



City of Cocoa, FL
Stormwater Rate Study

August 28, 2019



MC 19

Core Elements of the Study



Revenue Requirements

- Operating Costs
- Capital Costs
- Financial Policies
- Level of Service

Method of Collection

- Utility Bill Method
- Tax Assessment

Revenue Recovery Basis

- Units of Measure
 - Gross Area
 - Pervious Area
 - Impervious Area

Revenue Recovery Structure

- Evaluate Objectives
- Identify Structures
- Review Credits
- Customer Impacts

Revenue Sufficiency Analysis

Background

- The existing enterprise fund for stormwater management generates \$1.5M to cover existing operation/maintenance and minor capital improvements
- Additional revenue is needed to reduce flooding and comply with water quality regulations
- Stantec created a financial model to review scenarios and develop a sustainable financial plan for the stormwater utility

Key Assumptions

- Existing operations and maintenance must be maintained
- The capital improvements plan (CIP) includes a 10 year CIP developed jointly by Mead & Hunt, the utility's consulting engineers, and City staff
- Notable projects include:
 - River Front Park Lagoon
 - Diamond Square Pond
 - 72" Outfall

Status Quo Financial Projection

Current Plan
(\$0.25 annually)

FAMS-XL

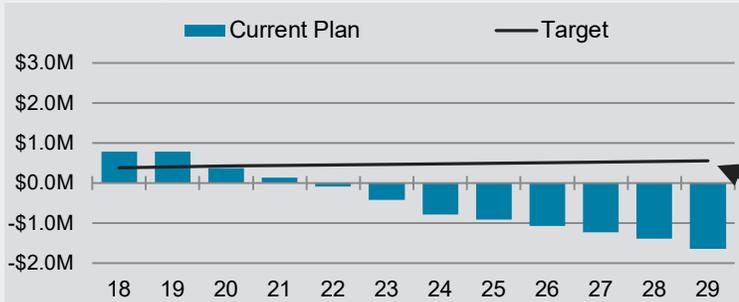
CITY OF COCOA



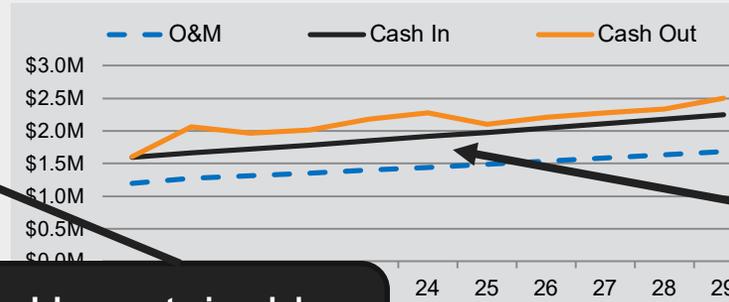
CALC SAVE CTRL LAST OVR

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2025	FY 2029
Revenue Adjustment Plan	0.00%	3.57%	3.45%	3.33%	3.23%	3.13%	3.03%	2.94%	2.86%	2.78%	2.70%	17.86%	35.71%
Senior-Lien DSC	0.00	1.83	1.34	1.41	1.07	1.04	1.08	1.01	1.01	1.04	0.88	Scenario Manager	

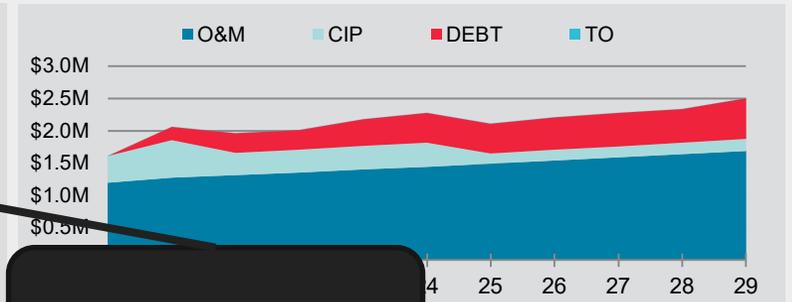
Operating Fund



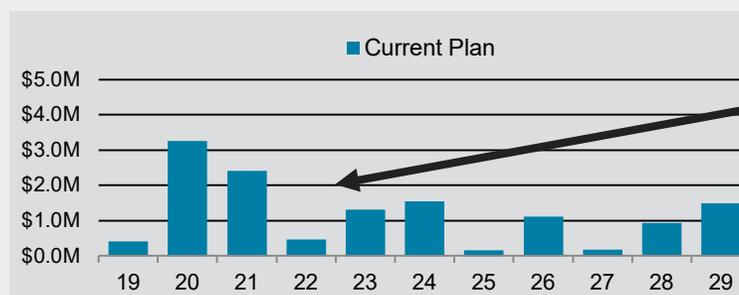
Revenues vs. Expenses



Expenses by Type

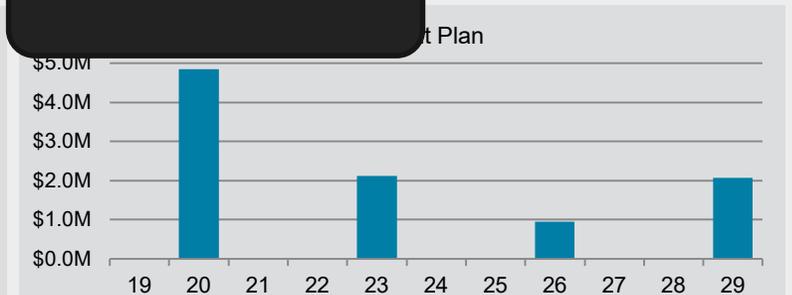
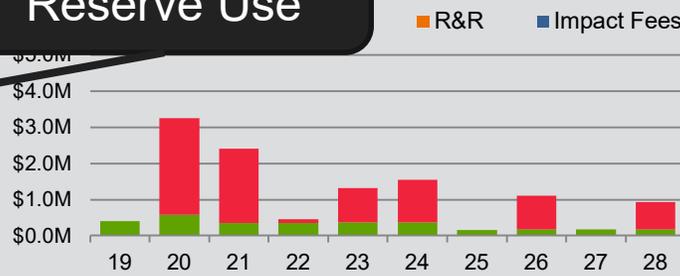


