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GETTING THE MOST FROM COLORADO'S RECYCLING PROGRAMS & INFRASTRUCTURE

SOCIAL MARKETING OUTREACH AND EDUCATION TOOLKIT – A GUIDEBOOK FOR COMMUNITIES

FINAL REPORT

Submitted to:
CDPHE

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ORGANIZATION OF THE TOOLKIT

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Executive Summary

Social marketing is a refined type of outreach and education that focuses on targeting messages based on barriers, delivering tailored messages through respected networks, and using prompts, norms, feedback, commitments, and other visible and social elements to encourage behavior change. The social marketing literature provides scores of examples of community-based social marketing (CBSM) programs – recounting messages, goals, barriers, and other elements. Skumatz Economic Research Associates (SERA) found that the impacts of a number of these campaigns were estimated, with varying degrees of reliability¹, but virtually none of the studies provided data on:

- Costs of the outreach undertaken, or
- The length of time the newly adopted behaviors lasted (“retention” of the effects).

This project designed and conducted a social marketing outreach program in a suburban neighborhood, tracked (in detail) the costs of the various interventions used, and used a defensible experimental design to provide supportable estimates of the project’s impacts on recycling. We also continued the impact tracking for some time after the discontinuation of outreach activities for the project.

Using the data from the project and projections on some other outreach based on our project’s research, we estimated ranges of costs associated with interventions that might comprise a social marketing project (presented in Table E-1).

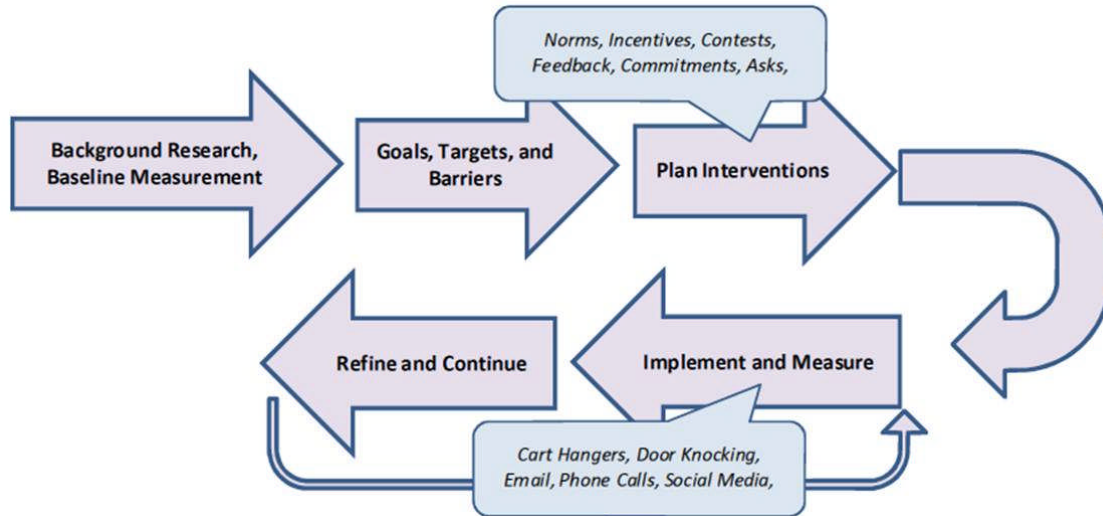
Table E.1| Outreach / Delivery Costs Per Household
(excluding design work, all time “valued”, including volunteer)

| | Cost Household \$25/hr | Cost per Household \$45/hr | Residential Recall | Impact on Recycling |
|--------------------------|------------------------------|-------------------------------|-----------------------|---------------------|
| Bill Inserts | \$0.03 to \$0.05 | \$0.05 - \$0.08 | Not tested | Not tested |
| Cart Hangers | \$0.46 to \$0.76 | \$0.74 - \$1.20 | High | High |
| Direct Mail | \$0.53 to \$0.58 | \$0.61 - \$0.66 | High | Medium |
| Door to Door Outreach | \$3.50 to \$4.00 | \$5.20-\$11.75 | Medium | High |
| Email | \$0.00 to \$0.01 | \$0.00 to \$0.01 | High | Medium to High |
| Newspaper/Radio | Depends | Depends | Not tested | Not tested |
| Phone Calls | \$0.65 to \$0.73 | \$1.08 - \$1.23 | Low | Low |

¹ A number lacked control groups, or had small sample sizes, etc.

Toolkit: The toolkit includes a description of a broad array of the steps communities will want to consider in designing and implementing an effective social marketing campaign.

Figure E.1: The “Flow” of the Toolkit and Decision-making/Implementation for a Social Marketing Campaign



The toolkit embeds information on how, what and why, examples, lessons learned, and the costs associated with each step. The toolkit specifically discusses:

- Set out surveys
- Focus groups
- Design of the social marketing campaign
- Cart hangers
- Direct mail
- Door-to-door outreach
- Email outreach
- Phone outreach
- Commitment Cards
- Fliers, mailers, cart-hangers
- Feedback
- Contests
- Reliable measurement methods

We used a fairly extensive combination of these elements for the design and implementation of a social marketing program to increase recycling in two neighborhoods.² Our particular efforts realized a 13% net increase in recycling and strong retention in the neighborhood that included door-to-door conversations, and a 4% net increase (and weaker retention) in the neighborhood without door-to-door

² Given that one of the objectives of this project was research, we conducted more steps than most communities would consider – and probably more outreach steps / rounds than would necessarily be optimal. We conducted two surveys, 2 focus groups, informational postcard, mailed and in-person commitment card distribution, two rounds of door-to-door visits, commitment reminder postcards and emails, 2 contests, and phone calls. At the time of this report, we had monitored tonnages before and during the interventions, as well as almost 6 months after we stopped the outreach.

visits. Lessons from our experience (and from other projects) are included throughout the toolkit.

The toolkit will allow communities to understand the pros and cons, and select those steps that they feel will be most effective as elements of a social marketing campaign in their community.

The Social Marketing Cost Estimator Tool: This project includes a “Social Marketing Cost Estimator”, which is located at the website www.socialmarketinghowto.com. The calculator allows the user to select from a laundry list of interventions and activities that communities may consider as part of their social marketing program. By filling out a number of assumptions (number of households, whether or not to do surveys, etc.), the tool will provide an estimate of the cost – in terms of labor and expenses - to conduct that program design. The user may “tweak” the design to arrive at a set of activities and associated estimated cost that meets a targeted budget. Note that the estimator is set up for a “suburban” environment; costs for rural and urban situations, especially for the door-to-door components, are likely to be higher (or at least different!), but the research provides ballpark starting figures for use by communities. The estimator supports computation of costs for:

- Focus groups
- Set out survey
- Web surveys, statistical and non-statistical
- Bill inserts
- Direct mail outreach
- Cart / door hangers, delivered door to door
- Email or phone outreach
- Door-to-door personal outreach / conversations
- Contests, and other elements

A toolkit on a topic as complex as the variety of activities, tools, and interventions associated with social marketing cannot, unfortunately, be just two or three pages. However, this toolkit tries to provide practical information in a format that balances brevity with clarity. We would be happy to entertain comments, questions, and suggestions from the readers of this document.³ We hope it is helpful, and that excellent social marketing campaigns around the state and nation result from the project’s report, toolkit, and calculator!

³ Feel free to contact us through the comment section of www.socialmarketinghowto.com, or directly.

Introduction

In 2010 Skumatz Economic Research Associates Inc. (SERA) partnered with Western Disposal Inc. (Western), and the City and County of Broomfield (Broomfield) to undertake a detailed study of the most cost effective methods to influence household recycling behavior. The project was funded by the Colorado Department of Health and Environment (CDPHE) Advance Technology Grant Fund with the goal of delivering more tons of recyclables throughout communities in the state without investing in new recycling programs or capital. The community outreach plan contained within this toolkit is designed to work within a community's existing recycling system with no new capital or truck routes. The toolkit presents estimates of outreach impacts on recycling tons and estimates of costs to allow community program managers, haulers, and others, to gauge the best investment of funds. The toolkit also compares the relative cost effectiveness of a few common recycling program options to allow program managers to weigh the efficacy of program adoption. Whether your community has a three cart system with food waste collection and pay-as-you-throw trash rates, or a drop-off only recycling program, this report contains tools that you can successfully use to create a successful social marketing outreach campaign.

Why Education?

No community based environmental program, recycling, composting or otherwise, can reach its maximum effectiveness without an outreach and education campaign behind it. Investing heavily in single stream collection and new carts will only work if residents know what materials they can put in the carts and what day they are collected. An energy efficiency program installing programmable thermostats will not be effective if residents do not know how to program their thermostats.

No community based environmental program, recycling, composting or otherwise, can reach its maximum effectiveness without an outreach and education campaign behind it.

Local, County, and State government, as well as private haulers and recyclers, have a finite supply of resources including money and staff time. When making decisions on new programs, capital investments, or other changes, factoring the cost of education in order to make the program perform optimally is integral. By using the tools provided in this resource, SERA hopes that communities in Colorado will be able to gain the optimal performance out of existing infrastructure and programs through successful education campaigns.

Brief Background on Social Marketing

Social marketing uses traditional marketing techniques combined with sociological and psychological concepts to change target behaviors, usually focusing on actions with a positive social value. Typical social marketing campaigns cover such topics as addiction, teen pregnancy, energy efficiency, climate change, and recycling among many others. Social marketing is not the same as social media. Although social marketing campaigns often incorporate web-based tools and social media sites, social marketing is an overall approach to behavior change while social media is a tool in the arsenal.

If a community decides to invest in recycling education, knowing how to effectively spend those education dollars on a campaign that actually changes behavior is important. Understanding the barriers to participation, including personal and environmental barriers, knowing the motivations to participate, and the factors that influence decision making, are all keys to effectively changing recycling and diversion related behaviors. Traditional education campaigns that simply provide information to raise awareness are not enough.

Successful outreach programs focus on tools that motivate the target audience to take specific actions. One of the important tools that will be discussed in detail in this report is face-to-face visits or door knocking campaigns. Although a time- and cost- intensive process, the research conducted for this grant has shown that this type of outreach is significantly more cost effective than a campaign not using door-to-door outreach and the impacts on recycling are meaningful.

When conducting a successful campaign marketing professionals know that decisions made on the individual and household level are not necessarily “rational” decisions. That is, individuals do not always weigh options on a cost benefit level the way economists do. Decisions are based on a number of personal factors including societal norms, habits, feelings of self-efficacy, instant versus deferred gratification, and many other psychological and sociological factors. Behavioral economists and social marketers base entire careers around uncovering, defining, and trying to model the various factors that can influence behavior change.

This toolkit, although based heavily upon previous research in community based social marketing and behavioral economics, does not delve deeply into the theory behind the tools. It instead offers a practical approach that can be transferred to any community in the state. Tips, various outreach methods and tools, measurement techniques, and others are all contained in the toolkit. Each community can choose which tools they wish to use based on available resources and costs. The appendix of the toolkit contains

a list of references and suggested readings for program managers interested in learning more about the theories underlying the outreach techniques covered in the toolkit⁴.

A Word about Costs and Retention

Costs: Recycling outreach campaigns have been conducted in earnest since the 1970's and early social marketing research in the literature can be traced to about the same time. Despite this longevity, there are very few resources available for program managers on the actual costs of conducting a campaign.⁵ It is relatively easy to find case studies showing strong results for social marketing (25%-35% increases in recycling are not uncommon), yet when digging deeper into the literature it is extremely rare to be able to find the actual costs per household of the outreach. This toolkit and grant project strives to change that. Throughout this report costs for various actions and outreach undertakings are included wherever possible. Costs for outreach are generally shown on a per household basis to allow communities to scale up for their own community. Costs for barrier identification, material design, and others, are based on the grant research as well as data available from community interviews and other sources. All costs are estimates, and actual costs will vary depending on staff knowledge and capabilities, population density (it is easier to do door-to-door if houses are closer together), in-house printing resources, and others.

