

Market Research Results and Recommendations

Improving Recycling Efforts in the Tunxis Region

September 25, 2007



Tunxis Recycling
Operating Committee

Acknowledgements

- Tunxis Recycling Operating Committee & its Public Education Subcommittee
- Aceti Associates, Opinion Dynamics Corporation
- Housatonic Resources Recovery Authority (HRRA) & CDHM
- MADEP



Tunxis Recycling
Operating Committee

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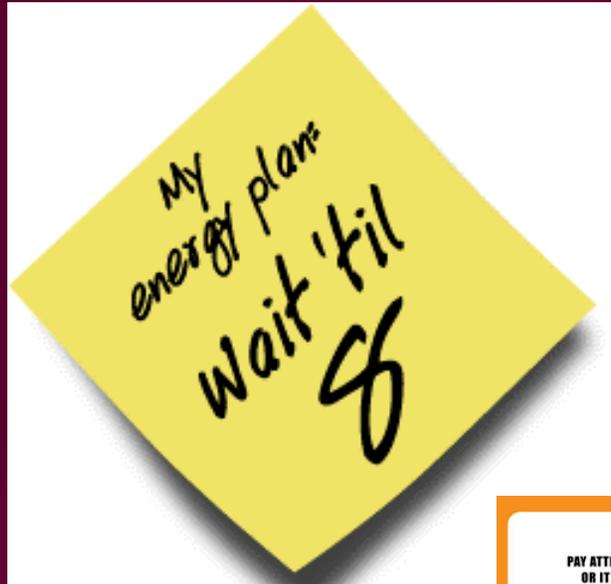
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DAY & NITE.

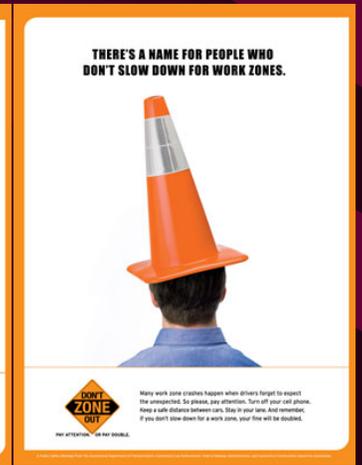
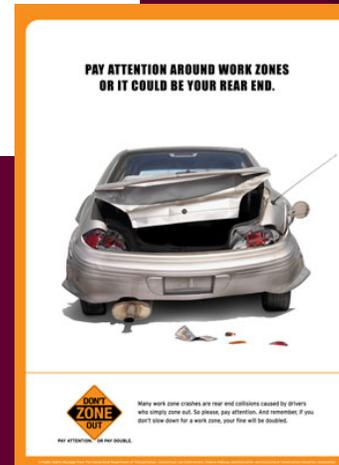
Social Marketing



BUCKLE UP OR PAY UP.



This program sponsored in part by the National Highway Traffic Safety Administration's safety belt campaign.



Objectives

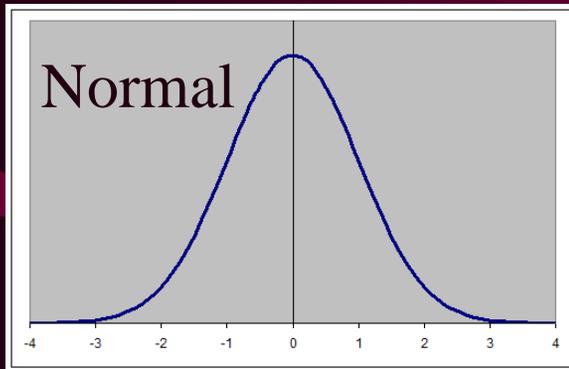
- Understanding of factors that influence participation in recycling
- Opportunities for increasing recycling participation in the future

Survey Methodology

- Survey Conducted March 2006
- Target Population: Adults in 13 TROC Communities
- Designed in relative proportion to population/age distribution in region
- 500 Respondents

Statistical Analysis

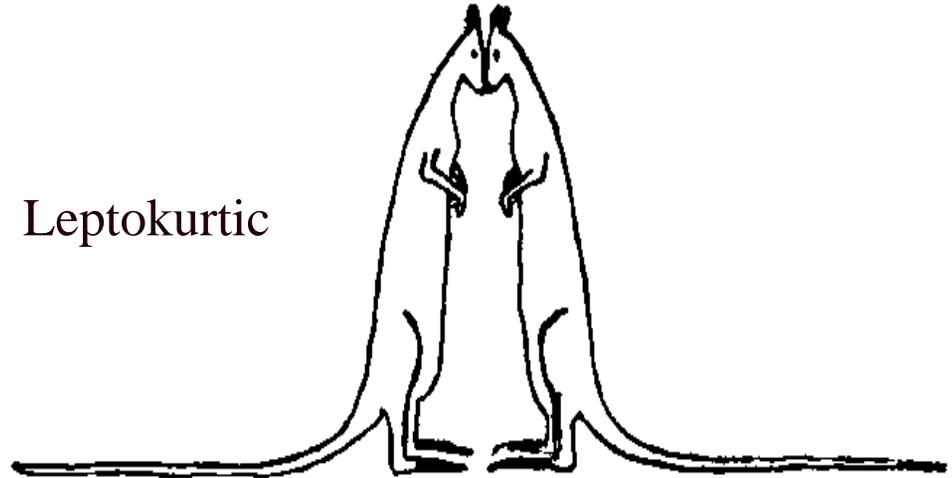
Margin of Error: $\pm 4\%$ at 95% Confidence Level



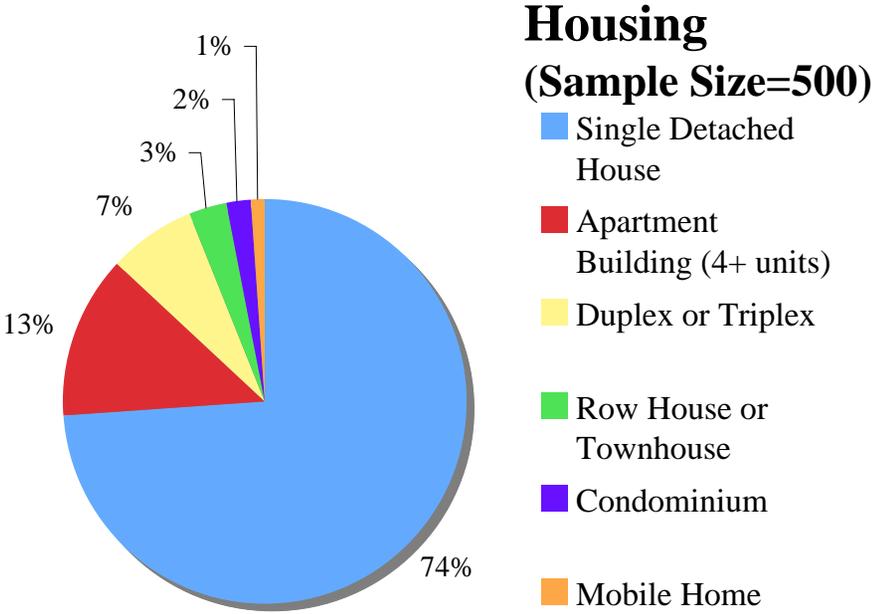
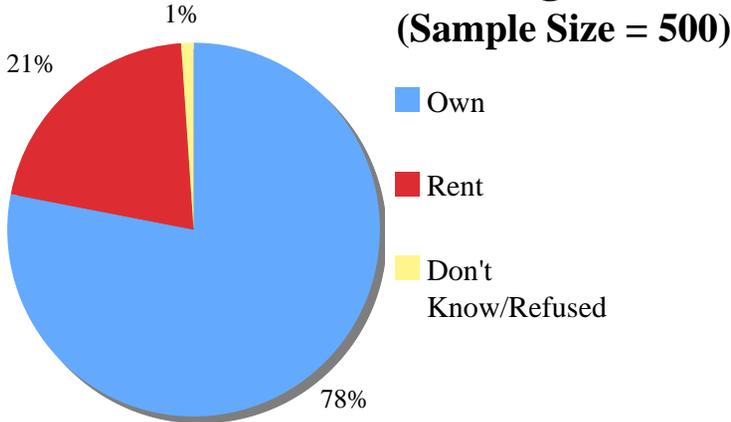
Platykurtic