CIP Spending



Unsustainable Reserve Use

Structural Deficit



Sustainable Financial Projection

Three 9% Revenue Increases, then 3% Annually Thereafter

FAMS-XL

CITY OF COCOA



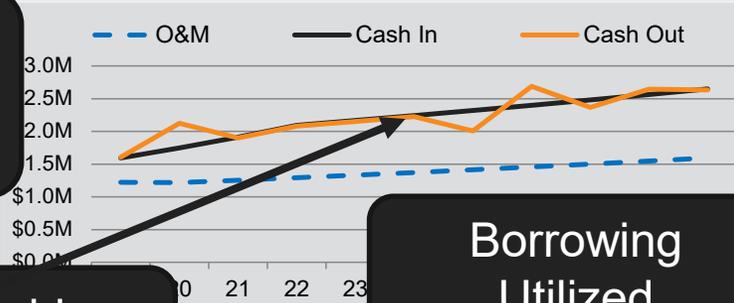
CALC SAVE CTRL LAST OVR

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2025	FY 2029
Revenue Adjustment Plan	0.00%	9.00%	9.00%	9.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	37.39%	59.27%
Senior-Lien DSC	0.00	2.56	2.20	2.68	2.23	2.19	2.28	2.13	2.15	2.23	1.99	Scenario Manager	

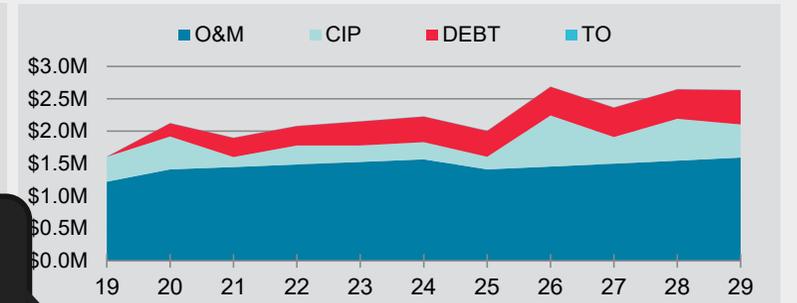
Operating Fund



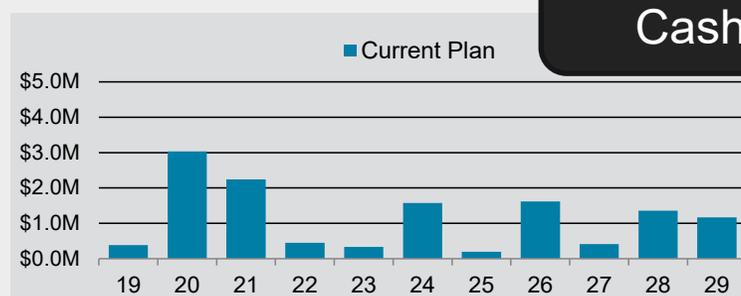
Revenues vs. Expenses



Expenses by Type

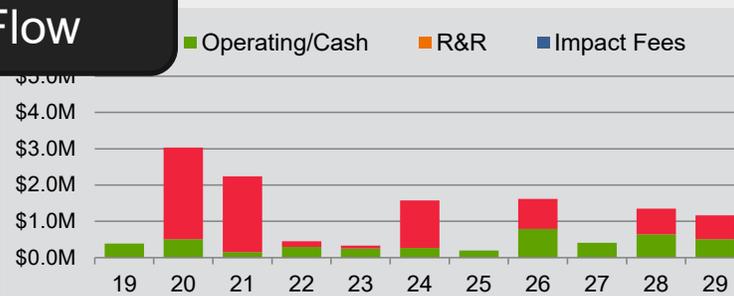


CIP Spending



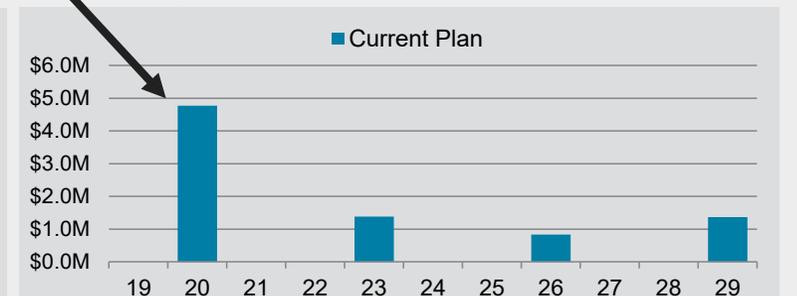
Sustainable Cash Flow

Borrowing



Borrowing Utilized

Borrowing



Collection Method

Stormwater Revenue Collection Method

Recommended

	Utility Billing – Current City Method	Non-Ad Valorem Assessment
PRO	Easier to Change the Fee	Greater Accuracy and More Equitable
		High Collection Rate
		Lower Staff Administration
		Updated With Tax Roll
		Property Owner vs. Renter Paying
CON	Difficult to Manage and Update	Strict Timeline
	Collection Issues / Write-off	Public Notice
	Nonactive Utility Customers Are Not Billed/Paying Fee	Tax Collector Cost
	Reduced Revenue and Subsidized by Others	

