

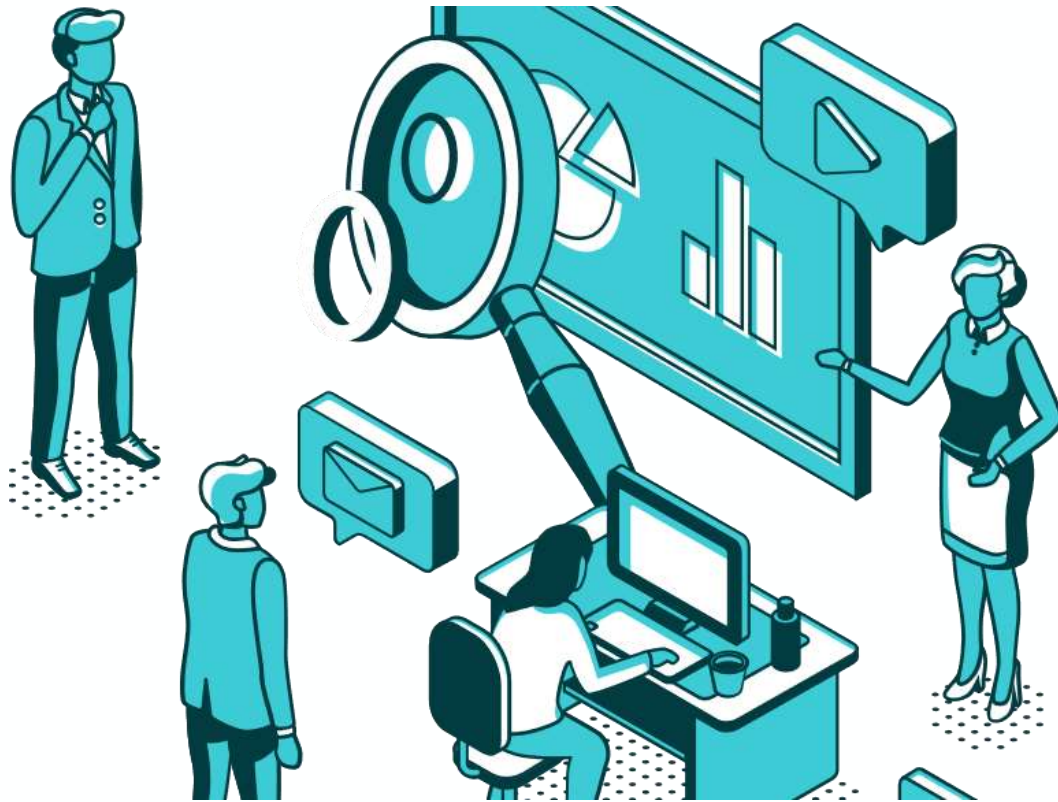
City of Cooper City

Stormwater Rate Cost of Service and Rate Design

February 22, 2021



Agenda



1. Overview
2. Methodology
3. Rate Design & Proposed Rates
4. Customer Impacts
5. Recommendations and Findings
6. Implementation Timeline

1 Overview



1) Overview – Recap 2020 Rate Study

- Summer 2020 Presented Stormwater Rate Study
 - › Recommended Increase in Rates to Cover Capital Improvements and Increased Debt Service Payments

Rate Adjustments and Residential Bill Impacts					
Fiscal Year	Rate Adjustment	Residential Direct Rate ¹		Residential Indirect Rate ¹	
		<u>\$/Month</u>	<u>\$/Change</u>	<u>\$/Month</u>	<u>\$/Change</u>
2020	--%	\$3.22	N/A	\$0.59	N/A
2021	65.00%	\$5.31	\$2.09	\$0.97	\$0.38

Note:

¹The City charges residential customers a “direct” monthly stormwater fee if the City maintains the stormwater management system for the property and an “indirect” monthly stormwater service fee if the resident maintains a private stormwater management system.