How long does outreach last and does social marketing last longer than traditional efforts? Starting with this question in mind SERA designed the Broadlands Project to find the answer.

⁴ For additional background on social marketing, the authors recommend reading *Fostering Sustainable Behavior: an Introduction to Community Based Social Marketing* by Doug McKenzie-Mohr or other texts noted in the references. Mr. McKenzie-Mohr is one of the pioneers in the field of social marketing.

⁵ In addition to the shortage of information on payback for social marketing efforts, we found similar gaps in other outreach fields. We were frustrated in attempts to identify information on the cost-effectiveness or "bang for the buck" in advertising. Research we previously conducted on outreach and advertising (Skumatz and Green 2000) noted the gap in costs of social marketing and traditional marketing. We discussed the fact that advertising firms spend most of their effort tracking recall, but not sales impact. Each interviewee on that project neatly deflected all questions about cost-effectiveness or return on investment for advertising dollars spent.

SERA Social Outreach Cost Calculator: As part of this project SERA has developed a social marketing outreach campaign cost calculator. The calculator is designed to allow users to select their community parameters, the steps of this toolkit they wish to undertake or to skip, and it provides the user with an estimated costs of the total social marketing campaign. The calculator can be accessed on <http://www.socialmarketinghowto.com>.

For each step in the outreach process a range of costs are provided. The costs include a low and a high estimate as well as estimates based on two different hourly rates, \$45/employee/hour and \$25/employee/hour. The ranges and estimates are designed to allow readers to choose what fully loaded hourly rate best fits their community. For outreach efforts (cart hangers, door knocking, etc.) low and high cost estimates are shown for both staff rates and for

1,000 households (population 2,500) and 10,000 households (population 25,000). For these estimates, the size of the community makes a large difference on the overall costs. Although the toolkit recommends using volunteers or temporary staff for a number of activities, all costs are estimated using fully paid staff, no volunteer hours are assumed. Recruiting volunteers has the potential to greatly reduce the costs of some efforts, especially those requiring a large investment of staff time.

SERA Social Outreach Cost Calculator: As part of this project SERA has developed a social marketing outreach campaign cost calculator. The calculator is designed to allow users to select their community parameters, the steps of this toolkit they wish to undertake or to skip, and it provides the user with an estimated costs of the total social marketing campaign. The calculator can be accessed on www.socialmarketinghowto.com.

Retention: Similar to costs, there is very little previous data available on behavior retention. How long after conducting an outreach campaign or after households adopt a behavior does the impact last? When buying a new recycling truck, budgets take into account depreciation and the useful lifetime of the truck. At some point, the truck will stop working and another will need to be purchased. We argue the same is true for outreach campaigns. At some point, new people will move into the community that were not aware of the original outreach and others forget about the outreach, with most eventually reverting back toward the original baseline level.⁶ Once this happens, similar to a public works department needing to plan for the purchase of a new truck, program managers must budget for additional rounds of outreach and education.

How long does outreach last and does the impact of door to door outreach last longer than other efforts? Starting with this question in mind SERA designed the Broadlands

⁶ Some (unknown percent) change behaviors permanently.

Project to find the answer. The appendix of this report discusses the education retention issues and its impacts on the costs and activities communities must consider.

A Little about the “Broadlands Project”

Much of the information on procedures, costs, and impacts contained within this toolkit came out of research undertaken in the *Broadlands Project*. The Broadlands Project was designed using scientific experimental procedures (control and test groups) to measure the changes in recycling and trash disposal in the Broadlands neighborhood of Broomfield, CO. The project design allowed SERA to track the exact costs of various outreach methods and tools. The project began in the spring of 2009 and encompassed nearly 1,600 households. Figure 1 provides a brief review of the Broadlands Project’s experimental design.



Figure 1 | Review of The Broadlands Project Design

| Three routes of comparable ⁷ single family households in Broomfield Colorado were each given different experimental treatments. Baselines were established for each route and weekly measurements were recorded to uncover the impacts of the outreach. There were approximately 500 households on each route. | |
|---|--|
| Route | Treatment |
| Route 1: Control or no-treatment route | Minimal level (standard) outreach materials |
| Route 2: Low treatment route: Social marketing-outreach and door-hangers | Received full treatment of social marketing materials with the exception of door-to-door personalized visits |
| Route 3: Full- or High-treatment route - Social marketing outreach materials plus door-to-door visits | Received the same outreach as Route 2 with the addition of door-to-door personalized visits and phone call reminders |

For readers that are interested in additional information about the Broadlands Project a more detailed review can be read in the appendix.

How to use this guide

The remainder of the toolkit focuses on the practical how-to steps for a community to undertake their own social marketing outreach campaign. The guide will take readers through a full outreach campaign starting with how to get accurate baseline measurement through outreach material design all the way to progress and impact measurements.

⁷ Households in all routes had similar demographics and received the same trash and recycling program.

The authors recommend that communities do not skip any of the steps in this guide. As the research SERA conducted in the Broadlands Project has shown, door-to-door outreach is cost effective and one of the key aspects of successfully “selling” a recycling program. However, the authors realize that although it is cost effective, door-to-door outreach is still expensive. Thus, when reviewing the steps in the toolkit and using the *SERA Social Outreach Cost Calculator*, it is ultimately up to readers to make tradeoffs and choose which activities fit in their budgets and which activities staff can feasibly undertake.

Although the guide is geared toward a governmental audience, there is no reason why the same tools could not be used by a private recycler, trash hauler, university, school, or other entity interested in influencing positive behavior change.

The toolkit is primarily focused on recycling and diversion education, however, many of the techniques and tools outlined in the guide can be transferred to other programs including energy efficiency, water conservation, and beyond. Additionally, although the guide is geared toward a governmental audience, there is no reason why the same tools could not be used by a private recycler, trash hauler, university, school, or other entity interested in influencing positive behavior change.

Finally, this toolkit cannot function exactly like a recipe. It craves adaptation to your particular community, and to your topic of focus. Throughout this document, we use the example of increasing recycling and green behaviors in a suburban community. We provide costs associated with a wide variety of outreach efforts for social marketing in that context. While these are reliable costs, and we provide specific impacts information, you will need to adapt the cost information for the household densities in your community, and the impacts for the types of programs and services available in your community. However, while the data cannot be all things to all readers, we are proud to be able to fill this 20-year gap in the social marketing literature with at least a starting point for estimation by the readers!

Phase 1: Background Research, Goal Setting, and Baseline Measurement

Prior to implementing an effective behavior change education program a starting point or baseline level must be established. Phase 1 of the toolkit will guide readers through the important tasks and activities associated with identifying your baseline measurements. Before starting your campaign we recommend undertaking a brief literature review of other outreach and education campaigns in your area, region, state, and beyond, to see what other communities have done that might or might not make sense in your area. Many communities are willing to share their signs, graphics, and other materials that may save you significant time and effort.

Three major tools (and one optional one) for uncovering baseline measurements are included:

- 1) *Review of tonnage data from haulers, transfer stations, landfills, or other:* Used to determine current diversion rate, generation, disposal, and recycling per capita.
- 2) *Set-out Survey-* View and weigh trash / recycling set outs at a sample of homes to uncover participation rates, pounds per household, materials in the trash stream that can be easily recovered, barriers, and data on what is happening in your community
- 3) *Web based behavior and opinion survey-* Provides important information on barriers to participate, motivations to participate, and the target audience.
- 4) *Optional- Focus Groups-* If budgets allow for a focus group it is a powerful tool for identifying the target audience, barriers, potential “key words”, outreach that they often see, and other information. However, much of this data can be obtained from the web survey if a focus group cannot be included in the budget.

Important

The authors highly recommend reading and reviewing the Second Phase instructions in this toolkit before undertaking the baseline measurement tasks. The specific goals, barriers, motivations, and targets should not be defined until all the baseline data has been collected and analyzed. However, knowing what you are looking for when conducting your baseline measurements is integral to the campaign. Spend some time thinking about what your goals are and who you might be marketing to, as well as thinking of questions to uncover barriers to action and motivations for the various behaviors and actions.

The web survey or focus groups may be optional, but both provide very valuable information and are quite inexpensive (and quick) to implement.

1.1: Review of Tonnage Data

Recycling education programs often have the goal of increasing the tons of materials recycled, decreasing the tons of materials sent to the landfill, or other quantitative based goals. Examining the tonnage data will allow your community to establish starting diversion rates, trash generation, and recycling behaviors as well as goals.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|-----------------|---|------------------|
| Planning | NA | 1 staff member |
| Data Collection | Depends on data availability. If tonnage reports are available 1-2 hours. If haulers must be contacted roughly 2 hour per hauler. | 1 staff member |
| Data analysis | 1-2 hours (includes time to make graphs and charts) | 1 staff member |
| Totals | 2-10 hours (Depending on data availability and records) | 1 staff member |

Materials needed:

| Material | Cost |
|-------------|------|
| None needed | \$0 |

Total Cost Estimate:

| | Staff Rates at \$25/Hour | Staff Rates at \$45/Hour |
|---------------|--------------------------|--------------------------|
| Low estimate | \$50 | \$100 |
| High estimate | \$250 | \$450 |

Relatively few communities and counties in Colorado require hauler reporting of households serviced and tonnages of materials collected. A few of the exceptions are those counties or communities such as Boulder County, Westminster, Fort Collins, and others that have passed ordinances requiring that all haulers servicing the community report data as a condition of their licensing agreement. Other communities including Denver, Loveland, and Durango, have residential trash collected by city staff and records are easily available. Still other communities such as Lafayette and Golden, contract with a single trash hauler who is required to report data on MSW and recyclables collected and disposed.

If you are in a community like those listed above (ordinance for reporting, municipal collection, or contracted hauler) a review of tonnage data is not difficult. The data that would need to be reviewed includes the number of households serviced, the tons of trash disposed at the curb, the tons of recycling at the curb, the tons of recycling at drop-off locations, and other tons that might be diverted (yard waste programs, HHW, e-waste, and others). Using these data the residential diversion rate (%) and per capita generation, diversion, and recycling can be calculated. Other information that can be seen through hauler reports may include the number of households signed up for recycling service (if the service is not included in the base level of service) and the number of households signed up for different service levels (if there are pay-as-you-throw⁸ options with different levels of service).



If you live in a community in which hauler reports are not available, like the majority of communities in Colorado, there are a number of options available for determining the baseline diversion and generation rates. The easiest, potentially, is to talk to the haulers serving your community to find out what data is available and what data they are willing to share. Some haulers are very open about data and keep detailed records of tons. However, others are often reticent about sharing data and you may not be able to access tonnage data.⁹ If you cannot access hauler-reported data we recommend moving to section 1.2 to estimate baseline disposal and recycling data using a *set-out survey*.

The figures below contain the basic formulas for determining baseline diversion and per capita recycling:

- **Residential Diversion Rate:** *The percentage of materials diverted from disposal in the landfill through all activities including recycling, composting, etc.*

⁸ Pay As You Throw (PAYT) systems bill households for trash service based on the number or size of containers of trash set out; more trash for collection leads to a higher bill. It provides an incentive for recycling, if recycling is removed from the trash volume.

⁹ Occasionally they will share data with a consultant if the information does not get delivered to the community until aggregated – this can reduce hauler issues with “public records”.

