

Economic Incentive Analysis

Purpose

This analysis evaluates existing economic incentive programs to encourage recycling and explores how to incorporate more economic incentive into source reduction and recycling programs. R3Source administers one program that acts as an economic incentive: the Residential Recycling Incentive (RRI) grant, which is the primary focus of this analysis followed by an overview of the residential volume-based programs in Hamilton County.

Definitions

Volume-Based or Pay-as-You-Throw (PAYT): A residential waste program structured so that residents are charged for the collection of household trash based on how much they throw away.

Residential Recycling Incentive (RRI) Program

R3Source divides \$900,000 annually in RRI funds among Hamilton County communities as an incentive to increase recycling. As a community increases its diversion rate and tons of materials collected, it receives more RRI funds. This program allows communities the flexibility to design a recycling program to best meet their needs. Communities fill out applications for the RRI once per year.

Table 1 lists the seven tiers of funding available to a community per ton recycled based on their diversion rate. R3Source alters the monetary amounts attached to these levels from year to year depending upon the total quantity of materials collected by communities.

The methodology for determining the funding changed in 2018 when R3Source began allowing communities to claim organics collected in addition to recycling. Twenty-six communities claimed yard trimmings collected in 2020.

Diversion Rate	Approximate Dollars per Ton
Greater than 30%	\$32
25% - 29.99%	\$28
20% - 24.99%	\$24
15% - 19.99%	\$20
10% - 14.99%	\$16
5% - 9.99%	\$12
0% - 4.99%	\$8

R3Source Budget and the RRI

Starting in 2018, R3Source began budgeting the total amount of the RRI program based on revenue.

- \$2.5 million in revenue- \$800,000 for the RRI
- \$2.6 million or higher revenue- \$900,000 per year
- \$2.4 million or lower revenue -\$700,000 per year

Since the start of the new plan in 2018, R3Source has budgeted \$900,000 per year for the RRI program.

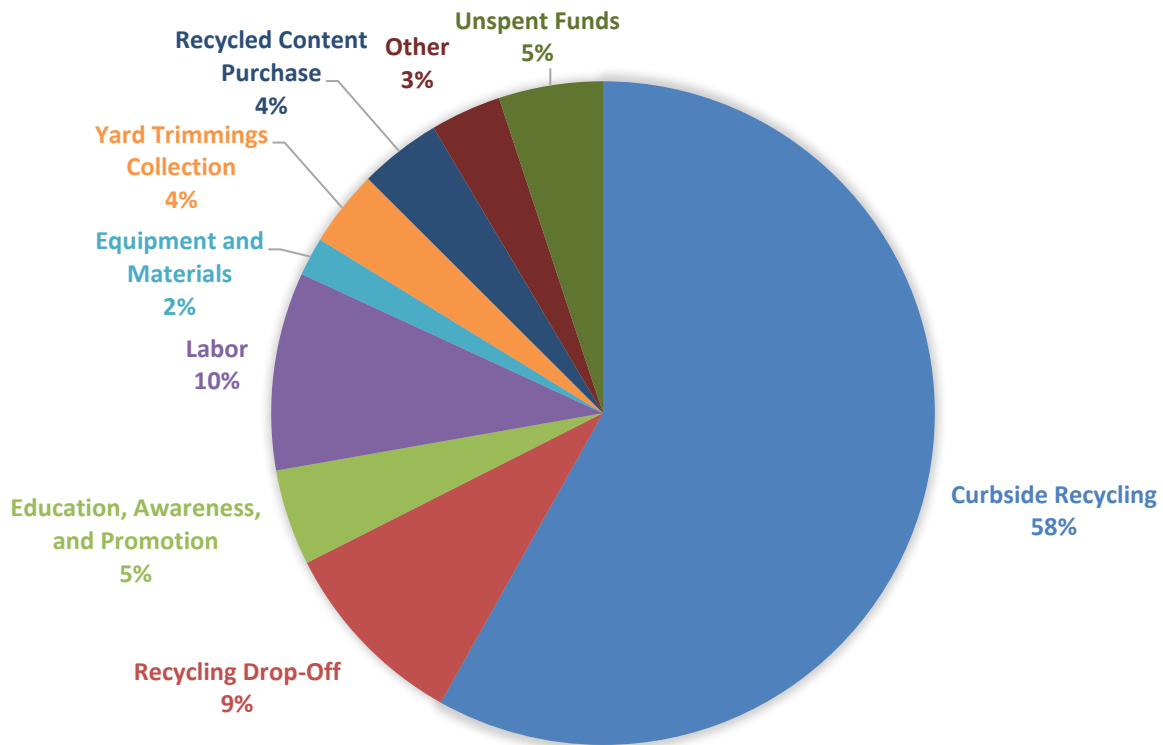
Use of RRI Funds

Communities can use RRI funds toward recycling, composting, reuse, or other waste reduction programs as well as litter collection programs. Funding for the RRI program appears more than adequate to help communities maintain and improve their recycling and other waste reduction activities. The RRI was never intended to fully fund residential recycling programs. Forty-six of the 48 communities in Hamilton County regularly participate in the RRI program.

