutional Use (SF)	$2,687	$0	$33,692	$8,089	$25,874	$18,730	$1,620
Total	$40,323,566	$1,526,823	$35,172,815	$2,487,914	$13,575,441	$7,822,804	$1,241,488
Potential DIF Receipts	$40,323,566	$1,526,823	$35,172,815	$2,487,914	$13,575,441	$7,822,804	$1,241,488
Fund Balance and Other Revenues	$174,372	$333,588	$0	$0	$0	$0	$0
Total - Other Resources	$40,497,938	$1,860,411	$35,172,815	$2,487,914	$13,575,441	$7,822,804	$1,241,488
Required Capital Total	$40,491,360	$1,861,500	$130,175,000	$15,200,000	$30,150,000	$10,175,000	$1,628,895
Over or (Under) Collection	$6,578	-$1,089	-$95,002,185	-$12,712,086	-$16,574,559	-$2,352,196	-$387,407

Schedule 2.1

City of El Segundo General Plan Maintenance Costs (Non-entitled Parcels)
Summary of Development Impact Fees By Type of Fee
(Costs/Fees per Residential Type Dwelling Unit, or Business Type Square Foot)

Land-use Category	Library Collection/ Computers Schedule 10.1	Public Meeting Facilities Schedule 11.1	Aquatics Center Facilities Schedule 12.1	Parkland Facilities Development Schedule 13.1	Development Impact Fee Total Per Unit or Square Feet
Calculated Development Impact Costs					
Detached Dwelling Units (+)	$907	$7,686	$1,769	$27,003	$52,426 per Unit
Detached Dwelling Units (-)	*$907*	*$7,686*	*$1,769*	*$27,003*	*$52,426 per Unit*
Attached Dwelling Units	$863	$7,307	$1,682	$25,672	$46,376 per Unit
Commercial Lodging Units	No Fee	No Fee	No Fee	No Fee	$4,802 per Unit
Retail & Service Uses (SF) (+)	No Fee	No Fee	No Fee	No Fee	$10.172 per S.F.
Retail & Service Uses (SF) (-)	*No Fee*	*No Fee*	*No Fee*	*No Fee*	*$10.172 per S.F.*
Office Uses (SF)	No Fee	No Fee	No Fee	No Fee	$5.376 per S.F.
Industrial Uses (SF) (+)	No Fee	No Fee	No Fee	No Fee	$5.077 per S.F.
Industrial Uses (SF) (-)	*No Fee*	*No Fee*	*No Fee*	*No Fee*	*$5.077 per S.F.*
Institutional Use (SF)	No Fee	No Fee	No Fee	No Fee	$6.716 per S.F.
Potential Collection with Recommended Impact Fee Schedule					
Detached Dwelling Units (+)	$18,140	$153,720	$35,380	$540,060	$1,048,520
Detached Dwelling Units (-)	*-$184,121*	*-$1,560,258*	*-$359,107*	*-$5,481,609*	*-$10,079,064*
Attached Dwelling Units	$1,690,617	$14,314,413	$3,295,038	$50,291,448	$88,340,889
Commercial Lodging Units	$0	$0	$0	$0	$1,103,740
Retail & Service Uses (SF) (+)	$0	$0	$0	$0	$68,645,210
Retail & Service Uses (SF) (-)	$0	$0	$0	$0	-$89,028
Office Uses (SF)	$0	$0	$0	$0	$14,593,372
Industrial Uses (SF) (+)	$0	$0	$0	$0	$3,715,389
Industrial Uses (SF) (-)	*$0*	*$0*	*$0*	*$0*	*-$2,465,148*
Institutional Use (SF)	$0	$0	$0	$0	$90,692
Total	$1,524,636	$12,907,875	$2,971,311	$45,349,899	$164,904,572
Potential DIF Receipts	$1,524,636	$12,907,875	$2,971,311	$45,349,899	$164,904,572
Fund Balance/Other Revenues	$75,235	$0	$0	$193,862	$777,057
Total - Other Resources	$1,599,871	$12,907,875	$2,971,311	$45,543,761	$165,681,629
Required Capital Total	$1,599,183	$12,907,305	$2,971,311	$45,543,761	$292,703,315
Over or (Under) Collection	$688	$570	$0	$0	-$127,021,686

Chapter 3
Law Enforcement Facilities, Vehicles, and Equipment

The Existing System of Law Enforcement Assets or infrastructure. The El Segundo Police Department currently operates out of 28,338 square foot facility on roughly a third of an acre at 348 Main Street. The building has an additional 6,000 square feet but that portion of the Police Station is leased to a different but cooperating law enforcement agency thus has not been included in this impact fee calculation.

The Department also has a significant inventory of:

- Vehicles (official and undercover) some with various added extra equipment;
- Assigned officer equipment such as various leathers, armament, clothing, and safety apparel; and,
- Specialty and computer equipment.

Demand Upon Infrastructure Created by the Development of Underdeveloped or Vacant Parcels. Residents and businesses benefit from law enforcement services in three ways: directly, indirectly and through standby availability. Direct services are those where a resident or business owner requires a direct response, usually as a result of being the victim of a crime. Direct service results in the form of a law enforcement officer contacting the victim. Indirect benefits, such as crime prevention programs, free patrol time and other law enforcement services that serve all businesses, citizens and visitors, are impossible to calculate for a specific beneficiary. An example of indirect benefit would be the apprehension of a burglar in your neighbor's residence or business yesterday. Had the burglar not been arrested he/she may have broken into your dwelling unit or business tomorrow. Most residents and businesses may go for many years before ever requiring a call-for-service. However, these fortunate residents and businesses still benefit from law enforcement services, if in no other way than by the knowledge that a law enforcement officer is available, through adequate planned stand-by, to respond if required. Lastly, residents and businesses also benefit from the stand-by capability, the ability to respond a police officer should you need service.

The addition of new residential units and new businesses will increase the demand upon the law enforcement service level by creating more direct calls-for-service, more areas requiring preventive patrol, and in general, more opportunities for crimes to be committed.

The development of vacant or underutilized parcels into residential or business units will also generate more calls. The residents and business owners occupying those residences and businesses will create the increase in law enforcement calls-for-service. More residences and businesses will mean more responses to the burglaries, domestic disputes, noise complaints, shoplifting and miscellaneous incidents that will occur in the new residences and businesses. If the law enforcement force capabilities (the base) are not expanded, then the increasing number of calls-for-service (the rate) will reduce the amount of "free" hours available for preventative patrol. This inability to expand the capabilities would ultimately drive the Department into a reactionary mode. The additional calls-for-service would limit the amount of time for training, planning, pro-active crime prevention and other non-direct services.

The Purpose of the Fee. Additional law enforcement calls-for-service are expected, and the cost of adding sworn officers necessary to respond to those calls can be determined. Those new costs can be translated to a fee, or an amount, necessary to be collected to offset the added costs of the required additional staffing. These costs include equipping and housing the additional officers. Providing that the fee is adopted and imposed, new development will finance its proportional capital costs of expansion of the Police Station. The continued costs of the annual salary and benefits for those additional officers will need to come from increases in property and sales tax generated by the new residences and businesses and their occupants.

The Use of the Fee. The revenues raised from a properly calculated and legally-supported Law Enforcement Impact Fee would be limited to capital costs related to that growth. The fees would be used to expand the law enforcement station, increase the number of responses and investigator's vehicles and properly equip additional officers. Conversely, the Law Enforcement DIF receipts cannot be used to replace existing vehicles or replace normal vacancies. The required projects/capital includes:

LE-001, Additional Police Station Space/Upgrades - The existing station will need to be expanded by 42,884 to meet the space needs of the 71 additional officers (at 604 square feet per officer) needed to meet the addition calls-for-service generated by new development.

LE-002, Additional Patrol/Detectives/Specialty/Staff Vehicles - This project is the acquisition of 67 law enforcement vehicles in order to maintain the existing 0.94 vehicles/officer standard.

LE-003, Additional Police Officer Assigned Equipment - Officers in the field will require personally-assigned equipment consisting of radios/electronic devices leathers, handgun, helmet, and assorted protection as well as the costly recruitment costs of a background check and other required exams. These costs have been included at $14,266 per additional officer but are only included for successful candidates.

LE-004, Additional Specialty Equipment - This project is the acquisition of specialty equipment such as advanced electronics, computer information sharing systems, special weapons and tactics equipment, and other unique equipment.

The Relationship Between the Need for *The Fee* and *The Type* of Development Project. Department records were used to demonstrate that differing land-uses generate differing numbers of calls. Police staff provided extremely accurate calls-for-service data by over-laying the Department's computerized response records with the City's zoning map thus allowing 100% of the private sector calls-for-service to be categorized. Table 3-1, following, summarizes an analysis of the calls-for-service received by the Police Department over a recent twelve month period. The breakdown of calls into the land-uses that generated them, divided by the number of developed units (during the same period) generating a *calls-for-service* nexus.

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Table 3-1
Law Enforcement Calls-for-Service Generated by DIF Land-use Type
(Over a 12 Month Period)

DIF Land-use Type	Developed Dwellings or Square Feet	Actual Calls For Service Over 12 Months	Total Calls per Dwelling or 1,000 SF (KSF)
Detached Dwelling Units	3,822	2,372	0.621/Unit
Attached Dwelling Units	490	296	0.604/Unit
Commercial Lodging Units	2,691	170	0.063/Unit
Retail & Service Uses	1,313,245	4,101	3.123/KSF
Office Uses	9,493,945	8,128	0.856/KSF
Industrial Uses	7,580,266	1,547	0.204/KSF
Institutional Uses	233,797	29	0.124/KSF

As an example, there were approximately 2,372 calls-for-service that generated a response to one of the 3,382 detached dwelling units in the City. The result indicates that, on average, each dwelling will generate just over 0.621 calls per year. The same analysis was undertaken for most land-uses. Since these calls-for-service by land use are an average, they were used to project the number of additional calls that could be expected by multiplying the calls per residential unit or business acre by the number of anticipated number of new residential dwellings or business acres. To determine the number of additional officers necessary to meet this increase from future developments, the number of increased calls resulting from new development was then divided by the average number of calls that an officer responds to.

These calls-for-service rates are then applied to (multiplied by) all of the undeveloped land-use database anticipated units to determine the number of calls-for-service in the future. The additional calls-for-service, in this case 25,110 per year, were then divided by the number of calls-for-service that a single officer can absorb.

The existing complement of 47 sworn officers currently absorbs the 16,643 annual calls-for-service to privately held residences and businesses by responding to just over 354 calls-for-service each to privately-owned and developed parcels annually. Based upon the addition of these 25,110 calls-for-service, the City will need to successfully recruit 71 additional officers to maintain the same response capabilities that are currently provided by the existing 47 officers now. This is not to imply that the existing level of services or the ratio of officers to calls-for-service is the desired level of service, it merely is the ***current*** level of service. To adequately mobilize the 71 new sworn officers, the City will need to add 67 response vehicles at a total cost of $3,581,622 to maintain the existing ratio of 0.94 vehicles per sworn officer (44 vehicles divided by 47 officers) and for the personnel recruitment/officer-assigned equipment at a combined cost of $1,012,886 (71 officers X $24,266 in assigned equipment costs).

The Relationship Between the *Use of the Fee* and the *Type of Development* Paying the Fee. Again, *use of the fee* is a similar argument to the *need for the fee*. As the development occurs,

the impact is generated, and the impact fee would be collected as the development occurs. The collected DIF receipts would be put to use to acquire equipment for additional officers, vehicles and additional building space necessary to respond to those additional calls, *without reducing the capability of responding to calls from the existing community.*

The Relationship Between the *Amount of the Fee* and the *Cost of the Portion* of the Facility Attributed to the Development Project. The Police Station size at 28,383 square feet, along with the 42,844 additional square feet proposed in LE-001 will meet the needs for operations space (and location) through General Plan build-out and the land-use database depicted in Table 2-1. The build-out complement of 118 sworn officers, (47 current and 71 projected) will allow for the maintenance of the average of about 600 square feet per officer.

Minimum Needs-based Fees. Table 3-2, following, summarizes the resulting DIFs (from Schedule 3.2) for development to contribute $40,316,988 towards the expansion of the Law Enforcement capabilities of the City in order to allow the City to extend the same level of service to the City's newest citizens and businesses.

Table 3-2
Minimum Needs-based Law Enforcement Facilities, Vehicles and Equipment Development Impact Costs by DIF Land-use Type

DIF land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units (+)	$19,268	$964/Unit
Detached Dwelling Units (-)	*($202,310)*	
Attached Dwelling Units	$1,899,467	$970/Unit
Mobil Home Dwelling Units	$24,085	$104/Unit
Retail & Service Uses (+)	$34,538,828	$5.014/S.F.
Retail & Service Uses (-)	*($59,409)*	
Office Uses	$4,104,005	$1.375/S.F.
Industrial Uses (+)	$239,240	$0.327/S.F.
Industrial Uses (-)	*($248,874)*	
Institutional Uses	$2,689	$0.199/S.F.

Existing Financial Commitment Comparison Costs. The City invested, at current dollars, about $22.1 million in the existing police station, or stated a slightly different way it would cost $22.1 million to replace the existing building. The Department staff uses 44 assorted vehicles with various added extra equipment costing a total of $2,387,748 for an average cost of about $54,267 per vehicle. The existing 47 sworn officers each have assigned equipment such as personally-assigned radio and communication equipment, various leathers, armament, clothing and safety apparel costing some $14,266 per sworn officer or a combined $670,502. Lastly,

there is $1,655,383 invested specialty equipment, computer capability and other electronic equipment. There is also an existing positive Law Enforcement Impact Fee Fund balance of $174,372. Combined, the City has invested, at current replacement costs, some $27,004,450 into the law enforcement assets.

When this combined replacement financial commitment cost figure is distributed over the entire current community (via Table 3-3 following and Schedule 3.3), we find that the existing financial commitment is quite similar to that of the calculated Law Enforcement Minimum Needs-based DIFs (or cost), indicating that the existing community has invested nearly what be required from future development. It also occurs due the straight line extension of the existing level of service.

Table 3-3
Existing Law Enforcement
Community Financial Commitment Comparison Data

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$3,848,739	$1,007/Unit
Attached Dwelling Units	$480,281	$980/Unit
Commercial Lodging Units	$275,837	$103/Unit
Retail & Service Uses	$6,654,164	$5.067/S.F.
Office Uses	$13,188,258	$1.389/S.F.
Industrial Uses	$2,510,117	$0.331/S.F.
Institutional Uses	$47,055	$0.021/S.F.

RECOMMENDED DEVELOPMENT IMPACT FEES

Since the *Minimum Needs-based Impact Costs (*necessary for expansion indicating the City's investment in law enforcement capabilities) is nearly the same as the *Existing Community Financial Commitment Comparison*, the *Existing Community Financial Commitment Development Impact Fee* schedule identified in Table 3-2 and Schedule 3.2 would be the most equitable DIF schedule to adopt.

RECAP OF RECOMMENDED LAW ENFORCEMENT DEVELOPMENT IMPACT FEES

1. General City - Adopt Schedule 3.2.

END OF CHAPTER TEXT

Schedule 3.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Allocation of Project Cost Estimates
Law Enforcement Facilities, Vehicles and Equipment

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
LE-001	Additional Police Station Space/Upgrades	$33,396,167	0.00%	$0	100.00%	$33,396,167
LE-002	Additional Patrol/Detective/Specialty/Staff Vehicles	$3,581,622	0.00%	$0	100.00%	$3,581,622
LE-003	Additional Officer Assigned Equipment	$1,012,886	0.00%	$0	100.00%	$1,012,886
LE-004	Additional Specialty Equipment	$2,500,685	0.00%	$0	100.00%	$2,500,685
	Sub-Total General Plan Total New Project Costs	$40,491,360	0.00%	$0	100.00%	$40,491,360
	LESS:					
	Development Impact Fee Fund Balance	$174,372	0.00%	$0	100.00%	$174,372
	Total General Plan Total New Project Costs	$40,316,988	0.00%	$0	100.00%	$40,316,988
					Forward to Schedule 3.2	

NOTES:
1. Costs distributed based upon recent actual twelve month El Segundo Police Department "Calls-for-Service" statistics.

Schedule 3.2

City of El Segundo
2021-22 Development Impact Cost Calculation
Minimum Capital Needs-based Impact Costs
Law Enforcement Facilities, Vehicles and Equipment

DIF Land-use Type	Undeveloped Acres	Undeveloped Units	Call Generation Rate	Expected New Calls for Service	Percentage of Additional Service Calls	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwelling Units (+)	3.64	20	0.621	12	0.05%	$19,268	$5,293	5.49	***$964 per Unit***
Detached Dwelling Units (-)	(73.93)	(203)	0.621	(126)	-0.50%	-$202,310			
Attached Dwelling Units	74.73	1,959	0.604	1,183	4.71%	$1,899,467	$25,418	26.21	***$970 per Unit***
Commercial Lodging Units	2.00	232	0.063	15	0.06%	$24,085	$12,043	116.00	***$104 per Unit***
Retail & Service Uses (SF) (+	137.48	6,887,925	3.123	21,511	85.67%	$34,538,828	$251,228	50,101	***$5.014 per S.F.***
Retail & Service Uses (SF) (-	(1.00)	(11,917)	3.123	(37)	-0.15%	-$59,409			
Office Uses (SF)	85.26	2,985,602	0.856	2,556	10.18%	$4,104,005	$48,135	35,018	***$1.375 per S.F.***
Industrial Uses (SF) (+)	28.00	731,808	0.204	149	0.59%	$239,240	$8,544	26,136	***$0.327 per S.F.***
Industrial Uses (SF) (-)	(166.52)	(758,027)	0.204	(155)	-0.62%	-$248,874			
Institutional Use (SF)	1.00	13,504	0.124	2	0.01%	$2,689	$2,689	13,504	***$0.199 per S.F.***
TOTAL	**90.66**	--	--	**25,110**	**100.00%**	**$40,316,988 in Law Enforcment Development-related GP Projects**			

Schedule 3.3

City of El Segundo
2021-22 Development Impact Cost Calculation
Existing Community Financial Commitment Comparison
Law Enforcement Facilities, Vehicles and Equipment

DIF Land-use Type	Developed Acres	Developed Units	Call Generation Rate	Existing Calls for Service	Percentage of Existing Service Calls	Allocation of Infrastructure "Equity"	Distribution of "Equity" per Acre	Average Units or Square Feet/Acre	Current Financial Commitment per Unit or Square Foot
Detached Dwelling Units	1,390.20	3,822	0.621	2,372	14.25%	$3,848,739	$2,768	2.75	*$1,007 per Unit*
Attached Dwelling Units	88.60	490	0.604	296	1.78%	$480,281	$5,421	5.53	*$980 per Unit*
Commercial Lodging Units	33.10	2,691	0.063	170	1.02%	$275,837	$8,333	81.30	*$103 per Unit*
Retail & Service Uses (SF)	110.20	1,313,245	3.123	4,101	24.64%	$6,654,164	$60,383	11,917	*$5.067 per S.F.*
Office Uses (SF)	574.80	9,493,945	0.856	8,128	48.84%	$13,188,258	$22,944	16,517	*$1.389 per S.F.*
Industrial Uses (SF)	1,665.20	7,580,266	0.204	1,547	9.30%	$2,510,117	$1,507	4,552	*$0.331 per S.F.*
Institutional Use (SF)	17.30	233,797	0.124	29	0.17%	$47,055	$2,720	13,514	*$0.201 per S.F.*
TOTAL	**3,879.40**	--	--	**16,643**	**100.00%**	**$27,004,450**	**Total Law Enforcement System Capital Assets**		

$22,116,445	**in Law Enforcement Facility Assets**
$2,387,748	**in Law Enforcement Vehicles Assets**
$670,502	**in Law Enforcement Officer Equipment Assets**
$1,655,383	**in Specialty Equipment Assets**
$174,372	**in Existing Law Enforcement DIF Fund Balance**

Chapter 4
Fire Suppression Facilities, Vehicles, and Equipment

The Existing System. The City has invested in a system of fire facilities, response vehicles and specialty equipment. The Fire Department responds to calls-for-service from two existing stations. The Department has specific equipment and training for calls-for-service consisting of fire suppression, emergency medical calls, vehicle extrication, high-angle rescue, trench and collapse rescue, swift water rescue, confined space rescue as well as and hazardous materials response. The Department is also available to handle other non-anticipated emergency calls-for-service. The City has invested in a significantly asset rich system of fire suppression/rescue system.

The fire station facilities are detailed as follows:

Fire Station #31/Headquarters is 13,355 square foot, four bays wide by two vehicles deep facility and is located on a 52,750 square foot parcel at 314 Main Street.

Fire Station #32 is a 13,687 square foot four bay wide by two vehicle deep fire station on a 37,750 square foot parcel at 2261 East Mariposa Avenue. There are also 975 square feet of storage structures on the parcel.

Both stations are the high end of number of bays/spaces (four bays wide by two vehicles deep) with most cities having maybe one such large station with the reminder at two bays wide by two vehicle deep stations. As such the City retains a great deal of response capacity. However, the anticipated 75% increase in calls-for-service may require an increase in staffing somewhere into the future

The land and replacement construction costs of the existing stations and training facilities is approximately $24,487,179. Not surprisingly, the City also has a sizable fleet of equipped City-owned response and prevention units consisting of:

- Three Type I response engines;
- Two aerial ladder vehicles;
- Two Command Vehicles (Chief and Battalion Chief);
- Two USAR vehicles (REMS/USAR);
- Four paramedic Vehicles;
- Two environmental vehicles;
- Three Fire Prevention vehicles; and,
- Five miscellaneous, administrative sedans and utility trucks.

The total investment in the 23 vehicle compliment is about $9,255,722. State or County vehicles and equipment are not included in the financial commitment figure. The City's fire-fighter assigned equipment and successful psychological/back-ground checks, at $14,820 per fire-fighter, is approximately $622,400 total for the existing staff of 42 fire fighters. The specialty equipment made up of Urban Search and Rescue, hazardous materials/mass casualty, confined space equipment, as well as major communications equipment, reserve hose and

appurtenances total some $255,018. Lastly, the Fire Suppression Facility, Vehicle and Equipment Impact Fee fund balance is $333,588.

The current financial commitment or investment, in fire stations, training facilities, response fleet, specialty and communications equipment and fund balance is a sizable $34,953,965. This figure represents what it would cost to establish the existing Department response capability at current vehicle, equipment, land acquisition and construction costs. The relevance of this figure will be established later in this Chapter.

Demand Upon Infrastructure Created by the Development of Underdeveloped or Vacant Parcels. While it can be said that numerous factors are considered when determining the number and location of fire stations in any city, it can be stated without fear of contradiction that all new private development in the City will have an effect on the City's current ability to respond to fire, rescue and emergency calls-for-service. The affect, simplified but not trivialized, is twofold. Initially, each new residential and business development will create, on average, more calls-for-service increasing the likelihood of simultaneous (and thus competing) calls-for-service. Additionally, as development spreads further from any existing station or stations, as large-scale development is often likely to do, the distances (and thus response times) will increase, taking the existing fire companies out-of-service for greater periods of time.

The capacity of any fire station is finite and will reach practical limits (through call *frequency* and *total time*). When that capacity is exceeded, the level of service afforded to existing development will be greatly reduced. Or stated in another way, if development continues without the addition of fire station capacity to respond, the existing stations could be overwhelmed in terms of calls-for-service, making a timely response for emergency service a virtual coin flip. That is, will the existing fire companies be available to respond to your needs or will they possibly be out-of-service on a call in a different part of the community?

The Purpose of the Fee. The City staff has determined there is no need for the additional fire station in order to continue to be able to respond to an ever-increasing number of expected additional service demands calls, now and in the future. The two four bays wide by two vehicles deep facilities have the capacity to absorb the additional calls-for-service anticipated from future upsizing development, but only in terms of equipment and facilities space. Having the right type, size, and number of fire stations in the right locations enables policy makers, the Chief and City Council to house fire fighters, apparatus, and equipment in a rational way for maximum use of capital resources at the lowest annual operations cost as is the case in El Segundo. While having a two large fire stations and a base of response vehicles and specialty equipment, the City may need to look at staffing at some point in the future.

