

HARNESSING THE POWER OF SOCIAL MARKETING:

Food Scrap Diversion



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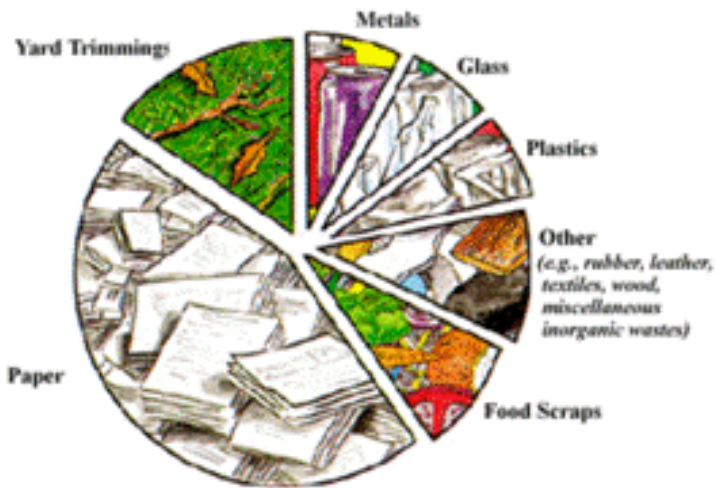
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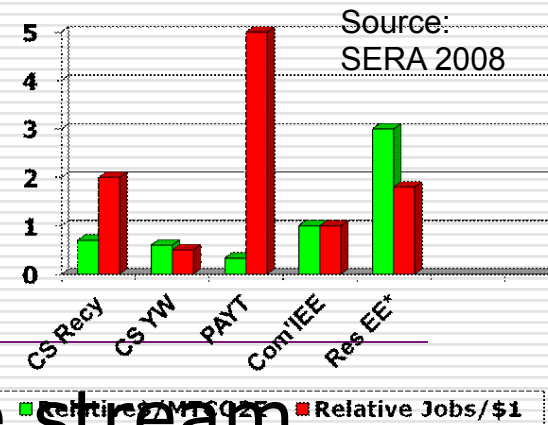
WHY ORGANICS & FOOD SCRAPS BEING CONSIDERED?

- Citizens want recycling and diversion options
- Jobs – 10:1 recycling; 4:1 compost*
- Environmental impacts
- Largest item remaining in stream



*(Estimates ILSR)

BACKGROUND ABOUT FOOD SCRAPS



□ EPA says food is 12.5% of waste stream

- Only 3% is recovered (composted and hog fuel);
- 5.4M tons generated in Region 5 per year (est.)
- 141K tons recovered, 5.3M sent to landfill

□ GHG Impacts

- Landfills are one of the largest CH₄ emitters
- Aerobic vs. Anaerobic decomposition
- EPA estimates composting avoids .25 MTCE/Ton of food scraps (lower for yard trimmings and organics)
- Composting council estimates 25M Tons of food scraps sent to landfill in 2005=7.8M passenger cars of emissions

