Marketing, peer modeling, and prompts:

Examining validity and persistence in waste reduction/recycling programs

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Presentation overview

- Community Based Social Marketing
- Project descriptions
 - Residential recycling campaign
 - Large-scale airport food waste project
- Behavior-based strategies employed
- Post-project observations
- Examination of validity & persistence
- Translation to other conservation industries

CBSM: What it is/isn't

- What it is . . .
 - Use of marketing principles to influence human behavior
- What it is not
 - A traditional marketing model
- Importance of identifying barriers
 - Then matching them with behavior strategies
- CBSM tools we might consider
 - Commitment
 - Prompts
 - Norms
 - Incentives

Project descriptions

- Metro Residential Recycling Campaign
 - <u>Time period</u>: January 2008 December 2008
 - Goal: Reduce plastic bags, glass and other contaminants
 - Audience: Portland residents, waste haulers

- Portland International Airport
 - <u>Time period</u>: 2003 current
 - Goal: Reduce airport's land-fill bound waste
 - <u>Audience</u>: Port employees, airlines, airport tenants, janitorial staff, waste haulers, & product supplies



Metro Residential Campaign

Field monitoring of 7600 single family bins

- Tasks:
 - Survey contents of recycling bins
 - Discourage contaminants (plastic bags, glass, etc.)
- Treatment group: correct or reward behavior
 - Educational flyers, stickers (prompts)
 - "Way to go" flyer (norms)
- Control group: No flyers or "Way to go"
- Follow-up and track progress

Prompts - educational flyers

No plastic bags!





Separate glass

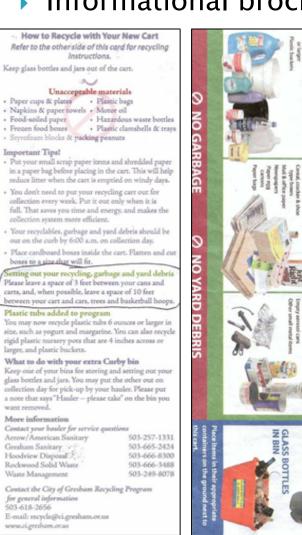


Prompts – with specificity

Attached to contaminants



Informational brochure



NEAR

Positive feedback & peer modeling



Way to go! Your recycling set-out

Portland metropolitan area residents have a great recycling ethic. In fact, more than 780,000 tons of recycling was collected from the Motto area in 2006, saving energy and natural resources and supporting the local economy.

looks great.

Recycling works best when materials are set out right and problem materials are avoided. Please remember to keep glass in a separate container and to recycle plastic bags at recycling centers or your local grocery store, not at the ourb.

Today, we spot-checked your roll cart for plastic bags and glass and didn't find any. Way to go! Thanks to your efforts, our region's recycling programs are among the best in the nation!

If you have questions about recycling or would like other waste-reduction ideas, call Metro Recycling Information at 503-234-3000 or check out www.RecycleAtHome.org.

Together our efforts won't go to waste.

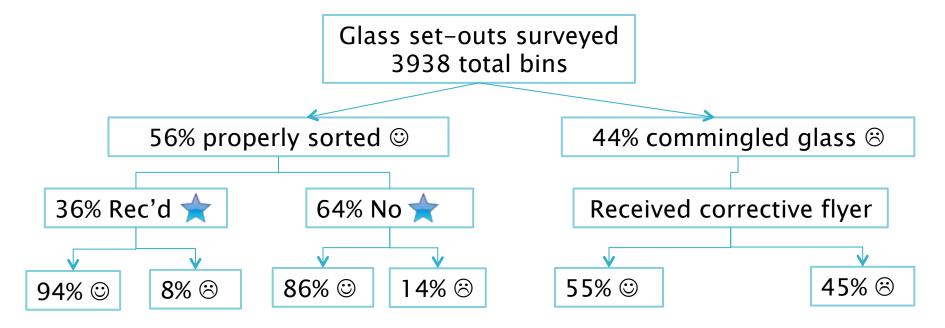
Metro | People places. Open spaces.