Leptokurtic

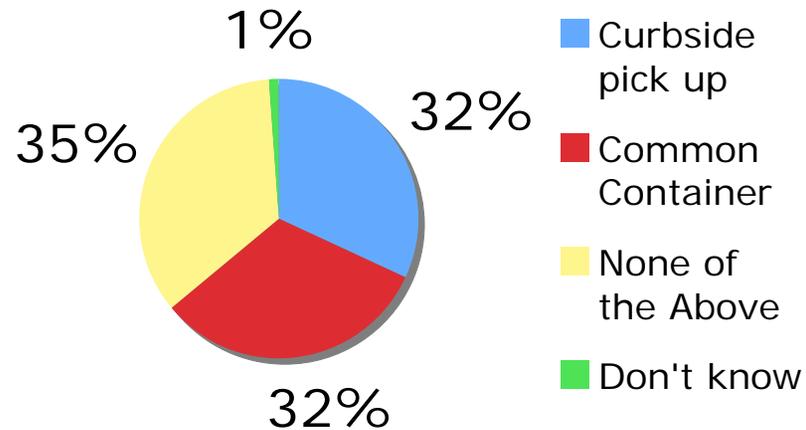


General Sample Characteristics - Housing



Apartment Dwellers

**Recycling Options in
Apartment Buildings**
(Sample Size = 61)



Housing Distribution by Participation Level

Participation level
(1 = not at all;
6 = all the time)

1–3/6

4–5/6

6/6

Percent in multifamily
housing

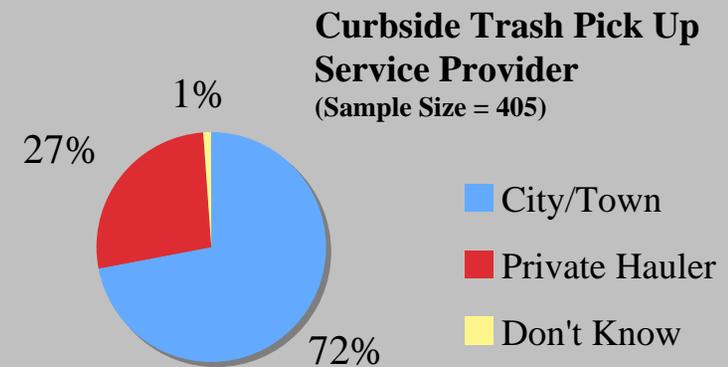
55%

35%

16%

Important classification
in market research study

Trash Services



People who participate more in recycling are more likely to:

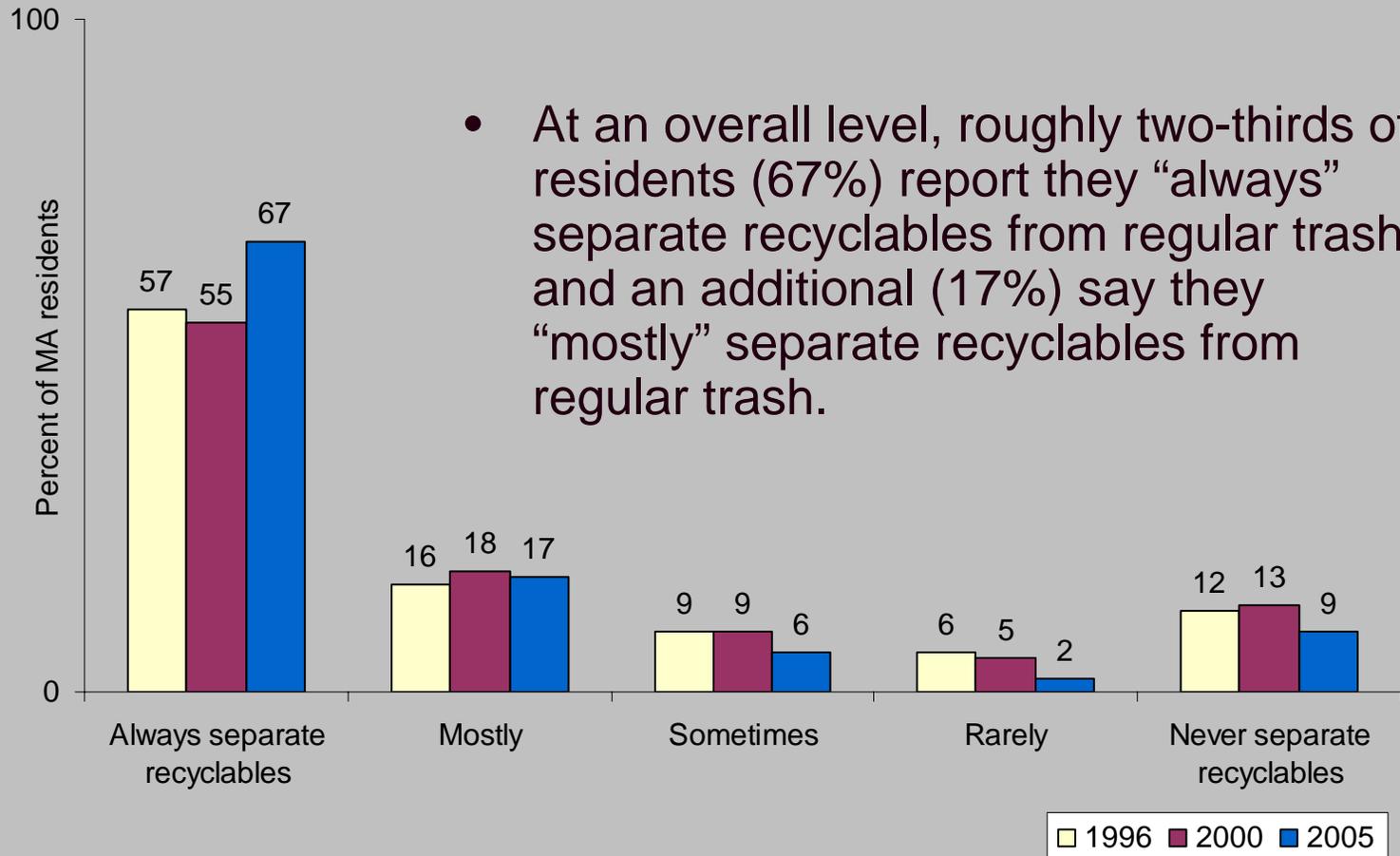
- live in a single detached home
- own their home
- have recycling instructions
- have a recycling bin

Other correlations with recycling behavior

- agree more strongly that it is easy to find a place to store the bin
- disagree more strongly that recycling takes too much time
- agree more strongly that the family expects the household to recycle
- be older (although the difference is not significant across all age groups)
- recycle a higher percentage of the following materials:
 - junk mail
 - newspaper
 - magazines and catalogs
 - cardboard boxes