Gas	GWP
CO ₂	1
CH ₄	21
N ₂ O	310

RESULTS OF THE NATIONAL SURVEY

THREE MAIN TYPES OF PROGRAMS

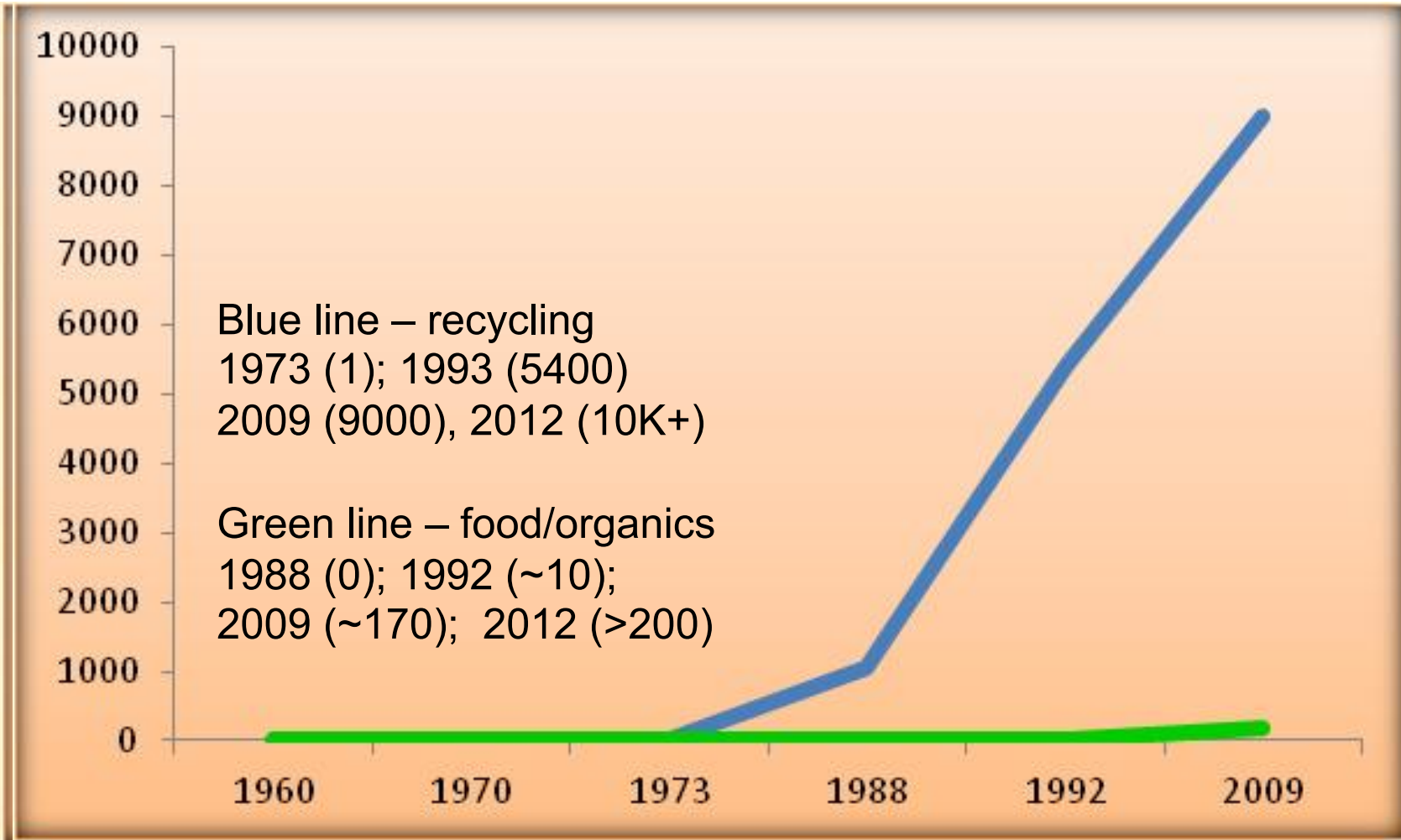
- *...After reuse / donation programs*
- On-site composting
 - Variations in up-take
 - Back Yard Composting, Commercial tubs (incl. farm-to-table), grant programs
- Collection (for composting)
 - Residential & commercial
- In-sink disposers
 - Free or discounted; encouraged / education

SURVEY OF EXISTING FOOD- SCRAPS COLL'N PROGRAMS

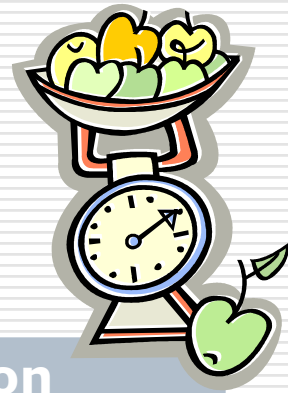
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- Over **200** programs identified in US
 - WA, MN, CA, OH, VT, IA, MA, OR, ME, etc
 - Mostly suburban, then urban, rural; also college & tourist; some only at schools / university campus; isolated,
 - Most curbside; Some drop-off
 - Most co-collect streams (some food only)
 - Sizes range from 170 to nearly 900K
 - States with YW bans represent good potential

Source:
SERA 2011

PROGRAM GROWTH 1970 - TODAY



Source: SERA 2011
(excludes BYC)



