

BUSINESS SECTOR ANALYSIS

DESCRIPTION OF BUSINESS ACTIVITY

R3Source has combined commercial, institutional, and industrial establishments into “businesses” for this plan update. Hamilton County has a broad mix of businesses located throughout the county. The U.S Census Bureau reports that 20,916 employer establishments are located in the county as of 2020. The business sector within the county consists of the following (non-exhaustive list): commercial businesses, schools and universities, office buildings, stadiums, event venues (stadiums/concert halls/theaters), hospitals, multi-family communities, and non-profit organizations. The county also has manufacturing establishments representing each standard industrial classification (SIC) code. Currently, manufacturing accounts for 12.7% of employment in the region by industry sector.

The largest employers in the county by workforce size are shown below.

| Employer | Employees |
|--------------------------------------|------------------|
| The Kroger Company | 20,000+ |
| University of Cincinnati | 15,000+ |
| Cincinnati Children’s Medical Center | 12,000+ |
| The Procter & Gamble Company | 12,000+ |
| Tri Health, Inc. | 10,000+ |
| UC Health | 8,000+ |
| GE Transportation | 7,500+ |
| St. Elizabeth Healthcare | 7,000+ |
| Fifth Third Bank | 7,000+ |

Of the largest employers in the county, only the University of Cincinnati’s waste stream fluctuates due to seasonal conditions. Other large businesses in the county that experience seasonal variations in waste generation quantities include:

- Schools
- Parks
- Sports Stadiums

Table 2 presents the employment percentage by industry.

| Industry Name | Percent Annual Employment in Industry | |
|--|--|-------------|
| | 2010 | 2019 |
| Health Care and Social Assistance | 17.3% | 17.6% |
| Manufacturing | 10.3% | 9.7% |
| Professional, Scientific, and Technical Services | 8.3% | 8.7% |
| Accommodation and Food Services | 7.0% | 7.7% |
| Retail Trade | 9.0% | 7.6% |
| Educational Services | 7.1% | 7.1% |

| Industry Name | Percent Annual Employment in Industry | |
|---|---------------------------------------|------|
| | 2010 | 2019 |
| Finance and Insurance | 5.2% | 6.4% |
| Administrative and Support Services | 5.7% | 5.7% |
| Wholesale Trade | 5.6% | 5.2% |
| Management of Companies and Trade | 6.8% | 5.1% |
| Construction | 3.8% | 4.6% |
| Other Services (Except Public Administration) | 3.3% | 3.0% |
| Transportation and Warehousing | 1.8% | 3.3% |
| Arts, Entertainment, and Recreation | 1.8% | 2.3% |
| Public Administration | 2.5% | 2.2% |
| Information | 2.1% | 2.1% |
| Real Estate, Rental, and Leasing | 1.3% | 1.6% |
| Utilities | 0.7% | 0.6% |

As Table 2 shows, the top five industries account for over 50% of employment in the county. Table 1 also indicates that employment in retail and management of companies decreased by around 1% since 2010, while employment in finance/insurance and transportation/warehousing increased by 1%.

Geographic

Businesses exist in every jurisdiction in the county, with some areas having a concentrated population. Downtown Cincinnati has a dense commercial business district and the largest special event venues. Many hospitals are located in the uptown area near the University of Cincinnati. Blue Ash, Forest Park, Norwood, Sharonville, and Colerain Township are suburbs with numerous office and industrial parks. Each of the 48 jurisdictions has at least one public school and a variety of parochial, private, and charter schools.

Industrial businesses are spread around the county but are concentrated in the I-75 corridor from Evendale to the Ohio River. Some of the largest manufacturing operations are situated in the suburbs of Blue Ash, Reading, Sharonville, and Norwood and along the riverfront in the southwest portion of the county. But facilities can be found in most jurisdictions within the county.