Residential Diversion rate (%) = $\text{Total Residential Tons Diverted}^{10} \div \sum(\text{Total residential tons diverted} + \text{total residential tons disposed})$

- **Per Capita Generation:** *This is the estimate of the total tons of materials, both diverted and disposed, that each person in your community generates per day.*

Per Capita Generation (lbs/person/day) = $\sum((\text{Total residential tons diverted} + \text{total residential tons disposed}) \times 2000) \div 365 \div \text{Total population served}$

- **Per Capita Recycling¹¹:** *Same as per capita generation but only includes the pounds of materials recycled per person per day.*

Per Capita Recycling (lbs/person/day) = $((\text{Total residential tons recycled} \times 2000) \div 365) \div \text{Total population served}$

- **Per Capita Waste Disposed:** *Same as per capita generation but only includes the pounds of materials disposed per person per day.*

Per Capita Waste Disposed (lbs/person/day) = $((\text{Total residential tons landfilled} \times 2000) \div 365) \div \text{Total population served}$

¹⁰ Total Residential tons diverted is the summation of the tons recycling at curbside, tons residential recycling at drop-off, tons yard waste collected at the curbside, tons of yard waste brought to drop-offs, and any other diversion related activities available to the sector

¹¹ If you want the per capita diversion include all types of diversion (curbside recycling, organics, drop-off, food waste, e-waste, etc.) in both the nominator and denominator.

1.2: Set-Out Survey

The set-out survey is designed to gather detailed data from the residential¹² sector on trash/recycling weights, behaviors, program participation, and contamination. The data collected will allow the researchers to determine an overall diversion rate for the surveyed area. Without a proper baseline of program participation and knowledge about the current recycling rate, it is very difficult to gauge the effectiveness of an outreach program.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|-------------------------|---|--|
| Planning | 1-2 hours | 1 staff member |
| Data Collection | 20-72 hours data collection (depending on size of community, level of statistical validity desired, type of trash collection arrangement ¹³ , and other factors) | 1 trained staff member, 4-8 other staff or volunteers (This is a great project for volunteer recycling committee members or other such organizations, temporary staff can also be used to limit costs) |
| Data entry and analysis | 3-6 hours | 1 staff member |
| Totals | 24-80 hours | 1 staff member |

Materials needed:

| Material | Cost |
|---|--|
| Community map | \$0 |
| Addresses of homes in community | \$0 |
| Clipboards | \$0 (if you have them) to about \$5 each per team (if you need to buy them) |
| Safety Vests | \$0 (if you have them) to about \$12-20 each staff / volunteer (if you need to buy them) |
| Identification cards/badges for data collectors | \$0- print in-house |
| Multiple digital scales ¹⁴ | \$150 each (1 per team) |
| Total Materials Cost | \$0 to \$600 |

¹² It is possible to conduct a similar type of survey for the commercial sector. However, the data, the results you can draw from the data, and the procedure is slightly different.

¹³ For instance, if the community is dense it is easier to physically collect the data with less driving, travel required. Also, if the community is served by one hauler it is easier to collect all the data on one trash hauling day. However, if the community is serviced by multiple private haulers it may be necessary to conduct multiple days of surveying to gather data from all HHs. One hauler may collect on Monday, another on Tuesday, and another on Friday and in order to gather a representative sample of the community set-outs must be conducted on all days.

¹⁴ Pelouze H-479 Digital Scale is the recommended option and it is around \$150. There are other less expensive (and more expensive) models available. If the budget is very tight, inexpensive bathroom scales can be used (\$20 each). However, the scales should go up to 300 pounds and they tend to be rather inaccurate and are not the first choice.

Total Cost Estimate:

| | Staff Rates at \$25/Hour | Staff Rates at \$45/Hour |
|---------------|--------------------------|--------------------------|
| Low estimate | \$450 | \$700 |
| High estimate | \$2,525 | \$3,950 |

Procedure

Step One: Planning.

A) The first step in the survey design is to gather a listing of all the residential addresses in the community. If the addresses are not available a listing of all the streets in the community may be used. Once the addresses have been obtained, use a computer program to randomly sort all of the addresses. The set out must be designed to collect a random sample of all households in the community. The number of households surveyed will determine the rigor of the analysis. The examples in Table 1 are based on a community with a population of 10,000. It is important to note however, that the sample size does not vary greatly regardless of the total population size. While a city with 10,000 HHs needs to survey 370 HHs to get a confidence interval of 95% +/- 5%, a city of 100,000 HHs would only need to increase the number of HHs surveyed from 370 to 383 to have the same level of confidence in their findings.

Table 1.1| Sample Size Needed for Various Levels of Statistical Validity (Example based on a city with 10,000 HHs)

| Sample Size Needed | Confidence Interval | Sample Size Needed | Confidence Interval |
|--------------------|---------------------|--------------------|---------------------|
| 370 | 95% +/- 5% | 263 | 90% +/- 5% |
| 95 | 95% +/- 10% | 67 | 90% +/- 10% |

B) Using the list of randomly selected HHs, choose the first X^{15} number of HHs for your starting addresses, these will be the houses and blocks that will be surveyed. To limit the amount of driving and to expedite the surveying process, not all of the HHs to be sampled are chosen, just the starting addresses. Using the randomly selected starting addresses, the data collectors will survey the first house on the block (the randomly selected address) and the next five households (those not selected in the random sample). If a smaller community is being sampled it may be better to survey the next ten houses on the block, or in very small communities (1,500 HH or less) it is possible to sample houses on every block. The fine points of the sampling technique should be refined for each survey (number of HHs to be samples, how many houses on each block, etc.) but the basic idea must remain constant- *collect data from a random selection of all the HHs in the community with a large enough sample size to ensure statistical validity.*

¹⁵ This number will depend on the sample size desired.

Step Two: Data Collection.

Once all of the HHs to be sampled have been selected, work with GIS department or on-line tools such as MapQuest™ to map the most effective sampling routes for each data collector. Depending on the number of volunteers for the data collection, samplers can go out individually or in pairs. Prior to data collection it is helpful to alert other city staff and the local police about the survey in case residents call in with questions. Also, equip each of the data collectors with a safety vest and handouts to give to any residents with questions about the project. Houses without trash or recycling set-out but on the data collection route are still recorded. Data collectors should not skip any homes, choose homes with only recycling out, or choose homes that look interesting; the sampled HHs *must* be the randomly selected sample only.



Data collectors do NOT sort through the trash/recycling; they take a cursory glance of the contents to see if there are any obvious contaminants in the recycling or recyclables in the trash, and weigh both the trash and recycling. Each data collector should be given a clipboard with a data recording sheet to collect at least the following basic pieces of information in table 2:

Table 1.2| Data Collection Categories

| Trash Data | Recycling Data |
|---|---|
| <ul style="list-style-type: none">• Whether or not cans/carts are out• Number of cans/carts/bags• Size/type of trash cans/carts• Percent full• Weight of each• Recycling in trash• Yard waste in trash• "Other" materials in trash | <ul style="list-style-type: none">• Whether or not bins/cans/carts are out• Number of bins/cans/carts/bags• Size/type of recycling bins/cans/carts• Percent full each• Weight of each• Contaminants in recycling• Any other notes |

Step 3: Data Analysis.

The final step in the set-out survey is the data analysis. Using basic statistical analysis the following type of information can be gained from the set-out survey:

- *Number of HHs setting out trash*

- *Number of HHs recycling-* allows the community to find out participation rate in program.
- *Number of trashcans set out/week/HH-* Useful in uncovering information on subscription levels, especially important in pay-as-you-throw programs
- *Number of recycle bins set out/week/HH*
- *Weight of trash generated/HH and per capita*
- *Weight of recycling generated/HH and per capita*
- *Total weight of materials generated/HH and per capita Trash plus recycling*
- *Recycling/diversion rate-* One of the key findings. The overall diversion rate is determined by the following formula: ***Diversion % = Lbs. of Recycling / Σ (Lbs recycling + Lbs trash)***
- *Amount of recycling in trash-* Data can help determine how effective the current recycling program is at removing recyclable from the trash
- *Amount of yard waste in trash-* Used to help guide further program decision
- *Other materials in trash-* Used for targeted education and outreach
- *Contaminants in recycling-* Used for education and outreach.

Tips: *One of the hardest parts of conducting the set-out survey is getting the staff to go out and physically collect the data. We recommend working with your community's Environmental Committee (if there is one) or other community groups that are interested in green issues. In other cases we have worked with high school clubs or volunteers to help staff the set-out survey. Another source of labor is craigslist- a free on-line help wanted advertising resource. Staff training can easily be done in a few minutes on the morning of the set-out survey. For planning purposes you can expect to collect data from 6 to 10 households per hour per team, including the drive time.*

1.3 Web-Based Survey

The third and final baseline measurement recommended is a web-based survey. If your community prefers mail surveys or phone surveys the same data can be obtained, however, by using a web-based survey instrument the costs are significantly lowered. The web survey is used to ascertain behaviors, opinions, motivations, and other information about the target audience. The survey allows for a well planned outreach campaign based on the barriers to participation and the motivations for participation.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|-------------------------|---|-------------------------------|
| Planning | 2-4 hours | 1 staff member |
| Data Collection | 1 hour- if using a web survey (You should plan for at least 3 weeks to collect responses) | None- if a web survey is used |
| Data entry and analysis | 5-7 hours | 1 staff member |
| Totals | 8-12 hours | 1 staff member |

| Material | Cost |
|---|---|
| A web based survey provider ¹⁶ | \$16-\$65/month |
| Optional Statistical Survey | \$0.47/postcard (includes postage, printing, and time to stamp) ¹⁷ |
| Total Materials Cost | \$16 to \$4,000- Depending on the type of survey- Statistical or Broad Based |

Total Cost Estimate:

Non-Statistical Survey

| | Staff Rates at \$25/Hour | Staff Rates at \$45/Hour |
|---------------|--------------------------|--------------------------|
| Low estimate | \$250 | \$400 |
| High estimate | \$700 | \$950 |

Statistical Survey

| | Staff Rates at \$25/Hour | Staff Rates at \$45/Hour |
|---------------|--------------------------|--------------------------|
| Low estimate | \$3,450 | \$3,600 |
| High estimate | \$5,200 | \$5,450 |

¹⁶ We recommend Survey Monkey. Pricing plans range from \$16/month for the basic service to \$65/month for the platinum service. A user can cancel their plan at any time so if you only want to run a survey for one month you would only need one month of service. There are multiple other services similar to Survey Monkey available some include significantly greater control and level of detail for survey administration and design yet for most opinion surveying an inexpensive and simple service will suffice.

¹⁷ The literature generally indicates that households pay more attention to mail with actual stamps, than to bulk mail / postage metered mail, and that results in higher response rates.

Procedure

Step 1: *Decide what type of survey you want.*

There are two main survey options described in this toolkit. The first is a statistically valid web survey, the second is broad based survey. The statistical survey costs significantly more money to conduct but provides rigorous and defensible data and results (and can serve more purposes than outreach planning information). The broad based survey is cheaper and easier to administer but does not provide statistically valid results. It will instead provide a snapshot of your community and responses that are like those typically seen in a city council meeting. Residents that feel very strongly for or against an issue are likely to respond while those in the middle tend not to respond. Because the survey is being used to decide outreach messages / directions, not policy, we find broad based surveys are generally sufficient for these outreach assignments if you do not have the budget to cover a statistically valid survey.

Once you have chosen what type of survey you wish to administer, the next step is designing the survey questions. The survey questions are the same for both types of surveys.

Step 2: *Designing Survey Questions.*

The survey goals are to provide information on trash/recycling behaviors and opinions in your community. Actual questions, of course, will vary in every location depending on the local situation and exact goals of the survey.

There are an unlimited number of potential topics (a few sample topics are included in the inset) and surveying is a great way to gain a deeper understanding of your target audience. Testing the survey prior to sending full scale will reveal confusing or leading questions, repetitive questions, and help streamline the survey to gather the most responses possible.

