

**ORANGE COUNTY
PARKS AND RECREATION
IMPACT FEE STUDY**



Prepared for:

ORANGE COUNTY

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Prepared by:

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ORANGE COUNTY PARKS AND RECREATION IMPACT FEE STUDY

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ORANGE COUNTY PARKS AND RECREATION IMPACT FEE

I. Introduction

Tindale-Oliver & Associates, Inc., (TOA) was retained by Orange County to develop a new Parks and Recreation Impact Fee Program. Orange County Parks and Recreation Division provides parks and recreation facilities and services throughout the county; however, this study will include only those parks that are located in the unincorporated areas of the county and the types of parks that tend to serve the county at large and not just neighborhoods. This approach allows the County to use impact fees for the types of parks that benefit and are used by a wide range of residents.

This report summarizes the results of the study and includes the following sections:

- Background Review;
- Facilities and Recreation Inventory;
- Service Delivery;
- Cost Component;
- Credit Component;
- Persons Per Household By Land Use;
- Net Parks and Recreation Facilities Impact Cost;
- Proposed Parks and Recreation Facilities Impact Fee Schedule;
- Revenue Projections; and
- Indexing.

Information supporting this analysis was obtained from the Orange County Parks and Recreation Division and other sources as indicated. The parks and recreation facilities impact fee is charged only to residential land uses.

II. Background Review

Orange County has been experiencing significant growth over the past ten years. Between 1994 and 2005, the County's population increased by 41 percent, while the population of the unincorporated County increased nearly the same, by 42 percent. Table 1 presents the changes in population from 1994 to 2005.

**Table 1
Population Growth**

	1994	2005	% Change
Orange County	740,167	1,043,299	41%
Unincorporated County	477,410	677,185	42%

Source: University of Florida, Bureau of Economic and Business Research

According to medium population projections generated by the Bureau of Economic and Business Research (BEBR), Orange County's population is expected to increase to 1.25 million by 2015 and to 1.47 million by 2025.

Along with the population growth, the County is also becoming more urbanized. To better serve the County's existing population, as well as to accommodate new growth, the County increased its parks inventory from 29 parks in 1994 to 96 parks in 2005, more than tripling the inventory. This increase in inventory has resulted in a higher percentage of the total budget being used to fund operating costs. In FY 93-94, 38 percent of the Orange County Parks and Recreation Division's approved budget was allocated to operations and maintenance related expenses, while 62 percent was allocated to capital expenditures. In FY 04-05, these percentages were almost reversed, with approximately 67 percent of the approved budget being used for operating expenses, while only 33 percent being allocated to the capital expenditures. Table 2 provides a summary of the changes in the Division's budget over the past ten years.

**Table 2
Parks and Recreation Division Budget**

	FY 93-94	FY 04-05	% Change
Approved Budget	\$19,800,000	\$32,000,000	62%
O&M Expenses	\$7,500,000	\$21,500,000	187%
Share of O&M Expenses	38%	67%	
Capital Expenses	\$12,300,000	\$10,500,000	-15%
Share of Capital Expenses	62%	33%	

Source: Orange County Park and Recreation Division

Primary funding sources for the Division include ad valorem and public service tax revenues, and user fees. As presented in Table 2, the increase in the inventory has led to a significant increase in operating and maintenance expenses, leaving a small portion of the budget available to capital expenditures. The budget available for capital expenditures decreased from \$12.3 million in FY 93-94 to \$10.5 million in FY 04-05. At the same time, land values have been increasing in Orange County. In just over the past five years, land values have increased by an average of 10 percent annually. The following table presents the increase

in land values in unincorporated Orange County, which is the primary service area of the County's Parks and Recreation Division.

Table 3
Increase in Property Values

Year	Unincorporated County Just Land Values	Percent Increase
1999	\$8,859,532,065	
2000	\$9,410,928,294	6.2%
2001	\$10,407,532,685	10.6%
2002	\$11,038,670,634	6.1%
2003	\$12,683,995,046	14.9%
2004	\$14,149,970,646	11.6%
Average		9.9%

Source: Orange County Property Appraiser

Given the importance of land in building parks, the increase in land values along with the decrease in available budget toward capital expenditures leaves the County with insufficient funds to accommodate the needs of the future development. The decrease in available funding for capital expenditures caused the County to explore other funding options, including impact fees.

This report summarizes the results of the parks and recreation facilities impact fee study and will serve as the technical document for the impact fee ordinance.

III. Parks and Recreation Facilities Inventory

The County's entire inventory includes a total of 15,616 acres of park land. The inventory consists of the following types of parks as they are defined in the Recreation Element of the Orange County 2000 – 2020 Comprehensive Policy Plan. Definitions presented here have been updated to reflect current characteristics of the parks.

- **Pocket parks** (such as Honolulu Park) are typically less than two acres. These parks can be located near neighborhoods as well as major collector streets. They take advantage of unique land opportunities throughout the county by turning remnant land, abandoned rights of way, and otherwise unusable land into open green space. These spaces typically contain park benches, small playgrounds, picnic tables, landscaping and, if located on a lake, fishing piers for lake shore fishing. Pocket parks typically serve a one-quarter mile radius.

- **Neighborhood parks** (such as Arcadia Acres Park) typically range in size from two acres to 19 acres. As the name suggests, these parks are located within neighborhoods and are accessible by walking or bike riding. These parks contain facilities such as children's play apparatus, multi-purpose courts, tennis courts, and park benches. Neighborhood parks usually serve the population within a one-half mile radius.
- **Community parks** (such as Barnett Park) usually range in size from 20 acres to 149 acres with a typical park size of 50 acres. 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 athletic fields, swimming pools, and multi-purpose courts. Natural areas are also included for walking, jogging, picnicking, and other passive recreational activities. 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. Some of these amenities/activities include soccer for adults and children, little leagues, adult softball and baseball, football, basketball, and special events such as corporate picnics, family reunions, weddings, fitness facilities, lake access, and other special amenities.
- **District parks** (such as Moss Park) typically range in size from 150 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 field, and family recreation centers.
- **Regional parks** (such as Hal Scott Preserve) are typically 500 acres or more. As the name implies, this type of park has a multi-county service area. Access to these parks is most often by car. Like the district park, these parks are usually resource-based, located in areas of diverse or unique natural resources, such as lakes, streams, marshes, flora, fauna, or topography. Regional parks offer the same type of activities as district parks.
- **Linear parks** (such as West Orange Trail) are multi-use trails. These facilities usually have a countywide service area. They can be reached by walking or bike riding, but more often by car. It should be noted that the definition for Linear Parks is new and is not currently in the County's Comprehensive Plan.
- **Special facilities** (such as Clarcona Horseman's Park) are designed for predominantly one activity, such as a golf course 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.

In addition to these classifications, Orange County also distinguishes between activity-based and resource-based parks. Activity-based parks are typically of the neighborhood or community size, whereas resource-based parks typically range in size from the community to the regional size. The size of a resource-based park varies depending on the size of the natural resource. In addition, the Comprehensive Policy Plan sets level of service (LOS) standards for activity-based and resource-based parks. The current standard for activity-based parks is 1.5 acres per 1,000 population. For resource-based parks, the standard is 6 acres per 1,000 population.

Orange County Comprehensive Policy Plan defines and measures these parks to establish the LOS for concurrency purposes.

- **Activity-based parks** contain predominantly man-made facilities such as hard courts for tennis and basketball, paved trails for biking and skating, lighted sports fields, water recreation, and playgrounds for children.
- In contrast, **resource-based** parks are geographically not as proximate to the population since these sites are located where the best natural resources exist. Uses of resource-based recreation areas include 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.

As mentioned previously, the County serves primarily the unincorporated county, and in fact, some of the municipalities have their own separate park systems. Because the County desires the impact fee to fund parks that serve the broadest range of residents, neighborhood and pocket parks are excluded for the purposes of this study. The exclusion of pocket and neighborhood parks, as well as the parks that are located in municipalities, reduces the land inventory from 15,616 acres to 15,435 acres.

In addition to the above described classifications, for the impact fee study purposes, the park land is classified in three different categories, which are defined below.

- **High-intensity Park Land** includes park and recreation facilities that contain predominantly man-made facilities, including sports fields and courts conducive to such activities as tennis, basketball, baseball, soccer, recreation centers, paved trails, office and maintenance buildings, paved parking, and grassed/mowed areas.
- **Low-intensity Park Land** includes park and recreation facilities containing a predominantly natural resource base conducive to such activities as fishing, lake swimming, hunting, hiking, primitive camping, and picnicking, unpaved trails, and unpaved parking.

- **Habitat Park Land** includes park and recreation facilities that provide habitat and wildlife areas that are unlikely to be developed for more intense uses.

These categories were developed to provide a fair and equitable land replacement value of the current park inventory used in the study as the cost of land varies greatly among the categories. 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. The reduction of the habitat land reduced the total inventory by approximately 9,709 acres.

The remaining 5,726 acres of land are offered in 50 parks, which also include various facilities and amenities. Table 4 summarizes the following information for the parks included in the analysis.

- facility name;
- park classification (specialty, community, district, and regional);
- number of acres;
- high intensity and low intensity acreage; and
- type and number of amenities (boat ramps, playgrounds, picnic pavilions, restrooms, tennis courts, ball fields, etc.).

