



# ZWAC Meeting

June 4, 2019





# Single Stream Recycling Processing Vendors Comparison

- Single Stream Recycling Statistical Report
- Factors Affecting Net Value to the City
  - Processing fees and revenue share
  - Materials composition
- Alternative Scenarios
  - Scenario 1: Swap all tonnage/materials between vendors
  - Scenario 2: 100% of materials to Balcones Resources, Inc.
  - Scenario 3: 100% of materials to Texas Disposal Systems
    - Note: Scenarios do **not** take into consideration costs associated with transportation, employee time, etc.
- Burns & McDonnell Study

# Single Stream Recycling Statistical Report

**Zero Waste Advisory Commission - November 14th, 2018**  
**Single Stream Recycling Statistical Report**  
**FY18: October 2017 - September 2018**  
**Texas Disposal Systems (TDS) and Balcones Resources, Inc. (BRI)**

Month and Year	Contractor	Tons Delivered	Contractor Payments			Net Value to the City	Landfill Cost Avoidance	
			Revenue	Processing Cost	Net Amount Due/(Owed)	\$ per ton value	Cost Per Ton	Total
July 2018	TDS	1,744.47	\$93,506	\$197,470	(\$103,965)	(\$47.65)	\$22.52	\$49,138
	BRI	3,077.37	\$57,551	\$196,195	(\$138,644)	(\$52.37)	\$22.52	\$59,619
	<b>Total</b>	<b>4,821.84</b>	<b>\$151,056</b>	<b>\$393,665</b>	<b>(\$242,609)</b>			<b>\$108,757</b>
August 2018	TDS	1,744.47	\$74,789	\$157,875	(\$83,818)	(\$48.05)	\$22.52	\$39,285
	BRI	3,227.14	\$67,785	\$229,492	(\$161,707)	(\$50.11)	\$22.52	\$72,675
	<b>Total</b>	<b>4,971.61</b>	<b>\$141,841</b>	<b>\$387,367</b>	<b>(\$245,526)</b>			<b>\$111,961</b>
September 2018	TDS	1,822.95	\$74,789	\$164,977	(\$90,188)	(\$49.47)	\$22.52	\$41,053
	BRI	2,668.91	\$55,392	\$197,465	(\$142,073)	(\$53.23)	\$22.52	\$60,104
	<b>Total</b>	<b>4,491.86</b>	<b>\$130,180</b>	<b>\$362,442</b>	<b>(\$232,262)</b>			<b>\$101,157</b>
<b>FY18 Totals</b>		<b>58,647.15</b>	<b>\$1,832,463</b>	<b>\$4,682,672</b>	<b>(\$2,850,210)</b>			<b>\$1,299,744</b>



# Factors Affecting Net Value to the City

- **Processing Fees and Revenue Share**

- Balcones Resources, Inc. (BRI)

- Tiered processing fees and revenue share per ton

Tons	Processing Fee	Revenue Share %
0-2000	\$ 79.00	51%
2000-3000	\$ 59.00	45%
3000+	\$ 55.00	40%

- Texas Disposal Systems (TDS)

- Flat processing fee and revenue share per ton
  - Processing fee: \$90.50
  - Revenue share: 77%



# Factors Affecting Net Value to the City

- Materials Composition

Material Type	BRI	TDS
ONP #8	15.26%	16.71%
OCC	10.99%	14.18%
Mixed Paper	14.87%	10.05%
PETE	2.18%	3.06%
HDPE Natural	0.64%	0.88%
HDPE Color	0.62%	1.02%
Mixed Plastics 3-7	1.36%	4.30%
Mixed Rigid Plastic	0.67%	0.00%
UBC	1.44%	1.52%
Tin Cans	1.51%	1.68%
Scrap Metals	1.06%	1.17%
Glass	26.32%	28.50%
Residual	23.08%	16.93%
Total	100%	100%



# Current Scenario

Actual Contractor Payments						
Single Stream Recycling Statistical Report						
FY 2017-18: October, 2017 - September 2018						
Texas Disposal Systems (TDS) and Balcones Resources, Inc. (BRI)						
Month and Year	Contractor	Actual Tons Delivered	Actual Contractor Payments Rank 2			Net Value to the City \$ per ton value
			Revenue	Processing Cost	Net Amount Due/(Owed)	
July 2018	TDS	2,181.99	\$93,506	\$197,470	(\$103,965)	(\$47.65)
	BRI	2,647.37	\$57,551	\$196,195	(\$138,644)	(\$52.37)
	<i>Total</i>	4,829.36	\$151,056	\$393,665	(\$242,609)	
August 2018	TDS	2,444.47	\$74,056	\$157,875	(\$83,818)	(\$48.05)
	BRI	3,227.14	\$67,786	\$229,492	(\$161,707)	(\$50.11)
	<i>Total</i>	4,971.61	\$141,841	\$387,367	(\$245,526)	
September 2018	TDS	1,822.95	\$74,789	\$164,977	(\$90,188)	(\$49.47)
	BRI	2,668.91	\$55,392	\$197,465	(\$142,074)	(\$53.23)
	<i>Total</i>	4,491.86	\$130,180	\$362,442	(\$232,262)	
<b>FY 2017-18 Totals</b>		<b>58,647</b>	<b>1,832,463</b>	<b>4,682,672</b>	<b>(\$2,850,210)</b>	<b>(\$48.60)</b>

