

Revive Recycling And Make Money Too

Case Study Category: Economic Vitality

Jurisdiction: City of Fort Lauderdale, FL

City Manager: Lee R. Feldman, ICMA-CM

Would you like the application to be considered for an Innovation Award?

Yes

Would you like the application to be considered for our Rapid Fire Session?

Yes

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SYNOPSIS

The City of Fort Lauderdale administers the largest curbside recycling program in Broward County, serving 38,000 residential accounts as well as City parks and government facilities. We are fortunate that our residents are enthusiastic and supportive of recycling. In FY10-11, our annual curbside recycling tonnage was 7,891, generating a total of \$444,640 in recycling revenue for the City.

Increasing recycling is always the right thing to do. This is especially true for a coastal community like ours where environmental protection is vital to our quality of life and to our economy. Our performance was solid for a mid-sized, urban, East-coast city, but we knew we could do more. Our set-out rates for residential service could be increased. We could expand service to more multi-family residences, and we could enhance our recycling program at parks and public facilities (where containers were often overflowing). So when a grant to convert to Single Stream Recycling was presented to us, we were ready *to improve upon our already successful service.*

We applied for and received \$3.4 million from Broward County, FL, with the intent of implementing SSR in three phases over 15 months: (1) in our curbside residential program, (2) in our public spaces program, and (3) as a trial and education campaign in multi-family units.

Our research showed that most municipalities converted to single-stream in a relatively straightforward manner. The focus seemed to be on provision of a larger container to increase capacity, automation of trucks to decrease collection costs, and some amount of resident education via print or online materials in order to control contamination.

This seemed a good start, but we wanted to do more. Our baseline analysis showed that we had an incredible opportunity to use recycling as a growing source of revenue, if we could:

- Increase set-out from current customers;
- Bring new customers into service;
- Collect recyclables from other sources; AND,
- Increase the revenue we earn from the MRF.

Our goal needed to be larger than just implementing single stream; it became **to create a business model that is both environmentally preferable and fiscally self-sustaining.**

	FY10/11	Potential
Recycling tons delivered for year	7,891	11,245
Revenue per ton from the MRF	\$56.35	\$58.50
Total revenue from curbside recycling	\$444,658	\$657,833
Residential garbage tons delivered for year	42,088	41,416
Disposal cost per ton	\$99.20	\$72.57
Monetary value for diverted materials	\$782,787	\$816,050
Cost for collection per HH per month	\$1.90	\$1.90
Recycling Set-Out Rate	30%	75%

Yes, we would cover the basics of service provision, but then we would focus on adding the tonnage and controlling the contamination that drives revenue. Further, we would execute flawlessly so that residents would be newly excited about recycling and ready for a revenue-focused message.

To meet this goal would call for a systemic approach to the project. We would need to look at the entire recycling process – from resident to MRF. We decided that it would be best to manage the project internally so that we would build the skills necessary to achieve our long-term goals.

We brought on two contract employees to help us: one to act as project manager, and the second to work on marketing and communication. This freed up our recycling program manager from the day-to-day project logistics and instead allowed her to concentrate on contract negotiation, vendor relations and organizational change management impacts that would ensure smooth operational Integration. Without a smooth transition, our highly engaged community would focus more on cart deployment issues than on helping us reach the goal.

For all three phases (residential, public spaces and multi-family), our implementation strategy would be:

EXPAND SYSTEM CAPACITY	<ul style="list-style-type: none">•Provide appropriate container for each type of residence or facility.•Remove obstacles to participation.•Work with vendors and other City departments to update infrastructure and procedures.
TEACH HOW TO RECYCLE MORE AND BETTER	<ul style="list-style-type: none">•Re-fresh the message and materials.•Reach out to a wider audience in more ways with more information.
REWARD THE RIGHT KIND OF PARTICIPATION	<ul style="list-style-type: none">•Strengthen and expand existing neighborhood rewards program to include more of our population.•Link rewards directly to our tonnage and contamination goals which drive revenue.



