

Solid Waste Impact Fees

SWANA FL Conference

February 21, 2022



Agenda

1. Introduction to Raftelis
2. What are Impact Fees?
3. Who Pays Impact Fees?
4. Why Charge an Impact Fee?
5. How are Impact Fees Determined?
6. Conclusion



Who is Raftelis?

Helping local governments and utilities thrive



Financial planning



Executive recruitment



Strategic planning



Communications & outreach

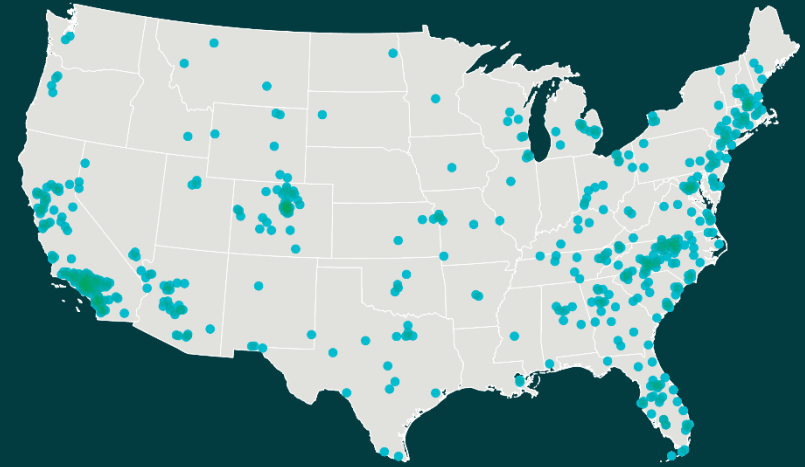


Organizational assessments



Data & technology

National Experience



With more than...

120+

consultants across the U.S.

Raftelis has provided assistance to over

1,200+

public agencies and utilities

What are Impact Fees?



Fees to recover the cost of infrastructure to serve growth



Required to Demonstrate a Connection Among Cost & Growth

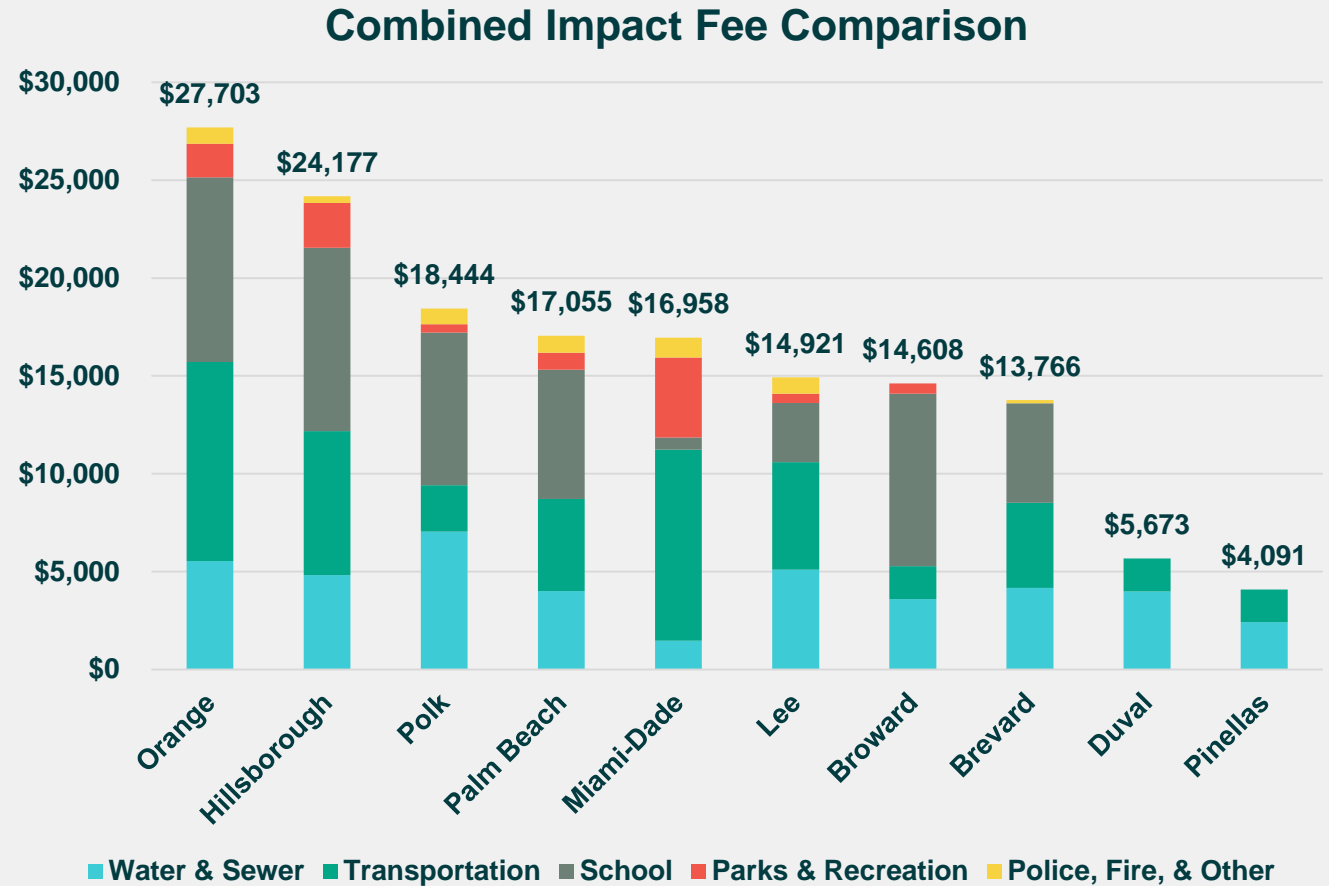
**Dual Rational Nexus Test: a) Demonstrate infrastructure is needed to serve growth; and
b) Cost allocation must be proportional to benefit received by growth**