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Impact from prompts/feedback



Positive feedback/peer modeling = greater persistence? Corrective flyer = greater impact but persistence unknown

Portland International Airport

- Time period: 2003 current
- Goal: reducing land-fill bound waste
- The following materials recycled:
 - Cardboard, paper, and periodicals
 - Glass
 - Aluminum and steel cans
 - Plastic bottles & tubs
 - Rigid plastics (buckets)
 - Batteries
 - Wood pallets
 - Waste oils/grease
 - Food waste (pre and post consumer)



Food waste project

Behavior change models utilized

- Barrier identification
- Program design to minimize barriers
- Technical assistance
- Prompts
- Positive feedback / peer modeling
- Reminder of the goal/outcome (benefits)

Tactics - technical assistance

- Technical assistance: co-create solutions
- Example: ordering supplies



 Reinforce message: publically displayed table tent cards on program progress

Tactics - prompts

- Food waste collection signage
 - Co-located food waste/garbage
 - Signage for restaurant kitchens
 - Signs bilingual





Tactics - feedback/reminder of goal

- Highlight participation
- Celebrate success
- Reinforce benefits to participants
- Leverage press opps
- Use public events to highlight end results . . .

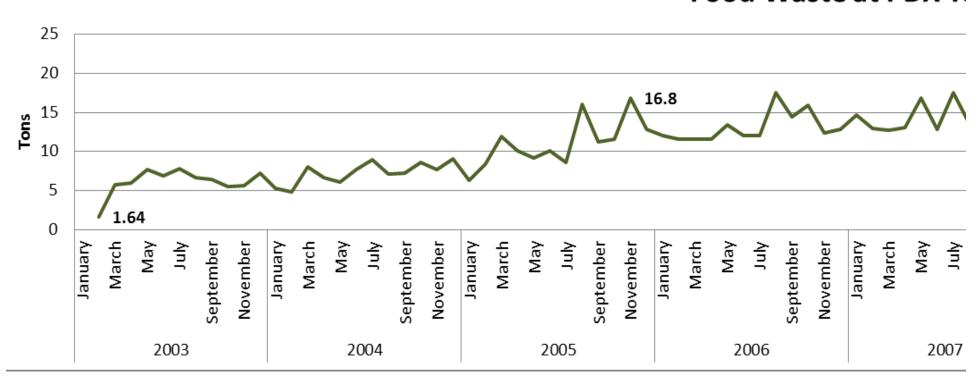


Stan Jones chatted with a family and offered them some compost at the Compost Giveaway on one of the skybridges at PDX April 18, 2008.

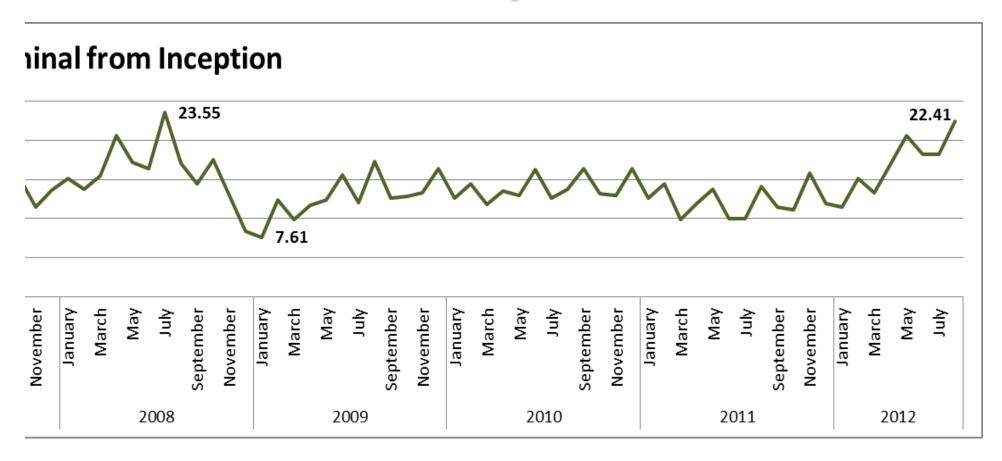
Turning food waste into usable end product = compost.

Measurement - impact

Food Waste at PDX To



Measurement - persistence



Suggested observations

- Baseline behavior was impacted
- Over time, an 8 average ton monthly diversion rate became the 'persistence' baseline
- Persistence varies between 12% on the low end and 33% on the high end
- Overall variance of 45%
- Persistence is maintained
- When behavior change models are maintained
 - Persistence beyond new baseline may not occur in absence of ongoing implementation
 - We might continue to observe behavior change impact increase and decrease with different tactics

Translation across industry

- Behavior change = success, ... But you might need a new baseline
- Establish a 'persistence' baseline over time.
- How to "count" or attribute affects of behavior change models
- New baseline is the new point from which you start measuring

What's great about these projects

- Step 1 start with <u>detailed baseline data</u>
- Target the biggest opportunities
- Limit tactics and employ control groups
- Keep gathering data after project concludes
- Re-visit and test early assumptions







Sort of deplaned waste

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Impact: landfilled vs. diverted

PDX TERMINAL: ANNUAL RECYCLING RATE % BY WEIGHT

