City of San Diego
CITYWIDE PARK DEVELOPMENT IMPACT FEE NEXUS STUDY

Prepared for

The City *of* SAN DIEGO

Prepared by

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In association with

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DRAFT

Table of Contents

List of Figures

List of Tables

Appendices

Introduction

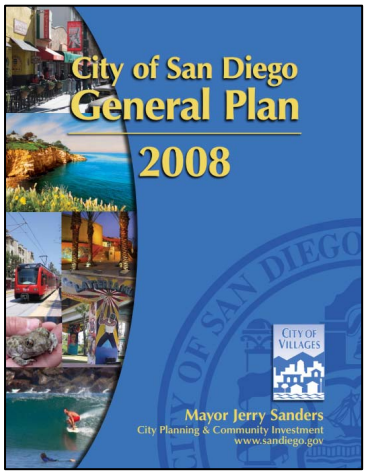
Purpose

The purpose of this Nexus Study is to document and summarize information supporting the development and implementation of an impact fee program to fund future park facilities needed to accommodate growth in the City of San Diego (City). The proposed "Citywide Park Development Impact Fee" (Park Impact Fee) will be used to fund a variety of park improvements to accommodate future growth, in a manner consistent with park standards set forth in the City's proposed *Parks Master Plan* (draft dated April 2020), incorporated herein by reference.

Background

The following section provides a brief summary of local actions, plans, initiatives and policies relevant to the development of the proposed Park Impact Fee.

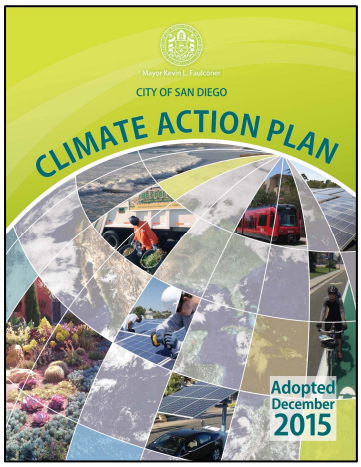
City of San Diego General Plan



The *City of San Diego General Plan* (General Plan) was adopted on March 10, 2008 by City Council Resolution R-303473. Portions of the General Plan have been updated over the years. The General Plan's *Recreation Element* (updated June 29, 2015) established standards for the development of population based-parks and recreation facilities, including recreation centers and aquatic complexes. Among the many goals and objectives contained in the *Recreation Element*, the City set forth a population-based park standard of at least 2.8 acres per 1,000 people. As the City has developed, this standard has caused both physical and practical challenges, including:

- Limits comprehensive planning for an interconnected Citywide parks system
- Urbanized areas lack available land
- Funding and staffing limits
- Can create further inequities in the distribution of parks throughout the City

City of San Diego Climate Action Plan



In December 2015, the City adopted a *Climate Action Plan* (CAP). Fundamentally, the CAP serves four primary purposes: (1) provides a roadmap to achieve GHG reductions, (2) conforms to California laws and regulations, (3) implements the City's General Plan, and (4) provides CEQA tiering (coverage) for new development's GHG emissions.

The CAP identified five specific and measurable strategies to reduce GHG emissions to achieve 2020 and 2035 targets:

- Energy & Water Efficient Buildings
- Clean & Renewable Energy
- Bicycling, Walking, Transit & Land Use
- Zero Waste (Gas & Waste Management)
- Climate Resiliency

Complete Communities Initiative

Complete Communities is a City initiative aimed at creating equitable, healthy and sustainable neighborhoods that are diverse, walkable, connected, safe and inclusive. The initiative specifically focuses on four key areas (housing, mobility, parks and infrastructure) to achieve its objectives. *Complete Communities* includes planning strategies that create incentives to build homes near transit, provide more mobility choices and enhance opportunities for places to walk, bike, relax and play. Thoughtful and inclusive planning initiatives and programs aim to create a healthy environment and thriving communities that will serve to enhance the quality of life for all residents, regardless of their background and identity. The *Play Everywhere* portion of the initiative focuses on parks, and sets forth a Citywide vision of providing opportunities for everyone to play and recreate throughout the City.

Proposed Parks Master Plan

The General Plan identifies the need for a new Parks Master Plan. The proposed *Parks Master Plan* (PMP) sets forth a long-range vision for the future of parks, recreation facilities, and programs across the City. The PMP, the central planning document for implementation of the *Play Everywhere* initiative, sets forth new park standards along with policies that are aligned with the City's vision for an interconnected Citywide park system with more options for play, exercise, and social interactions. The PMP proposes:

- A Citywide **interconnected park system** that fosters social interactions and play, and provides urban respite, enjoyable transportation options and an increased urban tree canopy cover.
- An **equitable parks system** that prioritizes investments in areas of need.
- **A plan that serves as a guide** for continued improvements and expansion resulting in a high quality, citywide system of parks, recreation facilities/programs, trails and open space that will meet the needs of San Diego citizens now and in the future.
- **A sustainable parks system** that addresses habitat protection and climate change related vulnerabilities.

The PMP, and associated revisions to the General Plan's *Recreation Element*, will align park planning with the City's vision to achieve Citywide goals of sustainability, resilience, equity, livability, and connectivity. In that regard, the PMP will also help implement the CAP by providing a framework for thriving public spaces to be enjoyed by residents and visitors throughout the City.

Statutory Framework

Local agencies may charge development impact fees pursuant to the *Mitigation Fee Act* (California Government Code §66000 et seq.) to finance the cost of public facilities or services needed to serve (or mitigate the effects of) future development. A development impact fee is a monetary exaction, not a property-related tax or special assessment within the meaning of *Proposition 218* (California Constitution, Article XIII). Impact fees are a commonly-used and well-accepted means of mitigating the impacts (or facility needs) created by future growth. Public agencies regularly levy impact fees on new development to fund a variety of public facilities, including roads, sewer and water facilities, libraries, parks, and schools.

The proposed Park Impact Fee has been developed and will be implemented in accordance with the *Mitigation Fee Act*. Prior to establishing, increasing, or imposing an impact fee, the *Mitigation Fee Act* requires the local agency to make the following findings:

- Identify the purpose of the fee (Government Code §66001(a)(1)).
- Identify the use for the fee and the facilities to be built (Government Code §66001(a)(2)).
- Determine a reasonable relationship between the fee's use and the type of development project on which the fee is imposed (Government Code §66001(a)(3)).
- Determine a reasonable relationship between the need for the public facility and the type of development project (Government Code §66001(a)(4)).
- Determine a reasonable relationship between the amount of the fee and the cost of the facility attributable to development (Government Code §66001(b)).

For purposes of the subject fee program, a statement of requisite findings is presented in the "Program Implementation" section of this report.

Fee Development Process

In preparation for the approval and implementation of the PMP, the City is developing a Park Impact Fee to provide a means by which future development can pay a fair share of its impacts on the overall park system based on defined Citywide park standards. The Park Impact Fee will fund a variety of park improvements to address the increased need for recreational resources created by population growth associated with future development.

The remainder of this report summarizes the process by which the Park Impact Fee was developed, as presented in the following sections:

- Impacts of Future Development
- Improvements to Reduce Impacts
- Fee Rate Calculation
- Program Implementation

Impacts of Future Development

Future Park Needs

Future development (and corresponding population growth) within the City will cause increased demand for park facilities. Without a corresponding investment in park facilities, this increased demand will result in sub-standard service levels, inadequate park coverage, and other recreational inequities. The proposed Park Impact Fee will be used to fund a variety of park improvements to accommodate future growth, in a manner consistent with City park standards set forth in the PMP.

