Interoffice Memorandum

AGENDA ITEM

September 31, 2022

TO: Mayor Jerry L. Demings
— AND —
County Commissioners

FROM: Jon V. Weiss, P.E., Director
Planning, Environmental, and Development
Services Department

CONTACT PERSON: **Alan Marshall, Assistant to the Director**
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SUBJECT: November 15, 2022 – Work Session Item
Chapter 23. Impact Fees – Five-year Impact Fee Study for Law Enforcement, Fire Rescue Services, and Parks and Recreation

Planning for additional capital improvements needed to service new growth and development that generate new demands on parks and recreation amenities, fire rescue services, and law enforcement services, is in the best interest of the health, safety and welfare of the citizens of the county. It is the policy of the Board, as set forth in the comprehensive plan, that new development should be permitted to occur only where an adequate level of government services and facilities can be provided. Orange County Code, Chapter 23. Impact Fees, requires that new development should pay for a portion of the overall capital costs related to the additional government services and facilities to accommodate new development. Impact fees for capital costs related for new parks and recreation, fire rescue services, and law enforcement services are required to be reviewed no less than every five years. The current fees were adopted by the Board on January 9, 2018.

On October 7, 2022, staff received draft impact fee studies for all three service areas from the contracted consultant, Benesch, Inc. The methodology used to update these fees is a consumption-based methodology, which charges new development based upon the burden placed on services from each land use (demand). The demand component is measured in terms of population per land use. In addition, a credit subtracted from total costs to account for contributions to expand capacity through other revenue sources. The five-year study covers the following aspects:

Facility Inventory	Service Area and Population
Level of Service	Cost Components
Credit Components	Net Impact Costs
Demand Component	Fee Comparisons

On November 15, 2022, staff will provide a work session outlining the purpose and background of impact fees, the methodology of how fees are calculated, the findings of the three contracted studies, a review of proposed ordinance changes, and a discussion of next steps in the process.

This item is for information purposes only, and no action is required.

JVW/ABM

C: Byron Brooks, AICP, County Administrator
Chris Testerman, AICP, Deputy County Administrator
Joel Prinsell, Deputy County Attorney
John Mina – Sheriff, Orange County Sheriff's Office
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Daniel Divine – Research and Development Manager, Orange County Sheriff's Office
James Fitzgerald – Fire Chief, Fire Rescue Division
Anthony Rios – Deputy Fire Chief, Fire Rescue Division
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Attachments

Orange County Law Enforcement Impact Fee Update Study

DRAFT REPORT

October 26, 2022

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Orange County
Law Enforcement Impact Fee Update Study
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Executive Summary

With a population of almost 1.5 million, Orange County is the fifth most populous county in Florida. It is also one of the fastest growing counties ranking 13th out of 67 Florida counties in terms of projected growth rate through 2050 (1.2 percent per year) and first in terms of projected absolute growth (608,000 new residents projected through 2050). The law enforcement service area houses approximately 940,000 of the countywide population. Given this growth rate and to mitigate cost associated with new growth, Orange County implemented impact fees for several service areas, including law enforcement, parks and recreation, fire rescue, transportation and schools. This report addresses the update of the law enforcement impact fee.

Law enforcement impact fees are used to fund capital expansion projects for law enforcement service related buildings, land, vehicles and capital equipment required to support the additional demand created by new growth. Orange County's law enforcement impact fees were last updated in 2017. Per the requirements of the impact fee ordinance, the County retained Benesch, in association with Laura Turner Planning Services, to update the impact fee to reflect most recent and localized data.

Consistent with the County's current methodology, this study is using a consumption-based methodology that charges new growth for the value of law enforcement infrastructure it consumes. The primary steps involved in the update of the law enforcement impact fee included the following:

- Review of the inventory and establishment of the achieved level of service;
- Estimation of the current value of the law enforcement land and facilities;
- Review of funding sources used for law enforcement expansion projects;
- Calculation of the demand component based on call data; and
- Calculation of the updated law enforcement impact fee.

Changes to the cost and credit components resulted in a 20 percent increase in net cost per call compared to the 2017 study. The remaining changes are primarily due to the fluctuations in the call data. The final increase is slightly moderated by the County's indexing policy between technical update studies.

Table ES-1 provides a comparison of the calculated fees to the County's current adopted fees.

Table ES-1
Calculated Law Enforcement Fee Schedule

Land Use	2022 Calculated Impact Fee[1]	Adopted Impact Fee[2]	Percent Change[3]
SFR Detached	**$624**	$510	22%
Multi-Family	**$220**	$197	12%
Mobile Home	**$294**	$356	-17%
Hotel/Motel	**$283**	$402	-30%
Commercial/Retail	**$733**	$799	-8%
Office/Institutional	**$444**	$269	65%
Manufacturing	**$105**	$148	-29%
Warehousing	**$111**	$82	35%
School - Private	**$197**	$92	114%

1) Source: Table 7
2) Source: Orange County. Fees adopted at 100% of 2017 calculated rate and indexed 1.6 percent annually.
3) Percent change from the adopted impact fee (Item 2) to the 2022 calculated impact fee (Item 1)

Introduction

With a population of almost 1.5 million, Orange County is the fifth most populous county in Florida. It is also one of the fastest growing counties ranking 13th out of 67 Florida counties in terms of projected growth rate through 2050 (1.2 percent per year) and first in terms of projected absolute growth (608,000 new residents projected through 2050). The law enforcement service area houses approximately 940,000 of the countywide population. Given this growth rate and to mitigate cost associated with new growth, Orange County implemented impact fees for several service areas, including law enforcement, parks and recreation, fire rescue, transportation and schools. This report addresses the update of the law enforcement impact fee.

Law enforcement impact fees are used to fund capital expansion projects for law enforcement service-related buildings, land, vehicles and capital equipment required to support the additional demand created by new growth. Orange County's law enforcement impact fees were last updated in 2017. Per the requirements of the impact fee ordinance, the County retained Benesch, in association with Laura Turner Planning Services, to update the impact fee to reflect most recent and localized data. It should be noted that figures calculated in this report represent technically defensible levels of impact fees that the County could charge; however, the Board of County Commission (BCC) may choose to discount the fees as a policy decision.

Methodology

The methodology used to update the law enforcement impact fee is a consumption-based impact fee methodology, which has also been used to calculate the current adopted impact fee for Orange County as well as impact fees throughout Florida. A consumption-based impact fee is intended to charge new growth the proportionate share of cost associated with providing law enforcement facilities available for use by new growth. In addition, per the requirements of case law, a credit is subtracted from total cost to account for contributions of new development toward any capacity expansion projects through other revenue sources. Finally, the demand component is measured in terms of incidents per unit of development for each land use.

Legal Overview

In Florida, legal requirements related to impact fees have primarily been established through case law since the 1980's. Impact fees must comply with the "dual rational nexus" test, which requires that they:

- Be supported by a study demonstrating that the fees are proportionate in amount to the need created by new development paying the fee; and
- Be spent in a manner that directs a proportionate benefit to new development, typically accomplished through establishment of benefit districts and a list of capacity-adding projects included in the County's Capital Improvements Program (CIP), Capital Improvement Element (CIE), or another planning document/Master Plan.

In 2006, the Florida legislature passed the "Florida Impact Fee Act," which recognized impact fees as "an outgrowth of home rule power of a local government to provide certain services within its jurisdiction." § 163.31801(2), Fla. Stat. The statute – concerned with mostly procedural and methodological limitations – did not expressly allow or disallow any particular public facility type from being funded with impact fees. The Act did specify procedural and methodological prerequisites, such as the requirement of the fee being based on most recent and localized data, a 90-day requirement for fee changes, and other similar requirements, most of which were common to the practice already.

More recent legislation further affected the impact fee framework in Florida, including the following:

- **HB 227 in 2009:** The Florida legislation statutorily clarified that in any action challenging an impact fee, the government has the burden of proving by a preponderance of the evidence that the imposition or amount of the fee meets the requirements of state legal precedent or the Impact Fee Act and that the court may not use a deferential standard.
- **SB 360 in 2009:** Allowed fees to be decreased without the 90-day notice period required to increase the fees and purported to change the standard of legal review associated with impact fees. SB 360 also required the Florida Department of Community Affairs (now the Department of Economic Opportunity) and Florida Department of Transportation (FDOT) to conduct studies on "mobility fees," which were completed in 2010.
- **HB 7207 in 2011:** Required a dollar-for-dollar credit, for purposes of concurrency compliance, for impact fees paid and other concurrency mitigation required.

- **HB 319 in 2013:** Applied mostly to concurrency management authorities, but also encouraged local governments to adopt alternative mobility systems using a series of tools identified in section 163.3180(5)(f), Florida Statutes.

- **HB 207 in 2019:** Included the following changes to the Impact Fee Act along with additional clarifying language:
    1. Impact fees cannot be collected prior to building permit issuance; and
    2. Impact fee revenues cannot be used to pay debt service for previously approved projects unless the expenditure is reasonably connected to, or has a rational nexus with, the increased impact generated by the new residential and commercial construction.

- **HB 7103 in 2019:** Addressed multiple issues related to affordable housing/linkage fees, impact fees, and building services fees. In terms of impact fees, the bill required that when local governments increase their impact fees, the outstanding impact fee credits for developer contributions should also be increased. This requirement was to operate prospectively; however, HB 337 that was signed in 2021 deleted this clause and making all outstanding credits eligible for this adjustment. This bill also allowed local governments to waive/reduce impact fees for affordable housing projects without having to offset the associated revenue loss.

- **SB 1066 in 2020:** Added language allowing impact fee credits to be assignable and transferable at any time after establishment from one development or parcel to another that is within the same impact fee zone or impact fee district or that is within an adjoining impact fee zone or district within the same local government jurisdiction. In addition, added language indicating any new/increased impact fee not being applicable to current or pending permit applications submitted prior to the effective date of an ordinance or resolution imposing new/increased fees.

- **HB 1339 in 2020:** Required reporting of various impact fee related data items within the annual financial audit report submitted to the Department of Financial Services.

- **HB 337 in 2021:** Placed limits on the amount and frequency of fee increases, but also included a clause to exceed these restrictions if the local governments can demonstrate extraordinary circumstances, hold two public workshops discussing these circumstances and the increases are approved by two-thirds of the governing body.

Impact Fee Definition

- An impact fee is a one-time capital charge levied against new development.
- An impact fee is designed to cover the portion of the capital costs of infrastructure capacity consumed by new development.
- The principal purpose of an impact fee is to assist in funding the implementation of projects identified in the CIP, CIE and other capital improvement programs for the respective facility/service categories.

Impact Fee vs. Tax

- An impact fee is generally regarded as a regulatory function established based upon the specific benefit to the user related to a given infrastructure and is not established for the primary purpose of generating revenue for the general benefit of the community, as are taxes.
- Impact fee expenditures must convey a proportional benefit to the fee payer. This is accomplished through the establishment of benefit districts as needed, where fees collected in a benefit district are spent in the same benefit district.
- An impact fee must be tied to a proportional need for new infrastructure capacity created by new development.

This technical report has been prepared to support legal compliance with existing case law and statutory requirements. The technical report also documents the methodology components for the law enforcement impact fee, including an evaluation of the inventory, service area, cost, credit, and demand components. Information supporting this analysis was obtained from the Orange County Sheriff's Office (OCSO), Orange County and other sources, as indicated. The study's methodology is documented in the following sections of this technical report:

- Facility Inventory
- Service Area
- Cost Component
- Credit Component
- Net Impact Cost
- Demand Component
- Calculated Law Enforcement Impact Fee Schedule
- Impact Fee Schedule Comparison
- Indexing

These various elements are summarized in the remainder of this report, with the result being the calculated law enforcement impact fee schedule.

Facility Inventory

Orange County law enforcement facilities include approximately 374,000 square feet of building space, including 331,000 square feet of primary buildings and 42,000 square feet of support buildings, along with 147 acres of land that is associated with the law enforcement buildings. **Table 1** presents this information.

The building value estimates are based on recent construction cost, insurance values of the existing buildings, information from other Florida jurisdictions, and discussions with OCSO and Orange County representatives. This analysis resulted in an estimated cost of $325 per square foot for primary buildings and $230 per square foot for support buildings. In addition to the buildings shown in Table 1, OCSO leases several facilities that are also utilized in providing law enforcement services. For the purposes of this impact fee study, the inventory includes only the space owned by the County.

In terms of estimating current land values, a review of recent appraisals and the value of land where existing law enforcement facilities are located was completed. In addition, vacant land sales and the current value of vacant parcels as reported by the Orange County Property Appraiser were evaluated. This analysis resulted in an average value of $150,000 per acre for parcels with 15 acres or less. As shown in Table 1, two of the law enforcement facilities are located on large, agriculturally zoned parcels. These two parcels are valued at $45,000 per acre, based on the value of agricultural land. Additional detail is included in Appendix B.

Table 1
Land and Building Inventory

Facility[1]	Address[1]	Law Enforcement Building Square Footage[2]	Total Building Square Footage[3]	Total Acres[4]	Allocated Law Enforcement Acres[5]	Building Value[6]	Land Value[7]	Total Building and Land Value[8]
Primary Buildings:								
Central Operations	2500 W. Colonial Drive	216,818	216,818	14.29	14.29	$70,465,850	$2,143,500	$72,609,350
Fleet Maintenance	2200 W. Colonial Drive	15,186	15,186	2.80	2.80	$4,935,450	$420,000	$5,355,450
Sector 1 (Apopka Service Center)	1111 N. Rock Springs Road	5,857	29,259	9.33	1.87	$1,903,525	$280,500	$2,184,025
Sector 2	11000 Lake Underhill Road	23,068	23,068	3.30	3.30	$7,497,100	$495,000	$7,992,100
Sector 3 (Ocoee Service Center)	475 W. Story Road	6,460	29,410	7.64	1.68	$2,099,500	$252,000	$2,351,500
Sector 4 and BRC	2400 W. 33rd Street	28,002	1,170,067	64.14	1.53	$9,100,650	$229,500	$9,330,150
Main Courthouse	425 N. Orange Avenue	20,986	905,728	7.51	0.17	$6,820,450	$25,500	$6,845,950
Juvenile Justice Center	2000 E. Michigan	2,093	251,438	54.11	0.45	$680,225	$67,500	$747,725
Communications	6590 Amory Court	12,700	55,968	6.52	1.48	$4,127,500	$222,000	$4,349,500
Support Buildings:								
Evidence 1	4536 S.W. 35th Street	24,300	24,300	1.44	1.44	$5,589,000	$216,000	$5,805,000
Evidence 2	3368 Bartlett Blvd	N/A	N/A	3.37	3.37	N/A	$505,500	$505,500
LEVO	6350 Wadsworth Road	4,680	4,680	82.96	82.96	$1,076,400	$3,733,200	$4,809,600
Range	14500 Wewahootee Road	13,400	13,400	31.58	31.58	$3,082,000	$1,421,100	$4,503,100
Total		**373,550**	**2,739,322**	**288.99**	**146.92**	**$117,377,650**	**$10,011,300**	**$127,388,950**
Weighted Average Building Value per Square Foot[9]						**$314**		
Weighted Average Land Value per Acre[10]							**$68,141**	

1) Source: Orange County
2) Source: Orange County
3) Source: Orange County Property Appraiser. Total building square footage on site.
4) Source: Orange County and Orange County Property Appraiser. Acreage excludes wasteland or submerged lands.
5) Ratio of the law enforcement building square footage (Item 2) to the total building square footage (Item 3) multiplied by the total acres (Item 4)
6) Law enforcement square footage (Item 2) multiplied by the estimated building value per square foot, $300 for primary buildings and $230 for support buildings. Appendix B provides more detail on cost per square foot estimates.
7) Allocated law enforcement acres (Item 5) multiplied by estimated land value per acre, $150,000 for primary buildings and the Evidence building and $45,000 per acre for LEVO and Range, which are located on agricultural land. Appendix B provides more detail on cost per acre estimates.
8) Sum of building value (Item 6) and land value (Item 7)
9) Total building value (Item 6) divided by the total law enforcement building square footage (Item 2)
10) Total land value (Item 7) divided by the total law enforcement allocated acreage (Item 5)

In addition to the land and buildings inventory, OCSO also has the necessary equipment and vehicles to perform law enforcement duties. **Table 2** summarizes the total equipment and vehicle inventory value. As shown, the total value associated with vehicles and equipment amounts to $156 million.

Table 2
Vehicle and Equipment Value

Item	Total Value[6]
Vehicle and Equipment Value	
Vehicle Value[1]	$88,903,776
Equipment Value[2]	$67,267,460
Total Vehicle and Equipment Value[3]	**$156,171,236**

1) Source: Appendix A-1
2) Source: Appendix A-3
3) Sum of the vehicle value (Item 1) and equipment value (Item 2)

Service Area

OCSO provides law enforcement services in unincorporated county and the Cities of Bay Lake and Lake Buena Vista. Therefore, the proper benefit district for the provision of law enforcement services is the unincorporated county and the Cities of Bay Lake and Lake Buena Vista.

Cost Component

The cost component of the study evaluates the cost of all capital items, including buildings, land, vehicles, and equipment. **Table 3** provides a summary of all capital costs, which amounts to $283.6 million.

Also presented within Table 3 is the total impact cost per call. To calculate the total impact cost per call, the total asset value of $283.6 million is divided by the average annual number of law enforcement related calls from 2017 through 2021, excluding 2020. The resulting total impact cost per call amounts to $622. 2020 call data is excluded to ensure impact fee calculations represent law enforcement activities at "normal" levels, excluding unusual factors, such as the pandemic.

Table 3
Total Impact Cost

Component	Cost	Percent of Total Value[7]
Building Value[1]	$117,377,650	41%
Land Value[2]	$10,011,300	4%
Vehicle and Equipment Value[3]	$156,171,236	55%
Total Asset Value[4]	**$283,560,186**	**100%**
Average Annual Number of Calls (2017-19 & 21)[5]	455,769	
Total Impact Cost per Call[6]	**$622.16**	

1) Source: Table 1
2) Source: Table 1
3) Source: Table 2
4) Sum of building value (Item 1), land value (Item 2) and vehicle and equipment value (Item 3)
5) Source: Orange County. Average annual incidents from 2017-19 & 2021, excluding MOBHU (mobile phone hang ups) classified calls.
6) Total asset value (Item 4) divided by the average annual number of calls (Item 5)
7) Distribution of building, land, and vehicle and equipment values

Credit Component

To avoid overcharging new development, a review of the capital financing program for law enforcement facilities and capital assets was completed. The purpose of this review was to determine any non-impact fee revenue generated by new development that is being used for capital facility (buildings, land, vehicles and equipment) expansion of the law enforcement program. Revenue credits would then apply against the cost per call so that new development is not overcharged for capital expansion projects. Based upon a review of capacity addition expenditures over the past five years and the current fiscal year, it has been determined that OCSO allocates ad valorem revenues to fund the capital expansion of law enforcement facilities.

Capital Expansion Funding Credit

To calculate the capital expansion credit per call, funding used for historical and current capital expansion projects are reviewed. Between 2017 and 2022, OCSO and Orange County appropriated an average annual non-impact fee funding of $158,000 towards expansion of law enforcement facilities. The average annual allocation was then divided by the average annual number of calls over the six-year period. As shown in **Table 4,** the result is an average annual capital expansion expenditure of $0.36 per call.

Once the revenue credit per population is calculated, a credit adjustment is needed since the revenue credit is funded with ad valorem tax revenues. This adjustment accounts for the fact that new homes tend to pay higher property taxes per dwelling unit than older homes due to "Save Our Homes" assessment cap. The adjustment factor was estimated based on a comparison of the average taxable value of newer homes to that of all homes. As presented, the adjusted revenue credit per population amounts to $0.61 per year.

Table 4
Capital Expansion Credit

Expenditure[1]	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Ad Valorem:							
Evidence Facility Sheriff	-	-	$3,800	-	-	-	$3,800
Sheriff's Communications Center	-	$5,970	$127,076	$54,550	$2,170	$310,234	$500,000
Sherrif's K-9 Facility	-	$924	$3,588	-	$62,228	$20,820	$87,560
Aviation Upgrade	-	-	-	$34,533	$66,534	$256,683	$357,750
Subtotal -- Expenditures Funded with Ad Valorem	**$0**	**$6,894**	**$134,464**	**$89,083**	**$130,932**	**$587,737**	**$949,110**
Total Capital Expansion Expenditures							**$949,110**
Average Annual Capital Expansion Expenditures[2]							**$158,185**
Average Annual Incidents (2017-2021)[3]							**444,774**
Capital Expansion Expenditures per Incident[4]							**$0.36**
Residential Land Uses Credit Adjustment Factor[5]							**1.70**
Residential Land Uses: Adjusted Capital Expansion Expenditures per Incident[6]							**$0.61**

1) Source: Orange County
2) Total capital expansion expenditures divided by 6 to calculate the average annual expenditures
3) Source: Orange County. Average annual incidents from 2017-2021, excluding MOBHU (mobile hang ups) classified calls.
4) Average annual capital expansion expenditures (Item 2) divided by the average number of incidents (Item 3)
5) Adjustment factor to reflect higher ad valorem taxes paid by new homes
6) Capital expansion expenditures per incident (Item 4) multiplied by the credit adjustment factor (Item 5)

Net Impact Cost

Table 5 summarizes the calculation of the net law enforcement impact cost per call, which is the difference between the total impact cost and the total revenue credit. The resulting net impact cost per call is $612 for residential land uses and $616 for non-residential land uses.

Table 5
Net Impact Cost

Impact Cost/ Credit Element	Per Call
Impact Cost	
Total Impact Cost[1]	$622.16
Revenue Credit	
Capital Improvement Credit[2]:	
- Residential Land Uses	$0.61
- Non-residential Land Uses	$0.36
Capitalization Rate	3.50%
Capitalization Period (in years)	25
Total Capital Improvement Credit[3]	
- Residential Land Uses	$10.05
- Non-residential Land Uses	$5.93
Net Impact Cost[4]	
- Residential Land Uses	**$612.11**
- Non-residential Land Uses	**$616.23**

1) Source: Table 3
2) Source: Table 4
3) Average annual capital improvement credit (Item 2) for a capitalization rate of 3.5% over 25 years. The capitalization rate is provided by Orange County.
4) Source: Total impact cost (Item 1) less capital improvement credit (Item 3)

Compared to the last study, the net cost per call increased by approximately 20 percent due to a combination of cost increase and credit decrease. The remaining changes in fee levels are due to fluctuations on call data.