Some Sample Survey Topics:

- *Trash disposal behavior*
- *Current recycling behavior (curbside, drop-off, frequency, costs, etc)*
- *Who in the household is responsible for recycling/trash disposal*
- *Barriers to recycling (too messy, costs too much, not sure where to recycle, etc.)*
- *Motivations to participate, or not participate*
- *Attitudinal questions (self efficacy, opinions on recycling, diversion)*
- *Brief demographic data (what part of town, age)*

Step 3: *Administering the survey.*

Option 1: Statistically Valid Web Survey- To conduct a statistically valid survey, it is necessary to survey a random sample of households chosen from the population at

large and it is necessary to reach a pre-determined number of completes. The same sample sizes described in the *set-out survey* would apply to the number of completes needed for a web-survey. In order to assure that only the randomly selected household sample responds, the survey has to be directly marketed to those households and not advertised to the community at-large. To gather the survey responses we recommend using a postcard advertising the survey website sent directly to the sample population. This adds a significant amount of cost. In previous residential surveys SERA has seen response rates ranging from around 5% to a high of approximately 15%. This means, to get 370 completed surveys, it may be necessary to send postcards to as many as 7,400 households. To send this many postcards, including postage and depending on where the postcards are printed, can cost between \$3,200 and \$4,500 dollars¹⁸. Not cheap.

Option 2: Broad Based Survey- This survey, as mentioned above, is the less expensive, and satisfactory / recommended option. This survey will provide information on the opinion of the community residents but is not statistically valid. To administer the survey you do not need to send postcard to a random sample. The survey is broadly advertised to the entire community through the city website, newspaper articles, newsletters, and other free means. If there is enough buzz in the community, the survey can get great responses. For example, a project SERA conducted in a community of over 200,000 used this type of survey and got over 4,200 responses! Beyond designing the survey and the monthly costs of the survey provider, there is no additional cost to run this type of survey.

Step 4: Data Analysis. The analysis is the same for both surveys. Once the survey is closed, complete an analysis of the collected data to uncover how people are currently recycling. A few of the most important pieces of data to pull from the survey are:

- Who in the house is recycling (your target audience)
- What are the barriers to recycling (what you want to design your interventions to overcome)
- What are the motivations to recycle (how you will sell the program/frame the message)

Tips: When administering a web-based survey include a phone number for respondents to call to complete the survey. Not all residents have easy internet access and if the only way to complete the survey is on-line you may limit responses. Consider providing an incentive to increase the response rate. A drawing for a \$50-\$100 “prize” can help increase the number of completes for a minimal cost. If budgets are really tight, free recreation center passes or other free prizes are also an option.

¹⁸ If your community already sends out utility bills or other mass mailings it is possible to select your sample of households and include the web survey announcement in these mailers. This can significantly decrease the costs of administering an statistically valid survey.

1.4: Optional Task- Focus Group

The focus group is included in the baseline portion of this toolkit but it could just as easily be included in the next phase of the guide, *Outreach Material Design*. The focus group allows you to gather a greater understanding of the current situation and the target audience. You can establish what the barriers and motivations to recycle are, and what types of messages will resonate best with the target audience. It is considered optional if you have completed a web-survey.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|-------------------------|--|---|
| Planning | 7-15 hours (The majority of this time will be used coordinate attendees) | 1 staff member |
| Running the Focus Group | 4 hours- Plan on a 90 minute focus group with set-up and breakdown time | 2 staff members- 1 to moderate, one to take notes |
| Data analysis | 1-3 hours | 1 staff member |
| Totals | 12 - 22 hours | 1 staff member |

Materials:

| Material | Cost |
|-----------------------------------|--|
| Tape/digital recorder | \$25 |
| Payment for focus group attendees | \$150 to \$300 (\$25 to \$50 per attendee, 6-10 attendees) |
| Total Materials Cost | \$175 to \$375 |

Total Cost Estimate:

| | Staff Rates at \$25/Hour | Staff Rates at \$45/Hour |
|---------------|--------------------------|--------------------------|
| Low estimate | \$475 | \$700 |
| High estimate | \$975 | \$1,500 |

Procedure

There are scores of marketing firms that specialize in running focus groups for communities, businesses, and other organizations. The description and procedures included in this toolkit provide instructions for running a basic low-tech focus group for your recycling outreach program. More scientific and detailed focus groups run by professional firms using two-way mirrors, trained moderators, etc., can cost in the range of \$3,000- to \$6,000 dollars per focus group. If your budget is unlimited you should hire a professional firm to conduct the focus group, which will result in more robust data¹⁹ and low hassle to the community staff. However, as most communities do not have

¹⁹ Although information from a focus group is never statistically valid – it is always qualitative only.

unlimited budgets, we recommend doing the slightly scaled back and more economical version described below.

Step One: *Choose participants.* Getting the right people to show up to the focus group is the first step to success. It is nearly impossible to accurately represent every facet of your population with just a handful of people, but with

Paying attendees for participation in a focus group is common.

careful planning the focus group attendees can be chosen to cover a wide swatch of opinions. You should ensure that included are; both sexes, a wide range of ages, and a wide range of geographic locations in your target area.²⁰ Focus group size can range from 6 to 10, with many moderators reporting that the ideal focus group size is 8. However, this depends on your community's objectives and ability to get people to attend. A three person focus group, although maybe not covering all points of view, can still provide useful data inputs.

Step Two: *Getting people to the focus group.* If you conduct a web survey, including a question asking people if they would be willing to participate in a focus group is a good way to find participants. Paying attendees for participation in a focus group is common. Offering a small reimbursement for attendee's time such as \$25-\$50, free passes to the recreation center, or others enticements, may be needed to gather attendees. Finding a date when the most number of attendees can be there may take some back and forth communications and flexibility. Offering mid-day and evening options will make it easier for more people to attend.

Step 3: *Running the meeting.* Prior to starting the meeting setting some concrete objectives internally, as well as for the attendees is helpful. Some of the objectives of a social marketing focus group for a recycling outreach campaign may include:

Sample Objectives

- what recycling they know about
- what they haven't heard of
- who does the recycling in the house
- uncover barriers to recycling and composting differences in families and sectors
- find objections/barriers to mulch mowing, composting, others
- motivations to recycle/not to recycle
- levels of self-efficacy
- best messages, words that resonate
- which social marketing tools might make sense (stickers, yard signs, contests, community groups, feedback, others)

²⁰ If you are going to conduct multiple focus groups, you may either "mix it up" in each group, or you may have targeted focus groups – one focusing on elderly issues, one on poor, etc.

Use the objectives when designing discussion topics and questions you will be asking the focus groups. The number of questions you plan to ask will depend on the number of attendees. If you are planning on 6-8 attendees, keep the number of questions to around 10 so the meeting does not run out of time.



During the meeting you should use two staff, a moderator to run the meeting and ask the questions, and a meeting recorder. It is recommended to record the meeting as well. At the onset of the meeting, the moderator should share the group objectives with the attendees so they understand the purpose and the stated goals of the meeting. An example of an announced focus group objective for a recycling campaign may be:

We are here to uncover barriers to recycling, find motivations and influences, what information sources and communication are effective, learn about programs you may or may not like, get your reaction to a few ideas, and brainstorm on other ideas.

Setting ground rules for the meeting is also important. Below are a few example ground rules:

- Everyone should say what they think, hold nothing back. We are interested in your opinions and experience
- There are no right or wrong answers; even negative comments are useful in gaining insight about the issues
- All comments are confidential
- Feel free to express any opinion – consensus is NOT the goal – opinions and information are. Everyone's opinion is valid and important.
- Group interaction/discussion is desirable
- You don't have to raise your hand, but try not to interrupt someone too much.

Step 4: Data Analysis. As soon after the focus group as possible, formalize the notes taken during the meeting. The longer you wait after the focus group, the less relevance the meeting notes will have. The formalized notes, combined with the other baseline data, will be used in the next step of the outreach program, Outreach Material Design.

1.5: Phase 1 Summary

Table 1.3 | Summary of Costs and Commitment Estimates

| Step | Time commitment | Estimated Total Cost | Importance of Step |
|-------------------------|-----------------|---|---|
| Tonnage Report Analysis | 2-10 hrs. | \$50-\$450 | Very High- if data available |
| Set-out Survey | 24- 80 hrs. | \$450-\$3,950 | Very High- if no tonnage data available Medium- if tonnage data is available |
| Web Survey | 8- 12 hrs | \$250-\$950 (broad based) \$3,450-\$5,450 (statistically valid) | Very High |
| Focus Group | 9-12 hrs. | \$475-\$1,500 | Medium- if web survey completed Very High- if no web survey |
| Totals | 43-114 hrs. | \$1,225-\$11,350 | |

Baseline information is integral in conducting an effective social marketing campaign. Table 1.3 summarizes the estimated costs and staff commitments for the various steps in the baseline data collection phase. Unlike traditional marketing, social marketing specifically looks to address barriers to participation for the target audience and design interventions to overcome those barriers. Additionally, if the baseline behaviors (participation, diversion rate, trash disposal) are not known, it is impossible to measure progress. Finally, the baseline data is needed in order to set goals for the outreach. If goals are set without knowing what is currently happening, these may be goals that are already met or goals that are unrealistic for the community.

Once the baseline data has been collected it is time to move on to **Phase 2, Outreach Material Design**.

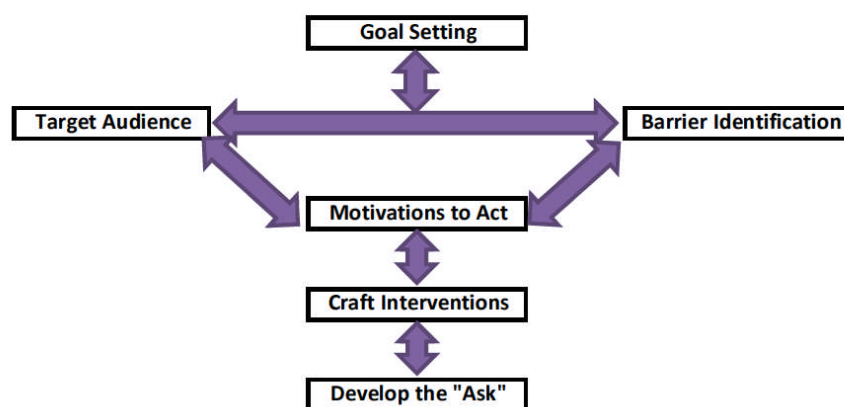
Phase 2: Outreach Material Design

Unlike Phase 1, where there are certain activities that were undertaken, Phase 2 of the outreach campaign is centered around internally evaluating the baseline data you have already obtained and using it to craft a specific and effective marketing campaign. The tasks in this phase are based on the literature review SERA undertook during the Broadlands Project as well as SERA's experience in testing social marketing materials in action. The steps involved in this stage are all necessary and must be undertaken to conduct the social marketing outreach campaign. The steps include:

- 1) **Goal Setting:** Setting a specific and attainable goal, not "Increase recycling in our City"
- 2) **Target Audience:** Deciding who exactly the target audience of the campaign. For example whether it is teens, 40-55 year old men, apartment renters, landlords, or others.
- 3) **Barrier Identification:** Uncovering the barriers that must be overcome to reach the goal
- 4) **Intervention development:** What steps need to be taken to overcome the barriers identified
- 5) **Motivation to participate:** Uncover and leverage the reason(s) why people want to participate/act
- 6) **Developing the "ask":** Decide on exactly what actions you want people to take

The steps in Phase Two are not linear. Determining who the target audience is informs the barriers, and it is possible that these two together may require you to slightly tweak the goals to fit your audience better. The flow chart in Figure 3 displays graphically how the steps in this phase relate to each other. The remainder of this section describes in more detail how to undertake the activities for outreach material design.

Figure 2.1 | Message Design Flow Chart



2.1: Goal Setting

Setting a specific goal that is measurable and potentially attainable is one of the first steps in designing your outreach materials. The goal will influence the remainder of the tasks in this phase. A broad goal such as “Increase recycling in my City” will not suffice. In general, the more specific the goal the better, and having more than one goal is reasonable. Evaluating your community’s strategic plan and the information and data collected in both the tonnage analysis and set-out surveys will help inform the goal setting task and allow you to make decisions on goals.

Recycling goals are often based around diversion rates, which are in turn based on the tonnage of material collected. An appropriate social marketing diversion rate based goal could be:

- *Increase the residential diversion rate from our current level of 25% to a rate of 35% over the next 12 months*

The goal has a clearly defined baseline, sets an attainable result, and is measurable. The outreach campaign’s goals do not need to be based on diversion rates.

