

## **10 Data Collection Analysis**

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### **Purpose**

This analysis aims to evaluate R3Source's current data collection efforts related to the Ohio EPA's Annual District Report and identify ways to improve the data required for reporting and planning purposes.

### **Data Collection Process Review**

#### **General Notes**

No mandate requires communities or businesses to respond to R3Source data collection efforts. Still, the Ohio EPA requires that R3Source gather recycling information to calculate a county landfill diversion percentage. R3Source relies on voluntary responses and "best estimate" calculations. R3Source tabulates and reports this information to the Ohio EPA as required.

#### **Residential Sector**

Each year, R3Source gathers data for the residential sector by surveying communities using the Re-TRAC platform. Re-TRAC specifically designs this platform to collect recycling data at the municipal level and provides a clear and consistent form for reporting. With few exceptions, local communities enter data into the Re-TRAC platform when R3Source requests it, resulting in easily aggregated information. There are 48 communities, and the response rate is very good (98% for 2020, collected in 2021).

#### **Commercial Sector**

R3Source collects data from a curated list of commercial businesses, including solid waste and recycling businesses. Most of the businesses have previously interacted with R3Source. The current commercial list represents approximately 200 non-manufacturing entities. The recyclers list includes haulers such as Rumpke and Republic, commercial recyclers such as Cohen USA, landscaping companies such as Ohio Mulch, and nonprofits such as Goodwill and St. Vincent DePaul. R3Source emails each business and provides a fillable pdf form for the company to complete and email back. Staff augments the data gathering process by phoning contacts, especially where there is a question about reported quantities. Response rate is relatively low, with 63 of 217 surveys completed and returned to R3Source (29%) in 2021. Staff manually aggregates all data and calculates any potential double counting between recyclers and businesses.

#### **Industrial Sector**

Similar to the commercial data collection process, R3Source maintains a curated list of industrial businesses in the county. This list represents manufacturers across various SIC/NAICS codes with representation from multiple business categories such as metal, food producers, and packaging/paper products industries. R3Source emails each business and provides a fillable pdf form, similar to the one

used for the commercial sector. Some businesses do not have contact information. In 2021, R3Source sent 122 surveys and received 29, for a response rate of 24%. As with the commercial sector, R3Source must aggregate data on the back end.

## Gap Analysis and Solutions

### A. Improve data collection methodology for commercial and industrial entities

To the extent possible, R3Source may collect all recycling data electronically. No matter what platform R3Source uses, collecting data in a central repository enables more efficient requests upfront and more effective aggregation on the back end.

Short term: If timing allows, R3Source may collect data using an online market research platform like Alchemer or Survey Monkey. Writing a survey within the platform will enable consistent data gathered using a link that R3Source can email to potential respondents. This approach reduces the chance for human error in collecting and collating the data. Creating the survey utilizing market research software may take some trial and error since it is not designed explicitly for recycling data collection. Below is a list of market research data collection platforms investigated:

Software Option	Description	Pros	Cons	Cost
Survey Monkey	Market research-based system to gather data from multiple participants	Electronic data collection, all data can be input anonymously, allows easier backend integration. R3Source already has a one-user license.	Not specialized in recycling; must collect data using ranges or open-end response.	Individual Advantage \$384 annually for one user. Premier Advantage \$2,700 includes phone support. 5,000 responses.
Alchemer	Market research-based system to gather data from multiple participants	Extremely flexible, all data can be input anonymously. Simple backend reporting capabilities.	Not specialized in recycling; must collect data using ranges or open-end response.	Professional license \$1,020 per year for one user. No per-response fees.
Qualtrics	Market research-based system to gather data from multiple participants	Flexible backend reporting to summarize responses allows automatic reminders to non-responders and enables an email list for users to set up within software.	Not specialized to recycling industry; vast amount of flexibility leads to steep learning curve	2,000 responses per year \$1,800; 5,000 responses/year = \$10,000

Long term (2023 and forward): R3Source may work with a data-gathering tool created explicitly for the recycling/solid waste industry. While the perfect platform does not currently exist, several companies are interested in expanding their platforms to enable industrial and commercial recycling information. Below is an example of the companies investigated for this analysis.