Demand Component

In determining the impact fee for each land use on a per call basis, it is necessary to determine the service delivery to residential and non-residential land uses. In developing the call-based demand, the average annual calls by land use between 2017 and 2021, excluding 2020, were reviewed. The year 2020 was excluded due to the anomalous impact of the pandemic on law enforcement service calls. The following calls were excluded from the analysis:

- ***MOBHUs:*** Based on discussions with OCSO, calls classified as mobile phone hang ups (MOBHU) were excluded. OCSO indicated that when these calls are received by the Communication Center, if the call taker does not hear anything before it is disconnected, the call taker attempts to reverse dial the number twice before moving onto the next call. The only time that a deputy is dispatched to this type of call is when the call taker hears something in the background that gives a reason for concern.

- ***Non-patrol functions:*** Similar to the 2012 and 2017 impact fee studies, calls that are not related to patrol functions are excluded from the call-based demand calculations, including:
  - DOR Code 8600 - County (Other than Public Schools, Colleges, Hospitals) Including Non-Municipal Govt.;
  - DOR Code 8700 - State (Other than Military, Forests, Pks., Rec Areas, Hospitals, and Colleges);
  - DOR Code 8600 - Federal; and
  - DOR Code 8900 - Municipal (Other than Parks, Rec Areas, Colleges, and Hospitals).

- ***Public schools:*** Calls to public schools were also excluded since public schools are not assessed impact fees, including:
  - DOR Code 8300 – School
  - DOR Code 8400 – College

With the exclusion of calls assigned to these land uses, the total annual average number of calls is reduced from 505,216 to 413,351. Of the 413,351 calls, 381,256 could be assigned to a land use. Of the remaining 32,095 calls, 76 were associated with mixed use properties; 24,061 were unclassified; 541 could not be allocated to a land use in the schedule, and 7,417

calls were to vacant properties. To assign all calls to the appropriate land uses, the percentage distribution of assigned calls is utilized in allocating unassigned calls to a land use. **Table 6** presents this analysis.

The final step in the call-based demand calculations involves the calculation of calls per units of development, which are also presented in Table 6. To determine the number of units to each respective land use, a review of the Orange County Property Appraiser's Database was conducted. Of the residential land uses, single family, multi-family, and mobile homes are measured per dwelling unit. Consistent with the 2017 study, hotel/motel is measured per room and is calculated based on the average gross square footage per room of 843. Non-residential land uses are measured by gross building square footage.

Table 6
Orange County Law Enforcement Call Based Demand

Land Use	Unit	Average Calls per Year (2017-19 & 2021)[1]	% Distribution (All Assigned Uses)[2]	Distribution of Unassigned Calls[3]	Total Calls[4]	Revised Percentage[5]	Units of Development[6]	Calls per Unit[7]
Calls Assigned to a Land Use								
SFR Detached	du	186,871	49.0%	15,727	202,598	49.0%	199,433	1.02
Multi-Family	du	37,799	9.9%	3,177	40,976	9.9%	113,621	0.36
Mobile Home	du	7,683	2.0%	642	8,325	2.0%	17,457	0.48
Hotel/Motel	room	31,478	8.3%	2,664	34,142	8.3%	73,454	0.46
Commercial/Retail	1,000 gross sf	70,547	18.5%	5,938	76,485	18.5%	64,139	1.19
Office/Institutional	1,000 gross sf	33,384	8.8%	2,824	36,208	8.8%	50,518	0.72
Manufacturing	1,000 gross sf	1,546	0.4%	128	1,674	0.4%	9,847	0.17
Warehousing	1,000 gross sf	11,219	2.9%	931	12,150	2.9%	68,811	0.18
School - Private	1,000 gross sf	729	0.2%	64	793	0.2%	2,453	0.32
Subtotal - Assigned Calls		**381,256**	**100.0%**	**32,095**	**413,351**	**100.0%**		
Calls Unassigned to a Land Use								
Mixed Use		76						
Null		24,061						
Other		541						
Vacant		7,417						
Subtotal - Unassigned Calls[8]		**32,095**						
Total		**413,351**						

1) Source: Orange County. Represents the average annual number of calls from 2017 to 2021 (excluding 2020), excluding calls not related to patrol functions, calls from public schools, and MOBHU classified calls.
2) Percent of all assigned calls (381,256) for each land use
3) Distribution of all assigned calls (Item 2) multiplied by the number of unassigned calls (Item 8)
4) Average annual calls (Item 1) plus the distribution of unassigned calls (Item 3)
5) Percent of total calls (413,351) for each land use.

6) Source: Orange County Property Appraiser's Database. Non-residential land uses are measured in terms of gross square feet. The hotel/motel land use utilizes an average of 833 gross square feet per room to convert total gross area into hotel/motel rooms.
7) Total calls (Item 4) divided by units of development (Item 6)
8) Sum of mixed use, null, other, and vacant calls

Calculated Law Enforcement Impact Fee Schedule

Based on the analysis presented in this report, a law enforcement impact fee schedule was developed for both residential and non-residential land uses and is presented in **Table 7**. The total impact fee is calculated by multiplying the net impact cost per call from Table 5 by the number of calls per unit shown in Table 6.

As mentioned previously, compared to the last study, the net cost per call increased by approximately 20 percent due to a combination of cost increase and credit decrease. The remaining changes in fee levels are due to fluctuations on call data. The final increase is slightly moderated by the County's indexing policy between technical update studies.

Table 7
Calculated Law Enforcement Impact Fee Schedule

Land Use	Unit	Impact Cost per Call[1]	Calls per Unit[2]	Total Impact Fee[3]	Adopted Impact Fee[4]	Percent Change[5]
SFR Detached	du	$612.11	1.02	$624	$510	22%
Multi-Family	du	$612.11	0.36	$220	$197	12%
Mobile Home	du	$612.11	0.48	$294	$356	-17%
Hotel/Motel	room	$616.23	0.46	$283	$402	-30%
Commercial/Retail	1,000 gross sf	$616.23	1.19	$733	$799	-8%
Office/Institutional	1,000 gross sf	$616.23	0.72	$444	$269	65%
Manufacturing	1,000 gross sf	$616.23	0.17	$105	$148	-29%
Warehousing	1,000 gross sf	$616.23	0.18	$111	$82	35%
School - Private	1,000 gross sf	$616.23	0.32	$197	$92	114%

1) Source: Table 5
2) Source: Table 6
3) Impact cost per call (Item 1) multiplied by the number of calls per unit (Item 2)
4) Source: Orange County
5) Percent change from the adopted impact fee (Item 4) to the calculated impact fee (Item 3)

Impact Fee Schedule Comparison

As part of the work effort in updating the Orange County law enforcement impact fee program, the County's calculated impact fee schedule was compared to the adopted fee schedule and several other jurisdictions. **Table 8** presents this review. **Table 9** presents a comparison of the current adopted single family impact fee rate as well as the fully calculated rate for Florida counties that implemented law enforcement impact fees. It should be noted some jurisdictions include only vehicles and equipment in the law enforcement impact fee and incorporate law enforcement buildings and land into the general government buildings impact fee. This approach results in lower law enforcement impact fees. This approach is noted in Table 9 when information was available.

Table 8
Law Enforcement Impact Fee Schedule Comparison

Land Use	Unit[1]	Orange County Calculated Fees[2]	Orange County Adopted Fees[3]	Collier County[4]	Indian River County[5]	Miami-Dade County[6]	Polk County[7]
Date of Last Update		**2022**	**2017**	2016	2019	2005	2019
Adoption Percentage		**N/A**	**100%**	100%	40%	N/A	100%
Residential:							
Single Family (2,000 sf)	du	**$624**	**$510**	$587	$196	$583	$283
Non-Residential:							
Light Industrial	1,000 sf	**$105**	**$148**	$215	$61	$405	$76
Office (50,000 sq ft)	1,000 sf	**$444**	**$269**	$372	$108	$405	$181
Retail (125,000 sq ft)	1,000 sf	**$733**	**$799**	$765	$184	$405	$289

1) du = dwelling unit
2) Source: Table 7
3) Source: Orange County
4) Source: Collier County Impact Fee Administration Division
5) Source: Indian River County Planning Divi
6) Source: Miami-Dade Zoning Development Services Division. Impact fees were adopted in 2005 with an annual adjustment based on the CPI starting in 2006/07.
7) Source: Polk County Building and Construction Department

Table 9
Law Enforcement, Single Family Impact Fee Schedule Comparison

County	Date of Last Update Study	Adoption %	Single Family (2,000 sf du)	Single Family Fee @ 100%[1]
Hernando County[1]	2012	100%	$86	$86
Monroe County[2]	1992	100%	$150	$150
Palm Beach County[3]	2022	Varies	$137	$198
St. Lucie County[4]	2016	100%	$246	$232
Sarasota County[5]	2016	100%	$281	$281
Polk County[6]	2019	100%	$283	$283
Nassau County[7]	N/A	N/A	$299	$299
St. Johns County[8]	2018	100%	$351	$312
Miami-Dade County[9]	2005	N/A	$583	$411
Orange County (Adopted)[10]	**2017**	**100%**	**$510**	**$478**
Jefferson County[11]	2007	100%	$481	$481
Indian River County[12]	2019	40%	$196	$490
Citrus County[13]	2021	73%	$416	$571
Collier County[14]	2016	100%	$587	$587
Manatee County[15]	2015	90%	$536	$596
Orange County (Calculated)[16]	**2022**	**N/A**	**$624**	**$624**
Martin County[17]	2012	100%	$760	$760

Note: Counties surrounding Orange County are highlighted.

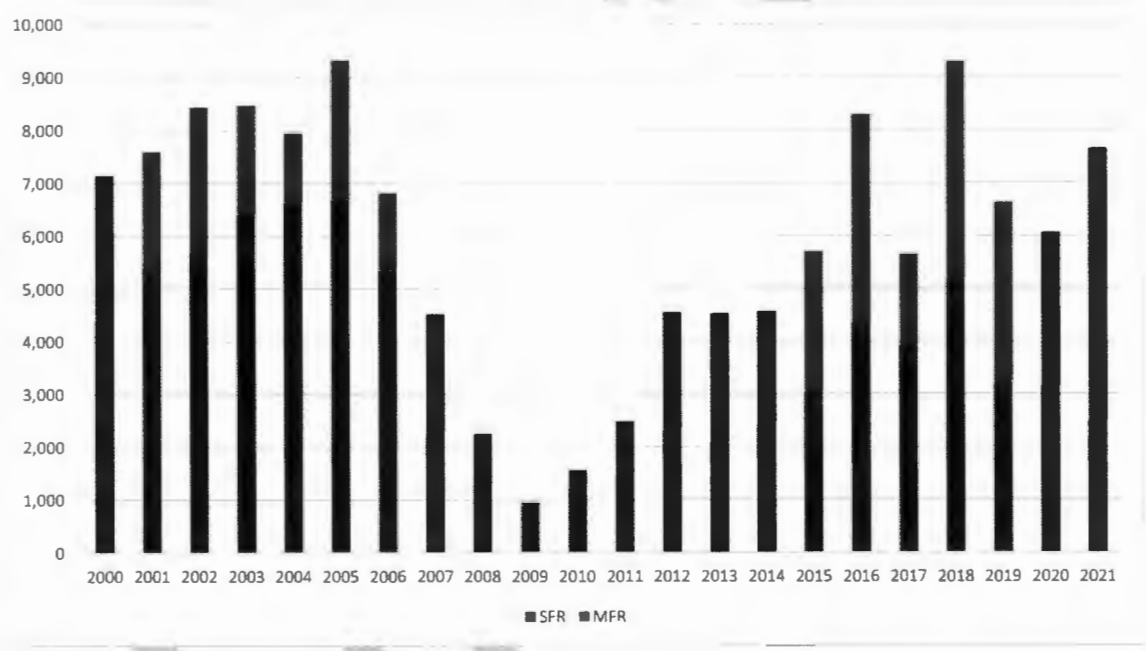
1) Source: Hernando County Building Division. The fee calculations include only vehicles and equipment. Law enforcement buildings are included under the general government buildings impact fee.
2) Source: Monroe County Planning & Environmental Resources Department
3) Source: Palm Beach County Planning, Zoning and Building Department, includes only the vehicle and equipment value. Law enforcement buildings are included in the general government buildings impact fee. Fees shown effective January 1, 2023. County adopted maximum allowable under HB 337.
4) Source: St. Lucie County Planning & Development Services Department
5) Source: Sarasota County Planning and Development Services Department
6) Source: Polk County Building and Construction Department
7) Source: Nassau County Building Department
8) Source: St. Johns County's Schedule of Fees and Services
9) Source: Miami-Dade Zoning Development Services Division. Impact fees were adopted in 2005 with an annual adjustment based on the CPI starting in 2006/07.
10) Source: Orange County
11) Source: Jefferson County Planning Department
12) Source: Indian River County Planning Division
13) Source: Citrus County Growth Management Department
14) Source: Collier County Impact Fee Administration Division
15) Source: Manatee County Impact Fee Administration
16) Source: Table 7
17) Source: Martin County Growth Management Department

Future Revenue Estimates

Over the past five years, Orange County collected an average of $3.1 million of law enforcement impact fees per year.

Based on permitting levels over the past three to five years, it is estimated that if adopted, the calculated impact fees are likely to generate $4.0 million to $4.5 million per year. The following chart presents residential permitting trends in the law enforcement service area.

Figure 1
Residential Permitting Trends – Law Enforcement Service Area



For impact fee purposes, revenue projections serve only as an overall guideline in planning future infrastructure needs. In their simplest form, impact fees charge each unit of new growth for the net cost (total cost less credits) of infrastructure needed to serve that unit of growth. If the growth rates remain high, the County will have more impact fee revenues to fund growth related projects sooner rather than later. If the growth rate slows down, less revenue will be generated, and the timing and need for future infrastructure improvements will be later rather than sooner.

Indexing

In many cases, impact fees are reviewed periodically (every three to five years, etc.) as opposed to on an annual basis. HB 337 that was signed into law in 2021 requires that impact fees not be increased more than once every four years. If no adjustment to the impact fee schedule is made during this period, a situation can be created where major adjustments to the impact fee schedule likely become necessary due to the time between the adjustments. During periods of cost increases, the need for significant adjustments also creates major concerns in the development community. To address this issue, Orange County indexes its impact fees to adjust for building, land, and equipment costs on an annual basis. The remainder of this section provides the method for calculating the combined index.

Land Cost

As shown in **Table 10**, between 2016 and 2021, just value of vacant land increased by an annual average of 4 percent in the law enforcement service area. Given the high level of fluctuations in land values, a longer-term review was also conducted. A review of land value changes countywide from 1976 to 2021 suggested an average increase of 5.4 percent per year. This figure is higher than the increase experienced over the past five years. When the change in a shorter period suggests a large average annual increase (for example, 10 percent or greater), this average can be moderated by a longer-term period.

Table 10
Vacant Land Value Change

Year	Just Value	Percent Change
2016	$2,079,704,020	-
2017	$2,204,952,492	6.0%
2018	$2,362,095,272	7.1%
2019	$2,472,545,119	4.7%
2020	$2,463,291,387	-0.4%
2021	$2,528,972,077	2.7%
Average (2016-2021)		**4.0%**

Source: Florida Department of Revenue, Ad Valorem Valuation and Tax Data files

Building Construction Cost

For building construction costs, a common index used is the national building cost index provided by Engineering-News Record. As shown in **Table 11**, the building cost index averaged 4.2 percent over the past five-years.

Table 11
Building Cost Index (National Average)

Year	Annual Avg[1]	Percent Change[2]
2016	5,645	-
2017	5,831	3.3%
2018	6,019	3.2%
2019	6,136	1.9%
2020	6,281	2.4%
2021	6,912	10.0%
Average (2016-2021)		**4.2%**

Source: Enginnering News-Record, Building Cost Index

Equipment Costs

For equipment costs, the Consumer Price Index (CPI) within the South Region is utilized for indexing purposes. **Table 12** presents the annual cost increase over the past five-years, which averages 2.4 percent.

Table 12
Equipment Cost Index (South Region)

Year	Annual Avg	Percent Change
2016	147.3	-
2017	150.3	2.1%
2018	153.4	2.1%
2019	155.5	1.3%
2020	157.1	1.0%
2021	165.4	5.3%
Average (2016-2021)		**2.4%**

Source: Bureau of Labor Statistics, CPI-All Urban Consumers, All Items

Application

To index the law enforcement impact fee schedule previously presented in this report, the combined index should first be calculated, which is shown in **Table 13**. The second column summarizes the average cost increases presented previously in Tables 10, 11, and 12. The third column presents the percent of the total cost for each inventory component, which are then multiplied with the annual change to create the overall index. The combined index for the law enforcement impact fee is then applied to the calculated fees and is presented in Table 14.

Table 13
Indexing Application – Combined Index

Cost Component	Annual Change[1]	Percent of Total[2]	Index[3]
Land Cost	4.0%	4%	0.2%
Building Cost	4.2%	41%	1.7%
Vehicle/Equipment Cost	2.4%	55%	1.3%
Total			**3.2%**

1) Source: Tables 10, 11, and 12
2) Source: Table 3
3) Annual change (Item 1) multiplied by the percent of total (Item 2)

Table 14 presents the indexed fee schedule for the next four years using the overall index calculated and shown in Table 13. It is recommended the calculated index be reviewed and recalculated annually, especially during time periods when costs fluctuate significantly.

Table 14
Indexed Fees

Land Use	Unit	Year 1 Calculated Impact Fee[1]	Year 2[2]	Year 3[3]	Year 4[4]	Year 5[5]
		Annual Index[6]	**3.2%**	**3.2%**	**3.2%**	**3.2%**
SFR Detached	du	$624	$644	$665	$686	$708
Multi-Family	du	$220	$227	$234	$241	$249
Mobile Home	du	$294	$303	$313	$323	$333
Hotel/Motel	room	$283	$292	$301	$311	$321
Commercial/Retail	1,000 gross sf	$733	$756	$780	$805	$831
Office/Institutional	1,000 gross sf	$444	$458	$473	$488	$504
Manufacturing	1,000 gross sf	$105	$108	$111	$115	$119
Warehousing	1,000 gross sf	$111	$115	$119	$123	$127
School - Private	1,000 gross sf	$197	$203	$209	$216	$223

1) Source: Table 7
2) Year 1 figures (Item 1) multiplied by (1+0.032), annual index (Item 6)
3) Year 2 figures (Item 2) multiplied by (1+0.032), annual index (Item 6)
4) Year 3 figures (Item 3) multiplied by (1+0.032), annual index (Item 6)
5) Year 4 figures (Item 4) multiplied by (1+0.032), annual index (Item 6)
6) Source: Table 13

Appendix A
Vehicle and Equipment Inventory - Supplemental Information

Appendix A: Vehicle and Equipment Inventory

This appendix presents the necessary vehicle and equipment required for OCSO to perform law enforcement services. Per HB 337, capital equipment that could be included in impact fee calculations (except for equipment and vehicles used to outfit a vehicle) is defined as having a minimum of 5 years of life expectancy.

Vehicle Inventory

As shown in Table A-1, OCSO's total vehicle value is approximately $88.9 million.

