



Connecticut Department of Energy & Environmental Management Capturing the Value – Transforming Municipal Materials Management Summit

### Tracking Participation: Not Just Recycling Rates



Mark E. Moriarty, PE Director of Public Works City of New Britain





- Recycling rates track performance but not participation...
- The City of New Britain implemented a Single Stream Recycling Program (SSR) in October 2010
- Our program has been very successful
- An overview of our SSR Program
  - Motivation
  - Program
  - Approach
  - Results



**Old Program** 



**New Program** 



#### Personally...

 I spend a lot of time outdoors, I recycle and I love the environment

#### Professionally...

- As a Public Works Director, I am in a position to positively impact the environment by:
  - Sewer discharges through I&I projects
  - Clean water illicit discharge elimination and other stormwater quality initiatives
  - Solid waste management
- BRRFOC/TROC Representative and Governor Malloy's Modernization Committee Member

## **Motivation**





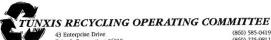


#### The Real Driver; for New Britain's \$\$R Program...

- In an economically challenged community with little economic growth, and we needed to come up with new ways to:
  - Save money
  - Keep taxes down
- We wanted to move towards a more sustainable approach to SWM
- Our recycling rates, when compared to other TROC municipalities, were very, very low

## Motivation





43 Enterprise Drive Bristol, Connecticut 06010 www.brrfoc.org (860) 585-0419 (860) 225-9811 Fax (860) 585-9875

MEMO TO:

TROC Members

Town	Jul - Mar FY 2009	Jul - Mar FY 2010
BERLIN	1,310	1,141
BRISTOL	2,765	2,550
BURLING.	548	534
MERIDEN	1,341	1,366
MORRIS	120	139
N. BRITAIN	2,027	1,661
PLAINVILLE	1,243	764
PLYMOUTH	336	334
PROSPECT	403	388
SOUTH.	1,898	2,297
WARREN	82	69
WASH.	344	343
WOLCOTT	475	460
TOTAL	12,892	12,046

**Bristol's showing us up!** 

Embarrassing = MOTIVATING!

Southington's making us look bad!

## **Motivation**



- Evaluated various program types
  - Pay-as-you-throw
  - Switching existing 95 gallon MSW cart to recycling carts, and purchasing new smaller MSW carts
  - Weekly vs. bi-weekly collection
  - And so on...
- Ultimately decided on a "vanilla" program
  - Weekly MSW curbside collection
  - Bi-weekly recycling collections
  - Continue serving residential properties up to six family

## **Program**





- Despite the vanilla curbside collection program for MSW and recycling, our approach was not cookie cutter
- Our approach had several unique attributes that made it work
  - Benchmarking
  - Public Outreach
  - Enforcement



## **Program**

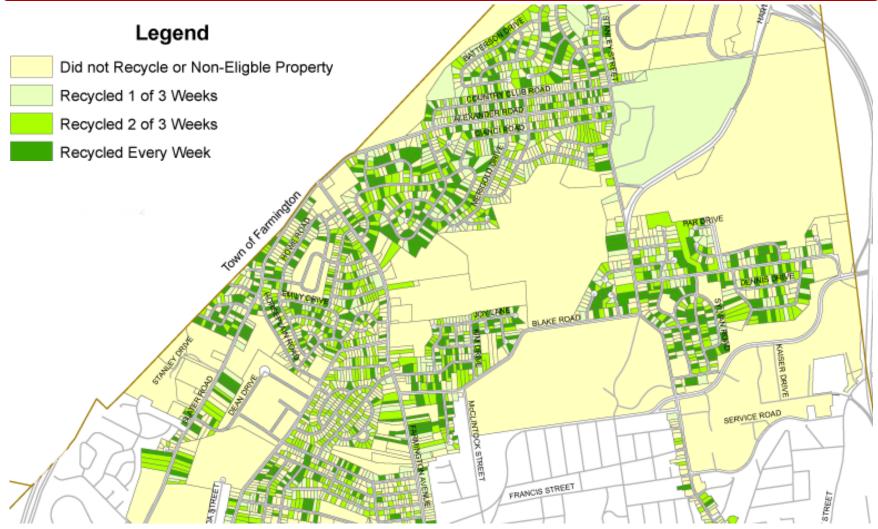


- Our goal was to make recycling a habit
  - In order to get where we wanted to go, we needed to understand where we were starting from
- We needed data beyond just an overall recycling rate – to find out what we were really dealing with
- Conducted 2010 City-Wide Recycling
   Survey in February 2010
- Developed a GI\$ database with the study results