Park Standards

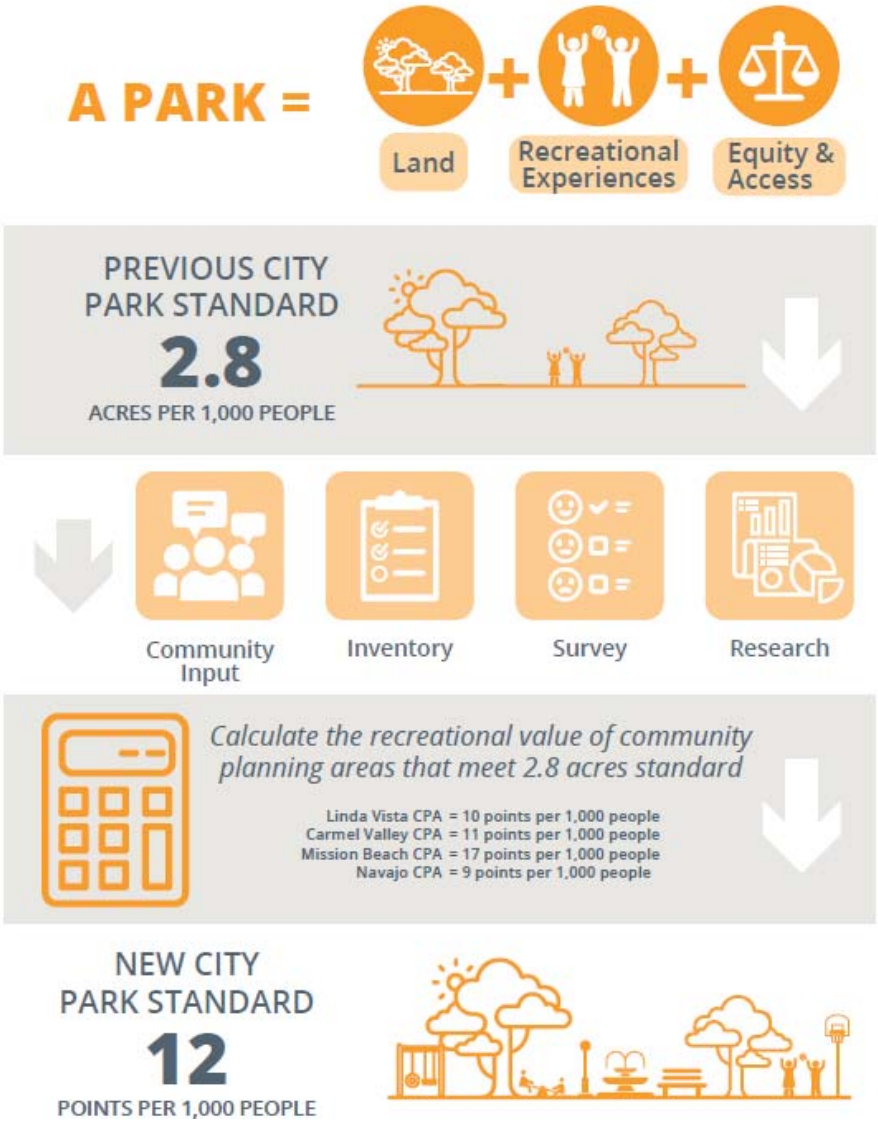
"The recreational value-based park standard (Value Standard) establishes a point value to represent recreational opportunities within local, resource-based, shoreline, and open space parks. Recreation value emphasizes the activities and experiences that residents can enjoy, rather than the amount of parkland in a given area. It measures the inherent benefits of park spaces – their ability to support active recreation and exercise; encourage socializing; link people to transit, bike facilities, trails, and active public areas; and invite activity throughout the day."
– Parks Master Plan

The PMP concludes that an acreage-based standard for population-based parks will become increasingly difficult to satisfy given limited available land and rising acquisition costs. The PMP includes a recreational value-based park standard (Value Standard) for traditional park facilities, with a focus on recreational amenities and features, as opposed to quantity of land. The Value Standard set forth in the PMP establishes a recreation value of 12 points per 1,000 people. As illustrated in **Figure 1** (on the following page), this value was derived from an analysis of existing parks in communities with parkland acreage that meet the former standard of 2.8 acres per 1,000 residents. The 12 points reflect scoring based on recreation amenities, space for programmed activity, connectivity to transit, and other factors.

The Value Standard excludes recreation centers and aquatic complexes, which will continue to be based on the following population-based standards:

- Recreation Centers (17,000 square feet per 25,000 people)
- Aquatic Complexes (1 aquatic complex per 50,000 people)

FIGURE 1: Development of Value Standard



SOURCE: Parks Master Plan

Improvements to Reduce Impacts

Standards-Based Program

In general, impact fee programs can be divided into one of two methodological categories, namely: (1) *Plan-based* programs, and (2) *Standards-based* programs. *Plan-based* programs are driven by a defined set of projects, whereas *standards-based* programs are focused on achieving a defined standard or level of service. Although both methodologies are equally valid, one may have certain advantages (or disadvantages) as compared to the other depending on the unique circumstances involved (e.g., type of improvements, state of current infrastructure, projected growth remaining, etc.).

The proposed Park Impact Fee has been developed under a *standards-based* methodology, using the standards set forth in the PMP. The benefits of using a *standards-based* methodology include:

- Greater flexibility to adapt to change
- Validity not tied to a static list of projects
- Citywide standard objectively measureable

Recreational Improvements

The PMP sets forth a series of factors and criteria for assigning points to various recreational opportunities and amenities, with the goal of achieving of 12 points per 1,000 people under the Value Standard. As previously noted, the 12 points reflect scoring based on recreation amenities, space for programmed activity, connectivity to transit, and other factors. These recreational opportunities and amenities, and corresponding point values, are summarized in Appendix D of the PMP.

The Value Standard, combined with the population-based standard (for recreation centers and aquatic complexes), will serve as the basis for calculating a unit cost for the Park Impact Fee.

Fee Rate Calculation

Unit Cost Analyses

An analysis of 27 recently constructed (or soon to be constructed) "sample" parks in the City was completed. These parks range in both size and location throughout the City, with each providing a diverse set of amenities. Each of the identified parks was analyzed in conformity with the Value Standard set forth in the PMP to determine total number of points assigned to the park. **Table 1** below summarizes the results of this analysis.

TABLE 1: Sample Parks & Recreational Values

Sample Park	Community Planning Area	Park Size (Acres)	Recreational Value (Points)
Beyer Park	San Ysidro	8.0	41.3
Canon Street Pocket Park	Peninsula	0.7	6.0
Central Avenue Mini Park	Mid-City/City Heights	0.6	5.0
Coast View Park	Torrey Hills	0.9	10.0
Cesar Solis Community Park	Otay Mesa	20.4	35.0
City Heights Square Mini Park	Mid-City/City Heights	0.3	4.0
Creekside Park	Mission Valley	1.3	8.0
Elizabeth Rabbitt Neighborhood Park	Del Mar Mesa	3.7	10.5
Del Mar Mesa Southern Multi-Use Trail	Del Mar Mesa	3.0	8.5
Del Sur Neighborhood Park	Black Mountain Ranch	4.0	22.0
Fairbrook Neighborhood Park	Scripps Ranch	3.4	12.5
Franklin Ridge Pocket Park	Mission Valley	0.2	2.0
Hawk Pocket Park	Encanto	0.6	19.0
La Paz Mini Park	Encanto	0.6	10.0
Linda Vista Skate Park	Linda Vista	1.1	12.0
North Park Mini Park	Greater North Park	0.5	10.0
Ocean Beach Gateway Mini Park	Ocean Beach	0.2	35.0
Olive Grove Community Park	Clairemont Mesa	9.2	22.0
Olive St Park	Uptown	0.4	9.0
Pacific Highlands Ranch Community Park	Pacific Highlands Ranch	12.5	35.0
Park de la Cruz Skate Park	Mid-City/City Heights	7.3	15.0
Riviera Del Sol Neighborhood Park	Otay Mesa	4.7	30.0
Southwest Neighborhood Park	Otay Mesa Nestor	11.6	46.0
Torrey Meadows Neighborhood Park	Torrey Highlands	5.0	20.5
Trail for All People	Black Mountain Ranch	0.0	14.0
Waldo D. Waterman Mini Park	Uptown	0.2	5.0
Wightman Street Neighborhood Park	Mid-City/City Heights	1.0	14.0

SOURCE: See **Tables 1 & 2** contained in *Parks Master Plan: Development Impact Fee Program – Unit Cost Analysis* (Chen Ryan Associates; July 1, 2020), included as **Appendix A**.

Cost estimates were compiled for each of the sample parks to facilitate calculation of a cost per point of Recreational Value, and corresponding cost per capita (based on the PMP's defined Value Standard of 12 points per 1,000 people). The following four components used to develop the sample park cost estimates: construction cost, construction contingency, right-of-way cost, and administration cost. **Table 2** below summarizes the estimated costs for each sample park and the resultant unit costs.