Conversely, the penalties are high and extremely visible for poor fire station location or a lack of one. Adverse effects are felt by the City staff, the council, and possibly by the existing taxpayers. With poor location or no additional locations, response times via great distance or out-of-service due to a previous call can become excessive, and if a tragedy occurs, the incident would be well publicized.

Often, response time is mistakenly referred to for only the first-in unit, and this can be a grave error. Instead, response time must consider *all* the forces necessary to place the incident under control. If the first unit arrives within five minutes but cannot provide the necessary water flow or

perform the needed functions due to a lack of staffing, the five minute response becomes insignificant and irrelevant. Thus, an increase in the number and type of response vehicles is also necessary to match and equip the needed additional staff. The following sections identify the manner in which the City plans to meet the demands of additional calls-for-service.

The Use of the Fee. The revenues generated from a properly calculated and legally-supported Fire Suppression Facilities, Vehicles and Equipment Impact Fee would be limited to capital costs related to that growth. The collected fees would only be used to acquire the projects identified following and on Schedule 4.1. Conversely, the Fire Suppression Facilities DIF receipts would not be used to repair any existing fire stations or replace any existing emergency response vehicles. Additional equipment and facilities are planned to come on-line, as needed, as development creates additional demands beyond the capability (volume or calls and distance) of the existing stations. The capital acquisitions include:

FS-001, Acquire an Additional Standard Type I Engine/Pumper - Given the additional calls-for service expected in the future, the Department would likely require one additional fully-equipped response engine at approximately $888,117 plus an additional 20% necessary to fully equip it with basic specialty equipment.

FS-002, Medic Response Vehicle - Acquire a fully equipped medic response vehicle. Given the additional 2,640 additional calls-for-service in the future, most of which will likely be medic calls, an additional medic response vehicle (and staff) will likely be required.

FS-003, Additional Training Facilities/Props - Acquire some additional props for improvements to the City's training capacity.

FS-004, Fire Suppression/Rescue Specialty Equipment - The list would include tools, expanded trench shoring devices, electronic and technological advancements, practice ladders and other similar costly items. Additional devices for advanced training would be included.

FS-005, Traffic Signal Preemption System Additions - Apply and install state-of-the-art signal preemption devices on the City's remaining non-preempted traffic signals in order to allow for unfettered fire/medic and rescue calls-for-service. The City's anticipated 125% increase in fire/medic/rescue calls-for-service will directly clash with the anticipated 75% increase in daily traffic trip-miles. All efforts must be made to improve the Fire Department's ability to maintain the NFIRS recommended five minute response @ 35 MPH by improving the Departments' ability to control all major traffic signals during a response.

FS-006, Fire Standards of Service Study - Given the unusual generation of additional future calls-for-service, i.e. significant upsizing of existing residences and business square feet, the Department would benefit from an El Segundo specific Fire Standards of Services Study. Such a study is equivalent to circulation, storm drainage or utilities Master Plan.

The proposed projects and costs of $1,861,500 are identified on Schedule 4.1. The total cost of completing the fire infrastructure system is a net $1,527,912 after subtracting the existing $333,588 in current Fire Suppression Facilities DIF Fund balance from the total capital needs.

The Relationship Between the Need for The Fee and The Type of Development Project. Fire service response standards extended to new development should be consistent with the fire response currently enjoyed by the City's existing citizens and business community by constructing new facilities, or else the result will be in the deterioration of the level of service (LOS) provided both to the existing residents and future citizens and businesses within the City of El Segundo. It follows that it is appropriate to assess future development to contribute additional fire facilities.

To project the impact of future development on fire services, it was first necessary to quantify the current impact on services from each of the City's land-uses. Then, a determination of the costs of future capital facilities necessary to meet this increased demand was made. The following section illustrates the relative impact from each land use on fire services and facilities.

While the majority of these requests for service were made by El Segundo citizens from their residences, a large percentage of requests were generated from new commercial and industrial uses within the City. A survey of each land use and its existing effect on requests for calls-for-service was conducted to project the impact of future development on fire services. The calls-for-service survey was undertaken in a similar manner and concurrently with the process used to determine law enforcement demand (specifically described in Chapter 3, Law Enforcement et al.). Only requests for fire and medic/rescue services to privately held property were counted. Requests for service to public property, such as City parks and public right-of-way or intersections, were excluded thus distributing these calls pro-rata through the requests for service from privately held property. This is based upon the argument that all public land serves privately held land in some manner.

Table 4-1, The following table identifies the number of calls-for-service received by the Fire Department during the past calendar year by the previously identified DIF categories. The number of requests for service received by the Department during the year was then divided by either the developed (1,000) square feet, or the existing number of units, to determine the number of requests generated per business square foot, per dwelling unit or commercial lodging unit.

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Table 4-1
Fire Suppression Calls-for-Service Generated by Land Use
(Over a 12 Month Period)

DIF Land-use Type	Developed Dwellings or Square Feet	Actual Calls For Service Over 12 Months	Total Calls per Dwelling or 1,000 SF (KSF)
Detached Dwelling Units	3,822	790	0.207/Unit
Attached Dwelling Units	490	235	0.480/Unit
Commercial Lodging Units	2,691	240	0.089/Unit
Retail & Service Uses	1,313,245	304	0.231/KSF
Office Uses	9,493,945	446	0.047/KSF
Industrial Uses	7,580,266	70	0.009/KSF
Institutional Uses	233,797	12	0.051/KSF

Of residential land-uses, an attached welling unit is more likely to require an emergency fire service response at 0.480 annual responses *per unit* than a detached dwelling unit at 0.207 annual responses per unit. Retail use development is shown to generate the highest business use demand at 0.231 responses per 1,000 square foot of building space, while industrial development generates the least demand at 0.009 calls per 1,000 square feet. The lower demand by industrial uses should be expected given the greater density of employees and patrons in an office use establishment when compared to an industrial business of similar square feet. However, it should be noted that while there are fewer calls for industrial properties, significant training is required to be prepared for industrial responses, (i.e., trenching response and hazardous materials training).

Based upon these calls-for-service and the anticipated development, future demands in the City will increase from the 2,097 annual calls-for-service to private development by 2,641 to 4,738 calls-for-service per year. Continued development will benefit from the existence of the current two large capacity stations and the fact that they a great deal of existing capacity.

Resulting General City Area DIF Schedule. The collection of the resulting DIFs through build-out would allow the City to acquire or construct almost all of the proposed development-related expansions and required equipment. Table 4-2, following, indicates the development impact fee necessary to finance the cost to the additional stations, response equipment and fire-fighter equipment.

[This space left vacant in order to place the following table on a single page].

Table 4-2
Minimum Needs-based Fire Suppression Facilities, Vehicles and Equipment Development Impact Costs by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units (+)	$2,292	$115/Unit
Detached Dwelling Units (-)	*($24,141)*	
Attached Dwelling Units	$541,492	$276/Unit
Commercial Lodging Units	$12,071	$52/Unit
Retail & Service Uses (+)	$916,442	$0.133/S.F.
Retail & Service Uses (-)	*($1,681)*	
Office Uses	$80,674	(1) $0.027/S.F.
Industrial Uses (+)	$3,973	(1) $0.000/S.F.
Industrial Uses (-)	*($3,820)*	
Institutional Uses	$611	(1) $0.000/S.F.

(1) Allocated costs to these land uses are less than a tenth of a mil and thus truncate to zero.

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The *use of the fee* is similar to the *need for the fee.* The DIF would be collected as the development occurs (generally at building permit or some predetermined point in the process). As the development occurs, the impact is generated. The collected DIF receipts would be put to use to acquire the capital acquisition identified previously or on Schedule 4.1, without reducing the capability of responding to calls from the existing community.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. Detail regarding the full acquisition cost of the existing project has been previously described.

The current community's commitment has been to establish the existing two-station capability paid for via past General Fund receipts. To allow future residents to benefit by use of all of the capital needs without contributing additional assets, would be clearly unfair to the existing residents and would reduce their current level of service. Table 4-3, following, summarizes the distribution of the $34,953,965 in replacement costs of the existing assets to the existing residents and business owners (Schedule 4.3 details this distribution).

The replacement value of the existing fire infrastructure (stations, response fleet and related safety equipment) of $34,953,965 represents the current equity investment or community *financial commitment* towards fire suppression capability by the existing community. When this figure is distributed over the existing community in the same manner as the future costs, by the land use demands, an investment, or financial "commitment" (or equity for that matter) per unit

can be determined. As an example, each attached dwelling unit has invested about $3,445 into fire suppression capital while the proposed DIF is a far lesser amount at $276 that could be imposed upon newly developed attached dwelling units.

Table 4-3
Existing Fire Suppression Community
Financial Commitment Comparison Data

DIF Land-use Type	Allocation of Development Costs	Asset/Equity Investment Per Unit or Square Foot
Detached Dwelling Units	$13,168,160	$3,445/Unit
Attached Dwelling Units	$3,917,111	$7,994/Unit
Commercial Lodging Units	$4,000,454	$1,487/Unit
Retail & Service Uses	$5,067,241	$3.859/S.F.
Office Uses	$7,434,177	$0.783/S.F.
Industrial Uses	$1,166,799	$0.154/S.F.
Institutional Uses	$200,023	$0.856/S.F.

RECOMMENDED IMPACT FEES

The Existing Community Financial Commitment Comparison (Schedule 4.3) is just slightly greater than the Minimum Needs-based Impact Costs (Schedule 4.2), which are necessary and sufficient to maintain the established fire suppressions system in that area. Schedule 4.2 would be a reasonable fee schedule to adopt for this infrastructure.

RECAP OF RECOMMENDED FIRE SUPPRESSION IMPACT FEES

1. General City Area- Adopt Schedule 4.2.

END OF CHAPTER TEXT

Schedule 4.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Allocation of Project Cost Estimates
Fire Suppression/Rescue Facilities, Vehicles and Equipment

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Other Resources/Future: Percent Need	Construction Needs Supported by Other Other Resources/Future: Apportioned Dollar Cost	Construction Needs Generated by New Development: Percent Need	Construction Needs Generated by New Development: Apportioned Dollar Cost
FS-001	Standard Engine/Pumper, Fully Equipped	$1,050,000	0.00%	$0	100.00%	$1,050,000
FS-002	Medic Response Vehicle, Fully Equipped	$91,500	0.00%	$0	100.00%	$91,500
FS-003	Additional Training Facilities/Props	$250,000	0.00%	$0	100.00%	$250,000
FS-004	Fire Suppression/Rescue Specialty Equipment	$150,000	0.00%	$0	100.00%	$150,000
FS-005	Traffic Signal Preemption System Additions	$225,000	0.00%	$0	100.00%	$225,000
FS-006	Fire Standards of Service Study	$95,000	0.00%	$0	100.00%	$95,000
	Sub-Total General Plan Total New Project Costs	$1,861,500	0.00%	$0	100.00%	$1,861,500
	LESS:					
	Development Impact Fee Fund Balance	$333,588	0.00%	$0	100.00%	$333,588
	Total General Plan Total New Project Costs	$1,527,912	0.00%	$0	100.00%	$1,527,912
						Forward to Schedule 4.2

NOTES:
1. Costs distribution based upon the City of El Segundo Fire Department "Calls-for-Service" statistics.

Schedule 4.2

City of El Segundo
2021-22 Development Impact Cost Calculation
Minimum Capital Needs-based Impact Costs
Fire Suppression/Rescue Facilities, Vehicles and Equipment

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Call Generation Rate	Anticipated New Calls for Service	Percentage of Additional Service Calls	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwelling Units (+)	3.64	20	0.207	4	0.15%	$2,292	$630	5.49	***$115 per Unit***
Detached Dwelling Units (-)	(73.93)	(203)	0.207	(42)	-1.58%	-$24,141			
Attached Dwelling Units	74.73	1,959	0.480	940	35.44%	$541,492	$7,246	26.21	***$276 per Unit***
Commercial Lodging Units	2.00	232	0.089	21	0.79%	$12,071	$6,035	116.00	***$52 per Unit***
Retail & Service Uses (SF) (+)	137.48	6,887,925	0.231	1,591	59.98%	$916,442	$6,666	50,101	***$0.133 per S.F.***
Retail & Service Uses (SF) (-)	(1.00)	(11,917)	0.231	(3)	-0.11%	-$1,681			
Office Uses (SF)	85.26	2,985,602	0.047	140	5.28%	$80,674	$946	35,018	***$0.027 per S.F.***
Industrial Uses (SF) (+)	28.00	731,808	0.009	7	0.26%	$3,973	$142	26,136	***$0.000 per S.F.***
Industrial Uses (SF) (-)	(166.52)	(758,027)	0.009	(7)	-0.25%	-$3,820			
Institutional Use (SF)	1.00	13,504	0.051	1	0.04%	$611	$611	13,504	***$0.000 per S.F.***
TOTAL	**90.66**	--	--	**2,652**	**100.00%**	**$1,527,912**	**in Fire Suppression Development-related GP Projects**		

Schedule 4.3

City of El Segundo
2021-22 Development Impact Cost Calculation
Existing Community Financial Commitment Comparison
Fire Suppression/Rescue Facilities, Vehicles and Equipment

Proposed Land Use	Developed Acres	Developed Units	Call Generation Rate	Existing Calls for Service	Percentage of Existing Service Calls	Allocation of Infrastructure "Equity"	Distribution of "Equity" per Acre	Average Units or Square Feet/Acre	Current Financial Commitment per Unit or Square Foot
Detached Dwelling Units	1,390.20	3,822	0.207	790	37.67%	$13,168,160	$9,472	2.75	***$3,445 per Unit***
Attached Dwelling Units	88.60	490	0.480	235	11.21%	$3,917,111	$44,211	5.53	***$7,994 per Unit***
Commercial Lodging Units	33.10	2,691	0.089	240	11.44%	$4,000,454	$120,860	81.30	***$1,487 per Unit***
Retail & Service Uses (SF)	110.20	1,313,245	0.231	304	14.50%	$5,067,241	$45,982	11,917	***$3.859 per S.F.***
Office Uses (SF)	574.80	9,493,945	0.047	446	21.27%	$7,434,177	$12,934	16,517	***$0.783 per S.F.***
Industrial Uses (SF)	1,665.20	7,580,266	0.009	70	3.34%	$1,166,799	$701	4,552	***$0.154 per S.F.***
Institutional Use (SF)	17.30	233,797	0.051	12	0.57%	$200,023	$11,562	13,514	***$0.856 per S.F.***
TOTAL	**3,879.40**	--	--	**2,097**	**100.00%**	**$34,953,965**	**Total Existing Fire Suppression System Assets**		

$24,487,179	**in Fire Suppression Facilities Assets**
$9,255,722	**in Fire Suppression Vehicles Assets**
$622,458	**in Fire Fighter Assigned Equipment Assets**
$255,018	**in Specialty Response Equipment Assets**
$333,588	**in Fire Suppression et. al. DIF Fund Balance**

Chapter 5
Circulation (Streets, Signals and Bridges) System

The following Chapter will discuss the Circulation System capital improvements consisting of major street segments, traffic signals and bridges required for the City through build-out of the existing City General Plan as identified in the Land-use Database Table in Chapter 2. Initially, RCS recommends continuation of the calculation of a comprehensive DIF schedule covering all components of the circulation system within the General Plan area, those three components consisting of major street segments, signals, bridge improvements and roadbed protecting drainage improvements. The reasons are practical in that combining this infrastructure will provide greater flexibility in establishing priorities in what is essentially a singular transportation issue with a common nexus, a combination of trip-end [5] generation and average trip distance. It is not uncommon that a single transportation capital project involves both a street improvement and signal improvement.

The Existing System. The City currently has and maintains an extensive system of roadways available for transportation of goods and services, as well as for educational, recreational, and social purposes. Streets that fall under the jurisdiction of the City of El Segundo are classified as one of three types of roadways for the purposes of this Report. [6] The types of roadways are defined in the El Segundo General Plan Circulation Element.

Major Arterials
Major arterials function to connect traffic from collectors to the major freeway system as well as to provide access to adjacent land uses. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions. These facilities handle inter-city and intra-city vehicular trips in the magnitude of 40,000 to 75,000 vehicles per day (vpd). They should be planned for eight lanes of through traffic. In the majority of cases in El Segundo, curb parking will be prohibited during peak periods. Bicycle traffic would travel with vehicular flow or be separated by a path behind the curb. Raised medians can be used to separate opposing flows of vehicular traffic as necessary. Access points, (i.e., driveways and minor intersecting streets) should be minimized.

Separate left-turn lanes at major signalized intersections would be mandatory with double left-turn lanes the rule rather than the exception. Separate right-turn lanes which also serve as bus loading areas would be considered at locations indicating high turn volumes. At some intersections up to three left turn and up to two right turn lanes may be provided, if needed, and if acquisition of additional right-of-way is practical.

Secondary Arterials
Secondary arterials are similar to major arterials in function. They connect traffic from collectors to the major freeway system. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions.

[5] A *trip* is defined as a series of one or more trip-ends. A trip-end is a single stop in a trip. As an example, a drive from home to work is a trip. Each individual stop along the way along the way to drop children off at a school, buy gas, get a lunch, drop off laundry and the ultimate arrival at work or home is a trip-end. The term *trip* has no effect on the calculation and only means *a drive*.
[6] Alleys are a part of the City's Circulation System but are not included in this list.

These streets handle intra-city trips in the magnitude of 25,000 to 55,000 vpd and are not as continuous in length as major arterials. At least six through lanes should be provided to handle these needs along with single or double left-turn lanes (the latter preferably) at major signalized intersections. Curb parking would be prohibited during peak periods. Bicycle traffic would have to use paths behind the curb, separate bicycle lanes, or travel in the street with autos, trucks, and buses.

Collector Streets

The collector street is intended to serve as an intermediate route to handle traffic between local streets and arterials. In addition, collector streets provide access to abutting property. Collector streets are anticipated to carry traffic volumes between 15,000 to 40,000 vpd and serve important internal functions within the community. A collector street may have one through lane per direction; but more realistically, it should have a minimum of two through lanes (at least during peak periods). In some cases, a 4-lane collector may have a median divider. Curb parking can be accommodated if abutting property owners have insufficient off-street parking. The function of the collector, however, is to "collect" vehicles from the local street system and transport them to the arterial system as efficiently as possible.

Signalization of collector/local street intersections should be timed to permit the majority of the traffic flow on the collector while allowing local street access. Restriction of free flow along collectors due to unwarranted STOP controls should be discouraged.

Local Streets

Local streets principally provide vehicular, pedestrian, and bicycle access to property abutting the public right-of-way. Cross sections of local streets vary, depending on the abutting land uses, parking requirements, street trees, and other considerations. Where both sides of the street are served equally in residential areas, the common right-of-way width for a local street is 60 feet with a 36-foot pavement width.

In multi-family areas where there is continuous parking throughout the day, a minimum of 40 feet of pavement may be required to provide room for two moving lanes of traffic in addition to street parking on both sides. In commercial and industrial areas, a minimum pavement width of 40 feet is considered necessary. In industrial areas, consideration of the predominant type of trucking, and whether or not maneuvering of trailers must be provided, may require a pavement width of more than 44 feet.

When pavement widths exceed 40 feet on local streets, rights-of-way should be increased above 60 feet. Each parkway width should be 12 feet, including landscaped area and sidewalk. Sidewalk width should be 4 feet in residential areas and 5 feet in commercial or industrial areas.

The overall system design of local streets can greatly affect traffic. Unduly long streets build up traffic volumes and act as collectors. Cross streets and intersections with acute angles are likely to contribute to accidents. Good practice precludes carrying local streets into arterials since such intersections create unnecessary friction points and cause related congestion on the arterials. A far better approach is to bring local streets into collectors which then feed into arterials.

In general, construction of local streets is the responsibility of the developer who then dedicates the completed street to the City. The City will accept these local street improvements and the responsibility to maintain them if they meet the City's requirements. For these reasons and the

fact that local streets do not exhibit City-wide benefits to all circulation system users, the cost of all "local" streets are not included in the Circulation System financial commitment calculation or the proportionality test.

GENERAL CITY DEVELOPMENT IMPACT FEES

Demand Upon Infrastructure Created by the Development of Undeveloped Parcels. Undeveloped parcels create few trip-ends beyond an occasional visit to the site for weed abatement purposes, planning purposes or to consider a sale or development of the vacant parcel. None of these trip-ends are on a routine basis. However, a developed parcel will generate a statistically predictable amount of trip-ends and trip-miles, depending upon the specific land use of the development. Thus, it can be stated that a vacant parcel, when developed into a specific use, i.e., residential or business, will generate more traffic than it did when it was vacant. Similarly, a change in the use of the property may increase or decrease the number of trip-ends, i.e., the demolition of a low trip-generating insurance office into reconstruction as a new a high trip generating fast-food restaurant.

All new development contributes to cumulative traffic impacts, which are difficult to measure and mitigate on a project-by-project basis, but which have significant and widespread cumulative impacts on the City's existing road system. Factors that will increase the competition for existing major street segment lane miles existing in General City area include the following:

- The construction of just under 9.8 million square feet of private business uses on the under or undeveloped acres will generate 599,861 additional daily trip-miles or about 93.2% of the total new trip-miles expected at GP build-out. This figure could vary significantly depending upon the type of commercial uses constructed and possible zoning changes or conditional use permits issued.

- An increase in the City's General Plan full-time population through the construction of about 1,776 additional dwelling units contributing approximately 38,914 new daily trip-miles or just 6.7% of the newly expected daily trip-miles.

- The addition of about 232 commercial lodging units will generate about 4,231 daily trip-miles, or about 0.7% percent of the total new trip-miles.

When all (or most) of the available vacant land within the City's limits is developed, the City can expect an additional 643,006 daily trip-miles. For perspective, the City currently experiences roughly estimated 836,628 daily trip-miles from/to the existing residences and businesses. The roughly 643,006 newly anticipated, development generated trip-miles represent about a 77% increase over the current 836,628 daily trip-miles.

The Purpose of the Fee. In the City, most of the planned arterials and collectors exist in some form, perhaps not yet fully widened to allow for the full number of lanes. Stated another way, there are few opportunities to construct any completely new arterial/collector lane miles. Thus the collection of Circulation System DIF receipts becomes imperative as a revenue source to finish off any existing, but, limited or incomplete, or not yet maximized roads. Additionally, the fees would be used to complete the system of signals that insures the smooth movement of

vehicles through intersections. Efficient signalization (i.e. turn pockets and fully actuated left-turn signals) is also important to keep vehicular traffic moving at the optimum efficiency through major intersections.

Included are transportation projects needed to alter existing arterials, connectors or collectors that currently exist, but due to additional trip-ends are becoming ineffective at moving vehicles.

The City anticipates approximate net increase of 2.9 million square feet of office uses to be built at GP build-out and approximately 6.8 million additional square feet of retail uses (these include retail and service uses). The result of these actions alone will generate an additional 601,781 additional trip miles within the City generated from commercial uses alone. When combined with the additional 1,776 anticipated residential units, the total increase of trip miles within the City will be a net 643,006. This significant increase in trip miles will likewise increase the demand for limited lane miles throughout the circulation system. The proper funding of circulation projects is critical to maintaining the current LOS for the citizens and business community of the City. New arterials/collectors, traffic signals, and road additions will help preserve the current LOS, while DIFs should be used to protect the general fund.

Traffic planners have long known that the critical constraint in a typical roadway network is the intersections. While the street capacity may be theoretically adequate to carry traffic volumes at GP build-out, motorists may experience congestion and even gridlock at the intersections of the street. While the City of El Segundo will certainly undertake any remaining major street widening projects, an equally important component of traffic circulation is the installation of traffic signals and lane reconfiguration at critical intersections in the City. However, as previously stated, there are extremely limited opportunities to expand major road lane miles.

The importance of traffic signals is two-fold. First, the City can build only so many major collector/arterial streets and there are limits as to how many extra lanes they will have. Second, north-south collectors will, by definition, intersect with east-west collectors assuring that *someone* will have to stop, either at a stop sign or a traffic signal. The traffic carrying capacity of each collector can only be maximized by assuring orderly flow of traffic by signalizing those intersecting collectors.

The collection of Circulation System DIFs is not intended to eliminate the time-honored practice of the developer constructing the full width roadway and being reimbursed for the portion of costs greater than would otherwise be required of the developer in the calculated simple impact fee amount. This impact fee calculation and resulting fee collection would simply improve the City's capability for such reimbursements.