Table 3 shows the ten political subdivisions with the largest number of business establishments.

| Political Subdivision | Number of Business Establishments |
|-----------------------|-----------------------------------|
| City of Cincinnati | 11,415 |
| City of Blue Ash | 1,961 |
| City of Sharonville | 1,244 |
| Colerain Township | 1,100 |
| City of Springdale | 883 |
| City of Norwood | 845 |
| Green Township | ~800 |
| City of Forest Park | 599 |

| Political Subdivision | Number of Business Establishments |
|------------------------------|--|
| Harrison Township | 502 |
| Loveland | 441 |

Source: Hamilton County Development Corporation

Landfill Diversion and Infrastructure Functionality

OhioEPA requires landfills and material recovery facilities (MRFs) to report waste and recyclables by residential/commercial and industrial generators. R3Source also asks business and local recyclers to respond to a survey voluntarily. Because of the data received through the residential recycling incentive (RRI) grant, R3Source can extract residential disposal and recycling quantities from residential/commercial to derive commercial disposal and recycling. For industrial recycling, R3Source used survey data.

During the reference year, commercial businesses disposed of 581,526 tons and recycled/composted 390,111 tons for a landfill diversion rate of 40%. Manufacturing industries disposed 206,277 tons and recycled/composted 863,078 tons for a landfill diversion rate of 81%. In total, businesses disposed 787,803 tons and recycled/composted 1,253,186 tons for an aggregate landfill diversion rate of 61%.

During the reference year, 474,341 tons of flue gas desulfurization waste (FGD) were recycled into a gypsum board. This tonnage accounts for approximately 38% of recycled/composted business waste. Flue gas desulfurization is the process used to remove sulfur dioxide from the power plant’s stack emissions, and OhioEPA regulates FGD as solid waste.

Commercial and industrial businesses often recover different types of materials. Recycling programs at commercial establishments typically target traditional recyclables (cardboard, mixed paper, plastic bottles, glass bottles/jars, steel, and aluminum cans). These materials are generally collected by private haulers and transported to local MRFs to be processed into saleable commodities. The industrial sector is more likely to be serviced through direct contracts for specific materials when substantial quantities and types are generated (e.g., metals, wood, cardboard, paper, e-waste, and other by-products).

Major employers in Hamilton County address sustainability issues, including recycling and waste diversion. Table 4 presents the top four employers in Hamilton County and their recycling efforts.

| Company | Number of Employees | Waste Diversion Efforts |
|----------------|----------------------------|---|
| Kroger Company | 18,000 | Kroger initiated a nationwide program in August 2020, enabling its customers to recycle flexible packaging of more than 300 products. Kroger also has a Zero Waste/Zero Hunger campaign to help create a more efficient and equitable food and charitable food system. Kroger also plans to achieve Zero Food waste in all stores throughout the country by 2025. |

| Company | Number of Employees | Waste Diversion Efforts |
|--------------------------------|----------------------------|--|
| Cincinnati Children’s Hospital | 16,000+ | Supplies recycling bins throughout the entire facility and advocates a paperless charting system. |
| TriHealth, Inc. | 12,000+ | TriHealth minimizes waste generation through source reduction, reuse, and recycling initiatives. |
| University of Cincinnati | 10,000+ | The University of Cincinnati maintains a comprehensive recycling program across campus, including recycling stations, special event recycling, move-in/out programs, and composting. |

Private sector haulers collect most business recyclables. In Hamilton County, waste haulers include Rumpke, Republic, Waste Management, Bavarian, and Best Way. However, not all private haulers offer recycling services, and some only collect certain recyclables or only offer recycling services to large accounts.

In addition the private companies, several municipalities provide businesses with recycling opportunities:

- The City of Cincinnati allows some small commercial operations to take advantage of its every-other-week curbside recycling service.
- Cheviot collects trash from their business, but not recyclables. Cheviot does permit businesses to use recycling drop-off sites.
- St. Bernard hauls recyclables from businesses upon request.
- The Village of Indian Hill collects trash and recyclables from schools within the community.

EXISTING R3SOURCE PROGRAMS

R3Source currently offers several business-focused programs to encourage more waste reduction.

- **“Let’s Stop Waste”**- helps schools, businesses, bars, restaurants, and multi-family establishments decrease reliance on landfills. R3Source’s support includes technical assistance, waste characterization studies, recycling audits, educational seminars, and physical infrastructure (ex. providing recycling bins and signage). R3Source emphasizes waste management best practices and does not charge businesses for this support and materials.
- **Waste Audits** – R3Source offers waste characterizations for organizations seeking to better understand their waste makeup. This data can inform new reduction opportunities and identify any issues regarding recycling contamination.
- **P2 Internship Program** - The Southwest Ohio Pollution Prevention (P2) Internship Program is a 12-week internship program occurring from late May to early August that pairs college students with companies seeking new and innovative approaches to pollution prevention and

conservation. Hamilton County R3Source, the Butler County Recycling and Solid Waste District, the Montgomery County Solid Waste District, and the Ohio EPA sponsor this program.

