



**Jacksonville City Council  
Transportation, Energy & Utilities Committee**

**Annual Recycling Report  
FY 2019/2020**

**Department of Public Works**

**April 5, 2021**

# Agenda



- **Report Summary**
- **Report Highlights**
- **Department Recommendations**

## Report Summary



- **Required by Ordinance 2020-700-E (Section 380.512)**
- **Report Requirements**
  1. Efforts to establish Recycling of Financially Attainable Materials
  2. Complaints received for Recycling Program
  3. Recycled Material Statistics
  4. Collaborative Efforts with third parties to maintain Recycling
  5. Public Education efforts to encourage Recycling
  6. Financial Accounting of the Recycling Program (Revenue/Expense)
  7. Performance Standards to Measure Compliance with City Contracts
  8. Recommendations for Improvements to the Program
  9. Certification that the City is using best practices to the Program
  10. Any other Information requested by City Council



## Report Summary



- **Summary of Jacksonville's Residential Recycling Program**
  - ❑ Ordinance Section 380, Part 5 makes Residential Recycling mandatory
  - ❑ Single Source Collection (**Do Not place in Plastic Bags**)
    - Paper
    - Yard Trash (collected weekly)
    - Plastics #1-3, 5 & 7
    - Tires (collected when notified)
    - Glass
    - Appliances (collected when notified)
    - Metals
    - Household Hazardous Waste (collected at Facility)  
(Oil/Batteries/etc.)
  - ❑ Collected Curbside every other week
  - ❑ Delivered to the City's Recycling Contractor (Republic)

# Report Highlights



- **Report:**

- 1. Efforts to establish Recycling of Financially Attainable Materials**

- Communication with the City's Recycling Contractor concerning Commodity Values
- Investigate Commodity Market for New Manufacturer Uses

- 2. Complaints received for Recycling Program:**

Recycling Issues	ADVANCED DISPOSAL	REPUBLIC SERVICES	WASTE PRO	COJ SOLID WASTE	SW Compliance	Grand Total
Cart	591	2,620	453	529		4,193
Damaged	92	2,304	180	51		2,627
Missing	499	316	273	478		1,566
Improper Placement	15	20	23	20	2	80
Improper Satout	0	0	0	0	124	124
Messy Collection	63	144	165	16		388
Missed Collection	1,840	6,322	3,738	758		12,658
Entire Street	957	4,294	2,102	225		7,578
My House	883	2,028	1,636	533		5,080
<b>Grand Total</b>	<b>2,509</b>	<b>9,106</b>	<b>4,379</b>	<b>1,323</b>	<b>126</b>	<b>17,443</b>
Premise Count	73,982	77,195	77,583	51,393		

Total # of Collections per year      1,923,532      2,007,070      2,017,158      1,336,218

# Report Highlights



## 3. Recycled Material Statistics – Separated by Type

Type	Commodity	Composite %
Fiber	CORRUGATED CONTAINERS	12.427%
Fiber	SOFT MIXED PAPER	28.972%
Fiber	ASEPTIC CARTONS	0.239%
Plastic	PET	5.295%
Plastic	Natural HDPE	1.149%
Plastic	Colored HDPE	1.650%
Plastic	COMMINGLED PLASTICS # 3-7	0.778%
Plastic	MIXED BULKY RIGID	0.907%
Glass	GLASS (3 MIX)	24.367%
Metal	STEEL CANS	1.971%
Metal	ALUMINUM CANS	1.007%
Metal	METAL SCRAP	1.661%
Non-Recyclables	RESIDUAL	19.492%
		99.92%



## Report Highlights



### 4. Collaborative Efforts with third parties to maintain

#### Recycling

- Main efforts have been internal collaboration
  - Department of Public Works
  - Public Affairs Office
  - Mayor's Office
  - Republic Services (Recycling Processor)
- Recent (2021) Discussions with Third Parties
  - Florida Beverage Association
  - The Recycling Partnership
    - (potential Grant for recycling education & outreach)

## Report Highlights



### 5. Public Education Efforts to Encourage Recycling

- City Website [coj.net](http://coj.net)
  - Provides list of recyclable materials
  - Videos of proper recycling
- Recycling schedule calendars contain information on recyclables
- Flyer/brochure provided with new carts, during compliance efforts
- Flyer/Brochure provided to various groups
  - Blight Office, CRM call center, City Hall Reception, Clean it up/Green it Up
- Working with ITD & PAO on development of Mobile Application (App) that will provide information on proper recycling/disposal of materials
- Republic Services
  - Has appeared on local news stations to discuss recycling
  - Hosts field trips to recycling center (pre-COVID-19)
  - Art Walk displays, Recycling Simplified website, Keep Jacksonville Beautiful Paper Shredding Event



## Report Highlights



### 6. Financial Accounting of the Recycling Program

- Expenditures
  - Collections (includes fuel & carts): \$6,055,158
  - Processing Fee (48,280 Tons): \$2,598,887
  - Contamination Disposal (>10% Non-Recyclables): \$74,750
  