TABLE 2: Sample Park Costs & Resultant Unit Costs

Sample Park	Recreational Value (Points)	Estimated Cost ($)	Unit Costs ($ / point)	Unit Costs ($ / capita) [1]
Beyer Park	41.3	$19,282,526	$466,889	$5,603
Canon Street Pocket Park	6.0	$3,372,736	$562,123	$6,745
Central Avenue Mini Park	5.0	$2,046,478	$409,296	$4,912
Coast View Park	10.0	$4,644,479	$464,448	$5,573
Cesar Solis Community Park	35.0	$29,760,452	$850,299	$10,204
City Heights Square Mini Park	4.0	$1,205,389	$301,347	$3,616
Creekside Park	8.0	$3,176,704	$397,088	$4,765
Elizabeth Rabbitt Neighborhood Park	10.5	$4,305,512	$410,049	$4,921
Del Mar Mesa Southern Multi-Use Trail	8.5	$4,530,249	$532,970	$6,396
Del Sur Neighborhood Park	22.0	$8,027,026	$364,865	$4,378
Fairbrook Neighborhood Park	12.5	$7,926,578	$634,126	$7,610
Franklin Ridge Pocket Park	2.0	$540,055	$270,027	$3,240
Hawk Pocket Park	19.0	$3,156,123	$166,112	$1,993
La Paz Mini Park	10.0	$2,616,175	$261,617	$3,139
Linda Vista Skate Park	12.0	$5,469,438	$455,787	$5,469
North Park Mini Park	10.0	$2,316,327	$231,633	$2,780
Ocean Beach Gateway Mini Park	35.0	$2,805,954	$80,170	$962
Olive Grove Community Park	22.0	$15,052,418	$684,201	$8,210
Olive St Park	9.0	$2,913,452	$323,717	$3,885
Pacific Highlands Ranch Community Park	35.0	$27,167,357	$776,210	$9,315
Park de la Cruz Skate Park	15.0	$23,920,273	$1,594,685	$19,136
Riviera Del Sol Neighborhood Park	30.0	$12,069,919	$402,331	$4,828
Southwest Neighborhood Park	46.0	$28,747,010	$624,935	$7,499
Torrey Meadows Neighborhood Park	20.5	$11,870,454	$579,047	$6,949
Trail for All People	14.0	$517,007	$36,929	$443
Waldo D. Waterman Mini Park	5.0	$1,820,709	$364,142	$4,370
Wightman Street Neighborhood Park	14.0	$3,981,118	$284,366	$3,412
Average			$464,052	$5,569

[1] Based on Value Standard of 12 points per 1,000 people.

SOURCE: See **Tables 3 & 4** contained in *Parks Master Plan: Development Impact Fee Program – Unit Cost Analysis* (Chen Ryan Associates; July 1, 2020), included as **Appendix A**.

As previously noted, the Value Standard does not include recreation centers and aquatic complexes. As the City has only built one recreation center in recent years, and has not built an aquatic complex in the last 20 years, there are not enough relevant sample projects to complete a cost analysis on City projects. Instead, the cost to construct and implement a recreational center and an aquatic complex was derived from the City's Parks Cost Estimation Tool and further validated based on the development of similar projects throughout the state. **Table 3** below summarizes the estimated costs for recreational centers and aquatic complexes and the resultant unit costs.

TABLE 3: Unit Costs for Recreation Centers & Aquatic Complexes

Facility	Estimated Cost ($)	Population Served	Unit Cost ($ / capita)
Recreation Center	$17,299,848	25,000	$692
Aquatic Complex	$16,773,628	50,000	$335

SOURCE: See **Tables 5 & 6** contained in *Parks Master Plan: Development Impact Fee Program – Unit Cost Analysis* (Chen Ryan Associates; July 1, 2020), included as **Appendix A**.

Based on the unit costs derived for Recreational Value, Recreation Centers, and Aquatic Complexes, a total combined programmatic unit cost (per capita) was calculated as presented in **Table 4** below.

TABLE 4: Total Combined Unit Cost (for All Park Facilities)

Facility	Unit Cost ($ / capita)
Park Recreational Value	$5,569
Recreation Center	$692
Aquatic Complex	$335
Total	$6,596

Maximum Allowable Fee Rates

This Nexus Study and accompanying technical analyses support a maximum allowable fee rate of $6,596 per capita. This amount assumes that programmatic improvements will be implemented Citywide in a manner consistent with the goals, objectives and criteria set forth in the PMP. This assumption is both fair and reasonable, and is consistent with achieving overall program objectives in a fiscally prudent and cost-effective manner.

The fee applicable to a given project will depend on the incremental population growth reasonably attributable to the project. Nationally, the average household size is approximately 2.52 persons (*United States Census Bureau*, "Table HH-6," November 2019). Locally, the City's average household size is estimated at 2.66 persons (*San Diego Association of Governments* "Series 13 Regional Growth Forecast"). Based on this estimated average household size in the City, the corresponding maximum allowable fee would be $17,545 per residential unit (in aggregate).

Recognizing that household size (persons) may vary by residential project type (land use) and project size (unit square footage), the City completed a detailed study to determine: (1) the average household size by project type (single-family or multi-family residential), and (2) the correlation between household size and residential unit square footage for each project type. This study (included as **Appendix B**) concluded that such a correlation exists and recommended a fee that is scaled based on the size of each residential unit. **Table 5** on the following page presents the maximum (scaled) fee rates per residential unit based on the criteria, findings and recommendations of that study.

TABLE 5: Maximum Scaled Fee Rates

SINGLE-FAMILY RESIDENTIAL		
Unit Size (sq ft)	Scale Factor	Max. Fee Rate
2,501<	100%	$22,426
2,451-2,500	99%	$22,202
2,401-2,450	98%	$21,978
2,351-2,400	97%	$21,754
2,301-2,350	96%	$21,529
2,251-2,300	94%	$21,081
2,201-2,250	93%	$20,857
2,151-2,200	92%	$20,632
2,101-2,150	91%	$20,408
2,051-2,100	90%	$20,184
2,001-2,050	88%	$19,735
1,951-2,000	87%	$19,511
1,901-1,950	86%	$19,287
1,851-1,900	85%	$19,062
1,801-1,850	83%	$18,614
1,751-1,800	82%	$18,390
1,701-1,750	81%	$18,165
1,651-1,700	80%	$17,941
1,601-1,650	78%	$17,493
1,551-1,600	77%	$17,268
1,501-1,550	76%	$17,044
1,451-1,500	75%	$16,820
1,401-1,450	74%	$16,596
1,351-1,400	72%	$16,147
1,301-1,350	71%	$15,923
1,251-1,300	70%	$15,698
1,201-1,250	69%	$15,474
1,151-1,200	67%	$15,026
1,101-1,150	66%	$14,801
1,051-1,100	65%	$14,577
1,001-1,050	64%	$14,353
>1,000	63%	$14,129

MULTI-FAMILY RESIDENTIAL		
Unit Size (sq ft)	Scale Factor	Max. Fee Rate
1,251<	100%	$17,150
1,201-1,250	99%	$16,978
1,151-1,200	96%	$16,464
1,101-1,150	94%	$16,121
1,051-1,100	92%	$15,778
1,001-1,050	89%	$15,263
951-1,000	87%	$14,920
901-950	84%	$14,406
851-900	82%	$14,063
801-850	80%	$13,720
751-800	77%	$13,205
701-750	75%	$12,862
651-700	72%	$12,348
601-650	70%	$12,005
551-600	68%	$11,662
501-550	65%	$11,147
>500	64%	$10,976

SOURCE: Based on factors and information contained in *City of San Diego DIF Program – Residential Scaling Methodology* (Chen Ryan Associates; draft dated July 10, 2020), included as **Appendix B**.

Annual Cost-Indexing

The unit costs contained in this report are based on a "Los Angeles Construction Cost Index" (LACCI) of 12,144.49 (*Engineering News Record*; January 2020). It is recommended that the fee rates be indexed annually in order to keep up with future increases in the cost of construction.

Program Implementation

Statement of Findings

The following information is provided to assist the City with satisfaction of the requisite statutory findings contained in §66001 of the *Mitigation Fee Act* with regard to implementation of the proposed Park Impact Fee:

Purpose of the Fee. The purpose of the fee is to fund park and recreational improvements needed to serve additional residential populations that result from new development in the City.

Use of the Fee. The fee will be used to fund park and recreation improvements throughout the City in a manner consistent with standards-based planning criteria set forth in the Parks Master Plan.

Reasonable Use (Benefit). Future development will require additional investments in park and recreational facilities to maintain defined Citywide park standards. As set forth in the Parks Master Plan, access to a wide variety of recreational resources throughout the City is key to a successful Citywide parks system. The fees would be used solely for this purpose.

Reasonable Need (Burden). Future development will require additional investments in park and recreational facilities to maintain defined Citywide park standards. As set forth in the Parks Master Plan, access to a wide variety of recreational resources throughout the City is key to a successful Citywide parks system. As new development will necessitate the need for park and recreation investments, the burdens posed are reasonably related to the use of the fee.

Reasonable Apportionment. The reasonable relationship between the fee for a specific project and the cost of improvements attributable to the project is described in this Nexus Study and is consistent with the standards-based planning criteria set forth in the Parks Master Plan.

Periodic Reporting

Provisions set forth in §66001(c) and §66006(b)(1)) of the *Mitigation Fee Act* require that each agency imposing an impact fee make specific information available to the public annually within 180 days of the last day of the fiscal year. This information includes the following:

- A brief description of the type of fee in each account or fund;
- The amount of the fee;
- The beginning and ending balance of the account or fund.
- The amount of the fees collected and the interest earned;
- An identification of each public improvement on which fees were expended and the amount of each expenditure;
- An identification of the approximate date in which the construction of the public improvement will commence;
- A description of any inter-fund transfer or loan and the public improvement on which the transferred funds will be expended; and
- The amount of the funds made and any allocations of unexpended fees that are not refunded.