A few examples of other goals are shown below:

- *Reduce the pounds of trash disposed per household by 20%, from 10 lbs/household/day to 8lbs/household/day over the next 6 months*
- *Increase residential recycling by 50% from 3 pounds per person per day to 4.5 lbs per person per day by 2013*
- *Increase residential recycling participation at our drop-off facility from 20 people visiting per day to 30 people visiting per day*
- *Encourage additional commercial recycling and get 100 businesses to sign up for a “free” commercial waste audit by December of this year.*
- *Increase mulch mowing and reduce the tons of yard waste being disposed in the trash at the curb by influencing 500 household in our community to switch to mulching mowers*
- *Raise awareness about at home composting among residents and sell 250 discounted at home compost bins during the summer composting events.*

Once the goal or goals have been drafted, it is time to move on to the next set of activities in this phase. It is very possible that as you learn more about the target audience, barriers and motivations, that the goals of the project are tweaked.

Phase 2 Activity 1| Goal Setting. *Use the worksheet below to record your outreach program's goals, metrics, and potential dates for completion. The program may have one goal or multiple goals.*

| | |
|--------------------------------|-------|
| Goal 1 is... | |
| What is the baseline? | _____ |
| How will progress be measured? | _____ |
| Date for meeting it? | _____ |
| Goal 2 is... | |
| What is the baseline? | _____ |
| How will progress be measured? | _____ |
| Date for meeting it? | _____ |
| Goal 3 is... | |
| What is the baseline? | _____ |
| How will progress be measured? | _____ |
| Date for meeting it? | _____ |

2.2: Identifying the Target Audience

Unlike a traditional widespread education or marketing campaign, social marketing relies on targeting specific audiences. The outreach materials and modes may change dramatically depending on whom the actor is undertaking the desired behavior change and who is most likely to help reach the goal. For example, if the goal is to increase mulch mowing, it would be appropriate to ask in the survey and focus groups who does the yard work around the



house and particularly who is responsible for mowing the lawn. The outreach should be designed to target the person responsible for the action. (See *Burt the Salmon Case Study*)

When designing your recycling outreach program, it is important to find out who is responsible for collecting trash and recyclables in the house, bringing them to the curb, bringing them to the drop-off and other actions. In the Broadlands Project, SERA found that all members of the households recycled but in many cases the one responsible for bringing the materials from the house to the carts and from the house to the curb were adult males. Thus, some of the cart hangers used in the outreach were designed with this audience specifically in mind.

Case Study: Burt the Salmon

In the 1996 King County WA undertook a successful social marketing campaign to change consumer lawn fertilizing behaviors and practices. The campaign, dubbed “Burt the Salmon”, had the goals of increasing grass cycling and decreasing water and fertilizer use. The reason behind the goals was to improve the vitality of the water in and around the Puget Sound. Through surveying and baseline research the campaign organizers uncovered that the target audience was male homeowners aged 25 to 54 years of age. These were the actors most likely to mow and water their lawns and use fertilizer on their lawns.

Identifying the segmented target audience allowed the marketing firm to specifically design the outreach materials and methods to best reach this group. The project team created a mascot “Burt the Salmon” with a baseball cap and jacket that was designed to appeal to the target demographic. They launched the advertisements in locations and media that the target audience would be most likely to see and hear, for example running media and TV ads during Seattle Mariners games. King County and the project team reported that the campaign not only increased the number of household that mulch mow from around 28% to over 40%, but they also increased the number of household that did not use pesticides from 47% to 60%. For more information on this project see www.toolsofchange.com

Previous research by SERA, and many others, researching the link between children and their parents have uncovered a very large spillover impact. A SERA study of outreach and education programs in California²¹ uncovered that the largest influence on “green” parental behavior changes was found to be their children. Thus, designing outreach materials to address school children may be a good way to reach a target audience of adults.

Once the target audience and the goals have been decided upon, uncovering the barriers for action as well as the motivations for action are next.

Phase 2 Activity 2| Target Audience. *Use the worksheet below to record who is the planned target audience and ideas about how you plan to reach them. Different goals may have different audiences.*

| | |
|--------------------------------|-------|
| Goal 1: | |
| Who is the target audience? | _____ |
| How do you plan to reach them? | _____ |
| Goal 2: | |
| Who is the target audience? | _____ |
| How do you plan to reach them? | _____ |
| Goal 3: | |
| Who is the target audience? | _____ |
| How do you plan to reach them? | _____ |

²¹ Skumatz and Freeman. *Curb Your Carbon Program Evaluation*. August, 2008.

2.3: Uncovering Barriers

Social marketing leverages an entire battery of tools to move the target audience from awareness to action and identifying the barriers and roadblock to action is a necessary step in this process. As mentioned earlier, behavior is not always dictated through rational decision-making. Barriers to action could be internal (feelings of self efficacy, cultural, habitual), practical, mechanical, or environmental (distance to a drop-off, cost of participation, recycling bins are too small), or other, and most often are a combination of different factors. By using the focus groups and survey instrument described in the first phase, you will be able to identify the barriers to action. Recycling barriers uncovered through surveys in Colorado include:

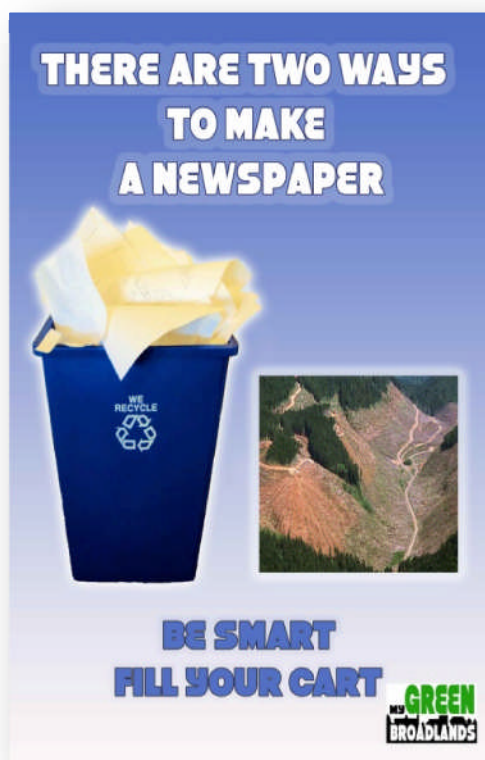
- It is too messy
- It costs too much to sign-up for service
- My recycle bins are not big enough
- I forget which day my recycling is collected
- What I do does not make a difference (low feelings of self-efficacy)
- I'm not sure that what I put in the recycling bin really gets recycled anyways
- It is too far to drive to the drop-off

Remember: The barriers to action may be vastly different for different actors. If possible, the target audience should be identified prior to identifying barriers.

Although as a program manager you may think the barriers to action are obvious baseline research has the opportunity to uncover barriers that you might not have thought of.

Crafting Interventions

After identifying each barrier, interventions to overcome the barriers need to be identified. Note that you are not trying to solve ALL the barriers in one social marketing campaign. Set some priorities; keeping it simple and focused is very important. The interventions can be on a personal, societal, institutional or other level. If for instance, the research uncovers that a large barrier to recycling in your community is that the recycling bins are too small there are multiple ways to address the barrier. One may be to work with the hauler to try and target households with overflowing recycle bins and offer rebates, incentives, or other enticements to get them to provide additional or larger bins. Another low cost method may be an outreach campaign to let residents know they can use laundry baskets, cardboard boxes, or other containers to set out their excess recyclables. If the barrier is that people forget what day the recycling collection is you could address the barrier at the individual or community level. At the individual level, you could provide a round of outreach with magnets that highlight the recycling collection day, at the community level the community could pass an ordinance requiring haulers to collect trash and recyclables on the same day.



A common barrier that SERA has uncovered is the misperception that many recyclables, once collected, are just thrown in the landfill. Providing information on where the recyclables go, offering tours of recycling facilities, putting videos of where your community's recyclables go on your city website, and other outreach efforts can help to overcome this misperception. Misperceptions can be difficult to overcome and fact-based arguments are often not enough to win people over. Social marketing uses tools beyond raising awareness like social norms, contests, and incentives to motivate action (these tools will be covered more in Phase 3). Although some barriers are more difficult to overcome, it is rare that a barrier exists that cannot be overcome with hard work and proper planning.

Phase 2 Activity 3| Barriers and Interventions. *Use the worksheet below to record what the potential barriers to the desired behavior change may be and ideas about how to overcome the barriers. Barriers may be different for each goal and audience.*

| | |
|---|-------|
| Barrier 1 | |
| What are the factors contributing to the barrier? | _____ |
| What interventions are planned to overcome the barrier? | _____ |
| Barrier 2 | |
| What are the factors contributing to the barrier? | _____ |
| What interventions are planned to overcome the barrier? | _____ |
| Barrier 3 | |
| What are the factors contributing to the barrier? | _____ |
| What interventions are planned to overcome the barrier? | _____ |

2.4: Motivations to Act

The third factor that must be considered is what motivates people to act. Some households may be motivated by “green” factors such as reducing greenhouse gases or saving resources, while others may be motivated to act by economic reasons such as saving money on their trash bills. Knowing the target audience’s motivation and framing the message appropriately in your outreach can reach an audience that may previously have been unmotivated to participate.

In the Broadlands example, the main motivations to participate among households in the focus groups and surveys were “to save resources” and “to save landfill space”. As any hauler, program manager, or recycling coordinator in Colorado could tell you, saving landfill space is not the foremost concern among those in the industry. The tipping fees in many parts of the state are around \$15/ton and there is no shortage of landfill space. For many program managers the motivations have nothing to do with saving landfill space. However, when the outreach materials were

FRAMING THE MESSAGE:

How you frame your outreach and how you approach individual’s motivations to participate can have significant impact on the effectiveness of your outreach. A prime example of this is the “Save the Crabs Then Eat ‘Em” campaign by the Chesapeake Bay Foundation (CBF). The CBF has been working diligently to reduce pollution and fertilizer run-off from residential lawn care for years. In 2005-2006 the organization decided to re-frame the messages they had been sending to reach new audiences and overcome potential message fatigue. Their goal was to reduce fertile run-off into the bay and the action they were trying to address was to get residents to fertilize their lawns in the fall instead of the spring when the run-off is more detrimental to the health of the bay.

The project organizers understood that the Maryland blue crab was loved by people in the region not only as a symbol but also as a food source. (If you ever go to visit the area it is obvious by the number of restaurants selling fresh crab cake sandwiches and offering all you can eat crabs). The CBF decided to reframe the message to be a culinary one and motivate people to participate through their stomachs. What resulted was the “Save the Crabs. Then Eat ‘Em” campaign. The group ran multiple TV and radio spots on the theme, made yard signs saying “No appetizers were harmed in making of this lawn” and others. The campaign was reported to be one of the most successful outreach campaigns the organization has taken to date.

designed for the “My Green Broadlands” project the recycling was framed as 1) a way to reduce our reliance on virgin materials and 2) a way for us to save landfill space for future generations. Your outreach program needs to “sell” the behavior change on the terms of what the audience wants to “buy”.

Self-Efficacy

Self-efficacy is the concept that individuals have the capabilities to make an impact, the feeling that “what I do *does* make a difference”. Previous SERA studies²² have examined the correlation between ratings of self-efficacy and the likelihood that an individual will adopt a new “green” behavior. The results have shown that the higher a person scores on a battery of questions related to self efficacy, the more likely they are to adopt a “green” behavior. In other words, people that feel that what they do *can* make a difference are more prone to act. We recommend crafting your messages in the outreach to impact your target audience on a personal level. Often times, recycling and diversion outreach contain information on impacts of recycling 1 ton of material. Instead of talking about a ton of aluminum cans which can be a difficult image to grasp, we suggest talking about what impact recycling 12 cans may have or what impact recycling one week’s worth of newspapers may make.