Peer Communities Methodology Comparison

Utility	Assessment	Utility Bill
Brevard County (District 1)	X	
Cape Canaveral		X
Cocoa (FY 2019)		X
Cocoa (FY 2020)	X	
Cocoa Beach		X
Daytona Beach		X
Edgewater		X
Flagler Beach		X
Holly Hill	X	
Indialantic	X	
Indian Harbour Beach	X	
Malabar	X	
Melbourne	X	
New Smyrna Beach	X	
Ormond Beach		X
Oviedo		X
Palm Bay	X	
Palm Coast		X
Port Orange	X	
Rockledge		X
Sanford		X
Satellite Beach	X	
South Daytona		X
Titusville	X	
West Melbourne	X	
Count	13	12

Industry Trend



City's Current Stormwater Fee Observations

- Established in early nineties and has not been materially changed
- Pervious and impervious billed units
 - A less common approach in the industry
 - Requires additional administration
 - Potentially penalizes natural lands
- Dwelling unit basis for residential
 - Simple to administer
 - Can be very inequitable when applied to vertical vs. horizontal development



THE TAKEAWAY

The opportunity exists to 1) provide for sufficient revenues for an environmentally and financially sustainable stormwater program, and 2) improve the method of revenue recovery

Building a Better Structure (Selecting a Basis)

Method for Measured Units on Parcel

Perceived Benefit and Equity

Taxable Value



Dwelling Units



Gross Area



Pervious Area



Impervious Area



Recommended

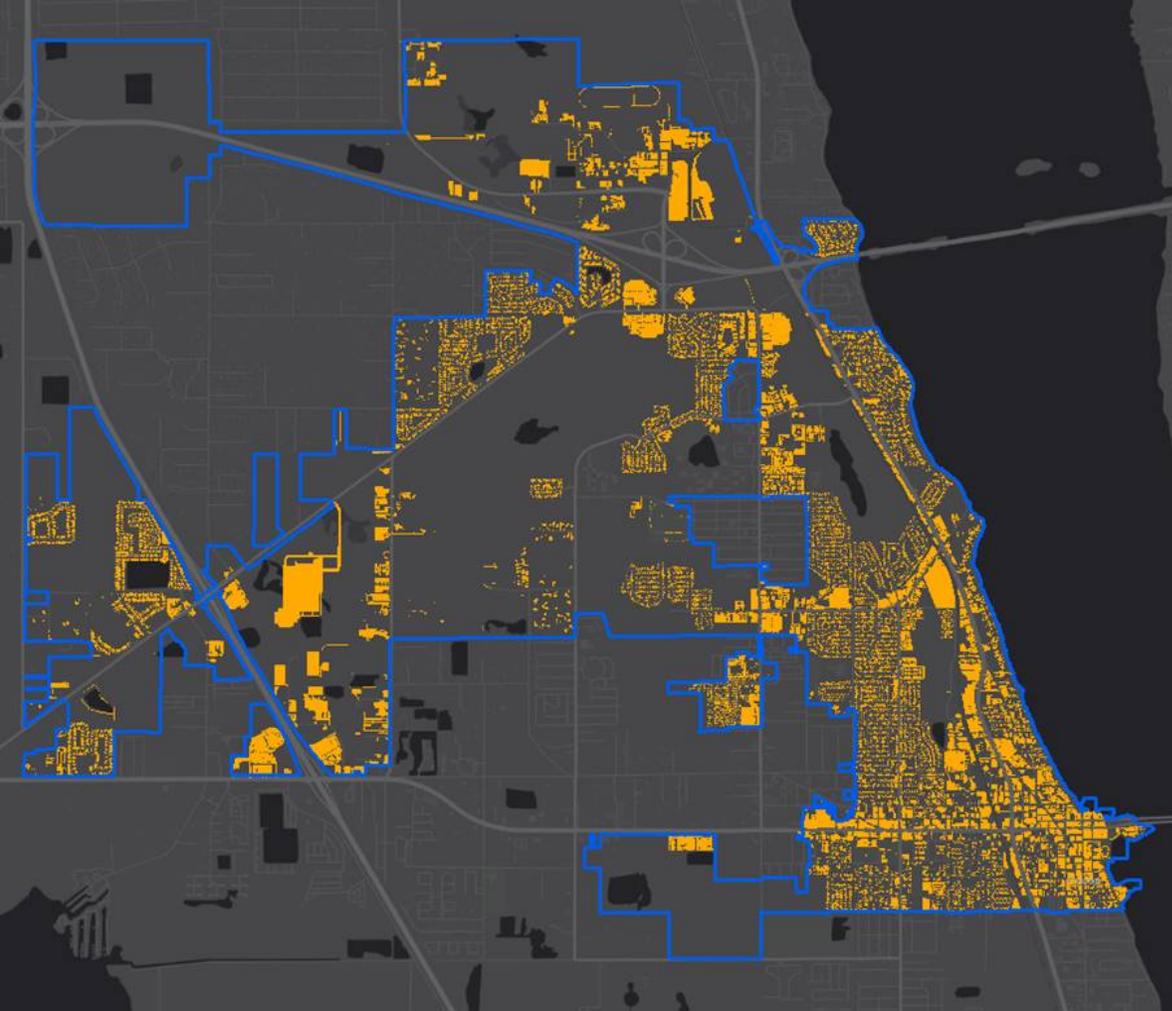
Impervious Area Measurement

Impervious Area Measurement

- Impervious area is defined in the current stormwater ordinance as hard-surfaced areas which either prevent or retard the entry of water into the soil mantle
- Impervious surfaces were digitized (measured) using Brevard County 2018 aerials
- Each parcel has a unique impervious footprint
- A geodatabase was provided to the City and can be updated