Table A-1
Law Enforcement Vehicle Inventory

Description	Total Value[1]	Unit Count[2]	Average Value per Unit[3]
Allmand Nlpro	$7,865	1	$7,865
ATV	$63,022	8	$7,878
Boat	$439,383	8	$54,923
Chevrolet Colorado	$246,662	9	$27,407
Chevrolet Equinox	$96,030	4	$24,008
Chevrolet Express	$112,817	4	$28,204
Chevrolet Impala	$6,564,703	311	$21,108
Chevrolet Malibu	$34,669	2	$17,335
Chevrolet Monte Carlo	$16,229	1	$16,229
Chevrolet Silverado	$1,221,132	39	$31,311
Chevrolet Tahoe	$2,645,978	84	$31,500
Chevrolet Trailblazer	$40,212	2	$20,106
Chevrolet Traverse	$1,156,593	44	$26,286
Chevrolet Uplander	$75,945	5	$15,189
Chrysler 200	$22,598	1	$22,598
Chrysler Pacifica	$49,099	2	$24,550
Chrysler Pt Cruiser	$14,687	1	$14,687
Chrysler Sebring	$13,922	1	$13,922
Chrysler Voyager	$183,531	7	$26,219
Compact Radar-Speed Trailer	$85,000	4	$21,250
Compressor Mako Breathing Air Mod	$13,000	1	$13,000
Continental Car Utility	$2,449	1	$2,449
Demc Ti11	$1,052	1	$1,052
Dodge 3500	$37,534	2	$18,767
Dodge Caravan	$176,968	9	$19,663
Dodge Charger	$664,341	27	$24,605

Table A-1 (Continued)

Law Enforcement Vehicle Inventory

Description	Total Value[1]	Unit Count[2]	Average Value per Unit[3]
Dodge Dakota	$39,055	2	$19,528
Dodge Durango	$278,872	10	$27,887
Dodge Grand Caravan	$856,965	37	$23,161
Dodge Intrepid	$14,311	1	$14,311
Dodge Journey	$39,530	2	$19,765
Dodge Nitro Sxt	$18,779	1	$18,779
Dodge Ram	$135,617	6	$22,603
Express	$13,912	2	$6,956
Ford Crown	$23,571	1	$23,571
Ford Crown Victoria	$13,437	1	$13,437
Ford E150	$89,089	5	$17,818
Ford E150 Van	$19,053	1	$19,053
Ford E250	$39,267	2	$19,634
Ford E350	$195,207	7	$27,887
Ford E350 Van	$21,099	1	$21,099
Ford E450	$124,992	1	$124,992
Ford Econoline 350	$148,691	1	$148,691
Ford Edge	$122,575	5	$24,515
Ford Escape	$275,502	12	$22,959
Ford Escape S	$20,417	1	$20,417
Ford Excursion	$4,188	1	$4,188
Ford Expedition	$334,689	8	$41,836
Ford Explorer	$34,567,454	982	$35,201
Ford F150	$3,644,995	102	$35,735
Ford F250	$687,307	20	$34,365
Ford F450	$260,174	6	$43,362
Ford F550	$484,241	6	$80,707
Ford Focus	$153,822	10	$15,382
Ford Fusion	$891,805	48	$18,579
Ford Interceptor	$28,666	1	$28,666
Ford Ranger	$94,353	3	$31,451
Ford Sport Trac	$22,560	1	$22,560
Ford Taurus	$779,497	34	$22,926
Ford Transit 150	$403,026	15	$26,868
Ford Transit 250	$386,225	10	$38,623
Ford Transit 350	$124,761	2	$62,381
Ford Windstar	$80,623	4	$20,156
Forklift	$72,061	2	$36,031
Freightliner	$1,576,281	4	$394,070

Table A-1 (Continued)

Law Enforcement Vehicle Inventory

Description	Total Value[1]	Unit Count[2]	Average Value per Unit[3]
Freightliner Command Post	$895,565	1	$895,565
Gem Glbl	$20,079	1	$20,079
Generator	$80,109	4	$20,027
GMC Canyon	$69,879	3	$23,293
GMC Sierra	$144,664	7	$20,666
GMC Terrain	$124,643	5	$24,929
GMC Yukon	$21,337	6	$3,556
Golf Cart	$53,271	5	$10,654
Hammonds G-18-Gas	$18,600	1	$18,600
Honda Civic	$4,000	1	$4,000
Honda Element	$21,023	1	$21,023
International 440 SBA	$82,035	1	$82,035
Jeep Cherokee	$104,357	4	$26,089
Jeep Compass	$22,580	1	$22,580
Jeep Grand Cherokee	$836,486	33	$25,348
John Deere Gator	$164,796	25	$6,592
Keller Bu-10-2	$30,600	1	$30,600
Kia Optima	$203,511	10	$20,351
Kia Sorento	$62,020	2	$31,010
Lenco F550	$589,964	2	$294,982
Lenco Tug	$30,200	1	$30,200
Mitsubishi 3500	$33,239	1	$33,239
Mitsubishi Lift	$32,102	1	$32,102
Motorcycle	$1,316,250	68	$19,357
Nissan Altima	$108,832	5	$21,766
Nissan Frontier	$143,002	6	$23,834
Nissan Murano	$24,284	1	$24,284
Nissan NVP	$38,632	1	$38,632
Nissan Pathfinder	$581,776	23	$25,295
Nissan Quest	$200,673	8	$25,084
Nissan Titan	$129,104	5	$25,821
Ram 1500	$135,150	5	$27,030
Ski Loader	$47,021	1	$47,021
Toyota Camry	$218,352	9	$24,261
Toyota Lift	$32,090	1	$32,090
Toyota Prius	$41,356	2	$20,678
Toyota RAV4	$53,288	2	$26,644
Toyota Scion	$17,725	1	$17,725

Table A-1 (Continued)

Law Enforcement Vehicle Inventory

Description	Total Value[1]	Unit Count[2]	Average Value per Unit[3]
Toyota Sienna	$97,106	4	$24,277
Toyota Tacoma	$76,616	3	$25,539
Track Loader	$237,500	1	$237,500
Trailer	$2,148,640	73	$29,433
Trailer/Generator	$14,299	2	$7,150
WaveRunner	$26,796	2	$13,398
Additional Equipment Cost per Marked Patrol Vehicle[4]	$18,498,134	1,178	$15,703
Total	**$88,903,776**		

1) Source: Orange County
2) Source: Orange County
3) Total value (Item 1) divided by unit count
4) Source: Appendix A-2

Marked Patrol Vehicle Cost

OCSO also has additional equipment to outfit a marked patrol vehicle which is not captured in the asset inventory. As shown in Table A-2, the total cost of a marked patrol vehicle is $60,491. Approximately $44,800 of this is accounted for in the asset inventory, but the remaining $15,700 is additional equipment. To determine the total value, of the additional equipment, the additional cost per vehicle (approximately $15,700) was multiplied by the number of marked patrol vehicles (1,178). This results in an additional $18.5 million included in the impact fee calculations as part of the vehicle inventory.

Table A-2

Marked Patrol Vehicle Cost

Item	Cost
Marked Patrol Vehicle Equipment, Included in Asset Inventory[1]	
Vehicle (Ford Explorer)	$38,000
Radio: Mobile (XTL 2500)	$5,000
MDT Cost	$1,788
Subtotal -- Equipment, Included in Asset Inventory[2]	**$44,788**
Marked Patrol Vehicle Equipment, Excluded from Asset Inventory[3]	
Lighting Package	$8,000
Front Push Bumper	$514
Console	$553
Computer Mount	$310
Shotgun Rack	$275
Vertical M4/M16 Rack	$318
Cage/Plastic Rear Seat/Mounting Kit/Kick Panel	$881
Rear Window Bars	$181
Lock Box Rear Area	$491
Antenna	$96
Vehicle Graphics	$595
Stop Sticks	$612
Fire Extinguisher	$27
Misc. Installation Equipment	$1,800
Window Tint	$150
Drive Cam/Subscription cost	$900
Subtotal -- Equipment, Excluded from Asset Inventory[4]	**$15,703**
Number of Marked Patrol Vehicles[5]	**1,178**
Total Equipment Cost, Excluded from Asset Inventory[6]	**$18,498,134**

1) Source: Orange County. Equipment is accounted for in Asset Inventory.
2) Total cost of vehicle, radio, and MDT cost per marked patrol vehicle. These costs are included in the Asset Inventory.
3) Source: Orange County. Equipment is not accounted for in Asset Inventory.
4) Source: Total cost of equipment per marked patrol vehicle that is unaccounted for in the Asset Inventory.
5) Source: Orange County
6) Equipment excluded from asset inventory (Item 4) multiplied by number of marked patrol vehicles (Item 5)

Equipment Inventory

As shown in Table A-3 OSCO's total equipment inventory is valued at $67.3 million.

Table A-3

Law Enforcement Equipment Inventory

Description	Total Value	Unit Count	Average Value per Unit
Airplane	$563,060	1	$563,060
Audio Processor	$39,840	2	$19,920
Bomb Robot	$1,639,919	1	$1,639,919
Camera/System	$6,655,183	213	$31,245
Desktop	$758,821	273	$2,780
Helicopter	$7,379,884	4	$1,844,971
Laptop	$8,200,458	4,563	$1,797
Machine Gun	$40,389	41	$985
Other	$23,834,290	4,686	$5,086
Pistol/Equipment	$802,138	1,814	$442
Radar	$816,873	297	$2,750
Radio/System	$9,077,439	1,883	$4,821
Rifle/Equipment	$2,336,270	1,262	$1,851
Shotgun/Equipment	$798,795	1,291	$619
Tablet	$50,961	33	$1,544
Taser	$4,273,140	2,791	$1,531
Total	**$67,267,460**		

Source: Orange County

Appendix B
Building and Land Value Analysis - Supplemental Information

Appendix B – Building and Land Value Analysis

This appendix provides the additional data and information on building and land value estimates.

Building Values

In determining the appropriate unit value for buildings, the following analysis was conducted:

- Construction cost increases since 2017;
- A review of recently built or planned law enforcement buildings in Orange County;
- Insurance value of the existing inventory; and
- Construction cost observed in other jurisdictions for law enforcement facilities.

The 2017 study used a building value estimate of $225 per square foot for primary buildings and $175 per square foot for support buildings. Indexing these values to current dollars results in $300 per square foot for primary buildings and $230 per square foot for support buildings (a 33-percent increase).

The most recent substation construction included the following:

- Sheriff's K-9 Facility, which was constructed from 2020 through 2022 for $366 per square foot for construction costs.
- New Evidence Building, which is an existing building purchased in 2022 and will need to be renovated. Total purchase and renovation cost is estimated at $320 per square foot.
- The weighted average cost of these two buildings is $324 per square foot.

The insurance values of existing primary buildings averaged $215 per square foot while this figure was $51 per square foot for support buildings, including contents. It is important to note that insurance values are considered to be a conservative estimate because the value of the foundation and other more permanent parts of the structure tend to be excluded since they would not have to be rebuilt if the structure is damaged or lost.

A review of law enforcement building cost observed during studies completed over the past seven years averaged approximately $267 per square foot, with a range of $200 per square foot to $350 per square foot.

Given this data and information, building cost for primary buildings was estimated at $325 per square foot. The value of support facilities was estimated at $230 per square foot, based primarily on indexing the 2017 estimate according to the Engineering News Record. These costs reflect all costs related to constructing buildings (such as design, construction, site preparation, furniture/fixture/equipment, permitting, etc.) with the exception of land purchase. This information is summarized in **Table B-1**.

Table B-1
Law Enforcement Buildings
Total Building Value per Square Foot

Building Description	2017 Cost Estimate	Indexed Cost
Primary Building Cost per Square Foot	$225	$299
Support Building Cost per Square Foot	$175	$232
ENR Cost Building Index (2017-2022)		32.74%
Building Description	**Year**	**Cost per Square Foot**
Recent Construction:		
Sheriff's K-9 Facility	*2020-2022*	*$366*
New Evidence Bldg	*2022*	*$320*
Recent Construction -- Weighted Average		$324
Insurance Values of Existing Buildings with Contents:		
- Primary Buildings	*2022*	*$215*
- Support Buildings	*2022*	*$51*
Data from Other Jurisdictions	2015-2020	$200 to $350
Used in the Study:		
- Primary Buildings		**$325**
- Support Buildings		**$230**

Source: Orange County and previous Benesch studies

Land Values

To estimate land value for future land purchases for law enforcement facilities, the following data/information was evaluated:

- Land cost increase since the last study based on estimates provided by the Orange County Property Appraiser's Office (OCPA);
- The market (or just) value of parcels where current law enforcement buildings are located based on information provided by OCPA;
- Recent land appraisals;
- Vacant land sales and market/just values of all vacant land in the law enforcement service area; and
- Discussions with OCSO and County representatives.

The 2017 study used an estimated land value of $230,000 per acre. Indexing this value to current dollars results in an estimated land value of $305,000 per acre.

Recent appraisals for a 3.6-acre commercial parcel indicated an average land price of $158,000 per acre. The County received appraisals for additional sites, but these sites include existing structures and thus were excluded from this analysis.

The value of current parcels as reported by the Property Appraiser averages $115,000 per acre with a range of $7,000 per acre to $2.4 million per acre.

Vacant residential land sales of similarly sized parcels (0.5 to 15 acres) between 2017 and 2021 averaged $105,000 per acre with a median value of 55,000 per acre. These prices were higher for vacant commercial land sales, with an average of $383,000 per acre and a median value of $292,000 per acre.

Similarly, the value of vacant residential land reported by OCPA averaged $68,000 per acre with a median value of $47,000 per acre. These values were also higher for vacant commercial parcels, with an average of $287,000 per acre and a median value of $218,000 per acre.

Based on this analysis, an average land value estimate of **$150,000 per acre** is used for impact fee calculations purposes for parcels with less than 15 acres. Two of the law enforcement facilities are located on large, agriculturally zoned parcels. For these two parcels, the estimate of **$45,000 per acre** is used, based on the recent sales prices of agriculturally zoned parcels.

Orange County Fire Rescue

Impact Fee Update Study

DRAFT REPORT

October 26, 2022

Prepared for:

Orange County
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Orange County
Fire Rescue Impact Fee Update Study
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Executive Summary

With a population of almost 1.5 million, Orange County is the fifth most populous county in Florida. It is also one of the fastest growing counties ranking 13th out of 67 Florida counties in terms of projected growth rate through 2050 (1.2 percent per year) and first in terms of projected absolute growth (608,000 new residents projected through 2050). The fire rescue service area houses approximately 955,000 of the countywide population. Given this growth rate and to mitigate cost associated with new growth, Orange County implemented impact fees for several service areas, including fire rescue, parks and recreation, law enforcement, transportation and schools. This report addresses the update of the fire rescue impact fee.

Fire rescue impact fees are used to fund capital expansion projects for fire rescue service related buildings, land, vehicles and capital equipment required to support the additional demand created by new growth. Orange County's fire rescue impact fees were last updated in 2017. Per the requirements of the impact fee ordinance, the County retained Benesch, in association with Laura Turner Planning Services, to update the impact fee to reflect most recent and localized data.

The methodology used to update the fire rescue impact fee is a consumption-based impact fee methodology, which has also been used to calculate the current adopted fire impact fee for the County as well as several fire/EMS impact fees throughout Florida. A consumption-based impact fee is intended to charge new growth the proportionate share of cost associated with providing fire rescue facilities available for use by new growth. In addition, per the requirements of case law, a credit is subtracted from total cost to account for contributions of new development toward any capacity expansion projects through other revenue sources. Finally, the demand component is measured in terms of incidents per property units for each land use category.

The primary steps involved in the update of the fire rescue impact fee included the following:

- Review of the capital inventory and establishment of the achieved level of service;
- Estimation of the current value of the fire rescue land, buildings, vehicles and equipment;

- Review of funding sources used for fire rescue capital capacity expansion projects;
- Calculation of the demand component; and
- Calculation of the updated fire rescue impact fee.

Table ES-1 provides a comparison of the calculated fees to the County's current adopted fees. The changes in the fee levels are due to several factors:

- Increase in the inventory of fire rescue capital facilities and cost of building/acquiring these assets resulted in a fee increase of approximately 25 percent compared to the 2017 study numbers.
- Credit increased in terms of dollars per resident; however, remained the same as a percent of cost. Therefore, it did not have any effect on the fee levels.
- Remaining changes are due to the fluctuations in incident data.
- The final increase is moderated by the County's indexing policy between technical update studies. For example, compared to the 2017 study, the fee for single family homes increased by 35 percent. However, due to indexing since 2017, the increase from the current fee is moderated to 25 percent.

Table ES-1
Calculated Fire Rescue Fee Schedule

Land Use	2022 Calculated Impact Fee[1]	Adopted Impact Fee[2]	Percent Change[3]
Single Family Detached/Duplex/Mobile Home	$431	$346	25%
Multi Family	$278	$237	17%
Hotel/Motel	$252	$198	27%
Commercial Retail/ Assembly	$449	$307	46%
Office/ Institutional	$399	$274	46%
Industrial	$96	$86	12%
Storage	$31	$19	63%

1) Source: Table 7
2) Source: Orange County. Fees adopted at 100% of 2017 calculated rate and indexed 2 percent annually.
3) Percent change from the adopted impact fee (Item 2) to the 2022 calculated impact fee (Item 1)

Introduction

With a population of almost 1.5 million, Orange County is the fifth most populous county in Florida. It is also one of the fastest growing counties ranking 13th out of 67 Florida counties in terms of projected growth rate through 2050 (1.2 percent per year) and first in terms of projected absolute growth (608,000 new residents projected through 2050). Fire rescue service area includes the unincorporated county, the City of Belle Isle, City of Edgewood, and the Town of Oakland, which combined comprise 955,000 of the countywide population. Given this growth rate and to mitigate cost associated with new growth, Orange County implemented impact fees for several service areas, including fire rescue, parks and recreation, law enforcement, transportation and schools. This report addresses the update of the fire rescue impact fee.

Fire rescue impact fees are used to fund capital expansion projects for fire rescue service related facilities, land, vehicles and capital equipment required to support the additional demand created by new growth. Orange County's fire rescue impact fees were last updated in 2017. Per the requirements of the impact fee ordinance, the County retained Benesch, in association with Laura Turner Planning Services, to update the impact fee to reflect most recent and localized data since the last technical study. It should be noted that figures calculated in this study represent the technically defensible level of impact fees that the County could charge; however, the Board of County Commission may choose to discount the fees as a policy decision.

Methodology

The methodology used to update the fire rescue impact fee is a consumption-based impact fee methodology, which has also been used to calculate the current adopted fire impact fee for Orange County as well as impact fees throughout Florida. A consumption-based impact fee is intended to charge new growth the proportionate share of cost associated with providing fire rescue facilities available for use by new growth. In addition, per the requirements of case law, a credit is subtracted from total cost to account for contributions of new development toward any capacity expansion projects through other revenue sources. Finally, the demand component is measured in terms of incidents per unit of development for each land use.

Legal Overview

In Florida, legal requirements related to impact fees have primarily been established through case law since the 1980's. Impact fees must comply with the "dual rational nexus" test, which requires that they:

- Be supported by a study demonstrating that the fees are proportionate in amount to the need created by new development paying the fee; and
- Be spent in a manner that directs a proportionate benefit to new development, typically accomplished through establishment of benefit districts (if needed) and a list of capacity-adding projects included in the County's Capital Improvements Program (CIP), Capital Improvement Element (CIE), or another planning document/Master Plan.

In 2006, the Florida legislature passed the "Florida Impact Fee Act," which recognized impact fees as "an outgrowth of home rule power of a local government to provide certain services within its jurisdiction." § 163.31801(2), Fla. Stat. The statute – concerned with mostly procedural and methodological limitations – did not expressly allow or disallow any particular public facility type from being funded with impact fees. The Act did specify procedural and methodological prerequisites, such as the requirement of the fee being based on most recent and localized data, a 90-day requirement for fee changes, and other similar requirements, most of which were common to the practice already.

More recent legislation further affected the impact fee framework in Florida, including the following:

- **HB 227 in 2009:** The Florida legislation statutorily clarified that in any action challenging an impact fee, the government has the burden of proving by a preponderance of the evidence that the imposition or amount of the fee meets the requirements of state legal precedent or the Impact Fee Act and that the court may not use a deferential standard.
- **SB 360 in 2009:** Allowed fees to be decreased without the 90-day notice period required to increase the fees and purported to change the standard of legal review associated with impact fees. SB 360 also required the Florida Department of Community Affairs (now the Department of Economic Opportunity) and Florida Department of Transportation (FDOT) to conduct studies on "mobility fees," which were completed in 2010.

- **HB 7207 in 2011:** Required a dollar-for-dollar credit, for purposes of concurrency compliance, for impact fees paid and other concurrency mitigation required.
- **HB 319 in 2013:** Applied mostly to concurrency management authorities, but also encouraged local governments to adopt alternative mobility systems using a series of tools identified in section 163.3180(5)(f), Florida Statutes.
- **HB 207 in 2019**: Included the following changes to the Impact Fee Act along with additional clarifying language:
    1. Impact fees cannot be collected prior to building permit issuance; and
    2. Impact fee revenues cannot be used to pay debt service for previously approved projects unless the expenditure is reasonably connected to, or has a rational nexus with, the increased impact generated by the new residential and commercial construction.
- **HB 7103 in 2019:** Addressed multiple issues related to affordable housing/linkage fees, impact fees, and building services fees. In terms of impact fees, the bill required that when local governments increase their impact fees, the outstanding impact fee credits for developer contributions should also be increased. This requirement was to operate prospectively; however, HB 337 that was signed in 2021 deleted this clause and making all outstanding credits eligible for this adjustment. This bill also allowed local governments to waive/reduce impact fees for affordable housing projects without having to offset the associated revenue loss.
- **SB 1066 in 2020:** Added language allowing impact fee credits to be assignable and transferable at any time after establishment from one development or parcel to another that is within the same impact fee zone or impact fee district or that is within an adjoining impact fee zone or district within the same local government jurisdiction. In addition, added language indicating any new/increased impact fee not being applicable to current or pending permit applications submitted prior to the effective date of an ordinance or resolution imposing new/increased fees.
- **HB 1339 in 2020:** Required reporting of various impact fee related data items within the annual financial audit report submitted to the Department of Financial Services.
- **HB 337 in 2021:** Placed limits on the amount and frequency of fee increases, but also included a clause to exceed these restrictions if the local governments can demonstrate extraordinary circumstances, hold two public workshops discussing these circumstances and the increases are approved by two-thirds of the governing body.

Impact Fee Definition

- An impact fee is a one-time capital charge levied against new development.
- An impact fee is designed to cover the portion of the capital costs of infrastructure capacity consumed by new development.
- The principal purpose of an impact fee is to assist in funding the implementation of projects identified in the CIP, CIE and other capital improvement programs for the respective facility/service categories.

Impact Fee vs. Tax

- An impact fee is generally regarded as a regulatory function established based upon the specific benefit to the user related to a given infrastructure type and is not established for the primary purpose of generating revenue for the general benefit of the community, as are taxes.
- Impact fee expenditures must convey a proportional benefit to the fee payer. This is accomplished through the establishment of benefit districts, where fees collected in a benefit district are spent in the same benefit district.
- An impact fee must be tied to a proportional need for new infrastructure capacity created by new development.

This technical report has been prepared to support legal compliance with existing case law and statutory requirements. The technical report also documents the methodology components for the fire rescue impact fee, including an evaluation of the inventory, service area, cost, credit, and demand components. Information supporting this analysis was obtained from the County and other sources, as indicated. The study's methodology is documented in the following sections of this technical report:

- Facility Inventory
- Service Area
- Cost Component
- Credit Component
- Net Impact Cost
- Demand Component
- Calculated Fire Rescue Impact Fee Schedule
- Impact Fee Schedule Comparison
- Indexing

These various elements are summarized in the remainder of this report, with the result being the calculated fire rescue impact fee schedule.

Facility Inventory

Orange County Fire Rescue (OCFR) provides fire rescue services from 40 fire stations as well as from three ancillary facilities that are owned and operated by the County. In addition to the owned facilities, OCFR provides fire rescue related services from four additional fire stations that are leased. For impact fee calculation purposes, only the County-owned fire stations and other support buildings are included in the inventory.