**Table 4
Park and Recreation Facility Inventory**

Facility	Park Type	High Intensity Acres	Low Intensity Acres	Total Acreage	Bandshell/ Amphitheater	Baseball Field (youth)	Baseball Field (adult w/lights)	Basketball Court	Batting Cages	BBQ Grills	Beach Swimming	Bird/ Fish Feeding/ Viewing Areas	BMX Track	Boardwalk	Boat Ramp	Butterfly Garden	Camping (Primitive/ Modern)	Classrooms/ Meeting Rooms	Clubhouse/ Community Center	Community Gardens	Concession Stands	Dog Park	Equestrian Show Arenas
Barber	C	52.8	0.0	52.8				1		4				0		1							
Barnett	C	135.0	14.0	149.0	1					18			1		1			4	1				
Bear Creek	C	37.0	0.0	37.0			2		2	1		1						1	1		1		
Bithlo	C	29.9	5.0	34.9		1	4	1	1	1									1		1		
Blanchard	C	43.0	0.0	43.0				2		40						2							
Cypress Grove	C	60.0	20.0	80.0	1			1		20		1				1		6	2				
Downey	C	50.0	0.0	50.0			4	1	2	25	1				1			0			1	1	
Dr. P. Phillips	C	23.0	20.0	43.0																			
East Orange	C	20.0	0.0	20.0		1		2		2													
Eastern Regional	C	46.0	6.0	52.0						1													
Econ Soccer Complex	C	31.0	0.0	31.0						1											1		
Extreme	C	25.0	0.0	25.0																			
George Bailey	C	20.0	0.0	20.0		2	4			3											1		
Orlo Vista	C	28.0	0.0	28.0			1	2		10								1	1	1			
Roosevelt Nichols	C	6.0	0.0	6.0			1	1		3													
Shadow Bay (Lake Cane- Marsha)	C	25.0	64.5	89.5		1		2		8													
South Orange Youth Complex	C	28.0	0.0	28.0		2	6																
West Orange	C	37.0	10.0	47.0																	1		
West Beach	C	20.3	0.0	20.3						10		1											
Magnolia	D	7.1	48.9	56.0						43				1	1		20						
Moss	D	65.0	900.0	965.0						100	1	1			2	1	55						
Tibet-Butler	D	7.8	0.0	7.8								2		2		1		1					
Trimble	D	4.8	66.2	71.0						45		1		1	2		16						
Hal Scott Preserve	R	10.0	2,490.0	2,500.0								1					1						
Apopka-Vineland Outpost	SP	3.0	0.0	3.0																			
Bywater Boat Ramp	SP	0.2	0.0	0.2											1								
Cady Way Trail	SP	21.0	0.0	21.0																		1	
Cady Way Phase 2	SP	16.0	0.0	16.0																			
Clarcona Horseman's	SP	40.0	0.0	40.0						28							28				1		4
Fern Creek Boat Ramp	SP	1.0	0.0	1.0											1								
Fort Christmas	SP	95.6	0.0	95.6				1		15													
Fort Gatlin	SP	7.7	0.0	7.7				2										1	1				
Goldenrod	SP	6.0	0.0	6.0				2		3													
Kelly (Rock Springs)	SP	44.2	234.2	278.4						95	1			1			24				1		
County Line Station (n.k.a.Killarney)	SP	4.0	0.0	4.0						1											1		
Little Econ Greenway	SP	24.0	300.0	324.0												1							
Little Econ Greenway PH 2	SP	11.4	0.0	11.4																			
Christmas Creek Preserve	SP	5.0	174.0	179.0								1											
Pine Hills Trail	SP	50.0	0.0	50.0																			
R.D. Keene	SP	25.0	22.0	47.0						8					1								
Randolph Ave Boat Ramp	SP	0.5	0.0	0.5											1								
Split Oak	SP	1.0	0.0	1.0										1									
SR 50 Boat Ramp	SP	1.0	0.0	1.0											1								
Support Facility 441	SP	1.0	0.0	1.0																			
Well Works (Eastern)	SP	0.1	0.0	0.1																			
Well Works (Michigan)	SP	0.1	0.0	0.1																			
Well Works (Public Works)	SP	0.1	0.0	0.1				1															
West Orange Trail	SP	133.0	0.0	133.0																			
West Orange Trail (P4)	SP	48.0	0.0	48.0																			
Woodsmere Boat Ramp	SP	1.0	0.0	1.0											1								
Total	N/A	1,351.6	4,374.8	5,726.4	2.0	7.0	22.0	21.0	5.0	485.0	3.0	10.0	1.0	6.0	13.0	6.0	144.0	14.0	7.0	1.0	9.0	2.0	4.0
Summary of Parks & Recreation Facilities	# of Parks	High Intensity Acres	Low Intensity Acres	Total Acres	Bandshell/ Amphitheater	Baseball Field (youth)	Baseball Field (adult-lights)	Basketball Court	Batting Cages	BBQ Grills	Beach Swimming	Bird/ Fish Feeding/Viewing Areas	BMX Track	Boardwalk	Boat Ramp	Butterfly Garden	Camping (Primitive/ Modern)	Classrooms/ Meeting Rooms	Clubhouse/ Community Center	Community Gardens	Concession Stands	Dog Park	Equestrian Show Arenas
Community Parks	19	717.0	139.5	856.5	2.0	7.0	22.0	15.0	5.0	147.0	1.0	3.0	1.0	0.0	2.0	4.0	0.0	12.0	6.0	1.0	6.0	1.0	0.0
Specialty Parks	26	539.9	730.2	1,270.1	0.0	0.0	0.0	6.0	0.0	150.0	1.0	2.0	0.0	2.0	6.0	1.0	52.0	1.0	1.0	0.0	3.0	1.0	4.0
Regional Parks	1	10.0	2,490.0	2,500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
District Parks	4	84.7	1,015.1	1,099.8	0.0	0.0	0.0	0.0	0.0	188.0	1.0	4.0	0.0	4.0	5.0	1.0	91.0	1.0	0.0	0.0	0.0	0.0	0.0
TOTAL	50	1,351.6	4,374.8	5,726.4	2.0	7.0	22.0	21.0	5.0	485.0	3.0	10.0	1.0	6.0	13.0	6.0	144.0	14.0	7.0	1.0	9.0	2.0	4.0

**Table 4
Park and Recreation Facility Inventory (Cont'd)**

Facility	Park Type	High Intensity Acres	Low Intensity Acres	Total Acreage	Equestrian Trail	Exercise Course	Fishing	Fitness Center	Frisbee/Disc Golf	Golf Facility	Horseshoe Pits	Locker Rooms	Mountain Biking Trail	Multi Purpose Field	Nature Center/ Study	Nature Trail/ Hiking (miles)	Playground (ages 8+)	Playground/ Tot lot (under 8)	Restrooms (exterior)	Shuffleboard Court	Soccer Field	Softball Field	Sprayground/ Splash Park	Swimming Pool	Tennis Court	Trail-Paved (linear mile)	Volleyball Court	Water Ski Dock
Barber	C	52.8	0.0	52.8			1							1			1	1	1		5					0.5	1	
Barnett	C	135.0	14.0	149.0		1	1	1	1	1	4	2		1			2	3	3						2	1.5	3	
Bear Creek	C	37.0	0.0	37.0		1	1							1			1	1	1									
Bithlo	C	29.9	5.0	34.9			1				4			1			1	1	1									1
Blanchard	C	43.0	0.0	43.0			1				1		0	1		2.00	1	1	1			3	1		2	1.0	1	
Cypress Grove	C	60.0	20.0	80.0										3			1	1	3									2
Downey	C	50.0	0.0	50.0		1	1				4						1	1	3				1	1				3
Dr. P. Phillips	C	23.0	20.0	43.0																								
East Orange	C	20.0	0.0	20.0																								
Eastern Regional	C	46.0	6.0	52.0													1	1	1									
Econ Soccer Complex	C	31.0	0.0	31.0													1		1			2						
Extreme	C	25.0	0.0	25.0																								
George Bailey	C	20.0	0.0	20.0																								
Orlo Vista	C	28.0	0.0	28.0			1				0			1		0.50	1		3	2	0	0			2	1.0	1	
Roosevelt Nichols	C	6.0	0.0	6.0										1			1	1	1									1
Shadow Bay (Lake Cane- Marsha)	C	25.0	64.5	89.5			4					2				12.00	1	1	1						17			1
South Orange Youth Complex	C	28.0	0.0	28.0													2		1									
West Orange	C	37.0	10.0	47.0															1			4						
West Beach	C	20.3	0.0	20.3													1		1									2
Magnolia	D	7.1	48.9	56.0			1							1			4	4	5									2
Moss	D	65.0	900.0	965.0			1				5						2		7									5
Tibet-Butler	D	7.8	0.0	7.8											1	4.00			1									
Trimble	D	4.8	66.2	71.0			1				1					1.17	3	3	3							1.4		
Hal Scott Preserve	R	10.0	2,490.0	2,500.0	1		1						1			25.00												
Apopka-Vineland Outpost	SP	3.0	0.0	3.0																								
Bywater Boat Ramp	SP	0.2	0.0	0.2																								
Cady Way Trail	SP	21.0	0.0	21.0												0.25										1.0		
Cady Way Phase 2	SP	16.0	0.0	16.0																								
Clarcana Horseman's	SP	40.0	0.0	40.0																2								
Fern Creek Boat Ramp	SP	1.0	0.0	1.0																								
Fort Christmas	SP	95.6	0.0	95.6							2						1	1	2						1			1
Fort Gatlin	SP	7.7	0.0	7.7										1				1	4					1	10			
Goldenrod	SP	6.0	0.0	6.0													1	1	1						2			1
Kelly (Rock Springs)	SP	44.2	234.2	278.4							3					3.00	2	2	3									2
County Line Station (n.k.a. Killarney)	SP	4.0	0.0	4.0													1		2									
Little Econ Greenway	SP	24.0	300.0	324.0																							5.0	
Little Econ Greenway PH 2	SP	11.4	0.0	11.4																						3		
Christmas Creek Preserve	SP	5.0	174.0	179.0	1																							
Pine Hills Trail	SP	50.0	0.0	50.0																								
R.D. Keene	SP	25.0	22.0	47.0													1		1			2						
Randolph Ave Boat Ramp	SP	0.5	0.0	0.5																1								
Split Oak	SP	1.0	0.0	1.0	1		1									12.00												
SR 50 Boat Ramp	SP	1.0	0.0	1.0																								
Support Facility 441	SP	1.0	0.0	1.0																								
Well Works (Eastern)	SP	0.1	0.0	0.1																								
Well Works (Michigan)	SP	0.1	0.0	0.1																								
Well Works (Public Works)	SP	0.1	0.0	0.1																								
West Orange Trail	SP	133.0	0.0	133.0																							22.5	
West Orange Trail (P4)	SP	48.0	0.0	48.0																								
Woodsmere Boat Ramp	SP	1.0	0.0	1.0			1																					
Total	N/A	1,351.6	4,374.8	5,726.4	3.0	3.0	18.0	4.0	1.0	1.0	24.0	4.0	1.0	12.0	1.0	59.9	31.0	23.0	55.0	2.0	16.0	10.0		1.0	36.0	36.9	27.0	1.0
Summary of Parks & Recreation Facilities	# of Parks	High Intensity Acres	Low Intensity Acres	Total Acres	Equestrian Trail	Exercise Course	Fishing	Fitness Center	Frisbee/Disc Golf	Golf Facility	Horseshoe Pits	Locker rooms	Mountain Biking Trail	Multi Purpose Field	Nature Center/ Study	Nature Trail/ Hiking	Playground (ages 8+)	Playground/Tot lot (under 8)	Restrooms (exterior)	Shuffleboard Court	Soccer Field	Softball Field	Sprayground/ Splash Park	Swimming Pool	Tennis Court	Trail-Paved (linear mile)	Volleyball Court	Water Ski Dock
Community Parks	19	717.0	139.5	856.5	0.0	3.0	11.0	1.0	1.0	1.0	13.0	4.0	0.0	10.0	0.0	14.5	16.0	11.0	23.0	2.0	14.0	9.0	1.0	0.0	23.0	4.0	16.0	0.0
Specialty Parks	26	539.9	730.2	1,270.1	2.0	0.0	3.0	3.0	0.0	0.0	5.0	0.0	0.0	1.0	0.0	15.3	6.0	5.0	16.0	0.0	2.0	1.0	0.0	1.0	13.0	31.5	4.0	1.0
Regional Parks	1	10.0	2,490.0	2,500.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
District Parks	4	84.7	1,015.1	1,099.8	0.0	0.0	3.0	0.0	0.0	0.0	6.0	0.0	0.0	1.0	1.0	5.2	9.0	7.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	7.0	0.0
TOTAL	50	1,351.6	4,374.8	5,726.4	3.0	3.0	18.0	4.0	1.0	1.0	24.0	4.0	1.0	12.0	1.0	59.9	31.0	23.0	55.0	2.0	16.0	10.0	1.0	1.0	36.0	36.9	27.0	1.0