Impervious Area in Cocoa

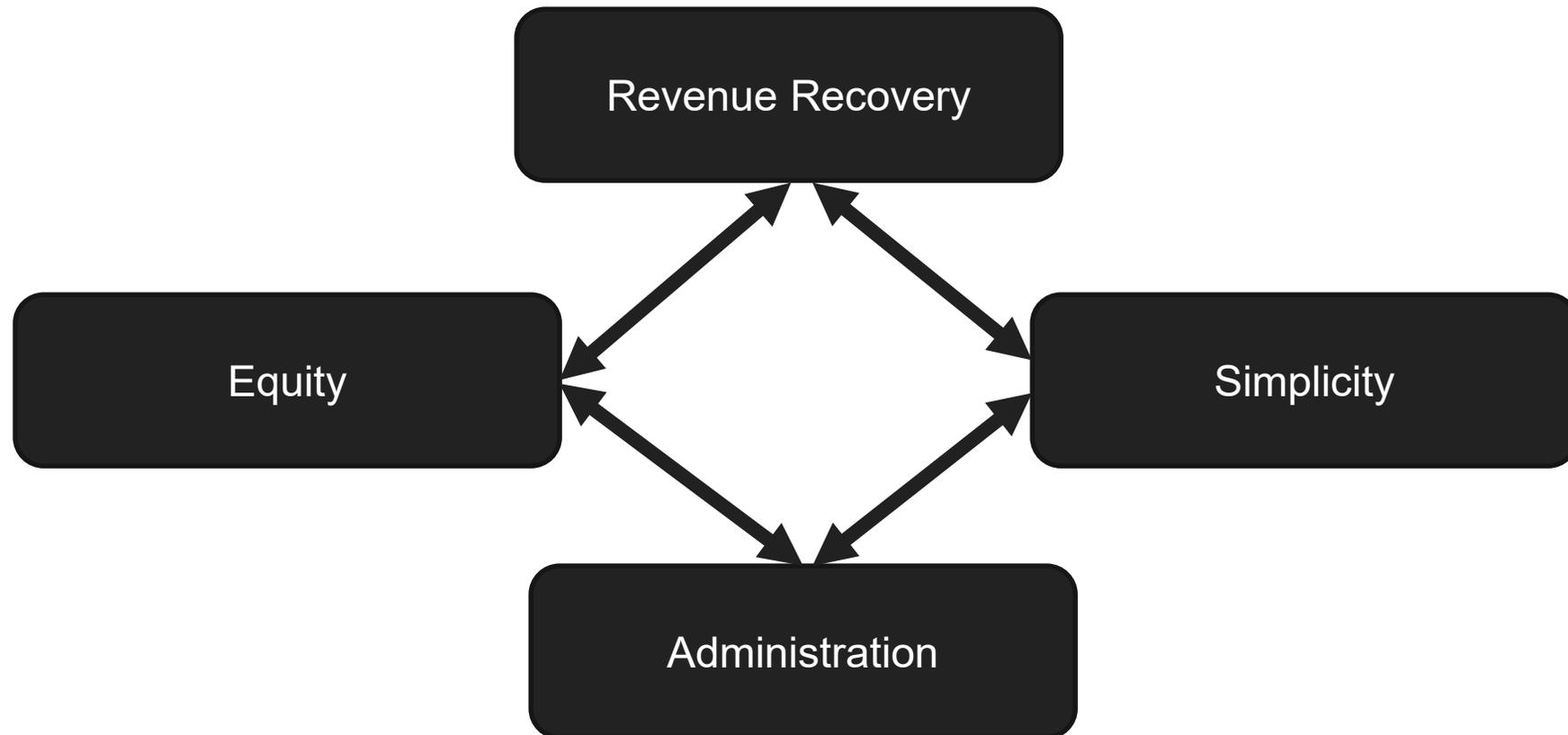
Total Impervious Area = 54.8M sq. ft.



Structural Description	Count	Impervious SQFT	Cumulative %
SINGLE FAMILY RESIDENCE	4,565	15,949,500	30.42%
WAREHOUSING, DISTRIBUTION AND TRUCKING TERMINAL,	90	3,107,400	30.42%
SHOPPING COMPLEX - COMMUNITY/NEIGHBORHOOD	4	2,018,600	36.35%
CONDOMINIUM UNIT	1,216	1,687,562	40.20%
LIGHT MANUFACTURING (SMALL EQUIPMENT MFG PLANT, SM	35	1,562,800	43.42%
MIXED USE - COMMERCIAL PROPERTY	44	1,522,300	46.40%
DEALERSHIP SALES / SERVICE CENTER	6	1,416,200	49.30%
COLD STRG & WAREHS DISTRIB CTR	1	1,313,500	52.00%
WAREHOUSE DISCOUNT STORE	2	1,298,200	54.51%
VACANT COMMERCIAL LAND	50	1,181,200	56.98%
CONDOMINIUM - MANUFACTURED HOME PARK	348	1,176,400	59.24%
CHURCH	40	1,134,200	61.48%
RETAIL STORE - 1 UNIT	74	1,070,700	63.64%
RETAIL STORE - MULTIPLE UNITS	48	1,008,700	65.69%
CONVENIENCE STORE WITH GAS PUMP	21	968,100	67.61%
UTILITY (ELECTRIC COMPANY) - IMPROVED	5	957,300	69.46%
CONCRETE / ASPHALT PLANT	2	909,500	71.28%
LOW RISE APARTMENTS - 2 OR 3 STORIES - 50 UNITS A	7	848,100	73.02%
HOUSING AUTHORITY - IMPROVED	42	671,700	74.63%
USED AUTOMOBILE SALES	20	628,700	75.92%
CENTRALLY ASSESSED	1	602,700	77.12%
MINI-WAREHOUSING	5	583,000	78.26%
MANUF. HOUSING PARK - 201 & MORE SPACES RENTALS	1	548,500	79.38%
GARAGE / AUTO-BODY / AUTO PAINT SHOP	34	510,800	80.42%
OPEN STOR, NEW & USED BLDG SUPP, JUNK YARDS, AUT	16	486,600	81.40%