As of this writing we have completed the Residential phase. We have re-branded our recycling program as “Mix it. Curb it.: Making Recycling Easier...and Cleaner.



We have purchased and deployed 40,000 65-gallon recycling carts with ultra high-frequency Radio Frequency Identification (RFID) tags, an InMold label guide to recycling, and a detailed instructional Cart Hanger for the resident to keep.



MIX ALL RECYCLABLES HERE

Mix It. Curb It. There's no need to sort. Simply mix all clean recyclables in this cart and roll it to the curb.

<u>CONTAINERS</u>	<u>PAPER/CARTONS</u>	<u>GUIDELINES</u>
<ul style="list-style-type: none"> • Glass bottles and jars (any color) • Juice and milk boxes • Metal cans and lids • Plastic bottles/jugs • Any plastic container with a narrow neck 	<ul style="list-style-type: none"> • Catalogs/magazines • Cereal boxes and other paperboard • Cardboard boxes no larger than 4' x 2', cut and flatten • Junk mail • Newspaper • Office paper • Paperback books • Any paper that tears 	<ul style="list-style-type: none"> • Empty and rinse containers. Remove lids and caps. • Don't bag recyclables. • Close cart lid completely. • Set cart two feet from other carts or objects. • Recycling carts are assigned to a property address. Don't remove.

IMPORTANT! NO batteries, ceramics, electronics, food waste, garbage, household hazardous chemicals (e.g., garden chemicals, paint, vehicle fluids, etc.), light bulbs, plastic bags, Styrofoam, window glass, or yard waste should be put into this cart.

For more information, visit www.fortlauderdale.gov/recycle or call (954) 828-8000.

mix it curb it
Making Recycling Easier

This cart is assigned to your property address. For easy identification, print your address in this box with permanent marker.

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We have updated our procedures and support materials for our Collection vendor's crews and our internal Cart Maintenance Shop personnel. We are beginning the integration of the RFID asset management data with our internal systems.

Performance in the single-family residential sector has been exactly as expected. We are already experiencing 50% tonnage increases, just from the process infrastructure improvements, even after only a few weeks of collection data.

The projects has also had some surprising side benefits.

- We were able to facilitate a level of inter-departmental communication and planning which is extending to other projects.
- We were the first project team to provide detailed process and procedure information or training to customer facing personnel in advance of deployment (including Customer Service, sanitation services, City Commission).
- We took an innovative approach by including a G.I.S specialist on our team and utilizing mapping technology extensively as a decision support tool.
- Our ability to measure and report performance along the way has exceeded expectations.

- Our relationship with vendors is even stronger and more cooperative.
- Our new methods and procedures for recycling cart asset management will serve as a model for management of our garbage and yard waste cart inventory.

Indeed, the execution of this project has been so well regarded that it is setting new standards within the City.

We are particularly proud of the fact that the deployment of our 40,000 carts was completed in only five weeks with no disruption to recycling service. Using a delivery schedule designed to mirror our truck routes, we were able to deliver carts on each resident's actual recycling collection day, and convert them to automated collection the very next week. We worked closely with our cart manufacturer to develop deployment policies, procedures and delivery crew support materials. We analyzed reports daily during deployment-- troubleshooting and implementing new procedures for things like lost or stolen carts, exemption requests, etc. As a result, though we are wrapping up deployment as we write, we anticipate total operational integration of residential SSR within four weeks. Our error rate (missed deliveries and complaints) has hovered about one percent for the entire deployment.

All the while, we have begun the second part of our strategy – teaching people how to recycle more and better. We've implemented a Communication and Education campaign to carry our updated message that recycling is the right thing to do for our City because it will have a positive economic impact. The campaign includes: HOA and civic organization presentations, appearances and sponsorship of special events, cable television commercials, the development of a Sustainability Portal as a pilot to our City's new digital broadcasting system, and continued print and electronic communications to residents.

