



Recycling Update

June 8th, 2021





Introduction

- Jan. 14, 2020 Council Workshop – “Recycling Program Update” presentation
- Council request for survey to determine citizen’s interest in recycling
- Recycling Program & recommendations and potential rate impacts

Trends: Then (2000) vs. Now (2021)

Then



VS

Now



Effects

Newsprint Tonnage down 75%

- Plastics - lighter weight (thinner)
- many new types
 - most are not economically recyclable



VS



VS



Water Bottles (now 2x as light)

Trends: Then (2000) vs. Now (2021)

Changing Market



Effects

MRF Cardboard Tonnage down 40%



**Aluminum Cans Relatively Constant
(but small component)**



Recycling Costs

2014	Costs lower due to inbound material being cleaner and heavier	Low residual averages (28%)	Commodity values strong, due to supply & demand and cleaner material	Collection costs seeing inflationary level increases
Revenue/Exp.	(\$110/Ton)	(\$20/Ton)	\$190/Ton	(\$229/Ton)
	PROCESSING	RESIDUAL	COMMODITY	COLLECTION
2020	Dramatically higher costs from labor, and technology	Residual average up to 38% requiring more transport and disposal	Average values down significantly	Costs higher from due to materials, labor, fuel and technology
Revenue/Exp	(\$122/Ton)	(\$28/Ton)	\$80/Ton	(\$301/Ton)



Recycling Challenges

- Market Volatility
 - Tonnage of marketable material down
 - Volatile Commodity pricing
 - Blended rate down \$220/ton in 2011
 - \$80/ton in 2020
 - Market Competition
- Recycling costs (increased labor, sorting, collection, and repair costs)
- **Revenues not covering expenses**





Material Recovery Facility Operational Challenges

- Currently not operating due to equipment breakdowns and fire
- No significant upgrades to Material Recovery Facility since 2000
- Increased residual percentage (more landfilled)
- Cannot handle glass (landfilled)
- Small paper/cardboard cannot be captured (landfilled)



Review of Recycling Program

- Council request for resident's survey
- Council request for in depth operational analysis/review
- Recommendations



Recycling Survey

- Week of Oct. 19 – Postcard mailed to 54,961 active accounts
- “Residential Trash and Recycling Survey” open to customers Oct.19 to Nov. 16, 2020.
- Survey could be taken online or by calling Customer Service