Source: Orange County Parks and Recreation Division

IV. Service Delivery

As mentioned previously, the Recreation Element of the Orange County 2000-2020 Comprehensive Policy Plan includes the adopted level of service standards for activity-based and resource-based parks. The adopted level of service for activity-based parks is 1.5 acres per 1,000 residents and 6.0 acres per 1,000 residents for resource-based parks. Although habitat, neighborhood, and pocket parks, and the parks that are located in municipalities are excluded for the purposes of this study, thus reducing the land inventory from 15,616 acres to 5,726 acres, the current service delivery for these park categories is still higher than the adopted level of service standards in the Recreation Element of the Orange County 2000-2020 Comprehensive Policy Plan.

The current service delivery for high intensity and low intensity acres for those parks included in the study is presented in Table 5. The current service delivery for each category of park included as part of the impact fee analysis is determined by dividing the total number of acres of County-owned community, district, regional, and specialty parks located in unincorporated Orange County by the population of unincorporated county. As presented, the current service delivery is 2.0 acres per 1,000 residents for high intensity parks and 6.5 acres per 1,000 residents for low intensity parks included in the impact fee calculations.

The current service delivery reflects the investment made by the existing residents of the County in park land. The direction received from the Orange County Administration and the Board of County Commissioners indicates that they want to maintain current service delivery discussed above. As such, it is appropriate to base the impact fee on this service delivery.

**Table 5
Current Service Delivery**

Park Land Category	Unincorporated County ¹	
	Inventory (Acres) ²	Service Delivery ³
High Intensity Parks	1,351.6	2.0
Low Intensity Parks	4,374.8	6.5
Total	5,726.4	8.5
2005 Unincorporated County Population ⁴		
	677,185	

(1) Source: Orange County Parks and Recreation Division

(2) Includes community, specialty, district and regional parks within unincorporated County.

(3) Acres (Item 1) divided by 2005 population (Item 4) multiplied by 1,000 for each park category.

(4) Source: Bureau of Economic and Business Research (BEBR), University of Florida

It should be noted that although park land is fundamental to the establishment of parks, land alone is not sufficient to create parks. This is especially true in the case of high intensity parks, which require the necessary land preparation, equipment and facilities to turn the raw land into a fully functional park.

V. Cost Component

This section provides a summary of land and facility replacement costs for Orange County parks.

Land Cost

The land cost is based on the replacement cost of park land. The replacement cost of park land for each park type as well as the total land replacement value are presented in Table 6. In addition, for high intensity park land, Table 6 also presents costs associated with land development, such as ponds, driveways, landscaping, utilities, paving, and other related site improvements.

Table 6
Park Land Replacement Cost

Park Land Category	Acres ¹	Land Cost per Acre ²	Site Development Cost per Acre ³	Total Land Cost ⁴
High Intensity Parks	1,351.6	\$65,000	\$40,000	\$141,918,000
Low Intensity Parks:				
-- More than 200 acres	3,924.2	\$30,000	\$0	\$117,726,000
-- 51 to 200 acres	304.7	\$35,000	\$0	\$10,664,500
-- 3 to 50 acres	145.9	\$40,000	\$0	\$5,836,000
	5,726.4			\$276,144,500
Weighted Average Cost per Acre				\$48,223

(1) Source: Table 4

(2) Source: Orange County Parks and Recreation Division, based on recent purchases

(3) Source: Orange County Parks and Recreation Division, based on recent projects

(4) Acres multiplied by the sum of land and site development cost per acre.

Recreation Facility Costs

While the previous section documented the cost of purchasing land, this section documents the cost of the facilities included within each park, such as playgrounds, basketball courts, soccer field, volleyball field, etc.

The recreation facility cost per person is developed by utilizing the recreation and facilities inventory information provided in Table 4. The type of facility, the service delivery provided through these facilities, and the unit cost for each facility are illustrated in Table 7. Facility information and unit costs were provided by the County. Unit costs reflect the current replacement value of each facility type. The cost per person for each facility type is calculated by dividing the total cost by the 2005 population.

**Table 7
Standard Recreation Facility Costs**

Facility Type	Unit	2005 Inventory ⁷	Current Service Delivery ⁸	Unit Cost ⁹	Total Facility Cost ¹⁰	Cost per Person ¹¹
Baseball Field (adult w/lights)	field	22	1 field per 30,781	\$300,000	\$6,600,000	\$9.75
Baseball Field (youth)	field	7	1 field per 96,741	\$200,000	\$1,400,000	\$2.07
Basketball Court	court	21	1 court per 32,247	\$70,000	\$1,470,000	\$2.17
Batting Cages	cage	5	1 cage per 135,437	\$25,000	\$125,000	\$0.18
BBQ Grills	grill	485	1 grill per 1,396	\$800	\$388,000	\$0.57
Beach Swimming ¹	square foot	3	1 square foot per 10	\$6	\$411,600	\$0.61
Bird/Fish Feeding/Outlook	area	10	1 area per 67,719	\$60,000	\$600,000	\$0.89
BMX Track	track	1	1 track per 677,185	\$304,733	\$304,733	\$0.45
Boardwalk ²	square foot	6	1 square foot per 137	\$50	\$246,500	\$0.36
Boat Ramp/ Dock	ramp	13	1 ramp per 52,091	\$500,000	\$6,500,000	\$9.60
Butterfly Garden	garden	6	1 garden per 112,864	\$6,000	\$36,000	\$0.05
Camping (Primitive/Modern)	site	144	1 site per 4,703	\$25,000	\$3,600,000	\$5.32
Classrooms/ Meeting Rooms ³	square foot	14	1 square foot per 57	\$325.56	\$3,901,185	\$5.76
Clubhouse/Community Center ⁴	center	7	1 square foot per 15	\$250	\$11,239,000	\$16.60
Community Gardens	garden	1	1 garden per 677,185	\$2,000	\$2,000	\$0.00
Concession Stands	stand	9	1 stand per 75,243	\$200,000	\$1,800,000	\$2.66
Dog Park	park	2	1 park per 338,593	\$125,000	\$250,000	\$0.37
Equestrian Show Arenas	show arena	4	1 show arena per 169,296	\$575,000	\$2,300,000	\$3.40
Equestrian Trail ⁵	mile of trail	3	1 mile per 13,544	\$35,000	\$1,750,000	\$0.16
Exercise Course	course	3	1 course per 225,728	\$100,000	\$300,000	\$0.44
Fishing	area	18	1 area per 37,621	\$60,000	\$1,080,000	\$1.59
Fitness Center	center	4	1 center per 169,296	\$500,000	\$2,000,000	\$2.95
Frisbee/Disc Golf	course	1	1 course per 677,185	\$30,000	\$30,000	\$0.04
Golf Facility	facility	1	1 facility per 677,185	\$60,000	\$60,000	\$0.09
Horseshoe Pits	pit	24	1 pit per 28,216	\$1,000	\$24,000	\$0.04
Locker rooms	room	4	1 room per 169,296	\$450,000	\$1,800,000	\$2.66
Mountain Biking Trail ⁶	trail	1	1 mile of trail per 33,668	\$30,000	\$600,000	\$0.89
Multi Purpose Field	field	12	1 field per 56,432	\$115,000	\$1,380,000	\$2.04
Nature Center/Study	center	1	1 center per 677,185	\$3,000,000	\$3,000,000	\$4.43
Nature Trail/ Hiking	mile of trail	60	1 mile of trail per 11,286	\$35,000	\$2,100,000	\$3.10
Playground (ages 8+)	playground	31	1 playground per 21,845	\$150,000	\$4,650,000	\$6.87
Playground/Tot lot (under 8)	playground	23	1 playground per 29,443	\$120,000	\$2,760,000	\$4.08
Restrooms (exterior)	restroom	55	1 restroom per 12,312	\$250,000	\$13,750,000	\$20.30
Shuffleboard Court	court	2	1 court per 338,593	\$5,000	\$10,000	\$0.01
Soccer Field lit	field	5	1 field per 135,437	\$300,000	\$1,500,000	\$2.22
Soccer Field	field	11	1 field per 61,562	\$200,000	\$2,200,000	\$3.25
Softball Field	field	10	1 field per 67,719	\$300,000	\$3,000,000	\$4.43
Sprayground/Splash Park	park	1	1 park per 677,185	\$750,000	\$750,000	\$1.11
Swimming Pool	pool	1	1 pool per 677,185	\$1,000,000	\$1,000,000	\$1.48
Tennis Court	court	36	1 court per 18,811	\$60,000	\$2,160,000	\$3.19
Trail-Paved (linear mile)	mile of trail	37	1 mile per 18,302	\$800,000	\$29,600,000	\$43.71
Volleyball Court	court	27	1 court per 25,081	\$3,000	\$81,000	\$0.12
Water Ski Dock	dock	1	1 dock per 677,185	\$50,000	\$50,000	\$0.07
Total					\$116,809,018	
Unincorporated County Population ¹²		677,185				

- (1) Based on information provided by the Orange County Parks and Recreation Division, the three beach swimming areas have an aggregate square footage of 68,600. The service delivery is calculated based on square footage.
- (2) Based on the information provided by the Orange County Parks and Recreation Division, the six boardwalk facilities have an aggregate length of 4,930 feet. This measure was multiplied by \$50 (cost per square foot) to obtain the total facility cost. The service delivery is calculated based on length.
- (3) Based on the information provided by the Orange County Parks and Recreation Division, the 14 classrooms/meeting rooms have a total of 11,983 square feet. Per square foot cost of \$325.56 is

based on the Tibet-Butler meeting/classroom cost and square footage. The service delivery is calculated based on square footage.