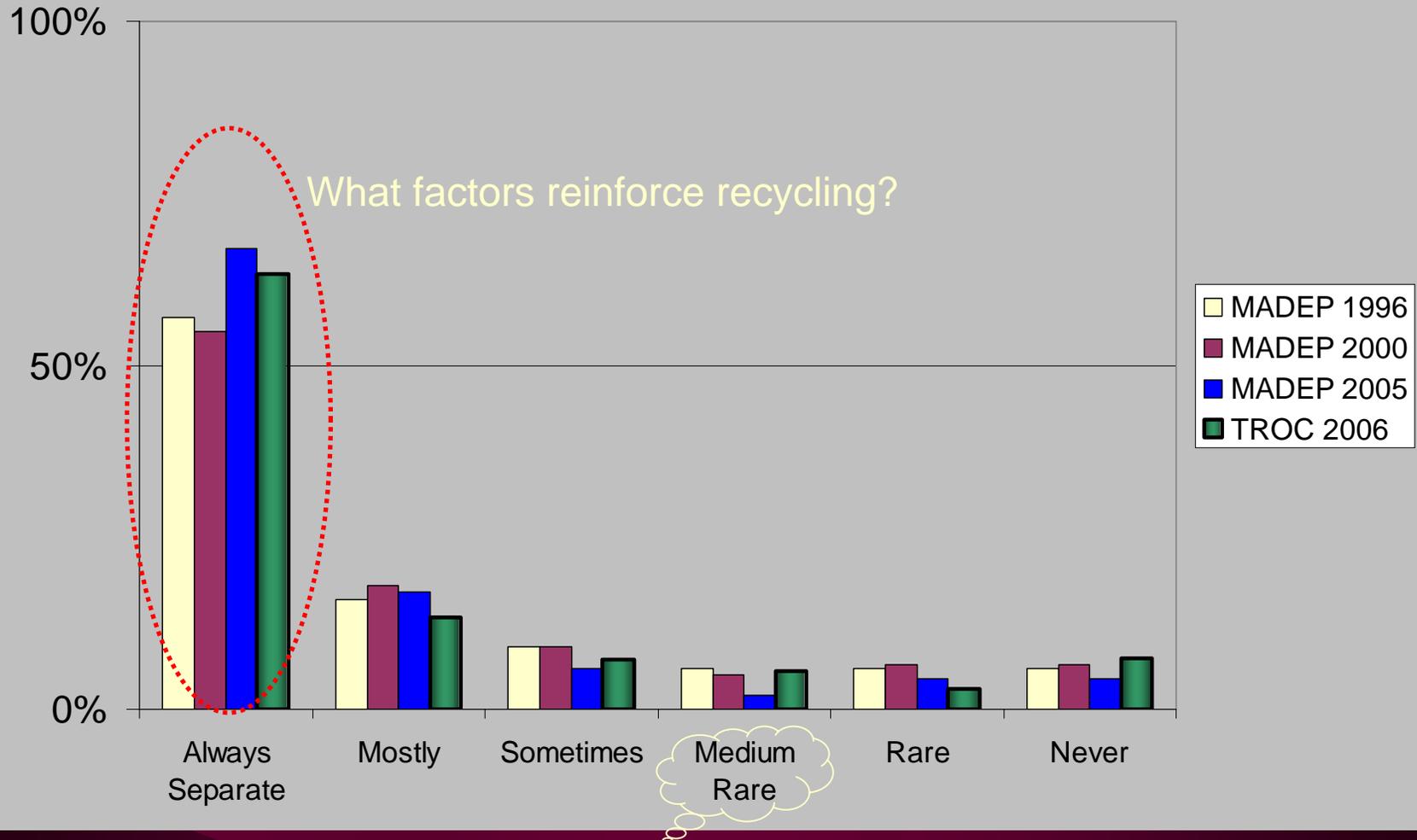
MA DEP 1996 – 2005 Trends

Self-Reported Recycling Behavior: Overall Household Participation



Are results unique to MA?