- **Let's Stop Waste at Schools** - To help schools start or improve a waste reduction and recycling program, R3Source meets with principals, teachers, students, facility managers, custodians, and PTAs to help design an effective waste reduction and recycling program for each school. R3Source further helps schools develop a composting program that transforms fruit and vegetable scraps from school lunches and other organic materials like leaves and plant clippings into nutrient-rich compost. School resources provided by R3Source includes:
 - Educator resources on the R3Source website for pre-K thru 12th grade
 - Field trips to the landfill, recycling center, or other locations
 - School assemblies
 - Technical assistance in setting up recycling (on-site consulting)
 - Indoor collection containers (various sizes depending on the location and material to be collected)
 - Signage to help students and teachers know what and where to recycle
 - Food share table guidance
- **Promotion of the 513Green Workplace Certification** – R3Source recognizes and promotes businesses in Hamilton County that voluntarily operate environmentally through sustainable actions.
- **Professional Enrichment Seminars** for local organizations to inform participants on wasted food, backyard composting, proper recycling procedures, sustainable management of resources, and R3Source waste reduction and recycling programs.
- **Grants to Schools, Communities, Non-Profit Organizations, and Businesses** that help fund innovative waste reduction, reuse, food rescue, composting, and recycling programs that significantly reduce waste in the county. R3Source offers the Waste Reduction Innovation Grant for projects under \$10,000. R3Source also offers the Greater Cincinnati Smart Kitchen Initiative, a grant program that provides assistance and funding to reduce pre-consumer food waste and/or donate prepared foods. R3Source also promotes and sponsors grant opportunities through OhioEPA on its website.
- **Promotion of the Ohio Materials Marketplace** – R3Source promotes the Ohio Materials Marketplace. This on-line platform allows companies and organizations to connect and find both reuse and recycling solutions for waste and by-product materials.
- **Multi-family Assistance** - R3Source provides technical assistance to property managers of apartments, condominiums, retirement communities, and other multi-family dwellings to reduce waste and start a recycling program. R3Source posts waste reduction tips on its website, and the website also includes a map that identifies multi-family properties with a recycling program. R3Source also distributes in-unit recycling collection containers and educational materials to residents who request them and are willing to sign a recycling pledge.

Before the start of the global pandemic in late March 2020, R3Source had significantly ramped up the number of businesses to which they provided technical assistance, as shown in Table 4.

| Year | Number of Properties Receiving Technical Assistance | | | | |
|-------------|---|----|----|----|-------|
| | Q1 | Q2 | Q3 | Q4 | Total |
| 2017 | 15 | 10 | 14 | 14 | 53 |
| 2018 | 32 | 21 | 67 | 36 | 156 |
| 2019 | 69 | 22 | 47 | 30 | 168 |
| 2020 | 52 | 7 | 12 | 28 | 99 |

GAP ANALYSIS AND SOLUTIONS

R3Source evaluated its existing business programs. This analysis aims to determine if R3Source requires additional programs, policies, or resources to address business sector reduction, reuse, recycling, or composting needs.

Businesses

1. Target Outreach/Technical Support

With almost 21,000 business establishments in Hamilton County, R3Source will increase outreach/technical support efficiency and effectiveness by targeting support by types of establishments. For example, there are 57 breweries in the county. Suppose the county conducts a waste audit at one brewery. In that case, the next step could be to have a workshop for all breweries where R3Source presents the audit data and strategies for increasing landfill diversion in breweries. R3Source could broaden this approach to include all food manufacturers and hospitality for an entire year, making direct, technical support competitive. R3Source would also create and host a network within the food industry where sustainability directors could connect, share information, and support each other.