Figure 1 shows a breakdown of what expenses communities used the RRI funds towards in 2020. The largest percentage by far, 60 percent, went toward funding curbside recycling collection and another nine percent went

toward funding recycling drop-offs. Communities are not required to spend funds every year leading some communities to save funds for larger future purchases (such as recycled-content products).

Figure 1: RRI Funds Spent in 2020



Communities Receiving Minimal RRI Grants

Eight communities participating in the RRI program in 2020 received a less than \$1,000 grant: the lowest payment being \$34.73. Communities receiving very low amounts of RRI funds are not able to make substantial purchases to improve their recycling or organics collection infrastructure.

Table 2 gives an overview of some of the strengths and weaknesses of the RRI program.

Table 2: Strengths and Weaknesses of RRI Program	
Strengths	Weaknesses
<ul style="list-style-type: none"> Provides flexibility for communities to develop a program that best fits their needs. Helps prevent loss of curbside, drop-off, and event recycling programs in communities. Builds a stronger relationship between R3Source and communities. Allows R3Source to promote benefits of recycling on community level with individualized press releases. Tier system encourages communities to increase diversion. 	<ul style="list-style-type: none"> Program consumes bulk of R3Source budget. Lower performing communities receive less funding but may need more assistance. When larger communities increase to the next tier, they take a larger percentage of the funding leaving all other communities with less funding. R3Source is spending a large percentage of the budget on a residential program when residential waste makes up a smaller percentage of the waste stream compared with the commercial sector.

<ul style="list-style-type: none"> • Provides R3Source with detailed data on residential recycling. • Acts as a goal setting tool for communities to use to increase diversion. • Includes organics in diversion rate. 	<ul style="list-style-type: none"> • Some residential recycling programs now depend on the RRI for funding. • Only incentivizes growth up to a 30% diversion rate.
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RRI Gap Analysis and Solutions

1. **Provide more assistance to under-performing communities.** One weakness of the RRI program is that the most under-performing communities receive the lowest amount of funding. This results in these communities having inadequate funding to improve their programs through infrastructure improvements or promotion. The communities receiving the lowest RRI amounts in 2020 closely followed the communities with the lowest diversion rate (out of 46 participating):

Community	2020 RRI Grant	Diversion Rate Rank
Addyston	\$34.73	45/46 (tie)
Arlington Heights	\$102.38	41
Whitewater Township	\$226.14	45/46 (tie)
Cleves	\$355.89	43
North Bend	\$405.66	37
Lincoln Heights	\$703.79	42
Cheviot	\$742.88	44

- Create a minimum RRI threshold which every community would receive, for example \$1,000 or \$2,000.
2. **Increase impact of RRI funds.** Stakeholder meetings with communities revealed that many communities were unsure of the best use for their RRI funds. Many help off-set the cost of curbside or drop off recycling, but many other communities have a separate funding structure already in place to fund these programs. This results in communities either not spending the grant funds or in spending it on recycled content purchases.
 - Create a best practices suggestion list for communities on ways to spend RRI funds that will result in an increase in landfill diversion for their community.
 - Facilitate collaborative regional meetings of community leaders to encourage cooperation and potential collaboration. Several smaller communities working together could pool their RRI funds and other resources such as staffing to implement new innovative programs for their residents.

Overview of Current Volume-Based Programs

There is one community with traditional volume-based trash service and one community with an optional tier in their contract allowing residents to choose a more limited service for waste. Table 4 gives an overview of the communities and their programs.

Table 4: Volume-Based or Similar Programs in Hamilton County			
Community	2020 Recycling Rate	2020 Rank*	Volume-Based Waste System
Madeira	25.66%	9 th	First 35 gallons of waste requires no sticker, \$1 stickers for additional bags or specific cart volumes.
Forest Park	13.89%	27 th	First 35 or 65 gallons included in cost, \$1 stickers for additional bags. Voluntary (approximately 8 percent of population use it).

*Highest to lowest ranking among 46 Hamilton County communities based on 2020 recycling rates.

Madeira

Madeira has a volume-based trash system through which residents can dispose of 35 gallons of trash per week at no extra cost. For any trash over that amount, residents must purchase \$1.00 stickers. Residents may rent a 65-gallon (\$50/year) or 90-gallon (\$82) container from the contractor on an annual basis. This eliminates the need to continually purchase stickers for those families which consistently have more than 35 gallons per week. Large items under 75 pounds require one sticker (\$1) and large items over 75 pounds require 10 stickers (\$10) before collection.