²² Skumatz and Freeman. *Curb Your Carbon Program Evaluation*. August, 2008., Skumatz, Smith-McClain, Freeman, *Alliance to Save Energy’s Green Campus Program: Year 1 and 2 Evaluation Report*. Submitted to California Public Utilities Commission, 2006, among other papers.

2.5: Developing the Ask

The last piece of the puzzle in the outreach design is developing the “ask”. This is the action, or action(s) that you want the target audience to undertake. Similar to the goal setting, establishing a broad “ask” is not appropriate. For example, if your goal is to increase the purchase of goods made with recycled content

The outreach should be limited to only two or three specific asks. Having too many asks may result in the audience not remembering any of them.

and the barrier you are trying to overcome is a lack of knowledge and supply of materials sold with recycled content, outreach materials with an ask of “buy recycled content items when shopping” will not be enough. The “ask” should be specific and something that the audience can remember. For instance, a better action would be “When buying paper towels, look for options made with recycled content such as Seventh Generation™ paper towels. These are available at all the King Soopers in our town”. The outreach should be limited to only two or three specific asks. Having too many asks may result in the audience not remembering any of them.

This is the last step of drafting your outreach materials. Drafting all of the materials may take a significant amount of time and going back and forth. You may find that as the target audience is identified it might cause you to change your goals which in turn may affect the barriers and interventions. Be flexible while drafting the materials and be sure to refer to your baseline data as well as examples in the literature and beyond when putting together the plan. The form below combines all of the activities in Phase 2 of the outreach program design and will assist your community in combining the goals, barriers, motivations, and defining the specific “ask” for the outreach program.

Phase 2 Activity 4| Developing the “Ask”. *Use the worksheet below to record and summarize the data and analysis from Phase 2.*

| | |
|---|--|
| Goal 1 | |
| Ask 1 | |
| Who is the target audience? | |
| What are the motivations to act? | |
| What are the barriers that must be overcome? | |
| What are the planned interventions? | |

| | |
|---|--|
| Goal 2 | |
| Ask 2 | |
| Who is the target audience? | |
| What are the motivations to act? | |
| What are the barriers that must be overcome? | |
| What are the planned interventions? | |
| Goal 3 | |
| Ask 3 | |
| Who is the target audience? | |
| What are the motivations to act? | |
| What are the barriers that must be overcome? | |
| What are the planned interventions? | |

The activities in Phase 2 lead directly into the actual outreach material layout and graphics. Keep in mind that the outreach material should be crafted in a simple and direct way to convey the specific “ask”, include goals of the project, supply or include some information on why the target should participate (the motivations), and as the program progresses, include some feedback on progress toward the goals. There is more information and specifics on outreach material design, as well as examples that your community can use, in the next section of the how-to-guide.

Phase 3: Conducting the Outreach

Phase Three of the how-to-guide is broken into two parts, the first covers the different outreach methods for your campaign, the second reviews the variety of outreach tools. As in Phase One of the toolkit, the estimated staff time needed to conduct the outreach as well as the estimated cost of each is included. Where possible, the costs are provided on a per household basis to allow readers to scale the outreach guide up to fit their community. The final part of the toolkit will review the various outreach tools and methods to allow you to make estimates on cost effectiveness in your community.

3.1 Outreach Methods

There are a range of outreach methods for each community to choose from and it is up to each community to opt for what makes the most sense for them. This section will cover some of the most common and most cost effective options.

Through the Broadlands Project, SERA uncovered that door-to-door outreach, although expensive and time-consuming, resulted in both the largest initial impact on diversion rates as well as the largest retention of the behavior. Door-to-door outreach, combined with other the other social marketing tools, is the most cost effective method of outreach and education. Figure 3.1 compares the various outreach methods examined and experimented with, their relative costs and effectiveness. There are many other potential outreach methods available to your community than those presented in Figure 3.1 however, SERA was only able to test the relative effectiveness of the most common outreach methods. Other potential methods could include bus placards, posters or informational notices at community centers, school presentations, HOA newsletters, television, booths at community events, and many others. Using the social marketing tools provided in this guide to draft the outreach materials will be useful regardless of the method you choose to distribute information.

Figure 3.1 | Comparative Costs and Effectiveness of Various Outreach Methods²³

| | Cost per Household \$25/hr | Cost per Household \$45/hr | Residential Recall | Impact on Recycling |
|--------------|-------------------------------|-------------------------------|-----------------------|------------------------|
| Bill Inserts | \$0.03 to \$0.05 | \$0.05 - \$0.08 | Not tested | Not tested |
| Cart Hangers | \$0.46 to \$0.76 | \$0.74 - \$1.20 | High | High |

²³ Costs per household are based primarily upon research conducted by SERA in the Broadlands Project. Costs per household are based on assumptions of \$25/hour staff time and \$45/hour and no volunteers. Using volunteers or temporary staff can significantly lower these costs, especially for the time intensive activity of door to door outreach. The costs do not include the time for preparation and analysis but do include the costs of printing and distribution.

| | Cost per Household \$25/hr | Cost per Household \$45/hr | Residential Recall | Impact on Recycling |
|--------------------------|---------------------------------------|---------------------------------------|-------------------------------|--------------------------------|
| Direct Mail | \$0.53 to \$0.58 | \$0.61 - \$0.66 | High | Medium |
| Door to Door Outreach | \$3.50 to \$4.00 | \$5.20-\$11.75 | Medium | High |
| Email | \$0.00 to \$0.01 | \$0.00 to \$0.01 | High | Medium to High |
| Newspaper/Radio | Depends | Depends | Not tested | Not tested |
| Phone Calls | \$0.65 to \$0.73 | \$1.08 - \$1.23 | Low | Low |

Cart Hangers

Cart hangers are handbills that are left on trash or recycling containers for residents to see. The use of cart hangers in the outreach campaign serves a number of purposes in a social marketing campaign including sharing the goals of the outreach, highlighting the specific “asks”, providing feedback and progress toward the goals, serving as a prompt or reminder for the target to undertake the action, and helping to overcome some of the barriers to action. In the Broadlands Project, residential recall of cart hangers was relatively high and the self reported impacts were also relatively high. However, a more detailed examination of the impacts of the outreach showed that the cart hangers were close to the level of impact of direct mail and neither had the impacts of door to door outreach. It is important to note that cart hangers require more staff time than direct mail and the delivery of the cart hangers may be compounded by the trash/recycling service in your community, housing density, and other factors.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|--------------|---|--|
| Planning | 4-6 hours (Depends significantly on the size of your community) | 1 staff member |
| Distribution | Average of 1 minute/household in typical density Colorado community | 1 staff member to organize-volunteers or other staff are needed to reach more households/day |
| Totals | Depends on the number of households | 1 staff member |

Materials:

| Material | Cost |
|---------------------------------------|---|
| Cost to print full color cart hangers | \$0.10 to \$0.20/piece |
| I.D. Tags | \$0-\$8 (one time cost) |
| Safety Vests | \$0-\$40 (can use from other tasks) (one time cost) |

Total Cost Estimate :

| | Staff Rates at \$25/Hour | | Staff Rates at \$45/Hour | |
|---------------|--------------------------|-----------|--------------------------|------------|
| | 1,000 HH | 10,000 HH | 1,000 HHs | 10,000 HHs |
| Low estimate | \$550 | \$4,700 | \$650 | \$4,775 |
| High estimate | \$1,050 | \$7,875 | \$1,150 | \$8,000 |

Procedure

Conducting cart hanger outreach distribution is not complicated. Deciding whether or not you would like to use cart hangers however, may be more difficult. Cart hangers were shown in the Broadlands Project to be slightly more expensive to direct mail in terms of costs and similar to direct mail in target material recall, and impacts. Using different material distribution methods is important. If you have traditionally only used direct mail pieces for outreach, it is worth considering cart hangers as a novel approach to get the target audiences attention.



If your community is sparsely populated or you have multiple haulers serving the community in an open subscription system, we would recommend considering other methods. Figure 5 shares some of the factors surrounding cart hanger outreach that can contribute to your final decision on whether or not to use this method.

Figure 3.2 | Factors Influencing Cart hanger Decisions

| Pros | Cons |
|--|--|
| <ul style="list-style-type: none"> • Can reach the person responsible for taking the trash/recycling to the curb • Overcomes outreach fatigue if you have been relying on mail for all outreach • Has a high message recall • Is similar in cost to direct mail on a per household cost • Works well in suburban and urban areas with dense populations • Works well with contracted hauler or municipal collection • May be combined with a set-out survey or other “on the ground” efforts • Can utilize volunteers as a way to get people involved in the outreach • You can hand deliver oversized pieces through cart hangers without additional costs | <ul style="list-style-type: none"> • May be difficult to distribute in large cities/communities • Does not work well with multiple haulers in an open subscription system • Can be hard to distribute in sparsely populated communities • The person taking in/out the trash may not bring the materials in for the rest of the household to see • Costs are higher than bill inserts, email • Weather can be a factor in the delivery process |

Step One: Identifying the Target Households. Once you have decided on conducting an cart hanger outreach campaign the first step is identifying the households/routes you will be targeting. Once this has been established, it is important to determine when the trash and recycling collection is conducted. If it is municipal collection or contracted collection, this is relatively easy to do. However, if your community has multiple haulers

serving the community in an open subscription hauler arrangement, conducting the cart hanger outreach is much more difficult. In these types of hauler arrangements, it is likely that trash or recycling is not all collected on the same day in a neighborhood making it very difficult to choose a single day to conduct the outreach in a neighborhood. In this case you may need to do door hangers²⁴. If you are planning an outreach program for a large city, distributing the cart hangers over several months is possible. You can target various neighborhoods over time to cover large parts of the city. Once the trash/recycling day and time has been determined the next step is distributing the material.

Step Two: Material Delivery. The average time to leave a cart hanger in a medium density neighborhood is around 1 minute/household. Of course, this could vary depending on how close the homes are to each other and other factors. Based on the average time per household, a group of 6 volunteers could cover around 1,500 households in a morning of outreach. Training volunteers or temporary staff to leave cart hangers is extremely easy. All you will need are the outreach materials (the cart hangers) and neighborhood maps to tell each volunteer where to go. We also recommend supplying each volunteer/employee with a brightly colored vest, a city badge or nametag identifying them as working on the project, and a script to tell anyone they may encounter during the outreach. Additionally, it may be wise to alert the police force as to what you are doing so that they do not get calls from residents about people taping things to their trash cans.

***Tips:** Cart hangers are not difficult to distribute and are similar in cost to direct mail on a per household basis. Distributing materials through cart hangers reaches your target audience directly but is not practical in every situation, namely open subscription hauler arrangements. If you choose to conduct cart hanger outreach, using volunteer staff is a good way to reduce costs. Also, combining cart hangers with other outreach methods is recommended. For instance, there were several times during the Broadlands Project that the researchers saw residents take the cart hanger right off the trash cart and put it directly in the trash can without reading it. The same also happens with direct mail, so doing both can be a good way to reach different actors in your community.*

Printing full color cart/door hangers with the hole cut out is more expensive than printing handbill sized or other sized materials without the hole. As a way to save money, print the cheaper handbill shaped cart hangers and use a piece of tape to adhere them to trash carts.

²⁴ Door hangers are more expensive to distribute than cart hangers, perhaps on the order of \$0.40 per household in terms staff effort due to the added time needed to approach each house and leave the hanger on the door compared to leaving it on the cart in the street.