Schedule 5.1 identifies $130,175,000 in capacity increasing circulation improvements. Roughly 27.0% of this amount, or $35,175,000, has been identified as the responsibility of development as these projects will increase the capacity of the circulation system. The remainder, 73.0% or $95,000,000 are projects that are not development-generated and will require non-DIF revenue sources. The individual projects and costs are identified on Schedule 5.1 at the end of the Chapter.

The Use of the Fee. The collection of Circulation System DIF schedule receipts would be used to construct the projects (or portions of projects) identified in Schedule 5.1 at the conclusion of

this Chapter's text. The collected fees will be used to create traffic signals, road additions, and roadway reconfigurations with which to accommodate the additional 643,006 daily trip-miles expected from further development of the City.

ST-001, Park Place Extension Grade Separation Project - Construct a 1,000 linear foot overpass to connect Park Place from a point 950' east of Pacific Coast Highway to Park Place at a point 875 feet north of Rosecrans. The overpass is necessary to connect the two separate Park Place segments over several railroad lines.

ST-002, New Pedestrian, Bike Lane, Slow Vehicle Network Improvements - Construct additional, construct additional Class I, II III and IV bike lanes throughout the City. Additional bike lanes will make the roadway safer for cyclists and vehicle transit alike. CALTRANS defines the four Bike Lanes Classes as follows:

> Bike Route Class I bikeways, also known as bike paths or shared-use paths, are facilities with exclusive right of way for bicyclists and pedestrians, away from the roadway and with cross flows by motor traffic minimized. Some systems provide separate pedestrian facilities. Class I facilities support both recreational and commuting opportunities. Common applications include along rivers, shorelines, canals, utility rights-of-way, railroad rights-of-way, within school campuses, or within and between parks.
>
> Bike Lane Class II bikeways are bike lanes established along streets and are defined by pavement striping and signage to delineate a portion of a roadway for bicycle travel. Bike lanes are one-way facilities, typically striped adjacent to motor traffic travelling in the same direction. Contraflow bike lanes can be provided on one-way streets for bicyclists travelling in the opposite direction.
>
> Bike Route Class III bikeways, or bike routes, designate a preferred route for bicyclists on streets shared with motor traffic not served by dedicated bikeways to provide continuity to the bikeway network. Bike routes are generally not appropriate for roadways with higher motor traffic speeds or volumes. Bike routes are established by placing bike route signs and optional shared roadway markings (sharrow) along roadways.
>
> Bicycle Boulevard, A Bicycle Boulevard is a shared roadway intended to prioritize bicycle travel for people of all ages and abilities. Bicycle Boulevards are typically sited on streets without large truck or transit vehicles, and where traffic volumes and speeds are already low, or can be further reduced through traffic calming.;
>
> Buffered Bike Lane, A buffered bike lane provides greater separation from an adjacent traffic lane and/or between the bike lane and on-street parking by using chevron or diagonal markings. Greater separation can be especially useful on streets with higher motor traffic speeds or volumes.
>
> Separated Bikeway/Cycle Track, A Class IV separated bikeway, often referred to as a cycle track or protected bike lane, is for the exclusive use of bicycles, physically separated from motor traffic with a vertical feature. The separation may include, but is not limited to, grade separation, flexible posts, inflexible barriers, or on-street parking. Separated bikeways can provide for one-way or two-way travel. By providing physical separation from motor traffic, Class IV bikeways can reduce the level of stress, improve comfort for more types of bicyclists, and contribute to an increase in bicycle volumes and mode share.

ST-003, Roadway Maintenance Due to New Development Use - While future development will indeed increase wear and tear on the City's many arterials and collectors, maintenance costs are not valid uses of impact fees. It is merely use of an existing asset. Thus the City will need to find other revenue sources for general maintenance of the street system.

ST-004, Circulation Master Plan – Undertake a Circulation Master Plan study to determine the effect of new and significant up-sizing development upon the City's existing circulation system and determine state-of-art solutions to the new demands. The result could alter many of the projects described herein.

The Relationship Between the Need for the Fee and The Type of Development Project. Schedule 5.1 identifies the additional traffic to be generated by new development, by type of development. The technical volume, *Trip Generation (Manual)* 7th Edition, produced by the Institute of Traffic Engineers, has been used to identify the *nexus*, or relationship between the type of development and the projected number of trips that development will generate.

A 150-unit attached dwelling development would generate about 3,465 daily trip-miles and a one-acre retail/service development would generate a similar 3,501 daily trip-miles. Each would pay its proportionate share of the total 643,006 newly created daily trip-miles expected in the City's limits at GP build-out. In the case of the detached dwelling residential development, the daily trip-miles generated by the 150 new residences represents about 0.5% of the total 643,006 new trip-miles anticipated at build-out, thus they would be required to pay or construct projects on the list to an amount equal to 0.5% of the total development-related project costs. The three acre retail/service/office development, also representing 0.5% of the total new daily trip-miles, would also finance 0.5% of the development-related project list.

Circulation System Cost Distribution by Average Land-use Trip Frequency/Distance

New Trip Adjustment for *Pass-by* or *Diverted* Trips. Schedule 5.2 contains a sub-schedule that identifies adjustments to new total ***trip-ends***. As an example, an acre of general retail/service/office uses (with a 0.40 FAR) would be expected, on average, to generate about 3,347 trip-ends daily. However, approximately 15% of those trip-ends, or about 562 trip-ends per day, are ***pass-by trip-ends.*** The ***trip-end*** is not truly an ***end*** but is actually one in a series of stops, i.e. at various commercial establishments, with a different location such as a residence as the final ***trip-end*** or destination of the series of ***trip-ends***. In order to be considered a pass-by trip, the location of the stop must be contiguous to the ***generator*** route [7], i.e. the route that would have been used even if the temporary stop had not been made. The Institute of Transportation Engineers (ITE) indicates that:

> Thus when forecasted trips based upon the trip generation rates are distributed to the adjacent streets, some reduction is made to account for those trips already there that will be attracted to the proposed development.[8]

[7] An example of a diverted trip-end would be a single trip-end where along the way from work, a motorists evening drive deviates from the normal route taken home at perhaps a preferred grocery store, mail drop, or to pick up a child from a piano lesson before continuing home. Each of these three stops would be considered *diverted* trip-ends.
[8] Trip Generation, Institute of Transportation Engineers, 1099 14th Street, Suite 300 West, Washington D.C. 20005-3438. Definition of terms, page 147.

Pass-by trip-ends are fully adjusted (reduced at 100%) from the average trip-ends (per day) generated by the seven land-uses identified in Schedules 5.2 and 5.3.

A *diverted* trip is similar to a *pass-by* trip-end in that it is an extra stop between, as an example, a motorists' work site and his or her residence. The *diverted* trip differs slightly from the *pass-by* trip in that it requires a minor deviation from the normal ***generator*** route and the temporary stop. In short, a *diverted* trip creates a separate side trip using additional (and different) lane miles from that of the normal route from the motorist's place of employment and his or her residence.[6] Using our example of one acre of general retail/service/office uses, roughly 1,499 of the expected trips would involve a diversion to that basic planned trip. We could expect these trips to increase the traffic volume of the generator route, but only for brief distances. The ITE states that diverted trips:

> are produced from traffic volume on roadways within the vicinity of the generator (route) and require a diversion from that roadway to another roadway with access to the site. These roadways could include streets or freeways adjacent to the generator but without access to the generator.[9]

These *diverted* trips will be adjusted (reduced at 50%) from the full trip count for each of the land-uses identified in Chapter 2.

Again, the sub-schedule at the bottom of Schedule 5.2 indicates the total trip-ends and the reduction due to the number pass-by trips (at 100%) and diverted trips (at 50%). The trip pass-by and diversion percentages were generated and are supported by a study conducted by the San Diego Association of Governments (SANDAG) in conjunction with various U.S. and California government agencies [10].

Additionally, the same SANDAG data schedule referenced above provides information for a trip distance factor component to the nexus. Based upon that data, a trip to an industrial work-site has the greatest distance at 9.0 miles. A trip to an office averages 8.8 miles, residential trips average 7.9 miles, a trip from a hotel or motel (once in residence) averages 7.6 miles, and an average trip to a retail/service site is the shortest at 4.3 miles. This indicates that drivers generally appear willing travel further distances to work and for treatment at medical offices than they are to shop. Both frequency (trip-ends) and distance (average miles per trip) have been combined into the nexus by multiplying average trip frequency by average trip distance. Trip-mile rates have been calculated for the seven DIF land-use categories. They are demonstrated at the bottom of schedule 5.2 at the end of the Chapter.

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. There is very little difference between this and the above category. The fee collected will be based on the projected number of trip-ends the proposed development will generate in

[9] Institute of Transportation Engineers, 1099 14th Street NW, Suite 300 west, Washington D.C. 2005-3438, Definition of Terms, page 146.

[10] *Traffic Generators*, San Diego Association of Governments, 401 B Street, Suite 800, San Diego, CA 92101. Brief Guide to Traffic Generators Rates. Compiled in conjunction with the U.S. Department of Housing and Urban Development. U.S. Department of Transportation, The California Department of Transportation and the U.S. Environmental Protection Agency, July 1995.

relationship to the total 643,006 net additional projected trip-miles at build-out. Any amount imposed as a Circulation System DIF will be placed in a separate fund (collecting interest) and is to be used only on the projects identified on Schedule 5.1 as development related.

From time to time the City may require an applicant for a private project to construct a street or signal improvement (or portion thereof) that is on the list of required improvements at the end of this Chapter. This method is often undertaken to expedite the project at the request of the applicant/developer. The developer should receive a credit for any monies expended on this required improvement against their Circulation System DIF.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. The calculation of the Circulation System DIFs is based upon the recognition that differing types of developments generate differing amounts of trip-miles. The fee is based upon the projected number of trips generated by the proposed private development project. Circulation DIF receipts will be accumulated until they reach the amount that could construct a meaningful project to alleviate or mitigate the demands of those new developments. Table 5-1 (summarized from Schedule 5.2) on the following page identifies the Minimum Needs-based Circulation System DIF schedule for the City of El Segundo's General Plan area.

Table 5-1
City of El Segundo's General Plan Area
Minimum Needs-based Circulation System
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units (+)	$37,855	$1,893/Unit
Detached Dwelling Units (-)	*($384,077)*	
Attached Dwelling Units	$2,474,973	$1,263/Unit
Commercial Lodging Units	$231,453	$968/Unit
Retail/Service/Office Uses (+)	$26,333,575	$3.823/Unit
Retail/Service/Office Uses (-)	*($45,568)*	
Office Uses	$6,523,835	$2.185/S.F.
Industrial Uses (+)	$857,430	$1.172/S.F.
Industrial Uses (-)	*($888,174)*	
Institutional Uses	$33,698	$2.495/S.F.

This set of proposed fees would generate the Minimum needs amount of revenue necessary to construct the needed street, signal, and roadway reconfiguration projects. These figures then need to be compared to the financial commitment demonstrated by the existing community.

Alternative Cost Methodology. A more precise calculation of costs for specific types of land-uses (i.e., banks, hospitals, convalescent residences, etc.) can be determined by multiplying the average cost per trip of $54.70 by the applicable daily trip-mile rate. An example of this calculation can be found at the bottom of Schedule 5.2 and applied to Table 5-2, on the following page. These tables list trip rates and costs for various residential, resort, industrial and commercial developments. A fee system based on a lengthy schedule of trip rates theoretically provides more accuracy and therefore financial commitment in determining specific uses' impact on the City's circulation system, but at the same time may increase the City's costs to administer the fee. A more extensive listing of traffic generators by land use is available in *Trip Generation* as published by the Institute of Transportation Engineers, New York, NY.

[This space left vacant to place the following table on a single page].

Table 5-2
Detail of Circulation System Minimum Needs-based Development (rounded) Impact Fees for Specific General City Area Commercial/Service/Office Uses

Land Use Category	Adjusted Trip-ends	Average Distance	Trip-end to Trip	Additional Trip-miles	Cost per Trip-mile	Cost per 1,000 Square Feet or Dwelling Unit
RESORT/TOURIST (per Unit or Entry Door):						
Hotel (multi-story)	6.29	7.6	0.5	23.9	$54.70	$1,307.33 /Room
All Suites Hotel	3.77	7.6	0.5	14.3	$54.70	$782.21 /Room
Motel	4.34	7.6	0.5	16.5	$54.70	$902.55 /Room
INDUSTRIAL (per 1,000 SF):						
General Light Industrial	6.17	9.0	0.5	27.8	$54.70	$1,520.66 /KSF
Heavy Industrial	5.97	9.0	0.5	26.9	$54.70	$1,471.43 /KSF
Manufacturing	2.73	9.0	0.5	12.3	$54.70	$672.81 /KSF
Warehousing	4.39	9.0	0.5	19.8	$54.70	$1,083.06 /KSF
MISCELLANEOUS BUSINESS USES (per 1,000 SF):						
Office Park	9.08	8.8	0.5	40.0	$54.70	$2,188.00 /KSF
Research Park	7.18	8.8	0.5	31.6	$54.70	$1,728.52 /KSF
Business Park (Specific)	11.29	8.8	0.5	49.7	$54.70	$2,718.59 /KSF
RETAIL/SERVICE USES (per 1,000 SF):						
Building Material Store	29.35	4.3	0.5	63.1	$54.70	$3,451.57 /KSF
Garden Center	23.45	4.3	0.5	50.4	$54.70	$2,756.88 /KSF
Movie Theater	2.47	4.3	0.5	5.3	$54.70	$289.91 /KSF
Church	5.92	4.3	0.5	12.7	$54.70	$694.69 /KSF
Medical-Dental Office	22.21	8.8	0.5	97.7	$54.70	$5,344.19 /KSF
General Office Building	7.16	8.8	0.5	31.5	$54.70	$1,723.05 /KSF
Shopping Center	30.20	4.3	0.5	64.9	$54.70	$3,550.03 /KSF
Hospital	11.42	4.3	0.5	24.6	$54.70	$1,345.62 /KSF
Discount Center	62.93	4.3	0.5	135.3	$54.70	$7,400.91 /KSF
High-Turnover Restaurant	8.90	4.3	0.5	19.1	$54.70	$1,044.77 /KSF
Convenience Market	43.57	4.3	0.5	93.7	$54.70	$5,125.39 /KSF
Walk-in Bank	13.97	4.3	0.5	30.0	$54.70	$1,641.00 /KSF
Other: (not available "per KSF")						
Cemetary (per acre)	3.07	4.3	0.5	6.6	$54.70	$361.02 /Acre
Service Station/Market (avg	107.69	4.3	0.5	231.5	$54.70	$12,663.05 /FP/Day
Service Station/Car Wash	99.35	4.3	0.5	213.6	$54.70	$11,683.92 /FP/Day

Table 5-3 following, (and summarized from Schedule 5.3) identifies the assets of the City's existing circulation system (at current replacement costs). The total system costs $247,839,677 consists of the existing circulation plan arterial and collector lanes at $123,600,000, major roadways right-of-way at $43,535,377, traffic signals and major intersections at $69,125,000, directional and street signs at $3,069,300, and $8,510,000 in street lighting. When these existing assets are distributed over the existing community, using the same nexus factor (e.g. trip-miles) used for distribution of future costs, the existing community has contributed the following, on average, by land use:

Table 5-3
Existing Circulation System Community
Financial Commitment
Comparison Data

DIF Land-use Category	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$39,161,565	$10,246/Unit
Attached Dwelling Units	$3,352,507	$6,842/Unit
Commercial Lodging Units	$14,539,283	$5,403/Unit
Retail/Service/Office Uses	$27,188,578	$20.703/Unit
Office Uses	$112,340,550	$11.833/S.F.
Industrial Uses	$48,096,648	$6.345/S.F.
Institutional Uses	$3,160,546	$13.518/S.F.

It should be noted that the existing community has contributed, on average, significantly more than would be required of future development to meet the minimum needs for build-out and all users. While there is clearly excess capacity in the existing system, it is usually the result of the existing community absorbing the initial street construction costs including the costly right-of-way acquisition, the later part of the community often finances only the smaller segment length widening's which maximize the street segments capacity.

Recommended Circulation System DIF Schedule. The adoption of Schedule 5.2 at the end of the chapter (and as summarized in table 5-1), as the Circulation System DIF Schedule would generate enough capital to construct the facilities needed by the new development. In addition, the City should adopt the application of the *per trip-mile fee* from the bottom of Schedule 5.2 and multiplied by the specific use Table 5-2 or the more extensive listing of traffic generation by land use available in *Trip Generation* as published by the Institute of Transportation Engineers, New York, N.Y.

Construction Responsibility vs. DIF Payment. This DIF assumes that each developer, contiguous to a planned Major Street would:

- Dedicate the needed right-of-way and would be responsible for last lane of asphalt concrete or PCC;
- Construct the parkway landscaping; and,
- Construct the curb, gutter, sidewalk, striping and street lights.

However, construction of the extra lanes would be financed by the Circulation System DIF, contributed to by all development within the City limits, thereby leveling the playing field between privately held parcels contiguous to a four lane collector as opposed to those privately held parcels contiguous to a two lane minor arterial. A given developer may undertake the actual construction of the *extra* lanes at the same time that they construct the *first* lane, but they would receive a reimbursement for construction of those *extra* lanes. However, it is important to note that if the developer constructs all or a portion of a road, signal or other circulation system improvement, and that project is not listed on Schedule 5.1, that project is assumed to be a condition of approval and not subject to a reimbursement or credit from the City from this DIF Fund. In short, the City cannot give a credit for a project that is not partially financed through this calculation.

The DIF Adoption Ordinance should contain the necessary language for identifying the process for calculating the reimbursement amount for the construction of *extra* lanes.

RECAP OF RECOMMENDED CIRCULATION SYSTEM DEVELOPMENT IMPACT FEES

1. Create a DIF Fund titled *Circulation System Impact Fee Fund.*

2. Adopt Schedule 5.2 for most land-uses and the $54.70 per trip-end rate on Schedule 5.2 to be used in conjunction with the most current edition of ITE manual (and the trip frequency/length figures (via SANDAG) at the bottom of Schedule 5.2) as well as Table 5-2 for unusual land-uses.

END OF CHAPTER TEXT

Schedule 5.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Allocation of Project Cost Estimates
Circulation (Streets, Signals and Bridges) System

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development: Percent Need	Construction Needs Generated by New Development: Apportioned Dollar Cost
ST-001	Park Place Extension Grade Separation Project	$100,000,000	75.00%	$75,000,000	25.00%	$25,000,000
ST-002	New Pedestrian, Bike Lane, Slow Vehicle Network Improvements	$20,000,000	50.00%	$10,000,000	50.00%	$10,000,000
ST-003	Roadway Maintenance Due to New Development Use	$10,000,000	100.00%	$10,000,000	0.00%	$0
ST-004	Circulation Master Plan	$175,000	0.00%	$0	100.00%	$175,000
	Sub-Total General Plan Total New Projects	$130,175,000	72.98%	$95,000,000	27.02%	$35,175,000
	LESS:					
	Circulation Development Impact Fee Fund Balance (none)	$0	100.00%	$0	0.00%	$0
	Other:	$0	100.00%	$0	0.00%	$0
	Other:	$0	100.00%	$0	0.00%	$0
	Development Impact Fee Fund Balance Total	$0	0.00%	$0	0.00%	$0
	Total Net General Plan Project Costs	$130,175,000	72.98%	$95,000,000	27.02%	$35,175,000
						Forward to Schedule 5.3

NOTES:
1. Costs distribution based upon a frequency and distance factor.

Schedule 5.2

City of El Segundo
2021-22 Development Impact Cost Calculation
Minimum Capital Needs-based Impact Costs
Circulation (Streets, Signals and Bridges) System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Trip-end and Length Factor	Total GC Additional Trip-miles	Percentage of Additional Trip-miles	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwelling Units (+)	3.64	20	34.588	692	0.11%	$37,855	$10,400	5.495	*$1,893 per Unit*
Detached Dwelling Units (-)	(73.93)	(203)	34.588	(7,021)	-1.09%	-$384,077			
Attached Dwelling Units	74.73	1,959	23.095	45,243	7.04%	$2,474,973	$33,119	26.214	*$1,263 per Unit*
Commercial Lodging Units	2.00	232	18.239	4,231	0.66%	$231,453	$115,726	116.00	*$998 per Unit*
Retail & Service Uses (SF) (+	137.48	6,887,925	69.888	481,383	74.86%	$26,333,575	$191,545	50,101	*$3.823 per S.F.*
Retail & Service Uses (SF) (-	(1.00)	(11,917)	69.888	(833)	-0.13%	-$45,568			
Office Uses (SF)	85.26	2,985,602	39.944	119,257	18.55%	$6,523,835	$76,517	35,018	*$2.185 per S.F.*
Industrial Uses (SF) (+)	28.00	731,808	21.419	15,674	2.44%	$857,430	$30,623	26,136	*$1.172 per S.F.*
Industrial Uses (SF) (-)	(166.52)	(758,027)	21.419	(16,236)	-2.53%	-$888,174			
Institutional Use (SF)	1.00	13,504	45.634	616	0.10%	$33,698	$33,698	13,504	*$2.495 per S.F.*
TOTAL	**90.66**	--	--	**643,006**	**100.00%**	**$35,175,000**	**in Development-related Circulation General Plan Projects**		
ALTERNATIVE FEE METHODOLOGY				***643,006***		***$35,175,000***	***$54.70 per Daily Trip-mile***		

Trip-ends Adjustment Calculation Land Use Title	Daily Total Trip-ends	Percent of Diverted Trips	Diverted Trip-end % Adjustment	Diverted Trip-end Percent	Percent of Pass-by Trips	Combined Diverted and Pass-by	Remaining Trip % as Adjustment %	Adjusted Trip Rate, Adjustment % X Total trips	*Average Trip Length*	*Trip-ends X Length X 50%*
Detached Dwelling Units (+)	9.57	11	0.50	5.5	3.0	**8.5**	**91.5%**	8.76	***7.9***	***34.588***
Attached Dwelling Units	6.39	11	0.50	5.5	3.0	**8.5**	**91.5%**	5.85	***7.9***	***23.095***
Commercial Lodging Units	6.23	38	0.50	19.0	4.0	**23.0**	**77.0%**	4.80	***7.6***	***18.239***
Retail & Service Uses (SF) (+	50.01	40	0.50	20.0	15.0	**35.0**	**65.0%**	32.51	***4.3***	***69.888***
Office Uses (SF)	10.50	19	0.50	9.5	4.0	**13.5**	**86.5%**	9.08	***8.8***	***39.944***
Industrial Uses (SF) (+)	5.38	19	0.50	9.5	2.0	**11.5**	**88.5%**	4.76	***9.0***	***21.419***
Institutional Use (SF)	11.99	19	0.50	9.5	4.0	**13.5**	**86.5%**	10.37	***8.8***	***45.634***

Schedule 5.3

City of El Segundo
2021-22 Development Impact Cost Calculation
Existing Community Financial Commitment Comparison
Circulation (Streets, Signals and Bridges) System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Trip-end and Length Factor	Existing GC Trip-miles	Percentage of Additional Trip-miles	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwelling Units	1,390.20	3,822	34.588	132,197	15.80%	$39,161,565	$28,170	2.75	*$10,246 per Unit*
Attached Dwelling Units	88.60	490	23.095	11,317	1.35%	$3,352,507	$37,839	5.53	*$6,842 per Unit*
Commercial Lodging Units	33.10	2,691	18.239	49,080	5.87%	$14,539,283	$439,253	81.30	*$5,403 per Unit*
Retail & Services Uses (SF)	110.20	1,313,245	69.888	91,780	10.97%	$27,188,578	$246,720	11,917	*$20.703 per S.F.*
Office Uses (SF)	574.80	9,493,945	39.944	379,226	45.33%	$112,340,550	$195,443	16,517	*$11.833 per S.F.*
Industrial Uses (SF)	1,665.20	7,580,266	21.419	162,359	19.41%	$48,096,648	$28,883	4,552	*$6.345 per S.F.*
Institutional Use (SF)	17.30	233,797	45.634	10,669	1.28%	$3,160,546	$182,691	13,514	*$13.518 per S.F.*
TOTAL	**3,879.40**	--	--	**836,628**	**100.00%**	**$247,839,677**	**Total Circulation System Capital Assets**		

$123,600,000	**in General Plan Major Streets/Bike Paths Assets**
$43,535,377	**in General Plan Streets Rights of Way Assets**
$69,125,000	**in General Plan Traffic Signalized Intersections**
$3,069,300	**in General Plan Street Signs**
$8,510,000	**in General Plan Street Lights**
$0	**in Circulation System Related DIF Fund Balance**

Chapter 6
Storm Drainage Collection System

The City's existing storm drainage network is composed of street gutter facilities, inlets and a network of storm drain pipe-lines which convey runoff to larger pipelines, washes and creeks located throughout the City. However, as the City continues to develop vacant parcels with rooftops, parking lots and driveways, the existing City-owned storm drainage lines will reach capacity and the ability of the existing drainage lines to collect additional runoff from developing areas will diminish regardless of the availability of a good system of wash channels. Additionally, there are areas in the City, such as near safety facilities such as the Police Station (existing and future) and numerous fire stations that require storm drainage improvements to ensure adequate safety response times to a few large vacant areas to be developed. City records indicate that there are roughly 84,161 linear feet of reinforced concrete pipe sized averaging about 36", requiring 190 inlet boxes, 120 manholes and 50 junction boxes (based upon average storm pipe construction).