In addition, the provisions set forth in §66001(d) of the *Mitigation Fee Act* require that each agency imposing an impact fee make specific findings every five years following receipt of monies, to the extent that such monies are deposited and remain unspent.

Other Considerations

Future Project Economics/Viability

The proposed fee will have an effect on future development. To the extent that the fee provides a mechanism by which development can mitigate, in whole or in part, the development's impacts, projects could benefit by reduced processing times, project costs and overall project certainty. Some projects could be

adversely impacted by the proposed fee due to project type, size or other factors. While this Nexus Study identifies the maximum allowable fees that could be charged, policy considerations, as well as likely other funding sources (discussed below), are relevant factors in considering what the actual adopted fee could be.

Supplemental Funding

The fee rate presented in this Nexus Study represents the maximum fee rate supported by the underlying costs analyses. This Nexus Study in no way precludes the use of other funding to augment, defray or otherwise reduce program costs reasonably attributable to future growth.

Sources of additional revenue may include, but are not limited to:

- General fund
- State and federal grant monies
- General and special taxes (including property taxes, other sales/use taxes)

The existence and availability of additional funding sources may help the City leverage their other infrastructure dollars. For example, grant programs often require a high level of difficult-to-find matching funds. Having a Park Impact Fee demonstrates a committed plan of action for facility improvements and the revenues can provide a ready source for matching funds. Both of these factors can provide a competitive edge when vying for grants or other similar allocations.

APPENDICES

APPENDIX A

Parks Master Plan: Development Impact Fee Program – Unit Cost Analysis

CHEN RYAN

TO:	Heidi Vonblum, City of San Diego
FROM:	Stephen Cook, PE, Chen Ryan Associates
DATE:	July 6, 2020
RE:	Parks Master Plan: Development Impact Fee Program – Unit Cost Analysis

1. Introduction

The purpose of this memorandum is to establish the cost for new development within the City of San Diego to pay their fair-share to maintain the level or service currently provided by the City's Park System, as the region grows and population expands. The fair-share cost was derived based on the standards and criteria outlined in the City of San Diego's Parks Master Plan – Value Standard, which establishes a recreational value, based on a point system, in which residents should have access to. The fair-share cost to develop or enhance park space was then normalized on a per resident basis to establish an overall unit cost per new resident. The unit cost will be assessed to new development through the Parks component of the City's Development Impact Fee (DIF) Program. Park DIFs will be assessed based on the projected population in which new residential development projects will house. Therefore, the payment of the Park DIF will allow developments to meet their recreational requirements, outlined by the City's General Plan, without providing on-site recreational amenities.

1.1. Project Background

The City of San Diego is currently undergoing a process to completely update their DIF Program. The biggest overall change to the Updated DIF Program from the previous program is that the fee and associated nexus studies, will now be calculated, collected, and allocated based on asset class instead of by community. Deriving and implementing the DIF program based on asset class allows the City to collect and allocate fees on a citywide basis to help fund and implement citywide assets that are shared by multiple communities. Collecting at a citywide level will also allow for funds to accrue faster, since they will be collected from multiple communities instead of just one. This will allow for needed infrastructure to be funded and implemented sooner.

Implementation of a Parks Fee Program will be the first asset class to be put into place under the Updated DIF Program. The Parks Fee Program will be implemented with the fourth coming adoption of the City's Parks Master Plan Update and associated General Plan Recreation Element Amendment, projected for July 2020. The updated parks component of the City's DIF program will be based on the new recreational standards outlined within the Parks Master Plan Update and General Plan Amendment. The parks facilities included within the City's previous DIF Program will be removed with the adoption of this program.

1.2. Purpose

San Diego Municipal Code §142.0640 provides for the imposition and administration of development impact fees. Development impact fee programs are generally established and utilized to provide new or expanded public capital infrastructure that is needed to serve future development. The fees are established based on a methodology and calculation derived from the cost of the public facilities needed and the nature and size of the proposed development, also known as establishing a nexus. A "rational nexus" must be established between the fee and the needs created by future development and the benefits incurred by the development. The nexus identifies a fair-share cost (or unit cost) of the needed capital infrastructure that can be allocated to individual developments based on a standard metric (e.g., project square footage,

generated vehicle miles traveled (VMT), population and/or projected employment). The fees collected through a DIF program cannot be used to improve or mitigate current needs or deficiencies, only those associated with future growth.

2. Methodology

This section documents the standards and methods that were utilized to determine the fair-share value that new development will need to contribute to maintain the current level of service for parks within the City of San Diego.

2.1. Standards

The City has historically used a standard of 2.8 acres per 1,000 residents for community parks, neighborhood parks, miniparks, and joint use facilities. As the City continues to grow through infill development limited open land and rising acquisition costs make it increasingly difficult to meet this acreage-based standard. Reliance on development impact fees to meet the acreage-based standard limits resources to invest in existing parks and expand recreational opportunities in neighborhoods with fewer parks.

However, with the implementation of the City's new Park Master Plan, a Recreational Value-Based Park (Value Standard) standard supplants the previous acreage standard. The Value Standard establishes a point value to represent recreational opportunities within parks. Recreational value emphasizes the activities and experiences that residents can enjoy, rather than the parkland in a given area. The Value Standard is based on four communities that in 2020 met the previous acreage standard of 2.8 acres per 1,000 residents. These communities were scored on their recreational amenities, yielding a recreation value of **12 points per 1,000 people** that is now applied Citywide. The points reflect the ability of parks to meet the needs of diverse users; promote physical activity; create a safe, active environment; and connect to the Citywide transportation and recreation network. A recreational value of 12 points per 1,000 people represents a range of recreation experiences comparable to the opportunities available to residents in communities that previously achieved the acreage-based standard. **Attachment A** provides a description of how the recreational value scoring was developed and will be applied.

2.2. Fair-Share Cost and Unit Cost

With the implementation of the City's Parks Master Plan, new development will be required to provide 12 Recreational Value points per 1,000 residents that are projected to be housed within their project site. To understand what the fair-share cost new development would need to pay to achieve this standard, A unit cost analysis was conducted to determine what the average cost would be to implement one Recreational Value point within the City, and then normalizing that cost based on the number of residents it would need to serve. To determine this unit cost, several sample parks that have either recently been developed or are in the development process were analyzed. The Recreational Value Score was calculated for each sample park (further described in Section 2.3), then the cost to construct and implement the sample park (further described in Section 2.4) was divided by the park's Recreational Value Score to determine the overall cost per point for the park. Finally, the per resident unit costs for each of the sample parks were derived and averaged together to determine a citywide unit cost.

2.3. Recreational Value Scoring

As noted previously, the Value Standard establishes a point value to represent the recreational opportunities within local parks. Recreation value emphasizes the activities and experiences that residents

can enjoy, rather than the amount of parkland in a given area. It measures the inherent benefits of park spaces – their ability to support active recreation and exercise; encourage socializing; link people to transit, bike facilities, trails, and active public areas; and invite activity throughout the day.

Since the Value Standard stresses the amenities and features within a space, rather than its size alone, the standard recognizes the value of parks appropriate for diverse communities, from a large field park for active recreation to trails within a regional park or a small, lively public urban gathering space. A focus on value also recognizes opportunities to upgrade existing parks by adding amenities and introducing new recreational activities. The Recreational Value scoring criteria, established by the City's Parks Master Plan, is provided in **Attachment B**.

2.4. Cost

Four components were accounted for when developing the sample park cost estimates: construction cost, construction contingency, right-of-way cost, and administration cost. Each cost component and the sources in which the costs were derived from are further explained below.

Construction Cost

The construction cost for each sample project was derived one of three ways. For completed parks the actual cost to construct the park was utilized. For parks that are under construction or in the bid process, the construction cost estimate or bid estimate was used, both of these are provided in **Attachment C**. For sample parks where construction cost data could not be provided, a planning level cost estimate was derived based on the City of San Diego Park Cost Estimation Tool, which is provided in **Attachment D**.

Contingency

A contingency of 20% of the park construction cost was assumed for each sample park. The 20% contingency is based on City's best practices as well as engineering judgment, and is a common number assumed for the construction of public facilities.

Right-of-Way Cost

Right-of-way costs for each sample park were derived based on the average land value (based on acres) for the Community Planning Area in which the sample park is located. The land values were derived based on the City's Park Costing Tool, which is provided in Attachment D. The cost per acre for the respective community was then applied to the total acreage of the sample park to determine the overall right-of-way costs for the park. However, since a portion of the fees collected will go towards improving existing parks (by increasing their existing Recreational Value) and some parks will be developed on land in which the City already owns, only 40% of the total right-of-way costs were assumed for each sample park.

