## CASE

## Scott County Residents "Go All In"

In Scott County, Iowa, the Waste Commission will increase participation and diversion with a new single-stream collection program for 48,500 households and an upgraded MRF with more than double capacity to serve the Quad Cities region.





### SUMMARY

**BORROWER** WASTE COMMISSION OF SCOTT COUNTY (IA)

#### **CLF LOAN** \$2.7 M

#### **OVERVIEW**

When the Scott Area Recycling Center's aging recycling equipment needed to be replaced, Waste Commission of Scott County and its intergovernmental partners, the cities of Davenport and Bettendorf, pursued the change from dual to single stream recycling. The change allows for the preservation of space at the Commission's Scott Area Landfill, saves natural resources, and allows for safer and more efficient collection by member cities' public works departments. The Commission and its partners invested in larger capacity carts for curbside recycling, a redesigned single-stream MRF, and an extensive

#### **BEFORE/AFTER**

Prior to this investment, the Commission's curbside program included a mix of dual stream carts and bins; its Recycling Center processed 27 tons of materials per day, charging a \$15/ton flat tip fee. The Commission-managed landfill charges \$26/ton.

Today, the Commission has upgraded to 95-gallon carts for single stream curbside collection at 48,500 residences; the recycling center now has capacity to manage 10

#### PORTFOLIO AREA COLLECTION, SORTATION

**TOTAL PROJECT** \$10.75 M with co-investment from municipal bonds

education campaign to increase diversion and participation in recycling.

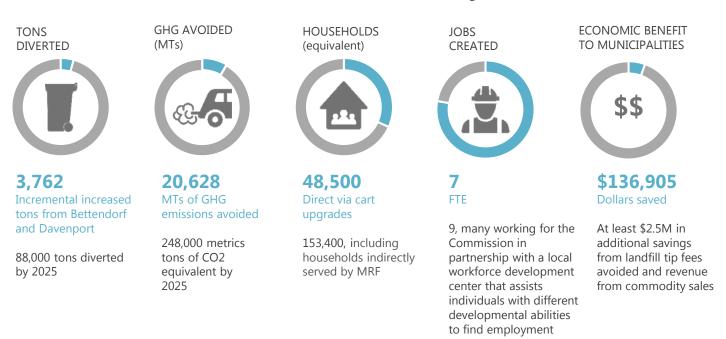
The Commission provides integrated solid waste management services for Scott County, Iowa, and beyond through its facilities and programs: Scott Area Landfill, Scott Area Recycling Center, Household Hazardous Material Facility, R2-ceritfied Electronic Demanufacturing Facility, environmental education program, grant program, and iLivehere program, which is the Scott County affiliate of Keep America Beautiful.

tons/hour, or 70 tons/day. The MRF shares revenue on sales of commodities with haulers (an even 50/50 split on estimated \$100/ton), less an \$80 processing fee which covers costs of operations. In the first six months under this scenario, haulers were paid over \$13/ton. Each ton diverted also brings savings on avoided landfill tip fees. The recycling program is a net positive contributor to the Commission's overall budget, projected at 18% of revenues and 12% of expenses.

Projected by 2025

Progress as of Jan 2017

#### **KEY METRICS**



### **PROBLEM/CONTEXT**

Scott County on the Iowa-Illinois border "has had a culture of recycling for 20 years," according to the Commission communication coordinator Brandy Welvaert. In Bettendorf, for example, participation rates have been at 80%. With an annual budget of \$7 million funded solely by user fees, the Commission, along with 44 staff members, prides itself on providing the highest level of service. In addition to managing the local landfill, it collects and processes recyclables, e-waste, appliances, household hazardous materials, and bulky items. As the Scott County affiliate of Keep America Beautiful, the Commission's iLivehere program also educates the community about waste management and environmental stewardship.

However, a 2011 study revealed residents were throwing away as much recyclable material as was getting processed by the Commission's recycling center. If the Commission wanted to extend the life of its landfill, it needed to divert more material. Commission director Kathy Morris suspected single-stream was the answer, but she needed to perform due diligence and develop a compelling rationale to present to Commissioners before requesting their support.

### SOLUTION

The Commission studied several options, including transferring and outsourcing sortation services to a third-party operator. **The most financially sustainable option turned out to be for the Commission to operate its own single-stream recycling facility**. In order to get enough feedstock to make the

operation sustainable, the County would need to increase service by expanding single-stream throughout the County and contracting with neighboring towns and cities, as well as private partners, in the Quad Cities region.