- (4) Based on the information provided by the Orange County Parks and Recreation Division, the four Centers have a total of 44,956 square feet. The service delivery is calculated based on square footage.
- (5) Based on the information provided by the Orange County Parks and Recreation Division, the three trails have a total length of 50 miles. The service delivery is calculated based on mileage.
- (6) Based on the information provided by the Orange County Parks and Recreation Division, the length of the trail is 20 miles. The service delivery is calculated on a per mile basis.
- (7) Source: Table 4
- (8) Population (Item 12) divided by the inventory.
- (9) Source: Orange County Parks and Recreation Division.
- (10) Unit cost (Item 9) multiplied by the inventory (Item 7).
- (11) Total cost (Item 11) divided by population (Item 12).
- (12) Source: Table 1

In addition to the facilities included in Table 7, the County parks included in this study offer the following ancillary and/or unique facilities. Table 8 provides a listing of these facilities.

**Table 8
Ancillary/Unique Facility Costs**

Facility Type	Unit	2005 Inventory ¹	Current Service Delivery ²	Unit Cost ³	Total Facility Cost ⁴	Cost per Person ⁵
Picnic Shelters	shelter	37	1 shelter per 18,302	\$25,000	\$925,000	\$1.37
Picnic Pavilion/Pavilion	pavilion	41	1 pavilion per 16,517	\$60,000	\$2,460,000	\$3.63
Well House Facility	facility	1	1 facility per 677,185	\$25,000	\$25,000	\$0.04
Tennis Pro Shop	shop	1	1 shop per 677,185	\$300,000	\$300,000	\$0.44
Residence	residence	15	1 residence per 45,146	\$250,000	\$3,750,000	\$5.54
Maintenance Building	building	13	1 building per 52,091	\$300,000	\$3,900,000	\$5.76
Visitor Center	center	2	1 center per 338,593	\$500,000	\$1,000,000	\$1.48
Water Treatment Facility	facility	3	1 facility per 225,728	\$500,000	\$1,500,000	\$2.22
Horse Barn	barn	13	1 barn per 52,091	\$70,000	\$910,000	\$1.34
Hay Barn	barn	1	1 barn per 677,185	\$25,000	\$25,000	\$0.04
Manor House	house	1	1 house per 677,185	\$850,000	\$850,000	\$1.26
Bee Head Ranch House	house	1	1 house per 677,185	\$133,978	\$133,978	\$0.20
Brown House (smokehouse)	smokehouse	1	1 smokehouse per 677,185	\$73,847	\$73,847	\$0.11
Ft. Blockhouse	blockhouse	2	1 blockhouse per 338,593	\$76,746	\$153,492	\$0.23
Storehouse	storehouse	1	1 storehouse per 677,185	\$60,867	\$60,867	\$0.09
Kiosk	kiosk	1	1 kiosk per 677,185	\$5,000	\$5,000	\$0.01
Powder Magazine	historic building	1	1 building per 677,185	\$7,426	\$7,426	\$0.01
School House	historic building	1	1 building per 677,185	\$118,994	\$118,994	\$0.18
Simmons House	historic building	1	1 building per 677,185	\$148,337	\$148,337	\$0.22
Stockade	historic building	1	1 building per 677,185	\$51,723	\$51,723	\$0.08
Sugar Cane Syrup House	historic building	1	1 building per 677,185	\$3,655	\$3,655	\$0.01
Wheeler Bass House	historic building	1	1 building per 677,185	\$85,746	\$85,746	\$0.13
Woods House	historic building	1	1 building per 677,185	\$81,780	\$81,780	\$0.12
Yates House	historic building	1	1 building per 677,185	\$86,778	\$86,778	\$0.13
Entrance Station/ Gate House	station	3	1 station per 225,728	\$150,000	\$450,000	\$0.66
Waste Water Treatment Plant	plant	1	1 plant per 677,185	\$218,651	\$218,651	\$0.32
Storage Shed	shed	3	1 shed per 225,728	\$20,000	\$60,000	\$0.09
Total Facility Cost					\$17,385,274	
Unincorporated County Population ⁶	677,185					

- (1) Source: Orange County Parks and Recreation Division
- (2) Population (Item 6) divided by the inventory.
- (3) Source: Orange County Parks and Recreation Division
- (4) Unit facility cost (Item 3) multiplied by inventory (Item 1).
- (5) Total cost (Item 4) divided by population (Item 6).
- (6) Source: Table 1

Table 9 provides a summary of total facility costs presented in Tables 7 and 8 and calculates facility cost per resident and per acre.

**Table 9
Summary of Facility Costs**

Facility Type	Total Facility Cost
Standard Facilities and Equipment ¹	\$116,809,018
Ancillary/Unique Facilities ²	\$17,385,274
Total ³	\$134,194,292
Total Acres ⁴	5,726.4
Unincorporated County Population ⁵	677,185
Total Facility Cost per Acre ⁶	\$23,434
Total Facility Cost per Resident ⁷	\$198.16

(1) Source: Table 7

(2) Source: Table 8

(3) Sum of standard facilities and equipment (Item 1) and ancillary/unique facilities (Item 2).

(4) Source: Table 4

(5) Source: Table 1

(6) Total cost (Item 3) divided by total acres (Item 4).

(7) Total cost (Item 3) divided by population (Item 5).

Summary of Capital Costs

Table 10 provides a summary of total land and facility costs per resident. As mentioned previously, land development costs such as site improvements, utilities, landscaping, and paving are included in the land cost of the facilities. The design cost is estimated at 13 percent of construction cost based on several project summaries provided by the Orange County Capital Facilities Division. The total capital cost per acre amounts to \$74,703.

In determining the total cost per resident, the current service level is utilized. The resulting cost is \$635 per resident.

Table 10
Total Capital Cost per Resident

Calculation Step	Figure
Land Cost per Acre ¹	\$48,223
Facility Cost per Acre ²	\$23,434
Design Cost at 13% of Construction Cost ³	<u>\$3,046</u>
Total Cost per Acre ⁴	\$74,703
Service Delivery (acres per 1,000 residents) ⁵	8.5
Total Capital Cost per Resident ⁶	\$634.98

(1) Source: Table 6

(2) Source: Table 9

(3) Calculated as the product of total facility cost per acre (Item 2) and 13%, which is estimated based on information provided by the Orange County Capital Facilities Division.

(4) Sum of land (Item 1), facility (Item 2), and design costs (Item 3).

(5) Source: Table 5

(6) Total cost per acre (Item 4) multiplied by current service level (Item 5) divided by 1,000.

VI. Credit Component

In order to avoid overcharging development for the park and facilities impact fee, a review of the financing program for facilities and recreation services was completed. The purpose of this review was to determine any potential credits that should be considered for non-impact fee revenues generated by new development that could be used for capital facility expansion of the facilities and recreation program.

Historical Capital Expenditures

As part of the credit analysis, parks and recreation facilities capital expenditures from Fiscal Year 98/99 through Fiscal Year 04/05 were reviewed. According to the information provided by the Parks and Recreation Division, given the rapid growth in new parks and recreation facilities, 90 percent of capital expenditures were for capital expansion and 10 percent for capital replacement. Based on this information, the facilities and recreation capital expansion expenditures averaged \$9.5 million per year over the seven-year period. The average population over the same time period was 626,769. As shown in Table 11, this results in a capital improvement cost of \$15.13 per person.