Charged by municipalities for water, sewer, police, fire, parks and recreation infrastructure; fees may range from \$1k-\$20k per household

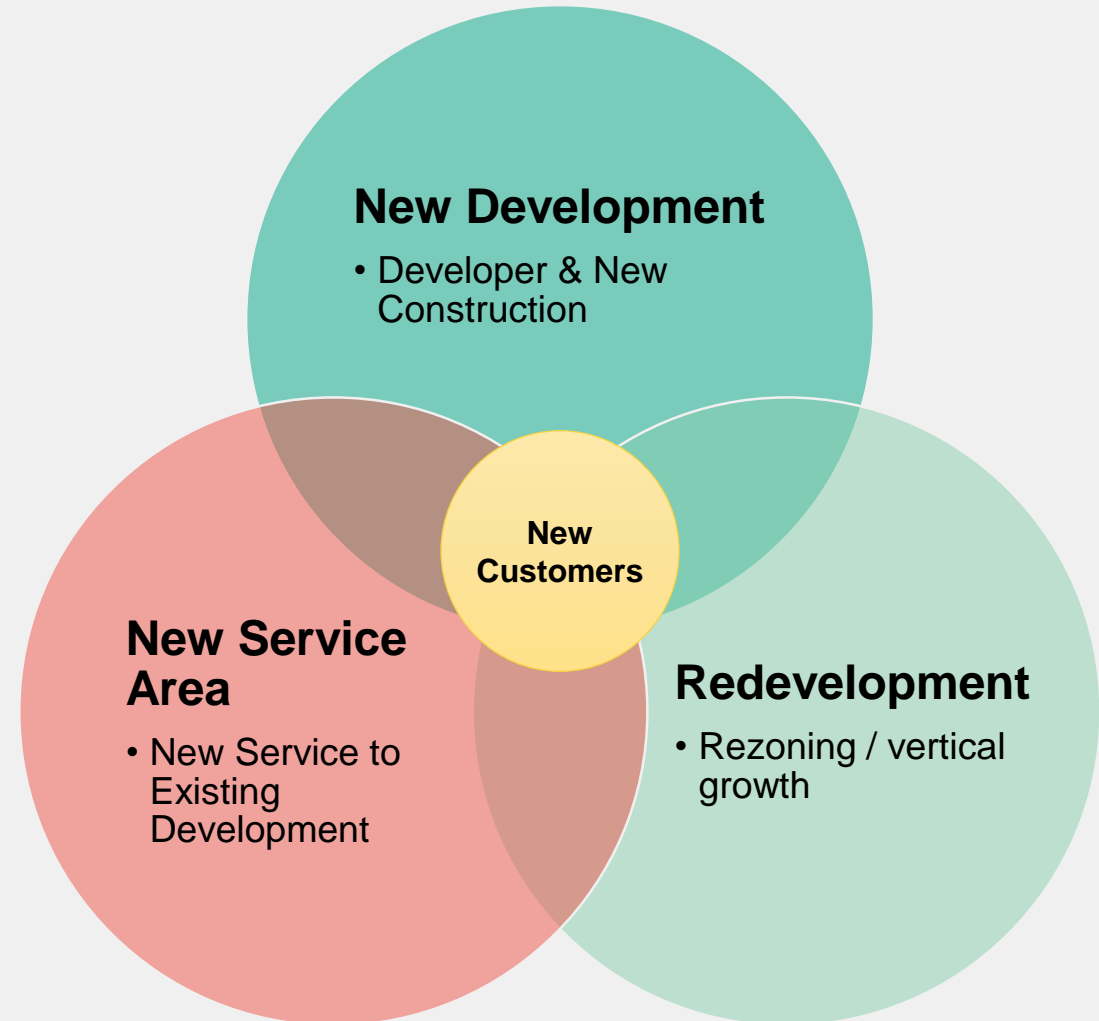
What are Impact Fees? *(continued)*

- Impact Fee calculations must be based on recent and local data
- Few Local Governments Charge Solid Waste Impact Fees
 - › Brevard County - \$160
 - Charged to Recover Cost of Disposal
 - Used to supplement expansion / new construction ~33% of cost



Who pays Impact Fees?