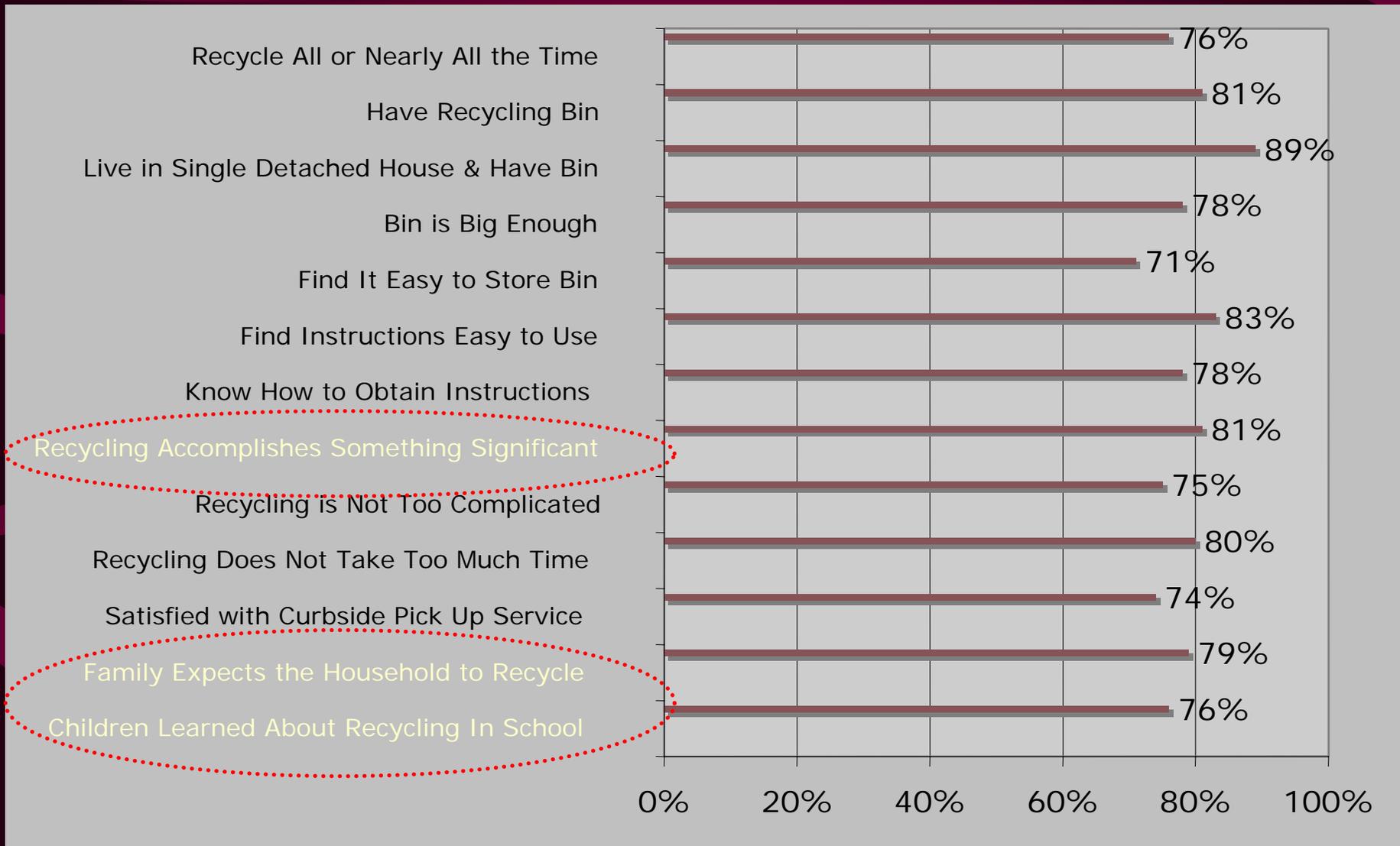
MADEP Distribution Compared to TROC



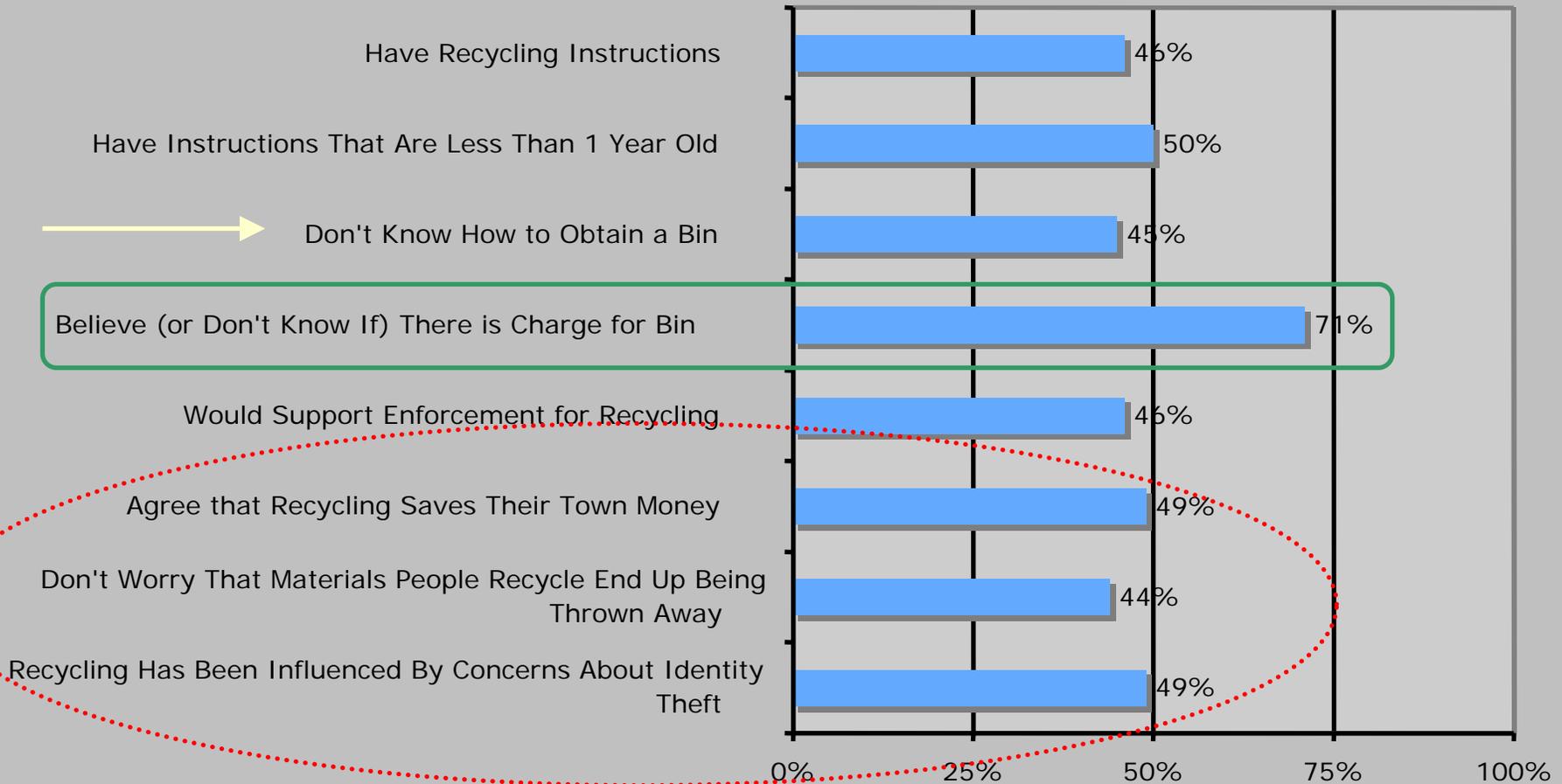
Category added to compare TROC with MADEP

