

COLLIER COUNTY

**2010 FIRE/RESCUE SERVICES IMPACT FEE
UPDATE STUDY**

Ochopee and Isles of Capri Fire Control and Rescue Districts

FINAL REPORT



**Prepared for:
Collier County**

Tindale-Oliver & Associates, Inc.



September 30, 2010
07320.05



Tindale-Oliver & Associates, Inc.

Planning and Engineering

September 30, 2010

Ms. Amy Patterson
Impact Fee Manager
Collier County Growth Management Division
2800 North Horseshoe Drive
Naples, Florida 34104

RE: Fire Impact Fee Update Study

Dear Ms. Patterson:

Enclosed is the Final Technical Report for the Collier County Fire Impact Fee Update Study. If you should have any questions concerning this report, please do not hesitate to contact me or Nilgün Kamp.

It has been our pleasure to have worked with the County and District staff on this important project.

Sincerely,

Tindale-Oliver & Associates, Inc.

Steven A. Tindale, P.E., AICP
President

COLLIER COUNTY

FIRE/RESCUE SERVICES IMPACT FEE

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COLLIER COUNTY 2010 FIRE/RESCUE SERVICES IMPACT FEE UPDATE STUDY

I. INTRODUCTION

Fire-rescue impact fees are used to fund acquisition and expansion of fire-rescue service-related capital assets required to address the additional fire-rescue service demand created by new growth. The unincorporated Collier County is served by seven fire districts. Of these, five are independent and two are dependent Districts. The last update of the fire impact fee was completed in 2005, with adoption in 2006. Per the requirements of the impact fee ordinance, the County retained Tindale-Oliver & Associates (TOA) to update the impact fees for the dependent districts, including the Ochopee and Isles of Capri Fire Control Districts.

This report summarizes the 2010 Fire Services Impact Fee Update Study and will serve as the technical document in updating the impact fee ordinances for the two dependent districts.

There are several major elements associated with the development of the fire-rescue impact fee. These include:

- Inventory of Existing Capital Assets and Level of Service
- Service Area and Service Delivery
- Cost Component
- Credit Component
- Net Fire-Rescue Impact Cost
- Demand Component
- Calculated Fire-Rescue Impact Fees

These items are all discussed in subsequent sections of this document for each District.

INVENTORY

The Isles of Capri Fire Control and Rescue District (ICFCRD) owns one station, and the Ochopee Fire Control and Rescue District (OFCRD) owns two stations. Consistent with the methodology used in the previous technical study, and given that neither District has

immediate plans to add future stations and do not have debt service on any existing buildings, the impact fee will be based only on vehicle and equipment value. As presented in Table 1, the OFCRD owns \$1.7 million worth of vehicles and equipment, and the ICFCRD owns \$1.2 million worth of vehicles and equipment. Table 1 presents a detailed listing of these assets.

Table 1
OFCRD and ICFCRD Inventory of Vehicles and Equipment ⁽¹⁾

Description	Units	Unit Cost	Total Replacement Cost
Ochopee:			
Pumper	1	\$380,000	\$380,000
Engine	2	\$380,000	\$760,000
Tanker	1	\$210,000	\$210,000
LT-60 (Expedition)	2	\$41,000	\$82,000
Brush Truck ⁽²⁾	2	\$0	\$0
Attack	1	\$85,000	\$85,000
Support	1	\$34,000	\$34,000
Boat	<u>1</u>	\$115,000	<u>\$115,000</u>
Total Equipment - Ochopee	11		\$1,666,000
Isles of Capri:			
Engine	2	\$410,000	\$820,000
Brush Truck	1	\$80,000	\$80,000
Boat	1	\$180,000	\$180,000
Support Vehicle	1	\$28,500	\$28,500
Chief Vehicle	<u>2</u>	\$37,100	<u>\$74,200</u>
Total Equipment - Isles of Capri	7		\$1,182,700

(1) Source: Ochopee/Isles of Capri Fire Control & Rescue Districts

(2) Vehicles are loaned to the County by the State.

SERVICE AREA and SERVICE DELIVERY

As mentioned previously, the ICFCRD and OFCRD are dependent districts and part of the Collier County Government. The primary service area for each district is the geographic area within the district boundaries.

Table 2 provides a summary of fire/rescue incidents the Districts responded to over the past five years. As presented in the table, between 2005 and 2009, the average number of incidents was 662 in the OFCRD and 813 in the ICFCRD. The overall decrease in the number of calls during this period is due partially to economic conditions, which reduced travel, especially on I-75, in the case of the OFCRD. In the case of the ICFCRD, some of the decrease in the incident volume is due to the change in the District’s response protocol. In addition, the District experienced fewer brush fires in more recent years.

**Table 2
OFCRD and ICFCRD Fire/Rescue Incidents⁽¹⁾**

Year	Ochopee		Isles of Capri	
	Incidents	3-Year Average	Incidents	3-Year Average
2005	746		1,080	
2006	N/A		1,026	
2007	737	742	599	902
2008	595	666	687	771
2009	571	634	675	654
Average	662		813	

(1) Source: National Fire Incident Reporting System

It should be noted that during the 2005 through 2009 period, the ICFCRD responded to a large number of calls from outside the district. To determine incidents originated within the district, the number of incidents for which the District provided mutual aid and automatic aid (net of aid received) is subtracted from the total number of calls. Table 3 shows this calculation.