- Paid by Any New Customer
 - › Fees Typically Paid by Developers and Passed on through Property Sale
 - › FS 163.31801 require fees to be paid at the time of building permit Issuance
 - › Sometimes Paid by Existing Development as Service is Extended or Acquired



Why charge an Impact Fee?

1. Policy Reasons

- Growth pays for growth
 - Burdens New Customers who Benefit from Expansion
 - Similar to the Save our Homes exemption (property taxes)



2. Financial Reasons

- Provides funding source for infrastructure costs
 - We Estimate it May Represent Between 1% to 6% of Gross Revenues



Why charge an Impact Fee for Solid Waste?

1. Growing Need for Infrastructure

- **FL Population Growing**
 - As Growth Occurs More Infrastructure Required
 - Transfer Stations, Recycling Processing, WTE / Landfill, etc.
- **More Recycling Infrastructure Investment**
 - Old Tech -> New Tech
 - Lack of Processing Capacity



FL Medium Pop Growth 2020 - 2040



Source: Florida Office of Economic & Demographic Research (medium growth projection)
http://edr.state.fl.us/Content/population-demographics/data/CountyPopulation_2020.pdf

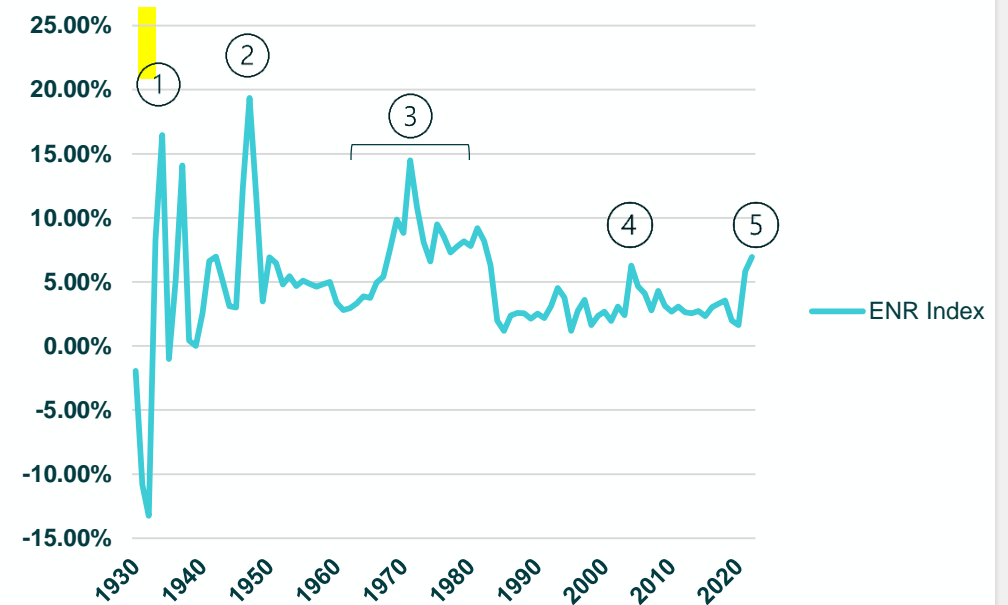
- **2020 - 2040**
 - 4.8 million people
 - 1.8 million households
 - Potentially \$0.9 to \$2.7 billion* (today's \$) in FL municipal solid waste infrastructure

*assumes \$500 - \$1,500 per household

Why charge an Impact Fee for Solid Waste?

- Experiencing Resurgence in Inflation
- ENR Construction Cost Index
 - 3.3% last 20 Years
 - 8.4% Feb 22 / Feb 21
- For Every \$1 invested Evenly Over Next 20 Years
 - Inflation at 3.3% = \$1.39
 - Inflation at 4.3% = \$1.54

Inflation in Capital Costs



① 1933-1939 FDR's New Deal

② 1941-1945 WWII

③ 1965-1982 Bretton Woods

④ 2005 – Lead up to Housing Crisis

⑤ 2020 – Present COVID

How are Impact Fees Determined?