Stormwater Assessment Design

Goals of a Stormwater Assessment Structure



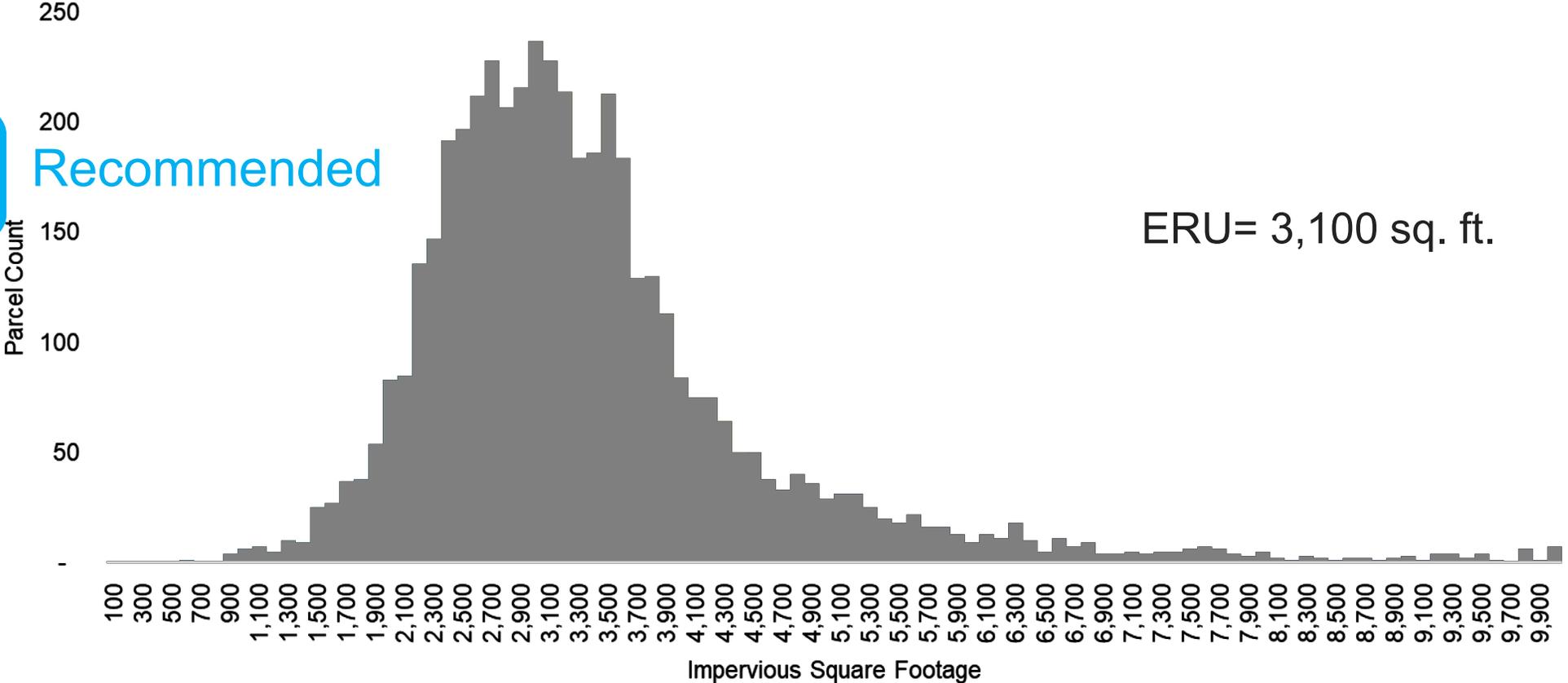
Building a Better Structure for Single Family Residential

Options

Flat Fee

Tiers

Measured Area



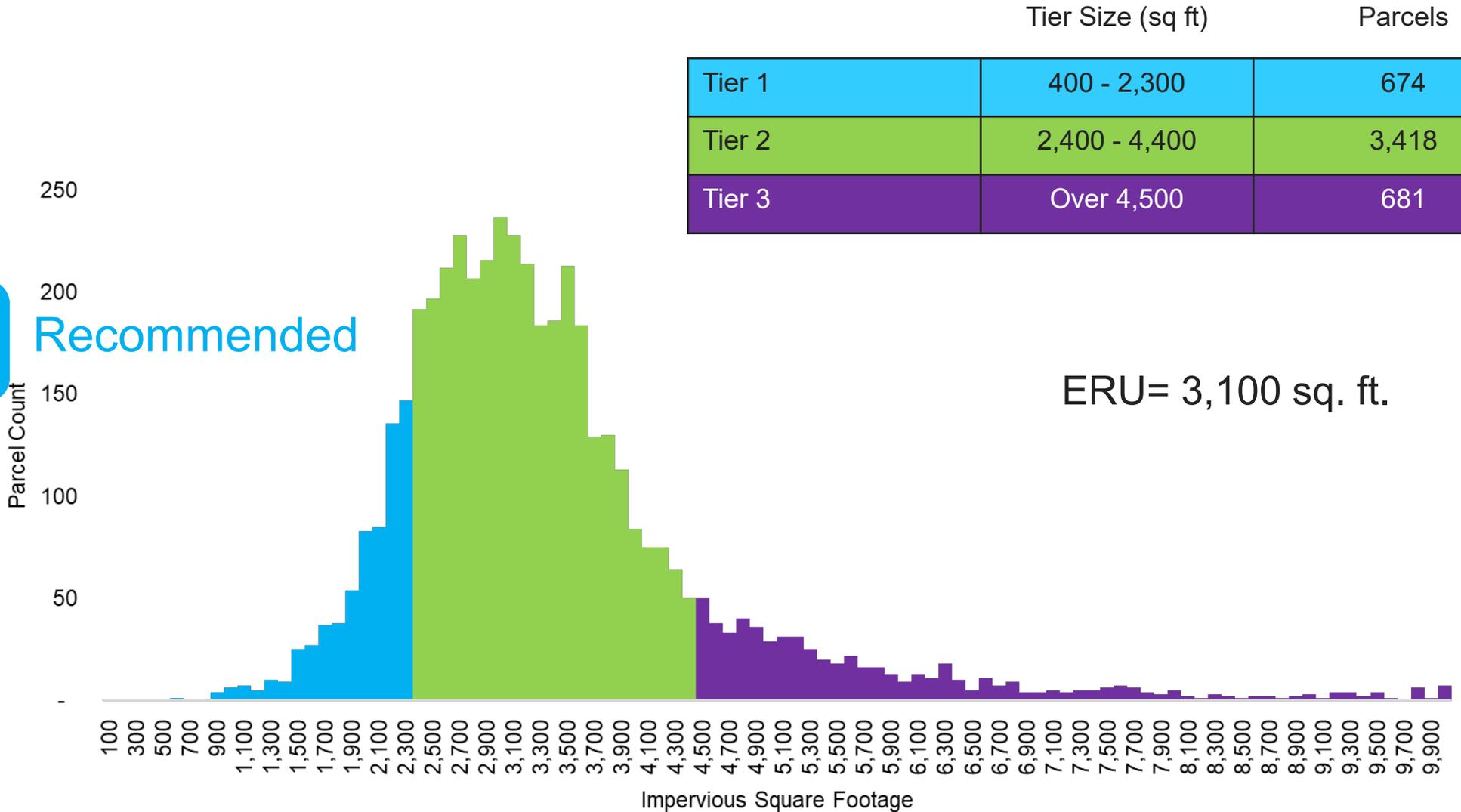
Building a Better Structure for Single Family Residential