Table 11 Capital Improvement Expenditures

Project Description	Fiscal Year 1998/1999	Fiscal Year 1999/2000	Fiscal Year 2000/2001	Fiscal Year 2001/2002	Fiscal Year 2002/2003	Fiscal Year 2003/2004	Fiscal Year 2004/2005	Total
Fund 1023-Ad Valorem Taxes								
MOSS PARK DEVELOPMENT	\$0	\$30,362	\$0	\$0	\$3,600	\$16,400	\$0	\$50,362
DIST 4 WATERFRONT IMPROVEMENTS	\$10,940	\$0	\$0	\$0	\$0	\$0	\$0	\$10,940
DIST 4 SHELTERS/PAVILIONS	\$20,049	\$0	\$0	\$0	\$0	\$0	\$0	\$20,049
DIST 3 LITTLE ECON GREENWAY	\$7,124	\$0	\$0	\$0	\$0	\$0	\$0	\$7,124
DIST 5 LITTLE ECON GREENWAY	\$6,361	\$0	\$0	\$0	\$0	\$0	\$0	\$6,361
PLAYGD EQ-BLAN,MAG,CHRISTMAS	\$5,485	\$0	\$0	\$0	\$0	\$0	\$0	\$5,485
DIST 5 SOCCER FIELDS	\$490	\$0	\$0	\$0	\$0	\$0	\$0	\$490
BARNETT PK COMM CNTR/AQUATIC	\$30,942	\$0	\$0	\$0	\$0	\$0	\$0	\$30,942
TANGERINE TOT LOT	\$6,716	\$1,687	\$0	\$0	\$0	\$0	\$0	\$8,403
WEST ORANGE TRAIL	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000	\$400,000
CADY WAY TRAIL	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$2,000,000
LESTER MANDELL PARK-DIST 1	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000
FUND TOTAL	\$93,106	\$32,049	\$0	\$0	\$3,600	\$16,400	\$2,400,000	\$2,545,154
TOTAL FUND -- CAPITAL EXPANSION	\$83,795	\$28,844	\$0	\$0	\$3,240	\$14,760	\$2,160,000	\$2,290,639
TOTAL FUND -- CAPITAL REPLACEMENT	\$9,311	\$3,205	\$0	\$0	\$360	\$1,640	\$240,000	\$254,515
Fund 1050 Parks- Ad Valorem Taxes, PST Transfers, Grant Improvements, Fees and Charges/Miscellaneous Revenues (Capital Improvements)								
LITTLE ECON GREENWAY	\$1,087,562	\$31,539	\$1,192,372	\$1,038,403	\$1,450,803	\$2,029,749	\$900,000	\$7,730,427
RANDOLPH PARK BOAT RAMP	\$0	\$0	\$0	\$87,799	\$23,488	\$0	\$0	\$111,287
TURNBULL PARK	\$0	\$24,216	\$109,840	\$482	\$0	\$0	\$0	\$134,538
CYPRESS GROVE PARK DEV	\$0	\$0	\$0	\$218,783	\$18	\$0	\$0	\$218,801
PARKS SIGNAGE-COUNTYWIDE	\$41,737	\$32,286	\$13,933	\$23,086	\$96,637	\$66,270	\$30,000	\$303,949
PARKS RESTROOM IMPROVEMTS-C/W	\$141,106	\$36,143	\$21,403	\$8,891	\$0	\$0	\$0	\$207,543
TRAIL LAND ACQUISITION	\$124,998	\$771,068	\$746,387	\$419,352	\$0	\$0	\$0	\$2,061,804
BOAT RAMPS-LAKES/ST JOHNS	\$717,876	\$42,402	\$6,191	\$550	\$0	\$0	\$0	\$767,019
GEORGE BAILEY PARK	\$0	\$0	\$764,339	\$1,472,843	\$0	\$0	\$0	\$2,237,182
SHADOW BAY PARK	\$0	\$0	\$44,264	\$41,573	\$254,120	\$398,537	\$0	\$738,494
BARNETT PK COMM CNTR/AQUATIC	\$38,403	\$42,548	\$285,612	\$91,768	\$0	\$0	\$0	\$458,331
DOWNEY PARK	\$0	\$0	\$0	\$18,149	\$69,254	\$720,478	\$100,000	\$907,881
BEAR CREEK RECREATION COMPLEX	\$97,217	\$13,065	\$83,751	\$151,910	\$0	\$0	\$0	\$345,943
FT GATLIN TENNIS COURTS	\$41,568	\$124,703	\$18,597	\$191,344	\$0	\$0	\$0	\$376,212
WEST ORANGE TRAIL	\$0	\$0	\$2,540,972	\$208,190	\$425,995	\$271,622	1,517,127	\$4,963,906
BITHLO PARK DESIGN / DEV	\$20,326	\$165,626	\$0	\$42,177	\$27,818	\$0	\$0	\$255,947
EXTREME SPORTS COMPLEX	\$0	\$0	\$0	\$657,847	\$2,509	\$0	\$0	\$660,356
BARBER PARK	\$0	\$0	\$717,202	\$233,303	\$0	\$0	\$1,550,000	\$2,500,505
CADY WAY TRAIL	\$0	\$0	\$0	\$50,217	\$877,144	\$132,645	\$2,447,857	\$3,507,862
FT CHRISTMAS PARK	\$0	\$0	\$10,918	\$89,166	\$70,794	\$29,426	\$300,000	\$500,304
ECON SOCCER COMPLEX	\$0	\$0	\$831,860	\$200,626	\$5,286	\$0	\$0	\$1,037,772
WEST ORANGE PARK	\$0	\$0	\$251,574	\$42,719	\$383,282	\$0	\$0	\$677,574
DR PHILLIPS PARK	\$0	\$0	\$30,044	\$39,139	\$2,243,223	\$233,898	\$3,968,167	\$6,514,470
GOLDENROD PARK	\$0	\$0	\$780,170	\$49,047	\$0	\$0	\$0	\$829,218
PARK IMPROVEMENTS	\$761,869	\$1,293,797	\$2,194,186	\$1,843,424	\$1,251,766	\$1,567,807	\$2,400,000	\$11,312,850
EASTERN REGIONAL PARK	\$0	\$0	\$0	\$1,558,034	\$67,080	\$0	\$0	\$1,625,114
PINE MILLS TRAIL	\$0	\$0	\$0	\$209,971	\$25,081	\$46,034	\$0	\$281,086
KELLY PARK ANNEX	\$0	\$0	\$0	\$1,031,287	\$55,908	\$12,835	\$0	\$1,100,030
SOUTHCHASE COMMUNITY PARK	\$0	\$0	\$0	\$0	\$115,447	\$15,327	\$0	\$130,774
MOSS PARK DEVELOPMENT	\$326,283	\$63,052	\$145,345	\$148,435	\$568	\$12	\$0	\$683,695
CAPEHART PARK	\$0	\$0	\$0	\$0	\$919,543	\$61,233	\$0	\$980,776
FORT CHRISTMAS ACQUISITION	\$0	\$0	\$0	\$0	\$575,846	\$6,453	\$0	\$582,300
EAST ORANGE SENIOR CENTER	\$0	\$0	\$0	\$0	\$21,528	\$1,757	\$0	\$23,285
PARK RENOVATIONS	\$0	\$0	\$0	\$0	\$0	\$79,646	\$1,200,000	\$1,279,646
SPORTSPLEX STUDY	\$0	\$0	\$0	\$0	\$0	\$29,990	\$1,650,000	\$1,679,990
ECON ENVIRONMENTAL CENTER	\$0	\$0	\$0	\$0	\$0	\$38,184	\$500,000	\$538,184
TIBET BUTLER PRESERVE	\$43,781	\$4,928	\$0	\$0	\$0	\$0	\$0	\$48,709
CRYSTAL GLEN PARK	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$6,000
PLAYGROUND SAFETY IMPROV-C/W	\$10,867	\$0	\$0	\$0	\$0	\$0	\$0	\$10,867
PLAYGROUND EQ-BLAN,MAG, CHRISTMAS	\$138,147	\$0	\$0	\$0	\$0	\$0	\$0	\$138,147

Table 11
Capital Improvement Expenditures (Cont'd)

Project Description	Fiscal Year 1998/1999	Fiscal Year 1999/2000	Fiscal Year 2000/2001	Fiscal Year 2001/2002	Fiscal Year 2002/2003	Fiscal Year 2003/2004	Fiscal Year 2004/2005	Total
ORLO VISTA PK IMPROVMTS	\$43,945	\$0	\$0	\$0	\$0	\$0	\$0	\$43,945
BELMERE BASEBALL COMPLEX	\$0	\$66,201	\$0	\$0	\$0	\$0	\$0	\$66,201
LAKE CANE MARSHA	\$0	\$74,886	\$0	\$0	\$0	\$0	\$0	\$74,886
PARKS & RECREATION RELOCATION	\$71,552	\$54,000	\$0	\$0	\$0	\$0	\$0	\$125,552
WEST ORANGE GREENWAY	\$1,443,693	\$17,120	\$0	\$0	\$0	\$0	\$1,517,127	\$2,977,939
BLANCHARD PARK RDWAY	\$500,282	\$9,161	\$0	\$0	\$0	\$0	\$0	\$509,443
BLANCHARD FAMILY CENTER	\$367,646	\$1,298,000	\$0	\$0	\$0	\$0	\$0	\$1,665,646
LAKE GEORGE LAND ACQUISITION	\$0	\$110,886	\$0	\$0	\$0	\$0	\$0	\$110,886
BEEHEAD HOUSE RELOCATION	\$174,400	\$20,239	\$0	\$0	\$0	\$0	\$300,000	\$494,639
S ORANGE YOUTH SPORTS COMPLEX	\$97,403	\$0	\$0	\$0	\$0	\$0	\$0	\$97,403
BMX/QUARTER MIDGET RELOCATION	\$124,207	\$166,594	\$0	\$0	\$0	\$0	\$0	\$290,801
LITTLE LEAGUE BALLFIELD DEV	\$13,773	\$0	\$0	\$0	\$0	\$0	\$0	\$13,773
APOPKAVINELANDCOMMPARKLANDAQ	\$0	\$7,674	\$0	\$0	\$0	\$0	\$0	\$7,674
TRIMBLE PARK	\$58,602	\$0	\$0	\$0	\$0	\$0	\$0	\$58,602
WEST BEACH PARK	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000
BARNETT PARK IMPROVEMENTS	\$31,627	\$26,029	\$0	\$0	\$0	\$0	\$0	\$57,656
NORTH ORANGE COUNTY IMPROVEMENT ASSOCIATION	\$0	\$0	\$0	\$0	\$0	\$0	\$350,000	\$350,000
BARNETT PARK ENTRANCE ROAD	\$0	\$0	\$1,620	\$389	\$0	\$0	\$0	\$2,009
FUND TOTAL	\$6,524,869	\$4,496,163	\$10,790,581	\$10,168,903	\$8,963,138	\$5,741,904	\$19,230,278	\$65,915,835
TOTAL FUND -- CAPITAL EXPANSION	\$5,872,382	\$4,046,547	\$9,711,523	\$9,152,012	\$8,066,824	\$5,167,713	\$17,307,250	\$59,324,252
TOTAL FUND -- CAPITAL REPLACEMENT	\$652,487	\$449,616	\$1,079,058	\$1,016,890	\$896,314	\$574,190	\$1,923,028	\$6,591,584
Fund 3355- Debt Financing								
Beehead House Relocation	\$5,097	\$0	\$0	\$0	\$0	\$0	\$0	\$5,097
FUND TOTAL	\$5,097	\$0	\$0	\$0	\$0	\$0	\$0	\$5,097
TOTAL FUND EXPANSION	\$4,587	\$0	\$0	\$0	\$0	\$0	\$0	\$4,587
TOTAL FUND REPLACEMENT	\$510	\$0	\$0	\$0	\$0	\$0	\$0	\$510
Fund 3359- Park Development (1998 Bond Issue)								
CYPRESS GROVE PARK DEV	\$87,941	\$3,799	\$25,243	\$22,173	\$2,262	\$0	\$0	\$141,418
COMM PARKLAND	\$180,791	\$358,138	\$7,700	\$0	\$0	\$0	\$0	\$546,629
WEST ORANGE TRAIL	\$0	\$0	\$9,250	\$4,997	\$7,000	\$0	\$0	\$21,247
EAST ORANGE NEIGHBORHOOD PARK	\$0	\$0	\$3,520	\$2,929	\$76,328	\$0	\$0	\$82,777
MOSS PARK DEVELOPMENT	\$0	\$69,384	\$817,917	\$77,133	\$0	\$0	\$0	\$964,434
APOPKAVINELANDCOMMPARKLANDAQ	\$6,348	\$421,034	\$20,202	\$0	\$0	\$0	\$0	\$447,584
SOUTHCHASE COMMUNITY PARK	\$0	\$0	\$0	\$0	\$490,857	\$0	\$0	\$490,857
WEST ORANGE PARK	\$0	\$0	\$0	\$0	\$234,617	\$0	\$0	\$234,617
BITHLO PARK DESIGN / DEV	\$0	\$0	\$0	\$0	\$149,814	\$0	\$0	\$149,814
ENVIRONMENTAL LAND ACQUISITION	\$0	\$0	\$0	\$0	\$319	\$0	\$0	\$319
WEST ORANGE GREENWAY	\$265,543	\$300,282	\$0	\$0	\$0	\$0	\$0	\$565,825
BEEHEAD HOUSE RELOCATION	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000
ORLO VISTA PARK DEV	\$1,205	\$0	\$0	\$0	\$0	\$0	\$0	\$1,205
LONG BRANCH PARK	\$6,448	\$28,131	\$0	\$0	\$0	\$0	\$0	\$34,579
FUND TOTAL	\$578,276	\$1,180,769	\$883,833	\$107,232	\$961,197	\$0	\$0	\$3,711,307
TOTAL FUND -- CAPITAL EXPANSION	\$520,448	\$1,062,692	\$795,449	\$96,509	\$865,078	\$0	\$0	\$3,340,176
TOTAL FUND -- CAPITAL REPLACEMENT	\$57,828	\$118,077	\$88,383	\$10,723	\$96,120	\$0	\$0	\$371,131
Fund 3361- Sales Tax 98								
FT CHRISTMAS PARK	\$0	\$0	\$108,350	\$0	\$0	\$0	\$0	\$108,350
BEEHEAD HOUSE RELOCATION	\$0	\$29,749	\$0	\$0	\$0	\$0	\$0	\$29,749
FUND TOTAL	\$0	\$29,749	\$108,350	\$0	\$0	\$0	\$0	\$138,099
TOTAL FUND -- CAPITAL EXPANSION	\$0	\$26,775	\$97,515	\$0	\$0	\$0	\$0	\$124,289
TOTAL FUND -- CAPITAL REPLACEMENT	\$0	\$2,975	\$10,835	\$0	\$0	\$0	\$0	\$13,810