- Recommended Consideration of Change in Cost Recovery and Billing Methodology to Address:
 - › Change to Non-ad Valorem Assessment Facilitates Billing Commercial Customer’s Common Area
 - › Level of Service Equity Among Direct Vs. Indirect Customers
 - › Customer Class Equity Among Single Family, Town Homes, Multi Family, and Commercial

1) Overview - Non-Ad Valorem Assessment Method of Billing



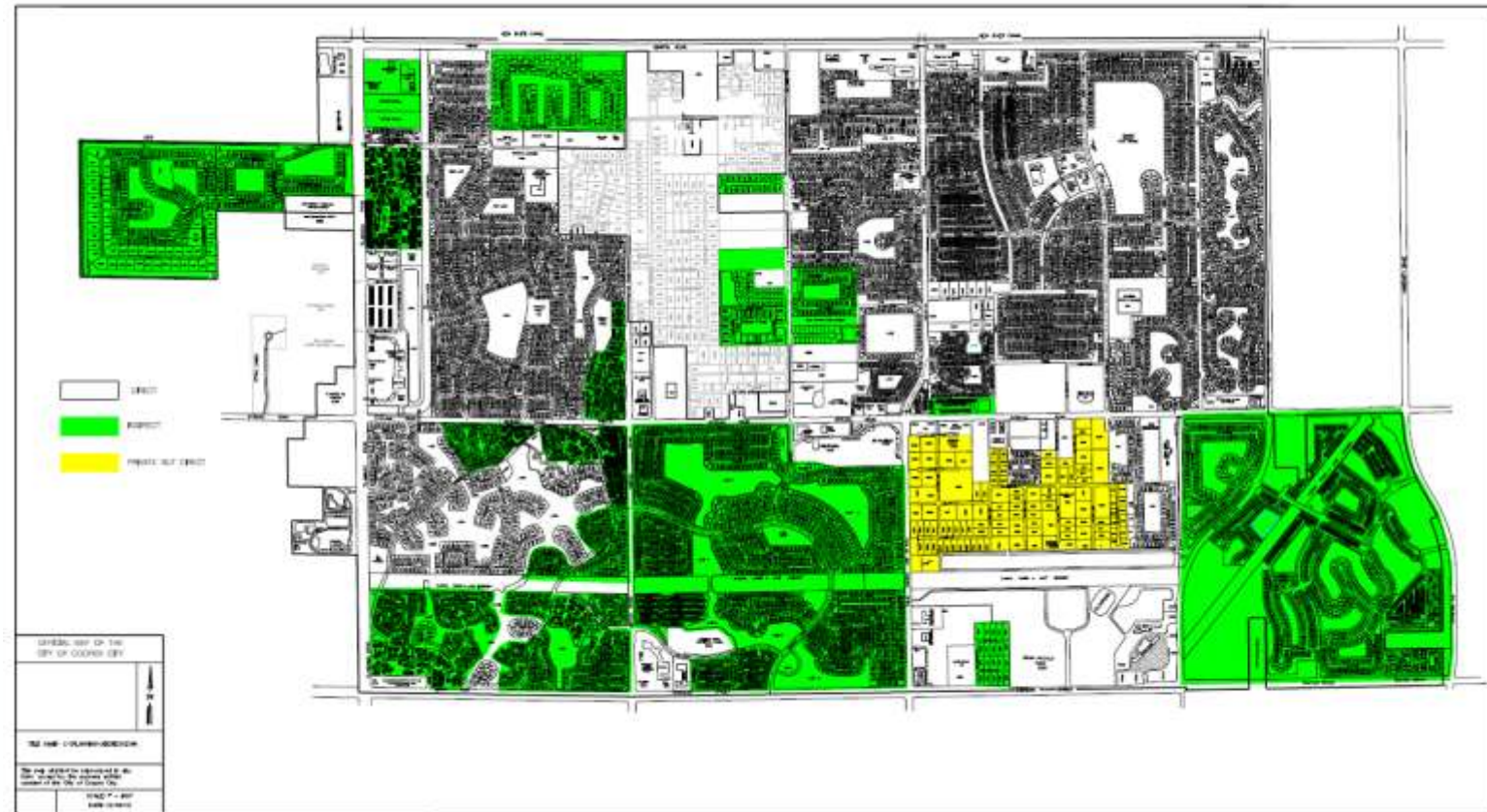
- Pros of Non-Ad Valorem Assessment
- Facilitate Billing Commercial Properties
- Helps in recovery of cost associated with impervious common area
- Highest collection rate (95 – 98%)
- County Tax Collector Provides Billing
- Revenue received within 6 months of start of fiscal year

