

# MIAMI BEACH

## City Commission Meeting SUPPLEMENTAL MATERIAL 3

City Hall, Commission Chambers, 3<sup>rd</sup> Floor, 1700 Convention Center Drive  
July 13, 2016

Mayor Philip Levine  
Commissioner John Elizabeth Alemán  
Commissioner Ricky Arriola  
Commissioner Michael Grieco  
Commissioner Joy Malakoff  
Commissioner Kristen Rosen Gonzalez  
Commissioner Micky Steinberg

City Manager Jimmy L. Morales  
City Attorney Raul J. Aguila  
City Clerk Rafael E. Granado

Visit us at [www.miamibeachfl.gov](http://www.miamibeachfl.gov) for agendas and video "streaming" of City Commission Meetings.

### ATTENTION ALL LOBBYISTS

**Chapter 2, Article VII, Division 3 of the City Code of Miami Beach entitled "Lobbyists" requires the registration of all lobbyists with the City Clerk prior to engaging in any lobbying activity with the City Commission, any City Board or Committee, or any personnel as defined in the subject Code sections. Copies of the City Code sections on lobbyists laws are available in the City Clerk's office. Questions regarding the provisions of the Ordinance should be directed to the Office of the City Attorney.**

### SUPPLEMENTAL AGENDA

#### C7 - Resolution

- C7F A Resolution Urging The Florida Department Of Transportation ("FDOT") To Stripe Dedicated Bicycle Lanes On The Julia Tuttle Causeway (I-195) And To Stripe Green Bicycle Lanes On Those Portions Of I-395 And A1A Known As The MacArthur Causeway As Soon As Possible To Protect The Safety Of Cyclists During The Next Phase Of Miami-Dade County's Venetian Causeway Project.  
(Sponsored by Commissioner Ricky Arriola)  
(Legislative Tracking: Transportation)  
**(Memorandum & Resolution)**

#### R7- Resolution

- R7GG A Resolution Accepting The City Manager's Recommendation Of AECOM To Modify The Methodology For Calculating The Equivalent Residential Unit (ERU) For Stormwater Utility Usage, And Directing The City Administration To Draft An Ordinance Amending Chapter 110 Of The City Code To Implement The Modified ERU Calculation From 791 To 849 Square Feet Of Impervious Area.  
  
(Public Works)  
**(Attachment)**

**THIS PAGE INTENTIONALLY LEFT BLANK**

**Condensed Title:**

**A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, URGING THE FLORIDA DEPARTMENT OF TRANSPORTATION ("FDOT") TO STRIPE DEDICATED BICYCLE LANES ON THE JULIA TUTTLE CAUSEWAY (I-195) AND TO STRIPE GREEN BICYCLE LANES ON THE THOSE PORTIONS OF I-395 AND A1A KNOWN AS THE MACARTHUR CAUSEWAY AS SOON AS POSSIBLE TO PROTECT THE SAFETY OF CYCLISTS DURING THE NEXT PHASE OF MIAMI-DADE COUNTY'S VENETIAN CAUSEWAY PROJECT.**

**Key Intended Outcome Supported:**

Ensure Comprehensive Mobility Addressing All Modes Throughout The City

**Item Summary/Recommendation:**

In April 2016, Miami-Dade County (County) advertised a Request for Price Quotation (RPQ) for the rehabilitation of the East Venetian bascule bridge (Bridge # 874474) connecting Rivo Alto Island and Belle Isle and the East Venetian Bridge connecting Belle Isle and Purdy Avenue (874481), collectively, the Venetian Causeway Project or Project. The rehabilitation project is proposed as a result of operational conditions that were determined to affect the bascule bridge's mechanical operation as well as the bridge decking for the easternmost bridge.