The C40 Cities uses this model. The C40 Cities is a global network of mayors taking urgent action to confront the climate crisis, and their one solid waste director supports over 90 cities on six continents. Due to this ratio of cities to staff and travel logistics, the C40 Cities is selective about who receives direct, technical assistance and that this support yields measurable results. For a city to receive this assistance, they must submit an application indicating the guidance they need and who will “champion” the implementation of recommendations. Cities that don’t receive direct technical assistance can participate in subject-based networks and attend conferences/workshops. Cities that receive direct technical assistance are encouraged to participate in networks, conferences, and workshops.

2. Follow Up with Businesses that Receive Technical Assistance

Before the global pandemic in 2020, R3Source provided waste reduction technical assistance services to over 100 businesses, schools, and multi-family establishments per year. This statistic demonstrates local businesses’ interest in waste reduction and recycling practices. While R3Source

documents information about each of the establishments that receive technical assistance, it could further document the level of service (number and size of collection containers and collection frequency) before technical assistance and then monitor the collection service for up to five years after R3Source provides technical assistance. This will document waste reduction and increased recycling and help R3Source better understand the more significant changes. This reporting would be limited to businesses that receive on-site technical assistance, such as waste audits. Businesses would agree to provide this information before receiving on-site technical assistance. R3Source would develop an on-line platform for businesses to provide this information.

The City of Redmond, WA established its “Refresh Your Recycling Program” to expand business recycling activity. Like R3Source, the City of Redmond offers technical assistance to encourage the implementation and improvement of business recycling programs. The City of Redmond documented over 200 businesses that received technical assistance resulting in additional recycling of over 3,000 cubic yards.

3. Purchase Paid Advertising or Sponsorships to Promote Let’s Stop Waste

Because there are only several print news publications and news-oriented radio stations in Hamilton County, it is difficult to promote programs through free mechanisms such as press releases and public service announcements. Therefore, R3Source may want to purchase paid advertising or sponsorships to make businesses aware of Let’s Stop Waste and annual award recipients. If R3Source purchases advertising, newspapers may run stories on specific businesses that participated in Let’s Stop Waste and radio stations may invite R3source to speak on their shows.

4. Evaluate the Feasibility of Awarding a Franchise Agreement for Recycling Services for Commercial Customers

To provide businesses with the opportunity to recycle at their establishment, R3Source could evaluate the feasibility of awarding a franchise agreement to a private company to offer this service. The franchisee would establish individual contracts with each business and billing customers. The franchise agreement would be the legal instrument to allow one company to provide recycling services for all county businesses.

R3Source’s current technical assistance to businesses for improved recycling and decreased contamination may increase service providers’ interest in bidding on collection services and potentially lower costs. In addition, R3Source may help interested companies determine the number of trash and recycling containers they will require if they implement a recycling program. The franchise would likely create an economy of scale that would allow the franchisee to offer recycling collection services for lower costs than the current open market collection.

5. Track Commercial Waste Quantities Separately

In Ohio, solid waste recycling facilities and landfills submit data to Ohio EPA, and their reports combine residential and commercial waste quantities. While R3Source does track residential waste by political subdivisions, there may be value in quantifying commercial waste by the by business category i.e. hospitals, hotels, grocery stores) to assess the efficacy of outreach and technical assistance and opportunities to increase landfill diversion from other programs.

R3Source conducts voluntary surveys of commercial recyclers to determine the tons recycled by businesses. In addition, R3Source uses data collected by Ohio EPA from various other sources such

as “big box stores” and other recycling processors from around the state. There are a few ways to estimate the quantities of waste by sector:

- **Request Information from In-County Facilities** – Many landfills and recycling facilities across the U.S. track residential and commercial waste separately, sometimes from local or state requirements but sometimes for their own purposes. R3Source could ask Rumpke and other facilities to supply information specific to the quantities of waste received at their facilities by business type. If they don’t already have this information, perhaps they would be interested in helping R3Source and taking steps to provide it.
- **Periodic Field Studies** – R3Source could work with Rumpke on periodic studies that record the weight of incoming waste by sector. R3Source can apply the proportion of residential and commercial waste quantities in these studies to the combined residential/commercial amounts that Ohio EPA reports.

Tracking commercial waste quantities separately from residential waste will allow R3Source to assess program effectiveness better and identify areas where more tailored assistance is needed.