Positive Indicators

Social marketing, behavior & values

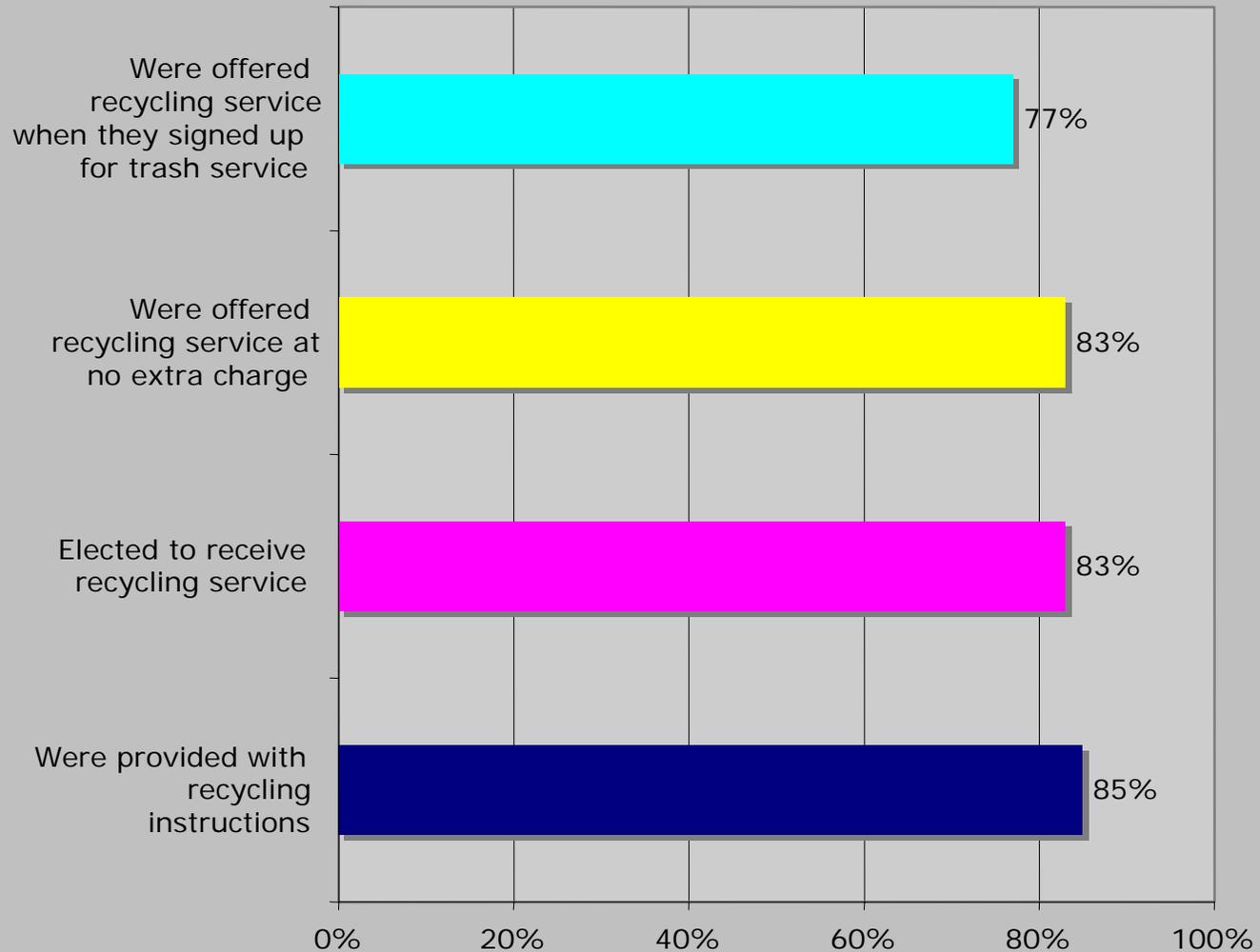


Negative Indicators

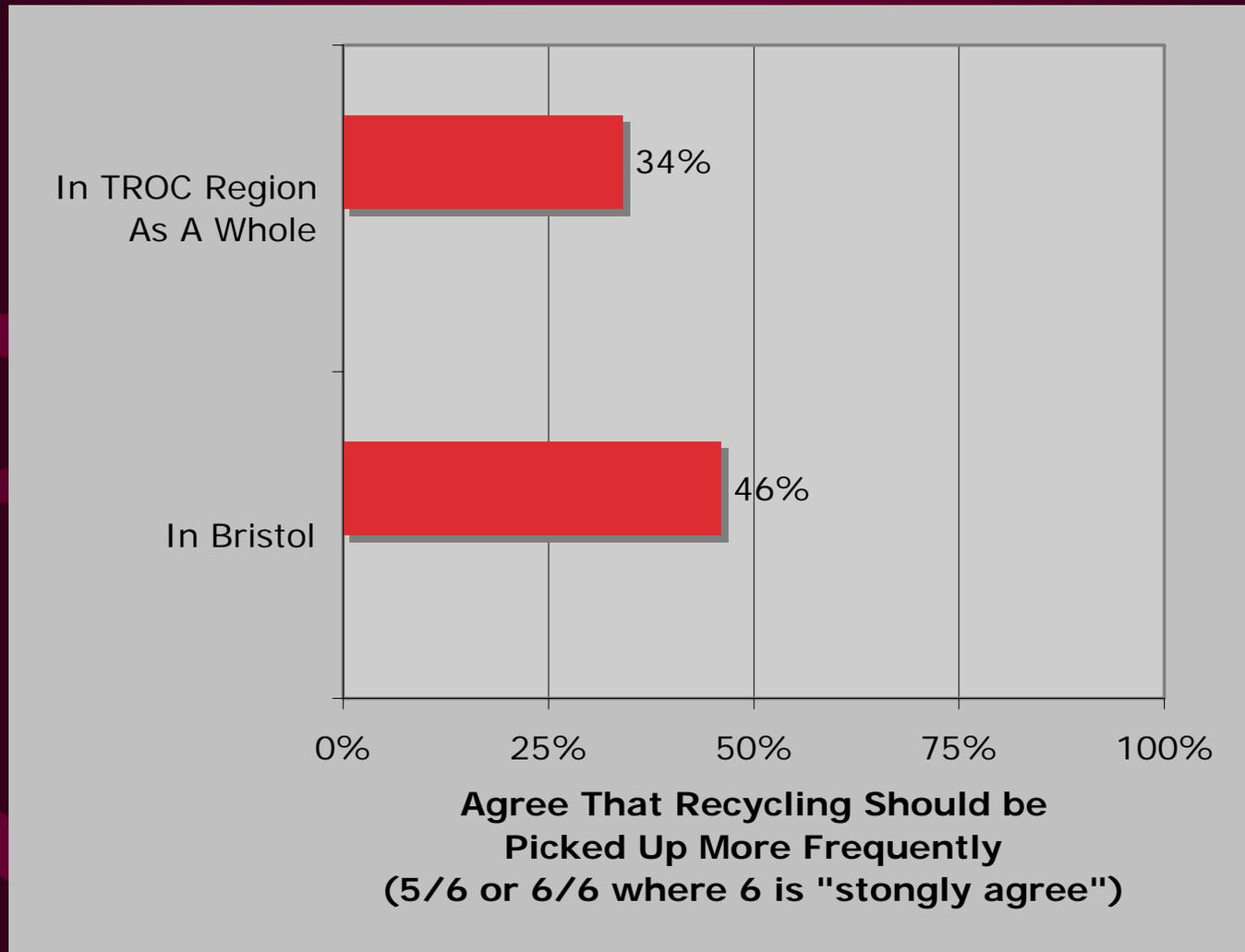


Private Hauler Recycling Service

(Sample size = 72 to 109, depending on the question)



Perceptions of Pick Up Frequency



Qualitative & Quantitative Factors

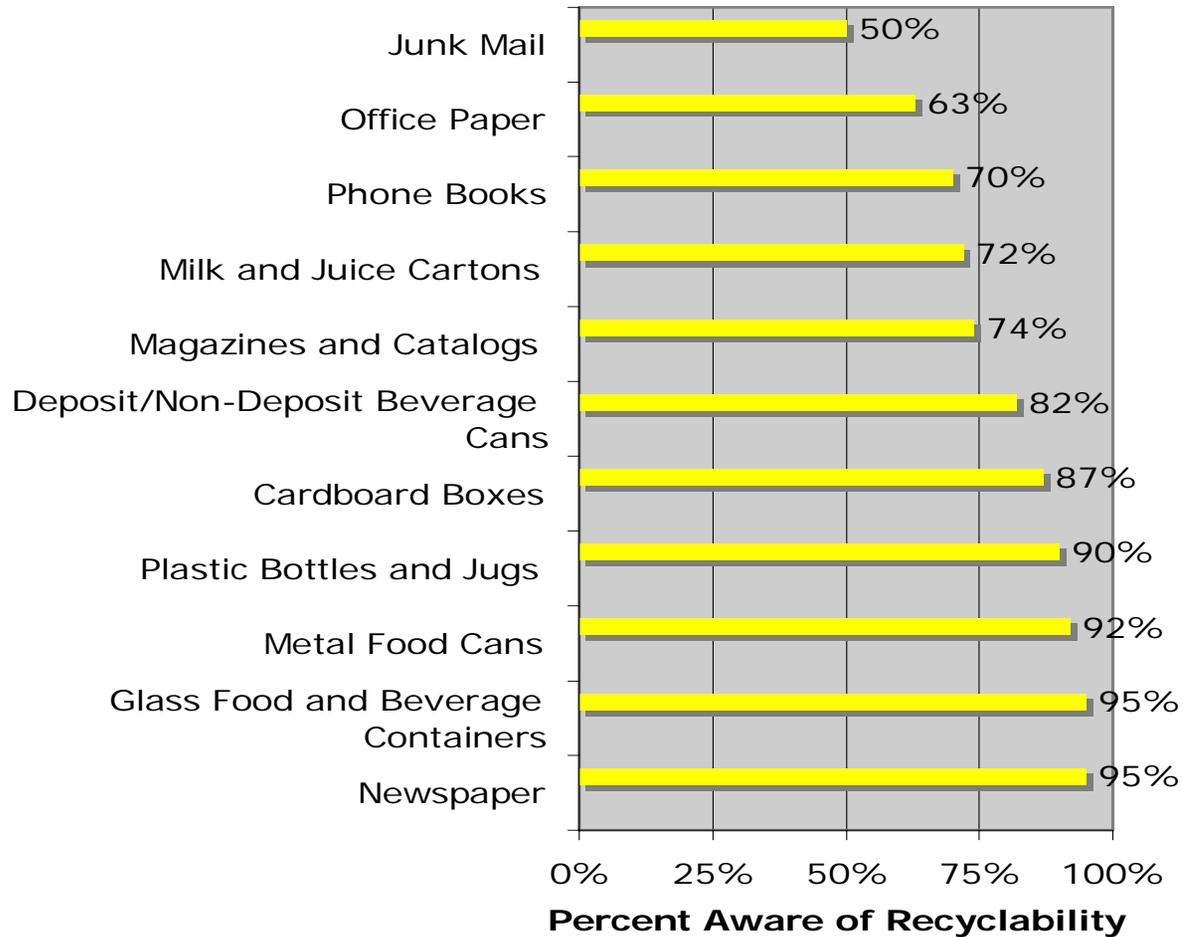
- Understanding of factors that influence participation in recycling
- Opportunities for increasing recycling participation in the future

Next, consider quantitative & metrics

Awareness – what can be recycled?

Awareness of Recyclability

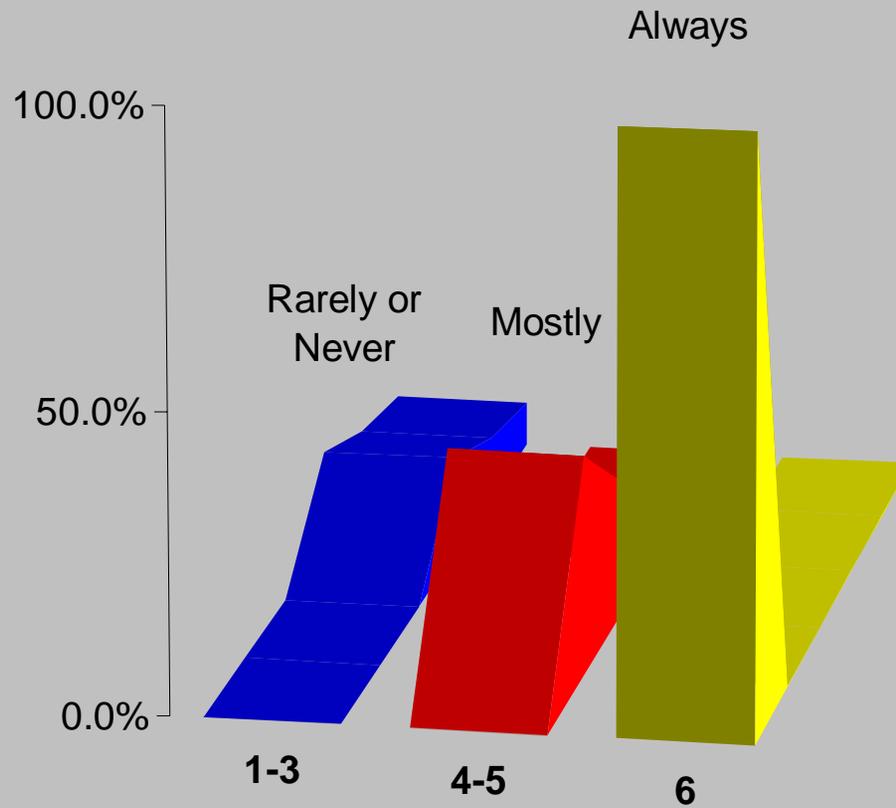
(Sample Size = 500)