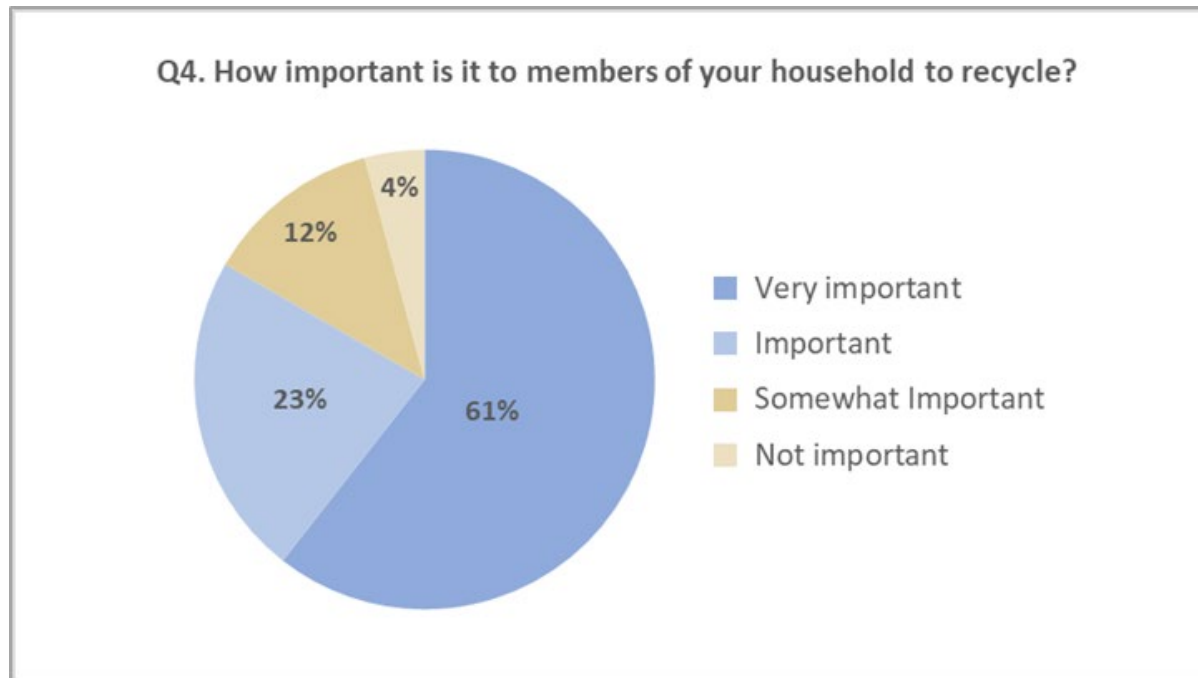
Survey Results

- 7,267 surveys submitted – 13% of households eligible for collection services
 - Exceptional Response
 - Statistically valid
- Some of the more significant survey findings include . . .



Survey Results

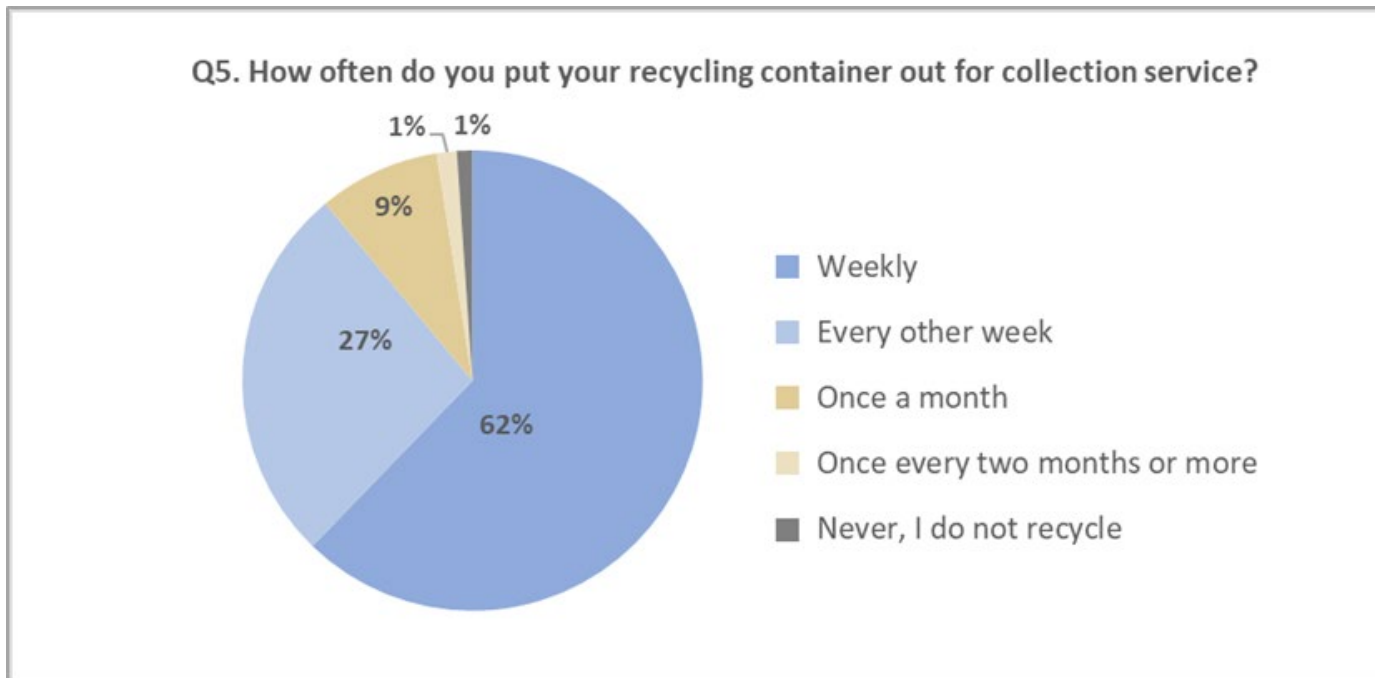
84% of respondents indicated that recycling is “Very important” or “Important” to their household.