- Revenues
  - 50% of Recyclable Material Sales: \$1,174,896
  
- Capital Improvements Savings
  - Trail Ridge Landfill Expansion (38,869 Tons): \$822,777

#### General Analysis of Costs \* :

Recycling Costs (not including TRLF Savings): \$31.04/Ton  
Recycling Costs (including TRLF Savings): \$13.99/Ton  
Non-Recycling Costs (normal disposal): \$29.50/Ton

\* Note...Analysis above did not include Collections Expense

# Report Highlights



## Processing & Sale of Recyclables Summary

TABLE 1: PROCESSING AND SALE OF RECYCLABLES

FY19\_20 Total Tons Received and Processed

48,279.52

Type	Commodity	Composite %	Actual	Index Description	Composite Tons	Total Value
Fiber	CORRUGATED CONTAINERS	12.427%	Rate Sold	\$/Ton, PS II baled, F.O.B. seller's dock	5,999.70	\$ 476,944.95
Fiber	SOFT MIXED PAPER	28.972%	Rate Sold	\$/Ton, PS I baled, F.O.B. seller's dock	13,987.54	\$ 164,943.50
Fiber	ASEPTIC CARTONS	0.239%	Rate Sold	\$/Ton, PS 52 baled, F.O.B. seller's dock	115.39	\$ (798.60)
Plastic	PET	5.295%	Rate Sold	Cents/lb, baled and picked up	2,556.40	\$ 437,619.43
Plastic	Natural HDPE	1.149%	Rate Sold	Cents/lb, baled and picked up	554.73	\$ 563,284.65
Plastic	Colored HDPE	1.650%	Rate Sold	Cents/lb, baled and picked up	796.61	\$ 181,218.60
Plastic	COMMINGLED PLASTICS # 3-7	0.778%	Rate Sold	Commingled (#3-7), cents/lb, baled and picked up	375.61	\$ 45,655.33
Plastic	MIXED BULKY RIGID	0.907%	Rate Sold	Cents/lb, baled and picked up	437.90	\$ 5,518.89
Glass	GLASS (3 MIX)	24.367%	Rate Sold	\$/Ton, delivered	11,764.27	\$ (103,678.16)
Metal	STEEL CANS	1.971%	Rate Sold	\$/Ton, sorted, baled and picked up	951.59	\$ 66,072.73
Metal	ALUMINUM CANS	1.007%	Rate Sold	cents/lb, sorted, baled and picked up	486.17	\$ 465,170.49
Metal	METAL SCRAP	1.661%	Rate Sold	Not on Index (Index Value = Actual Rebate)	801.92	\$ 47,840.21
Non-Recyclables	RESIDUAL	19.492%	N/A	Not on Index	9,410.64	
					48,238.48	\$ 2,349,792.03
					99.915%	

FY 19_20 Total Recycle Processing Expense	48,279.52 tons	\$53.83 per ton	\$2,598,886.56
FY 19_20 Total Residual Disposal Expense (>10%)	48,279.52 tons	0.09492	4,582.69 tons
FY 19_20 Total Recycle Revenue (50% of sales)	\$2,349,792.03	0.5	\$1,174,896.02
			\$29.87 per ton
			\$136,884.95*

\* = Because of COVID-19 tipping fee waiver at Trail Ridge for six months, actual residual disposal cost was \$74,749.99

Total City Cost of Processing, Residual Disposal and Sales = \$2,598,886.56 + \$74,749.99 - \$1,174,896.02 = \$1,498,740.53

## Report Highlights



### 7. Performance Measures to Measure Compliance

#### i. Customer Service

- 17K Reported Complaints for 7.3 million Collections (0.24% of Collections)
- Focus on Complaint reduction

#### ii. Recycling Volumes

- Collected 48,280 Tons
- Focus on increasing Recycling Volumes

#### iii. Reduced Recycling Contamination Volumes

- 19.49 % Contaminated Material
- Focus on reducing Contaminated Materials

#### iv. Reduce Recycling Cost to the City of Jacksonville

- \$1,498,740 Net Cost (not including Landfill Savings)
- Focus on reducing Net Cost for Recycling Program



## Report Highlights



8. **Recommendations for Improvements to the Program**
  - i. **Revise Annual Report Submittal Date from March 1<sup>st</sup> to May 1<sup>st</sup>**
    - Allow for use of Current Hauler collection costs...due March 1<sup>st</sup>
  - ii. **Increase volume of Recyclable Materials & Reduce volume of Contaminated Materials**
    - Improve Education & Outreach
      - Keep City Website current
      - Develop Mobile Application
      - Social Media Platforms Outreach
      - Pursue Collaboration and Grants with Organizations such as The Recycling Partnership (FBA Partner)
    - Identify potential new Program Contributors
      - Government Agencies (DCPS, etc.)
      - Multi-Family & Commercial Property Owners

# Report Highlights



- **Identify new Recycling Material Markets**
  - Plastic Use to Energy (Regen Energy)
  - Glass use to create Aggregate for Road Base (Aero Aggregates)
  