On May 25, 2016, the Office of the City Manager of the City of Miami Beach submitted Letter to Commission No. 231-2016 providing notice of the upcoming construction. According to the letter, construction was anticipated to begin in August 2016 and last 120 days; however, in recent coordination, County staff has not being able to commit to an August beginning of construction date. The County and its chosen contractor will be hosting a Pre-Construction meeting on July 20, 2016 regarding the scope of work of the Venetian Causeway Project. At the meeting, County staff anticipates finalizing the project schedule and the construction approach. The results of the meeting and the final schedule and construction approach determined will be communicated via Letter to Commission.

The existing lane configuration of the Venetian Causeway includes bicycle lanes and the operational characteristics of the corridor (low operational speed and low vehicular volumes) promote safe and comfortable bicycling and walking. With the previously described construction, pedestrians and bicyclist will be affected and would have to alter their route between Miami Beach and the mainland. Currently, the Julia Tuttle Causeway (I-195) and portions of I-395 and A1A (the MacArthur Causeway) have striped bicycle lanes; however, given the existing operational conditions of the corridors (high speed and high vehicular volume, bicycle facilities adjacent to the travel lanes), bicyclists are not likely to use these corridors.

On July 8, 2016, the City met with FDOT to discuss mitigation efforts to enhance bicycle facilities during the closure of the Venetian Causeway during the Project. At the meeting, FDOT advised that enhancements to mitigate the adverse effects for bicyclists and pedestrians as a results of the Project are only planned for the MacArthur Causeway. The enhancements include additional sections of green bicycle striping at conflict points and wayfinding signage to assist bicyclists through the corridor. At the meeting, the City requested the striping of green bicycle lanes for the MacArthur Causeway; however, FDOT advised that current guidelines for green bicycle lanes on state highways and roadways only allows the use of green bicycle lanes at conflict points with other road users. FDOT advised that it is in the planning stages of a long term project for a protected pathway along the Julia Tuttle Causeway that would accommodate pedestrians and bicycles. Currently, the long-term implementation of a pathway along the Julia Tuttle Causeway is under review by the District VI Design Office; however, no exact time for implementation has been provided. The Julia Tuttle Causeway (I-195) is part of the Interstate System; therefore further coordination with the Federal Highway Administration is required for implementation of the pathway.

**CONCLUSION**

It is recommended that the City Commission approve the resolution.

**Advisory Board Recommendation:**

n/a

**Financial Information:**

Source of Funds:	Amount	Account	Approved
1			
2			
3			
<b>OBPI Total</b>			

**Financial Impact Summary:**

**City Clerk's Office Legislative Tracking:**

Jose R. Gonzalez, P.E.

**Sign-Offs:**

Department Director	Assistant City Manager	City Manager
JRG JFD for JRG	KGB	JLM

T:\AGENDA\2016\July\Transportation\A Resolution Urging FDOT to Enhance the Julia Tuttle Bicycle Lanes SUMM.docx.docx

# MIAMI BEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

## COMMISSION MEMORANDUM

TO: Mayor Philip Levine and Members of the City Commission

FROM: Jimmy L. Morales, City Manager

DATE: July 13, 2016

SUBJECT: **A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, URGING THE FLORIDA DEPARTMENT OF TRANSPORTATION ("FDOT") TO STRIPE DEDICATED BICYCLE LANES ON THE JULIA TUTTLE CAUSEWAY (I-195) AND TO STRIPE GREEN BICYCLE LANES ON THE THOSE PORTIONS OF I-395 AND A1A KNOWN AS THE MACARTHUR CAUSEWAY AS SOON AS POSSIBLE TO PROTECT THE SAFETY OF CYCLISTS DURING THE NEXT PHASE OF MIAMI-DADE COUNTY'S VENETIAN CAUSEWAY PROJECT.**

*Sponsored by Commissioner Ricky Arriola*

### **BACKGROUND**

In April 2016, Miami-Dade County (County) advertised a Request for Price Quotation (RPQ) for the rehabilitation of the East Venetian bascule bridge (Bridge # 874474) connecting Rivo Alto Island and Belle Isle and the East Venetian Bridge connecting Belle Isle and Purdy Avenue (874481), collectively, the Venetian Causeway Project or Project. The rehabilitation project is proposed as a result of operational conditions that were determined to affect the bascule bridge's mechanical operation as well as the bridge decking for the easternmost bridge.