Direct Mail

Direct mail outreach in terms of this toolkit is referring to an individual piece of outreach mailed separately, not a bill insert or information included with another related mailing. Direct mail is an effective way to reach your audience, however, like cart hangers, it can be relatively expensive per household. Message recall and self reported impacts of direct mail are both high. Similar to cart hangers, the direct mail pieces are used to deliver the “ask”, motivations for participation, prompts to act, and feedback on progress. The actual impacts of direct mail on recycling diversion are not as significant as door to door outreach.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|--------------|--|------------------|
| Planning | 1-3 hours to gather addresses | 1 staff member |
| Distribution | 4-6 hours to arrange printing/stamping | 1 staff member |
| Totals | 5-9 hours | 1 staff member |

Materials needed²⁵:

| Material | Cost |
|--------------------------|-----------------------|
| Residential address list | \$0 |
| Direct mail pieces | \$0.15-.020/per piece |
| Stamps | \$0.28 |

Total Cost Estimate:

| | Staff Rates at \$25/Hour | | Staff Rates at \$45/Hour | |
|---------------|--------------------------|-----------|--------------------------|------------|
| | 1,000 HH | 10,000 HH | 1,000 HHs | 10,000 HHs |
| Low estimate | \$650 | \$5,425 | \$750 | \$5,525 |
| High estimate | \$800 | \$6,025 | \$975 | \$6,200 |

Tips: Direct mail is a tried and true method of outreach with high message recall among households. We recommend keeping the outreach pieces postcard size or smaller. This allows you to use postcard postage rates and save \$.16 per piece mailed a savings of \$160 per 1,000 households. Using multiple outreach methods is recommended. Postcards, no matter how attractive and interesting, may still be considered junk mail by some people and end up directly in the trash without your target audience ever seeing the message.

²⁵ The costs estimates for direct mail are for 4"x6" or smaller double-sided full color pieces. If you choose to do larger than 4"x6" the costs are much higher due to higher postage rates.

Door to Door Outreach

The research undertaken by SERA during the Broadlands Project found that door to door outreach, coupled with the use of social marketing tools such as commitments and norms, has a significantly larger impact on residential recycling rates than mail and cart hanger message delivery alone. The impact is higher both during the duration of the outreach as well as in the long term²⁶. The cost per household for door to door outreach is significantly higher than any other message delivery methods, yet the cost effectiveness is also higher. For more on the cost-effectiveness see *Section 4: Measurement and Impacts*. The instructions in this toolkit are for door to door recycling outreach to gather recycling and diversion commitments.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|---------------|--|---|
| Planning | 4-16 hours to map outreach routes, gather staff and volunteers | 1 staff member |
| Distribution | 7 to 8 Hrs/hour (7.5 to 8.5 minutes per household) | 1 staff member to organize, suggest teams of 2 for message delivery |
| Data analysis | 8 hours | 1 staff member |
| Totals | Depends on number of Households | 1 staff member |

Materials needed²⁷:

| Material | Cost |
|-----------------------------------|--|
| Residential address list and maps | \$0 |
| Outreach pieces | \$0.15-0.20/per piece |
| Clipboards | \$20-\$30 (can use from other tasks) (one time cost) |
| Stamps | \$0.28 |
| I.D. Tags | \$0-\$8 (one time cost) |
| Safety Vests | \$0-\$40 (can use from other tasks) (one time cost) |

Total Cost Estimate:

| | Staff Rates at \$25/Hour | | Staff Rates at \$45/Hour | |
|---------------|--------------------------|-----------|--------------------------|------------|
| | 1,000 HH | 10,000 HH | 1,000 HHs | 10,000 HHs |
| Low estimate | \$3,800 | \$35,300 | \$4,050 | \$35,550 |
| High estimate | \$4,725 | \$40,725 | \$5,225 | \$41,225 |

²⁶ At the time this report was written (March 2011) measure retention had been examined for six months. These early results showed that the household with door-to-door outreach were still recycling significantly more while the mail/cart hanger households had reverted toward the pre-outreach recycling levels.

²⁷ The costs estimates for direct mail are for 4"x6" or smaller double-sided full color pieces. If you choose to do larger than 4"x6" the costs are much higher due to higher postage rates.

Procedure:

Step One: Scripts, Staffing, Training, and Mapping: Prior to conducting the door-to-door outreach material delivery a bit of planning is needed in order to make the best use of this time and staff intensive activity. The procedure described in this toolkit is designed to gather a completed commitment card. This is not the only

Remember: Ensure that the “ask” is for a specific action i.e. “Mulch-mow my lawn during the month of August instead of bagging the grass”.

possible goal of a door to door outreach campaign, yet social marketing theory goes beyond a simple informational door knocking campaign and invites communities undertaking outreach efforts to use tools such as commitments, norms, vivid messages, among others, when conducting door to door campaigns.

Script: The goal of the door to door outreach described here is to get households to commit to undertaking the specific ask you developed by signing a commitment card and making a public commitment to increase recycling behaviors²⁸. Social marketing theory, and practice, has shown that a written, public commitment is one of the most powerful tools you can use in getting residents to undertake an action. Knowing what staff are going to say to households once they knock on the door is extremely important.

Staffing: SERA suggests going in teams of two. Although one person can conduct door-to-door outreach, our research found that a team of two can reach almost as many houses per hour as two people operating by themselves. This is due to the need to carry outreach materials, a clipboard, and to take notes on what is being done. SERA recommends contacting local environmental groups or clubs to try and find volunteers for the door to door outreach. In the Broadlands SERA was able to secure the assistance of a local high school ecology club in conducting the outreach. During another door-to-door message delivery day, SERA employees also recruited some of their teenage children to help in the outreach. We found that conducting 8 hours straight of door-to-door outreach can be very difficult for staff. Planning for 6 hour days with some breaks may be better. To determine the number of staff/volunteers you need to consider that in a neighborhood of average suburban density you will be able to reach about 7 to 8 households per hour. For a neighborhood of 500 households this will take 5 teams of 2 approximately 2.25 days at 6 hours a day. If you want to reach 1,000 households with 5 teams, plan on about 4.5 days at 6 hour days of outreach to reach all the households. The more staff and volunteers you are able to recruit, the more quickly you can conduct the outreach. You will need to adjust these figures for more densely or more sparsely populated neighborhoods.

²⁸ Gathering commitments is not going to be the goal of every door knocking campaign.

Training: All of the staff training can be conducted on the first day of outreach. It is important that all of the outreach volunteers are well versed in the specific “asks” of the outreach and the goals of the door-to-door knocking as well as background information on recycling in your community. Be prepared for residents to ask questions about the outreach project as well as recycling in general. We recommend having a list of talking points for the outreach teams but a strict script is not necessary. The training should also teach staff and volunteers how to record data. Data you should record includes: houses visited, whether or not they were able to talk to someone, if they took the commitment/challenge, other notes (for example, if someone does not want to be bothered in the future).

Step two: *Conducting the Outreach.* Once the script has been written, the commitment card has been crafted and the staff amassed it is time to go out and conduct the outreach. Although the actual door knocking campaign is rather self-explanatory, a number of tips are provided below to help you conduct your campaign:

- *Choose the days with your audience in mind:* Plan the door knocking campaign to coincide with days/times when the target audience is most likely to be home. Weekends and early evening tend to make the most sense in a residential recycling campaign.
- *Different people learn in different ways:* Some learners are number people and like to see stats about recycling and diversion while other are visual and like to see pictures of what they should be doing. Still others may be tactile learners and like to actually hold or touch items that should or should not be recycled. Arm your door-knockers with handouts and items to appeal to all types of learners.
- *Print T-Shirts:* The door-to-door outreach is a great time to help brand your marketing campaign. Using iron on decals and cheap white t-shirts is a good way to increase the brand recognition of your project as well as let people know who is coming to the door before they answer it. In the Broadlands it only cost about \$4/shirt for the outreach crew.
- *Prime the target audience ahead of time:* Do not make the door knocking campaign the first outreach effort you undertake. Prior to investing time and effort into door knocking use other outreach pieces to refine your message as well as familiarize the audience with the campaign. It may also be helpful to use another outreach method to let residents know when you will be conducting the door knocking ahead of time.



- *Collect Emails:* Sending email reminders to residents and email blasts are cheap and effective. Whenever possible, try to collect email addresses during your door knocking campaign.
- *Establish Norms:* The use of social norms is a common tool in social marketing (see the Outreach Tools section). When conducting door to door campaigns, consider asking households to place a large sticker on their cart/can or use some other symbol as a proxy for participation. This will show other households in the community who is participating and help to establish social pressure to participate as more households sign-on.

Email

Sending emails as a prompt to undertake the “ask” and feedback on the project progress is both effective and cost effective. Direct emails have high recall among residents and are perceived as an effective behavior change tool by residents. The challenge with email messaging is getting the target audience’s email addresses to begin with. If you are able to gather any emails for your target audience, whether through your web site, other projects in your community, the commitment cards completed through the door to door outreach, or other methods, we highly recommend sending periodic email blasts to the target audience.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|--------------|------------------------|------------------|
| Planning | 1 hour per email blast | 1 staff member |
| Distribution | N/A | 1 staff |
| Totals | 1 hour | 1 staff member |

Materials needed:

| Material | Cost |
|-----------------------------|------|
| Residential email addresses | N/A |

Total Cost Estimate:

| | Staff Rates at \$25/Hour | | Staff Rates at \$45/Hour | |
|---------------|--------------------------|-----------|--------------------------|------------|
| | 1,000 HH | 10,000 HH | 1,000 HHs | 10,000 HHs |
| Low estimate | \$25 | \$25 | \$50 | \$50 |
| High estimate | \$50 | \$150 | \$100 | \$200 |

Procedure:

If you are able to obtain the target audience’s email addresses the procedure for an email blast is self explanatory.

Tips: *Gathering the target audience’s emails is the greatest challenge in this distribution method. If your community has files of email addresses, sending out email blasts is easy. If you conduct a door-to-door outreach campaign we recommend that you make efforts to gather residential email addresses. Once you have the email addresses, sending out reminder emails as prompts and feedback is virtually no cost to your organization. We recommend a monthly reminder email in order not to bombard the target audience with too much information.*

Phone Calls

Making phone calls is a quick way to make personal contact with large numbers of residents. You can use phone calls to remind residents of upcoming events, to inform about your program, or collect basic data about the efficacy of other outreach methods you may be using. However, phone calls are not inexpensive and from SERA's research they do not appear to have as strong of a message recall or impact as some other form of outreach material distribution.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|-------------------------|-------------------------------------|---------------------------------------|
| Planning | 1-3 hours | 1 staff member |
| Performing Calls | 1.5 minutes per household (40hh/hr) | 1 trained staff member plus temporary |
| Data entry and analysis | 3-5 hours | 1 staff member |
| Totals | 5.5 - 9.5 hours | 1 staff member |

Materials needed:

| Material | Cost |
|--|---|
| Phone numbers to corresponding addresses | 8-10¢ per phone number (based on volume of 5,000) (unless you already have phone numbers on record) |
| Total Material Costs | 8-10¢ per household |

Total Cost Estimate:

| | Staff Rates at \$25/Hour | | Staff Rates at \$45/Hour | |
|---------------|--------------------------|-----------|--------------------------|------------|
| | 1,000 HH | 10,000 HH | 1,000 HHs | 10,000 HHs |
| Low estimate | \$750 | \$6,600 | \$825 | \$6,675 |
| High estimate | \$925 | \$7,500 | \$1,100 | \$7,650 |

Procedure:

Step one: Planning.

- A) It is important to determine the goal of your phone call outreach and how many households you want to reach. If you are in a small community, it might be feasible to call everyone. However, large communities may choose to call just those areas that are underperforming, or are predicted to have a large impact.
- B) If you don't currently have the phone numbers of the customers you plan to call, obtaining the addresses would be the first step. There are multiple services that provide phone numbers to addresses²⁹.

²⁹ One example is www.infogroup.com. For around \$500 it is possible for the service to append phone numbers to up to 5,000 addresses. Volume, location, and availability can change pricing.