Survey Results

62% of respondents indicated their household puts recycling out weekly, and 27% indicated every other week.

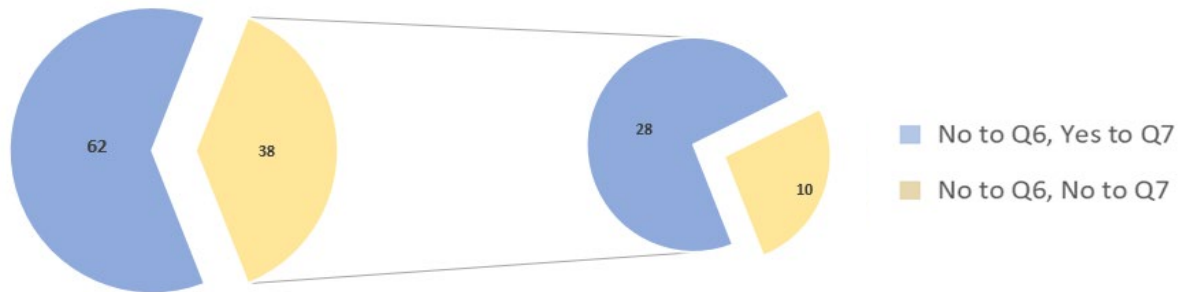




Survey Results

90% of respondents are willing to pay more for recycling collection.

Q6. Would you support an increase of up to \$1.60 in the monthly service charge to maintain your current once-per-week recycling collection service?





Survey Results

90% of respondents are willing to pay more for recycling collection.

Q7. Would you support reducing the frequency of your recycling collection from once per week to every other week in order to limit the increase in the monthly service charge to not more than \$1.00?

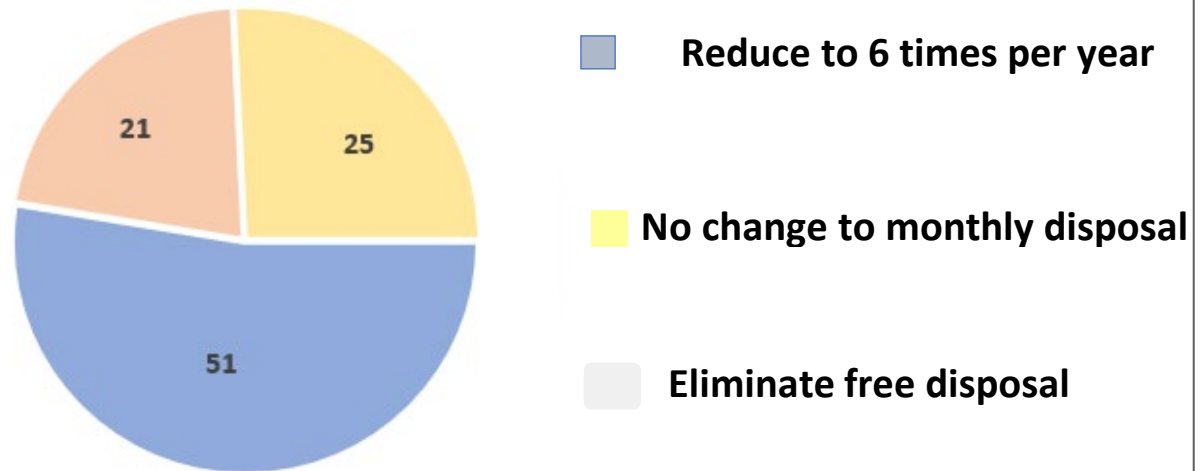




Survey Results

75% of survey respondents are willing to reduce or eliminate free disposal at the Glendale landfill.