The Venetian Causeway Project includes but it is not limited to mechanical repairs to the East Bascule Bridge (874474), such as replacing motors, brakes, switches, wiring, tread plates, and other mechanical elements. In addition, the Venetian Causeway Project includes repairs to the bridge deck for the East Venetian Bridge (874481).

On May 25, 2016, the Office of the City Manager of the City of Miami Beach submitted Letter to Commission No. 231-2016 providing notice of the upcoming construction. According to the letter, construction was anticipated to begin in August 2016 and last 120 days; however, in recent coordination, County staff has not being able to commit to an August beginning of construction date. The County and its chosen contractor will be hosting a Pre-Construction meeting on July 20, 2016 regarding the scope of work of the Venetian Causeway Project. At the meeting, County staff anticipates finalizing the project schedule and the construction approach. The results of the meeting and the final schedule and construction approach determined will be communicated via Letter to Commission.

## **ANALYSIS**

Currently, the Venetian Causeway is the prime connector for pedestrian and bicyclists between Miami Beach and the mainland. The existing lane configuration of the Venetian Causeway includes bicycle lanes and the operational characteristics of the corridor (low operational speed and low vehicular volumes) promote safe and comfortable bicycling and walking. With the previously described construction, pedestrians and bicyclist will be affected and would have to alter their route between Miami Beach and the mainland. Currently, the Julia Tuttle Causeway (I-195) and portions of I-395 and A1A (the MacArthur Causeway) have striped bicycle lanes; however, given the existing operational conditions of the corridors (high speed and high vehicular volume, bicycle facilities adjacent to the travel lanes), bicyclists are not likely to use these corridors.

On July 8, 2016, the City met with FDOT to discuss mitigation efforts to enhance bicycle facilities during the closure of the Venetian Causeway during the Project. At the meeting, FDOT advised that enhancements to mitigate the adverse effects for bicyclists and pedestrians as a results of the Project are only planned for the MacArthur Causeway. The enhancements include additional sections of green bicycle striping at conflict points and wayfinding signage to assist bicyclists through the corridor. At the meeting, the City requested the striping of green bicycle lanes for the MacArthur Causeway; however, FDOT advised that current guidelines for green bicycle lanes on state highways and roadways only allows the use of green bicycle lanes at conflict points with other road users. FDOT advised that it is in the planning stages of a long term project for a protected pathway along the Julia Tuttle Causeway that would accommodate pedestrians and bicycles. Currently, the long-term implementation of a pathway along the Julia Tuttle Causeway is under review by the District VI Design Office; however, no exact time for implementation has been provided. The Julia Tuttle Causeway (I-195) is part of the Interstate System; therefore further coordination with the Federal Highway Administration is required for implementation of the pathway.

## **CONCLUSION**

It is recommended that the Mayor and City Commission approve the resolution urging FDOT to stripe dedicated bicycle lanes on the Julia Tuttle causeway (I-195) and to stripe green bicycle lanes on the those portions of I-395 and the A1A, known as the MacArthur Causeway, as soon as possible to protect the safety of cyclists during the next phase of Miami-Dade County's Venetian Causeway Project.