6. Coordinate Requirements for Recycling in Zoning Ordinances

Throughout the United States, some local governments have zoning/code requirements that buildings be designed with adequate space for recycling containers. R3Source could work with its local jurisdictions to provide universal guidance on space requirements to accommodate recycling at commercial facilities. StopWaste of Alameda County, CA has published guidelines to help designers of commercial and mixed-use buildings plan for recycling collection when designing new buildings or planning major renovations.

Some jurisdictions require new construction and renovation projects to have the same amount of space dedicated to recycling as to garbage. Examples of such jurisdictions include Boulder, CO; Broomfield, CO; Charlotte, NC; and Vermont.

7. Facilitate Cooperative Recycling Programs

R3Source currently helps businesses of any size by providing technical assistance (contract with a private hauler for collection, selection of containers, signage, decals, and training) to those organizations that request it. However, larger businesses usually have resources and benefit from economies of scale in their recycling programs.

R3Source could further assist clusters of small businesses that do not recycle by helping them establish a cooperative recycling program. A cooperative recycling program involves a single contract for recycling collection services with a private hauler shared amongst multiple adjacent businesses. Because multiple companies share the cost for one service provider, each pays only a portion of the collection contract, thus making it more affordable. A cooperative recycling program also saves the space required for collection containers since multiple businesses can share a single recycling collection container.

Upon recognizing that small businesses find the financial aspect of recycling a burden, Montgomery County, MD began facilitating cooperative recycling programs in 2012. The cooperative recycling programs were especially beneficial in urban settings where space for recycling was also an issue.

Initially, the county utilized a contractor to develop a recycling program for a group of adjacent small businesses based on the types and quantities generated.

8. Create Program to Educate Property Managers

R3Source could create a guidance document that outlines best practices for business recycling, including tips for contracting collection services from a private hauler, indoor collection containers and location preferences, signs/decals, and methods for educating employees about the program. The guidance document could also be available on R3Source’s website for reference.

R3Source could conduct an annual workshop for business owners/representatives and property managers to share best practices and recycling successes. This information keeps the property-owner community connected to the recycling program without being burdensome. It also provides an opportunity to hear of specific issues and target workable solutions. R3Source could work with the private haulers to identify the property managers and individuals responsible for solid waste decisions.

Multi-family Properties

9. Target Communities with Low Recycling Rates but High Number of Multi-family Dwellings

R3Source tracks waste diversion rates for each of the county’s political subdivisions. R3Source could target communities with a high proportion of multi-family dwellings but low waste diversion rates. Table 5 shows the communities with a high percentage of multi-family and a waste diversion rate of less than 15%. It should be noted that most communities do not include recycling tonnage in their residential recycling numbers. Thus, the technical assistance to these communities would also include helping them develop a system to obtain this information.

| Table 6: Communities with High Multi-Family and Low Diversion | | | |
|--|-------------------------------------|------------------------------|--|
| Community | Number of Multi-Family Units | Percent of Households | Residential Waste Diversion Rate* |
| City of Sharonville | 1,547 | 27.5% | 14.2% |
| City of Forest Park | 1,757 | 25.4% | 13.9% |
| City of Mount Healthy | 1,173 | 32.3% | 10.7% |
| Village of Lockland | 383 | 23.5% | 6.8% |
| City of Reading | 1,213 | 25.2% | 4.6% |

**Waste Diversion Rate does not currently include any existing multi-family data.*

Attachment A presents waste diversion rates for each political subdivision, along with the number of multi-family dwellings.

10. Distribute In-Unit Collection Containers

Because residents of multi-family properties often need to take their recyclables to communal collection containers, providing an in-unit collection container that facilitates transfer can help residents recycle. The in-unit container should be small but with sufficient capacity to hold several bottles/cans and some cardboard. Also, a handle can help the resident easily carry the container directly to the communal collection container.

R3Source currently provides in-unit recycling containers to residents that request one and requires the tenant to sign a recycling pledge. R3Source should consider distributing in-unit recycling containers to all dwelling units of properties that subscribe to recycling. The broad distribution of in-unit recycling containers helps create excitement for recycling and incentivizes residents to recycle when they see their neighbors recycling.