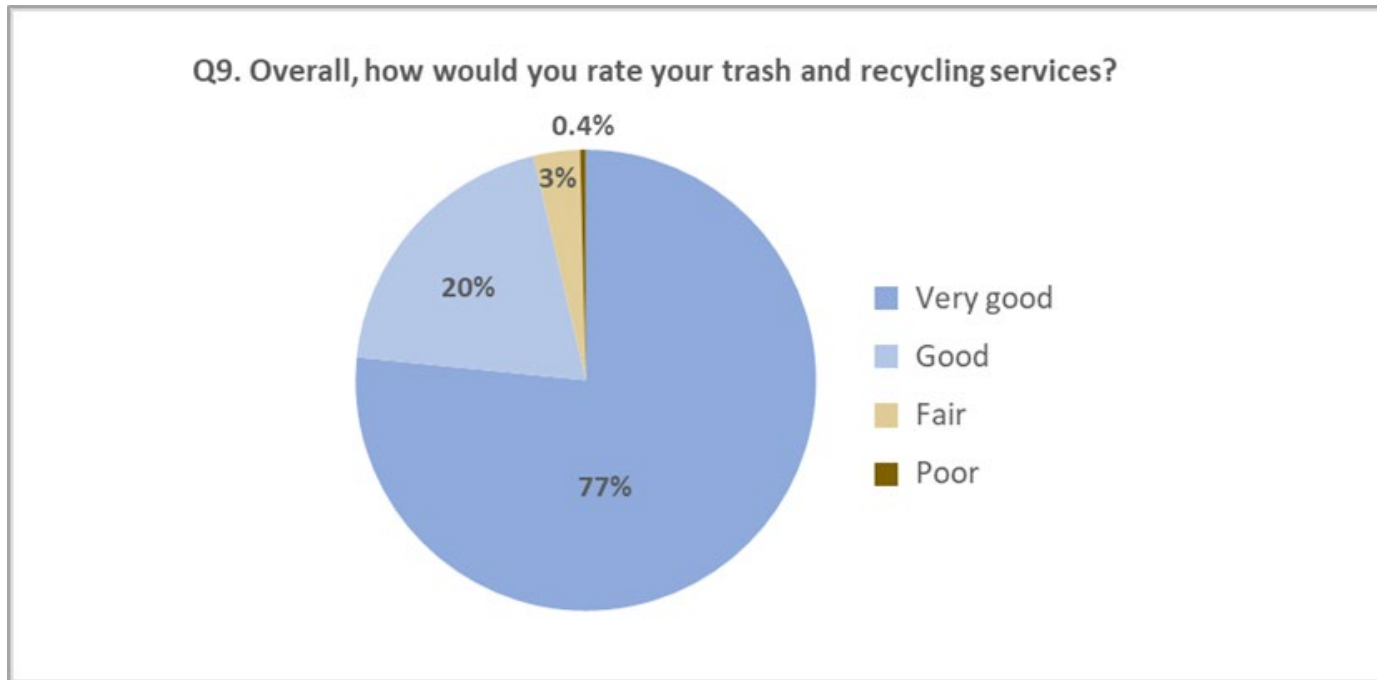
Q8(b.) Would you support reducing or eliminating “Free Disposal” at the landfill in order to minimize increases in your monthly service charge?





Survey Results

97% of respondents rated their satisfaction with residential collection services as either “Very Good” or “Good.”