With financing from CLF, the Commission provided 48,500 95-gallon carts to residents. Each new cart came with a RFID tag, which, along with new RVision software from Rehrig Pacific, is helping the Commission closely track participation and contamination at the household level. The



Commission and its partners will use this data to develop efficiently targeted educational campaigns. Along with bigger carts, the Commission engaged in a community-wide, multi-platform education campaign. Informed by tools and resources from The Recycling Partnership, the Commission worked with Bawden & Lareau PR, a local PR firm, and a creative consultant to create <u>Go All In</u>, a broad-reaching communication effort to rethink recycling in Scott County. (See "Key Insight 1" for best practice in effective education campaigns.) The Scott Area Recycling Center got a full upgrade in summer 2016. Commission staff visited several other facilities and learned from municipalities, like Outgamie County, Wis. Foth Engineering & Environment, LLC and equipment manufacturer CP Group collaborated on a redesign within the footprint of the existing MRF. The new 10 ton-per-hour single stream facility has more than doubled the County's recycling capacity from 7,000 to 18,000 tons/year.

#### **BUSINESS CASE**

Faced with significantly aged recycling equipment requiring replacement, the Commission saw an opportunity to expand capacity with a single stream MRF. In order to justify the investment, however, the Commission needed to ensure the financial impact on residents would be minimal; member governments could not increase waste collection fees more than they had historically, in line with cost-of-living. An analysis of the economic impact of different options was completed in June 2014. (See "Key Insight 2" for details.) A loan from the Closed Loop Fund was instrumental in making the project possible and set the stage for a one-time bond measure to help finance the remainder of the \$10.75M program.

"Closed Loop Fund's loan was a godsend. (The cities of) Davenport and Bettendorf, and the Waste Commission (of Scott County) had been talking about moving to single stream for ten years. As budgets were tightening, it wouldn't have been possible to do this project without Closed Loop Fund's help."



- TODD JONES, SUPERINTENDENT OF SERVICES, CITY OF DAVENPORT, IOWA

The Commission has also done its homework to ensure that the new expanded recycling program and related debt service will be financially sustainable for Scott County. Diverting more tonnage is generating savings from tip fees avoided. At the MRF, an \$80/ton processing fee and revenue share has replaced the tip fee and covered core operations, allowing the Commission to create additional full-time positions. The Commission also is seeing modest revenues from increased sales of commodities. As nearby communities and operators have learned of the new MRF, the Commission is building relationships and establishing contracts, which is creating additional revenue opportunity from handling material beyond Scott County.

## **RESULTS TO DATE**

In its first months of operations, the MRF has seen a 61% increase in volumes over the same months last year. Davenport has seen a 77% increase in recycling volumes. Bettendorf, which previously had dual stream carts, has seen a 36% increase.

Designed to process 18,000 tons per year, the upgraded MRF was projected to double its through-put over time. Since opening, inbound



volume has quickly ramped up, with material coming from the Illinois-side of the Quad Cities area and, in some cases, 60-100 miles away. As a result, the team has added operating hours to handle input. The Commission expects to reach 16,500 tons in its first year, and is now considering adding a second shift to manage volumes.

While the staff is still adapting to new equipment, technology, and inbound material, education has helped to keep residue low (below 10% on average).

Outbound commodities are also finding new homes. Working with Midland Davis (Moline, Ill.), the MRF has successfully found a new customer for their glass, which will decrease costs by \$10/ton. The economic benefits of the increase in marketable bales is being realized by both Bettendorf and Davenport. Bettendorf has even seen a modest return above and beyond their loan repayments in recent months.

## LOOKING AHEAD

Although the Commission's Go All In program is still in its first year, the Commission is beginning to think about further program expansion. With the help of a state grant and their partners at Rehrig, Scott County is now launching a recycling program focused on municipal buildings.

By 2025, the Commission is targeting increases and benefits in many areas, including:

- Increased participation rates in Bettendorf and Davenport
- Increased tonnage diverted from ~7,000 to 18,000 a year (cumulative 88,000 by 2025); related GHG emissions avoided of more than 248,000 metric tons by 2025
- Creation of 9 jobs
- For Bettendorf and Davenport, increased revenue from sale of commodities and savings from tip fees avoided, an **economic benefit to the county** of at least \$2.5M

### REPLICABILITY

## Replicable with the right operator

As more municipalities consider privatizing recycling operations, Scott County is a model for how public management can succeed. What to look for:

- **Committed and aligned public officials**: The Scott County Board of Supervisors and Bettendorf and Davenport city leaders were instrumental in guiding the Commission's transition to single stream and supporting the bond measure for this project.
- **Vertically integrated operations**: The Commission manages sortation, as well as markets its commodities throughout the area. It also coordinates closely with intergovernmental partners, which manage collections.
- **Solutions for a wide range of accepted materials:** The Commission operates programs for household hazardous waste, e-waste, and appliances, in addition to the recycling center and landfill, which means cross-contamination has a greater chance of being handled appropriately.
- **Sufficient volumes in the County with additional regional opportunities:** With the upgraded MRF, the Commission is well positioned to support the recycling needs of not only all residents of the County, but also those of the greater Quad Cities region and western Illinois.