- Cons of Non-Ad Valorem Assessment
- Cost must be proportional to the benefit to the property (less flexibility in rate design)
- Strict statutory requirements regarding public notice
- Cannot use for government property
- Billing Cost Chargeback by Tax Collector

1 Overview – Stormwater Level of Service

Direct vs. Indirect Customer Benefits Map

- Indirect = Customers on Private Roads
 - › Must Maintain On-site Stormwater System
 - › Benefits from Stormwater Management of Primary Public Roads
- Direct = Customers on Public Road
 - › City Maintains Stormwater System
 - › Benefits from Stormwater Management of Local and Primary Public Roads



 Denotes Indirect Customers

 Denotes Private but Direct Customers

1) Overview - Equivalent Stormwater Unit (ESU) Determination

- City's GIS Consultant FTC Performed Digitization
 - › Geospatial Layers of:
 - Stormwater Account Locations
 - Property Lines
 - Impervious Area of All Non-residential and Multi-family Accounts
 - › Sampled Accounts
 - › Corrected / Reclassified Customers

- New Structure
 - › Tiered Single Family & Townhome

	Existing / Indoor Sqft		Proposed / Digitation	
	Sq Ft	ESUs	Sq Ft	ESUs
Res – Sm	1,750	1.00	3,380	0.75
Res – Med	1,750	1.00	4,506	1.00
Res – Lg	1,750	1.00	5,633	1.25
Duplex	858	0.49	1,577	0.35
Condo /MF	438	0.24	1,127	0.25
Townhouse	438	0.24	2,704	0.60
Commercial	Varies	Varies	Varies	Varies
Impervious Area Totals				
Direct	13,377,656		29,903,793	
Indirect	<u>6,298,688</u>		<u>21,598,530</u>	
Total	19,676,344		51,502,323	

2 Methodology



2) Methodology



Step 1: Determine Unit Cost

$$\text{\$Unit Cost} = \frac{\text{\$ Cost of Service}}{\text{Impervious Area (sqft)}}$$



Step 2: Determine Rate per ESU

$$\text{\$ per ESU} = \text{\$Unit Cost} \times \text{LOS at 4,506sqft}$$



Step 3: Apply ESU Rate to Customers

$$\text{Customer Rate} = \text{\$ per ESU} \times \text{Customer LOS}$$

ESU = Equivalent Stormwater Unit

LOS = Level of Service per ESU

3 Rate Design



3) Rate Design - Stormwater Customer / Billing Statistics

Direct Customers			
Customer	Res Units/ Com Accts	Existing ESU*	Proposed ESU*
Small Res.	1,426	1,426	1,070
Medium Res.	2,230	2,230	2,230
Large Res.	1,731	1,731	2,164
Duplex	222	109	78
Condo	207	51	52
Townhouse	22	5	13
Commercial	351	1,167	1,093
Total	6,189	6,720	6,699
SqFt		13,377,656	29,903,793

Indirect Customers			
Customer	Res Units/ Com Accts	Existing ESU*	Proposed ESU*
Small Res.	1,633	1,633	1,225
Medium Res.	727	727	727
Large Res.	1,236	1,236	1,545
Duplex	80	41	28
Condo	550	158	138
Townhouse	1,720	496	1,032
Commercial	53	168	99
Total	5,999	4,459	4,794
		6,298,688	21,598,530

*Equivalent Residential Stormwater Unit (ESU) is defined as 1,750 sq ft (indoor sq ft) under the current stormwater rate structure and 4,506 sq ft (outdoor impervious sq ft) under the proposed rate structure.