Property-based Benefit Reasoning. Initially, the use of separate zones was reconsidered for each drainage basin within the City because each area has its own capital needs for storm-water collection. Storm-water runoff from Main Street may not directly impact the homeowner on Kansas Street; similarly, a small debris detention basin near East Grand Avenue required to handle runoff from the businesses in that area may provide little direct benefit to a business on North Nash Street. In each case, there can be some distinct property-related areas of benefit for each drainage basin. However, the owners and users of all developed and undeveloped parcels benefit, directly and indirectly, from all City-wide existing and future storm drainage improvements. As the various systems within the greater community of the City of El Segundo develop, concurrent with development of private property, the benefits are generally recognized as:

1. Proposed development projects can only be approved by the City when precautions, generally in the form of infrastructure improvements, have been made that assure that developed and undeveloped downstream parcels will not be adversely affected (i.e., inundated, flooded, cut off from access in and out), by storm water from the project being proposed. The avoidance of downstream or down-zone damage from the development of an upstream parcel may not be a major concern to a developer, but the City must concern itself with such issues when approving private development proposals.

2. The private development being assessed a DIF will receive the same storm-water protection from other development projects upstream or up-zone from its own development.

3. Storm water must be adequately controlled and removed to large scale flood control channels or creeks to assure access by public safety vehicles to all parts of the City, regardless of which zone a call-for-service is in. Fire and other rescue calls, as well as law enforcement and public works responses, cannot wait during heavy rainstorms. To the contrary, emergency calls-for-service probably increase during such storm events and the City's public safety and maintenance units must be able to respond to all zones.

4. The City of El Segundo's citizens and business owners/employees must also be able to travel safely (and send/receive goods and services) in heavy rain through one zone to another. An adequate and sufficient storm drainage system will provide such protection.

5. Storm drainage collection pipes protect the integrity of the roadbed of the very important arterials and collectors.

Demand Upon Infrastructure Created by the Development of Underdeveloped or Undeveloped Parcels. The construction of flood control and storm drainage facilities is essential to the preservation of private property, public streets, curbs and other facilities. The county or a regional level of government is generally responsible for flood control[11], and cities are generally responsible for storm drainage. The building of new residences and businesses on presently undeveloped land will increase the amount of runoff and thus accelerate the need for additional storm drainage facilities to handle increased runoff from these developing areas. As the vacant land is developed and bare dirt or turf is replaced with impervious rooftop, parking lots, driveways, pools, and sidewalks, greater amounts of the rainfall runs off of the developed parcel.

The amount of the runoff varies with differing types of development (i.e. land-use) and the varying amounts are referred to as the runoff coefficients. Approximately 0.775 (or 77.5%) of rainfall that falls on a parcel developed with detached dwelling residences, exits that developed parcel. The rate for an attached dwelling runoff is not much higher than a detached dwelling at 0.810 (81.0%). Most business uses such as lodging, retail/service, office, industrial and institutional have a runoff coefficient in excess of 0.900 or 90.0% with the exception of Business Park at a slightly lesser 0.875 or 87.5%.

Clearly, rainfall runoff increases with development. The cumulative effects of additional runoff must be managed with the appropriate capital facilities. These costs of the new storm drainage (and flood control revenue shortages) will be distributed by the coefficients of drainage, i.e., the percentage of property that will end up with impervious coverage such as asphalt or cement-based concrete drives or parking lots, rooftops, pools and any other hard surface that does not allow any absorption into the soil.

The Purpose of the Fee. The costs of extending the same level of storm drainage protection to the newly developing residences and businesses as is provided to the existing community (that has largely paid for the existing system) can be calculated, a fee imposed and collected. The Fee revenues can then be used to expand the storm drainage facilities necessary to extend the same level of services. The City staff has identified a total of $15,200,000 in storm drainage projects required to fully complete the City's network of pipes and small channels.

Of that figure, $3,850,000, or 25.33% of the storm drainage/quality projects, have been identified as being able to be funded by DIFs. The remaining $11,350,000 do not qualify for DIF funding and will need to be constructed using other resources.

[11] Projects of major importance generally involving the control of large quantities of flood water through numerous cities and unincorporated areas.

The Use of the Fee. The construction of flood and storm drainage facilities in the City of El Segundo is essential to the preservation of public and private property. The building of new residences and businesses on presently undeveloped land will require the installation of additional storm drains of sufficient capacity with an adequate number of inlets to handle increased rainwater runoff from these areas where development reduces natural absorption opportunities. This Chapter reviews the costs of storm drainage and flood control facilities needed to serve future development.

The revenues raised from a properly calculated and supported Storm Drainage Collection System DIF would be limited to the capitalized costs related to that growth. The fees would be used to construct the additional or parallel storm drainage lines necessary to increase the drainage capacity of the system to accommodate the additional rainwater runoff generated by the continued development. Conversely, the Storm Drainage Collection System DIF receipts would not be used to repair, replace or rehabilitate any existing storm drainage lines. The limited exceptions would be if the replacement or rehabilitation project creates additional capacity, in which case that proportional amount of additional capacity could be included as a DIF cost.

SD-001, Infiltration and Storm Water Quality Improvements - Construct a number of storm water improvements intended to: (1) direct water to more permeable areas or detain water to allow infiltration by intercepting and holding rainwater, and; (2) construct National Pollutant Discharge Elimination System (NPDES) stormwater capture/treatment requirements from development required by the Federal Clean Water Act. Pollutants to be captured include but are not limited to: rock, sand, dirt, other aggregates and agricultural, industrial, and other municipal waste.

SD-002, Storm Drainage Master Plan - Undertake a Storm Drainage Master Plan study to determine the effect of new and significant up-sizing development upon the City's existing circulation system and determine state-of-art solutions to the new demands. The result could alter many of the projects described herein.

The Relationship Between the Need for The Fee and The Type of Development Project. Upon the identification of the costs of storm drainage facilities generated by future development, costs must be further distributed for each of the land uses (i.e., business and residential uses) based on their estimated rainwater runoff. Residential detached dwelling development leaves the greatest remaining turf percentage per parcel and thus the greatest percolation, and conversely the least runoff of rainwater. As such, the detached dwelling residential land use should not bear the same cost as the institutional or industrial development, which generally have little or no turf area (or stated another way, a higher percentage of impervious area) and therefore generates a higher amount of rainwater runoff. For this Report, costs were distributed between land uses on established runoff coefficients. A listing of these runoff coefficients is provided in Table 6-1[12] following.

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[12] *San Bernardino Hydrology Manual* (1986). Williamson and Schmidt, Irvine, CA, Figure C-4.

Table 6-1
Storm Drainage Runoff Coefficients (By Acre)

DIF Land-Use Type	Runoff Coefficient
Detached Dwelling Units	0.740
Attached Dwelling Units	0.800
Commercial Lodging Units	0.800
Retail/Service/Office Uses (in SF)	0.900
Office Uses	0.900
Industrial Uses (in SF)	0.950
Institutional Uses (in SF)	0.900

As stated earlier, the El Segundo area requires $3,850,000 storm drainage projects. Table 6-2, following, demonstrates the DIF schedule that would need to be imposed to fully fund the completion of the Category A storm drainage system's collection of pipes and channels identified in the Master Plan of Drainage necessary for the City. It would not be unreasonable to require development, those generating greater amounts of rainwater runoff, to finance some portion of the identified storm drainage needs providing there is no violation of the proportionality requirement. Table 6-2 indicates the resulting fees required to fully fund DIF funded storm drainage projects. Please note that the DIF, by land use, is in terms of units such as residential dwellings or business square feet of building pad (adjusted for multiple floors).

Table 6-2
Minimal Needs-based Storm Drainage System
Development Impact Costs by DIF Land-use Type

DIF Land-Use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$125,946	$6,302/Unit
Attached Dwelling Units	$29,965	$1,249/Unit
Commercial Lodging Units	$37,456	$323/Room
Retail/Services/office Uses (in SF)	$2,284,811	$0.842/S.F.
Office Uses	$84,276	$1.018/S.F.
Industrial Uses (in SF)	$1,245,409	$1.702/S.F.
Institutional Uses (in SF)	$42,138	$3.120/S.F.

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The Storm Drainage DIFs that are imposed and collected will be used to mitigate the storm water runoff generated by the type of development. If the development is a commercial or industrial property generating a significant amount of runoff, the fee collected will be proportionally higher and will be enough to construct the required additions to the storm drainage system downstream from this development.

From time to time the City may require an applicant of a private project to construct an improvement (or portion thereof) that is on the list of required improvements at the end of this Chapter. This is often done to expedite the project for the applicant/developer. The developer should receive a credit for any money expended on this required improvement against their calculated storm drainage impact fee.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. Similar to the section above, the relationship is based upon the projected amount of storm water that will need to be collected and safely transported to flood control channels or rivers. The downstream collection lines (lines further down from the proposed project but prior to the outfall into a river or flood control channel) need to be sized to handle all the stormwater collected upstream. Stormwater that is collected in one location accumulates with feeder lines along the way and thus the downstream system must be built increasingly larger (at increasing higher material and construction costs) the farther it gets away from its source.

Table 6-3, following, distributes the total equity replacement value of the existing storm drainage system at $27,838,853 over the existing developed community. The total consists of the actual existing storm drainage pipe and channel systems at $25,613,853, and storm drainage detention basin at $2,225,000. The development impact costs figures represent the long-term financial commitment contributed by the existing community through dedications (from the developers of these established developments) and tax contributions.

Table 6-3
Existing Storm Drainage Community
Financial Commitment Comparison Data

DIF Land-Use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$10,376,733	$2,714/Unit
Attached Dwelling Units	$1,483,359	$2,936/Unit
Commercial Lodging Units	$7,899,967	$2,936/Unit
Retail/Services/office Uses (in SF)	$363,259	$0.277/Room
Office Uses	$1,897,020	$0.200/S.F.
Industrial Uses (in SF)	$5,804,806	$0.766/S.F.
Institutional Uses (in SF)	$58,709	$0.251/S.F.

Table 6-4, following, combines the total development-generated capital needs of $3,850,000 with the existing $27,838,853 asset replacement value of the existing storm drainage system to form the General Plan build-out storm drainage collection system total cost. In short it is the final storm drainage collection system that needs to be in place at General Plan build-out for protection of the street system and travel. Given that most of the development upsizing opportunities most likely have impervious surface consistent with the Runoff coefficients in Table 6-1 and will not likely create any additional storm water runoff it sets a unfair burden upon the remaining roughly 80 acres of truly vacant (or raw) land to finance the remaining storm drainage needs. This a fairer method would be recognize a fair share at build-out methodology. This is done by combining the existing $27,838,853 investment in the existing system with the $3,850,000 in future storm drainage needs. The combined $31,688,853 is then distributed over the General Plan Build-out land-use database (or the combination of Schedules 6.2 and 6.3). The resulting impact costs are identified in table 6-4 following.

Table 6-4
General Plan Build-out Proportional Storm Drainage System
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$9,547,401	$2,482/Unit
Attached Dwelling Units	$666,744	$1,297/Unit
Commercial Lodging Units	$250,029	$89/Unit
Retail & Service Uses	$1,370,529	$0.340/S.F.
Office Uses	$4,806,112	$0.502/S.F.
Industrial Uses	$14,899,873	$1.793/S.F.
Institutional Uses	$148,165	$0.599/S.F.

Of note is the fact that in Table 6-3, the investment "equity" of the current community is significantly high. DIFs identified in Table 6-4, indicate that the existing community has invested $23 million is far more than what is being asked of future development. Additionally, the City is including NPDES requirements on all future development falling within the NPDES guidelines. As such, it would be appropriate to require the undeveloped parcels to finance (via Table 6-4 and Schedule 6.4) the remainder of the Stormwater runoff collection system needs for the City.

Recommended General City Storm Drainage Development Impact Fee Schedule. The adoption of Schedule 6.4 and summarized in Table 6-4 as the Storm Drainage Collection System DIF schedule would generate capital to construct approximately 87% the facilities needed by the new development in the GC.

It is also recommended that the City calculate a separate NPDES in-lieu fee for the Clean Water Act storm water quality requires placed upon all projects required, new and expansions to separate it from ordinary storm collection pipe.

RECAP OF RECOMMENDED STORM DRAINAGE IMPROVEMENTS DIFS

1. Create a DIF Fund titled *Storm Drainage System Impact Fee Fund.*

2. Adopt Schedule 6.4 for the seven land-uses and the Cost Distribution per Acre figure (from the third column from the right side of the Schedule 6.2) for developments that do not involve a building pad, (e.g. additional asphalt parking area).

3. Separately, calculate and adopt National Pollutant Discharge Elimination System (*NPDES*) In-lieu fee, via the Clean Water Act, for future development, additions or private rehabilitations.

End of Chapter Text

Schedule 6.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Storm Drainage Collection System Facilities
Allocation of Project Cost Estimates

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New City-wide Development: Percent Need	Construction Needs Generated by New City-wide Development: Apportioned Dollar Cost
SD-001	Infiltration and Storm Water Quality (NPDES) Improvement Projects	$15,000,000	75.00%	$11,250,000	25.00%	$3,750,000
SD-002	Storm Drainage Master Plan	$200,000	50.00%	$100,000	50.00%	$100,000
	Sub-Total General Plan Total New Projects	$15,200,000	74.67%	$11,350,000	25.33%	$3,850,000
	LESS:					
	Development Impact Fee Fund Balance	$0	0.00%	$0	100.00%	$0
	Other Mitigating Revenue Sources	$0	0.00%	$0	100.00%	$0
	Development Impact Fee Fund Balance Total	$0	0.00%	$0	0.00%	$0
	Total Net General Plan Project Costs	$15,200,000	74.67%	$11,350,000	25.33%	$3,850,000
						Forward to Schedule 6.2

Schedule 6.2

City of El Segundo
Storm Drainage Collection System Facilities
2021-22 Development Impact Cost Calculation
Minimum Capital Needs-based Impact Costs

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Run-off Coefficient Index Rate	Total Future Impervious Acres	Run-off Coefficient Percentage	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwelling Units	3.64	20	0.740	2.69	3.27%	$125,946	$34,601	5.49	*$6,302 per Unit*
Attached Dwelling Units	0.80	24	0.800	0.64	0.78%	$29,965	$37,456	30.00	*$1,249 per Unit*
Commercial Lodging Units	1.00	116	0.800	0.80	0.97%	$37,456	$37,456	116.00	*$323 per Unit*
Retail & Service Uses (SF)	54.22	2,715,095	0.900	48.80	59.35%	$2,284,811	$42,140	50,076	*$0.842 per S.F.*
Office Uses (SF)	2.00	82,764	0.900	1.80	2.19%	$84,276	$42,138	41,382	*$1.018 per S.F.*
Industrial Uses (SF)	28.00	731,808	0.950	26.60	32.35%	$1,245,409	$44,479	26,136	*$1.702 per S.F.*
Institutional Use (SF)	1.00	13,504	0.900	0.90	1.09%	$42,138	$42,138	13,504	*$3.120 per S.F.*
TOTAL	**90.66**	--	--	**82.23**	**100.00%**	**$3,850,000**	**in Total Storm Drainage System General Plan Projects**		
ALTERNATE FEE METHODOLOGY				**82.23**		**$3,850,000**			

Schedule 6.3

City of El Segundo
2021-22 Development Impact Cost Calculation
Storm Drainage Collection System Facilities
Existing Community Financial Commitment Comparison

Existing Land Use	Undeveloped Acres	Undeveloped Units	Run-off Coefficient Index Rate	Total Existing Impervious Acres	Run-off Coefficient Percentage	Allocation of ExistingSystem Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwelling Units	1,390.20	3,822	0.740	1,029	30.81%	$8,576,701	$6,169	2.75	*$2,243 per Unit*
Attached Dwelling Units	88.60	490	0.800	71	2.13%	$591,784	$6,679	5.53	*$1,208 per Unit*
Commercial Lodging Units	33.10	2,691	0.800	26	0.78%	$216,710	$6,547	81.30	*$81 per Unit*
Retail & Service Uses (SF)	110.20	1,313,245	0.900	99	2.96%	$825,164	$7,488	11,917	*$0.628 per S.F.*
Office Uses (SF)	574.80	9,493,945	0.900	517	15.48%	$4,309,188	$7,497	16,517	*$0.454 per S.F.*
Industrial Uses (SF)	1,665.20	7,580,266	0.950	1,582	47.37%	$13,185,948	$7,919	4,552	*$1.740 per S.F.*
Institutional Use (SF)	17.30	233,797	0.900	16	0.48%	$133,360	$7,709	13,514	*$0.570 per S.F.*
TOTAL	**3,879.40**	–	–	**3,340**	**100.00%**	**$27,838,853**	**Total Existing Storm Drainage Ssytem Assets**		

$25,613,853	**in Storm Drainage Collection System Assets**
$2,225,000	**in Storm Drainage Detention/Retention Basins**
$0	**in Storm Drainage System DIF Fund Balance (none)**

Schedule 6.4

2021-22 Development Impact Cost Calculation
Storm Drainage Collection System Facilities
General Plan Build-out (Combined Existing and Future Development0

Existing Land Use	*Undeveloped*		*Run-off Coefficient Index Rate*	*Total Existing Impervious Acres*	*Run-off Coefficient Percentage*	*Allocation of ExistingSystem Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
	Acres	*Units*							
Detached Dwelling Units	1,393.84	3,842	0.740	1,031	30.13%	$9,547,401	$6,850	2.76	*$2,482 per Unit*
Attached Dwelling Units	89.40	514	0.800	72	2.10%	$666,744	$7,458	5.75	*$1,297 per Unit*
Commercial Lodging Units	34.10	2,807	0.800	27	0.79%	$250,029	$7,332	82.32	*$89 per Unit*
Retail & Service Uses (SF)	164.42	4,028,340	0.900	148	4.32%	$1,370,529	$8,336	24,500	*$0.340 per S.F.*
Office Uses (SF)	576.80	9,576,709	0.900	519	15.17%	$4,806,112	$8,332	16,603	*$0.502 per S.F.*
Industrial Uses (SF)	1,693.20	8,312,074	0.950	1,609	47.02%	$14,899,873	$8,800	4,909	*$1.793 per S.F.*
Institutional Use (SF)	18.30	247,301	0.900	16	0.47%	$148,165	$8,096	13,514	*$0.599 per S.F.*
TOTAL	**3,970.06**	--	--	**3,422**	**100.00%**	**$31,688,853**	**Total Existing Storm Drainage Ssytem Assets**		

Chapter 7
Water Distribution Infrastructure

Assuming that an adequate water supply is available, the next critical components needed to accommodate development are treatment facilities, water storage and distribution system. The City's water source, as presently constituted, can be fully expected to completely support the City's existing and future population. However, in order to meet all future water demands, the City will need to collect sufficient monies to increase well capacity as well as new storage reservoirs capacity.

Existing System. In addition to the City's distribution system and major water lines with a replacement value of $135,933,272, the City has water pumping stations with a replacement value of $4,924,800, and a 9.2 million gallon reservoir capacity with a replacement value of $15,102,720. There is no existing impact fee fund thus there is no fund balance.

The Purpose of the Fee. As additional businesses and residential structures are constructed, each one will generate a greater demand on the existing water system infrastructure. The existing system of distribution pipe, reservoirs, pumping stations and the source of water itself, will prove inadequate to meet all the anticipated water demands. The impact fee is based upon the additional capital additions necessary to accommodate the water demands of individual units of development outlined on Table 7-1.

Impact fees are necessary for the construction of the remainder of the water system for one significant reason. Initially, the storage and delivery of water has, for many years, been recognized by most public agencies as a utility. Utilities differ from general tax-supported services in that they are similar to private sector utility businesses. Water rates are elastic, within reason, and can be set to meet water delivery costs whereas taxes cannot. Therefore, general taxes must be protected and reserved for services that do not have any such elastic revenue source. These services include public safety, park maintenance storm drainage, and others.

The use of water (consumer benefit) can be measured, unlike many City services, water rates can, and should be, set to meet the Council's priorities and policies in terms of water use. As a result of the above, the use of general taxes, where no relationship between the rate of taxation and benefit exists, in support of any utility service would be inappropriate.

The Use of the Fee. The revenues collected from the potentially adopted impact fees outlined and supported in this Chapter will be used to construct or acquire the list of projects identified on Schedule 7.1. A stronger statement would be that they are limited to the projects identified on that Schedule.

WT-001, New Water Reservoir - Construct a 5.0 to 7.0 Million Gallon Reservoir. Construct a 5.0 to 7.0 million gallon water reservoir or combination of reservoirs to increase the City's current standard and have future development maintain that standard. While nearly 75% of the project cost is necessary to increase the reservoir capacity for the existing water users, the remaining 25% is necessary for future water users.

WT-002, New Major Water Distribution Pipelines – The City staff, given the magnitude of the potential long-range development demands, has recognized the need to upsize the water delivery system capacity and has identified $10.0 million in water pipelines needed to accommodate the increased demand generated by future development. However, because most new development will be done by upsizing, citing the specific pipeline widths and lengths needed to accommodate new development's needs is not possible at this time. A master plan will be able to help identify the specific widths and lengths of pipelines needed. City Engineering staff has cited that 50% of the $10 million needed for new pipelines to be the responsibility of future development.

WT-003, Water Master Plan – Undertake a Water System Master Plan study to determine the effect of new and significant up-sizing development upon the City's existing circulation system and determine state-of-art solutions to the new demands. The result could alter many of the projects described herein.

The Relationship Between the Need for the Fee and the Type of Development Project. Daily water demands will vary by category/type of development, however, use within a category/type tends to meet averages, thus making projection fairly accurate. The seven land-uses identified for separate impact fees are used along with averages for each of those types of land-uses. The service to be provided to the new users will mirror that of the existing level of service. Water use, for residential users was calculated (and planned for) on either a gallon per dwelling unit per day (GPD) basis for residential uses or gallons per acre per day (GPAD) basis for business uses. Table 7-1 following, indicates the DIF Land-use Type averages that were used as the nexus in the DIF distribution model. Since the City does not have a regional recycled water program in the area for the watering of common areas, the capital-needs costs will be distributed over new development based upon potable water demands at the meter and will not include any distributed recycled water demands. The following water demands are from the Master Plan of a similar sized public agency.

Table 7-1
General City Water Average Demand by DIF Land Use Type
Demand in GPD or GPAD

DIF Land-use Type	Gallons (per Unit) per Day	Gallons per Acre per Day
Detached Dwelling Units	544	
Attached Dwelling Units	372	
Commercial Lodging Units	150	
Retail/Service/Office Uses		2,200
Office Uses		2,200
Industrial Uses		2,000
Institutional Uses		2,200

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The *use of the fee* is similar to the *need for the fee*. The impact fee would be collected as the development occurs. As the development occurs, the impact is generated. The collected fee would be put to use to acquire additional water generation, storage and distribution facilities, and additional equipment necessary to respond to those additional water demands, without reducing the capability of providing water to the existing community.

Based upon Table 7-2 and the land-use database, the City currently (on average) delivers about 7.5 million gallons/day to private water users. This does not include the water demands from public institutions, other non-private uses and system loss. Obviously, this is an annual average and seasonal factors could be expected to affect use. Table 7-2, on the following page, indicates the demand for water (on average) for existing development within the City water delivery area.