## Benchmarking





## Benchmarking



#### **Recycling Percentages – by property type**

Type of Property	Total Number of Properties	Total Number of Properties Recycling	Percentage of Properties Recycling
<b>Single Family</b>	8,961	6,400	67%
<b>Two Family</b>	2,721	1,701	64%
Three Family	1,583	840	<b>50</b> %
<b>Four to Six Family</b>	410	151	41%
TOTAL	14,400	8,929	61%

## Benchmarking



## Public outreach had two primary components:

- Information
   Overload
- Targeted Mailings

#### Information Overload

- Can't get away from seeing SSR educational materials
- If people didn't get it it wouldn't be because we didn't try

#### Targeted Mailing;

- Based on City Wide Recycling Study
- Sent to all residents and property owners
- One letter for if you did recycle
- One letter for if you didn't recycle
- Included recycling magnet

## **Public Outreach**



#### Information Overload

- Media Blitz
- Reaching the Children
- **Direct Outreach**

New Britain Herald | www.NewBritainHerald.com

LOCAL

#### City rolling out single-stream recycling

STAFE WRITER

NEW BRITAIN - Residents are in the process of receiving their new blue recycling carts, which will ultimately save the city money while helping the environment.

The blue carts provide for "single-stream" recycling, which allows residents to recycle more items without separating them.

The blue carts replace the yellow recycling bins that residents put out





We are pleased to announce the arrival of automated SINGLE STREAM RECYCLING collection to New Britain. The new curbside program is anticipated to begin early fall 2010.

> Single Stream is an easier process that requires no sorting and allows more materials to be recycled.

#### PROGRAM CHANGES

Recycling collection will be EVERY OTHER WEEK

WATCH YOUR MAIL FOR MORE INFORMATION STATE LAW REQUIRES RECYCLING
LOCAL FINES FOR NOT RECYCLING WILL BE ENFORCED.
First offense: written warning. Second Offense \$25. Subsequent offenses: \$10

#### BENEFITS

dispose of recyclables than trash Cleanliness of the City of New Britain

u may keep your old recycling bin. If you wish to dispose of your bin, you may place it in your MAROON retainer. DO NOT put it is your new BLUE recycling container. You may also drop it off at the New Britists Londill, Demnig Bood, Berlin.

WHY? • Saves Money • Conserves Natural Resources
• Reduces Greenhouse Gas Emissions • Reduces Carbon Footpri

RECYCLING GUIDE

NO

AEROSOL CANS

PLASTIC BAGS

TOXIC FLUIDS

555

Syringes/Needles (Regulor special)
 Mirrors • Window Glass

YES

CLEAN FOOD & BEVERAGE CONTAINERS Must be cleaned and rinsed Including laundry detergent and shampoo bottles

GLASS AND METAL FOOD & GLASS AND METAL FOOD &
BEVERAGE CONTAINERS
Must be cleaned and rinsed

CORRUGATED CARDBOARD

PLASTIC CONTAINERS

Folded flat to 2'x3'

With Single-Stream Recycling All percycloble materials will be out into the blue percycling cost. No more banging virin angeloretim keyburing nut, recyclosom interitors with ore pur into the labe feograng cost; row note obgains lying, or bandling and no seed to sori or separate different types of metal, glass and plastic contains from paper, junk mail, backboard and caribboard – simply mix all recycloble materials together in the cort, close the lid and whele if it to the cub for collection.