J.F.D

JLM /KGB/JRG/JFD

RESOLUTION NO. \_\_\_\_\_

**A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, URGING THE FLORIDA DEPARTMENT OF TRANSPORTATION ("FDOT") TO STRIPE DEDICATED BICYCLE LANES ON THE JULIA TUTTLE CAUSEWAY (I-195) AND TO STRIPE GREEN BICYCLE LANES ON THOSE PORTIONS OF I-395 AND A1A KNOWN AS THE MACARTHUR CAUSEWAY AS SOON AS POSSIBLE TO PROTECT THE SAFETY OF CYCLISTS DURING THE NEXT PHASE OF MIAMI-DADE COUNTY'S VENETIAN CAUSEWAY PROJECT.**

**WHEREAS**, in April 2016, Miami-Dade County ("County") advertised a Request for Price Quotation (RPQ) for the rehabilitation of the East Venetian Bascule Bridge (Bridge No. 874474) connecting Rivo Alto Island and Belle Isle and the East Venetian Bridge (Bridge No.874481) connecting Belle Isle and Purdy Avenue (collectively, the "Venetian Causeway Project" or "Project"); and

**WHEREAS**, the Venetian Causeway Project includes, but it is not limited to, mechanical repairs to the East Venetian Bascule Bridge (874474), such as replacing motors, brakes, switches, wiring, tread plates, and other mechanical elements; and

**WHEREAS**, the Project also includes repairs to the bridge deck for the East Venetian Bridge (874481); and

**WHEREAS**, the County and its chosen contractor will be hosting a Pre-Construction meeting on July 20, 2016 regarding the scope of work for the Venetian Causeway Project; and

**WHEREAS**, at the meeting, County staff anticipates finalizing the Project schedule and the construction approach; and

**WHEREAS**, the existing lane configuration of the Venetian Causeway includes bicycle lanes and the operational characteristics of the corridor (low operational speed and low vehicular volumes) promote safe and comfortable bicycling and walking; and

**WHEREAS**, the Venetian Causeway Project will affect pedestrian and bicyclist routes between Miami Beach and the mainland; and

**WHEREAS**, currently, the Julia Tuttle Causeway (I-195) and those portions of I-395 and A1A known as the MacArthur Causeway have striped bicycle lanes; however, given the existing operational conditions of the corridors (high speed and high vehicular volume, bicycle facilities adjacent to the travel lanes), bicyclists are not likely to use these corridors; and

**WHEREAS**, on July 8, 2016, the City met with FDOT to discuss mitigation efforts to enhance bicycle facilities during the closure of the Venetian Causeway during the Project; and

**WHEREAS**, FDOT advised that enhancements to the existing striping and wayfinding signage to mitigate the adverse effects for bicyclists and pedestrians as a result of the Project are only planned for the MacArthur Causeway; and

**WHEREAS**, at the meeting, the City requested the striping of green bicycle lanes for the MacArthur Causeway; however, FDOT advised that current guidelines for green bicycle lanes on state highways and roadways only allows the use of green bicycle lanes at conflict points with other road users; and

**WHEREAS**, FDOT advised that it is in the planning stages of a long-term project for a protected pathway along the Julia Tuttle Causeway that would accommodate pedestrians and bicycles; and

**WHEREAS**, currently, the long-term implementation of a protected pathway along the Julia Tuttle Causeway is under review by the District VI Design Office; however, no exact time for implementation has been provided; and

**WHEREAS**, the Julia Tuttle Causeway (I-195) is part of the Interstate System; therefore, further coordination with the Federal Highway Administration is required for implementation of a protected pathway.

**NOW, THEREFORE, BE IT DULY RESOLVED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA**, that the Mayor and City Commission hereby urge the Florida Department of Transportation to stripe dedicated bicycle lanes on the Julia Tuttle Causeway (I-195) and to stripe green bicycle lanes on the those portions of I-395 and A1A known as the MacArthur Causeway as soon as possible to protect the safety of cyclists during the next phase of Miami-Dade County's Venetian Causeway Project.