Options

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Measured Area



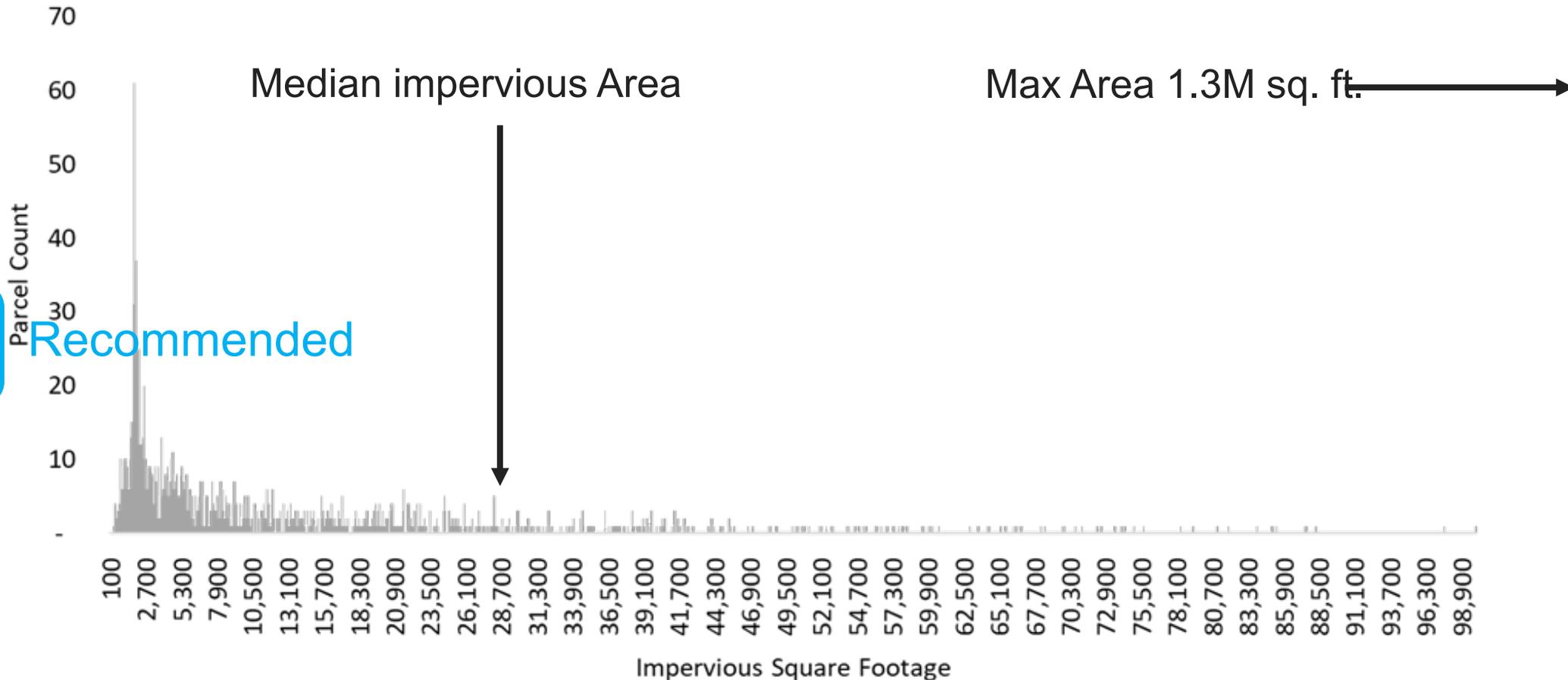
Building a Better Structure for Non Single Family Residential