Administration Cost

The administrative cost is the cost for City staff to process, permit, and oversee the construction of the sample park. Administrative costs for each sample park were calculated based on the cost of City staff hours for each specific project and were derived from City of San Diego records. The administrative cost for each project is also provided in Attachment C.

3. Unit Cost Analysis

This section outlines the analyses and calculations utilized to develop the Recreational Value point unit cost within the City, as well as the associated fair-share unit cost per resident.

3.1. Sample Parks

To ensure that the unit costs were derived from realistic and implementable parks, a series of recently constructed or soon to be constructed parks (27 total) were identified by the City of San Diego as "Sample Parks." The sample parks range in both size and location throughout the City, with each providing a diverse set of amenities. **Table 1** displays the sample parks that were utilized to develop the unit cost. The table also provides the current phase of implementation the project is in (as of the date of this memo), the date in which the project was completed or is anticipated to be completed, and the community planning area in which the sample park is located. The site design plan for each sample park is provide in **Attachment E**.

Table 1: Sample Parks

Park Name	Estimated/Actual Completion Date	Phase of Implementation	Community Planning Area
Beyer Park	September, 2022	Design	San Ysidro
Canon Street Pocket Park	February, 2021	Design	Peninsula
Central Avenue Mini Park	July 1, 2016	Completed	Mid-City/City Heights
Coast View Park	May 3, 2016	Completed	Torrey Hills
Cesar Solis Community Park	September 19, 2018	Completed	Otay Mesa
City Heights Square Mini Park	June 30, 2016	Completed	City Heights/Mid-City
Creekside Park	September 1, 2020	Construction	Mission Valley
Elizabeth Rabbitt Neighborhood Park	May 11, 2018	Completed	Del Mar Mesa
Del Mar Mesa Southern Multi-Use Trail	TBD	Planning	Del Mar Mesa
Del Sur Neighborhood Park	August 25, 2018	Completed	Black Mountain Ranch
Fairbrook Neighborhood Park	November, 2021	Design	Scripps Ranch
Franklin Ridge Pocket Park	February, 2020	Construction	Mission Valley
Hawk Pocket Park	July 25, 2018	Completed	Encanto
La Paz Mini Park	June, 2021	Design	Encanto
Linda Vista Skate Park	January 16, 2018	Completed	Linda Vista
North Park Mini Park	August, 2020	Bid & Award	Greater North Park
Ocean Beach Gateway Mini Park	December 27, 2016	Completed	Ocean Beach
Olive Grove Community Park	April. 2024	Design	Clairemont Mesa
Olive St Park	March, 2023	Design	Uptown
Pacific Highlands Ranch Community Park	April 10, 2019	Completed	Pacific Highlands Ranch
Park de la Cruz Skate Park	January 17, 2018	Completed	Mid-City/City Heights
Riviera Del Sol Neighborhood Park	August, 2021	Design	Otay Mesa
Southwest Neighborhood Park	TBD	Planning	Otay Mesa Nestor
Torrey Meadows Neighborhood Park	December 14, 2017	Completed	Torrey Highlands
Trail for All People	September 7, 2016	Completed	Black Mountain Ranch
Waldo D. Waterman Mini Park	October 25, 2017	Completed	Uptown
Wightman Street Neighborhood Park	August 29, 2017	Completed	Mid-City/City Heights

3.2. Park Recreational Value Score

Table 2 displays the size and Recreational Value score for each sample park. The Recreational Value scores were derived using the Recreational Value scoring system outlined in the City's Parks Master Plan Update

(provided in Attachment A) and review of the sample park site plans (provided in Attachment E). Individual scoring sheets for each sample project are provided in **Attachment F**. As shown in the table, there is little to no correlation between park size and its Recreational Value score. Some parks, such as Beyer Park are 8 acres in size and have a Recreational Value Score of 41, while other similar sized parks, such as Olive Grove Community Park (9.2 Acres) have a recreational value score of 22. This confirms the intent of the Recreational Value system and shows the diversity in which recreation each park can provide.

Table 2: Sample Park Recreational Value Scores

Sample Park	Park Size (Acres)	Recreational Value Score
Beyer Park	8.0	41.3
Canon Street Pocket Park	0.7	6.0
Central Avenue Mini Park	0.6	5.0
Coast View Park	0.9	10.0
Cesar Solis Community Park	20.4	35.0
City Heights Square Mini Park	0.3	4.0
Creekside Park	1.3	8.0
Elizabeth Rabbitt Neighborhood Park	3.7	10.5
Del Mar Mesa Southern Multi-Use Trail	3.0	8.5
Del Sur Neighborhood Park	4.0	22.0
Fairbrook Neighborhood Park	3.4	12.5
Franklin Ridge Pocket Park	0.2	2.0
Hawk Pocket Park	0.6	19.0
La Paz Mini Park	0.6	10.0
Linda Vista Skate Park	1.1	12.0
North Park Mini Park	0.5	10.0
Ocean Beach Gateway Mini Park	0.2	35.0
Olive Grove Community Park	9.2	22.0
Olive St Park	0.4	9.0
Pacific Highlands Ranch Community Park	12.5	35.0
Park de la Cruz Skate Park	7.3	15.0
Riviera Del Sol Neighborhood Park	4.7	30.0
Southwest Neighborhood Park	11.6	46.0
Torrey Meadows Neighborhood Park	5.0	20.5
Trail for All People	0.0	14.0
Waldo D. Waterman Mini Park	0.2	5.0
Wightman Street Neighborhood Park	1.0	14.0

3.3. Cost

As noted previously in Section 2.4, four factors went into establishing the cost to implement a park: construction cost, administrative cost, contingency, and right of-way. The individual costs of these components are displayed in **Table 3** for each sample park. Attachment C provides the costing information in which City staff could identify for the sample parks. If actual costing information for a Sample Park could not be found, then a planning level cost estimate was derived using the City's Park Costing Tool. Planning level cost worksheets are provided in Attachment F, along with the Recreational Value Score.

Table 3: Sample Park Cost to Implement

Sample Park	Construction	Administration	Contingency	Right-of-Way	Implementation Cost
Beyer Park	$9,576,786	$415,915	$1,915,357	$7,374,467	$19,282,526
Canon Street Pocket Park	$1,163,131	$208,374	$232,626	$1,768,605	$3,372,736
Central Avenue Mini Park	$677,157	$459,320	$135,431	$774,570	$2,046,478
Coast View Park	$2,034,548	$813,819	$406,910	$1,389,202	$4,644,479
Cesar Solis Community Park	$13,942,405	$842,721	$2,788,481	$12,186,846	$29,760,452
City Heights Square Mini Park	$437,549	$293,045	$87,510	$387,285	$1,205,389
Creekside Park	$798,441	$319,376	$159,688	$1,899,199	$3,176,704
Elizabeth Rabbitt Neighborhood Park	$2,053,175	$448,997	$410,635	$1,392,706	$4,305,512
Del Mar Mesa Southern Multi-Use Trail	$2,811,058	$34,556	$562,212	$1,122,423	$4,530,249
Del Sur Neighborhood Park	$3,196,060	$1,278,424	$639,212	$2,913,330	$8,027,026
Fairbrook Neighborhood Park	$4,452,569	$249,677	$890,514	$2,333,818	$7,926,578
Franklin Ridge Pocket Park	$147,614	$59,046	$29,523	$303,872	$540,055
Hawk Pocket Park	$2,008,096	$432,426	$401,619	$313,982	$3,156,123
La Paz Mini Park	$1,762,356	$187,365	$352,471	$313,982	$2,616,175
Linda Vista Skate Park	$3,319,726	$490,202	$663,945	$995,565	$5,469,438
North Park Mini Park	$408,815	$475,501	$81,763	$1,350,247	$2,316,327
Ocean Beach Gateway Mini Park	$1,188,015	$475,206	$237,603	$905,130	$2,805,954
Olive Grove Community Park	$6,400,050	$186,297	$1,280,010	$7,186,061	$15,052,418
Olive St Park	$999,768	$331,023	$199,954	$1,382,707	$2,913,452
Pacific Highlands Ranch Community Park	$9,436,814	$2,730	$1,887,363	$15,840,450	$27,167,357
Park de la Cruz Skate Park	$11,678,413	$1,119,652	$2,335,683	$8,786,525	$23,920,273
Riviera Del Sol Neighborhood Park	$7,510,138	$226,104	$1,502,028	$2,831,649	$12,069,919
Southwest Neighborhood Park	$12,138,630	$117,373	$2,427,726	$14,063,282	$28,747,010
Torrey Meadows Neighborhood Park	$3,407,136	$404,089	$681,427	$7,377,802	$11,870,454
Trail for All People	$256,897	$208,730	$51,379	$0	$517,007
Waldo D. Waterman Mini Park	$475,002	$490,218	$95,000	$760,489	$1,820,709
Wightman Street Neighborhood Park	$2,007,806	$421,998	$401,561	$1,149,752	$3,981,118

3.4. Cost Per Point

The cost per point was derived for each sample park by dividing the total implementation cost, shown in Table 3, by the parks' Recreational Value score, shown in Table 2. **Table 4** displays the associated cost per point for each sample park. Additionally, since the revised City Park Standard is to develop 12 Recreational Value points of park space for every 1,000 people, a cost per resident served (i.e. the unit cost) was also derived using the following formula: (Cost Per Point X 12 Points) / 1,000 residents. This information is displayed in the last column of Table 4.