**PASSED and ADOPTED** this 13<sup>th</sup> day of July, 2016.

**ATTEST:**

\_\_\_\_\_  
Philip Levine, Mayor

\_\_\_\_\_  
Rafael E. Granado, City Clerk

APPROVED AS TO  
FORM & LANGUAGE  
& FOR EXECUTION

  
\_\_\_\_\_  
City Attorney

7/12/16  
Date

**THIS PAGE INTENTIONALLY LEFT BLANK**

**ATTACHMENT**

**R7GG**

**City of Miami Beach Stormwater Funding  
Presentation to the City Commission**

**July 13, 2016**

# **Outline of Presentation**

- City's Current Stormwater Methodology
- What is an ERU?
- City's Current Stormwater Rates and Revenue
- Methodology Modifications for Discussion
- Recommended Methodology
- What's Next

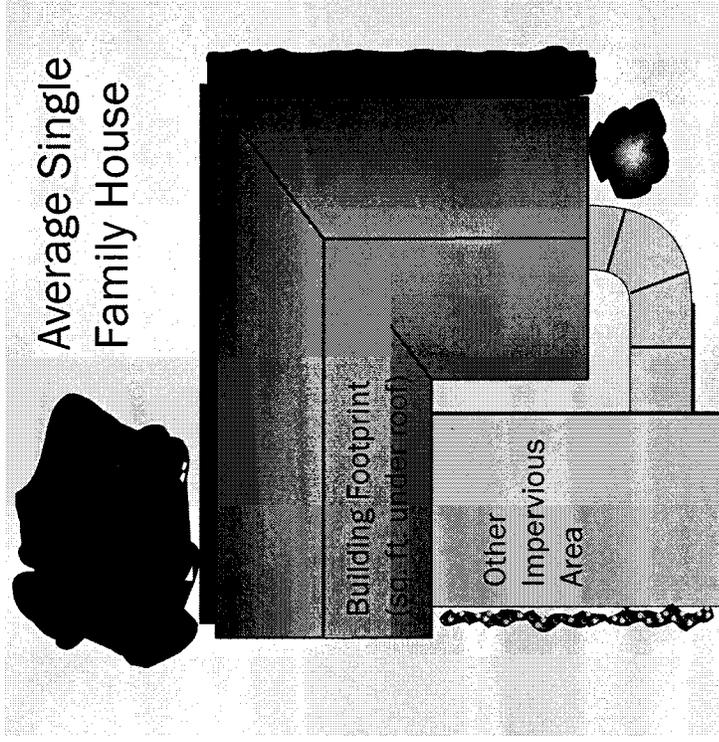
# City's Current Stormwater Methodology

- Equivalent Residential Unit (ERU) = 791 square feet of impervious area
- All Residential = 1 ERU/Dwelling Unit
- Non-Residential = Impervious Area  $\div$  791 square feet
- ERUs rounded to nearest whole number
- Each property assigned minimum of 1 ERU
- Current number of ERUs = 110,265

# What is an Equivalent Residential Unit “ERU”?

- Measurement that serves as a common index to compare runoff generated by different sized properties
- Equivalent Residential Unit value is developed using a statistical sampling of residential parcels in City
- Building Footprint + Additional Impervious Area (sidewalks, porches, decks, pools, etc.) = Total Impervious Area