Table 7-2
Existing Community Water Demand
in Gallons per Day (GPD rounded)

DIF Land-use Type	Existing Residential Units	Existing Business Acres	Water Demand in GPD or GPAD	Projected GPD Water Demand
Detached Dwellings	3,822		544/Unit	2,079,168
Attached Dwellings	490		372/Unit	182,280
Commercial Lodging Units	2,691		150/Unit	403,650
Retail/Service/Office Uses		110.20	2,200/Unit	242,440
Office Uses		574.80	2,200/Acre	1,264,560
Industrial Uses		1,665.20	2,200/Acre	3,330,400
Institutional Uses		17.30	2,200/Acre	38,060
Total Gallons per Day	---	---	---	**7,540,558**

`Again using the GPD demand data from Table 7-1 and the land-use database, the City will be asked to deliver an additional net 876,984 gallons per day (average) to new users. Table 7-3, following, indicates the demand for water (on average) for future development within the City's water delivery boundaries. The 876,984 gallons daily figure results in a slightly lower actual daily total water demand due to the use of Master Plan land-use demand averages applied to the narrower seven DIF Land-use Types as opposed to the actual broad variety of business uses. This will hold true for Tables 7-2, 7-3 and 7-4. Each of these tables **Total Gallons per Day** will be slightly understated when compared to the Water Master Plan (if any) totals.

[This space required to place the following table on a single page].

Table 7-3
Development-generated Additional Water Demand
in Gallons per Day (rounded)

DIF land-use Type	Potential Residential Units	Potential Business Acres	Water Demand in GPD of GPAD	Projected GPD Water Demand
Detached Dwellings (+)	20		544/Unit	10,880
Detached Dwellings (-)	(203)		544/Unit	(110,432)
Attached Dwellings	1,959		372/Unit	728,748
Commercial Lodging Units	232		150/Unit	34,800
Retail/Service Uses (+)		137.48	2,200/Acre	302,456
Retail/Service Uses (-)		(1)	2,200/Acre	(2,200)
Office Space		85.26	2,200/Acre	187,752
Industrial Uses (+)		28.00	2,200/Acre	56,000
Industrial Uses (-)		(166.52)	2,200/Acre	(333,040)
Institutional Uses		1	2,200/Acre	2,200
Total Gallons per Day	- - -	- - -	- - -	**876,984**

The total projected average daily demand from all El Segundo privately held acreage at GP build-out is about 8.4 million gallons daily. Although encouraged, widespread conservation efforts are not currently mandated in the City.

PROJECTS NEEDED FOR PROPER WATER DISTRIBUTION

Utility infrastructure such as water is unique among all City infrastructures. Water demand expansion simply cannot be ignored for long periods of time as can be police, fire, streets, and park levels of service (LOS). Residents could be asked to allow the number of officers to remain static, or wait a little longer for fire fighters, or even put up with the more congested traffic or more crowded parks. However, a delivered water supply must be in evidence to even *consider* additional growth. Even though Table 7-4 applies average daily use rates and creates a total demand difficult to imagine, it is apparent that additional water pumping and storage capability is necessary to allow for additional growth. Without adequate water distribution capabilities, development will grind to a stop. It is a prerequisite system.

Since a water distribution system is a prerequisite to development (i.e. there is no development without water), it tends to be a somewhat "front-ended" system, that is, the system develops earlier and the existing community tends to have built more of the system at any point in time than does the remainder of development. That is precisely the case with El Segundo's water utility, the water system appears to have been front-ended by the existing community.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. Schedule 7.1 identifies the water distribution system improvements needed to insure the continued adequate flow of water as needed to proposed development projects. There are three capital projects necessary for extending service to new development ($6.9 million) or maintaining service to existing water users ($23.3 million) for a total of $30.2 million. The $6.9 million figure was used to calculate the DIF schedule.

CALCULATION OF IMPACT COSTS

This Report identifies two methods of calculating potable water system delivery DIFs and imposing said fees. They are:

- *Standard (Average) DIF Land-use Type DIFs, similar to the other fees in this Report.*
- *An impact fee based upon the meter size needed to serve a development, if needed.*

Standard Use Category DIFs. Table 7-5, following, lists the seven major land-uses based upon average water usage statistics, (see Schedule 7.2). The City will require $30.2 million in new or replacement water capital expansion to properly accommodate the additional demand by new development. Of the $30.2 million needed in water capital improvement projects, 34.2% (or $10,316,667) has been identified as being able to be funded by new development. The remaining 65.8% (or $19,833,333) has been identified as being non development related and not able to be funded by DIFs. The $10.3 million is distributed pro-rata over the remaining under-built and totally vacant acreage (with negations for the eliminated demands from razed parcels) in the City's General City area as demonstrated in Table 7-5 following.

Table 7-5
Minimum Needs-based Water Distribution System
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling (+)	$127,990	$6,405/Unit
Detached Dwelling (-)	*($1,299,100)*	
Attached Dwelling Units	$8,572,848	$4,377/Unit
Commercial Lodging Units	$409,380	$1,765/Unit
Retail & Service Uses (+)	$3,558,033	$0.517/Unit
Retail & Service Uses (-)	*($25,880)*	
Office Uses	$2,206,560	$0.739/S.F.
Industrial Uses (+)	$658,773	$0.900/S.F.
Industrial Uses (-)	*($3,917,817)*	
Institutional Uses	$25,880	$1.916/S.F.

Cost and Financing of the Existing System. Typically, a water system is the oldest service provided by any City. The City's engineering staff has identified the cost of the existing "spine" system, consisting of distribution pipe, wells, valves, and reservoirs to be $155,960,792. This figure does not include local (tract) lines and connections, estimated conservatively to be in the area of an additional $62,398,374. It also does not include the value of any shares of water rights. The system has been constructed from four sources, water user rates (more commonly known as monthly water bills), exactions, DIFs, and requirements of development approval.

When this net $155.9 million in infrastructure contributions is distributed to the existing community based upon the same nexus used to distribute future costs by land use, (see Schedule 7.3) the results indicate that a detached dwelling has contributed, on average, an astounding $11,248 towards the water system. This distributed equity is clearly greater than the distributed - *Minimum Capital Needs-based Impact Costs* exemplified in Table 7-5 (and Schedule 7.2) indicating there are no proportionality issues. Table 7-6 following demonstrates the distribution of existing assets.

Table 7-6
General Plan Build-out Proportional Water Distribution System
Development Impact Costs by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$43,003,275	$11,248/Unit
Attached Dwelling Units	$3,770,083	$7,695/Unit
Commercial Lodging Units	$8,348,662	$3,102/Unit
Retail/Service/Office Uses	$5,014,368	$3.818/Unit
Office Uses	$26,154,799	$2.755/S.F.
Industrial Uses	$68,882,412	$9.087/S.F.
Institutional Uses	$787,192	$3.367/S.F.

Necessity of DIF Financing. DIFs are necessary for the construction of the remainder of the water system for one significant reason. Initially, the storage and delivery of water has, for many years, been recognized by most public agencies as a utility. Utilities differ from general tax-supported services in that they are similar to private sector utility businesses. Potable water rates are elastic, within reason, and can be set to meet water delivery costs whereas taxes cannot. Therefore, general taxes must be protected and reserved for services that do not have any such an elastic revenue source such as public safety, park maintenance, storm drainage, and others.

The use of water (consumer benefit) can be measured, unlike many of the City's other municipal services. Water rates can, and should be, set to meet the Council's priorities and policies in terms of water use. As a result of the above, the use of general taxes, where no relationship

between the rate of taxation and benefit exists, in support of any utility service would be inappropriate.

Recommended DIF Schedule. The adoption of Table 7-5, based upon Schedule 7.2 at the end of the chapter, as the water distribution DIFs would generate enough capital to construct the facilities needed by the new development. The DIFs contained on Schedule 7.2 also contain amounts less than the *Existing Community Financial Commitment Comparison* identified in Schedule 7.3 thus do not violate any proportionate requirements.

CREDITS AGAINST DEVELOPMENT IMPACT FEES

The City does not charge *stand-by* water rates. Vacant parcels are not charged water rates and therefore they have not contributed to the capital development of the water system. As a result there can be no credit for previous contributions to capital from vacant parcels, simply because there were none made. Additionally, there have been no General Fund expenditures on water projects.

Credit for Developer Constructed Improvements. Similar to roadway and storm drainage construction, it will likely be advantageous to have the developer construct certain public improvements contiguous to the private development. The adoption of the DIF schedules encourages such agreements. It is recommended that the City continue the process of agreeing to allow developers to construct water system capital improvements, identified within the DIF calculation and then calculating a credit for that project contribution amount. The net DIF would be the amount per the adopted schedules less the credit for the capital constructed by the developer. Credits can only be given for private construction of any project that is listed on Schedule 7.1. Thus any improvements that are project specific in nature and benefit will likely be imposed as conditions of approval.

ALTERNATIVE DEVELOPMENT IMPACT FEE METHODOLOGIES

There are two alternatives to the seven Minimum Needs-based area DIF categories. They are primarily applicable to the more specific demands by the multitude of differing business uses.

Equivalent EDU Based on Meter Size. The standard detached dwelling residence has a 3/4" meter at 15 gallons per minute normal (minimum-maximum) flow[13] which is defined as the **E**quivalent **D**welling **U**nit, or EDU. Schedule 7.2 indicates that the smallest meter size at 3/4" would cost $6,405 per connection, at the Minimum Needs based DIF schedule rate. The following Table 7-7 indicates the cost for larger meters based upon the normal flow demands, with again, the detached dwelling (detached) residence as the standard. A one inch meter is rated at 25 gallons per minute, which is 1.67 times larger than the 15 gallons per minute than is afforded by a 3/4" meter. Thus the one inch meter fee would be 1.67 times higher ($7,605) than the $6,405 for the 3/4" meter. Other meter sizes are as follows:

[13] *Meter Flow Ranges,* based upon *Minimum Maximum Continuous Flow Rates,* American Water Works Association.

Table 7-7
Equivalent Water Meter Size Calculation
Based upon Minimum Needs-based Impact Fees

Water Meter Size	Normal Water Flow (GPM)	Water Demand Factor	Cost per E.D.U (3/4" Meter)	DIF Cost per Meter Size
¾" Meter	15	1.000	$6,405	$6,405
1' Meter	25	1.667	$6,405	$10,677
1 & ½" Meter	50	3.333	$6,405	$21,348
2" Meter	80	5.333	$6,405	$34,158
3" Meter	240	16.000	$6,405	$102,480
4" Meter	420	28.000	$6,405	$179,340
6" Meter	920	61.333	$6,405	$392,838
8" Meter	1,600	106.667	$6,405	$683,202
10" Meter	2,500	166.667	$6,405	$1,067,502
12" Meter	3,300	220.000	$6,405	$1,409,100

RECAP OF RECOMMENDED WATER SYSTEM IMPROVEMENTS IMPACT FEES

1. Create a DIF Fund titled *Water Distribution System Impact Fee Fund.*
2. Adopt Schedule 7.2 for the seven land-uses
3. Adopt Table 7-7, Equivalent Water Meter Size Calculation Based upon *Minimum Needs-based Development Impact Fees.*

END OF CHAPTER TEXT

Schedule 7.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Allocation of Project Cost Estimates
Water Distribution System

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development: Percent Need	Construction Needs Generated by New Development: Apportioned Dollar Cost
WT-001	New Water 5.0 to 7.0 Million Gallon Reservoir	$20,000,000	74.17%	$14,833,333	25.83%	$5,166,667
WT-002	New Major Distributution Pipelines	$10,000,000	50.00%	$5,000,000	50.00%	$5,000,000
WT-003	Water Master Plan	$150,000	0.00%	$0	100.00%	$150,000
	Sub-Total General Plan Total New Projects	$30,150,000	65.78%	$19,833,333	34.22%	$10,316,667
	LESS:					
	Development Impact Fee Fund Balance (none)	$0.00	0.00%	$0.00	100.00%	$0
	Other Off-setting Revenues	$0.00	0.00%	$0.00	0.00%	$0
	Development Impact Fee Fund Balance Total	$0.00	0.00%	$0.00	0.00%	$0
	Total Net General Plan Project Costs	30,150,000.00	65.78%	$19,833,333	34.22%	$10,316,667
						Forward to Schedule 7.2

Schedule 7.2

City of El Segundo
2021-22 Development Impact Cost Calculation
Minimum Capital Needs-based Impact Costs
Water Distribution System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Water Allocation Rate GPD (1)	Cumulative New Water Allocation	Percentage of Added Water Allocation	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwelling Units (+)	3.64	20	544	10,880	1.24%	$127,990	$35,162	5.49	*$6,405 per Unit*
Detached Dwelling Units (-)	(73.93)	(203)	544	(110,432)	-12.59%	-$1,299,100	$17,572		
Attached Dwelling Units	74.73	1,959	372	728,748	83.10%	$8,572,848	$114,718	26.21	*$4,377 per Unit*
Commercial Lodging Units	2.00	232	150	34,800	3.97%	$409,380	$204,690	116.00	*$1,765 per Unit*
Retail & Service Uses (SF) (+)	137.48	6,887,925	2,200	302,456	34.49%	$3,558,033	$25,880	50,101	*$0.517 per S.F.*
Retail & Service Uses (SF) (-)	(1.00)	(11,917)	2,200	(2,200)	-0.25%	-$25,880	$25,880		
Office Uses (SF)	85.26	2,985,602	2,200	187,572	21.39%	$2,206,560	$25,880	35,018	*$0.739 per S.F.*
Industrial Uses (SF) (+)	28.00	731,808	2,000	56,000	6.39%	$658,773	$23,528	26,136	*$0.900 per S.F.*
Industrial Uses (SF) (-)	(166.52)	(758,027)	2,000	(333,040)	-37.98%	-$3,917,817	$23,528		
Institutional Use (SF)	1.00	13,504	2,200	2,200	0.25%	$25,880	$25,880	13,504	*$1.916 per S.F.*
TOTAL	**90.66**	--	--	**876,984**	**100.00%**	**$10,316,667**	**in Total Water System Development-related Projects**		
ALTERNATE FEE METHODOLOGY				**876,984**		**$10,316,667**	**$11.764 Per Gallon Demand**		

Schedule 7.3

City of El Segundo
2021-22 Development Impact Cost Calculation
Existing Community Financial Commitment Comparison
Water Distribution System

Proposed Land Use	*Undeveloped* *Acres*	*Units*	*GC Water Allocation Rate GPD (1)*	*Cumulative Existing Water Allocation*	*Percentage of Existing Water Allocation*	*Allocation of Existing System Costs*	*Cost Distribution Per Acre*	*Average Units or Square Feet/Acre*	*Development Impact Fee per Unit or Square Foot*
Detached Dwelling Units	1,390.20	3,822	544	2,079,168	27.57%	$43,003,275	$30,933	2.75	*$11,248 per Unit*
Attached Dwelling Units	88.60	490	372	182,280	2.42%	$3,770,083	$42,552	5.53	*$7,695 per Unit*
Commercial Lodging Units	33.10	2,691	150	403,650	5.35%	$8,348,662	$252,225	81.30	*$3,102 per Unit*
Retail & Service Uses (SF)	110.20	1,313,245	2,200	242,440	3.22%	$5,014,368	$45,502	11,917	*$3.818 per S.F.*
Office Uses (SF)	574.80	9,493,945	2,200	1,264,560	16.77%	$26,154,799	$45,502	16,517	*$2.755 per S.F.*
Industrial Uses (SF)	1,665.20	7,580,266	2,000	3,330,400	44.17%	$68,882,412	$41,366	4,552	*$9.087 per S.F.*
Institutional Use (SF)	17.30	233,797	2,200	38,060	0.50%	$787,192	$45,502	13,514	*$3.367 per S.F.*
TOTAL	**3,879.40**	--	--	**7,540,558**	**100.00%**	**$155,960,792**	**Total Existing Water System Inventory**		
						$135,933,272	**in Water Distribution System Assets**		
						$4,924,800	**In Water Well/Pumping Assets**		
						$15,102,720	**in Water Storage Reservoir Assets**		
						$0	**in Water System DIF Fund Balance**		

Chapter 8
Wastewater Collection System

As was mentioned in the prior chapter and will be reiterated here, a city or public agency experiencing dramatic growth may put off the construction of needed parks, roads storm drainage projects and the like and still function, perhaps minimally. However, nothing stops development in its tracks any faster than the lack of a water distribution system and a sewage collection system. These two systems were some of the earliest calculated DIFs, although they were generally called *hook-up* fees[14]. In short, a residence or business cannot exist without these important connections.

It should be noted that the City owns all wastewater collection assets, but the processing of the wastewater is performed at either the Hyperion Wastewater Treatment Plant or the West Basin Wastewater Treatment Plant. The City does not own or manage either of these facilities and therefore these facilities have not been included in the calculation of the wastewater DIF.

The Purpose of the Fee. The City has adequate and sufficient existing wastewater treatment capacity. Additionally, the spine (or major) collection system is also largely completed. However, some of the existing sewer pipes throughout the collection system will need to be upsized to accommodate the additional wastewater demands from new development. It is a commonly accepted principle in both water and wastewater expansion that DIF receipts can finance the expansions as needed and required. If a development wanted to connect and there were no close-by lines, the developer would finance the expansion with perhaps a reimbursement agreement if appropriate.

The principle remains the same with these DIFs. This Chapter will calculate a fee schedule that represents the proportional expense per unit of growth by DIF Land-use Type, i.e., a detached dwelling unit, a commercial lodging unit or 1,000 square feet of business space.

The Use of the Fee. The revenues generated from a properly calculated and legally supported Wastewater Collection Facilities System Development Impact Fee would be limited to capital costs related to the additional residential and business-related growth anticipated in the City's General Plan as depicted in Schedule 6.1. The impact fees would be used to construct additional spine wastewater collection lines or upsize existing ones to provide collection capacity for the additional demands from development that exceeds the capacity of the existing system. Conversely, the Wastewater Collection and Treatment Facilities system DIF receipts would not be used to repair or replace any existing line (unless up-sizing is required).

The City has a total of 289,694 linear feet of wastewater collection lines, roughly 146,040 linear feet of which is spine system and not located within the footprint within any privately-owned development footprint. The remaining 143,654 linear feet are considered "locals" and serve smaller portions of the City.

SW-001, Additional Sewer Pipe and Sewer Pipe Upgrades – The City has recognized the need to upsize and has identified $10 million in wastewater pipelines needed to accommodate

[14] Not to be confused with a "connection" fee which is a reimbursement for the actual costs of having a city-worker either set the water meter or connect the privately owned sewer pipe from the home to the City's later sewer pipe.

the increased demand generated by future development. However, because most new development will be done by upsizing, citing the specific pipeline widths and lengths needed to accommodate new development's needs is not possible at this time. A master plan will be able to help identify the specific widths and lengths of the wastewater pipelines needed. The City has cited only 50% of the 10 million needed for new pipelines to be the responsibility of future development.

SW-002, Wastewater Master Plan - Undertake a Wastewater Master Plan study to determine the effect of new and significant up-sizing development upon the City's existing circulation system and determine state-of-art solutions to the new demands. The result could alter many of the projects described herein.

Similar to the circulation/storm drainage and water DIFs, wastewater system infrastructure will require a separate DIF schedule in order to insure that existing users are not placed in the position of subsidizing private development.

EXISTING WASTEWATER COLLECTION SYSTEM

The City's major line wastewater collection system currently consists of an identified 289,694 linear feet of various sized (8" to 27") reinforced concrete pipe with over 148 junctions and various backfill, road base and asphalt. The current cost of duplicating the entire system of locals and collectors, would be approximately $172,029,560. There are also nine lift stations with a replacement value $4,559,625. As is the case with Circulation Facilities and Water Supply Infrastructure, local wastewater lines are typically the responsibility of the individual developer and not included in the final figure. When the $70,774,558 cost of local waste lines is removed the net system investment is $105,814,626.

GENERAL CITY WASTEWATER COLLECTION SYSTEM DEVELOPMENT IMPACT FEES

The Relationship Between the Need for the Facility (improvement) and the Type of Development Project. Schedule 8.1 identifies two capital projects costing $10,175,000. Of the $10.1 million needed in wastewater capital improvement projects, 49.74% ($5,061,250) has been identified as being able to be funded by new development. The remaining 50.26% ($5,113,750) has been identified as being non development related and not able to be funded by DIFs.

The Relationship Between the Use of the Fees and the Type of Development Paying the Fee. The project costs related to growth needs were then distributed to the development categories within the system design flows, or gallons per day/acre flow rates (GPAD) for business development or gallons per day (GPD) for residential construction. The wastewater design flow rates are based upon general engineering standard flow rates from a similar public agency and are as follows in Table 8-1:

Table 8-1
General City Wastewater Flow Rate
Demand by Land Use
Demand in GPD or GPAD

DIF Land-use Type	Gallons (per Unit) per Day	Gallons per Acre per Day
Detached Dwelling Units	240	
Attached Dwelling Units	210	
Commercial Lodging Units	140	
Retail/Service/Office Uses		900
Office Uses		1,200
Industrial Uses		1,600
Institutional Uses		1,600

DISTRIBUTION OF CAPTAL COSTS

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. Table 8-2, following, is extracted from Schedule 8.2 and demonstrates the results of distributing the $5,061,250 in wastewater system development-related expansion costs over the remaining private sector development opportunities.

Table 8-2
Minimum Needs-based Wastewater Collection System
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units (+)	$59,976	$3,001/Unit
Detached Dwelling Units (-)	*($608,919)*	
Attached Dwelling Units	$5,141,572	$2,625/Unit
Commercial Lodging Units	$405,693	$1,750/Unit
Retail & Service Uses (+)	$1,546,414	$0.235/Unit
Retail & Service Uses (-)	*($11,236)*	
Office Uses	$1,278,725	$0.427/S.F.
Industrial Uses (+)	$559,926	$0.765/S.F.
Industrial Uses (-)	($3,329,898)	
Institutional Uses	$18,727	$1.387/S.F.

The results indicate that the varying types of residential dwellings will need to contribute anywhere from a low of $2,625 for an attached dwelling unit to a high of $3,001 for a detached dwelling unit in either DIF payments or in contributed capital in the form of off-site wastewater lines (to the same amount).

Existing Contribution. Table 8-3, on the following page, distributes the current replacement value of the existing system distributed over those who have contributed to the existing wastewater system, the current users and rate payers. This has been done in the same manner as the future costs were distributed against the future users, by the same average demand statistics used for modeling master plans. The results indicate that the average attached dwelling unit has contributed $4,559 per unit and a detached dwelling unit has contributed about $5,207 per unit.

Table 8-3
Existing Wastewater Collection System Community
Financial Commitment Comparison Data

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Detached Dwelling Units	$19,905,848	$5,207/Unit
Attached Dwelling Units	$2,232,689	$4,559/Unit
Commercial Lodging Units	$8,175,238	$3,038/Unit
Retail/Service/Office Uses	$2,152,270	$1.639/Unit
Office Uses	$14,968,537	$1.577/S.F.
Industrial Uses	$57,817,112	$7.628/S.F.
Institutional Uses	$562,934	$2.408S.F.

PROPORTIONATE SHARE ANALYSIS

Necessity for DIFs. DIFs are necessary and appropriate for the construction of the remainder of the wastewater collection system for one significant reason. Similar to the distribution of water, the collection and treatment of sewage has long since been recognized by most public agencies as a utility. Utilities differ from general tax-supported services in that they are similar to private sector utility businesses and are financed by utility rates. Wastewater collection rates are relatively elastic, within reason, and can be set to meet sewage collection costs whereas taxes for general municipal services cannot. As a result, general taxes must be protected and reserved for services that do not have any such an elastic revenue source such as public safety, park maintenance, storm drainage, and others. Additionally, as long as the existing wastewater users have an adequate system for their needs, they would have little interest in having wastewater rates rise for any reason other than operating costs as opposed to meeting the cost of adding new users. Clearly, the cost of adding to the system infrastructure to accommodate additional private development demands should be imposed upon that same private development.

The contribution to the wastewater collection system (benefit) can be measured, unlike many of the City's services. Wastewater rates can, and should be, set to meet the Council's priorities and policies in terms of the wastewater system use. The use of general taxes, where no relationship between the rate of taxation and benefit exists, in support of any utility service would be inappropriate.