3) Rate Design – Unit Cost and Proposed Rates

Cost of Service					
	COS Options		Designed Rate	Residential Monthly Charge	
	Proposed COS	New Imp Sq Ft	Proposed COS	Residential Sq Ft	Proposed COS
Direct	\$428,391	29,903,793	\$0.0143	4,506	\$5.3793
Indirect	<u>\$99,507</u>	<u>21,598,530</u>	\$0.0046	4,506	\$1.7300
Total	\$527,898	52,502,323			

Proposed Rates			
	<u>Existing Rates</u>	<u>Proposed COS</u>	<u>\$ Change</u>
<u>Direct</u>			
Residential Sm	\$5.31	\$4.04	(\$1.27)
Residential Md	\$5.31	\$5.38	\$0.07
Residential L	\$5.31	\$6.72	\$1.41
Duplex	\$2.61	\$1.88	(\$0.73)
Condo/MF	\$1.32	\$1.35	\$0.03
Townhome	\$1.32	\$3.23	\$1.91
Commercial	\$5.31	\$5.38	\$0.07
<u>Indirect</u>			
Residential Sm	\$0.97	\$1.30	\$0.33
Residential Md	\$0.97	\$1.73	\$0.76
Residential L	\$0.97	\$2.16	\$1.19
Duplex	\$0.50	\$0.61	\$0.11
Condo/MF	\$0.28	\$0.43	\$0.15
Townhome	\$0.28	\$1.04	\$0.76
Commercial	\$0.97	\$1.73	\$0.76

4 Customer Bill Impacts





4) Customer Impact Overview

	Existing Bill	Proposed Bill	Change \$	Change %
Res – Sm	\$113,278	\$94,602	(\$18,676)	(16%)
Res – Med	178,748	159,049	(19,699)	(11%)
Res – Lg	136,004	171,635	35,631	26%
Multi-Family*	25,444	34,104	8,660	34%
Commercial	<u>76,317</u>	<u>72,605</u>	<u>(3,712)</u>	(5%)
	\$529,791	\$531,995	\$2,204	

* Multi-Family consists of a combination of the Townhouse class, Condominium Class, and Duplex Class.

4) Customer Impact – Residential Unit Comparison



Townhome
(0.60 ESU)



Duplex
(0.35 ESU)



Small Residential
(0.75 ESU)



Medium Residential
(1.00 ESU)



Large Residential
(1.25 ESU)

4) Customer Impact - Residential

DIRECT	% of Total Accounts*	Existing Rate	Proposed COS / Digitization**	
Duplex (1 Unit)	1.8%	\$2.61	\$1.88	(28%)
Townhome	0.2%	\$1.32	\$3.23	145%
Residential – SM	11.7%	\$5.31	\$4.04	(24%)
Residential – M	18.3%	\$5.31	\$5.38	1%
Residential – L	14.2%	\$5.31	\$6.72	27%

INDIRECT	% of Total Accounts*	Existing Rate	Proposed COS / Digitization**	
Duplex (1 Unit)	0.7%	\$0.50	\$0.61	22%
Townhome	14.1%	\$0.28	\$1.04	271%
Residential – SM	13.4%	\$0.97	\$1.30	34%
Residential – M	6.0%	\$0.97	\$1.73	78%
Residential – L	10.1%	\$0.97	\$2.16	123%

*Residential Accounts make up approximately 90% of stormwater customers and 85% of existing rate revenues

**Proposed charges shown assume tax bill paid in November and assumes “early prepayment discount”

4) Customer Impact – Townhome Sample

Condo / Multi-Family (MF)	% of Total Accounts	Existing Rate per Unit	Proposed Rate per Unit	
Direct – Townhome	0.2%	\$1.32	\$3.21	145%
Indirect - Townhome	14.1%	\$0.28	\$1.04	271%