11. Provide Outreach Materials in a Variety of Languages

Multi-family properties have a high transition of residents moving in and out each year. Additionally, a small but notable proportion of the county is comprised of residents for whom English is not their primary language. Overall, 2% of the population in the county speaks Spanish, according to the U.S. Census Bureau. However, specific communities have much higher percentages. Table 7 identifies the communities with the highest percent of Spanish-speaking residents and shows the percent of multi-family households. R3Source could target these communities with bilingual materials.

| Table 7: Percent of Spanish Speaking and Multi-Family | | |
|--|---------------------------------|-----------------------------|
| Community | Percent Spanish-Speaking | Percent Multi-Family |
| Forest Park | 5.6% | 24.4% |
| Columbia Township | 5.1% | 16.9% |
| Lockland | 4.8% | 23.5% |
| Springdale | 4.8% | 26.9% |
| Reading | 3.4% | 25.2% |

12. Franchise or Contract for Collection Services at Multi-Family Properties

Private haulers collect most multi-family waste generated in the county and commingle it with commercial waste. Also, it is up to the property manager to subscribe to recycling collection services for which they may not be adequately informed. The City of Cincinnati requires private waste haulers to pay a franchise fee, which the City uses to provide support and equipment for recycling at multi-family properties. R3Source could work with its local jurisdictions to coordinate collection services at multi-family properties, including recycling and organics collection services. By working with local jurisdictions to separately collect multi-family waste, R3Source could provide universal collection methods throughout the county, including recycling.

For many years, the City of Charlotte has provided garbage, recycling, and bulky waste collection services to multi-family properties (apartments, condominiums, and townhomes) through a contract with a private hauler. The most recent contract was awarded to Waste Pro of North Carolina in 2018 due to their routing plan, resulting in fewer pieces of equipment on the road, negatively impacting the environment. Additionally, Waste Pro is using compressed natural gas and “clean diesel” vehicles exclusively¹.

¹ <https://www.wastedive.com/news/waste-pro-gearing-up-for-new-17m-contract-in-charlotte-north-carolina/525146/>

Table 1. Summary of Potential R3Source Actions to Address Identified Gaps

| | | Program Improvement Suggestions | Gap Addressed | R3Source Program |
|------------|---|--|---|--|
| Businesses | 1 | Leverage results of direct technical assistance | R3Source has limited personnel and resources to make an impact on 19,000 businesses | Target businesses by SIC code or geographic clusters |
| | 2 | Follow-up with businesses that receive direct technical assistance | Long-term impact of LSW is difficult to measure | Create an on-line platform for businesses to provide waste information. |
| | 3 | Increase awareness of LSW benefits | Growing LSW requires broader awareness | Purchase advertising and sponsorships |
| | 4 | Evaluate the feasibility of awarding a Franchise Agreement for recycling services for commercial customers | Smaller businesses pay more for recycling services | Research the the legal authority to award franchise agreements and if other Ohio solid waste districts have done this. |
| | 5 | Track commercial waste quantities separately | Obtain data on the recycling and solid waste activities by individual business types (i.e. hospitals, hotels, grocery stores) currently, only have business data on a community level | R3Source could obtain this data through: <ul style="list-style-type: none"> • Request information from in-county facilities • Conduct periodic field studies |

| | | Program Improvement Suggestions | Gap Addressed | R3Source Program |
|------------|---|--|--|--|
| | 6 | Coordinate requirements for recycling in zoning ordinances | Some businesses do not have enough space for outdoor recycling containers | Work with local jurisdictions to provide universal guidance on space requirements to accommodate recycling at businesses |
| Businesses | 7 | Facilitate cooperative recycling programs | Small businesses do not have the same resources and do not benefit from economies of scale in their recycling programs | Assist clusters of small businesses that do not recycle by helping them establish a cooperative recycling program |
| | 8 | Create programs to educate property managers | Property managers often consider recycling an unnecessary, extra responsibility | Create a guidance document that outlines best practices for business recycling and conduct an annual workshop |
| | 9 | Enhance promotion of annual award recipients | Increase value for businesses to implement/enhance waste reduction and recovery programs | Supplement awards ceremony and publication with paid advertising |