- **Evaluate Recycling Material for adjustments in Collection (Add and/or Remove Material)**
  - New Materials to consider adding – None
  - Current Materials to consider for removal – **Glass**
    - Almost 25% of the Recycling Volume Collected (11,764 Tons)
    - Most costly component of material Recycled
    - \$62.64/Ton (not including TRLF savings)      Annual - \$737K
    - \$41.47/Ton (including TRLF savings)         - \$488K
    - \$29.50/Ton if eliminated from Recycling Stream - \$347K
  - Glass Recycling conserves Energy
  - Challenged public compliance...could result in increased contamination volume within Recycling Collections

## Report Highlights



### 9. Certification that the City is using Best Practices for the Program

#### 10. Any Other Information requested by City Council

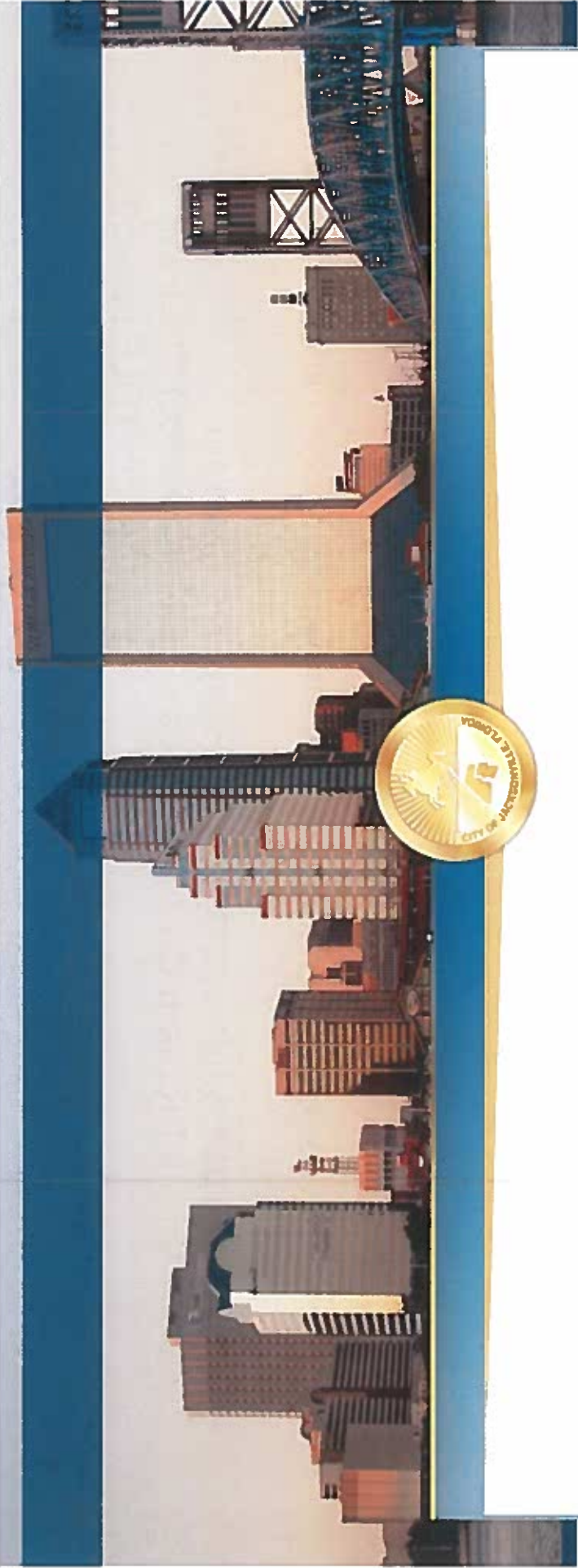
- Councilman Salem provided comments/questions that have been incorporated into the presentation and recommendations.
  - Page 6 – The subcontract haulers' audited reports are due to the City annually by March 1<sup>st</sup>. Would it be wise to move the due date of the recycling report to later in the year (May 1<sup>st</sup>) to allow time for PW to review the audited reports and include those numbers?
  - Page 6 - 4.8 – Provide more detail concerning the partnerships with the FBA and TRP.
  - Page 6 - 4.8 – Has consideration been made to totally eliminate glass from the stream and educate the public on that?
  - Page 7 – Move the recommendations to the end of the report.



## Department Recommendations



- Move the Annual Recycling Report to allow for Current Hauler Costs to be evaluated...move Annual Report submittal from March 1<sup>st</sup> to May 1<sup>st</sup> of each year
- Move Department Recommendations to the end of the Annual Recycling Report
- Improve Education & Outreach with Mobil Application and through the pursuit of the Grant from The Recycling Partnership
- Continue our efforts to evaluate new Recycling opportunities
- Retain Glass within Jacksonville's Recycling Program
  - Annual Program Cost Difference \$390K (without TRLF impact)  
\$141K (with TRLF impact)
  - Potential Public Compliance Challenges
  - Positive Environmental Benefits recognized by recycling Glass



# Jacksonville City Council Transportation, Energy & Utilities Committee

## Questions?