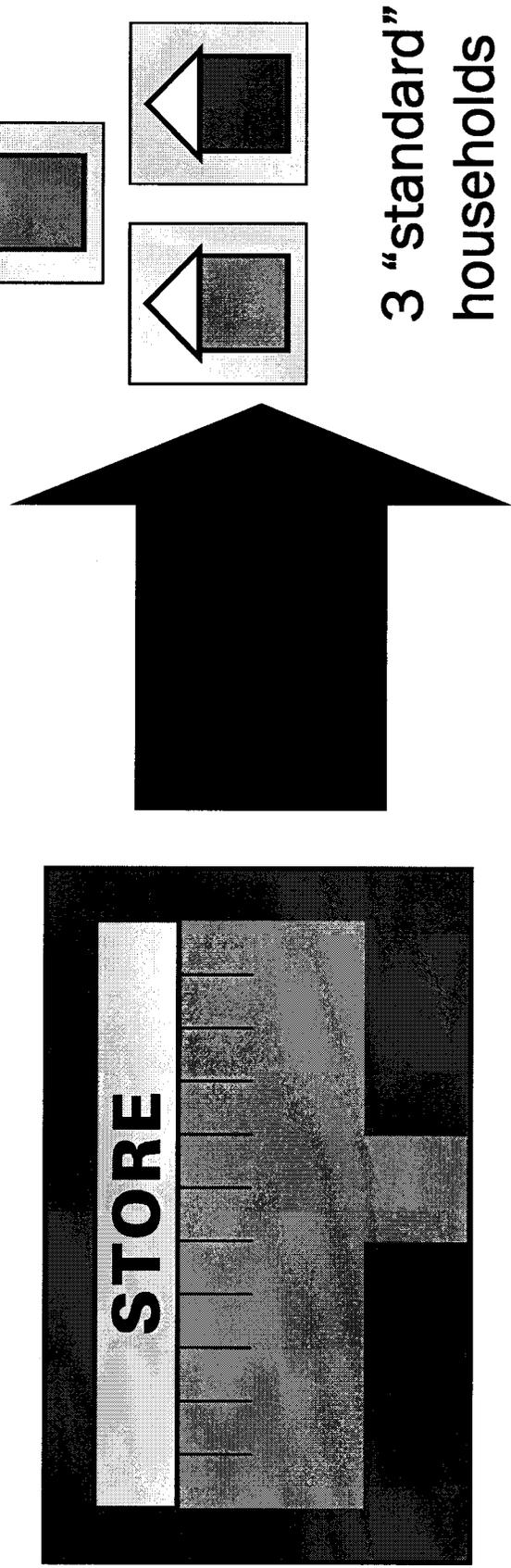
13



1 ERU = 791 square feet of total impervious area

# Impervious Area Methodology ("Equivalent Residential Units")

Customer pays based on number of "standard"  
households



# City's Current Stormwater Rates

- Current monthly rate = \$16.67
- Current annual rate = \$200.04
- Approximate annual billing = \$22,057,310.58
- Approximate annual revenue @ 98% = \$21,616,164
- Projected Fiscal Year 2016-17 monthly rate = \$22.67\*
- Projected Fiscal Year 2016-17 annual rate = \$272.04\*
- Projected Fiscal Year 2016-17 annual revenue @ 98% = \$29,300,602\*
- Reductions for properties with NPDES permit and/or served by privately owned and maintained BMPs
- Collected on monthly water bill

# City's Current Billing Units

Account Type	Total Units	Monthly Billing	Annual Billing	Percent of Units
Apartments (General)	15,175	\$252,967.25	\$3,035,607.00	13.76%
City (General)	1,909	\$31,823.03	\$381,876.36	1.73%
Commercial (General)	36,136	\$602,387.12	\$7,228,645.44	32.77%
Condo (Residential Condo)	41,653	\$694,355.51	\$8,332,266.12	37.78%
Duplex (General)	48	\$800.16	\$9,601.92	0.04%
Hotel (General)	7,121	\$118,707.07	\$1,424,484.84	6.46%
Residential (Residential)	8,223	\$137,069.07	\$1,644,828.90	7.46%
<b>Total</b>	<b>110,265</b>	<b>\$1,838,109.21</b>	<b>\$22,057,310.58</b>	<b>100.00%</b>
<b>Current Billing Unit Counts by New Categories</b>				
<b>Category</b>	<b>Total Units</b>	<b>Percent of Units</b>		
General Parcel	60,389	54.77%		
Non-Res Condo	0	0.00%		
Residential	8,223	7.46%		
Residential Condo	41,653	37.78%		
<b>Total</b>	<b>110,265</b>	<b>100.00%</b>		

# Methodology Modifications

- Develop/update impervious area information
- Update ERU value
- Create rate classes
  - Residential
  - Condominiums
  - General
- Develop tiers for Residential Category

# Preliminary Database Development

Assign assessment rate category based on DOR  
Code and calculate impervious area