# Alternative Scenario #1 – Flip Tonnage

Scenario #1						
Single Stream Recycling Statistical Report						
FY 2017-18: October, 2017 - September 2018						
Texas Disposal Systems (TDS) and Balcones Resources, Inc. (BRI)						
						0%
Month and Year	Contractor	Hypothetical Tons Delivered	Scenario #1 Rank 4			Net Value to the City \$ per ton value
			Revenue	Processing Cost	Net Amount Due/(Owed)	
July 2018	TDS	2,647.37	\$92,172	\$239,587	(\$147,415)	(\$55.68)
	BRI	2,181.99	\$59,744	\$168,737	(\$108,994)	(\$49.95)
	<i>Total</i>	4,829.36	\$151,916	\$408,324	(\$256,409)	
		<i>Difference (Compared to Actual):</i>			(\$13,800)	
August 2018	TDS	2,927.14	\$111,077	\$292,056	(\$180,980)	(\$56.08)
	BRI	1,714.47	\$47,830	\$137,813	(\$89,983)	(\$51.58)
	<i>Total</i>	4,641.61	\$158,906	\$429,869	(\$270,963)	
		<i>Difference (Compared to Actual):</i>			(\$25,438)	
September 2018	TDS	2,668.95	\$88,413	\$241,536	(\$153,123)	(\$57.37)
	BRI	1,822.95	\$48,309	\$144,013	(\$95,705)	(\$52.50)
	<i>Total</i>	4,491.86	\$136,721	\$385,549	(\$248,828)	
		<i>Difference (Compared to Actual):</i>			(\$16,566)	
<b>FY 2017-18 Totals</b>		<b>58,647</b>	<b>1,941,187</b>	<b>5,018,967</b>	<b>(\$3,077,780)</b>	<b>(\$52.48)</b>
		<i>Difference (Compared to Actual):</i>			(\$227,569) *	

# Alternative Scenario #2 – 100% BRI

Scenario #2						
Single Stream Recycling Statistical Report						
FY 2017-18: October, 2017 - September 2018						
Texas Disposal Systems (TDS) and Balcones Resources, Inc. (BRI)						
Month and Year	Contractor BRI	Hypothetical Tons Delivered	Scenario #2 Rank 1			Net Value to the City \$ per ton value
			Revenue	Processing Cost	Net Amount Due/(Owed)	
July 2018	TDS	0.00	\$0	\$0	\$0	\$0.00
	BRI	4,829.36	\$106,907	\$317,615	(\$210,708)	(\$43.63)
	<i>Total</i>	4,829.36	\$106,907	\$317,615	(\$210,708)	
	<i>Difference (Compared to Actual):</i>			\$31,901		
August 2018	TDS	0.00	\$0	\$0	\$0	\$0.00
	BRI	4,971.61	\$106,279	\$325,439	(\$219,160)	(\$44.08)
	<i>Total</i>	4,971.61	\$106,279	\$325,439	(\$219,160)	
	<i>Difference (Compared to Actual):</i>			\$26,366		
September 2018	TDS	0.00	\$0	\$0	\$0	\$0.00
	BRI	4,491.86	\$95,074	\$299,052	(\$203,978)	(\$45.41)
	<i>Total</i>	4,491.86	\$95,074	\$299,052	(\$203,978)	
	<i>Difference (Compared to Actual):</i>			-\$28,281		
<b>FY 2017-18 Totals</b>		<b>58,647</b>	<b>1,335,447</b>	<b>3,849,593</b>	<b>(\$2,514,146)</b>	<b>(\$42.87)</b>
	<i>Difference (Compared to Actual):</i>			\$336,064*		

# Alternative Scenario #3 – 100% TDS

Scenario #3						
Single Stream Recycling Statistical Report						
FY 2017-18: October, 2017 - September 2018						
Texas Disposal Systems (TDS) and Balcones Resources, Inc. (BRI)						
Month and Year	Contractor - TDS	Hypothetical Tons Delivered	Scenario #3 Rank 3			Net Value to the City
			Revenue	Processing Cost	Net Amount Due/(Owed)	\$ per ton value
July 2018	TDS	4,829.36	\$185,678	\$437,057	(\$251,379)	(\$52.05)
	BRI	0.00	\$0	\$0	\$0	\$0.00
	<b>Total</b>	<b>4,829.36</b>	<b>\$185,678</b>	<b>\$437,057</b>	<b>(\$251,379)</b>	
	<i>Difference (Compared to Actual):</i>			<i>(\$8,771)</i>		
August 2018	TDS	4,971.61	\$185,133	\$449,931	(\$264,798)	(\$53.26)
	BRI	0.00	\$0	\$0	\$0	\$0.00
	<b>Total</b>	<b>4,971.61</b>	<b>\$185,133</b>	<b>\$449,931</b>	<b>(\$264,798)</b>	
	<i>Difference (Compared to Actual):</i>			<i>(\$19,272)</i>		
September 2018	TDS	4,491.86	\$163,202	\$406,513	(\$243,312)	(\$54.17)
	BRI	0.00	\$0	\$0	\$0	\$0.00
	<b>Total</b>	<b>4,491.86</b>	<b>\$163,202</b>	<b>\$406,513</b>	<b>(\$243,312)</b>	
	<i>Difference (Compared to Actual):</i>			<i>(\$11,000)</i>		
<b>FY 2017-18 Totals</b>		<b>58,647</b>	<b>2,313,301</b>	<b>5,307,567</b>	<b>(\$2,994,266)</b>	<b>(\$51.06)</b>
	<i>Difference (Compared to Actual):</i>			<i>(\$144,056) *</i>		