Table 1 shows a summary of the OCFR building inventory included in the impact fee calculations. As presented, the inventory includes a total of 380,000 square feet of building space located on 94 acres of land.

The building value estimates are based on construction costs for recently built stations, estimates/bids for future stations in Orange County, insurance values of the existing stations, information from other Florida jurisdictions, and discussions with the County staff. The land value estimates are based on recent appraisals, land values of existing facilities, vacant land values and sales of parcels with similar characteristics throughout the fire rescue service area, and discussions with the County staff.

A more detailed explanation of building and land value estimates is included in Appendix A.

Table 1
Orange County Fire Rescue Land and Building Inventory

Facility[1]	Address[1]	Year Built[1]	# Bays - Enclosed / Open[1]	Fire Rescue Building Square Footage[2]	Acres[3]	Building Value[4]	Land Value[5]	Total Building and Land Value[6]
Station 20	3200 Washington Street	1962	5 - E	4,881	0.47	$2,440,500	$65,800	$2,506,300
Station 27	2248 Novella Eliza Lane	2006	2 - E	5,763	0.69	$2,881,500	$96,600	$2,978,100
Station 28	3250 Clarcona Road	1988	2 - O	1,184	1.76	$592,000	$246,400	$838,400
Station 30	20 S Hastings Street	1991	3 - E	13,103	1.52	$6,551,500	$212,800	$6,764,300
Station 33	1700 S Apopka Vineland Road	2001	2 - E	6,580	2.00	$3,290,000	$280,000	$3,570,000
Station 34	4000 Winter Garden Vineland Road	1985	2 - E	5,378	1.35	$2,689,000	$189,000	$2,878,000
Station 35	7435 Winter Garden Vineland Road	2009	3 - E	10,667	5.63	$5,333,500	$788,200	$6,121,700
Station 36	12252 Winter Garden Vineland Road	1986	3 - E	8,092	1.37	$4,046,000	$191,800	$4,237,800
Station 37[7]	540 E Oakland Avenue	2004	2 - E	6,616	0.84	$3,308,000	$117,600	$3,425,600
Station 40	5570 Beggs Road	1981	2 - E	7,550	3.45	$3,775,000	$483,000	$4,258,000
Station 41	4412 Fairview Avenue	1990	3 - E	10,288	0.49	$5,144,000	$68,600	$5,212,600
Station 42	5420 Silver Star Road	1973	4 - E	9,220	0.45	$4,610,000	$63,000	$4,673,000
Station 43	2700 N Apopka Vineland Road	2003	2 - E	6,676	1.68	$3,338,000	$235,200	$3,573,200
Station 50	1415 29th Street	1981	3 - E	7,548	0.93	$3,774,000	$130,200	$3,904,200
Station 51	1700 W Oak Ridge Road	1964	2 - E	10,216	1.48	$5,108,000	$207,200	$5,315,200
Station 52	4765 W Sand Lake Road	1980	3 - E	6,000	1.74	$3,000,000	$243,600	$3,243,600
Station 53	1270 La Quinta Drive	1977	2 - E	3,471	1.00	$1,735,500	$140,000	$1,875,500
Station 54	6500 Central Florida Parkway	1999	4 - E	14,499	4.83	$7,249,500	$676,200	$7,925,700
Station 55	801 Greenway Professional Ct	2007	2 - E	7,082	1.08	$3,541,000	$151,200	$3,692,200
Station 56	13303 International Drive	2004	2 - E	7,595	1.67	$3,797,500	$233,800	$4,031,300
Station 58	2900 Deerfield Boulevard	2002	2 - E	6,445	1.72	$3,222,500	$240,800	$3,463,300
Station 63	2450 N Goldenrod Road	2000	2 - E	5,998	9.39	$2,999,000	$1,314,600	$4,313,600
Station 65[8]	4999 N Orion Boulevard	2000	2 - E	6,188	N/A	$3,094,000	N/A	$3,094,000
Station 66	996 N Semoran Boulevard	1970	3 - E	5,370	0.64	$2,685,000	$89,600	$2,774,600
Station 67	10679 University Boulevard	2018	3 - E	10,417	2.00	$5,208,500	$280,000	$5,488,500
Station 68	1945 S Goldenrod Road	2021	2 - E	10,506	2.50	$5,253,000	$350,000	$5,603,000
Station 70	1027 E Wallace Road	1999	2 - E	6,120	2.00	$3,060,000	$280,000	$3,340,000

Table 1 (Continued)
Orange County Fire Rescue Land and Building Inventory

Facility[1]	Address[1]	Year Built[1]	# Bays - Enclosed / Open[1]	Fire Rescue Building Square Footage[2]	Acres[3]	Building Value[4]	Land Value[5]	Total Building and Land Value[6]
Station 71	4405 St Florian Way	1976	3 - E	8,480	1.72	$4,240,000	$240,800	$4,480,800
Station 72	3705 Conway Road	1994	2 - E	10,030	3.16	$5,015,000	$442,400	$5,457,400
Station 73	811 1st Street	1955	2 - E	3,018	0.33	$1,509,000	$46,200	$1,555,200
Station 76	11351 S Narcoossee Road	1983	2 - E	5,196	1.43	$2,598,000	$200,200	$2,798,200
Station 77	11501 Moss Park Rd	2007	2 - E	7,180	5.00	$3,590,000	$700,000	$4,290,000
Station 80	1841 Bonneville Drive	1973	6 - E	13,290	2.07	$6,645,000	$289,800	$6,934,800
Station 81	901 S Econlockhatchee Trail	2007	4 - E	10,931	4.30	$5,465,500	$602,000	$6,067,500
Station 82	500 Story Partin Road	1991	2 - E	10,312	1.79	$5,156,000	$250,600	$5,406,600
Station 83	11950 Lake Underhill Road	1989	4 - E	13,308	2.00	$6,654,000	$280,000	$6,934,000
Station 84	1221 N Fort Christmas Road	2013	2 - E	10,060	4.77	$5,030,000	$667,800	$5,697,800
Station 85	13801 Townsend Drive	2004	2 - E	6,700	1.24	$3,350,000	$173,600	$3,523,600
Station 86	3202 Babitt Av	1997	2 - O	3,939	4.34	$1,969,500	$607,600	$2,577,100
Station 87	2233 Crown Hill Boulevard	2020	2 - E	9,518	1.45	$4,759,000	$203,000	$4,962,000
Headquarters[9]	6590 Amory Ct	1994	N/A	46,228	5.11	$15,024,100	$715,400	$15,739,500
Supply	400 Gaston Foster	1967	4-E	14,550	1.64	$2,910,000	$229,600	$3,139,600
Fire Warehouse	1382 N. Chickasaw Tr.	1970	1-E	3,408	0.61	$681,600	$85,400	$767,000
Total Value				**379,601**	**93.64**	**$176,323,200**	**$13,109,600**	**$189,432,800**
Weighted Average Building Value per Square Foot[10]						**$464**		
Land Value per Acre[11]							**$140,000**	

1) Source: Orange County Fire Rescue
2) Source: Orange County Fire Rescue
3) Source: Orange County Fire Rescue
4) Fire Rescue building square footage (Item 2) multiplied by the estimated building value of $500 per square foot for fire stations, $325 per square foot for the Headquarters building, and $200 per square foot for the Supply and Fire Warehouse buildings. Appendix A provides further details on the unit cost estimates.
5) Acres (Item 3) multiplied by land value per acre (Item 11)
6) Sum of building value (Item 4) and land value (Item 5)

7) Fire station is jointly owned with the Town of Oakland with the County owning 60% of building and 50% of land. The building square footage and land included represents the 60% and 50% shares owned by the County.
8) Land is owned by the University of Central Florida and is excluded from impact fee calculations.
9) Acreage figure represents the portion of the total parcel acreage associated with fire rescue services.
10) Total building value (Item 4) divided by total square footage (Item 2)
11) Source: Appendix A

In addition to the land and buildings inventory, OCFR also has the necessary equipment and vehicles to perform its fire rescue services duties. **Table 2** summarizes the total equipment and vehicle inventory value. As shown, the value of fire rescue services related equipment and vehicles is estimated at $139.7 million.

Table 2
Orange County Fire Rescue Vehicle and Equipment Value

Vehicle Type[1]	Vehicle Value (per Unit)[2]	Equipment Value per Vehicle[3]	Total Value per Vehicle[4]	Number of Vehicles[5]	Total Value[6]
Pumper (Engine)	$651,000	$235,000	$886,000	59	$52,274,000
Aerials	$1,156,709	$259,350	$1,416,059	17	$24,073,003
Tanker	$450,000	$55,000	$505,000	7	$3,535,000
Squads	$950,000	$259,350	$1,209,350	6	$7,256,100
Wood Truck	$275,000	$8,800	$283,800	13	$3,689,400
Rescue Vehicles	$253,135	$193,200	$446,335	79	$35,260,465
Boats	$28,571	$3,928	$32,499	14	$454,986
Special Units	$119,542	-	$119,542	70	$8,367,940
Cars/Vans	$30,000	-	$30,000	158	$4,740,000
Total				**423**	**$139,650,894**

1) Source: Orange County Fire Rescue
2) Source: Orange County Fire Rescue
3) Source: Orange County Fire Rescue
4) Sum of vehicle value per unit (Item 2) and equipment value per vehicle (Item 3)
5) Source: Orange County Fire Rescue
6) Total value per vehicle (Item 4) multiplied by the number of vehicles (Item 5)

Service Area

OCFR provides fire rescue services in the unincorporated county, the City of Belle Isle, City of Edgewood, and the Town of Oakland. Therefore, the proper benefit district for the provision of fire rescue services is the unincorporated county and these three municipalities.

Cost Component

The cost component of the study evaluates the cost of all capital items, including buildings, land, and vehicles and equipment. **Table 3** provides a summary of all capital costs, which amounts to approximately $329 million.

Also shown within Table 3 is the total impact cost per call for OCFR. As presented, the total capital asset value is calculated as $2,584 per call, which is calculated by dividing the total asset value of $329 million by the average annual number of fire related calls from 2017 through 2021, excluding 2020. Because 2020 was not considered a typical year due to the pandemic, incidents during this year are excluded from the calculations.

Compared to the 2017 study, cost per call increased by approximately 25 percent due to additional stations/facilities built since 2017 and higher construction costs experienced throughout Florida and the nation.

Table 3
Total Impact Cost

Component	Cost	Percent of Total Value[7]
Building Value[1]	$176,323,200	54%
Land Value[2]	$13,109,600	4%
Vehicle and Equipment Value[3]	$139,650,894	42%
Total Asset Value[4]	**$329,083,694**	**100.0%**
Average Annual Number of Calls (2017-19 & 2021)[5]	127,330	
Total Impact Cost per Call[6]	**$2,584.49**	

1) Source: Table 1
2) Source: Table 1
3) Source: Table 2
4) Sum of building value (Item 1), land value (Item 2), and vehicle and equipment value (Item 3)
5) Source: Orange County Fire Rescue, average annual calls based on data from 2017 through 2021, excluding 2020.
6) Total asset value (Item 4) divided by the average annual number of calls (Item 5)
7) Distribution of building, land, and vehicle and equipment values

Credit Component

To avoid overcharging new development for the fire rescue impact fee, a review of the capital funding allocation for fire facilities and capital assets was completed. The purpose of this review was to determine any non-impact fee revenue generated by new development that is being used for capital facility (buildings, land, vehicles and equipment) expansion of the fire rescue program. Revenue credits would then apply against the cost per call so that new development is not overcharged.

Capital Expansion Funding Credit

To calculate the capital expansion funding per call, funding allocated to historical capital expansion projects was reviewed. Between 2017 and 2022, the County allocated an average non-impact fee funding of $8 million per year towards expansion of fire rescue facilities. The average annual funding was then divided by the average annual number of calls over the same time period. As shown in **Table 4,** the result is an average annual expansion cost of $64 per call.

Once the capital expansion credit is calculated, because the fire rescue capacity projects were partially funded with ad valorem revenues, an adjustment was made to account for the fact that new homes tend to pay higher taxes per dwelling unit due to the "Save Our Homes" assessment cap. This adjustment factor was estimated based on a comparison of the average taxable value of new homes to that of all homes. As presented in Table 4, the adjusted capital expansion credit amounts to $68 per call, which is used for credit calculations of residential land uses.

Table 4
Capital Expansion Credit

Expenditure[1]	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
OC Fire Protection & EMS/MSTU:							
Unmanned Aircraft Systems	$28,006	$51,688	$64,842	$59,583	$47,819	$40,804	**$292,742**
Dive Equipment	$6,482	$32,416	$25,933	-	-	-	**$64,831**
Fleet - R141	-	-	$200,530	-	-	-	**$200,530**
Aerials Q31	-	$862,963	-	-	-	-	**$862,963**
Aerials Q87	-	-	$945,000	-	-	-	**$945,000**
Aerials Q68	-	-	-	$945,000	-	-	**$945,000**
Marine 27 (Boat, motor, trailer)	-	-	-	-	$16,715	-	**$16,715**
Additional Battalion and Captain vehicles + equipment - Batt.7	$25,563	-	-	-	-	-	**$25,563**
Additional Battalion and Captain vehicles + equipment - Capt.7	$25,563	-	-	-	-	-	**$25,563**
Drone Response F250 & Drone Support Van	-	-	-	-	$125,000	-	**$125,000**
Station 54 Shed	-	-	-	-	-	$520,000	**$520,000**
Station 86 Metal Canopy	-	$51,000	-	-	-	-	**$51,000**
Subtotal -- Projects Funded with OC Fire Protection & EMS/MSTU	**$85,614**	**$998,067**	**$1,236,305**	**$1,004,583**	**$189,534**	**$560,804**	**$4,074,907**
General Fund:							
Fleet - R37	-	$181,875	-	-	-	-	**$181,875**
Fleet - R56	-	$200,530	-	-	-	-	**$200,530**
Fleet - R120	-	-	$181,875	-	-	-	**$181,875**
Fleet - R32	-	-	-	$209,990	-	-	**$209,990**
Fleet - R73	-	-	-	$209,990	-	-	**$209,990**
Fleet - R77	-	-	-	$209,990	-	-	**$209,990**
Fleet - R87	-	-	-	$200,810	-	-	**$200,810**
Subtotal -- Projects Funded with General Fund	**$0**	**$382,405**	**$181,875**	**$830,780**	**$0**	**$0**	**$1,395,060**
INVEST:							
Fire Station #67 (University/Lake Twylo) (INVEST)	-	-	-	-	-	$517,015	**$517,015**
Fire Station #87 (Avalon Park) (INVEST)	-	-	-	-	-	$2,888	**$2,888**
Fire Station #68 (Goldenrod & Silver Point Blvd) (INVEST)	-	-	-	-	-	$389,205	**$389,205**
Subtotal -- Projects Funded with INVEST	**$0**	**$0**	**$0**	**$0**	**$0**	**$909,108**	**$909,108**

Table 4 (Continued)
Capital Expansion Credit

Expenditure[1]	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
American Rescue Plan Act:							
Fire Heavy Equipment	-	-	-	-	-	$1,369,773	**$1,369,773**
Training Facility	-	-	-	-	-	$40,546,605	**$40,546,605**
Subtotal -- Projects Funded with American Rescue Plan	**$0**	**$0**	**$0**	**$0**	**$0**	**$41,916,378**	**$41,916,378**
Total Capital Expansion Expenditures							**$48,295,453**
Average Annual Capital Expansion Expenditures[2]							**$8,049,242**
Average Annual Number of Calls (2017-2021)[3]							**125,680**
Capital Expansion Expenditures per Call[4]							**$64.05**
Percent of Capital Expansion Projects Funded with Ad Valorem Tax Revenues[5]							**9%**
Portion Funded with Ad-Valorem Tax Revenues[6]							**$5.76**
Residential Land Uses Credit Adjustment Factor[7]							**1.70**
Residential Land Uses: Adjusted Capital Expansion Expenditures per Call[8]							**$9.79**
Portion Funded with Other Revenue Sources[9]							**$58.29**
Residential Land Uses: Adjusted Capital Expansion Expenditures per Call[10]							**$68.08**

1) Source: Orange County
2) Average capital expansion expenditures over the 6-year period
3) Source: Orange County
4) Average annual capital expenditures (Item 2) divided by the average annual number of calls (Item 3)
5) Percent of expenditures that is funded with ad valorem tax dollars
6) Capital expansion expenditures per call (Item 4) multiplied by percent of capital expansion projects funded with ad valorem tax revenues (Item 5)
7) Adjustment factor to reflect higher ad valorem taxes paid by new homes
8) Portion funded with ad-valorem tax revenues (Item 6) multiplied by the residential land uses credit adjustment factor (Item 7)
9) Capital expansion expenditures per call (Item 4) less portion funded with ad-valorem tax revenues (Item 6)
10) Adjusted capital expansion expenditures per call (Item 8) plus the portion funded with other revenue sources (Item 9)

Net Impact Cost

Table 5 summarizes the calculation of the net fire rescue impact cost per call, which is the difference between the total impact cost and the total capital expansion credit previously presented in Tables 3 and 4. The resulting net impact cost per call is $1,462 for residential land uses and $1,529 for non-residential land uses.

Table 5
Net Fire Rescue Impact Cost

Impact Cost/ Credit Element	Per Call
Impact Cost	
Total Impact Cost[1]	**$2,584.49**
Revenue Credit	
Capital Expansion Credit[2]:	
- Residential Land Uses	$68.08
- Non-residential Land Uses	$64.05
Capitalization Rate	3.50%
Capitalization Period (in years)	25
Total Capital Improvement Credit[3]	
- Residential Land Uses	$1,122.06
- Non-residential Land Uses	$1,055.64
Net Impact Cost	
Net Impact Cost[4]:	
- Residential Land Uses	**$1,462.43**
- Non-residential Land Uses	**$1,528.85**

1) Source: Table 3
2) Source: Table 4
3) Average annual capital improvement credit (Item 2) for a capitalization rate of 3.5% over 25 years. Capitalization rate is provided by Orange County.
4) Total impact cost (Item 1) less total revenue credit (Item 3)

Demand Component

In determining the impact fee for each land use on a per call basis, it is necessary to determine the service delivery to each land use.

In producing the call based demand, the average annual calls by land use between 2017 and 2021 (excluding 2020) were reviewed, which averaged 127,330 calls per year. Of the 127,330 total average annual calls, 93,631 calls were assigned to a land use. Of the remaining calls, 26,304 were related to outside activities, 1,859 were classified as "residential other," 3,695 were not classified due to a lack of data, and 1,841 were from schools. In order to assign all calls to the appropriate land uses, the percentage distribution of assigned calls is utilized in allocating unassigned calls to a land use. Because public schools are not charged an impact fee, these calls are also redistributed. **Table 6** presents this analysis.

The final step in the call-based demand calculations involves the calculation of calls per units of development, which are also presented in Table 6. To determine the number of units for each land use, a review of the Orange County Property Appraiser's (OCPA) database was conducted. Given that fire rescue call data are available for certain combination of land uses, the unit data from the OCPA was also grouped in the same manner. Of the residential land uses, single family, duplex, mobile home, and multi-family homes are measured per dwelling unit. Hotel/motel is measured per room and is calculated based on the average living area square footage per room of 752, estimated based on a sample of existing hotels/motels. Non-residential land uses are measured by building square footage of living area.

Table 6
Orange County Fire Rescue Call Based Demand Calculations

Land Use	Unit	Average Annual Calls (2017-19 & 2021)[1]	% Distribution (Assigned Residential Uses)[2]	% Distribution (All Assigned Uses)[3]	Distribution of Unassigned Calls[4]	Total Calls[5]	Revised Percentage[6]	Units of Development[7]	Calls per Unit[8]
Calls Assigned to a Land Use									
Residential/Transient:									
Single Family Detached/Duplex/Mobile Home	du	52,225	72.9%	55.7%	19,090	71,315	56.0%	241,565	0.295
Multi Family	du	13,305	18.6%	14.2%	4,867	18,172	14.3%	95,677	0.190
Hotel/Motel	room	6,071	8.5%	6.5%	2,228	8,299	6.5%	50,196	0.165
Residential/Transient Total		71,601	100.0%	76.4%	26,185	97,786	76.8%		
Non-Residential:									
Commercial Retail/ Assembly	1,000 sf	9,428		10.1%	3,216	12,644	9.9%	42,970	0.294
Office/ Institutional	1,000 sf	11,215		12.0%	3,821	15,036	11.8%	57,690	0.261
Industrial	1,000 sf	433		0.5%	159	592	0.5%	9,457	0.063
Storage	1,000 sf	954		1.0%	318	1,272	1.0%	62,410	0.020
Non-Residential Total		22,030		23.6%	7,514	29,544	23.2%		
Total Assigned Calls		**93,631**		**100.0%**	**33,699**	**127,330**	**100.0%**		
Calls Not Assigned to a Land Use									
Residential Other	N/A	1,859							
Schools	N/A	1,841							
Other Outside	N/A	26,304							
Unclassified	N/A	3,695							
Total Unassigned Calls[9]		**31,840**							
Total Calls		**127,330**							

1) Source: Orange County Fire Rescue. Represents the average annual number of calls during the 2017 to 2021 time period (excluding 2020)
2) Percent of assigned residential calls for each residential land use
3) Percent of all assigned calls (93,631) for each land use
4) Distribution of assigned residential calls (Item 2) multiplied by "Residential Other" calls plus the distribution of all assigned calls (Item 3) multiplied by the number of total unassigned calls (Item 9)
5) Average annual assigned calls (Item 1) plus the distribution of unassigned calls (Item 4)
6) Percent of total calls (127,330) for each land use
7) Source: Orange County Property Appraiser's Database. The number of hotel/motel rooms are estimated using an average of 752 livable square footage per room to convert

total living area into hotel/motel rooms. This average square footage per room is based on a review of several existing hotels/motels.

8) Total calls (Item 5) divided by units of development (Item 7)

9) Sum of schools, other outside, and unclassified calls. Excludes residential other since the distribution of these calls are based on the percentage of residential uses only (see item (2)).