#### DISPOSAL ITEM | SPECIAL RULES & FEES | WHERE TO TAKE IT

Cor Boteries	Free disposal	New Britain Landill	
Motor Oil	Free disposal (5 gollon limit)	New Britein Landfill	
Tires	\$5 each up to 19"; \$10 ea for 20"- 24"; \$60 each for 25" & above	24"; 560 each New Britain Londill	
Appliances:	Free disposal (\$15 for Freon appliances)	New Britain Landfill: See an-call collection	
Metal Recreational Equipment/ Yard Equipment	Swing sets, exercise equipment, grills, no tanks, lawn mowers, clippers etc. Free disposal.	New Britain Landill: See snrcoil collection	
Metal Bedfromes	Free disposal	New Britain Landfill: See an-call collection	
Metal Doors	Free disposal	New Britain Landill: See an-call collection	
Metal Furniture	Free disposal	New Britain Landfill: See an-call collection	
Metal Shelves & Closets	Free disposal	New Britain Landill: See an call collection	
Tollets, Tubs & Sireks	Landill fees apply. See below.	New Britain Landfill: See on call collection	
CAl Tanks, Hot Water Heaters & Radiators	Oil tanks dry & cut in half: free disposal	New British Landill: See an-call collection	
Home Building Debris	Bricks, rocks, cement, shingles, sheetrock, treated wood: See landfill fees below.	New Britain Landfill: See an call collection	
Rugs/Corpeling	Roll & tie to 5' length. Burnoble items can be placed on outb call for appointment.	Call Trash-Away: 225-1206	
Couches, Chairs & Recliners	Burnable items can be placed on curb. Call for appointment.	Call Trash-Away: 225-1206	
Mothesses & Box Springs	Burnable items can be placed on curb. Call for appointment.	Call Tresh-Away: 225-1206	
Loose Wood	Cut to 4" & bundle into manageable piles. Call for appointment.	Call Trash-Away: 225-1206	
Yard Clippings	Cut to 4' & bundle into manageable piles. Call for appointment.	Call Trash-Away: 225-1206	
Wooden Furniture	Burnable items can be placed on curb. Call for appointment.	Call Tresh-Away: 225-1206	
Wooden Framed Windows	Burnoble items can be placed on curb. Call for appointment.	Call Trash-Away: 225-1206	
Wooden Fences	Cut to 4' & bundle into manageable piles. Call for appointment.	Call Trash-Away: 225-1206	
Household Mostic Lawn Furniture & Toys	Barnable items can be placed on curb. Call for appointment.	Call Tresh-Away: 225-1206	
Leoves	Must be recycled. Look for details in October/ November calendor	New Britain Landfill	
Gross	No bagging! Clippings are not collected by houler: It's the law	Compost in backyard or cut and leave on lawn	
Books	Burnoble in with trash or given to community agency	Curbside or Community Organizations	
Clothing	Burnable in with trash or given to community agency	Curbside or Community Organizations	
Electronics	All computer components, TVs, VCRs, DVDs, cam- eros, cell phones, stereos, radios, etc. Free disposal.	New Britain Landfill. See an-call schedule	

LANDFILL First 5 cubic yards are \$5 for each cubic yard Next 5 cubic yards are \$10 for each cubic yard Next 10 cubic yards are \$20 for each cubic yards are \$20 f



## **Public Outreach**



#### **Targeted Mailings**

#### If you recycled...

- EDUCATE
- Involved 61% of properties

#### If you didn't recycle...

- MOTIVATE
- Involved 39% of properties

#### Speaking to Every Resident

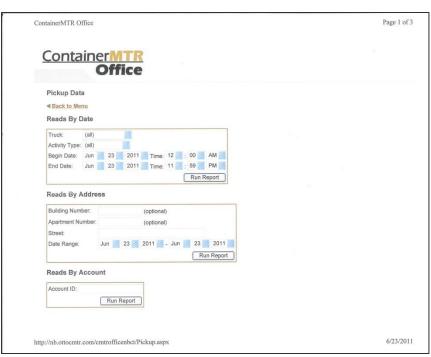
- Key to the program's success
- People largely ignore mass mailings, even though we did do some of this as part of the program
- Letters based on:
  - Did you recycle?
  - Did you NOT recycle?

## **Public Outreach**



#### Web-based real-time cart tracking software



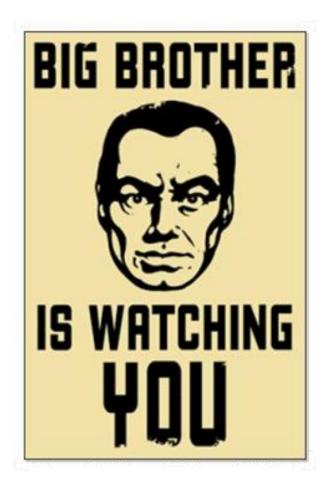


## **Enforcement**



#### 5 Simple Steps to Enforcement

- Identify Properties
- 2. Field Verify
- 3. Issue Written Warning
- 4. Issue First Violation (\$25)
- Issue Second Violation (\$100)



## **Enforcement**



# What we've accomplished



**NOVEMBER** 

2009:

VS.