RESIDENTIAL PROGRAM ATTRIBUTES - VARIES

- Drop-off only or C/S
- Materials in stream
 - Include foodwaste with YW
 - Includes meat and dairy
- Containers
 - 32-96 carts, some bags
- Payments and enrollment
 - Voluntary added fee most common (many embedded)
- Collection Frequency and Containers
 - Weekly in most, EOW available
- Presence of PAYT
 - Majority have PAYT (“next steps”)

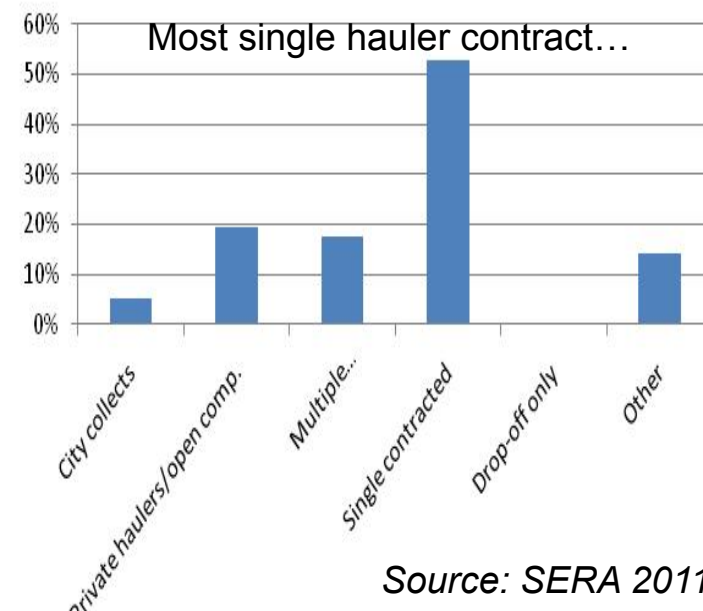
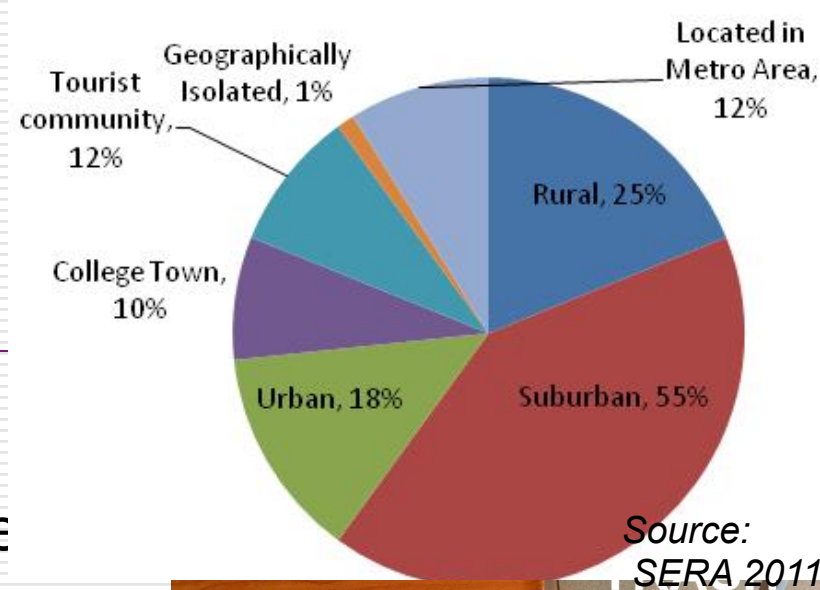
Diversion	
Overall avg.	52%
National avg. (EPA)	34%
Avg. lbs per participating HH/week	25-35 lbs
Food Waste only	7-10 lbs
Avg. Participation	35-40%

Source:
SERA 2011

Each program is modified, adapted to fit community resources and needs

COMMERCIAL ATTRIBUTES

- “Typical” commercial
 - Only targets a portion of the businesses
 - Voluntary participation for an added fee
 - Rates are lower than MSW rates
 - Commonly 64-gallon poly carts
 - Options for collection at least 3x/week
 - Includes staff education and outreach (often by the hauler)
 - Programs NOT always in places with high tip fees...