Software Option	Description	Pros	Cons	Cost
Re-TRAC	An online program allows communities to track recycling efforts	Staff familiar; designed for recycling reporting	Requires businesses to set up a profile	The current residential license is \$1,750; expanding to Industrial/ Commercial will be \$15-\$20K for set up, with an annual license of \$5,100
Recyclist	Program tracker and residential information for local recycling	Data collection into dashboard format; includes customer relationship management for ongoing communications	Currently set up to measure at hauler level with a focus on residential waste	The platform is not currently developed or on near term schedule.
Via Analytics	A program geared to providing proof of companies' claims of sustainability	Recycling based, data focused on tracking, improvement, and cost savings	Not currently set up for the public sector but eager to enter this space	\$3,000 -\$10,000 for set up and first year, subject to negotiation.
Sustayn Analytics	Analytics software for diversion	Set up to analyze recycling data for cost savings	Not currently serving the public sector	NA

Since the residential data collection process is currently working well, there is likely no need to explore alternative methodologies for community recycling reporting.

**B. Improve Data Collection Respondent List**

There is an opportunity to immediately improve the list of businesses from which R3Source collects data. Through enhanced targeting and strategic list procurement, R3Source can focus on the most likely businesses that currently recycle or have the opportunity to divert waste from the landfill with R3Source support. For example, Exact Data will provide a list of relevant SIC codes for the county that includes emails of pertinent personnel at the companies and can be augmented if necessary based on past survey participants. R3Source would need to purchase the database annually to keep contact information current.

Below is a table of options for business list acquisition:

List Option	Description	Pros	Cons	Cost
Zoominfo	B2B database to identify and connect with customers	Hand verified data available on online platform for searching for titles and emails	Data at county level incomplete; very hands-on for something to be used once a year	Annual license negotiated independently
Exact Data powered by Data Axle	List source available for purchase as needed	Excellent county-level data by SIC code includes titles and emails	Must request list each year for updated info	\$860 for recommended SIC codes
Dunn & Bradstreet	Large business database	Includes detailed corporate information	Not available for governmental organizations	NA
Reference Solutions	Public database for US businesses	County-level data available	Does not provide email addresses	Free from Cincinnati Public Library
Chamber of Commerce	30 million companies in the US	Size	Optional listings only for members	NA
Siccode.com	15 million companies	Size	Geared to providing marketing leads; incomplete at the county level	Customized pricing depending on list length

**C. Utilize market research best practices to improve the response rate**

R3Source may use certain techniques to encourage more potential respondents to complete their recycling information.

1. R3Source may consider sending out a preparation email that sets the stage for the upcoming request. This email could explain the reasons for the request, including information on how R3Source will use the data to improve environmental impacts and possibly decrease costs for their business. R3Source would emphasize privacy.
2. R3Source customizes surveys for different types of waste generators (residential, commercial, and industrial). R3Source may consider aligning the survey to the business model. R3Source may use a more customized format for specific types of business.
3. R3Source may adjust the request for data to include the purpose for gathering the information. A possible approach is to emphasize the team membership of the business as part of the overall goal to improve the environment, keep landfill disposal to a minimum, and save costs. Working with a platform organized around recycling will better enable R3Source to estimate the value to the businesses that divert waste from landfills. R3Source will use this information as an example for other companies.

4. R3Source may also include an incentive for participation. R3Source may base incentives on the data requested at the business/team level, and any prize drawing depends on sweepstakes rules subject to legal guidance. Possible choices are a group lunch for the business or suite tickets for a Cincinnati Reds or Bengals game. As an alternative, R3Source may choose to offer to make charitable donations to one of a choice of charities.
5. To the extent possible, R3Source may wish to keep the letter's language informal and friendly—less about government requests for information and more about positively contributing to recycling, which has myriad benefits for participants.
6. The data collection request should include a link to the platform for gathering the information. The process should limit time requirements for respondents.