Table 11
Capital Improvement Expenditures (Cont'd)

Project Description	Fiscal Year 1998/1999	Fiscal Year 1999/2000	Fiscal Year 2000/2001	Fiscal Year 2001/2002	Fiscal Year 2002/2003	Fiscal Year 2003/2004	Fiscal Year 2004/2005	Total
<i>Fund 3363- Public Service Tax 2003</i>								
EASTERN REGIONAL PARK	\$0	\$0	\$0	\$0	\$0	\$975,104	\$300,000	\$1,275,104
EAST ORANGE SENIOR CENTER	\$0	\$0	\$0	\$0	\$0	\$167,589	\$0	\$167,589
FUND TOTAL	\$0	\$0	\$0	\$0	\$0	\$1,142,693	\$300,000	\$1,442,693
TOTAL FUND -- CAPITAL EXPANSION	\$0	\$0	\$0	\$0	\$0	\$1,028,424	\$270,000	\$1,298,424
TOTAL FUND -- CAPITAL REPLACEMENT	\$0	\$0	\$0	\$0	\$0	\$114,269	\$30,000	\$144,269
TOTAL CAPITAL EXPENDITURES	\$7,201,347	\$5,738,730	\$11,782,763	\$10,276,135	\$9,927,935	\$6,900,997	\$21,930,278	\$73,758,185
TOTAL CAPITAL EXPANSION	\$6,481,212	\$5,164,857	\$10,604,487	\$9,248,521	\$8,935,142	\$6,210,897	\$19,737,250	\$66,382,367
TOTAL CAPITAL REPLACEMENT	\$720,135	\$573,873	\$1,178,276	\$1,027,613	\$992,794	\$690,100	\$2,193,028	\$7,375,819
Capital Expansion Expenditures Funded with Ad Valorem ¹								\$27,206,824
Percent of Capital Expansion Expenditures Funded with Ad Valorem ²								41%
Average Capital Expansion Expenditures (FY1998-1999 through 2004-2005)								\$9,483,195
Average Population (FY 1998-1999 through 2004-2005) ³								626,769
Average Annual Credit Per Person								\$15.13

Source: Orange County Parks and Recreation Division

(1) The sum of capital expansion projects funded with Fund 1023 and 42 percent of Fund 1050. The percent of Fund 1050 that is funded with ad valorem taxes is based on the distribution of funding sources for the total Fund 1050.

(2) Capital expansion expenditures funded with ad valorem (Item 1) divided by total capital expansion expenditures.

(3) Source: Bureau of Economic and Business Research (BEBR), University of Florida.

Alternative Capital Improvements Credit

The BCC asked Tindale-Oliver & Associates to develop two alternative credit calculations, based on the County's five year Capital Improvements Program (Fiscal Years 2005/06 to 2009/10). Table 12 presents the first alternative credit calculation, which bases the capital improvements credit per person on information contained in the adopted five-year Capital Improvements Program. Under this alternative, the credit is calculated to be \$9.03 per resident. The second alternative is based on the assumption that the County will reduce the non-impact fee funding of the projects in the five-year Capital Improvements Program by 50 percent. Thus, the capital improvements credit would also be reduced by 50 percent to \$4.52 per resident.

Table 12
Budget for Capital Expansion Projects

Project Description	Fiscal Year 2005/2006	Fiscal Year 2006/2007	Fiscal Year 2007/2008	Fiscal Year 2008/2009	Fiscal Year 2009/2010	Total
Fund 1050 Parks- Ad Valorem Taxes, PST Transfers, Grant Improvements, Fees and Charges/Miscellaneous Revenues (Capital Improvements)						
LITTLE ECON GREENWAY					\$2,349,300	\$2,349,300
CYPRESS GROVE PARK DEVELOPMENT			\$200,000	\$800,000		\$1,000,000
SHADOW BAY PARK			\$200,000	\$800,000		\$1,000,000
DOWNEY PARK			\$200,000	\$1,100,000		\$1,300,000
BEAR CREEK RECREATION COMPLEX	\$100,000	\$893,060				\$993,060
WEST ORANGE GREENWAY	\$389,828					\$389,828
BITHLO PARK DESIGN/DEVELOPMENT	\$146,519					\$146,519
EXTREME SPORTS COMPLEX		\$674,644	\$1,000,000			\$1,674,644
BARBER PARK	\$35,000	\$250,000	\$1,215,000			\$1,500,000
CADY WAY TRAIL	\$1,500,000					\$1,500,000
FT. CHRISTMAS PARK	\$250,000		\$300,000	\$300,000		\$850,000
WEST ORANGE PARK			\$200,000	\$1,300,000		\$1,500,000
DR. PHILLIPS PARK	\$3,754,118					\$3,754,118
PARK IMPROVEMENTS	\$500,000	\$500,000				\$1,000,000
EASTERN REGIONAL PARK	\$134,787	\$138,137	\$1,216,966			\$1,489,890
PINE HILLS TRAIL	\$250,000					\$250,000
KELLY PARK ANNEX			\$599,970			\$599,970
WEST BEACH PARK	\$400,000	\$1,925,000				\$2,325,000
CLARCONA HORSEMAN'S PARK	\$50,000	\$250,000	\$1,200,000			\$1,500,000
MAGNOLIA PARK		\$160,000	\$640,000			\$800,000
ORLO VISTA PARK		\$50,000				\$50,000
TRIMBLE PARK		\$160,000	\$640,000			\$800,000
WESTERN BELTWAY	\$140,000					\$140,000
FUND TOTAL	\$7,650,252	\$5,000,841	\$7,611,936	\$4,300,000	\$2,349,300	\$26,912,329
Fund 3363- Public Service Tax Bond						
EASTERN REGIONAL PARK	\$300,000	\$0	\$0	\$0	\$0	\$300,000
FUND TOTAL	\$300,000	\$0	\$0	\$0	\$0	\$300,000
Fund 1023-Ad Valorem Taxes						
CADY WAY TRAIL	\$3,000,000	\$0	\$0	\$0	\$0	\$3,000,000
FUND TOTAL	\$3,000,000	\$0	\$0	\$0	\$0	\$3,000,000
Fund 7503-Grants						
LAP -- WEST ORANGE TRAIL PH3	\$2,000,000	\$0	\$0	\$0	\$0	\$2,000,000
FUND TOTAL	\$2,000,000	\$0	\$0	\$0	\$0	\$2,000,000
TOTAL CAPITAL EXPANSION EXPENDITURES	\$12,950,252	\$5,000,841	\$7,611,936	\$4,300,000	\$2,349,300	\$32,212,329
Total Capital Expenditures Funded with Ad Valorem Taxes (Funds 1023 & 42% of 1050)	\$6,213,106	\$2,100,353	\$3,197,013	\$1,806,000	\$986,706	\$14,303,178
Percent of Ad Valorem Funds Used Toward Capital Expansion Projects¹						44%
Average Annual Capital Expansion Expenditures (FY 2005-2006 through 2009-2010)						
Average Annual Population (FY 2005-2006 through 2009-2010)²						713,220
Average Annual Credit Per Person (FY 2005-2006 through 2009-2010)						\$9.03

Source: Orange County Parks and Recreation Division

(1) The ratio of ad valorem dollars to be used toward capital expansion projects to total capital expansions projects. The dollar amount of capital projects to be funded with ad valorem is calculated as the sum of Fund 1023 and 42 percent of Fund 1050, based on distribution of funding sources that go into the Fund 1050.