Calculated Fire Rescue Impact Fee Schedule

Based on the analysis presented in this report, a fire rescue impact fee schedule was developed for residential and non-residential land uses. **Table 7** presents the total impact fee which is calculated by multiplying the net impact cost per call from Table 5 by the number of calls per unit from Table 6. As mentioned previously, changes in the fee levels are due to several factors:

- Increase in the inventory of fire rescue capital facilities and cost of building/acquiring these assets resulted in a fee increase of approximately 25 percent compared to the 2017 study numbers.
- Credit increased in terms of dollars per resident; however, remained the same as a percent of cost. Therefore, it did not have any effect on the fee levels.
- Remaining changes are due to the fluctuations in incident data.
- The final increase is moderated by the County's indexing policy between technical update studies. For example, compared to the 2017 study, the fee for single family homes increased by 35 percent. However, due to indexing since 2017, the increase from the current fee is moderated to 25 percent.

Table 7
Calculated Fire Recue Impact Fee Schedule

Land Use	Unit	Impact Cost per Call[1]	Calls per Unit[2]	Total Impact Fee[3]	Adopted Impact Fee[4]	Percent Change[5]
Single Family Detached/Duplex/Mobile Home	du	$1,462.43	0.295	**$431**	$346	25%
Multi Family	du	$1,462.43	0.190	**$278**	$237	17%
Hotel/Motel	room	$1,528.85	0.165	**$252**	$198	27%
Commercial Retail/ Assembly	1,000 living area sf	$1,528.85	0.294	**$449**	$307	46%
Office/ Institutional	1,000 living area sf	$1,528.85	0.261	**$399**	$274	46%
Industrial	1,000 living area sf	$1,528.85	0.063	**$96**	$86	12%
Storage	1,000 living area sf	$1,528.85	0.020	**$31**	$19	63%

1) Source: Table 5
2) Source: Table 6
3) Impact cost per call (Item 1) multiplied by the number of calls per unit (Item 2)
4) Source: Orange County Impact Fee Administration, Development Services. Rates were adopted at 100% in 2018 and indexed 2% per year.
5) Percent change from the current adopted fee (Item 4) to the total impact fee (Item 3)

Impact Fee Schedule Comparison

As part of the work effort in updating the fire rescue impact fee program, the County's calculated impact fee schedule was compared to the adopted fee schedule and those in similar or nearby jurisdictions. **Table 8** presents this review. As shown, the calculated fees are within the range of the fees charged by the jurisdictions reviewed. Additionally, **Table 9** presents a comparison of the current adopted single family impact fee rate as well as the fully calculated rate for each of the Florida counties with fire rescue impact fees. As shown, Orange County's adopted fees are in the lower end of the range of counties charging fire rescue impact fees while calculated fees are on the higher end, reflecting recent investment into the fire rescue structure and fluctuations in alternative funding availability.

Table 8
Fire Rescue Impact Fee Schedule Comparison

Land Use	Unit[1]	Orange County Calculated Fees[2]	Orange County Adopted Fees[3]	Brevard County[4]	Hillsborough County[5]	Lake County[6]	Miami-Dade County[7]	Osceola County[8]	Palm Beach County[9]	Polk County[10]	Seminole County[11]	Volusia County[12]
Date of Last Update		**2022**	**2017**	2000	2018	2003	2005	2017	2022	2019	2021	2022
Adoption Percentage		**100%**	**100%**	100%	100%	95%	N/A	100%	Varies	100%	100%	100%
Residential:												
Single Family (2,000 sf)	du	**$431**	**$346**	$93	$335	$390	$447	$391	$295	$358	$497	$667
Non-Residential:												
Light Industrial	1,000 sf	**$96**	**$86**	N/A	$57	$104	$1,448	$43	$86	$97	$163	$232
Office (50,000 sq ft)	1,000 sf	**$399**	**$274**	$44	$158	$1,301	$355	$267	$53	$229	$290	$450
Retail (125,000 sq ft)	1,000 sf	**$449**	**$307**	$129	$313	$1,301	$478	$543	$127	$366	$491	$1,201

1) du = dwelling unit
2) Source: Table 7
3) Source: Orange County
4) Source: Brevard County Planning & Development Department. Fees shown combine both the fire and EMS impact fees.
5) Source: Hillsborough County Development Services Department
6) Source: Lake County Growth Management Department
7) Source: Miami-Dade Zoning Development Services Division. Impact fees were adopted in 2005 with an annual adjustment based on the CPI starting in 2006/07.
8) Source: Osceola County Impact and Mobility Fees Office. Fees shown is the sum of the fire and EMS fees.
9) Source: Palm Beach County Administration Division. Fees shown effective January 1, 2023. Consistent with HB 337, County fees are established based on a maximum of 50% increase.
10) Source: Polk County Building and Construction Department. Fees shown combine both the fire and EMS impact fees.
11) Source: Seminole County Ordinance No. 2021-27
12) Volusia County Growth and Resource Management Department. The County is in the implementation process of recently completed technical study. Fees shown are the sum of the fire and EMS fees.

Table 9
Fire Rescue, Single Family Impact Fee Schedule Comparison

County	Date of Last Update Study	Adoption %	Single Family (2,000 sf du)	Single Family Fee @ 100%[1]
Brevard County[1]	2000	100%	$93	$93
Monroe County[2]	1992	100%	$105	$105
Alachua County[3]	2004	100%	$152	$152
Jefferson County[4]	2005	50%	$110	$220
Hernando County[5]	2012	100%	$235	$235
Indian River County[6]	2020	100%	$278	$278
Orange County (Adopted Fee)[7]	**2017**	**100%**	**$346**	**$319**
Hillsborough County[8]	2018	100%	$335	$335
Citrus County[9]*	2021	100%	$343	$343
Charlotte County[10]	2021	100%	$362	$353
Polk County[11]	2019	100%	$358	$358
Bay County[12]	2005	50%	$187	$375
Osceola County[13]	2017	100%	$391	$391
Lake County[14]	2003	95%	$390	$411
Pasco County[15]	2003	100%	$420	$420
Orange County (Calculated Fee)[16]	**2022**	**N/A**	**$431**	**$431**
Sarasota County[17]	2016	100%	$452	$452
Seminole County[18]	2021	100%	$497	$497
St. Johns County[19]	2018	100% / 60%	$654	$582
Martin County[20]	2012	100%	$599	$599
St. Lucie County[21]	2016	100%	$667	$617
Palm Beach County[22]	2022	N/A	$295	$628
Volusia County[23]	2022	100%	$667	$667
Lee County[24]	2018	100%	$821	$821
Collier County[25]	2010	100%	$1,342	$1,342
Nassau County[26]	N/A	N/A	$411	N/A
Miami-Dade County[27]	2005	N/A	$447	N/A

Note: Counties surrounding Orange County are highlighted.

1) Source: Brevard County Planning & Development Department. Fee shown is sum of fire and EMS fee.
2) Source: Monroe County Planning & Environmental Resources Department. Fee shown is for Fire Protection/EMS.
3) Source: Alachua County Growth Management Department. Fire impact fee shown.
4) Source: Jefferson County Planning Department. Fee shown combines the fire ($48) and EMS ($62) impact fees. Fees were adopted at 100% and have since been reduced to 50%.
5) Source: Hernando County Building Division. Fee combines fire ($209) and EMS ($26) impact fees.
6) Source: Indian River County Planning Division.
7) Source: Orange County Impact Fee Administration; Community, Environmental & Development Services Department
8) Source: Hillsborough County Development Services Department
9) Source: Citrus County Growth Management Department. Fee shown is sum of fire ($281) and EMS ($62) impact fees.
10) Source: Charlotte County Community Development Department. Fire and EMS impact fee shown and includes the 2.46% administrative fee.
11) Source: Polk County Building and Construction Department
12) Source: Bay County Planning and Zoning Department. Fire protection impact fee shown. Fee was adopted at 100% and

has since been reduced to 50% of the full calculated rate.

13) Source: Osceola County Impact and Mobility Fee Office
14) Source: Lake County Growth Management Department
15) Source: Pasco County Central Permitting Department. Fee shown combines the fire combat ($248) and recue service ($172) impact fees.
16) Source: Table 8
17) Source: Sarasota County Planning and Development Services Department. Fee shown combines the fire ($281) and rescue and EMS ($171) impact fees.
18) Source: Seminole County Ordinance No. 2021-27
19) Source: St. Johns County's Schedule of Fees and Services
20) Source: Martin County Growth Management Department
21) Source: St. Lucie County Planning & Development Services Department. Fee shown is Fire/EMS fee.
22) Source: Palm Beach County Administration Division. Fees shown effective January 1, 2023. Consistent with HB 337, fees are increased by a maximum of 50%.
23) Source: Volusia County Growth and Resource Management Department. The County is in the implementation process of recently completed technical study. Fees shown is the sum of the fire and EMS fees.
24) Source: Lee County Community Development Department. Fees shown reflect maximum fees. Fees vary by fire districts, but most charge the maximum fee.
25) Source: Collier County Impact Fee Administration Division. Fee shown combines the Ochopee Fire District's fire impact fee ($1,200, adopted at 100%) and the County's EMS impact fee ($94, adopted at 100%). Collier County's fire districts' fire impact fees range from $440 to $2,220 for a 2,000 sf home, in addition to the countywide EMS fee of $142 per unit.
26) Source: Nassau County Building Department
27) Source: Miami-Dade Zoning Development Services Division. Impact fees were adopted in 2005 with an annual adjustment based on the CPI starting in 2006/07.

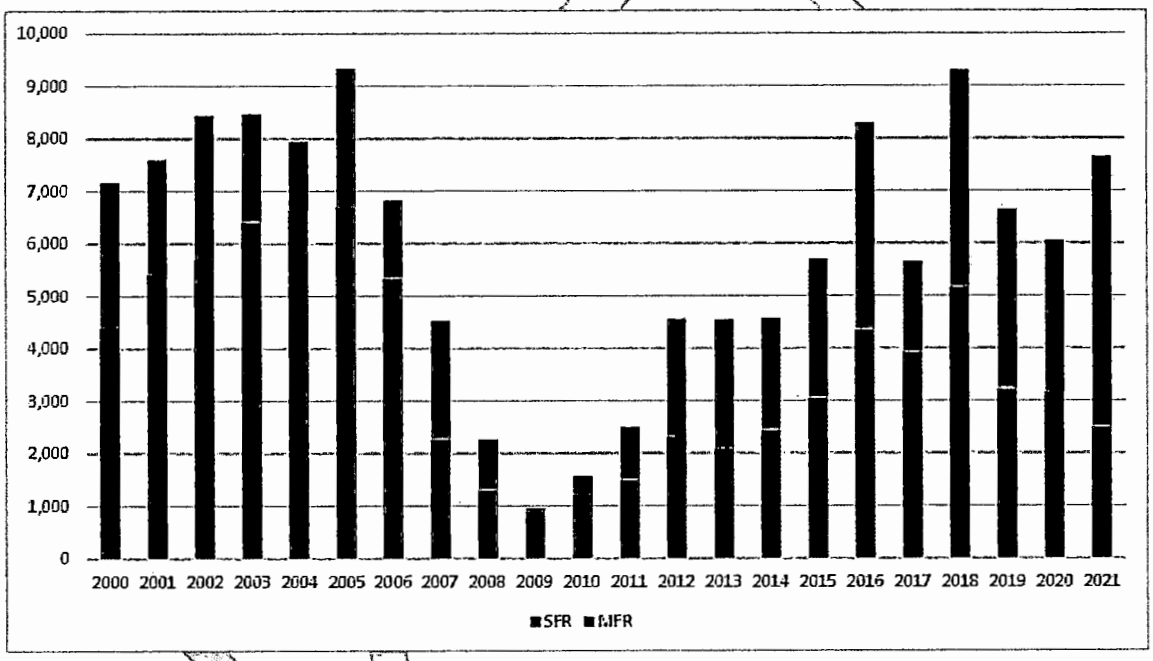
Future Revenue Estimates

Over the past five years, Orange County collected an average of $2.3 million of fire rescue impact fees per year.

Based on permitting levels over the past three to five years, it is estimated that if adopted, the calculated impact fees are likely to generate $2.7 million to $3 million per year.

The following chart presents residential permitting trends in the fire rescue service area.

Figure 1
Residential Permitting Trends – Fire Rescue Service Area



Source: U.S. Census Bureau, Building Permits Survey

For impact fee purposes, revenue projections serve only as an overall guideline in planning future infrastructure needs. In their simplest form, impact fees charge each unit of new growth for the net cost (total cost less credits) of infrastructure needed to serve that unit of growth. If the growth rates remain high, the County will have more impact fee revenues to fund growth related projects sooner rather than later. If the growth rate slows down, less revenue will be generated, and the timing and need for future infrastructure improvements will be later rather than sooner.

Indexing

In many cases, impact fees are reviewed periodically (every four to five years, etc.) as opposed to on an annual basis. HB 337 that was signed into law in 2021 requires that impact fees not be increased more than once every four years. If no adjustment to the impact fee schedule is made during this period, a situation can be created where major adjustments to the impact fee schedule likely become necessary due to the time between the adjustments. During periods of cost increases, the need for significant adjustments also creates major concerns in the development community. To address this issue, it is suggested that the fire rescue impact fees be adjusted for building, land, and equipment costs on an annual basis. The remainder of this section provides the method for calculating the combined index.

Land Cost

As shown in **Table 10**, between 2016 and 2021 just value of vacant land increased by an annual average of 4.2 percent in the OCFR service area. Given the high level of fluctuations in land values, it is recommended to review a longer period as well. A review of land value changes from 1976 to 2021 suggested an average increase of 5.4 percent per year. This figure is higher than the increase experienced over the past five years. When the change in a shorter period suggests a large average annual increase (for example, 10 percent or greater), this average can be moderated by a longer-term period.

Table 10
Vacant Land Value Change

Year	Just Value	Percent Change
2016	$2,051,845,487	-
2017	$2,195,441,390	7.0%
2018	$2,346,423,032	6.9%
2019	$2,445,490,411	4.2%
2020	$2,446,656,083	0.0%
2021	$2,521,771,362	3.1%
Average (2016-2021)		**4.2%**

Source: Florida Department of Revenue, Ad Valorem Valuation and Tax Data files

Building Construction Cost

For building construction costs, a common index used is the national building cost index provided by Engineering-News Record. As shown in **Table 11**, the building cost index remained fairly stable through 2020, but increased in 2021 when there was a more significant increase, reflecting recent cost increases nationwide. This trend is consistent with construction costs experienced statewide. The average annual change between 2016 and 2021 is 4.2 percent, which suggests an expectation that cost increases will be more moderate in the future compared to last year.

Table 11
Building Cost Index (National Average)

Year	Annual Avg[1]	Percent Change[2]
2016	5,645	-
2017	5,831	3.3%
2018	6,019	3.2%
2019	6,136	1.9%
2020	6,281	2.4%
2021	6,912	10.0%
Average (2016-2021)		**4.2%**

Source: Enginnering News-Record, Building Cost Index

Vehicle and Equipment Costs

For vehicle and equipment costs, the Consumer Price Index (CPI) within the South Region is utilized for indexing purposes. **Table 12** presents the annual cost increase over the past five-years, which averaged 2.4 percent.

Table 12
Equipment Cost Index (South Region)

Year	Annual Avg	Percent Change
2016	147.0	-
2017	150.3	2.2%
2018	153.4	2.1%
2019	155.5	1.4%
2020	157.1	1.0%
2021	165.4	5.3%
Average (2016-2021)		**2.4%**

Source: Bureau of Labor Statistics, CPI-All Urban Consumers, All Items

Application

To index the fire rescue impact fee schedules previously presented in this report, the combined index should first be calculated, which is presented in **Table 13**. The second column summarizes the average cost increases presented previously in Tables 10, 11, and 12. The third column presents the percent of the total cost for each inventory component, which are then multiplied with the annual change to create the overall index. The combined index for the fire rescue impact fee is then applied to the calculated fees, as presented in **Table 14**.

Table 13
Indexing Application – Combined Index

Cost Component	Annual Change[1]	Percent of Total[2]	Index[3]
Land Cost	4.2%	4%	0.2%
Building Cost	4.2%	54%	2.3%
Vehicle/Equipment Cost	2.4%	42%	1.0%
Total			**3.5%**

1) Source: Tables 10, 11, and 12
2) Source: Table 3
3) Annual change (Item 1) multiplied by the percent of total (Item 2)

Table 14 presents the indexed fee schedule for the next four years using the overall index calculated and shown in Table 13, and the calculated impact fee previously shown in Table 7. It is recommended the calculated index be reviewed and recalculated annually, especially during time period when the costs fluctuate significantly.

Table 14
Indexed Fees

Land Use	Unit	Year 1 Calculated Impact Fee[1]	Year 2[2]	Year 3[3]	Year 4[4]	Year 5[5]
		Annual Index[6]	**3.5%**	**3.5%**	**3.5%**	**3.5%**
Single Family Detached/Duplex/Mobile Home	du	$431	$446	$462	$478	$495
Multi Family	du	$278	$288	$298	$308	$319
Hotel/Motel	room	$252	$261	$270	$279	$289
Commercial Retail/ Assembly	1,000 living area sf	$449	$465	$481	$498	$515
Office/ Institutional	1,000 living area sf	$399	$413	$427	$442	$457
Industrial	1,000 living area sf	$96	$99	$102	$106	$110
Storage	1,000 living area sf	$31	$32	$33	$34	$36

1) Source: Table 7
2) Year 1 figures (Item 1) multiplied by (1+0.035), annual index (Item 6)
3) Year 2 figures (Item 2) multiplied by (1+0.035), annual index (Item 6)
4) Year 3 figures (Item 3) multiplied by (1+0.035), annual index (Item 6)
5) Year 4 figures (Item 4) multiplied by (1+0.035), annual index (Item 6)
6) Source: Table 13

Appendix A
Building and Land Value Analysis
Supplemental Information

Appendix A

This appendix provides the additional data and information on building and land value estimates.

Building Values

In determining the appropriate unit cost for building construction, the following analyses were conducted:

- Cost increases since the last study:
- A review of cost associated with recently built stations in Orange County;
- A review of recent bids/estimates for future stations in Orange County;
- A review of cost associated with recently built or bid fire stations in other Florida jurisdictions;
- Orange County station/building insurance values; and
- Discussions with County staff.

The 2017 study estimated station costs at $350 per square foot. ENR index suggests a 29-percent increase in construction costs, which results in an indexed cost of $450 per square foot.

Orange County has built three fire stations since 2018. The station costs ranged from $405 to $550 per square foot with an average of $475 per square foot.

The County received bids for the upcoming Station 80 and Station 44, which are planned for 2023. The estimated project cost is $555 per square foot for Station 80 and $675 per square foot for Station 44, with an overall average of $605 per square foot.

Current insurance values average approximately $245 per square foot for station buildings and $310 per square foot when contents were included. Insurance values tend to be lower than full value since certain components of the building, such as foundation, as well as costs related to architecture/design fees, site preparation, etc. are not part of the insured value.

Benesch also obtained cost information from several jurisdictions to supplement the local data. The bids and estimates received between 2016 and 2021 ranged from $250 to $525 per square foot.

Given this information, an average value of $500 per square foot was used for fire stations, which includes all related costs, such as architectural services/design, site preparation, construction, permitting, and ff&e. **Table A-1** summarizes this information.

In the case of the administrative/office buildings and support services buildings, insurance values and the ratios utilized in the 2017 study were used. These resulted in unit costs of $325 per square foot for administrative/office buildings and $200 per square foot for support buildings.

Table A-1
Building Value per Square Foot

Variable	Year	2017 Study	Index	Indexed Cost
Cost Increase since the 2017 Study [1]				
Estimated Station Cost	2017	$350		**$465**
ENR Index	2017-2022		32.74%	
Variable	**Year**	**Bldg Cost**	**Design/ FF&E**	**Total**
Insurance Values of Existing Stations [2]				
Stations	2022	$243	$69	$312
Recent Construction [2]				
Station 67	2018	$356	$47	$403
Station 87	2020	$432	$47	$479
Station 68	2021	$493	$59	$552
Weighted Average		**$425**	**$51**	**$476**
Estimates for Future Construction [2]				
Station 80	2023	$492	$63	$555
Station 44	2023	$612	$62	$674
Weighted Average		**$544**	**$63**	**$607**
Other FL Jurisdictions [3]	2016-2021	$250 - $525		
Used in the Study:				
- Stations	**2022**	**$500**		
- Administrative Bldgs	**2022**	**$325**		
- Support Bldgs	**2022**	**$200**		

1) Source: *Orange County Fire Rescue Impact Fee Update Study, Final Report, August 22, 2017*
2) Source: Orange County
3) Source: Benesch Database

Land Values

In order to determine land value for future fire station land purchases, the following data/information was evaluated:

- Land value increases since the 2017 study;
- Recent purchases/appraisals of land for fire rescue facilities;
- The market (or just) value of parcels where current fire stations are located based on information provided by the Orange County Property Appraiser;

- Vacant land sales and market/just values of all vacant land of similar size in the fire rescue service area; and
- Land use characteristics of the areas where current fire stations are located and future stations are expected to be located.

Since the 2017 study, vacant land values in the fire rescue service area increased by approximately 35 percent based on estimates provided by the OCPA. Applying this percentage to the estimates used in the 2017 study results in land value of $250,000 per acre.

Appraisals received by Orange County between 2019 and 2021 amounted to $140,000 per acre.

The value of current parcels as reported by the Property Appraiser averages $112,000 per acre. Property Appraiser land value estimates for governmental entities tend to be on the low end since these properties are not subject to property tax and the values are not regularly updated to reflect the market conditions.

Between 2017 and 2021, vacant land sale price of similarly sized residential parcels (from 0.5 acres to 5 acres) within the fire rescue service area averaged $106,000 per acre with a median value of $56,000 per acre. These prices are higher for commercial properties, with an average of $392,000 per acre and a median value of $298,000 per acre.