| | | Program Improvement Suggestions | Gap Addressed | R3Source Program |
|--------------|----|---|--|--|
| Multi-family | 10 | Target communities with low recycling rates but a high number of multi-family dwellings | Improve overall recycling rates and increase multi-family recycling | Target communities where greater than 20% of residents live in multi-family and diversion rates less than 15% |
| | 11 | Distribute in-unit collection containers | Residents of multi-family properties often need to take their recyclables to communal collection containers | Distribute in-unit recycling containers to all dwelling units of properties that subscribe to recycling |
| | 12 | Provide outreach materials in a variety of languages | A small but notable proportion of the county is comprised of residents for whom English is not their primary language. | Target communities where many individuals live in multi-family establishments and do not have English as a primary language |
| | 13 | Franchise or contract for recycling collection services at multi-family properties | Property managers must subscribe to recycling collection services for which they may not be adequately informed. | Work with local jurisdictions to coordinate collection services at multi-family properties, including recycling and organics collection services |

Questions for Policy Committee

- Most options encourage communities to consider actions like franchising business collection.
- Should R3Source consider measures such as zoning or franchising?
- Historically, large property owners have not been responsive to communication requests from R3Source. What role could the County play in engaging large property owners?

Attachment A. Waste Diversion Rates and Multi-Family Dwellings by Hamilton County Subdivision

| Hamilton County Subdivision | Waste Diversion Rate* | Multi-Family Dwellings | |
|-----------------------------|-----------------------|----------------------------------|--------------------------|
| | | Number of Multi-Family Dwellings | Percent of Housing Units |
| Amberley Village | 59.9% | 0 | 0.0% |
| Anderson Township | 16.0% | 1,607 | 9.4% |
| Arlington Heights Village | 5.1% | 47 | 11.4% |
| Blue Ash City | 31.8% | 1,055 | 20.0% |
| Cheviot City | 1.6% | 632 | 15.3% |
| Cincinnati City | 20.0% | 57,588 | 35.6% |
| Colerain Township | 12.0% | 3,412 | 13.9% |
| Columbia Township | 18.3% | 355 | 16.9% |
| Crosby Township | 6.7% | 40 | 3.4% |
| Deer Park City | 11.8% | 242 | 8.9% |
| Delhi Township | 6.4% | 1,260 | 11.1% |
| Elmwood Place Village | | 200 | 18.2% |
| Evendale Village | 22.4% | 0 | 0.0% |
| Fairfax Village | 18.4% | 27 | 3.5% |
| Forest Park City | 13.9% | 1,757 | 24.4% |
| Glendale Village | 29.6% | 23 | 2.2% |
| Golf Manor Village | 9.0% | 99 | 5.7% |
| Green Township | 10.0% | 3,784 | 15.4% |

| | | | |
|----------------------------|-------|-------|-------|
| Greenhills Village | 24.0% | 113 | 7.0% |
| Harrison Township | 17.4% | 1,067 | 16.2% |
| Lincoln Heights Village | 4.9% | 219 | 13.5% |
| Lockland Village | 6.8% | 383 | 23.5% |
| Loveland City | 21.0% | 1,050 | 25.9% |
| Madeira City | 29.7% | 30 | 0.9% |
| Mariemont Village | 55.8% | 262 | 16.0% |
| Miami Township | 11.4% | 377 | 5.8% |
| Montgomery City | 36.5% | 391 | 9.4% |
| Mount Healthy City | 10.7% | 1,173 | 32.3% |
| Newtown Village | 15.5% | 204 | 17.4% |
| North College Hill City | 8.4% | 722 | 16.9% |
| Norwood City | 11.8% | 1,621 | 16.8% |
| Reading City | 4.6% | 1,213 | 25.2% |
| St. Bernard Village | 15.7% | 332 | 15.0% |
| Sharonville City | 14.2% | 1,547 | 27.5% |
| Silverton Village | 24.4% | 536 | 20.9% |
| Springdale City | 23.2% | 1,282 | 26.9% |
| Springfield Township | 15.0% | 967 | 6.3% |
| Sycamore Township | 21.0% | 1,313 | 15.3% |
| Symmes Township | 15.7% | 1,075 | 18.0% |
| Terrace Park Village | 49.6% | 0 | 0.0% |
| The Village of Indian Hill | 34.5% | 0 | 0.0% |
| Whitewater Township | 1.1% | 538 | 22.3% |
| Woodlawn Village | 31.9% | 777 | 44.3% |
| Wyoming City | 45.2% | 78 | 2.5% |

*Diversion rate does not include multi-family data.