(2) Source: Bureau of Economic and Business Research (BEBR), University of Florida

Debt Service

Any outstanding bond issues related to park and recreation land and/or facility expansion will also result in a credit to the impact fee. Outstanding bond issues related to recreation and facility-related purchases are presented in Table 13. Debt to purchase environmentally sensitive lands and acquire and improve park and recreational facilities is supported by revenue from the Public Service Tax. Orange County currently assesses the Public Service Tax at the maximum rates of ten percent (10%) on sales of electricity, metered or bottled gas, and water service, seven percent (7%) on telecommunications services, and four (4) cents per gallon on fuel oil. The Public Service Tax was put into effect on November 1, 1991.

The impact fee credit is calculated by determining the present value of the total payments related to the bond issue that remain and then dividing by the average annual population estimated over the life of the bond issue. The resulting credit for facilities and recreation-related debt is \$9.78 per person.

Table 13
Bond Debt Credit Analysis

Bond Issue	Number of Years	Years Remaining	Interest Rate	Total Recreation Funding	Present Value of Payments Remaining	Average Annual Population During Bond Issue Period ¹	Credit per Person
Public Service Tax Refunding Revenue Bonds	21	20	4.17%	\$8,121,488	\$7,872,154	804,638	\$9.78

Source: Orange County, County Attorney's Office

(1) Source: Bureau of Economic and Business Research (BEBR), University of Florida

Vacant Land

The last credit component involves credit for past ad valorem tax payments. Here, the share of buildable vacant land assessed value (residential, commercial, and industrial) to total assessed value of land is reviewed to develop the percentage of the vacant land assessment to the total unincorporated county assessment for land. Table 14 indicates that the vacant land assessment is 5.8 percent of total assessed value. This percentage is used to give credit for past property taxes paid by property owners of vacant land.

Table 14
Assessed Property Value

Land	Assessed Value
Unincorporated County Vacant Land Value	\$2,489,156,396
Unincorporated Countywide Total Land Value	\$42,719,711,986
Vacant Land Value as a Percentage	5.83%

Source: Orange County Growth Management Department

Summary of Credit Components

Table 15 provides a summary of each credit component based on historical data and the additional credit options.

Table 15
Total Credit per Resident

Calculation Step	Historical	Credit Option 1	Credit Option 2
Capital Improvements Credit:			
Revenue Credit per Resident ¹	\$15.13	\$9.03	\$4.52
Capitalization Rate ²	5%	5%	5%
Capitalization Period (years) ³	25	25	25
Capital Improvement Credit per Resident ⁴	\$213.24	\$127.27	\$63.70
Debt Service Credit:			
Credit per Resident ⁵	\$9.78	\$9.78	\$9.78
Vacant Land Credit:			
Total Capital Cost per Resident ⁶	\$634.98	\$634.98	\$634.98
Unincorporated County Vacant Land Percent ⁷	5.83%	5.83%	5.83%
Revenue Credit for Past Property Taxes ⁸	\$37.02	\$37.02	\$37.02
Percent Used for Capital Expansion ⁹	41%	44%	44%
Net Revenue Credit for Past Property Taxes ¹⁰	\$15.18	\$16.29	\$16.29
Total Credit per Resident ¹¹	\$238.20	\$153.34	\$89.77

(1) Source: Tables 11 and 12

(2) Capitalization rate is estimated at 5 percent.

(3) Capitalization period is estimated at 25 years.

(4) Present value of the revenue credit per resident (Item 1) at a capitalization rate of 5 percent (Item 2) over a 25-year period (Item 3).

(5) Source: Table 13

(6) Source: Table 10

(7) Source: Table 14

(8) Total capital cost per resident (Item 6) multiplied by vacant land percentage (Item 7).

(9) Source: Table 11 and 12

(10) Revenue credit for past property taxes (Item 8) multiplied by percent used for capital expansion (Item 9).

(11) Sum of capital improvement credit (Item 4), debt service credit (Item 5), and net credit for past property taxes (Item 10).

As presented, the total credit per resident amounts to \$238 when historical expenditures are used in the calculations. This figure decreases to \$153 per resident and \$90 per resident under credit Options 1 and 2.

VII. Persons per Household by Land Use

Because the facilities and recreation impact fee is calculated based on the impact cost per person, the final calculation of the park and recreation impact fee depends upon the number of persons per household. This is because the impact fee itself is charged per dwelling unit,

not per person. By determining the average number of persons per household, the total impact fee that should be charged per household can be calculated. In determining the number of persons per housing unit, the number of total housing units is utilized instead of only the occupied housing units. This is because impact fees must be paid in the development of all housing units and not just the occupied ones. Table 16 illustrates the number persons per household for the three different land uses.

**Table 16
Persons per Household by Housing Type**

Housing Type	Population	Total Housing Units	Persons / Household
Single Family	435,417	153,894	2.83
Multi-family	111,655	54,632	2.04
Mobile Homes	37,753	17,848	2.12

Source: American FactFinder, U.S. Census Bureau, 2000

VIII. Net Parks and Recreation Facilities Impact Cost

The calculation of the net facilities and recreation impact cost is shown in Table 17. The first section of Table 17 presents the total impact cost per resident, which includes the land and facility cost per resident of \$635.

The second section of the table presents the revenue credits for the facilities and recreation impact fee calculated in Table 17. The revenue credit per resident ranges from \$90 to \$238.

The third section of the table calculates the net impact cost per resident as the difference between the total impact cost per resident and the total revenue credit. The net impact cost per resident ranges from \$397 to \$545.

**Table 17
Net Parks and Recreation Facilities Impact Cost**

Impact Cost / Credit Element	Historical	Credit Option 1	Credit Option 2
Impact Cost:			
Total Impact Cost per Resident ¹	\$634.98	\$634.98	\$634.98
Impact Credit:			
Total Revenue Credits per Resident ²	(\$238.20)	(\$153.34)	(\$89.77)
Net Impact Cost:			
Net Impact Cost per Resident ³	\$396.78	\$481.64	\$545.21

(1) Source: Table 10

(2) Source: Table 15

(3) Total impact cost per resident (Item 1) less total revenue credits per resident (Item 2).

IX. Proposed Parks and Recreation Facilities Impact Fee Schedule

The information presented in Table 17 concerning the net impact cost per resident for the existing service delivery is used to calculate the corresponding impact fee for the different residential land uses. The resulting fee schedules are provided in Tables 18 and 19, and are calculated as the number of persons per unit multiplied by the net cost per resident. Table 18 reflects impact fees based on historical capital improvement funding. The fees range from \$809 for the multi-family and accessory single family residential land uses to \$1,123 for the single-family residential land use. The table also presents a possible phasing schedule, which shows how the fees would range from Years 1 through 4. In this example, the County could adopt the new parks and recreation facilities impact fee at 60 percent of the maximum fee and the fees in Year 1 would range from \$486 to \$674. In Years 2, 3 and 4, the percentage of the fee charged would increase to the 75-percent, 90-percent, and 100-percent levels respectively. After Year 4, the fee would remain at the 100-percent level until the next update.

**Table 18
Proposed Impact Fee Schedule**

Land Use	Persons per Unit ¹	Net Cost per Person ²	Total Impact Fee (@ 100%) ³	Impact Fee Phasing		
				Year 1 @ 60%	Year 2 @ 75%	Year 3 @ 90%
Single Family	2.83	\$396.78	\$1,122.89	\$673.73	\$842.17	\$1,010.60
Accessory Single Family	2.04	\$396.78	\$809.43	\$485.66	\$607.07	\$728.49
Multi-family	2.04	\$396.78	\$809.43	\$485.66	\$607.07	\$728.49
Mobile Homes	2.12	\$396.78	\$841.17	\$504.70	\$630.88	\$757.05

(1) Source: Table 16

(2) Source: Table 17

(3) Persons per unit (Item 1) multiplied by net cost per person (Item 2).

It should be noted that phasing will reduce the impact fee revenues received by the County during the phasing period.

As presented in Table 19, the fee under the first credit option will range from \$983 to \$1,363, while under the second credit option, it will range from \$1,112 to \$1,543.

Table 19
Proposed Impact Fee Schedule – Credit Options

Land Use	Persons per Unit ¹	Option 1		Option 2	
		Net Cost per Person ²	Total Impact Fee(@ 100%) ³	Net Cost per Person ²	Total Impact Fee(@ 100%) ³
Single Family	2.83	\$481.64	\$1,363.04	\$545.21	\$1,542.94
Accessory Single Family	2.04	\$481.64	\$982.55	\$545.21	\$1,112.23
Multi-family	2.04	\$481.64	\$982.55	\$545.21	\$1,112.23
Mobile Homes	2.12	\$481.64	\$1,021.08	\$545.21	\$1,155.85

(1) Source: Table 16

(2) Source: Table 17

(3) Persons per unit (Item 1) multiplied by net cost per person (Item 2).

X. Revenue Projections

Based on the BEBR medium population projections for the unincorporated Orange County and net impact fee per resident figure calculated in Table 17, it is estimated that the parks and recreational facilities impact fee will generate to \$110 million from 2006 to 2025. As illustrated in Table 20, this amount results in average revenue of \$5.5 million per year. Revenue calculations assume the fee will be in effect at the beginning of 2006.

It should be noted that revenue projections are presented in 2005 dollars and do not take into account the effects of indexing.

Finally, it should also be noted that 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. Theoretically, if the growth rates remain high, the County will have more impact fee revenues to fund growth related projects sooner rather than later. If growth rates slow down, less revenue will be generated and the timing and need for future infrastructure improvements will be later rather than sooner.

**Table 20
Revenue Projections**

Year	Projected Population ¹	Increase in Population ²	Estimated Impact Fee Revenue ³
2005	677,185	N/A	N/A
2006	688,922	11,737	\$4,657,007
2007	700,862	11,940	\$4,737,553
2008	713,010	12,148	\$4,820,083
2009	725,368	12,358	\$4,903,407
2010	737,940	12,572	\$4,988,318
2011	751,878	13,938	\$5,530,320
2012	766,079	14,201	\$5,634,673
2013	780,548	14,469	\$5,741,010
2014	795,291	14,743	\$5,849,728
2015	810,312	15,021	\$5,960,032
2016	824,514	14,202	\$5,635,070
2017	838,964	14,450	\$5,733,471
2018	853,668	14,704	\$5,834,253
2019	868,629	14,961	\$5,936,226
2020	883,853	15,224	\$6,040,579
2021	897,668	13,815	\$5,481,516
2022	911,699	14,031	\$5,567,220
2023	925,949	14,250	\$5,654,115
2024	940,423	14,474	\$5,742,994
2025	955,122	14,699	\$5,832,269
Total		277,937	\$110,279,844
Average Annual Revenue			\$5,513,992
Net Fee per Resident ⁴			\$396.78

(1) Source: Bureau of Economic and Business Research (BEBR), University of Florida

(2) Added population per year.