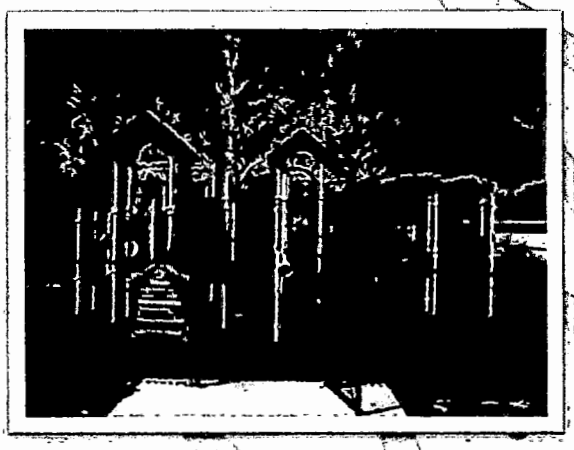
Similarly, the value of vacant residential land estimated by the Property Appraiser within the fire rescue service area averaged $73,000 per acre with a median value of $48,000 per acre for all vacant properties. For commercial properties, the average value is estimated at $280,000 per acre with a median value of $218,000 per acre.

Based on this analysis, an average land value estimate of $140,000 is used for impact fee calculation purposes based primarily on recent purchases, which is also within the range of vacant land sales and values throughout the service area.

Orange County Parks and Recreation Impact Fee Update Study

DRAFT REPORT

October 26, 2022



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Parks and Recreation Impact Fee Update Study
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APPENDICES

Executive Summary

With a population of almost 1.5 million, Orange County is the fifth most populous county in Florida. It is also one of the fastest growing counties ranking 13th out of 67 Florida counties in terms of projected growth rate through 2050 (1.2 percent per year) and first in terms of projected absolute growth (608,000 new residents projected through 2050). Unincorporated Orange County houses approximately 940,000 of the countywide population. Given this growth rate and to mitigate cost associated with new growth, Orange County implemented impact fees for several service areas, including parks and recreation, fire rescue, law enforcement, transportation and schools. This report addresses the update of the parks and recreation impact fee.

Parks and recreation impact fees are used to fund acquisition and expansion of parks and recreation service-related capital assets required to address the additional parks and recreation service demand created by new growth. Orange County implemented a parks and recreation facilities impact fee in 2006, which was last updated in 2017. Per the requirements of the impact fee ordinance, the County retained Benesch, in association with Laura Turner Planning Services, to update the impact fee to reflect most recent and localized data.

The methodology used to update Orange County's impact fee program is a consumption-based impact fee methodology, which has also been used to calculate the County's adopted parks and recreation impact fees as well as other impact fees throughout Florida. A consumption-based impact fee charges new development based upon the burden placed on services from each land use (demand). The demand component is measured in terms of population per unit of land use. A consumption-based impact fee is intended to charge new growth the proportionate share of the cost of providing additional infrastructure available for use by new growth. In addition, per the requirements of case law, a credit is subtracted from total cost to account for contributions of new development toward any capacity expansion projects through other revenue sources.

Consistent with the County's adopted impact fee methodology, the primary steps involved in the update of the parks and recreation impact fee included the following:

- Review of the inventory and establishment of the achieved level of service compared to the adopted LOS standard;

- Estimation of the current value of the park land and facilities;
- Review of funding sources used for parks and recreation facility expansion projects;
- Calculation of the demand component; and
- Calculation of the updated parks and recreation impact fee.

Table ES-1 provides a comparison of the calculated fees to the County's current adopted fees. Changes to the cost and credit components resulted in an overall increase of 40 percent compared to the 2017 study calculated rates. When changes to the demand component are taken into consideration, overall fee increases would have ranged from 43 percent to 47 percent for most residential categories. However, because the County has been indexing the fees between technical study updates, the increases are moderated to 24 to 27 percent.

Table ES-1
Calculated Parks and Recreation Impact Fee Schedule

Land Use	2022 Calculated Impact Fee[1]	Adopted Impact Fee[2]	Percent Change[3]
Single Family (detached)	**$2,246**	$1,785	26%
Accessory Single Family	**$1,492**	$1,208	24%
Multi-Family	**$1,492**	$1,208	24%
Mobile Home	**$1,694**	$1,330	27%
Retirement Housing/Age Restricted	**$1,212**	$957	27%

1) Source: Table 10
2) Source: Orange County. Fees adopted at 100% of 2017 calculated rate and annually indexed by 3.7 percent.
3) Percent change from the adopted impact fee (Item 2) to the 2022 calculated impact fee (Item 1)

Introduction

With a population of almost 1.5 million, Orange County is the fifth most populous county in Florida. It is also one of the fastest growing counties ranking 13th out of 67 Florida counties in terms of projected growth rate through 2050 (1.2 percent per year) and ranks first in terms of projected absolute growth (608,000 new residents projected through 2050). Unincorporated Orange County houses approximately 940,000 of this population. Given this growth rate and to mitigate cost associated with new growth, Orange County implemented impact fees for several service areas, including parks and recreation, fire rescue, law enforcement, transportation and schools. This report addresses the update of the parks and recreation impact fee.

Parks and recreation impact fees are used to fund acquisition and expansion of parks and recreation service-related capital assets required to address the additional parks and recreation service demand created by new growth. Orange County implemented a parks and recreation impact fee in 2006, which was last updated in 2017. Per the requirements of the impact fee ordinance, the County retained Benesch, in association with Laura Turner Planning Services, to update the impact fee to reflect most recent and localized data. It should be noted that figures calculated in this study represent the technically defensible level of impact fees that the County could charge; however, the Board of County Commission may choose to discount the fees as a policy decision.

Methodology

The methodology used to update the parks and recreational facilities impact fee is a consumption-based impact fee methodology, which has also been used to calculate the current adopted impact fee for Orange County as well as impact fees throughout Florida. A consumption-based impact fee is intended to charge new growth the proportionate share of cost associated with providing park land and recreational facilities available for use by new growth. In addition, per the requirements of case law, a credit is subtracted from total cost to account for contributions of new development toward any capacity expansion projects through other revenue sources. Finally, the demand component is measured in terms of population per unit. Parks and recreation impact fees are charged only to residential land uses.

Legal Overview

In Florida, legal requirements related to impact fees have primarily been established through case law since the 1980's. Impact fees must comply with the "dual rational nexus" test, which requires that they:

- Be supported by a study demonstrating that the fees are proportionate in amount to the need created by new development paying the fee; and
- Be spent in a manner that directs a proportionate benefit to new development, typically accomplished through establishment of benefit districts if needed and a list of capacity-adding projects included in the County's Capital Improvements Program (CIP), Capital Improvement Element (CIE), or another planning document/Master Plan.

In 2006, the Florida legislature passed the "Florida Impact Fee Act," which recognized impact fees as "an outgrowth of home rule power of a local government to provide certain services within its jurisdiction." § 163.31801(2), Fla. Stat. The statute – concerned with mostly procedural and methodological limitations – did not expressly allow or disallow any particular public facility type from being funded with impact fees. The Act did specify procedural and methodological prerequisites, such as the requirement of the fee being based on most recent and localized data, a 90-day requirement for fee changes, and other similar requirements, most of which were common to the practice already.

More recent legislation further affected the impact fee framework in Florida, including the following:

- **HB 227 in 2009:** The Florida legislation statutorily clarified that in any action challenging an impact fee, the government has the burden of proving by a preponderance of the evidence that the imposition or amount of the fee meets the requirements of state legal precedent or the Impact Fee Act and that the court may not use a deferential standard.
- **SB 360 in 2009:** Allowed fees to be decreased without the 90-day notice period required to increase the fees and purported to change the standard of legal review associated with impact fees. SB 360 also required the Florida Department of Community Affairs (now the Department of Economic Opportunity) and Florida Department of Transportation (FDOT) to conduct studies on "mobility fees," which were completed in 2010.

- **HB 7207 in 2011:** Required a dollar-for-dollar credit, for purposes of concurrency compliance, for impact fees paid and other concurrency mitigation required.
- **HB 319 in 2013:** Applied mostly to concurrency management authorities, but also encouraged local governments to adopt alternative mobility systems using a series of tools identified in section 163.3180(5)(f), Florida Statutes.
- **HB 207 in 2019:** Included the following changes to the Impact Fee Act along with additional clarifying language:
    1. Impact fees cannot be collected prior to building permit issuance; and
    2. Impact fee revenues cannot be used to pay debt service for previously approved projects unless the expenditure is reasonably connected to, or has a rational nexus with, the increased impact generated by the new residential and commercial construction.
- **HB 7103 in 2019:** Addressed multiple issues related to affordable housing/linkage fees, impact fees, and building services fees. In terms of impact fees, the bill required that when local governments increase their impact fees, the outstanding impact fee credits for developer contributions should also be increased. This requirement was to operate prospectively; however, HB 337 that was signed in 2021 deleted this clause and making all outstanding credits eligible for this adjustment. This bill also allowed local governments to waive/reduce impact fees for affordable housing projects without having to offset the associated revenue loss.
- **SB 1066 in 2020:** Added language allowing impact fee credits to be assignable and transferable at any time after establishment from one development or parcel to another that is within the same impact fee zone or impact fee district or that is within an adjoining impact fee zone or district within the same local government jurisdiction. In addition, added language indicating any new/increased impact fee not being applicable to current or pending permit applications submitted prior to the effective date of an ordinance or resolution imposing new/increased fees.
- **HB 1339 in 2020:** Required reporting of various impact fee related data items within the annual financial audit report submitted to the Department of Financial Services.
- **HB 337 in 2021:** Placed limits on the amount and frequency of fee increases, but also included a clause to exceed these restrictions if the local governments can demonstrate extraordinary circumstances, hold two public workshops discussing these circumstances and the increases are approved by two-thirds of the governing body.

Impact Fee Definition

- An impact fee is a one-time capital charge levied against new development.
- An impact fee is designed to cover the portion of the capital costs of infrastructure capacity consumed by new development.
- The principal purpose of an impact fee is to assist in funding the implementation of projects identified in the CIP, CIE and other capital improvement programs for the respective facility/service categories.

Impact Fee vs. Tax

- An impact fee is generally regarded as a regulatory function established based upon the specific benefit to the user related to a given infrastructure type and is not established for the primary purpose of generating revenue for the general benefit of the community, as are taxes.
- Impact fee expenditures must convey a proportional benefit to the fee payer. This is accomplished through the establishment of benefit districts, where fees collected in a benefit district are spent in the same benefit district.
- An impact fee must be tied to a proportional need for new infrastructure capacity created by new development.

This technical report has been prepared to support legal compliance with existing case law and statutory requirements. The technical report also documents the methodology components, including an evaluation of the inventory, service area, level of service (LOS), cost, credit, and demand components. Information supporting this analysis was obtained from the County and other sources, as indicated.

It should be noted that although this study establishes a technically calculated fee, the Board of County Commission has the policy option of adopting the fee at a reduced level or phase it in over time.

Inventory

Orange County parks that are included in the impact fee calculations are classified into four different types, including community, district, regional and specialty parks. Neighborhood and pocket parks that typically serve the immediate area surrounding the park are excluded from the calculations. The following provides the definitions of the various park types included in the impact fee update study.

- **Community** – Community parks usually range in size from 20 acres to 149 acres with a typical park size of 50 acres. Because of the types of amenities and activities offered in these parks, the service area of this park type ranges from a 3-mile radius to the entire county. Community parks can be accessed by walking or bike riding, but more often by car. These parks are usually located near major collector streets or arterial roads to promote accessibility. Community parks are designed to serve the needs of several neighborhoods. This park type typically includes facilities such as sportsfields, playgrounds, large picnic pavilions, splash pads, gyms or recreation centers. Natural areas (resource-based) are also included for walking, jogging, picnicking, and other passive recreational activities.

- **District** – District parks typically range in size from 150 acres to 500 acres. This type of park usually has a countywide service area. Access to these parks is most often by car. These parks are usually classified as resource-based and are usually located contiguous to or encompassing natural resources. They offer playgrounds, play fields, and family recreation centers. District parks, when located near urban or population centers, can provide activity-based recreation facilities such as sports complexes.

- **Regional** – Regional parks are usually 500 acres or more and tend to have a multi-county service area. Access to these parks is most often by car. These parks are usually resource-based, located in areas of diverse or unique natural resources, such as lakes, streams, marshes, flora, fauna, or topography. Activity-based facilities may be located at Regional parks as long as the activity does not negatively impact the natural resources.

- **Special Facilities** – These parks are designed for predominantly one activity or use, such as a multi-use trail, golf course, equestrian complex, sports complex, indoor recreation center or historic site. Because their use varies, standards cannot be quantified for special

facilities. The size of the special facilities is variable, depending on the particular use. These facilities usually serve the entire county.

Orange County Comprehensive Policy Plan classifies and measures recreation sites as either activity-based, resource-based, a combination of the two or habitat parkland to establish the LOS for concurrency purposes. Different types of parks (i.e., pocket parks, neighborhood parks, community parks, district parks, regional parks and special facilities) can contain activity-based, resource-based and habitat parklands. These terms are further defined as follows.

- **Activity-based parkland** – consists of predominately user-oriented facilities that are located within or adjacent to population centers. User-based activities include, but are not limited to, tennis, golf, baseball/softball, football/soccer, shuffleboard, basketball, volleyball, paved trails, playgrounds, indoor recreation and swimming/leisure pools/water recreation.

- **Resource-based parkland** – provides access to natural and historic resources. Recreation activities are considered to be passive-in-nature and include, but are not limited to, historic tours, interpretation, nature observation, fishing, lake swimming, camping, and picnicking. Even though some of these activities may have man-made facilities such as nature trails, boat ramps, picnic tables, and campground hookups, these are secondary to natural resources required for each activity. The portion of these properties considered to be Green PLACE properties are excluded from the inventory.

- **Habitat parkland** – includes park and recreation facilities that provide habitat and wildlife areas that are unlikely to be developed for more intense uses. In addition, because in most cases habitat land is not accessible to the public, it is excluded from the inventory and the impact fee calculations.

As mentioned previously, for impact fee calculation purposes, the study includes only the community, district, regional, and specialty parks, which have a wide service area, and excludes pocket and neighborhood parks, which tend to serve the immediate area. In addition, parks located within municipal limits are not included in the inventory since the fee is collected only in the unincorporated area. Finally, as mentioned previously, habitat land and Green PLACE acreage is also excluded.

Table 1 provides an inventory of all parks and recreation facilities that are owned by Orange County and included in the impact fee analysis, along with the facilities that are available at each park location. The parks and recreation inventory used as the basis for the impact fee analysis includes 54 parks, including 26 community parks, 21 specialty parks, one regional parks, and six district parks.

Table 1
Parks and Recreation Facility Inventory[1]

Facility	Park Type	Activity Based Acres	Resource Based Acres	Total Acreage	Batting Cages (cages)	Boardwalk (total linear feet per site)	Boat Ramp (ramps)	Camping (sites)	Classrooms/ Meeting Rooms (sf)	Clubhouse/ Community Center (sf)	Concession Stands (stands)	Court				Dog Park (parks)	Equestrian Trail (linear miles)	Exercise Course (courses)	Field			
												Basketball (goals)	Shuffleboard (courts)	Tennis (courts)	Volleyball (courts)				Baseball (fields)	Multi Purpose (fields)	Soccer (fields)	Softball (fields)
Apopka-Vineland Outpost	SP	3.00	0.00	3.00																		
Avalon-Mailer Trailhead (Avalon Trail)	SP	0.66	0.00	0.66																		
Barber Park	C	35.31	17.17	52.48								3			1	2					4	
Barnett Park	C	130.00	28.00	158.00		416	2		3,104			6		2	3	2		1		1		2
Bear Creek Park	C	37.00	7.00	44.00	2	250			1,008		1				1			1	2			2
Bithlo Park	C	29.90	8.10	38.00	4				1,024	16,500	1	2			1				6	1		
Blanchard Park	C	43.00	41.00	84.00								4		4	1					3	1	
Bomberos Field Park	C	20.00	0.00	20.00							1									3		
Bywater Boat Ramp	SP	0.00	0.20	0.20			1															
Cady Way Trail	SP	9.36	0.00	9.36																		
Clarcona Horse Park	SP	40.00	0.00	40.00				28			1											
Clarcona-Ocoee Connector Trail	SP	3.00	0.00	3.00																		
Cypress Grove Park[1]	C	60.37	20.00	80.37					2,315			2			2					3		
Deputy Brandon Coates Park	C	27.20	0.00	27.20																		
Deputy Jonathan Scott Pine Community Park	C	19.60	0.00	19.60							1										1	
Downey Park	C	50.00	0.00	50.00	3		1				1	2			2	2			4			1
Dr. P. Phillips Park	C	23.00	20.00	43.00								2			2	2			1		2	
East Orange District Park	D	14.00	229.00	243.00							1										2	
East Orange Neighborhood Park	C	20.00	0.00	20.00								2										1
Econ Soccer Complex	C	31.00	0.00	31.00																	2	
Fern Creek Boat Ramp	SP	0.00	1.00	1.00			1															
Fort Christmas Historical Park	SP	95.60	47.10	142.70								2		1						1		1
Fort Gatlin Recreational Park	SP	7.70	0.00	7.70						230		4		10						1		
George Bailey Park	C	20.00	0.00	20.00	5														6			
Goldenrod Park & Trailhead (CWT)	SP	6.00	0.00	6.00					2,100			4		2								
Horizon West Regional Park	D	0.00	219.00	219.00													5.000					
Kelly Park	D	98.00	292.00	390.00		2,790		26	1,300		1				2		3.553					
Lake Apopka Loop Trail	SP	22.00	0.00	22.00																		
Lake Ellenor Park	C	20.01	0.00	20.01															1		2	
Little Econ Greenway	SP	49.00	396.00	445.00																		
Magnolia Park	D	7.10	48.90	56.00			1	18				2			2							
Meadow Woods Park	C	19.00	0.00	19.00					2,100			6			1	2						
Moss Park	R	100.00	1,451.00	1,551.00			2	60							2							
Orlo Vista Park	C	28.00	0.00	28.00					2,342			5	2	2	1					1		
Pine Hills Trail	SP	35.27	0.00	35.27																		
R.D. Keene Park	C	25.00	27.00	52.00			1														2	
Randolph Street Boat Ramp	SP	0.00	0.50	0.50			1															
Rolling Hills Park	SP	9.60	0.00	9.60							1								4			1
Shadow Bay Park	C	26.20	84.80	111.00								4		17				1				1
Shingle Creek Trail	SP	6.83	0.00	6.83																		
Silver Star Park	C	25.00	0.00	25.00					2,100			4										
South Econ Park/Renaissance Sr. Center	C	51.00	11.00	62.00					8,476	3,000		2										
South Orange Youth Complex	C	28.00	0.00	28.00	2						1								6			2
SR 50 Boat Ramp	SP	0.00	1.00	1.00			1															
Taft Ball Field	SP	2.00	0.00	2.00								2							1			1
Tibet-Butler Nature Park	D	7.70	431.30	439.00		1,151			900													
Timber Bridge Preserve	C	0.00	30.20	30.20																		
Trimble Park	D	40.00	31.00	71.00		800	1	30										1				
Wekiva Trail	SP	7.47	0.00	7.47																		
West Beach Park	C	20.30	0.00	20.30											2							
West Orange Soccer Complex	C	37.00	10.00	47.00												2					4	
West Orange Trail	SP	95.05	0.00	95.05													10.000					
Woodsmere Boat Ramp	SP	0.00	1.00	1.00			1															
Young Pine Community Park	C	27.50	33.88	61.38							1					2				3		
Total	**54**	**1,512.73**	**3,487.15**	**4,999.88**	**16**	**5,407**	**13**	**162**	**26,769**	**19,730**	**11**	**58**	**2**	**38**	**23**	**14**	**18.553**	**4**	**31**	**17**	**20**	**12**

Table 1 (Continued)[1]
Parks and Recreation Facility Inventory

Facility	Park Type	Fitness Center (centers)	Frisbee/Disc Golf (# of holes)	Golf Facility (facilities)	Hockey Rink (Lit)	Horseshoe Pits (pits)	Nature Center/Study (sf)	Picnic Pavilion (pavilions)			Playground (playgrounds)		Recreation Center / Gymnasium (sf)	Restroom			Skate Park (parks)	Sprayground/ Splash Park (parks)	Swimming Pool (pools)	Trail (miles)	
								Rental only, medium or large	Non-rental, large	Non-rental, medium	Non-rental, small	Ages 5-12	Tot Lot (ages 2-5)	Women	Men	Unisex/Family				Nature Trail/Hiking	Trail-Paved
Apopka-Vineland Outpost	SP									1		1									
Avalon-Mailer Trailhead (Avalon Trail)	SP										1			1	1						
Barber Park	C				1			1			1	1	1	1	1						0.750
Barnett Park	C	1	36	1		4		4				5	5	24,400	7	7	1	1	1		
Bear Creek Park	C							1				2		1,200	2	2					
Bithlo Park	C							1				1	2		2	2			1		
Blanchard Park	C							2			2	2			1	1					
Bomberos Field Park	C											1	1		1	1					
Bywater Boat Ramp	SP																				
Cady Way Trail	SP										3										6.200
Clarcona Horse Park	SP														2	2					
Clarcona-Ocoee Connector Trail	SP																				
Cypress Grove Park[2]	C							1				1	1		4	4	3				0.800
Deputy Brandon Coates Park	C											1	1		1	1		1			
Deputy Jonathan Scott Pine Community Park	C														1	1					
Downey Park	C							2				2	2		3	3		1	1		
Dr. P. Phillips Park	C							6				1	1		1	1			1	0.600	1.300
East Orange District Park	D													5,715	1	1				3.000	
East Orange Neighborhood Park	C									1	2	1			1	1					
Econ Soccer Complex	C										2	1			1	1					
Fern Creek Boat Ramp	SP																				
Fort Christmas Historical Park	SP					2		3				1	1		1	1	2				
Fort Gatlin Recreational Park	SP									1	3	1		3,459	1	1	3		1		0.250
George Bailey Park	C							1			3	1			1	1					
Goldenrod Park & Trailhead (CWT)	SP	1								2		1		24,400	3	3	1				
Horizon West Regional Park	D																				
Kelly Park	D					3	1,300	4				2	1		4	4				1.245	
Lake Apopka Loop Trail	SP																			0.700	
Lake Ellenor Park	C																				
Little Econ Greenway	SP										2										8.000
Magnolia Park	D					6	2,430	4				5	1		5	5				0.439	
Meadow Woods Park	C	1								2	3	1	1	24,400	3	3	1				
Moss Park	R					4		5	1		1	2	1		7	7				1.000	
Orlo Vista Park	C							2			1	1	1		3	3				1.000	
Pine Hills Trail	SP																				2.500
R.D. Keene Park	C										2	1			1	1	1				
Randolph Street Boat Ramp	SP																				
Rolling Hills Park	SP												1		1	1					
Shadow Bay Park	C							1	2		1	1	1		2	2				1.621	2.379
Shingle Creek Trail	SP																				1.100
Silver Star Park	C	1								1	2	1	1	24,400	2	2	1				
South Econ Park/Renaissance Sr. Center	C	1									1	1	1		3	3	1				
South Orange Youth Complex	C											2									
SR 50 Boat Ramp	SP										1										
Taft Ball Field	SP										1	1									
Tibet-Butler Nature Park	D						9,600								1	1				3.600	
Timber Bridge Preserve	C																				
Trimble Park	D					2		4		3		1	2		3	3				0.310	
Wekiva Trail	SP																				
West Beach Park	C									1	8	1	1		1	1					
West Orange Soccer Complex	C										5	1			2	2					
West Orange Trail	SP									1	1										22.000
Woodsmere Boat Ramp	SP																				
Young Pine Community Park	C							1		1		2	1		1	1					
Total	54	5	36	1	1	21	13,330	43	3	14	46	47	28	107,974	75	75	14	3	4	1	13.515	45.279