1

Eligible Costs

Identifying the capital and potential one-time operating costs associated with serving system growth

2

Unit Cost

Identifying costs in terms of the appropriate units of service capacity per the fee type

3

Impact Fee Calculation

The application of the cost per unit of service capacity to the customer's level of service requirements

$$\frac{\text{Eligible Cost}}{\text{Capacity}} = \text{Unit Cost}$$

$$\text{Unit Cost} * \text{Level of Service} = \text{Impact Fee}$$

1) Eligible Costs

- Municipal Owned Infrastructure Costs Necessary to Serve Growth
 - › Collection Vehicles
 - › Transfer Station
 - › Recycling / MRF Facilities
 - › Waste-to-Energy (WTE)
 - › Other Disposal Facilities
 - › Household Hazardous Waste Facility
- Should exclude Grant Funding
- Long Lived Assets
 - › >5 Years Service Life
- May Need to Consider Allocating Costs Among New vs. Existing Customers



2) Determining Unit Costs

- Numerator - Eligible Costs
 - › Allocating Shared Facility Sites:
 - Allocate by usage or sqft
 - Sample #1 MRF: 47% & Transfer Station: 53%
- Denominator – Capacity
 - › Sample #1 Permit vs. Constructed Capacity
 - › Sample #2 Based on Accounts Served
 - Commercial May Consider Frequency of collection & Container Size

$$\frac{\text{Eligible Cost}}{\text{Capacity/Units}} = \text{Unit Cost}$$

Sample #1 Facility Unit Costs

	MRF	Transfer Station
Capital Value (96' value)	\$16,068,555	\$17,347,741
Capacity (TPY)	31,200	280,800
Unit Cost per Ton	\$515.02	\$61.78

Sample #2 Truck Unit Costs

	Residential	Commercial
Truck Cost (21' value)	\$337,017	\$338,698
Accounts per Route	3,830	612
Unit Cost per Account	\$88.00	\$553.00

3) Impact Fee Calculation – Level of Service (LOS)

- Determining LOS by Class
 - › Residential: Service Typical the Same
 - Class TPY / Accounts
 - › Commercial: Service Often Varies
 - Collection Frequency & Container Size
 - Requires Methodology to Allocate Waste to Accounts
 - Equivalent Billing Units (EBU)
 - Used to Equalize Variance in Service Levels

$$\text{Unit Cost} * \text{Level of Service} = \text{Impact Fee}$$

Sample #1 Residential MRF & TS Calculation

	MRF	Transfer Station
Unit Cost per Ton	\$515.02	\$61.78
Residential TPY	0.30	2.02
Residential Fee	\$154.18	\$124.67

3) Impact Fee Calculation *(continued)*

Commercial Fee Design

Container Volume (CY)	Collection Frequency	Accounts	Calculated EBUs	EBU Allocation	Alloc. Waste / Account	Tons / Account	TS Unit Cost	Fee / Account
<i>a</i>	<i>b</i>	<i>c</i>	<i>a*b*c = d</i>	<i>d / Σ = e</i>	<i>fΣ*c</i>	<i>f / c = g</i>	<i>h</i>	<i>g * h</i>
2	1	2,000	4,000	38.0%	22,814	11.41	\$61.78	\$704.71
2	2	900	3,600	34.2%	20,532	22.81	\$61.78	\$1,409.42
2	3	250	1,500	14.3%	8,555	34.22	\$61.78	\$2,114.13
2	4	100	800	7.6%	4,563	45.63	\$61.78	\$2,818.85
2	5	50	500	4.8%	2,852	57.03	\$61.78	\$3,523.56
2	6	<u>10</u>	<u>120</u>	<u>1.1%</u>	684	68.44	\$61.78	\$4,228.27
		3,310	10,520	100%	60,000			

Major Steps

1. Factor the accounts into EBUs
2. Use EBU's to allocate waste (since we do not have the data)
3. Divide the allocated waste per account to determine the fee

Conclusions

Benefits

- Additional Revenue Stream
- Helps Support Growth Pays for Growth
- Lower Monthly / Annual Service Fees

Considerations

- Funds are Restricted by Law
- Use limited to “expansion” or “expansion” related debt service
- Impact fees are Commonly Challenged by Developers
 - › Always consult legal counsel





Thank you!

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FL Impact Fee Law (FS 163.31801)

- Calculation must be based on recent and local data
- Infrastructure must have service life of > 5 years
- Rational Nexus - fee must be proportional and reasonably connected with
 - The need for additional capital facilities and the increased impact generated by new residential or commercial construction
 - The expenditures of the funds collected and benefits to new residential or nonresidential customers
- Funds must be earmarked after collected to be for expansion related capital projects to benefit new users

Disclaimer: We are not attorneys, nor can we provide a legal opinion.

For legal interpretations please discuss with your legal counsel.