Options

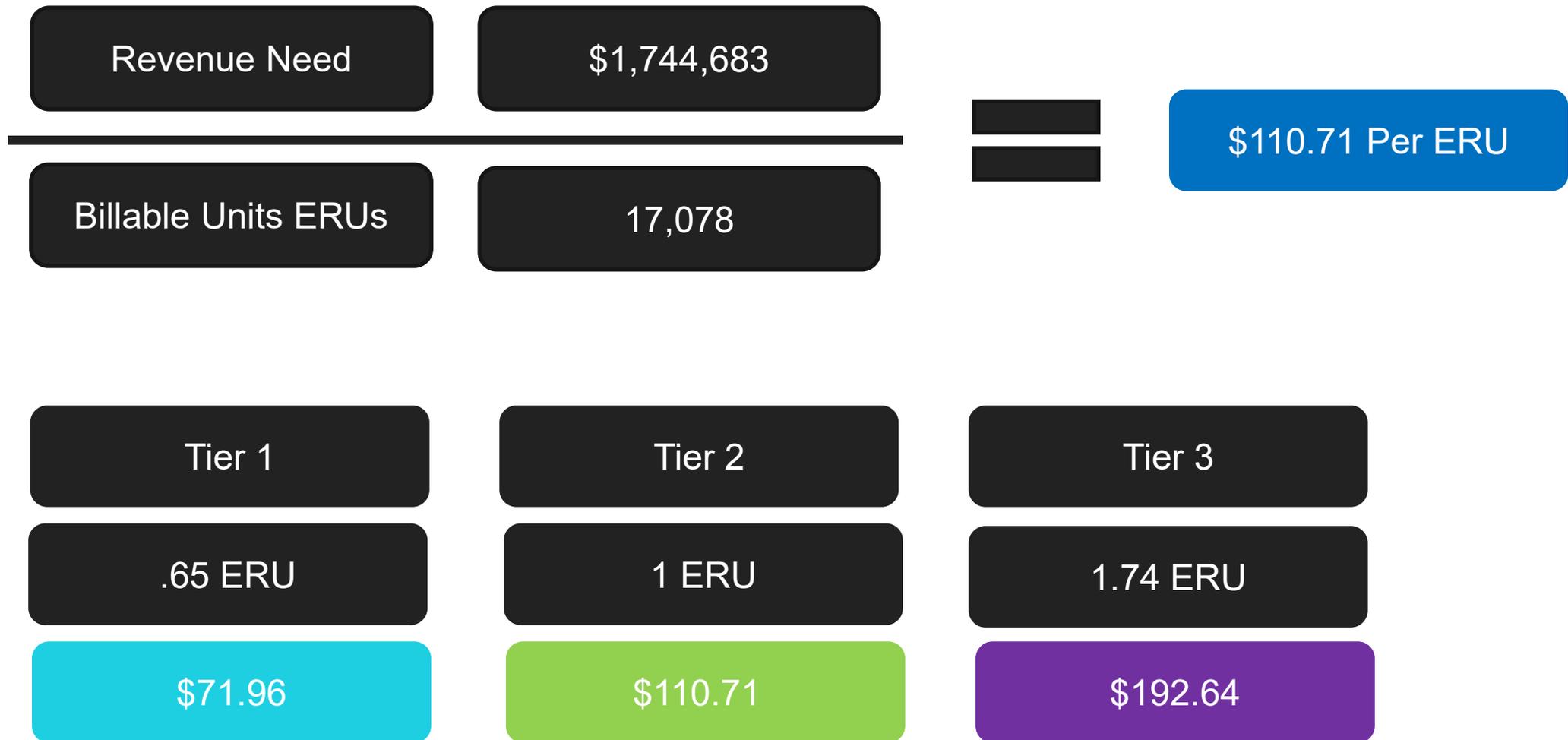
Flat Fee

Tiers

Measured Area



Calculated Single Family (up to three units) Assessments



Single Family Residential Customer FY 2020 Impacts

Tier 1



Tier 2



Tier 3



Current: \$ 87.00
 Calculated: \$ 71.96
 Dollar Change: (\$ 15.04)
 Percent Change: (17%)

Current: \$ 87.00
 Calculated: \$110.71
 Dollar Change: \$ 23.71
 Percent Change: 27%

Current: \$ 87.00
 Calculated: \$192.64
 Dollar Change: \$105.84
 Percent Change: 121%

Condo Customer FY2020 Impacts

138 Units



Current:	\$12,006.00
Update :	\$3,820.53
Dollar Change:	(\$8,185.47)
Percent Change:	(68%)