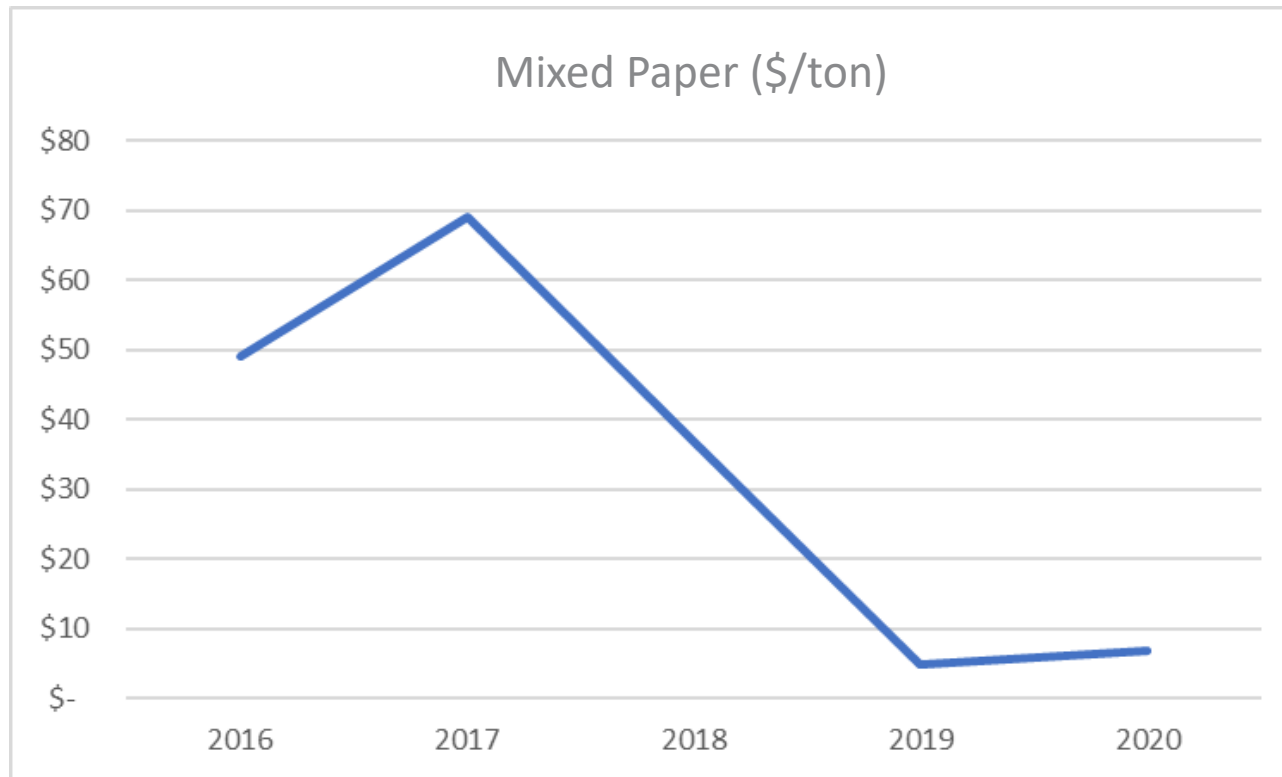
Recycling Economics





Recycling – Regional Markets

Economics of Recycling



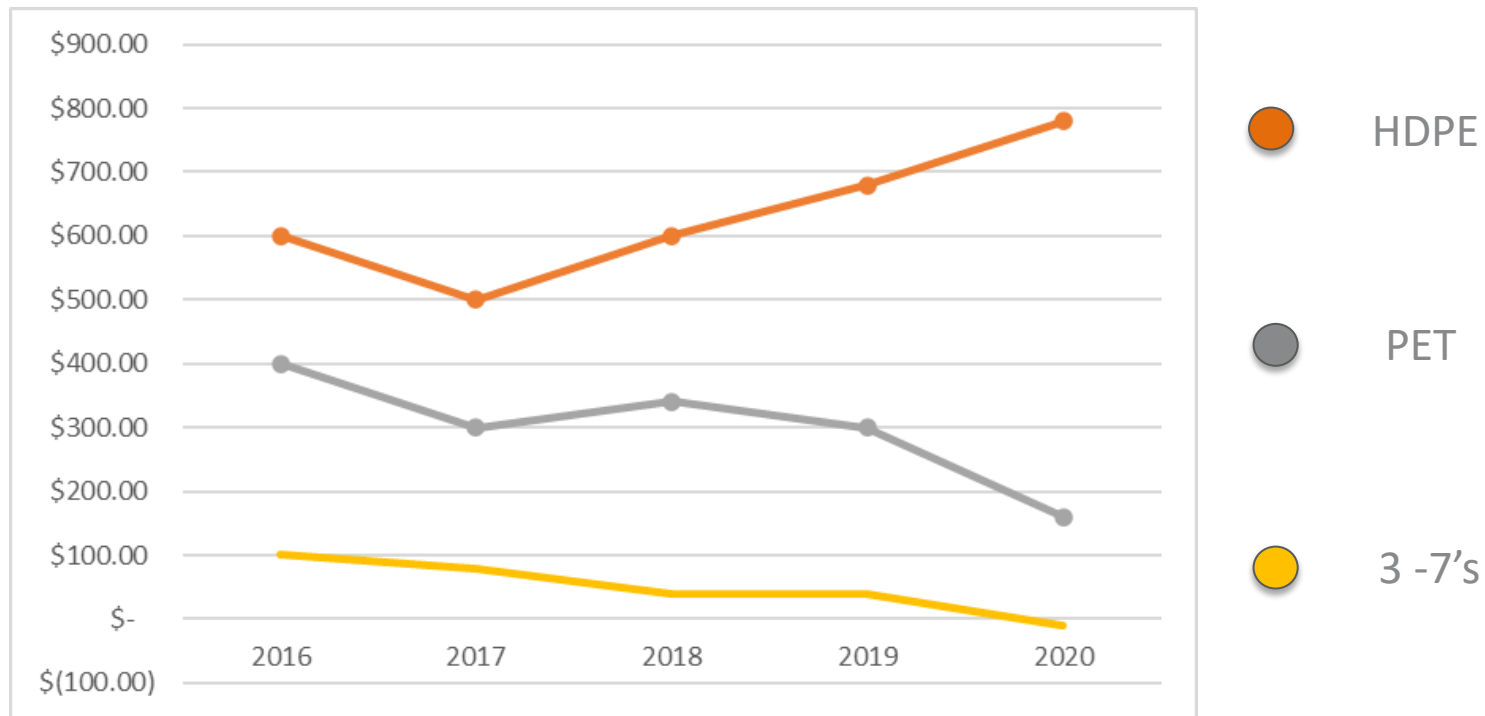
Source: RecyclingMarkets.net information for Market Region 2



Recycling – Regional Markets

Economics of Recycling

Plastics (\$/ton)