Table 4: Cost Per Recreational Value point for Sample Parks

Sample Park	Recreational Value Score	Implementation Cost	Cost Per Recreational Value point	Cost Per Resident
Beyer Park	41.3	$19,282,526	$466,889	$5,603
Canon Street Pocket Park	6.0	$3,372,736	$562,123	$6,745
Central Avenue Mini Park	5.0	$2,046,478	$409,296	$4,912
Coast View Park	10.0	$4,644,479	$464,448	$5,573
Cesar Solis Community Park	35.0	$29,760,452	$850,299	$10,204
City Heights Square Mini Park	4.0	$1,205,389	$301,347	$3,616
Creekside Park	8.0	$3,176,704	$397,088	$4,765
Elizabeth Rabbitt Neighborhood Park	10.5	$4,305,512	$410,049	$4,921
Del Mar Mesa Southern Multi-Use Trail	8.5	$4,530,249	$532,970	$6,396
Del Sur Neighborhood Park	22.0	$8,027,026	$364,865	$4,378
Fairbrook Neighborhood Park	12.5	$7,926,578	$634,126	$7,610
Franklin Ridge Pocket Park	2.0	$540,055	$270,027	$3,240
Hawk Pocket Park	19.0	$3,156,123	$166,112	$1,993
La Paz Mini Park	10.0	$2,616,175	$261,617	$3,139
Linda Vista Skate Park	12.0	$5,469,438	$455,787	$5,469
North Park Mini Park	10.0	$2,316,327	$231,633	$2,780
Ocean Beach Gateway Mini Park	35.0	$2,805,954	$80,170	$962
Olive Grove Community Park	22.0	$15,052,418	$684,201	$8,210
Olive St Park	9.0	$2,913,452	$323,717	$3,885
Pacific Highlands Ranch Community Park	35.0	$27,167,357	$776,210	$9,315
Park de la Cruz Skate Park	15.0	$23,920,273	$1,594,685	$19,136
Riviera Del Sol Neighborhood Park	30.0	$12,069,919	$402,331	$4,828
Southwest Neighborhood Park	46.0	$28,747,010	$624,935	$7,499
Torrey Meadows Neighborhood Park	20.5	$11,870,454	$579,047	$6,949
Trail for All People	14.0	$517,007	$36,929	$443
Waldo D. Waterman Mini Park	5.0	$1,820,709	$364,142	$4,370
Wightman Street Neighborhood Park	14.0	$3,981,118	$284,366	$3,412
Average			$464,052	$5,569

As shown in Table 4, the average cost to implement one Recreational Value point of park space within the City of San Diego is $464,052 which equates to a unit cost of $5,569 per resident served. Therefore, the

Parks component of the City's DIF Program should assess new developments within the City of San Diego a fee of $5,568.63 per resident in which it can house.

4. Recreation and Aquatic Complex

As noted in the City's Parks Master Plan Update (provided in Attachment A) recreation and aquatic complex are not included within the Recreational Value point system because they have their own standards outlined within the City's General Plan. As noted in Table RE-3 of the City of San Diego General Plan Recreation Element, a recreation center (minimum 17,000 SF) serves a population of 25,000 people. An aquatic complex (minimum 25-meter by 25-yard pool) serves a population of 50,000 people. Similar to parks, new developments with the City are also required to meet this standard, either by building a facility or paying into the City's DIF Program. Therefore, the parks component of the Updated DIF Program, and associated unit cost, should account for these standards as well.

4.1. Sample Cost

The City of San Diego has only built one recreation center in recent years (Pacific Highlands Ranch) and has not build an aquatic complex in the last 20 years. Therefore, the use of sample projects for costing purposes is very limited. Instead, the cost to construct and implement a recreational center and aquatic center was derived from the City's Parks Cost Estimation Tool and was then validated based on the development of similar projects throughout the state. Costing information is provided in **Attachment F**. **Table 5** displays the assumed cost to construct and implement both a recreation center and aquatic center within the City of San Diego.

Table 5: Cost to Construct Recreation and Aquatic Complex

Facility	Construction	Administration[1]	Contingency	Right-of-Way[2]	Implementation Cost
Recreation Center	$7,905,000	$3,162,000	$1,581,000	$4,651,848[3]	$17,299,848
Aquatic Complex	$4,668,707	$1,867,482	$933,7412	$9,303,697[4]	$16,773,628

Notes:
[1]An administrative cost of 40% of the Construction Cost was assumed based on City input.
[2]It is assumed that 2 acres of land would be required for both a Recreation Center or an Aquatic Center. Land values were derived based on the average cost of an acre of land in the City of San Diego (2020 dollars).
[3]It is assumed that 50% of recreational centers will require new or non-city owned right-of-way.
[4]It is assumed that all new aquatic centers would need to purchase new right of way.

4.2. Cost Per Resident

Similar to the way unit cost per resident was developed for parks, the total cost to develop either a recreation or aquatic center was divided by the population in which it is intended to serve. **Table 6** displays the total cost to implement both facility types, the total population they are intended to serve, and the unit cost per resident to implement them.

Table 6: Cost Per Resident for Recreation and Aquatic Centers

Facility	Total Implementation Cost	Residents Served	Cost Per Resident
Recreation Center	$17,299,848	25,000	$692
Aquatic -Complex	$16,773,628	50,000	$335

5. Unit Cost

As noted initially, the purpose of this memorandum is to establish the cost for new developments within the City of San Diego to pay their fair-share to maintain the level or service currently provided by the City's Parks and Recreation System, based on the City's General Plan requirements. The previous sections of this memorandum broke down the cost to develop and maintain the park system based per these requirements on a per resident basis. **Table 7** summarizes the findings of these sections and outlines the total cost per resident to maintain these standards. In-turn, this cost can be used as the unit cost in which new development would need to pay into the parks component of the DIF Program, if the development cannot, or declines to provide equivalent amenities on-site.

Table 7: Park Fee Unit Cost

Component	Cost Per Resident
Recreational Value	$5,569
Recreation Center	$692
Aquatic Complex	$335
Total	**$6,596**

6. Program Implementation

Developments which have a residential component would be assessed the Park DIF (based on the unit cost derived in Section 5) in-lieu of providing their required amenities on-site. Therefore, the payment of the Park DIF will allow developments to meet their recreational requirements, outlined by the City's General Plan, without providing on-site recreational amenities. Developments will be allowed to get credit for recreational amenities which are provided on site, consistent with the City's Park Master Plan Recreational Value system to either reduce or nullify their fee payment. However, a development will not be awarded more credit than what it is required to provide.

APPENDIX B

City of San Diego Development Impact Fee Program – Residential Scaling Methodology

CHEN RYAN

MEMORANDUM

TO: Tom Tomlinson, City of San Diego
Marco Camacho, City of San Diego

FROM: Stephen Cook, PE, Chen Ryan Associates

DATE: July 10, 2020

RE: City of San Diego DIF Program – Residential Scaling Methodology

The City of San Diego (City) is currently investigating the potential for changing the residential fee structure within their Developer Impact Fee (DIF) program. The fee structure would be changed from a flat fee, by unit type, to a scaled fee based on the unit type and size. The purpose of this memo is to document the sources, assumptions and methodologies utilized to develop a recommended fee scaling structure for residential units within the DIF program.

1. Current DIF Program

The City currently maintains a DIF program which provides funding for public facilities projects throughout the City, including transportation, fire services, libraries and parks. DIF fees are currently calculated, collected and spent within each Community Planning Area. The dollar amount of the DIF is based upon the collective cost of remaining public facilities projects, divided by total community development allowed by the respective currently adopted Community Plan (buildout of the adopted Land Use Element). At time of building permit issuance, the owner/developer of any parcel being developed must pay a DIF based on the DIF Rate Schedule in effect at the time of building permit issuance, and as determined by the type of development. Currently, the fee program has a flat rate for residential units based on type (Single Family or Multifamily), while the fees for commercial uses (such as retail, office, etc.) are based on the type and size of the development.