All photos courtesy of Waste Commission of Scott County

## **KEY INSIGHT 1: BEST PRACTICE IN EDUCATION CAMPAIGN EFFECTIVENESS**

Commission Director Kathy Morris understood that a successful rollout required focused attention and resources to engage residents and stakeholders. In preparation, the Commission developed a robust plan.

- Use Data to Understand Residents. A public perception survey conducted in 2013 highlighted potential gaps in the Commission's education efforts. For example, residents, particularly young residents (18-34) want recycling information at the time of recycling, and not through print publications hence the use of full-color, pictorial in-mold labels (IMLs) on the lids of all new recycling carts.
- Commit Resources. The existing "culture of recycling" and environmental stewardship has been a core asset on which the Commission was able to build – even still, the Commission has invested heavily in public education, using best practice tools from The Recycling Partnership and a multimedia (digitalfocused) communications strategy supported by a local PR firm, Bawden & Lareau Public Relations. The "Go All In" campaign and related education activities cost approximately \$3.50 per household.
- Create Ambassadors. To get ready for rollout and implementation, Commission staff went on a learning tour to nearby MRFs and received extensive training from CP Group. Commissioners and other community partners were briefed on all aspects of the project well in advance of the public rollout and campaign. Volunteers were recruited to share their stories and promote the new program in the community. By proactively engaging stakeholders, a relatively small team of Commission staff created an army of ambassadors to support the broader campaign.
- **Follow Through**. To carry forward the message post-launch and rollout, the Commission is committed to ongoing education and resident engagement through the year. In the first year post-launch, the County has retained PR support to address targeted follow-up messaging to residents. It will also conduct a follow-up survey to gauge whether resident perceptions and behaviors changed after the "Go All In" campaign.

#### **BEST PRACTICE CHECKLIST**

Appropriate investment has been made

- Municipality has allocated an appropriate total budget / # of households reached, including dedicated resource for ongoing resident engagement and education
- Comprehensive communications plan is in place for launch and ongoing education
- Effort leverages value-added expertise and community partners (e.g., TRP, local KAB affiliate, municipal leadership, community leaders, media organizations)

#### Residents are aware of the program

- □ Campaign materials are clear; activities have a broad reach (% of households)
- Residents indicate they are aware, understand program (e.g., through survey or other mechanism)
- Questions/concerns are responded to quickly and satisfactorily

#### **Residents are changing behavior**

- #/% of households participating is increasing
- Lbs. collected per household is increasing

# Contamination is low; trouble spots are identified and being addressed

- □ % residue is maintained/declining
- #/% of households and instances per household/neighborhood are maintained or declining

## **KEY INSIGHT 2: DECISION FACTORS FOR MRF OPERATIONS**

The Commission evaluated 3 options for transitioning to single stream. The consulting firm Foth Infrastructure and Environment assisted the Commission with the evaluation and conducted a sensitivity analysis to consider the impacts of increased tonnage and improved commodity prices.

# Options

# 1.

## The Commission operates the Scott Area Recycling Center (SARC).

- Requires the most upfront capital expenditure
- Offers less risk in down commodities markets
- Greater potential financial upside with added tons
- Keeps local jobs
- Allows for the most control over operations in the future

# 2.

## SARC becomes a transfer station, sends material to privately-owned MRF in Illinois.

- Requires the least capital expenditure, less capital cost risk
- Easiest to implement and manage
- More financial risk in down-commodity markets
- Loss of local jobs

## 3.

## SARC is owned by the Commission, operated by private entity.

- Still requires capital investment in upgrading MRF
- Under various scenarios, this option was determined to be the most costly to the County in the long-run

Foth's analysis illustrated the importance of increasing volumes of materials coming to the MRF. Once the Commission agreed to pursue the first option, it had to secure the contracts for tonnage beyond Davenport and Bettendorf, and secure financing. Within 13 months of the Commission's decision, the newly upgraded Scott Area Recycling Center accepted its first truckload of recyclables.

The Southeast Regional Development Council (SERDC) has developed an excellent toolkit to assist local governments in improving their materials management operations. Following an integrated solid waste management program model, like Scott County's, SERDC resources include a full cost accounting handbook and worksheets. The toolkit is available for download at <u>http://www.serdc.org/iswm</u>.

www.closedloopfund.com