Other Non Single Family Residential Customer FY2020 Impacts

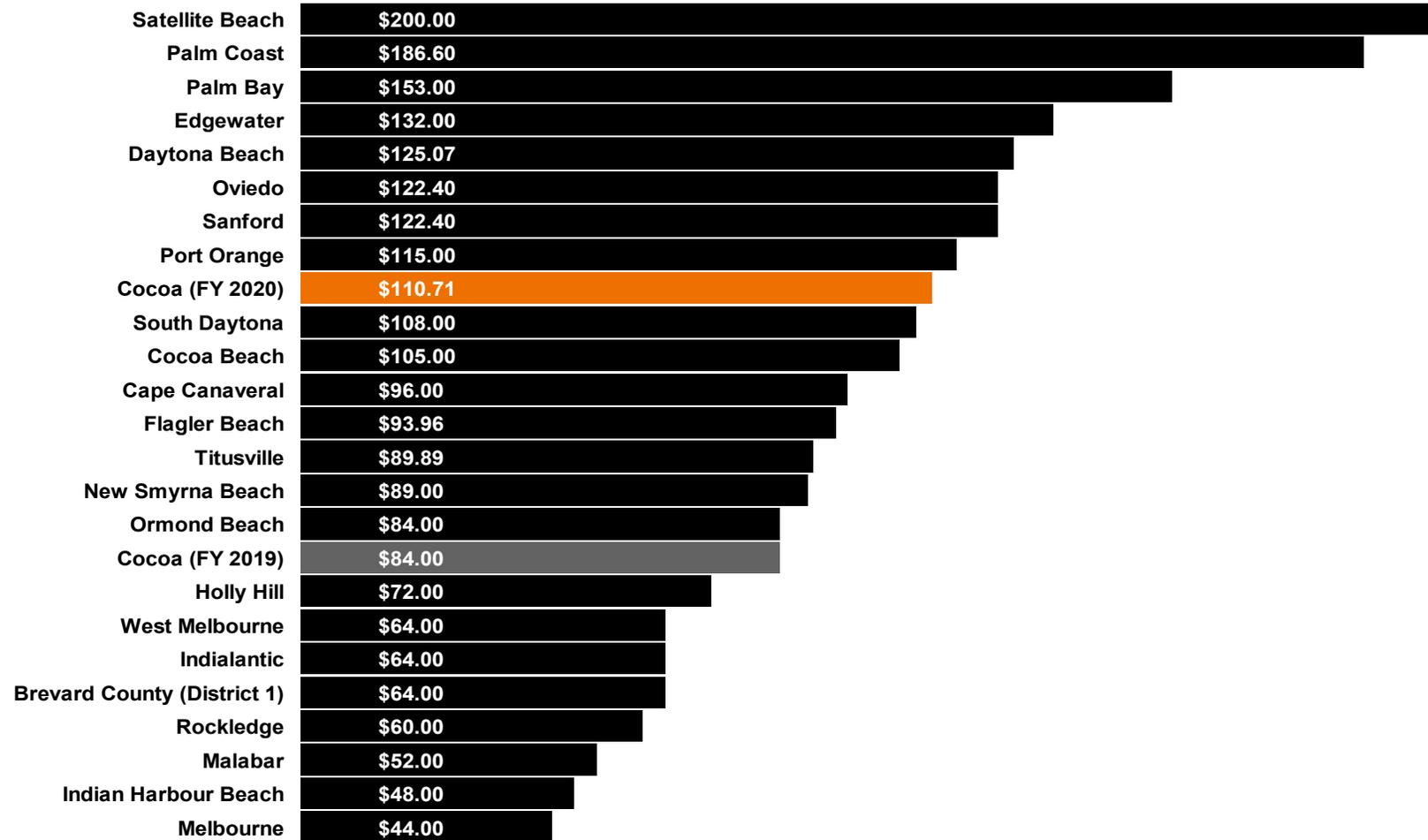
34,900 sq. ft. = 10.9 ERUs



Current:	\$911.28
Update:	\$1,206.74
Dollar Change:	\$295.46
Percent Change:	32%

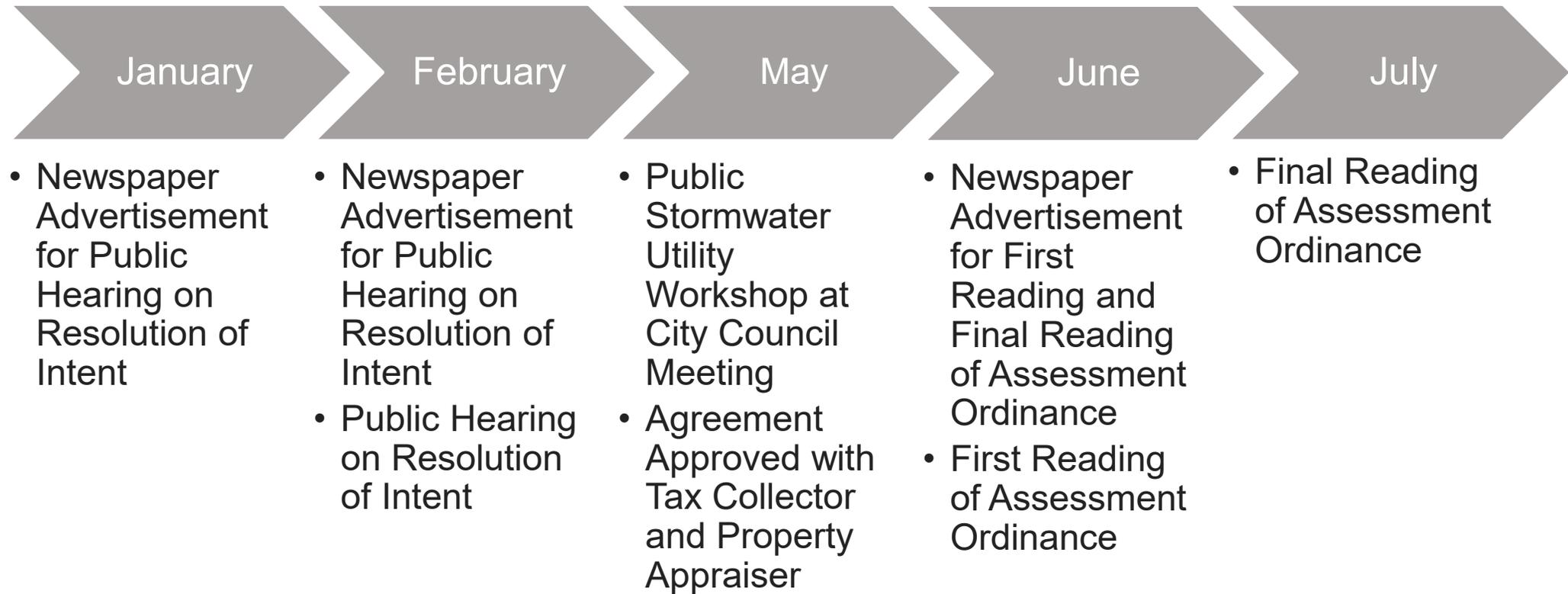
Local Area Fee Survey with Fee Adjustments

FY 2019 Annual Residential Stormwater Fee Rate Survey at 1 ERU



Implementation Schedule

Implementation Plan



Implementation Plan



Questions and Discussion