Table 1 (Continued)[1]
Parks and Recreation Facility Inventory

Facility	Number of Parks	Activity Based Acres	Resource Based Acres	Total Acreage	Batting Cages (cages)	Boardwalk (total linear feet per site)	Boat Ramp (ramps)	Camping (sites)	Classrooms/ Meeting Rooms (sf)	Clubhouse/ Community Center (sf)	Concession Stands (stands)	Court			
												Basketball (goals)	Shuffleboard (courts)	Tennis (courts)	Volleyball (courts)
Community Parks	26	853.39	338.15	1,191.54	16	666	4	0	22,469	19,500	7	44	2	25	17
Specialty Parks	21	392.54	446.80	839.34	0	0	5	28	2,100	230	2	12	0	13	0
Regional Parks	1	100.00	1,451.00	1,551.00	0	0	2	60	0	0	0	0	0	0	2
District Parks	6	166.80	1,251.20	1,418.00	0	4,741	2	74	2,200	0	2	2	0	0	4
Total	**54**	**1,512.73**	**3,487.15**	**4,999.88**	**16**	**5,407**	**13**	**162**	**26,769**	**19,730**	**11**	**58**	**2**	**38**	**23**

Facility	Number of Parks	Dog Park (parks)	Equestrian Trail (linear miles)	Exercise Course (courses)	Field				Fitness Center (centers)	Frisbee/Disc Golf (# of holes)	Golf Facility (facilities)	Hockey Rink (Lit)	Horseshoe Pits (pits)	Nature Center/ Study (sf)
					Baseball (fields)	Multi Purpose (fields)	Soccer (fields)	Softball (fields)						
Community Parks	26	14	0.000	3	26	15	18	9	4	36	1	1	4	0
Specialty Parks	21	0	10.000	0	5	2	0	3	1	0	0	0	2	0
Regional Parks	1	0	0.000	0	0	0	0	0	0	0	0	0	4	0
District Parks	6	0	8.553	1	0	0	2	0	0	0	0	0	11	13,330
Total	**54**	**14**	**18.553**	**4**	**31**	**17**	**20**	**12**	**5**	**36**	**1**	**1**	**21**	**13,330**

Facility	Number of Parks	Picnic Pavilion (pavilions)				Playground (playgrounds)		Recreation Center / Gymnasium (sf)	Restroom			Skate Park (parks)	Sprayground/ Splash Park (parks)	Swimming Pool (pools)	Trail (miles)	
		Rental only, medium or large	Non-rental, large	Non-rental, medium	Non-rental, small	Ages 5-12	Tot Lot (ages 2-5)		Women	Men	Unisex/Family				Nature Trail/ Hiking	Trail-Paved
Community Parks	26	23	2	6	33	32	21	74,400	45	45	8	3	4	0	3.221	5.229
Specialty Parks	21	3	0	5	12	5	2	27,859	9	9	6	0	0	1	0.700	40.050
Regional Parks	1	5	1	0	1	2	1	0	7	7	0	0	0	0	1.000	0.000
District Parks	6	12	0	3	0	8	4	5,715	14	14	0	0	0	0	8.594	0.000
Total	**54**	**43**	**3**	**14**	**46**	**47**	**28**	**107,974**	**75**	**75**	**14**	**3**	**4**	**1**	**13.515**	**45.279**

1) Source: Orange County
2) Activity-based acreage portion excludes 9.66 acres in Edgewood

Service Area and Demand Component

The Orange County parks and recreation service area includes the unincorporated county. As such, the current 2022 population for the unincorporated county is used to develop the parks acreage level of service and the demand component. Consistent with the County's Comprehensive Plan, population figures in this report include permanent residents only and uses BEBR mid-level projections. Appendix A, Table A-1 provides the population trends and projections from 2000 through 2050 for use in the parks and recreation impact fee update study. Parks and recreation facility impact fees are charged only to residential land uses and the demand component is measured in terms of residents per housing unit for each residential category, which is also calculated in Appendix A.

Level of Service

Table 2 presents the calculation of the current achieved level of service (LOS) for each park type included in the impact fee inventory, as well as the adopted LOS standards included in the County's Comprehensive Plan. Orange County's 2022 achieved LOS is 1.6 acres per 1,000 residents for activity-based parks and 3.7 acres per 1,000 residents for resource-based parks which results in a total achieved LOS of 5.3 acres per 1,000 residents. The adopted LOS standards are 1.5 acres per 1,000 residents for activity-based parks and 6 acres per 1,000 residents for resource-based parks.

The current achieved LOS represents the investment the community has made into parks and recreation facilities while the adopted LOS standards indicate the intended LOS going forward. For impact fee purposes, the lower of the two measures is used to not overcharge new development. Given this, the LOS of 1.5 acres for activity-based parks and 3.7 acres for resource based parks is utilized in the calculation of the parks and recreation facilities impact fee.

Table 2
Current Level of Service & Adopted Level of Service Standards

Park Land Category	Acres[1]	Unincorporated County Achieved LOS[2]	Unincorporated County Adopted LOS Standard[3]	LOS Used in the Study[4]
Activity Based Acres	1,512.73	1.6	1.5	1.5
Resource Based Acres	3,487.15	3.7	6.0	3.7
Total	**4,999.88**	**5.3**	**7.5**	**5.2**
2022 Unincorporated County Population[5]	**941,241**			

1) Source: Table 1
2) Acres (Item 1) divided by 2022 unincorporated county population (Item 5) multiplied by 1,000. For the impact fee calculation, the achieved level of service reflects only county-owned acres which are not located within municipalities.
3) Source: Orange County Comprehensive Plan 2010-2030, Recreation and Open Space Elements
4) Impact fee calculations use the lower of the achieved LOS vs. the adopted LOS standard
5) Source: Appendix A, Table A-1

Cost Component

The total cost per resident for parks and recreation facilities consists of two components: the cost of purchasing and developing park land and the cost of building recreational facilities at each park.

Land Cost

To estimate the cost of activity-based and resource-based park land, several variables were evaluated, including recent park land purchased by Orange County, an analysis of recent sales and value of vacant land similar in size and location to Orange County's parks based on data from the Orange County Property Appraiser, change in vacant land values since the last technical study, and value of parcels where existing parks are located.

Based on this analysis and information, a unit cost of $100,000 per acre for activity-based parks and $40,000 per acre for resource-based parks are used for impact fee calculation purposes. A more detailed explanation of the land value estimates is included in Appendix B. Based on information provided by Orange County, site preparation cost is estimated at $32,000 per acre for activity-based parks. As shown in **Table 3**, the overall cost for park land amounts to $346 per resident.

Table 3
Land Value per Resident

Park Land Category	Land Cost per Acre[1]	Site Development Cost per Acre[2]	Total Land Cost per Acre[3]	LOS Used in the Study[4]	Land Value per Resident[5]
Activity Based Parks	$100,000	$32,000	$132,000	1.5	$198.00
Resource Based Parks	$40,000	$0	$40,000	3.7	$148.00
Total:					**$346.00**

1) Source: Appendix B
2) Source: Orange County Parks and Recreation Division
3) Sum of land cost (Item 1) and site development cost (Item 2)
4) Source: Table 2
5) Cost per acre (Item 3) multiplied by LOS standard (Item 4) divided by 1,000

Recreational Facility Cost

The next step in calculating the total cost for parks and recreation services in Orange County involves estimating the current value of the recreational facilities included in the inventory.

As presented in **Tables 4 and 5**, the total park recreational and ancillary facilities value is estimated at approximately $429.2 million, including architectural, engineering, construction and inspection costs. Table 4 includes recreational facilities and Table 5 includes the support/ancillary facilities.

Recreational and ancillary facility value estimates are based on a review of construction cost increases since the last study, insurance values of the existing facilities, and information provided by the Orange County Parks and Recreation Division.

Table 4
Recreation Facility Values

Facility Type	Unit	Unit Count[1]	Unit Cost[2]	Recreational Facility Value[3]
Baseball Fields	field	31	$420,000	$13,020,000
Basketball Court	goal	58	$70,000	$4,060,000
Batting Cages	cage	16	$30,000	$480,000
Boardwalk	linear feet	5,407	$175	$946,225
Boat Ramp	ramp	13	$250,000	$3,250,000
Camping	site	162	$19,000	$3,078,000
Classrooms/ Meeting Rooms	square foot	26,769	$400	$10,707,600
Clubhouse/Community Center	square foot	19,730	$350	$6,905,500
Concession Buildings/Stands	stand	11	$700,000	$7,700,000
Dog Park	park	14	$200,000	$2,800,000
Equestrian Trail	mile of trail	18.553	$75,000	$1,391,475
Exercise Course	course	4	$100,000	$400,000
Fitness Center	center	5	$800,000	$4,000,000
Frisbee/Disc Golf	course	36	$90,000	$3,240,000
Golf Facility	facility	1	$230,000	$230,000
Hockey Rink	rink	1	$1,000,000	$1,000,000
Horseshoe Pits	pit	21	$2,500	$52,500
Multi Purpose Field	field	17	$620,000	$10,540,000
Nature Center/Study	square foot	13,330	$280	$3,732,400
Nature Trail/ Hiking	mile of trail	13.515	$60,000	$810,900
Picnic Pavilion	pavilion	106	$66,000	$6,996,000
Playground (Ages 5- 12)	playground	47	$325,000	$15,275,000
Playground (Tot Lot)	playground	28	$175,000	$4,900,000
Recreation Center/Gymnasium	square foot	107,974	$400	$43,189,600
Restroom	restroom	89	$550,000	$48,950,000
Shuffleboard Court	court	2	$10,000	$20,000
Skate Park	park	3	$425,000	$1,275,000
Soccer Field	field	20	$900,000	$18,000,000
Softball Field	field	12	$420,000	$5,040,000
Sprayground/Splash Park	park	4	$700,000	$2,800,000
Swimming Pool	pool	1	$1,250,000	$1,250,000
Tennis Court	court	38	$80,000	$3,040,000
Trail-Paved (linear mile)	mile of trail	45.279	$2,000,000	$90,558,000
Volleyball Court	court	23	$18,000	$414,000
Recreational Facility Value [4]				**$320,052,200**
Architecture, Engineering, and Inspection @ 12.5% [5]				$40,006,525
Total Recreational Facility Value [6]				**$360,058,725**

1) Source: Table 1
2) Source: Orange County Parks & Recreation Division
3) Unit count (Item 1) multiplied by unit cost (Item 2)
4) Sum of recreational facility values
5) Facility value multiplied by 12.5 percent, based on information provided by Orange County
6) Sum of the recreational facility value (Item 4) and the architecture, engineering, and inspection cost (Item 5)

Table 5
Ancillary Facility Value

Facility Type	Unit	Unit Count[1]	Unit Cost[2]	Ancillary Facility Value[3]
Horse Barns	barn	13	$60,000	$780,000
Maintenance/Operations Buildings	square foot	34,118	$230	$7,847,140
Multi-use Trail Pedestrian Bridge	bridge	3	$6,000,000	$18,000,000
Office/Administration Buildings	square foot	85,299	$350	$29,854,650
Picnic Shelters	shelter	5	$25,000	$125,000
Storage Facilities	square foot	9,804	$30	$294,120
Tennis Pro Shop	shop	2	$200,000	$400,000
Trailhead Buildings	building	4	$550,000	$2,200,000
Walkway Pedestrian Bridge (Wood)	bridge	10	$62,000	$620,000
Walkway Pedestrian Bridge (Metal Truss)	bridge	1	$1,300,000	$1,300,000
Ancillary Facility Value [4]				***$61,420,910***
Architecture, Engineering, and Inspection @ 12.5%[5]				$7,677,614
Total Ancillary Facility Value[6]				**$69,098,524**

1) Source: Orange County Parks and Recreation Division
2) Source: Orange County Parks and Recreation Division
3) Unit count (Item 1) multiplied by unit cost (Item 2)
4) Sum of ancillary facility value
5) Ancillary facility value multiplied by 12.5 percent, based on information provided by County staff
6) Sum of the ancillary facility value (Item 4) and the architecture, engineering, and inspection cost (Item 5)

Table 6 provides a summary of recreational and ancillary facility values, which is estimated at $456 per resident.

Table 6
Summary of Recreation and Ancillary Facility Values

Facility Type	Total Facility Value
Recreational Facilities[1]	$360,058,725
Ancillary/Support Facilities[2]	$69,098,524
Total Facility Value[3]	$429,157,249
Unincorporated County Population (2022)[4]	941,241
Total Facility Cost per Resident[5]	**$455.95**

1) Source: Table 4
2) Source: Table 5
3) Sum of recreational facilities (Item 1) and ancillary/support facilities (Item 2)
4) Source: Appendix A, Table A-1
5) Total facility value (Item 3) divided by unincorporated county population (Item 4)

Total Impact Cost per Resident

Table 7 presents total park land and recreation/ancillary facility value per resident. As presented, the total impact cost is estimated at $802 per resident; of which $346 is for the land value and $456 is for the facility value.

Table 7
Total Impact Cost per Resident

Calculation Step	Total Asset Value	Percent of Total Asset Value[4]
Land Cost per Resident[1]	$346.00	43%
Facility Cost per Resident[2]	$455.95	57%
Total Cost per Resident[3]	**$801.95**	**100%**

1) Source: Table 3
2) Source: Table 6
3) Sum of land cost per resident (Item 1) and facility cost per resident (Item 2)
4) Distribution of total asset value per resident

Credit Component

To avoid overcharging new development for the capital cost of providing parks and recreation services, a review of the capital funding program for the parks and recreation program was completed. The purpose of this review is to determine non-impact fee revenues generated by future development that may be spent on parks and recreation capital facility expansion projects. The future revenue amounts were estimated based on a review of non-impact fee revenues used within the last six years for the purchase of land and construction of additional recreational facilities. This review indicated that the County uses a combination of funds in addition to impact fee revenues to add capacity to the parks system.

Capital Expansion Credit

Between FY 2017 and FY 2022, in addition to impact fees, the County has used a combination of ad valorem tax revenue, grant revenue, and other general revenues to fund capital expansion projects. To calculate the capital expansion credit per resident, the average annual capital expansion funding over the 6-year period is divided by the average population for the same period.

Over the 6-year period, Orange County's parks and recreation capacity expansion projects required approximately $5 million of non-impact fee funding, resulting in an average capital expansion funding of $840,000 per year. As presented in **Table 8,** the average annual capital expansion funding amounts to $0.94 per resident.

Once the capital expansion credit per resident is calculated, a credit adjustment is needed for the portion of the capital expansion credit funded with ad valorem tax revenues, which is approximately 87 percent of the funding allocation. This adjustment accounts for the fact that new homes tend to pay higher property taxes compared to older homes due to the "Save Our Homes" assessment cap. This adjustment factor is estimated based on a comparison of the average taxable value of newer homes to that of all homes. As shown, the adjusted capital expansion credit per person amounts to $1.51 per resident per year.

Table 8
Capital Expansion Credit per Resident [1]

Expenditure[1]	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Fund 1050 - Parks Fund							
Barber Park Multipurpose Fields	$111,783	$37,990	$2,284,011	$203,358	-	-	**$2,637,142**
Lake Wekiva Trail Electric Gate	-			-	-	$60,000	**$60,000**
Magnolia Park	-	-	-	$1,255,105	-	-	**$1,255,105**
Subtotal -- Expenditures Funded with Parks Fund	**$111,783**	**$37,990**	**$2,284,011**	**$1,458,463**	-	**$60,000**	**$3,952,247**
Fund 1023 - Capital Projects Fund							
Barber Park Multipurpose Fields	49,923	28,635	952,273	69,089	-	-	**$1,099,920**
Subtotal -- Capital Projects Fund	**$49,923**	**$28,635**	**$952,273**	**$69,089**	-	-	**$1,099,920**
Total Capital Expansion Expenditures							**$5,052,167**
Average Annual Capital Expansion Expenditures[2]							**$842,028**
Average Annual Population[3]							**894,417**
Capital Expansion Expenditures per Resident[4]							**$0.94**
Percentage Funded with Ad Valorem Tax Revenues[5]							**87%**
Portion Funded with Ad-Valorem Tax Revenues[6]							**$0.82**
Portion Funded with Other Revenue Sources[7]							**$0.12**
Residential Land Uses Credit Adjustment Factor[8]							**1.70**
Adjusted Capital Expansion Credit per Functional Resident[9]							**$1.51**

1) Source: Orange County
2) Total capital expansion expenditures divided by 6 to calculate the average annual expenditures
3) Source: Appendix A, Table A-1
4) Average annual capital expansion expenditures (Item 2) divided by the average annual population (Item 3)
5) Percentage of total capital expansion expenditures funded with ad valorem tax revenue
6) Capital expansion expenditures per resident (Item 4) multiplied by percentage funded with ad-valorem tax revenues (Item 5)
7) Average annual expenditures per resident (Item 4) less portion funded with ad valorem revenues (Item 6)
8) Adjustment factor to reflect higher ad valorem taxes paid by new homes
9) Credit portion funded with ad valorem revenues (Item 6) multiplied by the credit adjustment factor (Item 8) and added to the portion funded with non-ad valorem revenues (Item 7)

Net Parks and Recreation Impact Cost

The net impact fee per resident is the difference between the cost component and the credit component. **Table 9** summarizes the calculation of the net parks and recreation impact cost. As presented, the net impact cost amounts to $777 per resident.

Table 9
Net Impact Cost per Resident

Impact Cost / Credit Element	Figure
Impact Cost	
Total Impact Cost per Resident[1]	$801.95
Revenue Credit	
Capital Expansion Credit per Resident[2]	$1.51
Capitalization Rate	3.50%
Capitalization Period (years)	25
Total Revenue Credit per Resident[3]	$24.89
Net Impact Cost	
Net Impact Cost per Resident[4]	**$777.06**

1) Source: Table 7
2) Source: Table 8
3) Present value of the revenue credit (Item 2) over a 25-year period with a capitalization rate of 3.5%. The capitalization rate is based on the information provided by Orange County.
4) Total impact cost per resident (Item 1) less total revenue credits per resident (Item 3)

Calculated Parks and Recreation Impact Fee Schedule

Table 10 presents the calculated parks and recreation facilities impact fee schedule for Orange County, based on the net impact cost per resident previously presented in Table 9. Also presented is a comparison to the County's current adopted fee and percent change from the current fee. As mentioned previously, changes to the cost and credit components resulted in an overall increase of 40 percent compared to the 2017 study calculated rates. When changes to the demand component are taken into consideration, overall fee increases would have ranged from 43 to 47 percent for most residential categories. However, because the County has been indexing the fees between technical study updates, the increases from the current adopted fees are moderated to 24 to 27 percent.

Table 10
Calculated Parks and Recreation Impact Fee Schedule

Land Use	Residents per Unit[1]	Net Cost per Resident[2]	Calculated Impact Fee[3]	Adopted Impact Fee[4]	% Change[5]
Single Family (detached)	2.89	$777.06	**$2,246**	$1,785	26%
Accessory Single Family	1.92	$777.06	**$1,492**	$1,208	24%
Multi-Family	1.92	$777.06	**$1,492**	$1,208	24%
Mobile Home	2.18	$777.06	**$1,694**	$1,330	27%
Retirement Housing/Age Restricted	1.56	$777.06	**$1,212**	$957	27%

1) Source: Appendix A, Table A-2
2) Source: Table 9
3) Residents per unit (Item 1) multiplied by the net cost per resident (Item 2)
4) Source: Orange County
5) Percent change from the adopted impact fee (Item 4) to the calculated impact fee (Item 3)

Parks and Recreation Impact Fee Schedule Comparison

As part of the work effort in updating the Orange County parks and recreation impact fee, a comparison of Orange County's adopted and calculated rates to parks and recreation impact fees adopted by other Florida counties. The comparison table provides the date of the last technical study, the adoption percentage, current adopted fees for three residential categories, and the full calculated fee for single family homes per the most recent technical study completed. The ranking shown in the table is based on the last column, full calculated rate for single family housing. Information related to the counties surrounding Orange

County are highlighted. As presented, the County's current adopted fees as well as calculated fees are within the range of fees imposed by other Florida jurisdictions.