Recommended DIF Schedule. The adoption of Schedule 8.2 at the end of the Chapter text (as summarized in table 8-2), as the Wastewater Collection and Treatment Facilities system DIF schedule is both reasonable and would generate enough capital to construct or pay for the infrastructure facilities needed by the new development as well as a proportional amount of the debt service that created the excess capacity. The DIFs contained in Schedules 8.2 also contain amounts lesser than the significant financial commitment costs identified in Schedule 8.3 thus Schedule 8.2 does not violate any proportionate requirements.

CREDITS AGAINST DEVELOPMENT IMPACT FEES

Like the water utility, there are no *stand-by* wastewater collection rates. Vacant parcels are not charged wastewater rates and therefore they have not contributed to the capital development of the wastewater system. As a result, there can be no credit for previous contributions to capital from vacant parcels, simply because there were none. Additionally, there has been no General Fund expenditures on wastewater projects.

Credit for Developer Constructed Improvements Contained Within the City's MFP and Impact Fee Calculation. Similar to other infrastructure construction, it may be advantageous to have the developer construct certain public improvements contiguous to the private development. The adoption of DIFs should not preclude such agreements. Thus, it is recommended that the City continue the process of agreeing to allow developers to make wastewater system capital improvements that are identified within this report and that are part of the impact fee calculation, and receive a credit for that constructed amount. The net DIF would be the amount per the adopted schedules less the credit for the capital constructed by the developer.

RECAP OF RECOMMENDED WASTEWATER SYSTEM IMPROVEMENTS IMPACT FEES

1. Create a DIF Fund titled *Wastewater Collection System Impact Fee Fund.*

2. Adopt Schedule 8.2 for the seven land-uses.

END OF CHAPTER TEXT

Schedule 8.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Allocation of Project Cost Estimates
Wastewater Collection System

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources: Percent Need	Construction Needs Supported by Other Resources: Apportioned Dollar Cost	Construction Needs Generated by New Development: Percent Need	Construction Needs Generated by New Development: Apportioned Dollar Cost
WW-001	Additional Sewer Collection Pipe or Sewer Pipe Upgrapdes	$10,000,000	50.00%	$5,000,000	50.00%	$5,000,000
WW-002	Wastewater Master Plan	$175,000	65.00%	$113,750	35.00%	$61,250
	Sub-Total General Plan Total New Projects	$10,175,000	50.26%	$5,113,750	49.74%	$5,061,250
	LESS:					
	Development Impact Fee Fund Balance (none)	$0	100.00%	$0	0.00%	$0
	Other Off-setting Revenues	$0	0.00%	$0	100.00%	$0
	Development Impact Fee Fund Balance Total	$0	0.00%	$0	0.00%	$0
	Total Net General Plan Project Costs	$10,175,000	50.26%	$5,113,750	49.74%	$5,061,250
					Forward to Schedule 8.2	

Schedule 8.2

City of El Segundo
2021-22 Development Impact Cost Calculation
Minimum Capital Needs-based Impact Costs
Wastewater Collection System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Gallons per Day Sewer Demand Rate	Cumulative New Sewer Demand	Percentage of Additional Sewer Demand	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwelling Units (+)	3.6	20	240	4,800	1.19%	$59,976	$16,477	5.49	*$3,001 per Unit*
Detached Dwelling Units (-)	*(73.9)*	*(203)*	*240*	*(48,720)*	*-12.03%*	*-$608,919*			
Attached Dwelling Units	74.7	1,959	210	411,390	101.59%	$5,141,572	$68,802	26.21	*$2,625 per Unit*
Commercial Lodging Units	2.0	232	140	32,480	8.02%	$405,963	$202,982	116.00	*$1,750 per Unit*
Retail & Service Uses (SF) (+	137.5	6,887,925	900	123,732	30.55%	$1,546,414	$11,248	50,101	*$0.225 per S.F.*
Retail & Service Uses (SF) (-	*(1.0)*	*(11,917)*	*900*	*(900)*	*-0.22%*	*-$11,236*			
Office Uses (SF)	85.3	2,985,602	1,200	102,312	25.27%	$1,278,725	$14,998	35,018	*$0.428 per S.F.*
Industrial Uses (SF) (+)	28.0	731,808	1,600	44,800	11.06%	$559,926	$19,997	26,136	*$0.765 per S.F.*
Industrial Uses (SF) (-)	*(166.5)*	*(758,027)*	*1,600*	*(266,432)*	*-65.79%*	*-$3,329,898*			
Institutional Use (SF)	1.0	13,504	1,500	1,500	0.37%	$18,727	$18,727	13,504	*$1.387 per S.F.*
TOTAL	**90.66**	**--**	**--**	**404,962**	**100.00%**	**$5,061,250 in Total Wastewater Development-related GP Projects**			

Schedule 8.3

City of El Segundo
2021-22 Development Impact Cost Calculation
Existing Community Financial Commitment Comparison
Wastewater Collection System

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Gallons per Day Sewer Demand Rate	Cumulative Existing Sewer Demand	Percentage of Existing Sewer Demand	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Detached Dwelling Units	1,390.20	3,822	240	917,280	18.81%	$19,905,848	$14,319	2.75	***$5,207 per Unit***
Attached Dwelling Units	88.60	490	210	102,900	2.11%	$2,232,689	$25,200	5.53	***$4,559 per Unit***
Commercial Lodging Units	33.10	2,691	140	376,740	7.73%	$8,175,238	$246,986	81.30	***$3,038 per Unit***
Retail & Service Uses (SF)	110.20	1,313,245	900	99,180	2.03%	$2,152,270	$19,531	11,917	***$1.639 per S.F.***
Office Uses (SF)	574.80	9,493,945	1,200	689,760	14.15%	$14,968,537	$26,041	16,517	***$1.577 per S.F.***
Industrial Uses (SF)	1,665.20	7,580,266	1,600	2,664,320	54.64%	$57,817,112	$34,721	4,552	***$7.628 per S.F.***
Institutional Use (SF)	17.30	233,797	1,500	25,950	0.53%	$562,934	$32,540	13,514	***$2.408 per S.F.***
TOTAL	**3,879.40**	--	--	**4,876,130**	**100.00%**	**$105,814,626 Total Wastewater Capital Needs to Finish System**			
						$101,255,001 in Wastewater Collection System Assets			
						$4,559,625 in Wastewater Collection Lift Station Assets			
						$0 in Wastewater System DIF Fund Balance (none)			

Chapter 9
General Facilities, Vehicles and Equipment

The Existing System. General Facilities are generally limited to general office or work buildings and equipment used by City staff to undertake their daily duties. The replacement costs totaling $26,572,360 are as follows:

City Hall Facilities	$25,297,360
Computer and Miscellaneous Electronic Equipment	$1,200,000
General Fund Pool Cars	$75,000
General Facilities Impact Fee Fund Balance (None)	$0

Demand Upon Infrastructure Created by the Development of Underdeveloped or Undeveloped Parcels. As the City increases in both population and additional business ventures, the City Hall will typically become overcrowded with a growing staff, even if major efforts are made to keep the number of municipal workers to a minimum. The City of El Segundo current City Hall is 28,646 square feet.

City pool vehicles are generally made available to general employees assigned with general code enforcement, intra-city mail delivery, planning and engineering field inspection projects and other issues. These tasks often require on-site inspection or review. Other demand upon pool cars is travel by employees that do not have assigned City vehicles, which will be checked-out on an increasing basis requiring a minor fleet addition.

Lastly, the City's centralized and personal desktop computer processing capability and storage space will also be impacted with greater amounts of data necessary to manage a larger city.

The Purpose of the Fee. The costs of extending the same level of service to the newly developing community as is provided to the existing community that has largely paid for the existing facilities can be calculated, a fee imposed and collected, and the fee used to expand the facilities necessary to extend that same level of services.

The Use of the Fee. The revenues that are raised from a properly calculated and supported General Facilities, Vehicles and Equipment Impact Fee would be limited to capitalized costs related to that growth. The fees would be used to construct additional general facilities. Conversely, the General Facilities, Vehicles and Equipment DIF receipts would not be used to repair any existing general building with the exception of remodeling City Hall to increase capability and capacity, which would be far less expensive than constructing a building addition. The improvements necessary to contend with increased demand resulting from additional residents and businesses would include the following:

- City Hall floor plan remodel to increase use.
- Expansion of the administrative pool car fleet.
- Up-sizing of the existing centralized computer system capacity.

GF-001, City Hall Remodel for City Staff Use - Remodel City Hall complex space to maximize use by City staff as the City's population and business community expands.

GF-002, Expansion of Administrative Pool Car Fleet - Additional inspections such as in business license and code enforcement can be expected so some pool vehicle expansion would be expected.

GF-003, General Use Computer Hardware/Software - This project consists of minor computer and software expansions needed to accommodate new users.

The Relationship Between the Need for The Fee and The Type of Development Project. The need is based upon the recognition that additional developed parcels in the City will create the need for more building space and specialty equipment, largely within the arena of overhead space, i.e., administrative management, personnel, record keeping, financial accounting, etc. The costs are distributed on an equal acreage basis as the most direct index of demand relating to central management services.

The Relationship Between the use of the Fee and the Type of Development Paying the Fee. General management of the City and General Plan issues transcend type of land use and the use of the fee, as well as the need for the fee. Distribution of new demand will be based upon an equal benefit in terms of general management of the City.

Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. The fee would be based upon the size of the development. A fee has been determined for individual units, either residential dwelling units or business square feet. A development of twelve residential units would have to pay a fee twelve times larger than a single unit. No developer will be required to construct any portion of any general facility as a condition of development.

Resulting DIF Schedule. Table 9-1 following, summarizes the Minimum Needs-based General Facilities DIFs. The fees identified following represent the fees necessary to construct or acquire the facilities identified on Schedule 9.1.

[This space left vacant in order to place the following table on a single page].

Table 9-1
City of El Segundo's Entire City Area
Minimum Needs-based General Facilities, Vehicles and Equipment
Development Impact Costs
by DIF Land-use Type

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Private Residential Units (+)	$397,096	$201/Unit
Private Residential Units (-)	($374,599)	
Commercial Lodging Units	$10,134	$44/Unit
Business Uses (+)	$1,270,485	$0.120/S.F.
Business Uses (-)	$843,747	

It must be restated that the existing community has established the City Hall, general pool fleet, and inventory of computer/electronic equipment. In short, the current community has created more than adequate staff facilities for which future development attains immediate benefit from. Table 9-2, following, identifies the average investment by residential dwelling units, commercial lodging units and business square feet.

Table 9-2
Existing General Facilities, Vehicles and Equipment
Community Financial Commitment Comparison

DIF Land-use Type	Allocation of Development Costs	Development Impact Cost Per Unit or Square Foot
Residential Dwelling Units	$10,129,197	$2,349/Unit
Commercial Lodging Units	$226,722	$84/Unit
Business Uses	$16,216,441	$0.871/S.F.

RECOMMENDED IMPACT FEES

The *Minimum Needs-based Impact Costs* should be adopted for the two broad land-uses, per Schedule 9.2 and summarized in table 9-3. The *Existing Community Financial Commitment* indicates that the existing community has generated a great deal more infrastructure than will be asked of future development.

RECAP OF RECOMMENDED GENERAL FACILITIES ET. AL. IMPACT FEES

1. Create a DIF Fund titled *General Facilities Impact Fee Fund.*
2. Adopt Schedule 9.2 for the three common land-uses

END OF CHAPTER TEXT

Schedule 9.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Allocation of Project Cost Estimates
General Facilities, Vehicles and Equipment

Line #	Project Title	Estimated Cost	Construction Needs Supported by Other Resources		Construction Needs Generated by New Development	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
GF-001	City Hall Reconfiguration/Expansion	$1,358,895	20.00%	$271,779	80.00%	$1,087,116
GF-002	Expansion Of Administrative Pool Car Fleet	$45,000	20.00%	$9,000	80.00%	$36,000
GF-003	Electronic Specialty Equipment/Computer Hardware/Software	$225,000	20.00%	$45,000	80.00%	$180,000
	Sub-Total General Plan Total New Project Costs	$1,628,895	20.00%	$325,779	80.00%	$1,303,116
	LESS:					
	Development Impact Fee Fund Balance	$0	0.00%	$0	100.00%	$0
	Total General Plan Total New Project Costs	$1,628,895	20.00%	$325,779	80.00%	$1,303,116
					Forward to Schedule 9.2	

Schedule 9.2

City of El Segundo
2021-22 Development Impact Cost Calculation
Minimum Needs-based Impact Costs
General Facilities, Vehicles and Equipment

Proposed Land Use	Undeveloped Acres	Undeveloped Units	Acre Distribution Factor	Acre Demand Factor	Percentage of Additional Demand	Allocation of Expansion Costs	Cost Distribution Per Acre	Average Units or Square Feet/Acre	Development Impact Fee per Unit or Square Foot
Private Residences (+)	78.37	1,979	1.000	78.37	30.47%	$397,096	$5,067	25.25	***$201 per Unit***
Private Residences (-)	(73.93)	(203)	1.000	(73.93)	-28.75%	-$374,599			
Commercial Lodging Room	2.00	232	1.000	2.00	0.78%	$10,134	$5,067	116.00	***$44 per Unit***
Business Square Feet (+)	250.74	10,618,839	1.000	250.74	97.50%	$1,270,485	$5,067	42,350	***$0.120 per S.F.***
Business Square Feet (-)	(166.52)	(769,944)	1.000	(166.52)	-64.75%	-$843,747			
TOTAL	**257.18**	--	--	**257.18**	**100.00%**	**$1,303,116**	**in Total General Facilities Development-related GP Projects**		

Schedule 9.3

City of El Segundo
2021-22 Development Impact Cost Calculation
Existing Community Financial Commitment Comparison
General Facilities, Vehicles and Equipment

Proposed Land Use	Developed Acres	Developed Units	Acre Distribution Factor	Acre Demand Service	Percentage of Existing Service Calls	Allocation of Infrastructure "Equity"	Distribution of "Equity" per Acre	Average Units or Square Feet/Acre	Current Financial Commitment per Unit or Square Foot
Private Residences	1,478.80	4,312	1.000	1,478.80	38.12%	$10,129,197	$6,850	2.92	***$2,349 per Unit***
Commercial Lodging Rooms	33.10	2,691	1.000	33.10	0.85%	$226,722	$6,850	81.30	***$84 per Unit***
Business Square Feet	2,367.50	18,621,253	1.000	2,367.50	61.03%	$16,216,441	$6,850	7,865	***$0.871 per S.F.***
TOTAL	**3,879.40**	--	--	**3,879.40**	**100.00%**	**$26,572,360**	**in Total Existing General Facilities Capital Assets**		

$25,297,360	**in City Hall Land/Facilities**
$1,200,000	**in Equity in Existing Computer/Electronic Equipment**
$75,000	**in General Fund Pool Vehicles**
$0	**in Existing General Facilities Impact Fee Fund Balance.**

Chapter 10
Library Collection Items and Dedicated Public Use Computer Stations

The Existing System. The City's residents are served by the City-owned El Segundo Public Library. The facility provides access to a broad inventory of books, tapes, electronic books, subscriptions called a *collection* of volumes and a number of dedicated public use computer stations available to the public. Table 10-1, following, identifies the current inventory of library offerings enjoyed by the City's residents.

Table 10-1
Identification of Current Library Inventories and Calculation of Collection Items and Computer Stations per Resident Standards

	Collection Items	Computer Stations
Existing Collection Items	121,918	19
Collection Items Available Within Fund Balance	1,864	0.29
Total Collection Items/Public Computers	123,782	19.29
Current City Population	16,660	16,660
Current Standard per Resident	7.430	0.0012

The Purpose of the Fee. The purpose of the fee is to enable the City to add collection items and additional computer stations to ensure that its citizens the same access to the collection items and computer stations they do now. Table 10-2, following, indicates that the remaining residential development and typical number of persons per type of residential dwelling will generate a need for an additional 37,748 collection items in order to maintain the existing local library collection facility standard of 7.430 collection items per person and six dedicated public use computer stations to maintain the existing standard of 0.0012 stations per resident.

Table 10-2
Collection Items Required to Maintain Existing Library Collection Items Standard

Residential DIF Land Use Type	Number of Units Anticipated	Persons per Dwelling	Population Generated
Detached Dwelling Units	(183)	3.025	(554)
Attached Dwelling Units	1,959	2.876	5,634
Additional City Residents from Added Dwelling Units			5,080
Collection Items per Person Existing Standard			7.430
Collection Items Required to Maintain Standard			**37,748**

Table 10-3, following, indicates the additional number of residents (5,080) to be served by the existing nineteen computer stations and the number of computer stations required (six) to maintain the existing standard of 0.0012 computer stations per person in light of the additional 5,080 residents at build-out.

Table 10-3
Collection Items Required to Maintain Existing
Library Dedicated Public Access Computer Stations Standard

Residential DIF Land Use Type	Number of Units Anticipated	Persons per Dwelling	Population Generated
Detached Dwelling Units	(183)	3.025	(554)
Attached Dwelling Units	1,959	2.876	5,634
Additional City Residents from Added Dwelling Units			5080
Existing Computer Stations per Person Standard			0.0012
Computer Stations Required to Maintain Standard			**6**

The Use of the Fee. The fee, if adopted, imposed and collected would be limited to acquiring additional library collection items and dedicated public use computer stations, but not on the replacement of either. The preservation of the existing Library standards must be maintained.

LB-001, Library Collection Expansion – Expand the Library collection by 37,748 collection items in order to maintain the existing standard of 7.430 collection items per City resident. Were the City unable to expand the current collection the standard would be reduced to 5.69 collection items per resident.

LB-002, Library Computer Stations – Expand the Library's inventory of public access computers by six (from nineteen) in order to maintain the existing standard of 0.0012 computers per 1,000 City residents. Were the City unable to expand the current computer standard would be reduced to 0.266 computer items per 1,000 residents. The computers could be any variety of internet accessible items.

The Relationship Between the Need for The Fee and The Type of Development Project. The development of any acreage zoned for residential uses, increases the demand on the finite amount of library collection items and dedicated public use computer stations. Thus, those residential land-uses that generate higher amounts of residents (i.e., detached dwelling unit) will be charged a proportionally higher amount. There is no information available demonstrating a significant link or nexus between library use by local businesses.

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. Additional collection items and dedicated public-use computer stations will be acquired with the impact fee receipts collected from residential development.

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. The cost of acquiring additional volumes, called the accession process,[15] is $40.00 per item per Schedule 10.1. The accession process cost has been decreased steadily over recent years due to the contracting out this time-intensive process. When the 123,782 collection items inventory is divided by the 16,660 existing citizens establishes a standard of 7.430 collection items per resident. The standard of 7.430 collection items standard is multiplied by the $40.00 per item a charge of $297.20 per additional City resident is determined.

Table 10-4
Establishment of the Library Collection Standard and Cost per Person to Maintain the Standard

Library Collection Items	123,782
Current Population	16,660
Collection Items per Resident	7.430
Acquisition Cost of Collection Item	$40.00
Cost per Additional Resident	**$297.20**

The cost of acquiring a single computer station (per Schedule 10.1) is estimated to be $2,300 per computer, monitor, software license, workstation and installation. The nineteen existing computer stations used by El Segundo residents, when divided by the 16,660 net existing residents create a standard of 0.0012 dedicated public use computer stations per City resident. The standard of 0.0012 collection items multiplied by the $2,300 per public computer station results in a cost of $2.76 per additional City resident, in order to maintain the existing standard. Table 10-5 identifies this:

[This space left vacant in order to place the following table on a single page].

[15] The accession process includes: need research, ordering, receipt, preparation, entering it into the computer and actual placement on the shelves.

Table 10-5
Establishment of the Library Dedicated Public Use Computer Station Standard and Cost per Person to Maintain the Standard

Dedicated Public Use Computer Stations	19
Current Population	16,660
Collection Items per Resident	0.0012
Accessions Cost per Collection Item	$2,300
Cost per Additional Resident	**$2.76**

Library Collection Items and Computer Station DIF Schedule. The combined cost per new resident is $299.96 ($297.20 for 7.430 collection items and $2.67 for 0.0012 additional computer stations). Table 10-6, following, indicates the amount required for pro-rata expansion of the library space per Schedule 10.1. If adopted and imposed on the remaining development, it would collect enough to acquire an additional 37,748 library collection volumes and sixteen dedicated public use computer stations.

Table 10-6
Summary of Collection Items and Computer Stations Impact Costs

DIF Land Use Type	Residents Per Dwelling	Cost per Resident	Impact Cost per Dwelling
Detached Dwelling Units	3.025	$299.96	$907.00
Attached Dwelling Units	2.876	$299.96	$863.00

RECAP OF RECOMMENDED LIBRARY AND COLLECTION VOLUMES IMPACT FEES

1. Create a DIF Fund titled *Library Collection/Computers Impact Fee Fund.*
2. Adopt Schedule 10.1 for the two differing residential land-uses

END OF CHAPTER TEXT

Schedule 10.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Library Collection Items/Dedicated Public Use Computers

	Collection Items	Computer Stations	Total Resources
Existing Number of Collection Items	121,918		
Existing Number of Dedicated Public Computer Stations		19.00	
Library Items/Stations Represented by Existing Fund Balance	1,864	0.29	
Total Library Components Status	123,782	19.29	
Current Net City Population	16,660	16,660	
Collection Items per Resident	7.430		
Computer Stations per Resident		0.0012	
Accessions Cost per Collection Item	$40.00		
Cost per Computer Station with Licenses, Installed		$2,300.00	
Collection Item Cost per Resident	$297.20		
Collection Item Cost per Resident		$2.76	

Cost per Land Use Residential Dwelling Unit	Density per Dwelling Unit	Collection Items	Computer Stations	Total Resources
Detached Dwelling Unit	3.025	$899	$8	$907
Attached Dwelling Unit	2.876	$855	$8	$863

Chapter 11
Public Use (Community Center) Facilities

This important component of the City's offerings to its citizens is distinct from the Park Land and Park Improvements DIF as a separate DIF infrastructure category. This was undertaken for three reasons.

First, few parks contain a community public use center. Secondly, it is difficult to ensure that the cost for such a facility is properly included in the average park development cost per acre. Lastly and perhaps most importantly, it has been the experience of RCS staff, that when the cost for community centers is included as a cost of park development, these facilities simply do not get built. This is because the park impact fee revenues get used on the costly demand for turfed park acres with sports or passive-use park improvements.

The Existing System. The City has some facilities currently dedicated for public use. Such facilities are available to community groups for meetings, classes, sports activities, and other civic functions. This category of buildings differs from General Facilities which are those used by the City staff to undertake their municipal service duties (City Hall and the City Corporation Yards as good examples).

The City owns some facilities dedicated to a specific use, such as the George E. Gordon Clubhouse and Joslyn Senior Center. Table 11-1 shows the City's existing public meeting facilities.

Table 11-1
Inventory of Existing (Owned) Public Meeting Facilities

Public Use Meeting Facility	Square Feet
Camp Eucalyptus Building	1,210
Check-Out Building	1,000
George E. Gordon Clubhouse	7,500
Joslyn Senior Center	10,800
City Library	31,275
Teen Center	5,480
Total Public Use Square Feet	**57,267**

Based upon an existing population of 16,660, the 57,265 square feet creates an impressive standard of 3.437 square feet per resident. This standard indicates that the City maintains a substantial commitment to providing a community center or recreation space for public groups and individuals. It should also be noted that the standard of 3.437 is not only impressive but one of the highest standards RCS staff has seen in years. Table 11-2, following, demonstrates the calculation establishing the square foot standard:

Table 11-2
Calculation of Public Use Facilities
Square Foot Standard

Existing Public Use Facilities Space Square Feet	57,267
Current City Population	16,660
Square Foot per Resident Standard	3.437

Demand Upon Infrastructure Created by the Development of Underdeveloped or Undeveloped Parcels. Simply stated, additional residential dwelling units will increase the population, placing greater demands for use of the existing community centers. The construction of a detached dwelling unit will create, on average, 3.025 potential new community center users. The addition of a new attached dwelling will create on average 2.876 potential new users.