Capture Rate (determined from study)

Material	% Recovered from Waste Stream
Junk mail	26
Office paper	29
Magazines and Catalogs	53
Cardboard boxes	63
Newspapers	72
Plastic bottles and jugs	72
Glass, food and beverage containers	76

Frequency Distribution



Newspaper Use by Participation Level

Participation level (1 = not at all; 6 = all the time)	1-3/6	4-5/6	6/6
Percent that use local newspaper	61%	70%	83%

Potential Recovery - Newspapers

Participation Level (1 = not at all; 6 = all the time)	Generation Rate for Newspaper (lb/home/yr)	Potential Recovery Rate	Highest Potential Amount Recycled (lb/home/yr)	Current Amount Recycled (lb/home/yr)	Potential Change in Amount Recycled (lb/home/yr)
1-3/6	240.35	75%	180.27	55.64	124.63
4-5/6	358.52	90%	322.67	242.16	80.51
6/6	457.20	90%	411.48	392.48	19.00

assumed for purposes of study

Discards
185 lb/yr

Discards
65 lb/yr

Newspaper Potential for Category 1-3

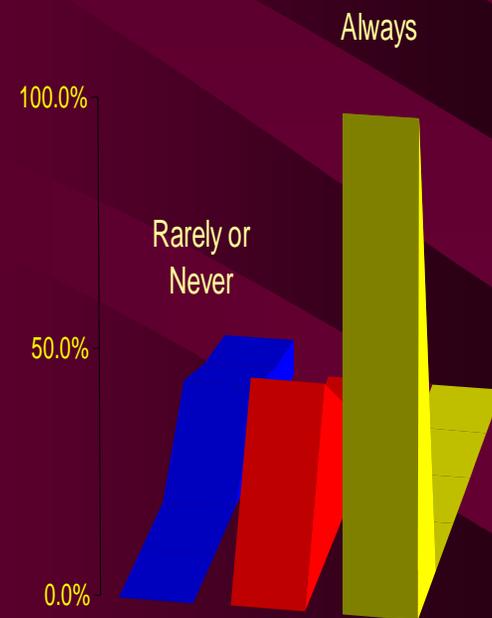
	Percent	Number
1-3	16%	80

% Receiving the Following Number of Daily Newspapers

0	51.0%
1	41.0%
2	4.0%
3	0.0%

# Daily Newspapers	NUMBER OF PUBLICATIONS				<u>Total</u>
	0	1	2	3	
% Received	51.0%	41.0%	4.0%	0.0%	
Lbs/Hshld/Yr	0	263	527	790	
Number of Hshlds	41	33	3	0	
Lbs/yr	0	8,635	1,685	0	10,319
# Sunday Newspapers	0	1	2	3	
% Received	53.0%	39.0%	4.0%	0.0%	
Lbs/Hshld/Yr	0	226	452	678	
Number of Hshlds	42	31	3	0	
Lbs/yr	0	7,047	1,446	0	8,493
# Weekly Newspapers	0	1	2	3	
% Received	57.0%	32.0%	5.0%	2.0%	
Lbs/Hshld/Yr	0	11	22	33	
Number of Hshlds	46	26	4	2	
Lbs/yr	0	277	87	52	416
Total Available					19,228
% Hshlds that Recycle and Aware News is Recyclable					50.0%
% of news recycled among these households					46.3%
% max recovery rate (assumed)					75.0%
Improvement potential					224%
Total lb/yr potential for Category 1-3					9,970

Sample calculations for Potential Increased Newspaper Capture



Potential Recovery – Magazines/Catalogs

Participation Level (1 = not at all; 6 = all the time)	Annual Generation Rate for Magazines & Catalogs (lb/home/yr)	Highest Potential Recovery Rate	Highest Potential Amount Recycled (lb/home/yr)	Current Amount Recycled (lb/home/yr)	Potential Change in Amount Recycled (lb/home/yr)	Number of Homes
1–3/6	104.90	75%	78.67	4.73	73.94	80
4–5/6	117.43	90%	105.69	54.22	51.47	102
6/6	120.47	90%	108.42	86.12	22.30	314

assumed for purposes of study

Potential Fiber Recovery

Participation Level (1 = not at all; 6 = all the time)	Potential for Increased Newspaper Recycling (Lb/Year)	Potential for Increased Magazine/Catalog Recycling (Lb/Year)	Total Potential for Increased Newspaper and Magazine/Catalog Recycling (Lb/Yr)
1-3/6	9,970	5,916	15,886
4-5/6	8,212	5,250	13,462
6/6	5,965	7,003	12,968

From previous slide

2x more material from groups 4-5/6 and 6

2/3 more material from groups 4-5/6 and 6

Factors affecting recycling:

- whether trash is picked up by municipal service or private hauler
- how old their instructions are
- how strongly they agree that the instructions are easy to use
- whether a language other than English is spoken at home
- whether their bin is big enough

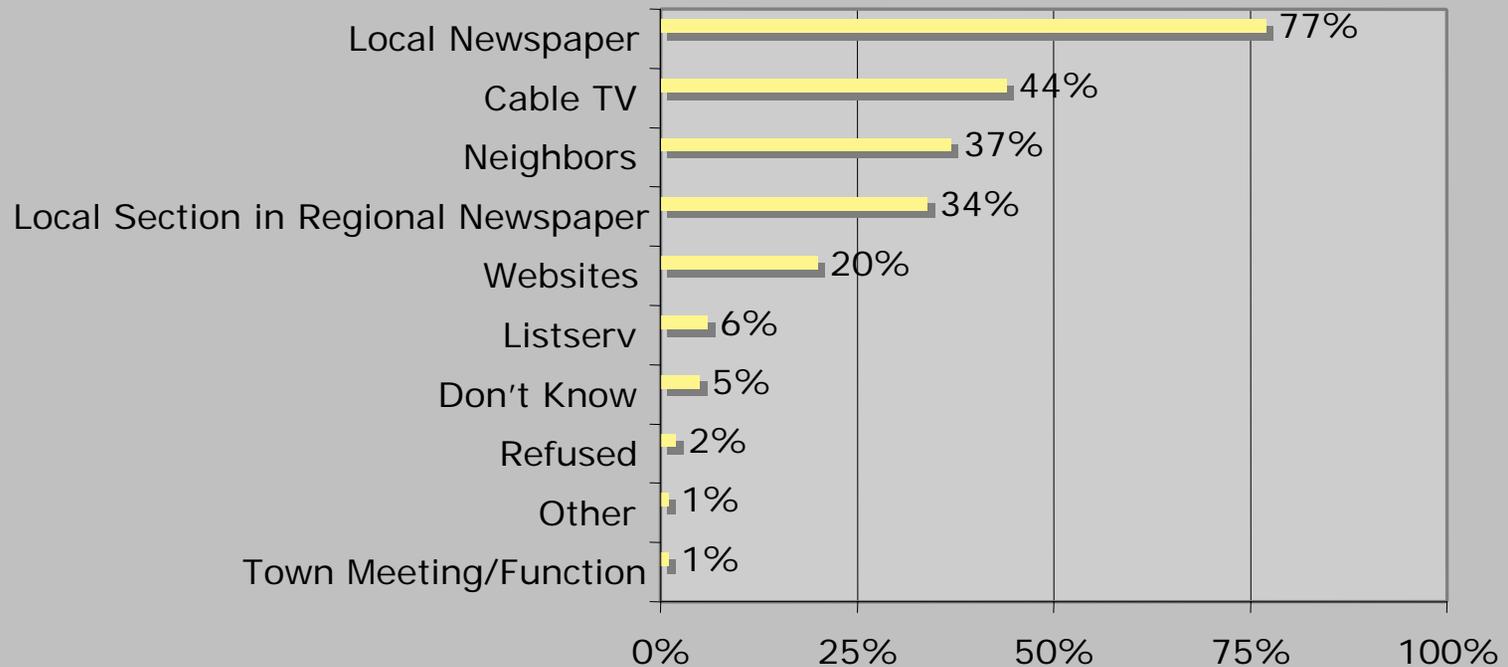
Participation unrelated to:

- how worried they are that materials people recycle end up being thrown away
- concerns about identity theft
- whether they have 8-16 year old children at home
- household size (except that 2-person hshlds participate more than 1-person hshlds)
- education level
- income level
- community they live in

Most Effective Media

Do you learn about what is going on in your community through any of the following means?