***MOVING FOOD
PROGRAMS FORWARD –
BARRIERS RESEARCH***

www.foodscrapsrecovery.com

SURVEY & FOCUS GROUPS – BARRIERS



COLLECTION

- Community-level
 - Political will**
 - Facility / certification issues**
 - Costs
- Generators on coll'n
 - Costs
 - Contamination
 - Yuck factor, pests & vectors

DISPOSER PROGRAMS

- Community
 - Public works**
 - Cost**
- Generators on disposers
 - Skepticism of program / “catch”, cheap model?
 - Concern about plumbing upgrades & strangers in home
 - Smell
 - Renters / permission

ADDRESSING COLL'N COSTS - EOW COLLECTION

Getting the most for least...

3 stops / week

- Trash weekly &
- Recycling weekly &
- Organics (org) weekly

2 stops / week

→ Save ~1/3 overall, ~40-50% program \$

- Trash weekly &
- Recycling weekly

2 stops / week -

→ BETTER (more diverted tons, ~same \$)

- Trash weekly, alternate Recy & Org
- → **OR BEST**,
- Org weekly, Alternate Recy & Trash

Integrated Decisionmaking

COLL'N BARRIERS - CONTAMINATION & YUCK



□ Contamination

- Bags in stream (bio and plastic); local decision; some allow but don't advertise to reduce
- Customer education; on processing side, staff training, what local system can handle

□ Yuck & pests

- BMPs suggestions; mostly perception problem
- Remind NOT new material/Just a change in containers(!);
- Education, persistent message, clarify meat/dairy helps (freeze, layers, paper towels, boxes, etc.)
- Regardless, people WON'T put all food scraps in can (sorts)



□ Smell

- Able to stop freezing with disposer / immediate disposal

*More best practices in design, rates, containers,
education at www.foodscrapsrecovery.com*

CASE STUDIES IN FOOD AND SOCIAL MARKETING

TACOMA, WA CURBSIDE FOOD COLLECTION

□ Program Goal: Food scraps in curbside yard waste.

□ Program Steps:

- Customer service staff informed of all program changes and outreach
- Multiple mediums, print, tv, utility bills, events, YouTube
- Use Community representatives to provide credibility
- Anticipate common barriers and provide solutions (yuck factor)
- Make program convenient/ current yard waste cart



TACOMA, WA CURBSIDE FOOD COLLECTION

- Have program start- the “little brown bucket”, advance advertising
- They’re coming;
- They’re here;
- They’re hungry!!



Delivered in house buckets to 54,000 residents

TACOMA, WA CURBSIDE FOOD COLLECTION

□ Evaluation:

- Phone survey halfway through program
- “Walk and Talk”

□ Results:

- 48% participation
- Almost double the 10% diversion goal of 1400 tons



NORTH SHORE RECYCLING BYC PROGRAM, CANADA

- Some level of existing Back Yard Composting (BYC), but amount unknown
- 2008-2009 set up program; small sample BYC HHs



- Asked HH to record volumes & behaviors, and gave coaching on BY composting methods (2010-2011)
- Tracked organics & yard waste
- Evaluated results

NORTH SHORE RECYCLING BYC PROGRAM, CANADA

- 2011 wrap-up visits and survey / data / reward
 - Pre/post surveys on comfort with composting (food / yard)
 - 79% said they diverted more material.
 - 68% rated coaching as very successful (100% recommend)

- Tonnage changes
 - Organics diverted with coaching is 994 lbs; 794 lbs without coaching (25% increase)
 - Garbage decreased 55%.
 - \$35/hh/yr savings in trash, YW collection fees
 - 1500 avoided truck trips avoided.



IN-SINK FOOD DISPOSAL PROGRAM



- Program Goal:
 - Assess to what extent food waste disposers could reduce the amount of food scraps disposed in the landfill
- Program
 - Installed 173 free disposals in two distinct neighborhoods
 - Provided outreach for proper usage
 - asked to change behavior and no longer put food scraps in trash, but to put all down disposal
- Several rounds of outreach
 - including door to door, neighborhood meetings, flyers
 - Worked with neighborhood community action agencies

IN-SINK FOOD DISPOSAL PROGRAM



□ Evaluation

- 75 Post surveys assessing self-reported activities and behavioral changes
- Focus groups
- Waste comp and comparison in progress