2. Potential Changes to the Current DIF Program

As noted previously, the City of San Diego is currently investigating the potential for changing the residential fee structure from a flat fee, by unit type, to a scaled fee based on the unit type and size. To make this change, and still maintain the nexus analyses that were developed for each community for the DIF Program, the new fee structure must do two things 1) the new fee structure cannot exceed the maximum residential fee values that were established for the current DIF program; 2) a connection has to be made relating to the fee's magnitude and the unit's impact on the improvements or four asset classes included in the program (transportation improvements, fire services, libraries and parks).

Based on the two nexus compliance objectives outlined above, the development of the scaled fee structure (based on unit size) should be developed using the following guidelines:

1. Develop a fee structure that is scaled as a percentage of the maximum residential fee, by community, that was authorized by the current DIF program.

2. Identify a metric, in which the fee can be scaled to, which relates to both the size of a residential unit and the impact the unit will have on the four asset classes.

3. Relating Unit Size to the Impacts on Asset Classes

As noted previously, to maintain the nexus established for the current DIF program, any cost scaling that is applied to residential fees must also reflect their associated impacts on the asset classes covered by the program. Therefore, the fee scaling must be based on a metric that relates both to the size of the unit and its impact to the asset classes.

One key metric that potentially relates to the size of a unit as well as the magnitude of impact on the four asset classes is the population. For example, larger units have the potential to attract a larger household population, thereby placing an additional burden on the asset classes included in the DIF program due to more people from that household using the associated facilities and services. Therefore, it can be argued that these larger units should pay a higher fair-share contribution towards the services, facilities and improvements included in the City's DIF program. Table 1 outlines how an increased population can relate to each asset class included in the current DIF program.

Table 1: Relationships Between Population and the Asset Classes Included in the DIF Program

Asset Class	Relation to Population
Fire Services	The City of San Diego General Plan (2008) established the following policy regardingthe development and funding of fire stations within the City: PF-D.2. Determine fire station needs, location, crew size and timing of implementation as the community grows. a) Use the fire unit development performance measures (based on population density per square mile) shown in Table PF-D.1 to plan for needed facilities. Where more than one square mile is not populated at similar densities, and/or a contiguous area with different density types aggregates into a population cluster area, use the measures provided in Table PF-D.2. b) Reflected needed fire-rescue facilities in community plans and associated facilities financing plans as a part of community plan updates and amendments. As noted in the policies listed above, fire station needs and implementation are to be determined as a community grows. The performance measures used to determine these improvements are based on population density. Therefore, the higher and denser the population is, the higher the demand for fire needs.
Library	The City of San Diego General Plan (2008) established the following policy regarding the development and funding of libraries within the City: PF-J.6. Design libraries to provide consistent and equitable services as communities grow in order to maintain service levels which consider operational costs and are based on established guidelines. As noted in the policy listed above, libraries need to be maintained and developed to provide consistent and equitable services as communities grow. Community growth and needs are typically directly related population growth. Therefore, this policy creates a direct link to the impact that new/additional population may have on the library asset class.

Table 1: Relationships Between Population and the Asset Classes Included in the DIF Program

Asset Class	Relation to Population
Parks	The City of San Diego General Plan (2008) established standards for the development of population-based parks and recreation facilities, including Recreation Centers and Aquatic Complexes (For additional detail about population-based park categories and guidelines, see the General Plan, Table RE-2). The City's General Plan establishes a minimum standard of 2.8 acres of community park space for every 1,000 people. This standard creates a direct link to the impact of population to the impacts on the park asset class.
Transportation	The transportation related facilities included in the DIF program are generally developed based on the overall travel demand. Therefore, the higher the population within an area, the higher the demand for transportation facilities within the area across all modes of travel. This asset class can be directly related to household population size since the transportation related trip demands are directly correlated on a per person basis (2009 National Household Travel Survey found that each person generally generates 3.79 trips per day).

4. Link between Residential Unit Size and Household Population

In theory, the larger a residential unit (based on total SF), the more people it could house. Unfortunately, based on initial research there was no readily available data confirming this theory. However, it was found that American Community Survey 2016 (5 Year Estimate) does provide both Average Household Size (AvgHHSize) and Average Number of Bedroom data, for each census block group. Therefore, using this data could establish a link between Average Household Size (i.e. people per household) and the average number of bedrooms per household. Using the Statistical Packages of the Social Sciences (SPSS) software, a regression analysis was performed for the entire San Diego Region (1,187,644 points of data) to determine the statistical relationship between overall household size and the total number of bedrooms within the household. Figure 1 below displays the results of the statistical analysis.

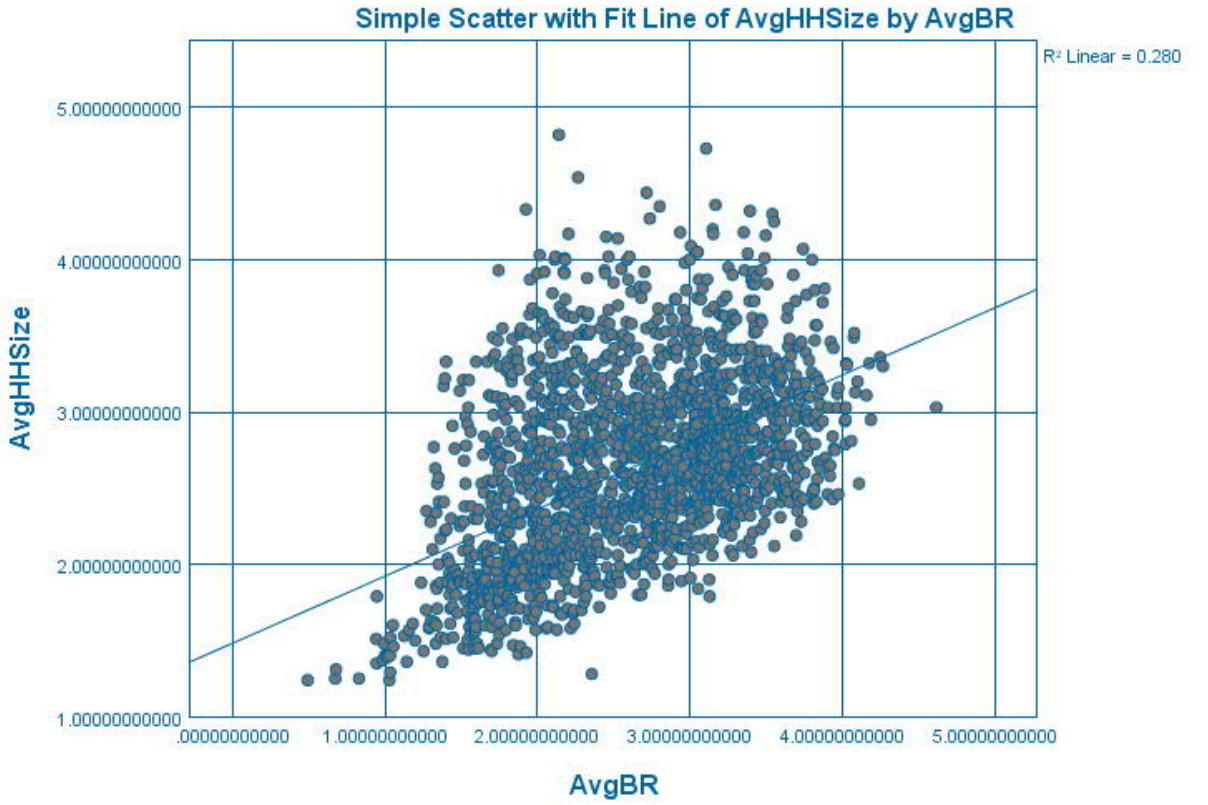


Figure 1: Relationship between Average Household Size and Number of Bedrooms

This statistical analysis found the relationship between Average Household Population and Average Number of Bedrooms within the household is as follows:

Average Household Population = 1.483+0.440(The Average Number of Bedrooms)

Using this formula, the average household population per number of bedrooms was calculated for households with one to five bedrooms, which is the general number of bedrooms range found within the Region. Table 2 displays the average household population by number of bedrooms, as determined by the statistical analysis.

Table 2: Household Population by Bedroom - City of San Diego

Number of Bedrooms	Average Household Population
1	1.9
2	2.4
3	2.8
4	3.2
5	3.7

Source: US Census – 2016 American Community Survey 5-Year Estimate

Note
Average number of people per household, based on total number of bedrooms

Once the relationship between average household population and average number of bedrooms was established, a relationship between number of bedrooms and residential unit size (sf) was needed. Once this relationship was established, the size of the residential unit is correlated back to the average population size using the number of bedrooms as the common link.

SANGIS parcel data, throughout the entire San Diego Region, was utilized to determine this relationship between residential unit size and number of bedrooms (over 785,000 data points). The SANGIS parcel data includes information such as land use type, total livable square feet (unit SF excluding uses such as garages), number of bedrooms and year built. This data was utilized to determine the average unit size (SF) based on the total number of bedrooms for both single family and multifamily units, as displayed in Table 3.