- **Residential**
  - Measure statistical sample of single family parcels and/or multi-family parcels
  - Develop residential tiers
- **Condominiums**
  - Measure impervious area of all condominium parcels
- **General**
  - Measure impervious area of all general parcels
    - Includes commercial, institutional, industrial/warehouse, government parcels, mobile home/RV parks
    - Unique parcels

# Recommended Methodology Revisions

- ERU Value = 849 square feet
- Minimum of 1.0 ERU per parcel
- Three rate classes
  - Single Family Residential
  - Condominiums
  - General Parcels
- Two Single Family Tiers:
  - Building Footprint Area Range 100 - 5,228 ft<sup>2</sup> = 1 ERU
  - Building Footprint Area Range > 5,228 ft<sup>2</sup> = Measured and Calculated  
(Footprint x Factor (2.03))/ ERU Value (849 ft<sup>2</sup>)

# Single Family Residential Tiers

Residential Tier	Building Footprint Area Range (Provided by the Property Appraiser)	Plus Additional Impervious Area	Assigned Billing Units (ERUs)
Most	100-5,228 sq. ft.	Assumed based on statistical sample (Factor = 2.03)	= 1.0 ERU
Very Large	> 5,228 sq. ft.	Measured	= Calculated*

\*(Footprint x Factor (2.03))/ ERU Value (849 ft<sup>2</sup>)

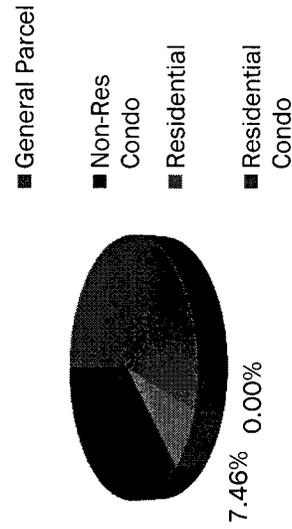
# Single Family Tier Results

	Parcel Count	Percent of Parcels	Assigned ERU	Total ERUs	Charge	Total Revenue	Percent of Revenue
100 - 5,228	4,678	95.70%	1	4,678	\$202.47	\$928,211.57	50.03%
>5,228	210	4.30%	Impervious/ERU Value	4,672	Varies	\$927,009.14	49.97%
<b>Total</b>	<b>4,888</b>			<b>9,350</b>		<b>\$1,855,220.70</b>	

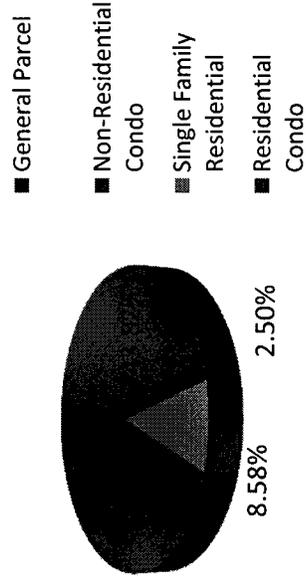
# Methodology Results

Category	Current Units		Recommended Methodology	
	ERUs	Percent of Units	ERUs	Percent of Units
General Parcel	60,389	54.77%	47,738	43.82%
Non-Residential Condo	0	0.00%	2,724	2.50%
Single Family Residential	8,223	7.46%	9,350	8.58%
Residential Condo	41,653	37.78%	49,126	45.09%
<b>Total</b>	<b>110,265</b>	<b>100.00%</b>	<b>108,939</b>	<b>100.00%</b>

## Current Units



## Recommended Method



# Methodology Results

- Total ERUs = 108,939
- Adjusted ERUs @ 98% = 106,760
- Rate Per ERU = \$16.87/month or \$202.47/year
- Estimated Annual Assessment Revenue at Current Rate and Adjusted ERUs = \$21,356,314 (-\$259,850)

# What's Next

- Finalize assessment methodology
- Establish assessment rates
- Establish the fiscal year for implementation
- Confirm collection method