Finally, the aspect of our program that is likely to have the most positive impact is the extension and utilization of our Green Your Routine (GYR) incentive program and network of volunteers in order to reward the right kind of participation. Like many cities, we investigated a privately run incentive program that would reward individuals, but that didn't seem to fit the culture of our City. We have a long history of working through our neighborhoods to create change and a strong relationship with neighborhood HOAs and civic associations. Our view is that incentive dollars will be more effective, and will go farther, if they reward neighborhoods with money that will definitely be used for community improvement and events, rather than rewarding individuals with "points" that may never be used. Utilizing the new RFID technology, we will be able to provide better data to our neighborhood GYR volunteers, who in turn will be able to feed back to us the specific issues, questions and obstacles to recycling that their neighborhoods face. We'll be able to troubleshoot and target education more effectively, and of course reward neighborhoods with cash grants when they recycle more and better.

In September, we will begin the second phase of our work, including the replacement of older parks and City facility containers, the deployment of additional containers and a trial of “big belly” solar containers. We are also planning for a Fall start to third phase. This will include an analysis of whether to bring smaller (four to 10 unit) multi-family dwellings back into City service, and how to effectively increase recycling in all apartments and condominiums. We will conduct town meetings with larger multi-family units and their collections providers to develop recommendations for larger buildings. We plan to conduct a comparative trial to determine what works best in different settings and then an education campaign to assist building management and associations with implementation.

We still have challenges before us-- with the key question being how to get people to recycle the right things in the right way. How do we get people to stop putting plastic bags, dirty containers, plastic not covered by our processing contract and plain old garbage in their recycling? How do we avoid the inevitable contamination?



The answer, we think, lies in continuing our project approach. The key to our success has been in looking outside our normal scope, so our message to constituents needs to do the same. Most recycling programs emphasize the notion that recycling is good for the environment. Of course that's true! Even those who don't recycle know about that connection to the environment. It just doesn't seem to be enough to motivate them.

We believe that we need to talk about recycling as more than just an environmental cause. While we will

continue to educate our residents about that connection, our message will now be more clearly linked to the economics of recycling: It's good business for our City. The main components of our new message are:

- Recycling is a market driven industry.
- The market will pay more for desirable and clean recyclables that can be processed into high-value manufacturing grade materials.
- We want to go for the highest rate of return (by increasing tonnage, by lowering collection costs, AND by increasing what we get paid for materials).
- The revenues we bring in from recycling WILL go back to residents by: keeping recycling service free, offsetting sanitation service (in the long term), and providing cash incentives to neighborhoods.

PRESENTATION STYLE

We look forward to sharing our project planning and execution materials and our results with TLG participants. These will include a “gallery” of our resident education materials, video of our cable television commercials, and demonstration of online materials. By April, we will have well developed performance results to share and case studies for individual neighborhoods.

We are also developing outreach programs for niche sectors of the Community, and will be able to exhibit:

- A community service program/opportunity for high school students to help us get the word out about more and better recycling
- An “I Have a Green Streak” curriculum for K-8 (a component of which requires students to educate their parents)
- Materials from our partnership with the Fort Lauderdale Museum of Discovery and Science
- Integration of recycling education into our after-school and camp programs
- Special presentations and toolkits for large multi-family units
- Special presentations to senior citizen groups

In addition, to make the presentation fun and interactive, we would be happy to demonstrate our recycling “game show” which is a parody of NPR’s “Wait, Wait Don’t Tell Me...” program. This is a special presentation in development to teach homeowners and civic associations why and how to recycle more and better.

Both our Recycling Program Manager and the Single Stream Project Manager have extensive public speaking experience and are sure to host an engaging and worthwhile session for communities thinking about Single Stream Recycling, and for any community looking for excellence in managing strategic projects.