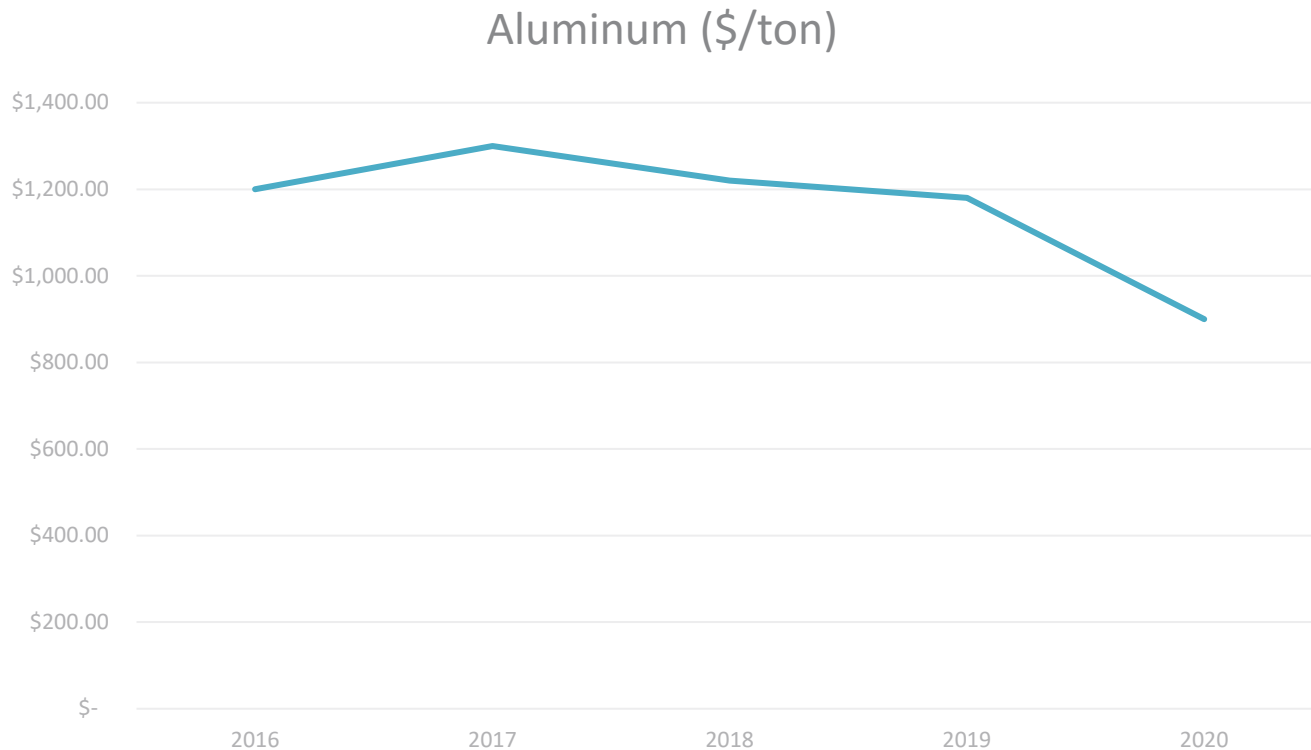


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Recycling – Regional Markets

Economics of Recycling



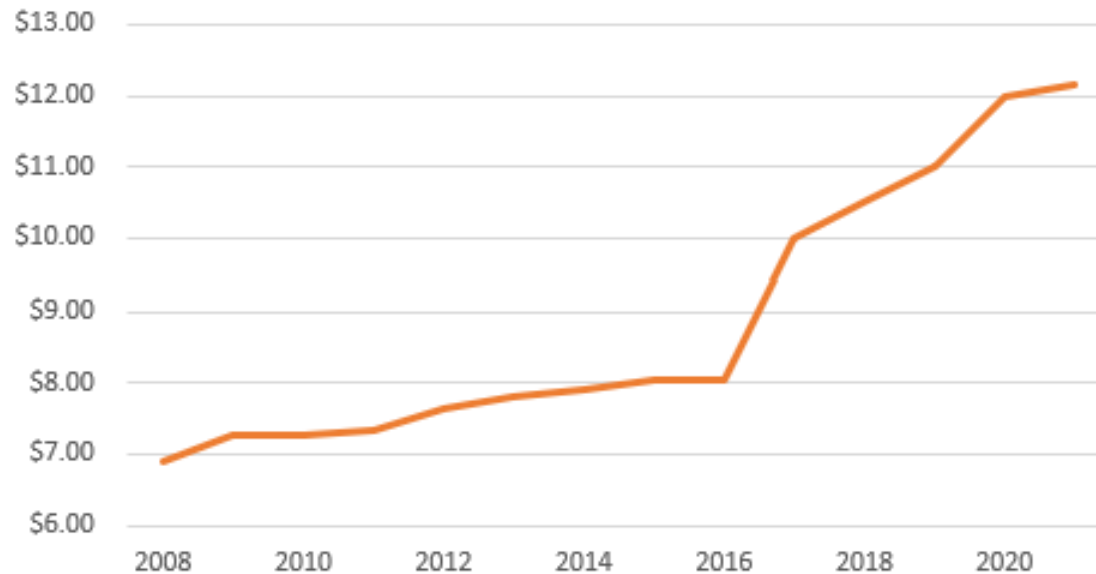
Source: RecyclingMarkets.net information for Market Region 2