(Sample size = 500)



Media Recommendations

- Improve/expand use of newspapers to convey information

Insertions	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29										
	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa										
Waterbury Republican-American 3 col x 4" - East Zone (Wed & Fri)	4			5														3																				
New Britain Herald 3 col x 4" (Daily)	4										2															4												
Sunday (runs as same paper)	4							2														3																
Bristol Press 3 col x 4" (Daily)	4										3															1												
Meriden Record-Journal 3 col x 4" (Daily)	4																	2																				
3 col x 4" Sunday	4														2																							
Citizen Publications 3 col x 4"								media mix, budget																														
Berlin Citizen (Thurs)	4																														5							
Plainville Citizen (Thurs)																																						
Southington Citizen (Fri)	4																																					
CT Voices 3 col x 4" (Wed)	4										5																2											
Registro - Zones 3 col x 4"																																						
Hartford/New Britain Zone (Tues/Fri)	6																																					
New Haven/Bridgeport Zone (Tues/Fri)																																						
Waterbury/Danbury/NW CT Zone (Fri)																																						
Stepsaver/Observer Publications 3 col x 4" (Thurs)																																						
Southington Observer	4																																					
Bristol Observer																																						
New Britain Observer																																						
Plainville Observer																																						
Tri-Town Post 3 col x 4" (wkly)	3																																					

Sept. '07 Print Campaign

Throw the Book at Us... **PLEASE RECYCLE**



Please recycle your phone books with your newspapers and magazines in a brown paper bag curbside.
For more information call 860-585-0419 or 860-225-9811 or visit us online at tunxisrecycling.org



OLD NEWS is good news

Please recycle your newspaper & magazines curbside with your weekly trash pickup.
For more information call 860-585-0419 or 860-225-9811 or visit us online at tunxisrecycling.org



Media Recommendations

- Improve/expand use of newspapers to convey information
- Increase the percentage of households with recycling instructions
- Increase the percentage of households with bins

Curbside Recycling Guide

RECYCLING GUIDE

Keep this information handy so that you'll know what your town accepts as recyclable items. If you have any questions about your town's program, please call your town's number shown below. Remember, curbside recycling saves money, helps the environment ... and, IT'S THE LAW.

NOTE: Not all towns recycle all of these items. Additional items may also be collected at drop-off locations. For more specific instructions check with your town's recycling coordinator.

Berlin: (860) 828-7022
Branford: (203) 488-8394
Bristol: (860) 504-6124
Burlington: (860) 673-2439
Hartland: (860) 653-6800
Meriden: (203) 630-4018
Morris: (860) 567-7438
New Britain: (860) 826-3350
Plainville: (860) 793-0221 x 210
Plymouth: (860) 585-4030
Prospect: (203) 758-4461
Seymour: (203) 888-2511
Southington: (860) 276-6200
Warren: (860) 879-9030
Washington: (860) 868-2259
Wolcott: (203) 879-8100

Or call the Tunxis Recycling Operating Committee at 860-585-0419 or 860-225-9811.
www.tunxisrecycling.com



TUNXIS RECYCLING OPERATING COMMITTEE

CURBSIDE RECYCLING

CAUTION: Do not recycle any plastic or glass that contained prescription drugs. And absolutely NO syringe needles.

When in doubt, leave it out!

NEW Mixed Paper

Office paper, stationery and envelopes including those with plastic windows. Direct mail pieces – shiny coated paper ok. Place in brown paper bag next to bin.
No: Brown manila envelopes, overnight envelopes or Tyvek™
No: Giveaway items (product samples/CD's)
No: Greeting cards or wrapping paper
No: Boxboard, 6-pack cartons.
No: Tape, post-it-notes or mail with pressure sensitive labels.

Newspapers and Magazines:

Include all paper inserts, place in brown paper bag next to bin. Catalogs & phone books also accepted.
No: Tape, packaging materials, egg cartons, cereal, shoe and pizza boxes. **No:** String or plastic bags.

Corrugated Cardboard:

Folded flat. Clean.
No: String or tape-tied bundles.

Glass & Juice Cartons :

Clean food and beverage containers only. Clear or colored glass bottles & jars. Single-serve containers, pint, quart, and half-gallon juice & milk cartons.
No: Light bulbs, ceramics, cookware, window/mirror glass, crystal.

Metal Cans and Foil:

Clean food and beverage containers only. Aluminum foil & foil baking tins. **No:** Scrap metal, appliances, metal parts, pots/pans, silverware, needles, aerosol and paint cans.

Plastics: and

Look for the number triangle on bottom. **No:** Bottle caps or #1 & #2 Bottles that contained antifreeze, motor oil, pesticides or other toxic fluids.



Place your recycling container at the curb the night before your recycling collection day. Paper/cardboard may be wet with rain or snow. Do not leave at the curb for more than one day.

Media Recommendations

- Improve/expand use of newspapers to convey information
- Increase the percentage of households with recycling instructions
- Increase the percentage of households with bins
- Billboards

Yellow bin - New Britain

RECYCLING YOUR PLASTIC
is as easy as

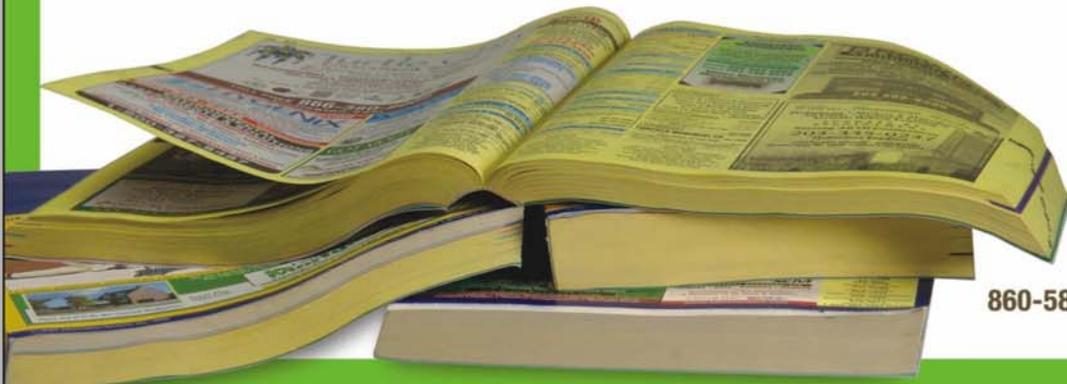


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Phone Book Promotion

Throw the Book at Us...
PLEASE RECYCLE



860-585-0419 • 860-225-9811 • tunxisrecycling.org

Junk Mail Promotion



It's **NOT JUNK** to us.

Recycle Your Junk Mail.