The Purpose of the Fee. The purpose of the fee is to determine the cost of expanding the community center and public use type facilities by some 17,460 square feet to meet the added demands created by the construction of additional residential dwelling units. It should be noted that 17,460 square feet of public use facilities may not fully meet the needs of the build-out community and that square feet may be desired by the community. The reference to the 17,460 square feet indicates that is the amount of additional public use facilities square feet that could be financed by DIFs.

Table 11-3, following, demonstrates the calculation of the number of additional square feet required to maintain the existing Public Use facilities standard:

Table 11-3
Square Feet of Community Center Space
Required to Maintain Existing Standard

Residential DIF land-use Type	Number of Units Anticipated	Persons per Dwelling	Population Generated
Detached Dwelling Units	(183)	3.025	(554)
Attached Dwelling Units	1,959	2.876	5,634
Additional City Residents from Added Dwelling Units			5,080
Square Foot per Person Existing Standard			3.437
Public Use Facilities (SF) Required to Maintain Standard			**17,460**

The **Use** of the Fee. The fee, if adopted, would be imposed, collected, and spent on the construction of additional community center space that benefits City of El Segundo residents, not rehabilitation of any existing public use facility.

PF-001, Public Use Facilities Expansion – Construct up to 17,460 square feet of general purpose public use facilities. Public Use Facilities include, but are not limited to, gymnasiums, senior or teen centers, general purpose community centers, libraries, galleries etc. The 17,460 square foot figure is the amount of space would need to be added to the City's public use inventory to maintain the existing standard of 3.437 square foot per resident standard at GP build-out. Were the City unable to expand the existing public use facility inventory the standard would decrease from the existing 3.437 square foot per City resident to 2.634 square foot per City resident.

The Relationship Between the Need for The Fee and The Type of Development Project. Different types of residential dwellings generally have differing amounts of people dwelling in them. Census data indicates the following occupancy statistics for the City:

Detached Dwelling Units ..... 3.025 Persons/Unit
Attached Dwelling Units ..... 2.876 Persons/Unit

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The fee will be used to expand the amount of community center square feet in proportions consistent with the average persons per dwelling. Community centers would be expanded in the following amounts following, by type of residential dwelling:

Detached Dwelling Unit.... 3.025 Persons per Unit X 3.437 Square Feet = 10.397 Square Feet
Attached Dwelling Unit..... 2.876 Persons per Unit X 3.437 Square Feet = 9.885 Square Feet

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. The cost of adding 3.437 square feet of building space per person is roughly $2,540.80 based upon a $695 per square foot for construction, $13.50 for parcel hardscape improvements based upon a $4.50 per square foot cost and a floor area ratio of 0.333) and land acquisition cost of $30.75 per square foot. A detached dwelling unit with 3.025 persons would require 10.396 square feet of public meeting space at a cost of $7,686 (10.396 square feet X $739.24 per square foot, rounded). An attached dwelling unit requires 9.829 square feet of public meeting space at a cost of about $7,307 (9.884 square feet X $739.24 per square foot).

Resulting DIFs. Table 11-4, following, indicates the proposed Public Use Facilities DIF.

Table 11-4
Summary of Public Use Facilities Impact Fee

DIF Land-use Type	Impact Fee Per Unit
Detached Dwelling Unit	$7,686
Attached Dwelling Unit	$7,307

RECAP OF RECOMMENDED PUBLIC USE FACILITIES IMPACT FEES

1. Create a DIF Fund titled *Public Use Facilities Impact fee Fund.*
2. Adopt Schedule 11.1 for the two differing residential land-uses

END OF CHAPTER TEXT

Schedule 11.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Public Use Facilities

	Buidling Square Feet
Camp Eucalyptus Building	1,210
Check-out Building	1,000
George E. Gordon Clubhouse	7,500
Joslyn Senior Center	10,800
City Library	31,275
Teen Center	5,480
Facilities Represented in Existing DIF Fund Balance (no existing DIF))	0
Existing City-owned Public Use Facilities Square Feet	57,265

Current Population	16,660

Square Foot per Resident Standard	3.437

Average Public Use Facility Construction Cost per Square Foot	$695.00
Parcel Hardscape Improvements, $4.50 S.F. and 0.333 Floor Area Ratio	$13.50
Land Acquisition/Grading Cost @ $10.25 per square foot X 0.333 FAR	$30.75

Total Cost for a Single Square Foot of Public Use Space	$739.25

Total Cost for one Square Foot of Public Use Space	$739.25
Square Foot per Resident Standard	3.437
Cost per New Resident	$2,540.80

Cost per Land Use Residential Dwelling Unit	Density per Dwelling Unit	Total Resources
Detached Dwelling Unit	3.025	$7,686
Attached Dwelling Unit	2.876	$7,307

Chapter 12
Aquatics Facilities

This component of City infrastructure is also separated from the Park Land Acquisition and DIF for the same reasons described in the previous Chapter regarding Public Use (community center) Facilities.

The Existing System. The City owns and operates two impressive aquatics centers/pools consisting of a total of 24,372 square feet of swimming pool surface and 1,794 square feet of combination locker/utilities/office buildings. The existing facilities are available to individuals and organized groups represented by the existing 16,660 residents for leisure, competition and general fitness uses. Table 12-1 following, details the size of the four aquatic pools and building structure. There is no existing fund balance.

Table 12-1
Existing City Pools/Utility Buildings

Pool Facility	Pool Surface Capacity in SF	Pool Support Facilities in SF
Aquatic Center – Competition Pool	15,808	
Aquatic Center – Practice Pool	3,053	
Urho Saari Swim Stadium – Plunge	4,534	
Uhro Saari Swim Stadium – Junior Pool	977	
Aquatics Center		1,794
Total Square Feet	**24,372**	**1,794**

Demand Upon Infrastructure Created by the Development of Underdeveloped or Undeveloped Parcels. Simply stated, additional residential dwelling units will increase the population placing greater demands upon the City's existing aquatics centers. The construction of detached dwelling and attached dwellings will create, on average, 3.025 and 2.876 potential new potential pool users, respectively. The current *de-facto* standards are 0.1077 square feet of locker/office/maintenance building per person and 1.4629 square feet of pool surface per person in the City.

The **Purpose** of the Fee. The purpose of the fee is to generate DIF revenue with which to expand the aquatics centers capacity to meet the added demands created by the construction of additional residential dwelling units.

The **Use** of the Fee. The fee, if adopted, would be imposed, collected, and spent on the construction of additional aquatics centers that would benefit City of El Segundo residents, but would not be spent on rehabilitation of the existing aquatic center.

The Relationship Between the Need for The Fee and The Type of Development Project. Different types of residential dwellings generally have differing numbers of people dwelling in them. United States Census 2000 data (see Table 2-2. page 16) was used to determine the occupancy density statistics for the City. They are summarized as follows:

Detached Dwelling Units ..... 3.025 Persons/Dwelling Unit
Attached Dwelling Units ..... 2.876 Persons/Dwelling Unit

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. The fee will be used to expand the pool surface space and support building in proportions consistent with the average persons per dwelling. The aquatic center pools and locker/utility buildings would be expanded in the amounts on the following page, by type of residential dwelling:

Detached Dwelling Units... 0.326 S.F. of locker space and 4.425 S.F. of pool surface
Attached Dwelling Units.... 0.310 S.F. of locker space and 4.207 S.F. of pool surface

The Relationship Between the Amount of the Fee and the Cost of the Portion of the Facility Attributed to the Development Project. Schedule 12.1 indicates the pool and locker building cost calculations. The pool construction costs are also based upon past pool construction costs received from previous agencies.

The two separate square foot costs above total about $526.64 per person for the pool expansion ($360/S.F. X 1.4629 S.F per resident = $526.64 per person) and locker building expansion ($540/S.F. X 0.1077 S.F. per resident = $58.16 per person) or $584.80 per person for both construction components. Thus, a detached dwelling detached unit would incur impact costs of $1,769/dwelling, (3.025 persons X $584.80, rounded). An attached dwelling unit would generate impact costs of about $1,682/dwelling, (2.876 persons X $584.80, rounded).

Resulting DIF Schedule. Schedule 12.1, as summarized by Table 12-2 following, indicates the proposed Aquatics Facilities DIF schedule.

Table 12-2
Summary of Aquatics Facilities Impact Fee

Residential Dwelling Type	Impact Fee Per Dwelling Unit
Detached Dwelling Unit	$1,769
Attached Dwelling Unit	$1,682

[This space left vacant in order to place the Chapter recommendations on a single page].

RECAP OF RECOMMENDED AQUATICS FACILITIES IMPACT FEES

1. Create a DIF Fund titled *Aquatics Facilities Impact Fee Fund.*
2. Adopt Schedule 12.1 for the two residential land-uses

END OF CHAPTER TEXT

Schedule 12.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Aquatics Facilities

	Pool Capacity in Surface Square Feet	Support Facilities in Building Square Feet
Aquatic Center - Competition Pool	15,808	
Aquatic Center - Practice Pool	3,053	
Aquatic Center Lockers/Shower/Restroom Buildings		1,794
Urho Saari Swim Stadium - Plunge	4,534	
Urho Saari Swim Stadium - Junior Pool	977	
Facilities Represented in Existing DIF Fund Balance	0	0
Current Pool Size (Surface Square Feet):	24,372	
Current Aquatics Building (Square Feet):		1,794
Current Population (1)	16,660	16,660
Existing Standards:		
Square Feet of Surface /Resident	1.4629	
Square Foot of Locker Building/Person		0.1077
Construction Costs		
Pool Cost per Surface Square Foot	$360.00	
Facilities Construction/Square Foot		$540.00
Existing Standards per Resident	1.4629	0.1077
Adjusted Pool Cost per Resident	$526.64	
Adjusted Facilities Cost per Resident		$58.16

Cost per Land Use Residential Dwelling Unit	Density per Dwelling Unit	Pool Surface	Support Facilities	Total Cost
Total Cost per Added Resident		$526.64	$58.16	$584.80
Detached Dwelling Unit	3.025	$1,593	$176	**$1,769**
Attached Dwelling Unit	2.876	$1,515	$167	**$1,682**

Chapter 13
Park Land Acquisition and Park Infrastructure Development

This Chapter summarizes the City's existing inventory of parks and identifies the ratio of park land per resident allowable under the Quimby Act (§66477 of the Government Code) [16] for residential developments involving the subdivision of land and the Mitigation Fee Act (§66000 of the Government Code) for the construction of residential developments not involving the subdivision of land. The existing per capita standard is then utilized to calculate the park dedication requirement for future residential development.

EXISTING PARKS AND RECREATION SYSTEM

Intensive parks and park recreational facilities constitute one of the City of El Segundo's greatest challenges both with respect to facilities for both current residents and future citizens. The provision of a well-planned park system, with a variation in the size and nature of facilities offered, is an important amenity to residents of any city, the City of El Segundo included. A mixture of passive and active uses and facilities and programs which appeal to a broad spectrum of potential park users is considered optimal in most urban cities. A city's park system and inventory of open space is often a major factor in selection of a place to live. The current acres dedicated to park use will serve well to meet the City's current needs. However, if the number of improved active/passive park acres remains static at 62.47 acres, they will not continue to meet recreational demands in light of the increase to the City's population.

Future residential development, by increasing the City's population, will impact the City's park system by requiring additional baseball fields and adequate space for various athletic activities. Given the magnitude of growth projected in this and other reports, the challenge facing the City will be to provide new facilities and park land to serve the recreational needs of these new residents. Without additional park land acquisition and continued development of currently owned but underutilized park land during the next twenty to thirty years, the City's parks will become overcrowded and overused, with the ultimate result becoming a negative experience for park users.

Existing Parks. Currently, the City owns approximately 62.47 acres of park land, most of it developed. Recreation, Campus El Segundo Fields, Civic Center Courtyard, Imperial Parkway and Washington Parks are the City's largest developed parks, representing over 63% of the park system acreage (when only traditional improved parks are considered) and provide the greatest variety of sports and passive uses. Raytheon Employee Park and Richmond Field are not owned by the City and while often enjoyed by City residents they are not included in the calculation of the City-owned Parks standard of acres per 1,000 residents.

Table 13-1, on the following page, is an inventory of the existing park acreage.

16 Adoption of a Quimby Act Fee requires a park "plan".

Table 13-1
Inventory of Owned and Developed Park Land

Park or Space Name	Owned Park Acres	Developed Park Acres
Acacia Park	0.54	0.54
Camp Eucalyptus	0.31	0.31
Campus El Segundo Fields	5.00	5.00
Candy Lane Park	0.31	0.31
Civic Center Courtyard/Park	4.55	4.55
Clutters Park	0.90	0.90
Constitution Park (1)	1.13	1.13
El Segundo Dog Park	1.96	1.96
Freedom Park (1)	3.25	3.25
Hilltop Park	1.22	1.22
Holly Valley Park	0.21	0.21
Imperial Parkway (2)	4.88	0.00
Imperial Strip/Memory Row (2)	7.75	0.00
Independence Park (1)	0.72	0.72
Kansas City Park	0.40	0.40
Library Park	3.44	3.44
Raytheon Employee Park	0.00	0.00
Recreation Park (includes Stevenson Field)	20.42	20.42
Richmond Field (School District Property)	0.00	0.00
Sycamore Park	0.84	0.84
Washington Park (1)	4.56	2.74
Total Park Acres	**62.47**	**48.01**

City De Facto Park Standard. Table 13-2 following is a comparison of the acreage of parks to the City of El Segundo's current population and indicates that the City presently possesses a total standard of 3.750 acres of owned park land per 1,000 residents, (62.47 acres ÷ [16,660 residents ÷ 1,000], rounded). This average is significantly higher than the benchmark of 3.0 acres per 1,000 persons contained in Section 66477 of the California Government Code relating to dedication of parks. It should also be noted that the park average for the City is not only high when compared to the 3.0 standard set by Section 66477, but is the second highest when compared to the last 18 cities RCS has worked with. The City should be commended for this achievement.

Table 13-2
Calculation of Actual City-owned Improved Park Acres Standard

	City Owned Acres	Developed Acres
Total Park Acres	62.47	48.01
Current City Population	16,660	16,660
Population Divided by 1,000	16.660	16.660
Park Acres per 1,000 Population	3.750	2.882

However, the Quimby Act, to be discussed later, allows a minimum standard of 3.0 acres per thousand residents even if the City does not reach that standard. The Quimby minimum of 3.0 acres per 1,000 residents has been exceeded by the 3.750 acres per 1,000 residents and thus the Quimby allowable minimum of 3.0 acres per 1,000 will not be used in the remainder of the Chapter for park *construction*. The 3.750 acres per 1,000 residents will be the standard used to calculate the park land acquisition and park improvements development impact fee. Though not relevant to the City of El Segundo, the Quimby Act has a cap of 5.0 acres per thousand residents (Government Code §66447 (a) (2).

Planned Park Improvements. In addition to the on-going improvement of the existing 62.47 acres [17], the City will need to acquire 19.05 park acres, per Table 13-3, and develop these new parks to serve the additional 4,241 residents anticipated to live in City.

Table 13-3
Calculation of Required
Park Acres per Allowable Standard

General Plan Anticipated Population Increase	5,080
Additional Population Divided by 1,000	5.080
Allowable Standard in Acres/1,000	3.750
Park Acres required to Maintain Standard	19.05

These general improvements are outlined below:

PK-001 Park Land Acquisition and Improvements – Acquire land for and make improvements to a composite of 19.05 acres of parkland. The parkland could be any type of park, community, sports, neighborhood, historical, etc. Should the City be unable to finance any additional parkland by GP build-out of the net 1,776 anticipated residential dwelling units, the

17 The Quimby Act does allow for the use of receipts raised by the adoption of a Quimby Act park Impact Fee to be used for rehabilitation of existing park configurations.

standard would drop from 3.750 acres per 1,000 residents to 2.87 acres per 1,000 residents, or a 23.4% decrease from the existing level of service (LOS).

The City may also consider adopting a park standard of 3.0 and maintaining this standard until G.P. Build-out. If the City were to take this approach the total needed acres to maintain this standard would be 65.22 total acres for the entire City at G.P. build-out (21,740 G.P. Build-out Population ÷ 1,000 = 21.74 X 3.0 Park Standard = 65.22 Acres). If this approach is used the City would only need to acquire 2.75 acres of park land to maintain a 3.0 standard.

PK-002, Existing Park Fund Balance Projects – This represents the use of the $193,862 in the existing Park Fund Impact Fee balance.

The 19.05 acres could be constructed in any of the following configurations:

Mini or "Pocket" Parks - This the smallest of the parks designations and though generally not planned due to higher maintenance costs, usually are the result of acquiring an unusual parcel of land sometimes with historical significance. The City's Camp Eucalyptus, Candy Lane and Holly Valley Parks best demonstrate this category.

Local or Neighborhood Parks - These parks are generally five to ten acres and serve local (1/4 mile walk-in distance) users. Not surprisingly, the City has a number of these parks. Campus El Segundo Fields, Imperial Parkway, and Imperial Strip/Memory Row Park are good examples of this category.

Community or Sport Parks - These parks are most functional when they are twenty acres or larger and are designed to meet the needs of the entire community. Often, ten to twenty acre parks are forced to act as community or sports parks. These needs include youth and adult sports organizations, clubs or associations and large scale community events such as 4th of July celebrations or festivals. Recreation Park is a perfect example of the community or sport park.

The park and recreation improvements that could be contained within the almost 19.05 needed acres and the existing standard (Table 13-1) are both consistent with the City's Park and Recreation Element of the General Plan. The City's 3.750 acres per 1,000 population standard speaks well for the City as a three acre per 1,000 population standard is a common minimum, but frequently unmet, target of municipalities and recreation/park special districts throughout Southern California.

CALCULATION OF PARK DEDICATION STANDARD

Unlike the other facilities discussed in this Report, the California Government Code contains enabling legislation for the acquisition and development of community and neighborhood parks by a City. This legislation, codified as Section 66477 of the Government Code and known commonly as the "Quimby Act", establishes criteria for charging new development for park facilities based on specific park standards. This Report will recommend the adoption of Quimby-style park fees over an AB 1600-style DIF for developments requiring the subdivision of land and an AB 1600 fee for non-subdivided land.

Allowable Park Standard As stated earlier, under §66477 of the Government Code, the City may charge new residential development based on a standard of 3.0 acres per 1,000 residents even if the City does not presently possess a ratio of 3.0 acres per 1,000 for the existing population. The Government Code also enables a city to charge development based on a standard higher than 3.0 acres (to a maximum of 5.0 acres) if the City currently exceeds the minimum benchmark ratio of 3.0 acres per 1,000 residents.

The law states that "if the amount of existing neighborhood and community park area ... exceeds the [3 acres of park area per 1,000 person] limit ... the legislative body may adopt the calculated amount as a higher standard not to exceed 5 acres per 1,000 persons" [18]. Park fees may be required by the City provided that the City meets certain conditions including:

- The amount and location of land to be dedicated or the fees to be paid shall bear a reasonable relationship to the use of the park by the future inhabitants of the subdivision.
- The legislative body has adopted a general plan containing a recreational element, and the park and recreational facilities are in accordance with definite principles and standards contained therein.
- The city ... shall develop a schedule specifying how, when, and where it will use the land or fees, or both, to develop park or recreational facilities ... Any fees collected under the ordinance shall be committed within five years after the payment of such fees.

Determination of a Park Standard. As previously identified, the City currently has a demonstrated 3.750 acres of owned and developed park acres/1,000 residents and will be used in the calculation. The Quimby Act allows the City to adopt a standard of 3.0 acres per thousand as the low-end threshold. However, the 3.0 acres per 1,000 residents standard is the highest standard that can be adopted under the Quimby Act, without actually maintaining a standard higher than 3.0 acres/1,000.

CALCULATION OF IMPACT COSTS

Once a per capita standard for parks is determined, the cost of residential development's impact on the City's park system can be computed as follows.

Park Land Acquisition Costs. Land costs will vary significantly from one park to another. The park land to be acquired must be suitable for park construction and is conservatively estimated at approximately $2,000,000 per acre which is used in the park DIF calculation. However, the use of this figure could be criticized if a developer can show that the cost of the residential land they are developing is currently valued at less than the $2,000,000/acre acquisition figure. The fee recommendation at the end of the Chapter will recognize this challenge.

Park Improvements Construction Costs. Park improvement construction costs are based upon a schedule (Appendix C) of common park improvements by size of park and costs from various

18 California Government Code, Title 7, Division 2, Section 66447 (b).

construction bids received by other clients as the City does not have any more recent full park construction history. Again, public use facilities were not included in the cost calculation (see Chapters 11 and 12).

Average Park Acquisition, Development and Maintenance Vehicles and Facilities Cost per Capita. The combined park land acquisition, park improvements development and support facilities cost is $2,037,500 per acre ($2,000,000/acre for land acquisition, $37,500 per acre for grading and contiguous infrastructure). If the City were to charge development for the maximum allowable amount of park acreage as allowed in the Quimby Act and, then the City would need to acquire 3.750 acres of new park land for every potential 1,000 new residents to the City. The 3.750 acres of land acquisition and development per 1,000 persons would be $8,926,451 or about $8,926.46 per new resident. Schedule 14.1 calculates the cost to develop 3.750 acres, which again represents the required park land cost for 1,000 persons.

Average Cost per Dwelling Unit. Schedule 13.1 further calculates the cost per dwelling unit based on the per person park land acquisition and improvement costs of $8,926.46 (Schedule 13.1) and the average number of persons per unit for each category of housing. Detached dwelling residential housing has the highest number of persons per dwelling unit (@ 3.025 per unit) and consequently carries the highest impact fee, $27,003 per unit ($8,926.46 X 3.025 persons per unit, rounded). Attached dwelling units have an average of 2.876 persons per unit and would need to be assessed $25,672 ($8,926.46 X 2.876 rounded). Table 13-4, following, summarizes the calculated and recommended fees for each of these three residential categories. Schedule 13.1 provides greater park calculation detail and a complete schedule of Park Land Acquisition and Park Improvements DIFs for each of the three dwelling unit types.

Table 13-4
Summary of Park Development Fees for
Residential Dwelling Construction

DIF Land-use Type	Development Impact Cost
Detached Dwelling Unit	$27,003/Unit
Attached Dwelling Unit	$25,672/Unit

The DIFs for detached dwelling residential development involving the subdivision of land, as identified in Table 13-4, should be adopted under the auspices of the Quimby Act and the Fee Mitigation Act. The Residential dwelling units not requiring the sub-division of a privately-owned parcel will need to be adopted as a Government Code § 66000 supported DIF [19].

Land Acquisition Cost Adjustment Challenge. As mentioned previously, the use of $2,000,000 as the park land cost is based upon the assumption that park acreage would likely be close in proximity and thus similar in cost to residential land value of the project the park is intended to

19. This is required because the Quimby Act is referenced in the State Subdivision Code.

serve. However, if the developer or contractor of a dwelling can provide evidence (acceptable to the City) in the form of a recent appraisal of the property they will be developing that the current land value is worth less than the pre-graded $2,000,000/acre or $46/square foot cost, the DIF could be adjusted downward accordingly by placing the actual cost of land acquisition into the calculation identified in Schedule 13.1. Again, if the City wishes to adopt such an adjustment, the terms under which the challenge may be made and proved should be included in the Impact Fee Ordinance.

RECAP OF RECOMMENDED PARK LAND ACQUISITION AND PARK INFRASTRUCTURE DEVELOPMENT IMPACT FEES

1. Residential Housing - Adopt Schedule 13.1 for Park Land and Park Improvements for the two basic residential land-uses.