(3) Increase in population (Item 2) multiplied by net fee per resident (Item 4).

(4) Source: Table 17

Table 21 presents revenue projections under the two alternative credit calculations. The average annual revenue is projected at \$6.7 million under Option 1 and at \$7.6 million under Option 2.

Table 21
Revenue Projections – Credit Options

Year	Projected Population ¹	Increase in Population ²	Estimated Impact Fee Revenue (Option 1) ³	Estimated Impact Fee Revenue (Option 2) ³
2005	677,185	N/A		
2006	688,922	11,737	\$5,653,009	\$6,399,130
2007	700,862	11,940	\$5,750,782	\$6,509,807
2008	713,010	12,148	\$5,850,963	\$6,623,211
2009	725,368	12,358	\$5,952,107	\$6,737,705
2010	737,940	12,572	\$6,055,178	\$6,854,380
2011	751,878	13,938	\$6,713,098	\$7,599,137
2012	766,079	14,201	\$6,839,770	\$7,742,527
2013	780,548	14,469	\$6,968,849	\$7,888,643
2014	795,291	14,743	\$7,100,819	\$8,038,031
2015	810,312	15,021	\$7,234,714	\$8,189,599
2016	824,514	14,202	\$6,840,251	\$7,743,072
2017	838,964	14,450	\$6,959,698	\$7,878,285
2018	853,668	14,704	\$7,082,035	\$8,016,768
2019	868,629	14,961	\$7,205,816	\$8,156,887
2020	883,853	15,224	\$7,332,487	\$8,300,277
2021	897,668	13,815	\$6,653,857	\$7,532,076
2022	911,699	14,031	\$6,757,891	\$7,649,842
2023	925,949	14,250	\$6,863,370	\$7,769,243
2024	940,423	14,474	\$6,971,257	\$7,891,370
2025	955,122	14,699	\$7,079,626	\$8,014,042
Total		277,937	\$133,865,577	\$151,534,032
Average Annual Revenue			\$6,693,279	\$7,576,702
Net Fee per Resident ⁴			\$481.64	\$545.21

(1) Source: Bureau of Economic and Business Research (BEBR), University of Florida

(2) Added population per year.

(3) Increase in population (Item 2) multiplied by net fee per resident (Item 4).

(4) Source: Table 17

XI. Indexing

In many jurisdictions, impact fees are reviewed periodically (every three to five years, etc.) instead of on an annual basis with no adjustment to the fee schedule during this period. This creates a situation where major adjustments become likely to be required during updates because of the time between the updates. In recent years, the most volatile component of the total cost has been the land value. This factor creates the potential for major changes in the fee schedule if several years are allowed to pass before the fee schedule is updated. The need for significant adjustments also creates major concerns in the development community. For planning purposes, indexed fee schedules benefit the development community, County, and other interested parties by establishing what the fees will be for several years in the future as part of the indexed fee schedule adopted at the time

of the update. This allows the annual increases of the fee to be known ahead of scheduled updates as well as when each indexed update will take effect.

Orange County already indexes the transportation, law enforcement, and fire rescue impact fees. To minimize the magnitude of future rate increases, it is recommended that the parks and recreation facilities impact fees be indexed for land and equipment cost increases also on an annual basis.

Land Cost

Just property values in the unincorporated Orange County increased by 9.9 percent between 1999 and 2004. This is based on information provided by the Orange County Property Appraiser’s Office, which was presented in Table 3.

Facility and Equipment Costs

For facility and equipment costs, it is recommended that the building cost index provided by Engineering-News Record be used for indexing purposes. Table 22 presents the annual cost increase over the past five years, which averages to an annual increase of 2.9 percent.

**Table 22
Facility and Equipment Cost Index**

Year	Annual Avg	Percent Change
1999	3456	
2000	3539	2.4%
2001	3574	1.0%
2002	3623	1.4%
2003	3693	1.9%
2004	3984	7.9%
Average		2.9%

Source: Engineering News-Record, Building Cost Index

Application

This section presents how these indices can be applied. As presented in Table 23, of the \$428 million of total inventory value, 65 percent is for the land (\$276 million); 35 percent is for equipment/facilities (\$152 million). Applying these percentages to the average cost increases presented previously would provide a combined index of 7.4 percent, which then

can be applied to all fees presented in Tables 18 and 19. The calculation of the combined index is presented in Table 24.

Table 23
Total Capital Value

Item	Value	Percentage
Total Value of Land ¹	\$276,144,500	65%
Total Value of Equipment/Facilities ²	\$151,635,072	35%
Total Value of Capital ³	\$427,779,572	100%

- (1) Source: Table 6
 (2) Sum of per acre facility and design cost (from Table 10) multiplied by total acres (from Table 4).
 (3) Sum of total land (Item 1) and total equipment/facility cost (Item 2).

Table 24
Indexing Application – Combined Index

Cost Component	Annual Increase ¹	Percent of Total ²	Index ³
Land Cost	9.9%	65%	6.4%
Facility Cost	2.9%	35%	1.0%
Total			7.4%

- (1) Source: Tables 3 and 22
 (2) Source: Table 23
 (3) Annual increase (Item 1) multiplied by percent of total (Item 2)

Table 25 presents the indexed fee schedule for the four years following the adoption of the new Parks and Recreation Impact Fee at 100 percent of its calculated value. This indexing example is based on the proposed fee schedule presented in Table 18, which reflects impact fees based on historical capital improvement funding. With indexing, the parks and recreation impact fee for the single family residential land use increases from \$1,123 to \$1,494 at the end of the first four years.

**Table 25
Indexed Fees**

Land Use	Year 1 Proposed Impact Fee ¹	Year 2 ²	Year 3 ³	Year 4 ⁴	Year 5 ⁵
Single Family	\$1,122.89	\$1,205.98	\$1,295.22	\$1,391.07	\$1,494.01
Accessory Single Family	\$809.43	\$869.33	\$933.66	\$1,002.75	\$1,076.95
Multi-family	\$809.43	\$869.33	\$933.66	\$1,002.75	\$1,076.95
Mobile Homes	\$841.17	\$903.42	\$970.27	\$1,042.07	\$1,119.18
Annual Index ⁶		7.4%	7.4%	7.4%	

- (1) Source: Table 18
 (2) Year 1 figures (Item 1) multiplied by (1+0.074), annual index (Item 6).
 (3) Year 2 figures (Item 2) multiplied by (1+0.074), annual index (Item 6).
 (4) Year 3 figures (Item 3) multiplied by (1+0.074), annual index (Item 6).
 (5) Year 4 figures (Item 4) multiplied by (1+0.074), annual index (Item 6).
 (6) Source: Table 24

Table 26 presents the indexed fee schedules for the four years under both credit options. With indexing, the parks and recreation impact fee for the single family residential land use increases from \$1,363 to \$1,814 at the end of the first four years for the first credit option and from \$1,543 to \$2,053 at the end of the first four years for the second credit option.

**Table 26
Indexed Fees – Credit Options**

Land Use	Option 1					Year 1 Proposed Impact Fee ¹	Option 2			
	Year 1 Proposed Impact Fee ¹	Year 2 ²	Year 3 ³	Year 4 ⁴	Year 5 ⁵		Year 2 ²	Year 3 ³	Year 4 ⁴	Year 5 ⁵
Single Family	\$1,363.04	\$1,463.90	\$1,572.23	\$1,688.58	\$1,813.53	\$1,542.94	\$1,657.12	\$1,779.75	\$1,911.45	\$2,052.90
Accessory Single Family	\$982.55	\$1,055.26	\$1,133.35	\$1,217.22	\$1,307.29	\$1,112.23	\$1,194.54	\$1,282.94	\$1,377.88	\$1,479.84
Multi-family	\$982.55	\$1,055.26	\$1,133.35	\$1,217.22	\$1,307.29	\$1,112.23	\$1,194.54	\$1,282.94	\$1,377.88	\$1,479.84
Mobile Homes	\$1,021.08	\$1,096.64	\$1,177.79	\$1,264.95	\$1,358.56	\$1,155.85	\$1,241.38	\$1,333.24	\$1,431.90	\$1,537.86
Annual Index ⁶		7.4%	7.4%	7.4%			7.4%	7.4%	7.4%	

- (1) Source: Table 19
 (2) Year 1 figures (Item 1) multiplied by (1+0.074), annual index (Item 6).
 (3) Year 2 figures (Item 2) multiplied by (1+0.074), annual index (Item 6).
 (4) Year 3 figures (Item 3) multiplied by (1+0.074), annual index (Item 6).
 (5) Year 4 figures (Item 4) multiplied by (1+0.074), annual index (Item 6).
 (6) Source: Table 24

If the County chooses to adopt impact fees at less than 100 percent of the cost and gradually increase the fee over several years until it reaches the full cost, the impact fees should be indexed along with phasing each year between updates to the impact fee. Otherwise, by the time the original 100-percent level is reached, the fees will likely be substantially lower than the actual costs at the end of the phasing period. This is because the fees will not have been increased to account for the increased costs of park land, facilities, and equipment.

XII. Summary

The purpose of this study was to clearly define what the County currently has by way of parks and recreation land and facilities and to determine what is needed to maintain the current service delivery to the existing and future residents of unincorporated Orange County.

For impact fee purposes, the County's parks and recreation inventory includes approximately 5,726 acres of park land and several facilities. These facilities and land are valued based on the current estimated replacement cost. The study uses a consumption-based approach, which means the impact fee is based on the value of the parks assets consumed by each new unit of growth. The County's current inventory results in a service delivery level of 8.5 acres per resident within unincorporated county. The direction from the BCC was to continue the service at this level.

In terms of implementation, the following should be considered:

- The BCC may, by policy decision, adopt the fee at 100 percent of the fee calculation or may adopt a discounted fee at some percentage of the 100 percent maximum fee.
- The BCC may, by policy decision, phase in the fee at their discretion over time and/or identify other funding sources to enable the expansion of future parks facilities to meet the current service delivery.
- The BCC may, by policy decision, choose to index the fee on an annual basis.