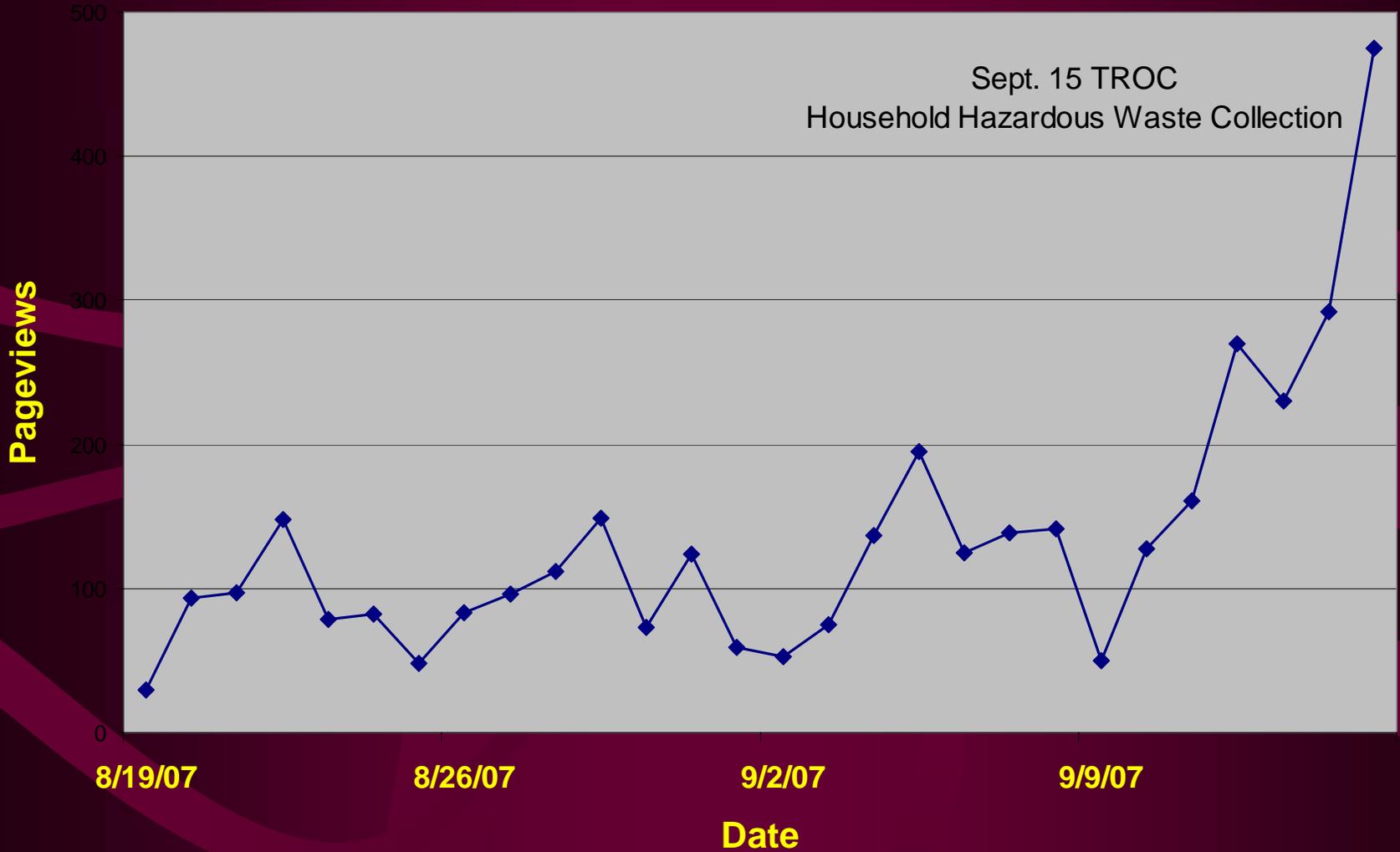
860-585-0419
860-225-9811
tunxisrecycling.org



Results

- Web Site Activity

Recent TROC Web Site Activity

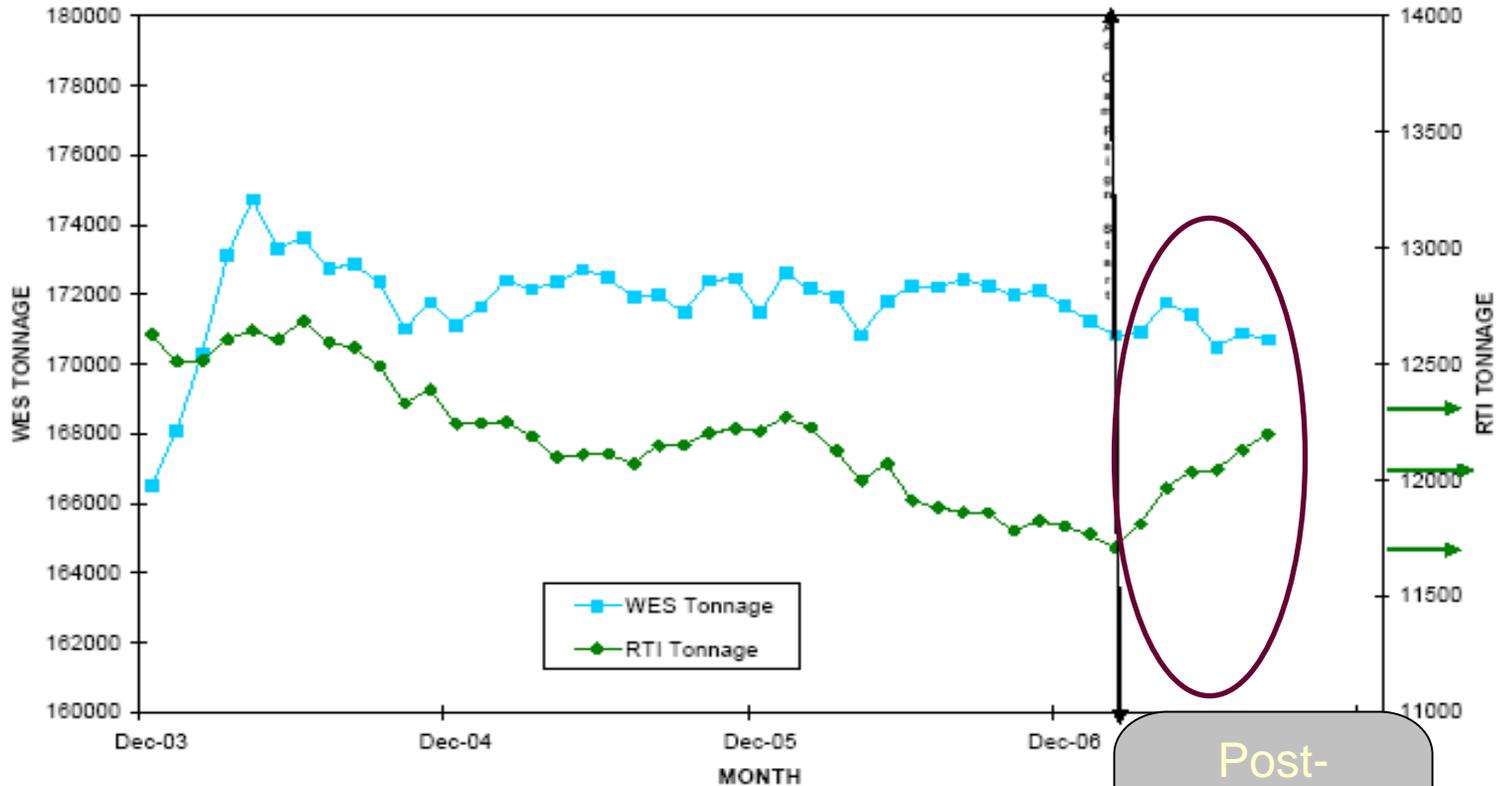


Results

- Web Site Activity
- Tons delivered to recycling facility

Housatonic Resources Recovery Authority

HRRA MSW vs RECYCLING TONNAGE ROLLING 12 MONTH BASIS



Post-advertising rolling avg. tons

Results

- Web Site Activity
- HRRRA Tons shown, TROC tons available end of September
- Anecdotal
 - Phone calls
 - Comments at HHW collections, other events
 - Questions & comments via contact form on Web Site

Questions?

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