NOVEMBER

2010:

179.77 tons

recycled

334.13 tons

recycled

An increase of 154.36 tons and 85.9%!

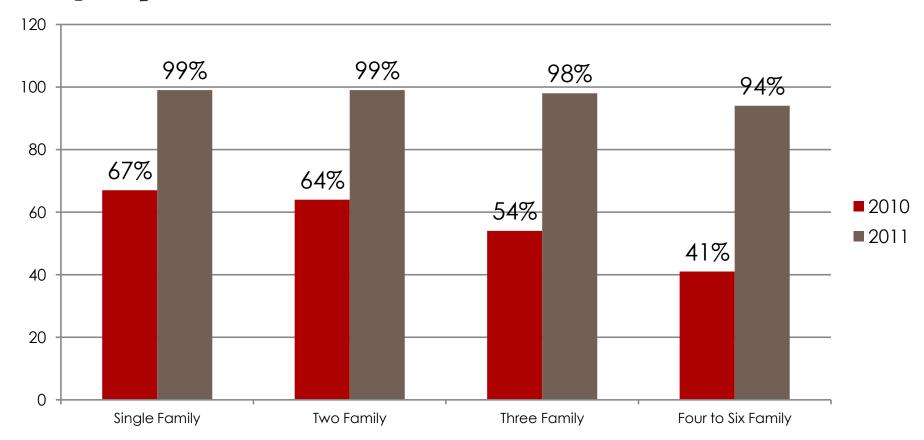


#### And subsequent months followed the same trend...

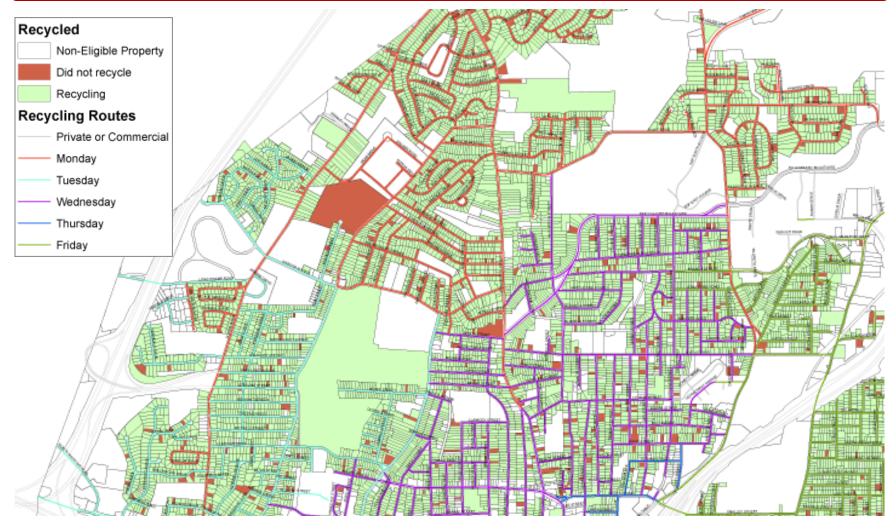
Month	2010 tons	2011 tons	% Increase
December 2010	201.15	377.58	87.7%
January 2011	159.26	291.53	83.0%
February 2011	162.06	287.73	77.5%
March 2011	190.56	407.23	113.7%
April 2011	189.02	356.59	88.7%
May 2011	190.94	372.65	95.2%



#### Property-Based Increase Data: 2010 vs. 2011









- Effective benchmarking, targeted public outreach and the ease of SSR gave us an initial per property participation rate of
   95%.
- On-going enforcement efforts increased this rate by a total of 3.5%.
- We will continue to evolve and monitor the process with a goal of 100% participation!

Overall increases 61% to

98.5%







- Performance rates and participation rates are not the same
- High participation rates can be achieved in any community
- Start with an accurate benchmark
- Tailor public outreach and enforcement efforts to your specific audience
- Keep it simple





## Summary



## Questions

Mark Moriarty, PE
Director of Public Works
City of New Britain
27 West Main Street, 5<sup>th</sup> Floor
New Britain, CT 06051
860-826-3350