END OF CHAPTER TEXT

Schedule 13.1

City of El Segundo
2021-22 Development Impact Cost Calculation
Park Land and Open Space Acquisition and Park Improvements
(both Quimby and Mitigation Fee Act Calculations)

Park Name	Existing Park Acres	Improved/ Constructed Park Acres
Acacia Park	0.54	0.54
Camp Eucalyptus	0.31	0.31
Campus El Segundo Fields	5.00	5.00
Candy Lane Park	0.31	0.31
Civic Center Courtyard/Park	4.55	4.55
Clutters Park	0.90	0.90
Constitution Park	1.13	1.13
El Segundo Dog Park	1.96	1.96
Freedom Park	3.25	3.25
Hilltop Park	1.22	1.22
Holly Valley Park	0.21	0.21
Imperial Parkway	4.88	0.00
Imperial Strip/Memory Row	7.75	0.00
Independence Park	0.72	0.72
Kansas Park	0.40	0.40
Library Park	3.44	3.44
Raytheon Employee Park (privately owned)	0.00	0.00
Recreation Park (includes Stevenson Field)	20.42	20.42
Richmond Field (School District Property)	0.00	0.00
Sycamore Park	0.84	0.84
Washington Park	4.56	2.74
Park/OS Equivalent in Fund Balance	0.08	0.08
Total Acres (Owned/Developed)	62.47	48.01
Current Population	16,660	16,660
Population/1,000	16.66	16.66
Current Standard	3.750	2.882
Minimum Acres/1,000 Population Standard	3.750	2.882
Construction Cost per Acre		$446,158
Land Acquisition Cost per Acre	$2,000,000	
Grading/Contiguous Infrastructure	$37,500	
Total Cost per Acre	$2,037,500	$446,158
Cost X 3.0 Acre/1,000 Residents Standard	$7,640,625	$1,285,826
Population Served by Standard	1,000.00	1,000.00
Acquisition/Construction Cost per Resident	$7,640.63	$1,285.83

	Occupants/ Dwelling	Land Acquisition	Park Construction	Total Park Costs
Cost per Additional Resident		$7,640.63	$1,285.83	$8,926.46
Detached Dwelling Unit	3.025	$23,113	$3,890	$27,003
Attached Dwelling Unit	2.876	$21,974	$3,698	$25,672

Appendix A

Summary of Recommendations

SUMMARY OF RECOMMENDATIONS

Chapter 3 - Law Enforcement Facilities and Equipment

- Adopt Schedule 3.2, page 28, *General City – Minimum Capital Needs-based Impact Costs*

Chapter 4 - Fire Suppression Facilities, Vehicles and Equipment

- Adopt Schedule 4.2, page 38, *Minimum Capital Needs-based Impact Costs.*

Chapter 5 – Circulation (Streets, Signals and Bridges) System

- Create a DIF Fund titled *Circulation System Impact Fee Fund.*

- Adopt Schedule 5.2, page 53, - *Minimum Capital Needs-based Impact Costs, and the ALTERNATIVE COST METHODOLOGY, per single trip-end cost from Schedule 5.2 to apply to Table 5-2 and the more specific ITE Trip Calculation.*

Chapter 6 - Storm Drainage Collection Facilities

- Create a DIF Fund titled *Storm Drainage Collection System Impact Fee Fund.*

- Adopt Schedule 6.4, page 65, for the seven land-uses and the Cost Distribution per Acre figure (from the third column from the right side of the Schedule 6.2) for developments that do not involve a building pad, (e.g. additional asphalt parking area).

- Separately, calculate and adopt a *National Pollutant Discharge Elimination System (NPDES)* In-lieu fee, via the Clean Water Act, for future development, additions or private rehabilitations.

Chapter 7 - Water Distribution Facilities

- Create a DIF Fund titled *Water Distribution System Impact Fee Fund*

- Adopt Schedule 7.2, page 75, - *Minimum Capital Needs-based Impact Costs, Table 7-7,* p. 71, and *Equivalent Water meter Size calculation based Upon Minimum Needs- based Impact Fees.*

Chapter 8 - Wastewater Collection Facilities

- Create a DIF Fund titled *Wastewater System Impact Fee Fund*

- Adopt Schedule 8.2, page 83, - *Minimum Capital Needs-based Impact Costs.*

Chapter 9 - General Facilities, Vehicles and Equipment

- Create a DIF Fund titled *General Facilities Impact Fee Fund*
- Adopt Schedule 9.2, page 90, Minimum Needs-based Impact Costs.

Chapter 10 - Library Collection Items and Computer Stations

- Create a DIF Fund titled *Library Collection/Computers Impact Fee Fund*
- Adopt Schedule 10.1, p. 96.

Chapter 11 - Public Use (Community Centers) Facilities

- Create a DIF Fund titled *Public Use Facilities Impact Fee Fund*
- Adopt Schedule 11.1 page 101.

Chapter 12 – Aquatics Facilities

- Create a DIF Fund titled *Aquatics Facilities Impact Fee Fund*
- Adopt Schedule 12.1, p.105.

Chapter 13- Park Land Acquisition and Park Infrastructure Development

- Create Quimby Act Park land Acquisition and DIF Fund, Note (1).
- /OR - Adopt Schedule 13.1, page 113, for residential uses requiring the sub-division of land for Quimby Act application.
- /OR - Adopt Schedule 13.1, page 113, for residential uses not requiring the sub-division of land for AB1600 application.

Appendix B

Expanded Land-use Database

Total - Land-use Database Summary of A, B and C Below	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwelling Units (+)	1,390.20	3,822	3.64	20	1,393.84	3,842
Detached Dwelling Units (-)	0.00	0	(73.93)	(203)	(73.93)	(203)
Attached Dwelling Units	88.60	490	74.73	1,959	163.33	2,449
Commercial Lodging Units	33.10	2,691	2.00	232	35.10	2,923
Retail & Service Uses (SF) (+)	110.20	1,313,245	137.48	6,887,925	247.68	8,201,170
Retail & Service Uses (SF) (-)	0.00	0	(1.00)	(11,917)	(1.00)	(11,917)
Office Uses (SF)	574.80	9,493,945	85.26	2,985,602	660.06	12,479,547
Industrial Uses (SF) (+)	1,665.20	7,580,266	28.00	731,808	1,693.20	8,312,074
Industrial Uses (SF) (-)	0.00	0	(166.52)	(758,027)	(166.52)	(758,027)
Institutional Use (SF)	17.30	233,797	1.00	13,504	18.30	247,301
Total - All City	3,879.40		90.66		3,970.06	
Private Residences (+)	1,478.80	4,312.00	78.37	1,979	1,557.17	6,291
Private Residences (-)	0.00	0.00	(73.93)	(203)	(73.93)	(203)
Commercial Lodging Rooms	33.10	2,691.00	2.00	232	35.10	2,923
Business Square Feet (+)	2,367.50	18,621,253.00	250.74	10,618,839	2,618.24	29,240,092
Business Square Feet (-)	0.00	0.00	(166.52)	(769,944)	(166.52)	(769,944)
Total for General Facilities DIF	3,879.40		90.66		3,970.06	28,479,159.00

A. Development Opportunities from Vacant Land	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwelling Units	1,390.2	3,822	3.64	20	1,393.84	3,842
Attached Dwelling Units	88.6	490	0.80	24	89.40	514
Commercial Lodging Units	33.1	2,691	1.00	116	34.10	2,807
Retail & Service Uses (SF)	110.2	1,313,245	54.22	2,715,095	164.42	4,028,340
Office Uses (SF)	574.8	9,493,945	2.00	82,764	576.80	9,576,709
Industrial Uses (SF)	1,665.2	7,580,266	28.00	731,808	1,693.20	8,312,074
Institutional Use (SF)	17.3	233,797	1.00	13,504	18.30	247,301
Sub-total - Vacant Land	3,879.40		90.66		3,970.06	

B. Development Opportunities from Upsizing from Existing	Existing Development		Potential Development		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwelling Units			0.00	0	0.00	0
Attached Dwelling Units			73.93	1,935	73.93	1,935
Commercial Lodging Units			1.00	116	1.00	116
Retail & Service Uses (SF)			83.26	4,172,830	83.26	4,172,830
Office Uses (SF)			83.26	2,902,838	83.26	2,902,838
Industrial Uses (SF)			0.00	0	0.00	0
Institutional Use (SF)			0.00	0	0.00	0
Sub-total - Upsizing	0.00		241.45		241.45	

C. Parcels Being Upsized from Undersized Development	Existing Development		Potential Demolition		Total General Plan Build-out	
	Acres	# of Units	Acres	# of Units	Acres	# of Units
Detached Dwelling Units (-)			-73.93	-203	(73.93)	(203)
Attached Dwelling Units			0.00	0	0.00	0
Commercial Lodging Units			0.00	0	0.00	0
Retail & Service Uses (SF) (-)			-1.00	-11,917	(1.00)	(11,917)
Office Uses (SF)			0.00	0	0.00	0
Industrial Uses (SF) (-)			-166.52	-758,027	(166.52)	(758,027)
Institutional Use (SF)			0.00	0	0.00	0
Sub-total - Razed Uses	0.00		(241.45)		(241.45)	

Appendix C

Park Construction Cost Schedule

Appendix C
Detailed Park Improvements - Unit Costs/Average Cost per Acre Calculation

ENR at January 2001	6281
Used ENR Construction Cost Index	9516
ENR Percent Increase	151.50%

	2003	Unit	ENR %	Current Cost	Unit	5 Acre Neighborhood	
Public Imps, Road/curb, gutter, etc.	$121	Linear Foot	151.5%	$183.32	Linear Foot	1,680	$307,978
Large Park Grading/Irrigation/Turf	$25,500	Acre	151.5%	$38,630	Acre	0	$0
Small Park Grading/Irrigation/Turf	$30,600	Acre	151.5%	$46,360	Acre	5	$231,800
Plant Material:							
Trees-5, 24 Gallon Box/Acre	$200.00	Each	151.5%	$303.01	Each	25	$7,575
Trees-15, 15 Gallon/Acre	$100.00	Each	151.5%	$151.50	Each	75	$11,363
Shrubs-10, Five Gallon	$19.00	Each	151.5%	$28.79	Each	50	$1,440
Shrubs-30, One Gallon	$7.00	Each	151.5%	$10.61	Each	150	$1,592
Play apparatus							
Play Apparatus - Large	$120,000	Lot	151.5%	$181,810	Lot	0	$0
Large Apparatus Curbing, 450'	$18.50	Linear Foot	151.5%	$28.03	Linear Foot	0	$0
Play Apparatus - Medium	$80,000	Lot	151.5%	$121,200	Lot	1	$121,200
M'edium Apparatus Curbing, 375'	$18.50	Linear Foot	151.5%	$28.03	Linear Foot	375	$10,511
Play Apparatus - Small	$40,000	Lot	151.5%	$60,600	Lot	0	$0
Small Aparatus Curbing, 225'	$18.50	Linear Foot	151.5%	$28.03	Linear Foot	0	$0
Apparatus Safety Surface	$2.50	Square Foot	151.5%	$3.79	Square Foot	8,789	$33,310
Buildings:							
Restroom - Small	$60,450	Each	151.5%	$91,580	Each	0	$0
Restroom - Large	$102,300	Each	151.5%	$154,990	Each	0	$0
Electrical Service Extension	$15,000	Each	151.5%	$22,730	Each	0	$0
Equipment Storage Facility	$55,800	Each	151.5%	$84,540	Each	0	$0
Combined Restroom/Concession	$167,400	Each	151.5%	$253,620	Each	0	$0
Parking Lot							
Parking Space 4" A.C. W/6" Rock base	$1,627.50	Space	151.5%	$2,465.74	Square foot	8	$19,726
V-gutter	$7.44	Linear Foot	151.5%	$11.27	Linear Foot	96	$1,082
Drain Inlet	$744	Each	151.5%	$1,127.19	Each	1	$1,127
Drain Inlet Connector	$1,209	Each	151.5%	$1,831.69	Each	1	$1,832
Storm Drainage Collection Line	$18.00	Linear Foot	151.5%	$27.27	Linear Foot	144	$3,927
Drive Approach	$1,674	Each	151.5%	$2,536.00	Each	1	$2,536
Perimeter Curbing	$9.30	Linear Foot	151.5%	$14.09	Linear Foot	490	$6,904
Parking Lot Striping	$0.28	Linear Foot	151.5%	$0.42	Linear Foot	80	$34
Exterior Street Lighting Standards	$1,674	Each	151.5%	$2,536.00	Each	4	$10,144
Lot Signage	$186	Lot	151.5%	$281.80	Lot	1	$282
Storm Drainage Facilities (in park)							

Appendix C
Detailed Park Improvements - Unit Costs/Average Cost per Acre Calculation

ENR at January 2001	6281
Used ENR Construction Cost Index	9516
ENR Percent Increase	151.50%

	2003	Unit	ENR %	Current Cost	Unit	5 Acre Neighborhood	
Inlets	$744	Each	151.5%	$1,130	Each	2	$2,260
Connections	$1,209	Each	151.5%	$1,830	Each	2	$3,660
Lateral (to arterial)	$18.00	Linear Foot	151.5%	$27.27	Linear Foot	1,050	$28,634
Sewer Facilities							
Connection to Arterial	$1,860	Lot	151.5%	$2,820	Lot	0	$0
Line in Street	$14.50	Linear Foot	151.5%	$21.97	Linear Foot	0	$0
Line in Park	$12.50	Linear Foot	151.5%	$18.94	Linear Foot	0	$0
Fire Hydrant	$2,790	Each	151.5%	$4,230	Each	1	$4,230
Park Lighting							
Walkway Lighting Standards	$1,256	Each	151.5%	$1,900	Each	0	$0
Duct Work/Wiring	$767	Each	151.5%	$1,160	Each	3	$3,480
Walkway Electical Wiring	$15	Linear Foot	151.5%	$20	Each	0	$0
Water Facilities							
3" Meter	$1,860	Each	151.5%	$2,820	Each	1	$2,820
#" Backflow Device	$2,325	Each	151.5%	$3,520	Each	1	$3,520
Line in Street	$11.16	Linear Foot	151.5%	$20	Linear Foot	1,320	$26,400
Water Fountains	$651.00	Each	151.5%	$990	Each	1	$990
Fountain Lines in Park	$11.16	Linear Foot	151.5%	$20	Linear Foot	200	$4,000
Benches/Tables							
Concrete Picnic Tables	$750	Each	151.5%	$1,140	Each	4	$4,560
7' x 10' Cement Table Pads	$1,050	Each	151.5%	$1,590	Each	4	$6,360
Individual BBQ Grills	$326	Each	151.5%	$493.90	Each	2	$988
Concrete Benches	$325	Each	151.5%	$492.39	Each	4	$1,970
3' x 6' Concrete Bench Pads	$270	Each	151.5%	$409.06	Each	4	$1,636
Bleachers	$3,255	Each	151.5%	$4,930	Each	0	$0
Large Covered Picnic Ramada	$57,660	Each	151.5%	$87,360	Each	0	$0
Individual Covered Picnic Pad	$13,950	Each	151.5%	$21,130	Each	4	$84,520
User Electrical Service	$9,300	Each	151.5%	$14,090	Each	0	$0
Electrical Service per Group area	$1,163	Each	151.5%	$1,760	Each	1	$1,760
Game Courts	$75,600						
Basketball Courts	$50,350	Each	151.5%	$76,280	Each	0	$0
Basketball Court Lighting	$32,550	Each	151.5%	$49,310	Each	0	$0
Fenced Tennis Courts	$55,800	Each	151.5%	$84,540	Each	0	$0
Tennis Court Lighting	$32,550	Each	151.5%	$49,310	Each	0	$0

Appendix C
Detailed Park Improvements - Unit Costs/Average Cost per Acre Calculation

ENR at January 2001	6281
Used ENR Construction Cost Index	9516
ENR Percent Increase	151.50%

	2003	Unit	ENR %	Current Cost	Unit	5 Acre Neighborhood	
Baseball Field - Competitive	$46,500	Each	151.5%	$70,450	Each	0	$0
Ballfield Lighting	$186,000	Per two fields	151.5%	$281,800	Per two fields	0	$0
Baseball Field - Recreational	$13,950	Each	151.5%	$21,130	Each	1	$21,130
Soccer Field (crowned)	$16,740	Each	151.5%	$25,360	Each	0	$0
Skatepark	$17.50	Square Foot	151.5%	$26.50	Each	0	$0
Pedestrian Walkway							
5' wide	$75.00	Linear Foot	151.5%	$113.63	Linear Foot	1,680	$190,898
6' wide	$81.00	Linear Foot	151.5%	$122.72	Linear Foot	1,680	$206,170
9' wide	$108.00	Linear Foot	151.5%	$163.62	Linear Foot	0	$0
Miscellaneous Flatwork	$15.00	Square Foot	151.5%	$22.73	Linear Foot	500	$11,365
Small Park Signage	$4,650	Lot	151.5%	$7,040	Lot	1	$7,040
Large Park Signage	$15,000	Lot	151.5%	$22,730	Lot	0	$0
Bike Rack/Pad	$1,395	Each	151.5%	$2,110	Each	2	$4,220
Natural Element Improvement (Lake, etc)	$375,000	Each	151.5%	$568,140	Each	0	$0
Small concrete stage	$29,060	Each	151.5%	$44,030	Each	1	$44,030
Medium Ampitheater/bandshell	$139,500	Each	151.5%	$211,350	Each	0	$0

	Total Cost	$1,441,004
	Total Acres	5
	Average Cost per Acre	$288,201
Total Cost per Park		$1,441,004
Number of Parks	15.00	9
Total Cost of Parks	$66,923,649	$12,969,036
Total Improved Park Acres	150.00	45
Average Construction Cost per Park Acre	$446,157.66	

Appendix C
Detailed Park Improvements - Unit Costs/Av

ENR at January 2001
Used ENR Construction Cost Index
ENR Percent Increase

	15 Acre Community Park		20 Acre Sports Park	
Public Imps, Road/curb, gutter, etc.	3,360	$615,955	3,780	$692,950
Large Park Grading/Irrigation/Turf	15	$579,450	20	$772,600
Small Park Grading/Irrigation/Turf	0	$0	0	$0
Plant Material:				
Trees-5, 24 Gallon Box/Acre	75	$22,726	50	$15,151
Trees-15, 15 Gallon/Acre	225	$34,088	300	$45,450
Shrubs-10, Five Gallon	150	$4,319	100	$2,879
Shrubs-30, One Gallon	450	$4,775	300	$3,183
Play apparatus				
Play Apparatus - Large	1	$181,810	1	$181,810
Large Apparatus Curbing, 450'	450	$12,614	450	$12,614
Play Apparatus - Medium	2	$242,400	1	$121,200
M'edium Apparatus Curbing, 375'	750	$21,023	375	$10,511
Play Apparatus - Small	2	$121,200	1	$60,600
Small Aparatus Curbing, 225'	450	$12,614	225	$6,307
Apparatus Safety Surface	36,562	$138,570	24,609	$93,268
Buildings:				
Restroom - Small	1	$91,580	1	$91,580
Restroom - Large	1	$154,990	1	$154,990
Electrical Service Extension	2	$45,460	2	$45,460
Equipment Storage Facility	0	$0	1	$84,540
Combined Restroom/Concession	1	$253,620	2	$507,240
Parking Lot				
Parking Space 4" A.C. W/6" Rock base	150	$369,861	400	$986,296
V-gutter	1,800	$20,286	4,800	$54,096
Drain Inlet	8	$8,454	20	$22,544
Drain Inlet Connector	8	$13,738	20	$36,634
Storm Drainage Collection Line	2,700	$73,629	7,200	$196,344
Drive Approach	4	$10,144	6	$15,216
Perimeter Curbing	3,600	$50,724	9,600	$135,264
Parking Lot Striping	1,500	$630	4,000	$1,680
Exterior Street Lighting Standards	18	$45,648	20	$50,720
Lot Signage	3	$845	3	$845
Storm Drainage Facilities (in park)				

Appendix C
Detailed Park Improvements - Unit Costs/Av

ENR at January 2001
Used ENR Construction Cost Index
ENR Percent Increase

	15 Acre Community Park		20 Acre Sports Park	
Inlets	30	$33,900	40	$45,200
Connections	6	$10,980	8	$14,640
Lateral (to arterial)	4,725	$128,851	6,300	$171,801
Sewer Facilities				
Connection to Arterial	2	$5,640	2	$5,640
Line in Street	120	$2,636	120	$2,636
Line in Park	630	$11,932	630	$11,932
Fire Hydrant	4	$16,920	5	$21,150
Park Lighting				
Walkway Lighting Standards	252	$478,800	235	$446,880
Duct Work/Wiring	12	$13,920	5	$5,800
Walkway Electical Wiring	13,120	$262,400	8,830	$176,600
Water Facilities				
3" Meter	1	$2,820	1	$2,820
#" Backflow Device	1	$3,520	1	$3,520
Line in Street	120	$2,400	120	$2,400
Water Fountains	8	$7,920	12	$11,880
Fountain Lines in Park	1,000	$20,000	1,000	$20,000
Benches/Tables				
Concrete Picnic Tables	60	$68,400	30	$34,200
7' x 10' Cement Table Pads	60	$95,400	30	$47,700
Individual BBQ Grills	30	$14,817	10	$4,939
Concrete Benches	30	$14,772	15	$7,386
3' x 6' Concrete Bench Pads	30	$12,272	15	$6,136
Bleachers	0	$0	14	$69,020
Large Covered Picnic Ramada	2	$174,720	0	$0
Individual Covered Picnic Pad	20	$422,600	4	$84,520
User Electrical Service	2	$28,180	1	$14,090
Electrical Service per Group area	6	$10,560	4	$7,040
Game Courts				
Basketball Courts	2	$152,560	4	$305,120
Basketball Court Lighting	0	$0	4	$197,240
Fenced Tennis Courts	2	$169,080	6	$507,240
Tennis Court Lighting	0	$0	6	$295,860

Appendix C
Detailed Park Improvements - Unit Costs/Av

ENR at January 2001
Used ENR Construction Cost Index
ENR Percent Increase

	15 Acre Community Park		20 Acre Sports Park	
Baseball Field - Competitive	0	$0	6	$422,700
Ballfield Lighting	0	$0	4	$1,127,200
Baseball Field - Recreational	6	$126,780	0	$0
Soccer Field (crowned)	0	$0	4	$101,440
Skatepark	14,400	$381,600	21,600	$572,400
Pedestrian Walkway				
5' wide	1,680	$190,898	1,050	$119,312
6' wide	1,680	$206,170	1,050	$128,856
9' wide	2,940	$481,043	3,780	$618,484
Miscellaneous Flatwork	8,500	$193,205	4,000	$90,920
Small Park Signage	0	$0	0	$0
Large Park Signage	1	$22,730	1	$22,730
Bike Rack/Pad	9	$18,990	12	$25,320
Natural Element Improvement (Lake, etc)	1	$568,140	0	$0
Small concrete stage	2	$88,060	1	$44,030
Medium Ampitheater/bandshell	1	$211,350	0	$0

$7,786,119	$10,198,752
15	20
$519,075	$509,938
$7,786,119	$10,198,752
3	3
$23,358,357	$30,596,256
45	60

Appendix D

Calculation of ADUs as a Function of Detached Dwellings

Application of Development Impact Fee on Accessory Dwelling Units

The approach that is recommended for the calculation of DIFs for application to the construction of ADUs is to make it a function of the demand of one detached dwelling unit as is consistent with current State statutes. One can assume that the State identified them as function of a detached dwelling DIF as they more closely resemble detached dwellings, albeit smaller in size, as they are largely located within detached dwelling neighborhoods and will likely function as such.

The application of an ADU DIF as a function of a Detached Dwelling is consistent with the recently Chaptered Government Code, Title 7, Division 1, Chapter 4, Article 2 (attached as Attachments A to E). Section 65852.2, (f) (1).

> (3) (A) A local agency, special district, or water corporation shall not impose any impact fee upon the development of an accessory dwelling unit less than 750 square feet. *Any impact fees charged for an accessory dwelling unit of 750 square feet or more shall be charged proportionately in relation to the square footage of the primary dwelling unit.*

The following Table is an example of a proposed 750 square foot accessory dwelling unit to be constructed behind a 3,000 square foot primary dwelling unit. The 550 square feet ADU represents 25.0% of the 3,000 square foot primary unit (750 SF/3,000 SF = 25.0%). The City will also receive a spreadsheet application enabling staff to make other such calculations depending upon the facts presented within the ADU application.

Existing Mitigation Fee Act Findings. The five required Government Code §66000 findings within each chapter would apply to the imposition/collection of ADU DIFs. The fees collected would be used to finance the same projects limited for use in that DIF-defined area in each corresponding infrastructure chapter in the *2021-22 Development Impact Fee Calculation and Nexus Report*.

Square Feet of Attached Dwelling Unit (ADU)	750
Square Feet of Primary Dwelling Unit	3,000
Ratio of ADU to Primary Unit	25.0%
Adopted Detached Dwelling Unit Impact Fee	$56,246
ADU Impact Fee	$14,161.50

End of Report