Table 3: Household Population by Unit Size

Bedrooms	Average Population[1]	Size (SF) Single Family	Size (SF) Multifamily
1	1.9	870	706
2	2.4	1,188	1,084
3	2.8	1,630	1,436
4	3.2	2,228	N/A
5	3.7	2,996	N/A

Source: Chen Ryan Associates, November 2018

Note
[1] Based on information provided in Table 2

5. Scaling Based on Unit Size

As noted in Section 2, one of the guidelines for developing a scaled fee structure for residential units is to develop a structure that can be scaled as a percentage of the maximum residential fee authorized within the current DIF program. Therefore, the maximum authorized fee for residential units should be used as the high point of the scale (i.e. 100%) in which only the largest units pay, while the remaining smaller units would pay a percentage of the maximum fee. The percentage of the fee, in which smaller units would pay, should be based on the proportional burden they place on the different asset classes. As shown in in Table 1, household population size can be related to the burden placed on the DIF program asset classes; therefore, using household population size would be an equitable way in allocating the fee scale.

Using the trends set in Table 3, the household population can be calculated for any unit size. Figure 2 displays the identified relationship between unit size and household population, as well as the equations for the plotted data points' trendlines. These equations, both for single family and multifamily units, can be used to derive the household population based on unit size.

Single Family: Projected Household Population = (Unit Size (SF) + 1579.6) / 1200.7
Multifamily: Projected Household Population = (Unit Size (SF) + 838.95) / 808.85

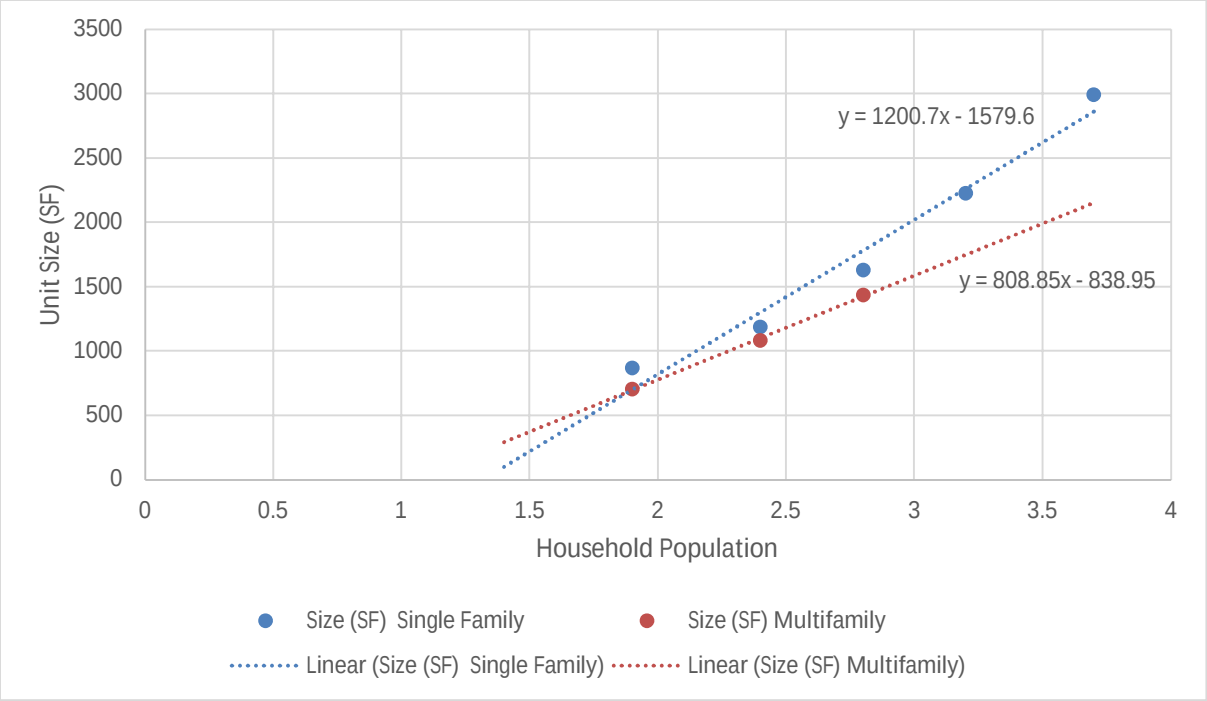


Figure 2: Relationship between Unit Size and Household Population

The units that would pay the maximum fee (i.e. those within the highpoint of the scale) was determined based on units that fall above the 80th percentile in size (SF) within the San Diego Region. This value was established for both single family and multifamily units utilizing the data in the SANGIS Parcel Database, the results of this analysis are displayed below:

Single Family Units 80th Percentile: 2,485 SF
Multifamily Units 80th Percentile: 1,336 SF

Based on the findings outlined above, it is recommended that single family units constructed larger than 2,500 SF would pay the maximum fee established for single family units by the current DIF program. Additionally, multifamily units constructed larger than 1,300 SF would pay the maximum fee established for multifamily units by the current DIF program. Using the equations derived above:

Single Family Units 80th Percentile: 2,500 SF = 3.4 People Per Household
Multifamily Units 80th Percentile: 1,300 SF = 2.6 People Per Household

Since unit sizes outlined above were identified as the highpoint of the scale, their associated household population values will be used as the highpoint value in which the fee structure will be scaled against for smaller units; meaning, the highpoint values listed above will be used as the denominator in calculating the percent of the maximum fee that the unit would pay (Projected Household Population / Highpoint People Per Household). Therefore, the percent of the maximum residential fee the unit would be calculated as follows:

Single Family: Percent of Maximum Fee = [(Unit Size (SF) + 1579.6) / 1200.7]/3.4
Multifamily: Percent of Maximum Fee = [(Unit Size (SF) + 838.95)/ 808.85]/2.6

6. Recommendation

Based on the research and information presented in the previous sections, it is recommended that, if the City of San Diego decides to implement a scaled fee structure for residential uses in their DIF program, that the following methodology is used to develop the structure:

- The maximum residential fee allowable within each Community Planning Area (for both single family and multifamily units) should be used as the highpoint in which the fee scale is based on.
- The fee scale would have a cap at 2,500 SF for single family units and 1,300 SF for multifamily units. Units at or above this size would pay their respective maximum fee rate.
- For units below the cap, the fee rates would be calculated as follows:
    - Single Family: Maximum Fee X [(Unit Size (SF) + 1579.6) / 1200.7]/3.4
    - Multifamily: Maximum Fee X [(Unit Size (SF) + 838.95) / 808.85]/2.6

Table 4 displays the scaled fee rate for single family units, in 50 square foot increments, based on the formula outlined above. The scaled fee rate should be applied to the total residential DIF fee rate for each respective CPA.

Table 4: Scaled Fee Rate – Single Family

Unit Size (SF)	Scaled Fee Rate
2,501 <	Full Fee
2,451 - 2,500	99%
2,401 - 2,450	98%
2,351 - 2,400	97%
2,301 - 2,350	96%
2,251 - 2,300	94%
2,201 - 2,250	93%
2,151 - 2,200	92%
2,101 - 2,150	91%
2,051 - 2,100	90%
2,001 - 2,050	88%
1,951 - 2,000	87%
1,901 - 1,950	86%
1,851 - 1,900	85%
1,801 - 1,850	83%
1,751 - 1,800	82%
1,701 - 1,750	81%
1,651 - 1,700	80%
1,601 - 1,650	78%

Table 4: Scaled Fee Rate – Single Family

Unit Size (SF)	Scaled Fee Rate
1,551 - 1,600	77%
1,501 - 1,550	76%
1,451 - 1,500	75%
1,401 - 1,450	74%
1,351 - 1,400	72%
1,301 - 1,350	71%
1,251 - 1,300	70%
1,201 - 1,250	69%
1,151 - 1,200	67%
1,101 - 1,150	66%
1,051 - 1,100	65%
1,001 - 1,050	64%
> 1,000	63%

Table 5 displays the scaled fee rate for multifamily units, in 50 square foot increments, based on the formula outlined above. The scaled fee rate should be applied to the total residential DIF fee rate for each respective CPA.

Table 5: Scaled Fee Rate – Multifamily

Unit Size (SF)	Scaled Fee Rate
1,251 <	Full Fee
1,201 - 1,250	99%
1,151 - 1,200	96%
1,101 - 1,150	94%
1,051 - 1,100	92%
1,001 - 1,050	89%
951 - 1,000	87%
901 - 950	84%
851 - 900	82%
801 - 850	80%
751 - 800	77%
701 - 750	75%
651 - 700	72%
601 - 650	70%
551 - 600	68%
501 - 550	65%
< 500	64%