Table 3
ICFCRD Fire/Rescue Incidents
Originated within the District

Year	Total Incidents⁽¹⁾	Net Aid Given⁽²⁾	Net Total⁽³⁾
2005	1,080	698	382
2006	1,026	625	401
2007	599	361	238
2008	687	442	245
2009	675	344	331
Average			319

- (1) Source: National Fire Incident Reporting System
- (2) Source: National Fire Incident Reporting System.
Represents mutual and automatic aid given net of aid received.
- (3) Total incidents (Item 1) less net aid given (Item 2).
Represents incidents originated within the District.

For the impact fee study purposes, an appropriate measure of service delivery is calls per station. Between 2005 and 2009, the OFCRD handled an average of 331 calls per station annually, while the ICFCRD handled an annual average of 813 calls per station, of which, approximately 319 originated within the District.

COST PER INCIDENT

Table 4 presents the value of vehicles per incident. This figure is approximately \$2,500 for the OFCRD and \$3,700 for the ICFCRD.

Table 4
Capital Cost per Incident

Cost Component	OFCRD	ICFCRD
Total Vehicle and Equipment Value ⁽¹⁾	\$1,666,000	\$1,182,700
Number of Incidents --2005-2010 Average ⁽²⁾	662	319
Total Vehicle and Equipment Value per Incident⁽³⁾	\$2,517	\$3,708

- (1) Source: Table 1
- (2) Source: Tables 2 and 3
- (3) Total capital value (Item 1) divided by the average number of incidents (Item 2)

CREDIT PER INCIDENT

To avoid overcharging development for the fire rescue impact fee, a review of the capital financing program for fire rescue services was completed. The purpose of this review was to determine any non-impact fee revenues generated by new development that is being used for the expansion of the type of capital facilities included in the inventory (i.e., vehicles and equipment). Revenue credits are then applied against the cost per incident so that new development is not charged twice for capital expansion expenditures.

Revenue Sources for Capital Expenditures

An analysis of the historical capital expansion expenditures and associated funding sources for the five year period from FY 2005/2006 to FY 2009/2010 was completed for the two districts. Based on the information provided, the OFCRD's main sources for capital expenditures are the Municipal Service Taxing Unit (MSTU) and impact fees. However, the MSTU was used only to purchase buildings while new vehicles were purchased with impact fee revenues. In addition, according to the 2009 AUIR, there are no plans to use non-impact fee funding sources for future vehicle and equipment purchases. As such, no credit is necessary against the impact cost in the case of the OFCRD.

Over the past five years, the ICFCRD received and expended funds from the Department of Homeland Security, FEMA Grant on vehicles. Although there are no programmed non-impact fee funding toward future vehicles and equipment, to calculate a conservative impact fee, a credit is given based on the historical data.

Table 5 summarizes capital expenditures for the last five fiscal years as well as the calculation of the capital improvement credit per incident. The capital improvement credit per incident was calculated using the average capital expansion expenditures during the last five years. As presented in Table 5, the result is an average annual expansion expenditure of \$157 per incident for the ICFCRD.

Table 5
ICFCRD Historical Capital Expenditures⁽¹⁾

Expenditure	Fiscal Year					Total/ Average
	2005/2006	2006/2007	2007/2008	2008/09	2009/10	
Municipal Service Taxing Unit						
Fire Engine Purchase	\$25,000					\$25,000
Department of Homeland Security/FEMA Grant						
Fire Engine Purchase	\$225,000					\$225,000
Total Capital Expenditures - Isles of Capri	\$250,000	\$0	\$0	\$0	\$0	\$250,000
Annual Average Capital Expenditures -- Isles of Capri ⁽²⁾						\$50,000
Annual Incidents - Isles of Capri ⁽³⁾	382	401	238	245	331	319
Average Annual Credit Per Incident - Isles of Capri⁽⁴⁾						\$156.74

(1) Source: Isles of Capri Fire Control & Rescue District

(2) Average expenditure over the five year period

(3) Source: Table 3

(4) Average capital expenditures divided by the average annual incidents for the District.

NET IMPACT COST

Table 6 summarizes the calculation of the net fire rescue impact cost per incident which is the difference between the total impact cost and the total revenue credit. This results in a net impact cost of \$2,517 per incident in the case of the OFCRD and \$1,499 per incident for the ICFCRD.