Table 11

Parks and Recreation Impact Fee Schedule Comparison

County	Date of Last Update Study	Adoption %	Single Family (2,000 sf, per du)	Multi-Family (1,300 sf, per du)	Mobile Home (du)	Single Family Fee @ 100%
Levy County[1]	2005	100%	$150	$124	$158	$150
Lake County[2]	2003	95%	$222	$171	$177	$234
Alachua County[3]	2004	100%	$252	$252	$252	$252
Monroe County[4]	1992	100%	$340	$340	$340	$340
Hernando County[5]	2012	100%	$411	$311	$411	$411
Polk County[6]	2019	100%	$417	$309	$304	$417
Bay County[7]	2005	50%	$330	$261	$336	$660
Citrus County[8]	2021	100%	$661	$509	$628	$661
Pasco County[9]	2001	100%	$892	$627	$627	$892
Flagler County[10]	2021	32%	$304	$122	$284	$950
Volusia County[11]	2022	100%	$1,028	$968	$968	$1,028
Charlotte County[12]	2021	27%	$312	$246	$249	$1,156
St. Johns County[13]	2018	100%	$1,513	$1,215	$1,215	$1,346
Manatee County[14]	2015	90%	$1,298	$1,030	$1,030	$1,442
Lee County[15]	2018	52.5%	$806	$610	$591	$1,535
Orange County (Adopted)[16]	**2017**	**100%**	**$1,785**	**$1,208**	**$1,330**	**$1,544**
Martin County[17]	2012	100%	$1,972	$1,972	$1,972	$1,972
Indian River County[18]	2020	40%	$819	$468	$471	$2,048
Nassau County[19]	2019	100%	$2,049	$1,330	$2,219	$2,049
Orange County (Calculated)[20]	**2022**	**N/A**	**$2,246**	**$1,492**	**$1,694**	**$2,246**
Osceola County[21]	2019	100%	$2,305	$1,118	$1,699	$2,305
Palm Beach County[22]	2022	Varies	$951	$812	$812	$2,332
Sarasota County[23]	2016	100%	$2,719	$2,204	$1,880	$2,719
St. Lucie County[24]	2022	70%	$1,920	$1,713	$1,258	$2,728
Hillsborough County[25]	2020	65%	$2,145	$1,710	$1,710	$3,300
Collier County[26]	2015	100%	$3,628	$1,685	$2,862	$3,313
City of Orlando[27]	2014	14%	$966	$825	$966	$6,902
Miami-Dade County[28]	2005	N/A	$2,613-$4,154	$1,619-$3,514	$2,613-$4,154	N/A
Broward County[29]	N/A	N/A	$405	$239	$367	N/A

Note: Counties surrounding Orange County are highlighted.

1) Source: Levy County Community Development Department
2) Source: Lake County Growth Management Department. The County is in the process of updating the fee.
3) Source: Alachua County Growth Management Department. Fees shown for residential per 1,000 sf.
4) Source: Monroe County Planning & Environmental Resources Department
5) Source: Hernando County Building Division
6) Source: Polk County Building and Construction Department
7) Source: Bay County Planning and Zoning
8) Source: Citrus County Land Development Division Impact Fees
9) Source: Pasco County Central Permitting Department

10) Source: Flagler County Planning and Zoning Department
11) Source: Volusia County Growth and Resource Management Department. Fee shown is the sum of local and district/coastal park impact fees. The County is in the implementation process of recently completed technical study.
12) Source: Charlotte County Community Development Department. Regional/ Specialty & Community Parks impact fees are shown. Includes a 2.55% administrative fee.
13) Source: St. Johns County's Schedule of Fees and Services. Mobile home fee shown reflects the residential 1,251 to 1,800 sq. ft. tier.
14) Source: Manatee County Financial Management Department. Fees shown for the multi-family and mobile home rate reflect the 1,300 to 1,700 sf tier.
15) Source: Lee County Department of Community Development. Fees shown is sum of community and regional park's impact fees for unincorporated area.
16) Source: Orange County
17) Source: Martin County Growth Management Department. Fees shown is the 1,101 to 2,300 sf tier.
18) Source: Indian River County Planning Division
19) Source: Nassau County Building Department
20) Source: Table 10
21) Source: Osceola County Impact and Mobility Fees Office
22) Source: Palm Beach County Planning, Zoning, and Building Department. Fees shown effective January 1, 2023. Fees shown for multi-family and mobile home reflect residential 800 sf to 1,399 sf tier. County adopted maximum allowable according to HB 337 (2021).
23) Source: Sarasota County Planning and Development Services. Fees shown for the multi-family rate is for the 1,250+ sf tier.
24) Source: St. Lucie County Planning & Development Services Department. Fees shown effective January 1st, 2023.
25) Source: Hillsborough County Development Services Department. Mobile home fee reflects residential 1,250-1,499 sq. ft. tier.
26) Source: Collier County Capital Project Planning, Impact Fees, and Program Management Division. Fees shown are sum of community and regional parks impact fees.
27) Source: City of Orlando City Planning Division
28) Source: Miami-Dade County Development Services Division. Fees vary based on district and unit type. Impact fees were adopted in 2005 with an annual adjustment based on the CPI starting in 2006/07.
29) Source: Broward County Planning and Development Management Division. Includes a 1% administrative fee. Fees shown for single family and mobile home use the 2 or less bedroom tier. The multi-family fee shown is the garden apartment, high-rise, and mid-rise: 1 or less bedroom tier.

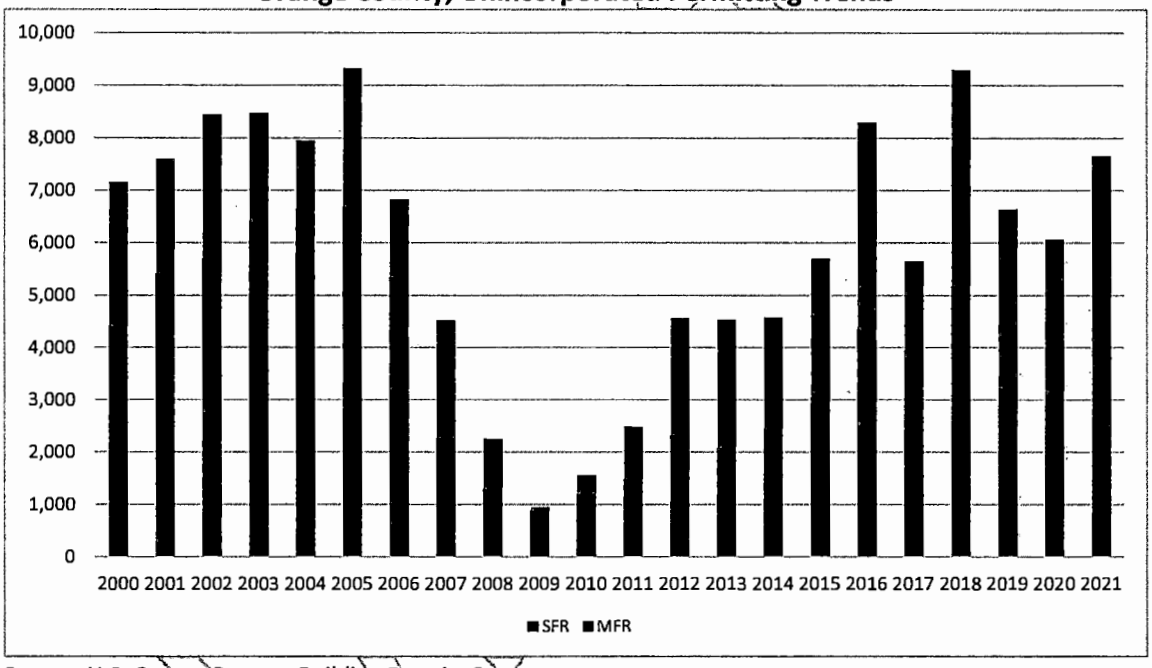
Future Revenue Estimates

Over the past five years, Orange County collected an average of $7.7 million of parks and recreation impact fees per year. This figure was higher at $8.6 million per year when the average of last three years is considered.

Figure 1 shows the permitting trends in the unincorporated area of Orange County from 2000 to 2021. Based on permitting levels over the past three to five years, it is estimated that if adopted, the calculated impact fees are likely to generate approximately $9 million to $11 million per year.

For impact fee purposes, revenue projections serve only as an overall guideline in planning future infrastructure needs. In their simplest form, impact fees charge each unit of new growth for the net cost (total cost less credits) of infrastructure needed to serve that unit of growth. If the growth rates remain high, the County will have more impact fee revenues to fund growth related projects sooner rather than later. If the growth rate slows down, less revenue will be generated, and the timing and need for future infrastructure improvements will be later rather than sooner.

Figure 1
Orange County, Unincorporated Permitting Trends



Source: U.S. Census Bureau, Building Permits Survey

Indexing

In many cases, impact fees are reviewed periodically (every four to five years, etc.) as opposed to on an annual basis. HB 337 that was signed into law in 2021 requires that impact fees not be increased more than once every four years. If no adjustment to the impact fee schedule is made during this period, a situation can be created where major adjustments to the impact fee schedule likely become necessary due to the time between the adjustments. During periods of cost increases, the need for significant adjustments also creates major concerns in the development community. To address this issue, in the past, Orange County indexed its fees annually for construction and land cost changes based on changes over the past five years, as appropriate. The remainder of this section provides the method to calculate a combined index that can be updated by the County annually.

Land Cost

As shown in **Table 12**, between 2016 and 2021, just value of vacant land increased by an annual average of 4 percent in the unincorporated county. Given the high level of fluctuations in land values, it is recommended to review a longer period as well. A review of countywide land value changes from 1976 to 2021 suggested an average increase of 5.4 percent per year. This figure is higher than the increase experienced over the past five years. When the change in a shorter period suggests a significantly large average annual increase (for example, 10 percent or greater), this average can be moderated by using a longer-term period.

Table 12
Vacant Land Value Change

Year	Just Value	Percent Change
2016	$2,014,490,714	-
2017	$2,148,256,709	6.6%
2018	$2,299,014,697	7.0%
2019	$2,391,726,440	4.0%
2020	$2,391,921,741	0.0%
2021	$2,452,240,314	2.5%
Average (2016-2021)		**4.0%**

Source: Florida Department of Revenue, Ad Valorem Valuation and Tax Data files

Building Construction Cost

For building construction costs, a common index used is the building cost index provided by Engineering-News Record. As shown in **Table 13**, the building cost index remained relatively stable until 2020 when there was a more significant increase, reflecting recent cost increases nationwide. This trend is consistent with construction costs experienced statewide. The average annual change between 2016 and 2021 is 4.2 percent, which suggests an expectation that cost increases will be more moderate in the future compared to last year.

Table 13
Recreational/Ancillary Facility Cost Index

Year	Annual Average	Percent Change
2016	5,645	-
2017	5,831	3.3%
2018	6,019	3.2%
2019	6,136	1.9%
2020	6,281	2.4%
2021	6,912	10.0%
	Average	**4.2%**

Source: Enginnering News-Record, Building Cost Index

Application

To index the parks and recreation impact fee schedule previously presented in this report, the combined index should first be calculated, which is presented in **Table 14.** The second column summarizes the average cost increases presented previously in Tables 12 and 13. The third column presents the percent of the total cost for each inventory component, which are then multiplied with the annual change to create the overall index. The combined index for the parks and recreation impact fee is then applied to the calculated fees presented in the impact fee schedule in **Table 15.**

Table 14
Indexing Application – Combined Index

Cost Component	Annual Change[1]	Percent of Total[2]	Index[3]
Land Cost	4.0%	43%	1.7%
Facility Cost	4.2%	57%	2.4%
Total			**4.1%**

1) Source: Tables 12 and 13
2) Source: Table 7
3) Annual change (Item 1) multiplied by the percent of total (Item 2)

Table 15 presents the indexed fee schedules for the next four years. With the overall index calculated in Table 14, the parks and recreation impact fee for the single family detached residential home increases from $2,246 in Year 1 to $2,638 in Year 5. It is recommended the calculated index be reviewed and recalculated annually, especially during time periods when the costs fluctuate significantly.

Table 15
Indexed Fees

Land Use	Year 1 Calculated Impact Fee[1]	Year 2[2]	Year 3[3]	Year 4[4]	Year 5[5]
Annual Index[6]		**4.1%**	**4.1%**	**4.1%**	**4.1%**
Single Family (detached)	$2,246	$2,338	$2,434	$2,534	$2,638
Accessory Single Family	$1,492	$1,553	$1,617	$1,683	$1,752
Multi-Family	$1,492	$1,553	$1,617	$1,683	$1,752
Mobile Homes	$1,694	$1,763	$1,835	$1,910	$1,988
Retirement Housing/Age Restricted	$1,212	$1,262	$1,314	$1,368	$1,424

1) Source: Table 10
2) Year 1 figures (Item 1) multiplied by (1+0.042), annual index (Item 6)
3) Year 2 figures (Item 2) multiplied by (1+0.042), annual index (Item 6)
4) Year 3 figures (Item 3) multiplied by (1+0.042), annual index (Item 6)
5) Year 4 figures (Item 4) multiplied by (1+0.042), annual index (Item 6)
6) Source: Table 14

Appendix A
Population Analysis
Supplemental Information

Appendix A

The parks and recreation impact fee requires the use of population data in calculating current levels of service, demand component, and credit calculations. To accurately determine demand for services, and to be consistent with the County's Comprehensive Plan, population projections include only permanent residents and uses the mid-level population projections obtained from the University of Florida, Bureau of Economic and Business Research (BEBR).

Table A-1 presents the population trend for Orange County, unincorporated Orange County, and a trend of the unincorporated portion of the countywide population. The projections indicate that the current population for the unincorporated county is approximately 941,200 and is estimated to increase by an average of 1.8 percent annually between 2022 and 2030 based on the countywide growth estimates. The unincorporated county population has averaged 63.3 percent of the countywide population between 2019 and 2021, which is utilized to project the population in future years.

Table A-1
Population Estimates and Projections – Unincorporated Orange County

Year	Orange County[1]	Percent Change[2]	Unincorporated County[3]	Percent Change[2]	Percent Unincorporated[4]
2000	896,344	-	596,164	-	66.5%
2001	929,246	3.7%	619,072	3.8%	66.6%
2002	956,062	2.9%	631,580	2.0%	66.1%
2003	982,599	2.8%	644,721	2.1%	65.6%
2004	1,014,242	3.2%	662,729	2.8%	65.3%
2005	1,050,333	3.6%	681,660	2.9%	64.9%
2006	1,084,706	3.3%	701,015	2.8%	64.6%
2007	1,111,307	2.5%	717,534	2.4%	64.6%
2008	1,125,822	1.3%	722,586	0.7%	64.2%
2009	1,133,453	0.7%	726,201	0.5%	64.1%
2010	1,145,956	1.1%	736,657	1.4%	64.3%
2011	1,163,170	1.5%	746,411	1.3%	64.2%
2012	1,185,898	2.0%	760,858	1.9%	64.2%
2013	1,212,950	2.3%	779,062	2.4%	64.2%
2014	1,239,616	2.2%	793,737	1.9%	64.0%
2015	1,267,505	2.2%	809,636	2.0%	63.9%
2016	1,298,087	2.4%	824,666	1.9%	63.5%
2017	1,331,702	2.6%	845,671	2.5%	63.5%
2018	1,366,343	2.6%	865,920	2.4%	63.4%
2019	1,400,539	2.5%	886,058	2.3%	63.3%
2020	1,429,908	2.1%	905,200	2.2%	63.3%
2021	1,457,940	2.0%	922,413	1.9%	63.3%
2022	**1,486,953**	**2.0%**	**941,241**	**2.0%**	**63.3%**
2023	1,516,543	2.0%	959,972	2.0%	63.3%
2024	1,546,722	2.0%	979,075	2.0%	63.3%
2025	1,577,700	2.0%	998,684	2.0%	63.3%
2026	1,602,312	1.6%	1,014,263	1.6%	63.3%
2027	1,627,308	1.6%	1,030,086	1.6%	63.3%
2028	1,652,694	1.6%	1,046,155	1.6%	63.3%
2029	1,678,476	1.6%	1,062,475	1.6%	63.3%
2030	1,704,700	1.6%	1,079,075	1.6%	63.3%

1) Source: University of Florida, Bureau of Economic and Business Research (BEBR), historical estimates and medium projections for 2050. Interim years were interpolated.
2) Percent change from year to year
3) For 2000-2021, BEBR. For future projections, the average portion of the unincorporated county to countywide population for 2019-21 (63.3%) was used to project the unincorporated county population.
4) Unincorporated county population (Item 3) divided by the Orange County population (Item 1)

Apportionment of Demand by Residential Unit Type

The residential land uses to be used for the impact fee calculations are the following:

- Single Family (detached)
- Multi-Family
- Mobile Home
- Retirement Housing/Age Restricted

Table A-2 presents the number of persons per housing type for the residential categories identified above in the Orange County parks and recreation impact fee update study. This analysis includes all housing units, both occupied and vacant. In the case of the retirement home/age restricted land use, data from the 2017 National Household Travel Survey was used to adjust the single family and multi-family land uses to account for the residents over 55 years of age.

Table A-2
Persons per Housing Unit (Unincorporated Orange County)

Housing Type	Population[1]	Housing Units[2]	Persons per Housing Unit[3]
Single Family (detached)	641,725	222,425	2.89
Multi-Family	169,838	88,591	1.92
Mobile Home	38,172	17,473	2.18
Weighted Avg.	**849,735**	**328,489**	**2.59**
Retirement Housing/Age Restricted	486,657	311,016	1.56

1) Source: 2020 ACS, Table B25033. Population for the retirement housing/age-restricted housing type adjusts the sum of the population of single family (detached/attached) and multi-family (apartment/condo) for the residents over 55 years of age based on information obtained from the 2017 National Household Travel Survey, prepared by the US Department of Transportation.
2) Source: 2020 ACS, Table DP04
3) Population (Item 1) divided by housing units (Item 2)
Notes: Excludes boats, RVs, vans, etc.

Appendix B
Land Value Analysis
Supplemental Information

Appendix B

This appendix provides a summary of land value estimates for the parks and recreational facilities impact fee. To estimate the land value for Orange County parks, the following information was reviewed and analyzed:

- Change in vacant land values since the last technical study (2017);
- Recent park land purchases made by the County;
- Value of the parcels where existing parks are located;
- Vacant land sales in unincorporated county obtained from the Orange County Property Appraiser database for similar size parcels; and
- Vacant land values for similarly sized vacant property in unincorporated county obtained from the Orange County Property Appraiser's database.

The 2017 technical study estimated average land value at $60,000 per acre for activity-based parks and $30,000 per acre for resource-based parks. Since then, the property values increased by 34 percent based on Orange County Property Appraiser's estimates. This results in a value of $81,000 per acre for activity-based parks and $40,000 per acre for resource-based parks.

A review of the recent park land purchases was also completed. In 2020, the County purchased a 21-acre site at a cost of $86,000 per acre and a 30-acre site at a cost of $166,000 per acre. The weighted average cost of these two parcels is approximately $133,000 per acre.

The value of parcels where the existing parks are located, as estimated by the Orange County Property Appraiser, indicates an average land value ranging from $4,000 per acre to $28,000 per acre depending on the park type. Property Appraiser estimates tend to be on the conservative side for publicly owned land since the values for non-tax paying property are not updated frequently.

A review of residential vacant land sales of similarly sized parcels over the past five years suggested an average value of $95,000 per acre to $181,000 per acre depending of size of the parcels while the median values ranged from $50,000 per acre to $80,000 per acre. Residential vacant land sales in 2021 indicated higher average values of approximately $106,000 per acre to $166,000 per acre depending on the size of the parcels. In 2021, the

median sales price per acre ranged from $60,000 per acre to $140,000 per acre depending on the size tier.

Finally, the vacant residential land values in 2021 averaged $30,000 per acre to $65,000 per acre based on OCPA estimates.

Given this information and based on discussions with Orange County representatives, an average value of $100,000 per acre for activity-based parks and $40,000 per acre for resource-based parks are utilized for impact fee calculation purposes. **Table B-1** provides a summary of this information.

Table B-1
Summary of Park Land Value Information

Variable	2017 Land Value Estimate[1]	Indexed Land Value[2]	
Activity-based Parks	$60,000	$80,580	
Resource-based Parks	$30,000	$40,290	
Just Value Land Increase (2017-2022)		34.30%	
Recent Land Purchases[3]	**Year**	**Cost per Acre**	
Magnolia Park Expansion	2020	$85,700	
Timber Bridge Preserve	2020	$165,563	
Weighted Average		**$133,001**	
Value of Current Inventory[4]		**Cost per Acre**	
Value of the Current Inventory			
Community Parks		$28,327	
District Parks		$9,727	
Regional Parks		$3,541	
Specialty Parks		$22,860	
Vacant Land Sales (2017-2021)[5]	**Count**	**Sale Price per Acre** Median	W. Average
Vacant Residential Land Sales (2017-2021)			
- 1- 5 acres	963	$48,907	$95,366
- 5.0001 - 10 acres	36	$49,422	$99,363
- 10.0001 - 20 acres	12	$80,394	$181,362
Vacant Residential Land Sales (2021)			
- 1- 5 acres	326	$58,229	$106,480
- 5.0001 - 10 acres	13	$141,125	$158,195
- 10.0001 - 20 acres	4	$70,651	$166,228
Vacant Land Values (2021)[5]	**Count**	**Land Value per Acre** Median	W. Average
Vacant Residential Land Values			
- 1- 5 acres	2,865	$42,705	$64,544
- 5.0001 - 10 acres	151	$34,986	$53,510
- 10.0001 - 20 acres	47	$30,000	$43,599
Used in the Study:			
- Activity-Based			**$100,000**
- Resource-Based			**$40,000**

1) *Orange County Parks and Recreation Impact Fee Update Study, 2017*
2) Source: Orange County Property Appraiser Database
3) Source: Orange County
4) Source: Orange County Property Appraiser Database
5) Source: Orange County Property Appraiser Database