# Notes/Summary

- Many factors influence “Net Value to the City”
- Materials composition matters
- BRI tiered structure vs. TDS flat structure
- Carbon footprint

# Burns & McDonnell Study

- ARR commissioned study to comparing ARR recycling processing contract to:
  - Dallas: public-private partnership (2017)
  - Fort Worth: processing services agreement (2018)
  - San Antonio: processing services agreement (2014)
- Compared financial terms (both revenue and expense)

# Comparison of Select Contract Terms

Table 1: Key Contract Financial Terms

Description	Austin	Dallas	Fort Worth	San Antonio
Operator(s)	Balcones and TDS	FCC	Republic Services	Republic Services
Processing Fee	\$71.78 per ton	\$72.71 per ton	\$84.00 per ton	\$35.55 per ton
Basis of Material Value for Gross Revenue	Index	Higher of Index or Actual Sales	Higher of Index or Actual Sales	Higher of Index or Actual Sales
Revenue Share (RS) Formula	(Gross Revenue x RS%) – Processing Fee	(Gross Revenue – Processing Fee) x RS% <sup>1</sup>	(Gross Revenue – Processing Fee) x RS%	(Gross Revenue x RS%) – Processing Fee
Revenue Share Percent (RS%)	59.2% <sup>2</sup>	50.0%	80.0%	50.0%
Public Education Contribution	None	\$1.04 per household per year	\$2 per ton	\$1 per ton
Transfer and Disposal Fees for Residue	None	None	\$27.40 per ton	\$30.91 per ton <sup>3</sup>
Other Fees	None	None	None	\$12.50 per ton diaper fee <sup>4</sup>
Other Revenues	None	\$15 per ton host fee <sup>5</sup>	None	None

1. If the processing fee exceeds the gross revenue, the revenue share is \$0.
2. Weighted average for both facilities.
3. Only applies to residue exceeding 15 percent.
4. Fee imposed when amount of diapers exceeds 50 pounds per hour based on audit results and applies to all incoming tons.
5. Paid on third party tonnage accepted at the facility. Host fee in place since Dallas provided the land for the facility.

# Material Value Comparison

Table 3: Material Values (per Ton)

Description	Austin	Dallas	Fort Worth	San Antonio
ONP	\$25.00	\$30.78	\$20.00	\$50.00 <sup>1</sup>
Mix Paper	\$5.00	\$30.78	\$20.00	\$17.83
PET	\$360.00	\$365.00	\$340.00	\$340.00
HDPE Colored	\$270.00	\$350.00	\$305.57	\$303.31
HDPE Natural	\$780.00	\$790.12	\$800.00	\$811.69
<b>Aluminum (UBC)</b>	<b>\$780.00</b>	<b>\$1,410.00</b>	<b>\$1,528.85</b>	<b>\$1,390.00</b>
Steel (Tin Cans)	\$78.58	\$165.00	\$96.67	\$110.00
Scrap Metal	\$39.29	\$80.00	\$96.67	\$110.00
Glass	\$0.00	\$12.34	(\$6.79)	(\$16.15)
Mixed Plastics 3-7	\$20.00	\$77.12	\$240.00	\$240.00
Mixed Rigid Plastics	\$60.00	\$60.00	\$30.00	\$30.00
OCC	\$95.00	\$124.81	\$112.31	\$109.09

1. San Antonio has a floor price of \$50.00 per ton for ONP.

# Analysis

**Table 4: Monthly Revenues and Expenses  
Utilizing Austin's Material Quantity and Composition for Other City Contracts**

Description	Austin	Dallas	Fort Worth	San Antonio
Processing Fees	\$322,443	\$326,603	\$377,316	\$159,686
Gross Revenue	\$211,950	\$322,634	\$296,333	\$295,949
Revenue Share	(\$197,294)	\$0	(\$80,983)	(\$11,711)
Other Revenues and Expenses				
Public Education Contribution	\$0	\$16,640	\$8,984	\$4,492
Transportation	\$0	\$0	(\$9,246)	(\$2,257)
Disposal	\$0	\$0	(\$16,088)	(\$5,496)
Diaper Fee	\$0	\$0	\$0	(\$56,148)
Total Revenue (Expense)	(\$197,294)	\$16,640	(\$97,333)	(\$71,121)
Monthly Difference	\$0	\$213,934	\$99,960	\$126,173



# QUESTIONS & ANSWERS