**Table 6
Net Impact Cost**

Calculation Step	OFCRD		ICFCRD	
	Impact Cost	Revenue Credits	Impact Cost	Revenue Credits
Impact Cost				
Total Impact Cost per Incident ⁽¹⁾	\$2,517		\$3,708.00	
Impact Credit				
Average Annual Capital Improvement Credit ⁽²⁾		\$0.00		\$156.74
Capitalization Rate		5%		5%
Capitalization Period (in years)		25		25
Capital Improvement Credit per Incident ⁽³⁾		\$0.00		(\$2,209.08)
Net Impact Cost				
Net Impact Cost per Incident ⁽⁴⁾	\$2,517		\$1,499	

- (1) Source: Table 4
- (2) Source: Table 5 for the ICFCRD. No credit is given in the case of the OFCRD.
- (3) Present value of average annual capital improvement credit per incident using an interest rate of 5% over a capitalization period of 25 years.
- (4) Capital cost per incident (Item 1) less total revenue credit per incident (Item 3)

DEMAND COMPONENT

In determining the revised impact fee for each land use, it is necessary to determine service delivery to residential versus non-residential land uses. To do so, the number of calls received from each type of land use was compared to the square footage of each land use within the two districts. The square footage figures were obtained from the Collier County Property Appraiser’s FY 2010 Tax Roll database. Table 7 presents the distribution of calls and the incidents per square foot for residential and non-residential land uses.

Table 7
Land Use Distribution of Incidents

Land Use	Square Feet ⁽¹⁾		5-Yr Average Incidents ⁽²⁾		Incidents Per Square Foot	
	OFCRD	ICFCRD	OFCRD	ICFCRD	OFCRD	ICFCRD
Residential	1,717,327	3,118,786	410	239	0.00024	0.00008
Non-residential	932,199	133,557	252	80	0.00027	0.00060

(1) Source: Collier County Property Appraiser's Office parcel database

(2) Source: National Fire Incident Reporting System

CALCULATED IMPACT FEE SCHEDULE

Based on the net impact cost and the distribution of the calls among land uses, a revised impact fee schedule is prepared. The revised fee is calculated by multiplying the number of incidents per square foot by the net impact cost per incident for the two districts.

Table 8 presents the calculated impact fees for both districts.

Table 8
Calculated Impact Fee Schedule
Ochopee and Isles of Capri Fire Control and Rescue Districts

Land Use	Incidents Per Square Foot ⁽¹⁾	Calculated Impact Fee ⁽²⁾	Unit	Existing Impact Fee ⁽³⁾	Unit	Percent Change ⁽⁴⁾
Ochopee Fire Control and Rescue District						
Residential	0.00024	\$0.60	sf	\$0.75	sf	-20%
Non-Residential	0.00027	\$0.68	sf	\$0.21	sf	224%
Net Impact Cost per Incident ⁽⁵⁾	\$2,517					
Isles of Capri Fire Control and Rescue District						
Residential	0.000080	\$0.12	sf	\$0.44	sf	-73%
Non-Residential	0.000600	\$0.90	sf	\$1.15	sf	-22%
Net Impact Cost per Incident ⁽⁵⁾	\$1,499					

(1) Source: Table 7

(2) Incident per square foot (Item 1) multiplied by net impact cost per incident (Item 5)

(3) Source: Collier County Impact Fee Schedule, effective February 14, 2010

(4) Difference between the current and calculated fee

(5) Source: Table 6

As shown in Table 8, the calculated fee for residential uses in the OFCRD is \$0.60 per square foot (or \$600 per 1,000 square feet), and \$0.68 per square foot (or \$680 per 1,000 square feet) for non-residential land uses. These figures represent a decrease for the residential land uses and an increase for the non-residential land uses. The primary

reason for the increase in the non-residential fee is the change in the distribution of calls between residential and non-residential land uses since the last study.

In the case of the ICFCRD, the calculated fee is \$0.12 per square foot (or \$120 per 1,000 square feet) and \$0.90 per square foot (or \$900 per 1,000 square feet) for non-residential land uses. These fees represent a decrease from the current fees.

Table 9 presents a comparison of current and calculated fees for the OFCRD and ICFCRD to fire impact fee implemented by other fire districts within Collier County.

Table 9
Impact Fee Comparison⁽¹⁾

Fire District	(Per square foot)	
	Residential	Non-residential
OFCRD (current) ⁽²⁾	\$0.75	\$0.21
OFCRD (calculated)	\$0.60	\$0.68
ICFCRD (current) ⁽²⁾	\$0.44	\$1.15
ICFCRD (calculated)	\$0.12	\$0.90
Big Corkscrew	\$0.82	\$0.87
East Naples	\$0.22	\$0.26
Golden Gate	\$0.25	\$0.39
Immokalee	\$1.11	\$0.32
North Naples	\$0.28	\$0.99

(1) Source: Collier County Impact Fee Schedule, effective February 14, 2010

(2) Source: Table 8

It is recommended that the Districts continue to cap the fee for residential land uses. Based on data obtained from the American Housing Survey and National Personal Transportation Survey, it is apparent that beyond a certain square footage, the number of people in a residential unit begins to taper off. Although larger structures may be more likely to catch on fire, their possibility of using fire services does not increase proportionately. This square footage was determined based on a review of the data from the sources indicated above, as well as discussions with County representatives. With

this cap, the highest fee charged for a residential dwelling unit will be \$2,400 ($\$0.60 \times 4,000$) in the OFCRD and \$480 in the ICFCRD ($\$0.12 \times 4,000$).

A cap for non-residential land uses is not needed because as the size of these uses increases, the number of people at these uses (e.g., offices, malls, other retail, etc.) continues to increase.