Recycling – Cost to Process

- Labor Intensive

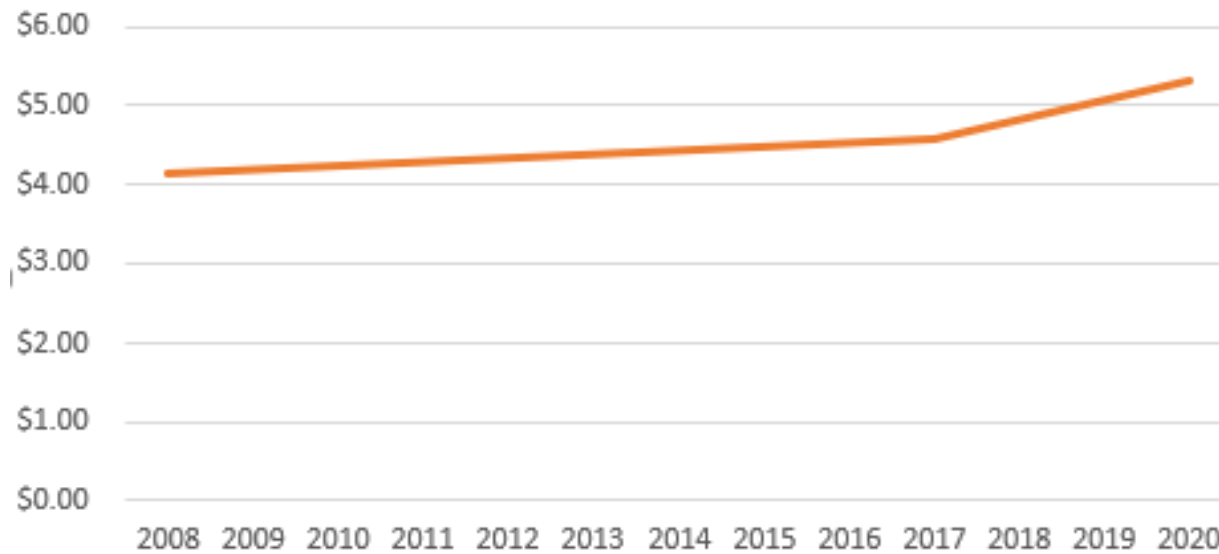
Minimum Wage in Arizona





Recycling – Cost to Collect

- Increases in benefits & wages; landfill fees; and equipment costs



Cost per residential household per month



How are Others Responding?

- Arizona:
 - Surprise stopped August 2019
 - Sierra Vista, Casa Grande ended programs July 2019
 - Tucson reduced collection frequency to every other week
- Nationally:
 - Similar as in Arizona
 - Added monthly “surcharge” for recycling



Recycling Options – MRF Operations

- **Option #1** - Rebuild MRF - \$18M capital estimate (\$2.80/month for 10-years – capital recovery)
- **Option #2** - Outsource MRF Processing Services
 - Request Statements of Qualifications for processing options
 - Costs (net savings to the City) market driven
 - Worst case scenario (zero value of commodities) – unlikely
 - Conservative estimate shows \$350,000 annual savings compared to in-house operations



Summary

- Residents overwhelmingly support the continuation of the recycling program
- Residents willing to pay more to continue the program

Staff Recommends:

- Continue recycling
- Outsource MRF processing services
 - Benefits: - Maintain rate structure
 - Add glass to recycle program
- Adjust number of “free loads” to 6 per year
 - Benefits: - Customer Service / Wait Times
 - Safety



Strategies to Minimize Future Rate Increases

- Consider biweekly collection of recyclables
 - Collection costs are increasing
 - Minimize any future rate increases



Questions?

Thank you!