□ Results

- ~75% put *all* food scraps down disposal
- 88% put more than half down disposal
- (86%) reported a decrease in the amount of trash they throw away; Average reported 33% decrease in bags
- Bags of trash decreased from **2.4** to **1.5** per household per week.
- 32% said they increased their recycling

IN-SINK - REPORTED BENEFITS TO BEHAVIOR CHANGE

- *"I used to put out trash every day and now I only put it out every other day".*
- *'It was a blessing to me'*
- *'Once you have a disposer you can't live without one'.*
- *"They are beautiful."*

- Reduced trash
- Easier kitchen clean up,
- Reduced odors and smells in the house and neighborhood
- Limited pests associated with trash collection.

IN-SINK - MESSAGING & OUTREACH



□ Successful

- 75% said personal door-to-door outreach most effective
- 66% said flyers
- 39% said neighborhood meetings
- Contact from associated neighborhood organizations essential
- Working closely with neighborhood organizations and block captains is recommended.

□ Less Successful

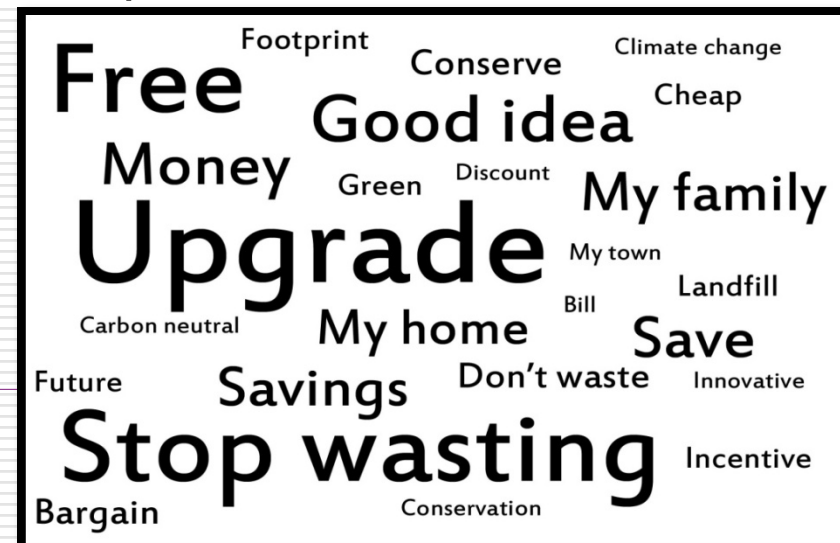
- Only 16% said robo calls were motivational
- Messages from City, unknown third parties, or corporations viewed with skepticism/ evoke 'what is the catch?'
- Environmental benefits not a motivator

IN-SINK - REASONS FOR HH PARTICIPATION



- ❑ Thought that they could reduce trash
- ❑ The program was free
- ❑ Help reduce odors in the trash / kitchen / house
- ❑ Stop freezing food before setting it out for trash day
- ❑ Buy less bleach for the trash cans
- ❑ Reduce issues with pests and rodents

- ❑ Waste comp under way for tonnage impacts
- ❑ Wrap-up – disposers left in place



FOOD SCRAPS COLLECTION PROGRAM - COLORADO

- ❑ Existing food / YW collection program
- ❑ Working with hauler / city
- ❑ Test / control routes to test effects of social marketing – particularly door-to-door component
- ❑ 300+ households each route; carefully chosen
- ❑ Focus groups, pre-post sort, surveys
- ❑ Project delayed-floods (sorry!)



Keep Watching!



SUMMARY

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- Food a significant stream (one of last double digits)
 - Organics diversion growing (20% more than last year common, but **capacity shortfalls** a problem!)
 - Can be pulled efficiently IF YW already, IF processing available
 - Very cost-effective; combo helps formula
 - Consider EOW – tradeoffs in collections for C/E
- Barriers can be addressed by programs
- Social marketing a powerful tool for food – can address yuck, other personal barriers
 - Collection
 - Back yard composting
 - In-sink disposal program examples.
 - Try it!



THANK YOU!!

Questions?



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***Thanks for filling out surveys; reports at
www.foodscrapsrecovery.com***