4) Customer Impact – Condo Sample #1

Condo / Multi-Family (MF)	% of Total Accounts	Existing Rate per Unit	Proposed Rate per Unit	
Direct – Condo /MF	1.7%	\$1.32	\$1.35	2%
Indirect - Condo /MF	4.5%	\$0.28	\$0.43	54%

- Sample Apartment / Condo Complex
 - › Indirect
 - › 304 Units
 - › 366,282 sqft Impervious
 - › Existing Annual Charges
 - 88 ESUs \$1,021
 - › Proposed Annual Charges
 - 76 ESUs \$1,569
 - › \$547 or 54% Change



4) Customer Impact – Condo Sample #2

Condo / Multi-Family (MF)	% of Total Accounts	Existing Rate per Unit	Proposed Rate per Unit	
Direct – Condo /MF	1.7%	\$1.32	\$1.35	2%
Indirect - Condo /MF	4.5%	\$0.28	\$0.43	54%

- Sample Apartment / Condo Complex
 - › Direct
 - › 55 Units
 - › 49,700sqft Impervious
 - › Existing Annual Charges
 - 14 ESUs \$871
 - › Proposed Annual Charges
 - 14 ESUs \$891
 - › \$20 or 2% Change



4) Customer Impact – Commercial Example #1



Customer	Type	Units	Sq Ft	Existing ESU	Old Complex Monthly Bill	Proposed ESU	New Complex Monthly Bill
Com01	Direct Commercial	50	804,281	121	\$624.51	178.5	\$960.20

4) Customer Impact – Commercial Example #2



Customer	Type	Units	Sq Ft	Existing ESU	Old Complex Monthly Bill	Proposed ESU	New Complex Monthly Bill
Com06	Direct Commercial	25	87,354	25	\$132.75	19	\$102.21

4) Customer Impact – Commercial Example #3



Customer	Type	Units	Sq Ft	Existing ESU	Old Complex Monthly Bill	Proposed ESU	New Complex Monthly Bill
Com10	Direct Commercial	24	193,035	26	\$138.06	43	\$231.31

5 Findings and Recommendations



Findings and Recommendations

- Change to Tax Bill will Facilitate:
 - › Billing based on Impervious Area & Charging Properties
 - › More Equitable

- Bill Impacts:
 - › Direct Large SF and Townhomes Had Largest Increase
 - Based on Impervious Analysis
 - Direct Class Residential Changes
 - Increase of \$1.91/Mo. Townhome
 - Decrease of \$0.73/Mo. Duplex

 - Increase of \$1.41/Mo. Townhome
 - Decrease of \$1.27/Mo. Sm SF
 - › Impacts Can Be Phased Over Time

- Recommend Consider Proposed Rate Changes & Billing by Tax Bill

	Existing Bill	Proposed Bill	Change \$	Change %
Res – Sm	\$113,278	\$94,602	(\$18,676)	(16%)
Res – Med	178,748	159,049	(19,699)	(11%)
Res – Lg	136,004	171,635	35,631	26%
Multi-Family*	25,444	34,104	8,660	34%
Commercial	<u>76,317</u>	<u>72,605</u>	<u>(3,712)</u>	(5%)
	\$529,791	\$531,995	\$2,204	

Proposed Monthly Rates		
	Indirect	Direct
Residential Sm	\$1.30 / unit	\$4.04 / unit
Residential Md	\$1.73 / unit	\$5.38 / unit
Residential L	\$2.16 / unit	\$6.72 / unit
Duplex	\$0.61 / unit	\$1.88 / unit
Condo/MF	\$0.43 / unit	\$1.35 / unit
Townhome	\$1.04 / unit	\$3.23 / unit
Commercial	\$1.73 / sqft	\$5.38 / sqft

6 Implementation Timeline



6) Implementation Timeline

1

**Notice of Intent –
February 22**

2

**Develop Tax Roll / Two Public Hearings
to Change Ordinance
March / April**

3

**Submit Tax Roll to Broward County by
May 1**

4

**Final Tax Roll
September 15**

5

**Final Stormwater Utility Bills Rendered
October**



Thank you!