Residents receive curbside recycling in a 65-gallon cart or curbside bin at no cost for weekly curbside pickup. Madeira provides separate yard trimmings collection on a seasonal basis. The contractor collects yard trimmings set out at other times of the year and landfills the material.

Forest Park

The City of Forest Park contracts for waste and recycling collection on behalf of 5,400 single and duplex houses. They offer two levels of service, full service and the eco-tier service.

- Full-service level household = \$19.50 per month (plus cart rental of \$2.50 per month)
- Eco-tier household = \$14.50 per month, cart included (about 585 households)

Eco-tier households choose between a 35- or 65-gallon waste cart for trash at no extra cost. If the household has more waste than can fit in the container, a \$1 sticker must be affixed to each trash bag placed beside container. Households on both levels receive unlimited recycling service. Because more than 89 percent of Forest Park's population has access to full-service waste collection (max. 2 96-gallon carts), R3Source does not consider this program a true volume-based system. However, this innovative option is a good model for communities unable to adopt a true volume-based system but interested in offering residents an option to decrease waste and save money.

Performance

Madeira's program is successful at encouraging residents to recycle more and reduce waste. The recycling containers provide adequate volume and the cost structure involved seem to work.

Communities without Volume-Based Service

Forty-seven of the communities in Hamilton County do not have a volume-based or PAYT waste collection system. Several communities have considered this option in the past but were unable to garner the necessary political and community support. Many communities use general fund dollars to fund their waste and recycling

program, so they do not pay a separate fee for waste services. Without a separate fee for waste services, a volume-based program is more difficult to implement.

Outreach Programs for Volume-Based Service

R3Source held a PAYT workshop in 2011 attended by about 50 people representing nearly 30 organizations and communities. In 2013, R3Source held a special workshop on contracting for waste and recycling attended by 25 people representing about 20 different organizations and communities. The contracting workshop devoted the afternoon to writing bid specifications for volume-based programs. Both of these workshops were well attended and successful in increasing the knowledge of communities about volume-based programs. They have not yet resulted in any new volume-based programs.

R3Source also meets with communities on a regular basis (usually 10 per year) and communicates with via email and with an electronic newsletter with all communities. R3Source offers technical assistance reviewing waste and recycling bids for communities.

Volume-Based Program Gap Analysis and Solutions

- 1. Offer more direct assistance incorporating volume-based systems into the bid specifications.** Communities may choose to continue with the curbside waste and recycling program and bid specifications familiar to them and to which their residents are accustomed. Because changing bid specification language may seem daunting to a community, R3Source could assist in incorporating these options into specification packages.
 - Maintain a database of communities contracting schedules and reach out appropriately with offers of assistance with bid language in general and incorporating volume-based options if desired.
 - Follow up with community to help implement the program.
 - Educate community officials with webinars and workshops on volume-based programs as need arises.
 - Offer information on R3Source website on the benefits of volume-based programs.

Conclusions

The RRI program provides a positive economic incentive program to Hamilton County communities to maintain and improve residential recycling programs. R3Source could improve the impact of the program by adapting the grant to give a minimum threshold of funding to lower performing communities, creating a best practices suggestion list for impactful ways to spend RRI funds, and fostering collaboration among communities.

One community, Madeira, has a volume-based residential waste program functioning in Hamilton County. R3Source should consider ways to promote these successes, such as with workshops and seminars, and should promote alternatives such as the “eco-tier” program in Forest Park.

Table 5: Summary of Potential Actions to Address Identified Gaps

		Infrastructure Improvement Suggestions	Gap Addressed	R3Source Program
Residential Recycling	1	Create a minimum RRI threshold which every community would receive	Under performing communities receive inadequate funding to make infrastructure changes	Adapt RRI to include a minimum threshold of funding
	2	Increase impact of RRI funds	Difficult for some communities to come up with most impactful RRI spending on their own	Create best practices for RRI spending document Facilitate regional collaborative meetings among communities
Volume-Based Programs	1	Offer direct assistance incorporating volume-based waste collection	Community officials typically maintain the same bid specs and the same waste and recycling programs year after year	Assist with bid specs Offer follow up assistance to implement the program Hold workshops or webinars to educate community officials on volume-based programs Have information on website and/or in print

Questions for Policy Committee

- Do you think R3Source should add a minimum threshold amount for communities participating the RRI program?
- Should R3Source continue spending almost half of its budget on residential programs?
- Would establishing regional meetings help foster collaboration among communities?
- Should District staff do more to promote volume-based waste programs?