- C) Preparing the script. On average, we found that a script of approximately 4 to 7 sentences (30 seconds) worked the best. Stating the name of your project up front helps alleviate the conception of a sales call. Saying the script out loud can help identify pronunciation errors and stumbling blocks. (For example, our project “My Green” Broadlands was often interpreted “Migraine” to those unfamiliar with the project). Ending the script with something relevant to the area such as “stay warm” on a cold day also helps promote a more neighborly vs. sales call feeling. Depending on whether you are just informing or wish to ask questions, you may want to develop two scripts, one for in person, and another for answering machines.
- D) Determine time of day to perform calls. For example mid to late afternoon returning students are more likely to answer the phone, other times are more or less likely to be picked up by answering machines. Another consideration could be language barriers, knowing your target area is important

Step 2: Performing Calls. Once a script has been composed, set up in an area where ringing phones or other conversations will not be overhead on the calls. On average, it takes about one and a half minutes per phone call. Just providing information, (not asking questions) is a little faster person to person, answering machines often have longer pickup times and long messages. Expect that of the numbers you call, a small portion of the households will be unreachable either because of disconnected numbers, fax numbers, no answering machine, or hang ups. You can expect approximately 20% to 40% of the calls you place will result in a person picking up the phone, the others will be answering machines, no answer, or disconnected numbers.



Others (Bill Inserts, Conventional Media)

Beyond the distribution methods described in this toolkit, there are many other ways to distribute your outreach materials. Previous SERA research has shown that bill inserts are an effective and cost effective way to reach members of your community. Inserting an extra piece in the mailings you are already undertaking does not increase the costs of mailing and residents tend to open and look at the materials in their bills. A SERA

study of traditional outreach methods found that the following distribution methods were effective in increasing recycling and diversion³⁰:

- Newspaper ads/articles in urban areas
- Bill inserts in urban areas
- Brochures in suburban areas
- Billboards in rural areas

Do not limit your outreach methods to only those described in this toolkit. There are many other options available and this is a wonderful opportunity to undertake some creative liberties.

³⁰ Skumatz, Green. *Evaluating the Impacts of recycling/Diversion Education Programs- Effective Methods and Optimizing Expenditures*. May 2002. Submitted to the Iowa Department of Natural Resources.

3.2: Outreach Tools

Equally important to, and perhaps maybe even more important than the material delivery methods, are the outreach tools you wish to use. In this section a number of common social marketing tools are reviewed as well as tips for material design. The tools and outreach materials you decide to utilize are based on the outreach material design you completed in Phase Two. Knowledge of the barriers, interventions, motivations, and the “ask” is needed before you can choose what tools you plan to use. The costs in this section are for the material graphic design and planning. The printing costs for the individual pieces were included in the previous *Outreach Methods* section.

Social Marketing Terms and Tools

A review of some common social marketing terms and tools may be helpful to the reader and is included below:

- **Prompts:** Prompts serve as a reminder for the actor to complete a certain action. While it may be relatively easy to get consumers to purchase reusable grocery bags, ensuring that consumers remember to bring the bags is a whole other story. A classic prompt seen in many of the case studies was a reminder sticker or magnet. Another basic prompt that is a sign in a neighborhood reminding participants of the campaign goals. Some of the best practices uncovered related to prompts include using catchy designs and logos to ensure that they are not just thrown in the trash, placing prompts in areas where participants will see them, and personalizing the prompts as much as possible.
- **Commitments:** People who publically commit to an action and follow through are valued in our society. Leveraging this value system as a tool can help change behaviors. The Broadlands Project utilized commitment cards with a written commitment to undertake more recycling actions and publishing the committed households names on the project website to make the commitment public. Other commitments observed in social marketing case studies include placing stickers on windows saying the resident was participating, putting a sign or placard in participants lawn, agreeing to have participant names printed in local publications, on-line commitments, wearing pins or buttons to events, joining a group/membership, or others.
- **Norms:** Conforming to societal norms has been proven in the psychology field to be a significant force for behavior change. Social marketers have developed multiple tools and techniques of incorporating this innate psychological trait into marketing campaigns. The idea behind norms is that people do not want to

stand out from the crowd; they prefer to act and behave in a way that society deems as normal. To transfer this idea to social marketing, program managers attempt to make the desired behavior the norm. In social marketing, the trick to establishing norms is that typically the behaviors the programs try to influence are personal decisions and are not seen by others, thus, a proxy or some other symbol for participation is used to establish the norm.

- **Incentives:** Using economic incentives or disincentives to reinforce the desired behavior is a common social marketing tool. A familiar, and excellent, example of this in the trash and recycling sector is the use of variable rates, or pay-as-you-throw (PAYT). PAYT charges customers based on the amount of waste they dispose of, the more you throw away, the more you pay. In social marketing, the higher trash rate for more trash serves as a constant reminder of the desired behavior, more recycling, and acts as an economic incentive, and a prompt, for the customers to recycle more.
- **Feedback:** Experiments and research into social marketing has led many campaigns to include specific feedback for participants. Common examples include community signs reporting on progress toward a goal, door hangers reporting progress, direct mail, email, and web sites. This is another aspect of social marketing in which new media will play an increasing role. Twitter™ accounts, Facebook™, smart grids, and other technologies are allowing program managers to give participants real-time feedback on their impacts.

Fliers/Mailers/Cart Hangers

Designing the content of your outreach must be thoughtful and content driven. Using catchy artwork, logos, and slogans is equally important to crafting your materials to market the goals, motivations, and “asks” of your project.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|---------------------|-----------------|------------------|
| Planning and design | 8-10 hours | 1 staff member |
| Totals | 8-10 hours | 1 staff member |

Materials needed:

| Material | Cost |
|---|------|
| Data from baseline surveys, focus groups and a computer with Photoshop or other program | N/A |

Total Costs:

| | Staff Rates at \$25/Hour | | Staff Rates at \$45/Hour | |
|---------------|--------------------------|-----------|--------------------------|------------|
| | 1,000 HH | 10,000 HH | 1,000 HHs | 10,000 HHs |
| Low estimate | \$550 | \$4,700 | \$650 | \$4,775 |
| High estimate | \$1,050 | \$7,875 | \$1,025 | \$8,000 |

Procedure

Step One: Graphic Design. Whether you hire a graphic designer to draft your outreach materials or decide to do it in house depends on your community’s budget and the skill set of the individuals working within your organization. There may very well be someone that already works in your community that is adept and proficient in at least a basic level of graphic design. The outreach materials drafted for the Broadlands Project are available on SERA’s www.socialmarketinghowto.com website for any community that wants to use them to download.

When designing your outreach materials include the information collected in Phase One of this toolkit. The following tips may be useful when crafting your community’s materials:

- 1) *“Sell” the program your audience wants to “buy”*: It may be true that Proctor and Gamble like to sell Tide™ because it is one of their most profitable items. However, when they sell Tide™ to consumers they use attributes such as the great aroma and how clean it gets your sheets.³¹ They are selling the item on

Include the “ask” Be sure to include a clear description of the behavior change you want the target audience to undertake.

what consumers want to buy, not on why they want to sell it. This should be the same for your behavior change program. Do not sell recycling because it fits with a city sustainability goal; instead sell it for the motivations uncovered in your baseline research. Figure 6 displays one of the outreach pieces used in the Broadlands Project with an explanation of the items on the piece.

- 2) *Include goals and feedback*: Most residents have no idea what their diversion rate is or what it would mean to divert 50% of the waste stream. Use information in your outreach that makes sense to the audience such as “Recycle 5lbs more this week”. In subsequent pieces include feedback on the progress toward the goal. Also consider other ways to provide feedback to your target (a common feedback mechanism seen in many towns in Colorado is a “Percent Completed” sign on a road construction project).
- 3) *Include the “ask”*: Be sure to include a clear description of the behavior change you want the target audience to undertake. A message like “Recycle More” will not be enough.
- 4) *Use images/graphics wisely*: In the summer of 2010 a BP well operating in the Gulf of Mexico had a horrific oil spill. Right after the spill SERA used a graphic of an oil covered duck (at right) in one of the Broadlands Project outreach pieces. This was one of the most recalled outreach pieces of the campaign



³¹ This example comes from Skumatz presentations associated with programs on energy efficiency.

Figure 3.2| Example of Informational Handbill

MY GREEN BROADLANDS The City/County of Broomfield and Western Disposal are teaming up with Broadlands residents to increase recycling and conservation in your neighborhood. Join the project and help make the Broadlands a **GREEN** leader in the State!

The word GREEN was identified by the focus groups as a good motivator.

Recycling is one of the best ways individual households can save our country's natural resources!

RECYCLING ONE 4-FOOT STACK OF NEWSPAPERS SAVES THE EQUIVALENT OF ONE 44 FOOT FIR TREE

Messaging crafted to increase self-efficacy on a HH level

HOW YOU CAN HELP:

- Remember to recycle cardboard, cereal box-type packaging, catalogs, junk mail, and other paper
- Install compact fluorescent lights and you can replace your lights less often and save an estimated \$30 over the life of the bulb
- Use power strips to turn off computers and TVs to reduce "phantom load". Electronic equipment on "stand-by" uses 10-15% of your home's energy !!
- Join the challenge at www.mygreenbroadlands.org

Action items

THE CHALLENGE:

Your neighborhood's recycling rate is **23%**, if your house recycles just **7lbs** more per week we can reach the goal of a 50% increase in recycling!

Includes pictures and graphs for different choices

Clear goal

Log on to www.mygreenbroadlands.com to join the **Broadlands Recycling Club**

Printed on 30% Recycled Paper

MY GREEN BROADLANDS

| Category | Now (Pounds/week) | Goal 2010 (Pounds/week) |
|-----------|-------------------|-------------------------|
| Trash | ~55 | ~45 |
| Recycling | ~15 | ~30 |

Commitment Cards

Social marketing experiments from the 1970's on have shown the power of a public commitment. Leveraging this sociological tool in your effort to get more recycling is a cost effective outreach technique. The two challenges in using a commitment in your outreach are 1) crafting an effective commitment card/challenge and 2) getting the target audience to actually sign—up for the commitment. By using the baseline data you collected in Phase One combined with door-to-door outreach you will be able to overcome both of these challenges.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|---------------------|-----------------|------------------|
| Planning and design | 1-6 hours | 1 staff member |
| Totals | 1-6 hours | 1 staff member |

Materials needed:

| Material | Cost |
|---|------|
| Data from baseline surveys, focus groups and a computer | N/A |

Total Cost Estimate (*Costs are for design only, not distribution and collection of commitments*):

| | Staff Rates at \$25/Hour | Staff Rates at \$45/Hour |
|---------------|--------------------------|--------------------------|
| Low estimate | \$25 | \$45 |
| High estimate | \$150 | \$275 |

Procedure

Step 1: Crafting the Commitment Card. Although the actual look of the commitment card does matter, the content of the commitment card is what is most important. Conducting your baseline and background research is integral in crafting an effective commitment card/challenge. We recommend the following tips when drafting your commitment:

- 1) *Keep it simple:* The commitment card does not need to be complicated. Know what you are trying to achieve and keep the card and the commitments on the card simple. Keep in mind the barriers you need to overcome and the specific actions you want the target audience to undertake when developing the commitment card.
- 2) *Focus the “asks”:* Having too many actions a household or individual can commit to will overwhelm the audience. If your commitment outreach piece has 10 different commitments an individual can make, the likelihood that they will remember what actions they did and did not commit to is diminished. By having 3-5 distinct and specific actions for commitment, you will increase the likelihood that your audience will remember the commitments.

- 3) *Measurable and individual*: Ensure that the commitments are something that an individual can undertake. An example of a bad commitment that is not based around an individual would be “I commit to increasing recycling in our city by 50%”. If possible, the commitment should also be measurable whether through recycling rates, material set-outs, participation, or some other metric.
- 4) *Make it public*: Our society esteems individuals who tend to keep their commitments and promises. By making a commitment public, it will increase the follow through of your audience. You can publicize the commitment in HOA newsletters, websites, the newspaper, or many other ways.
- 5) *Get emails*: When asking people to sign the commitment cards, get their emails! Email addresses are difficult to obtain but extremely useful. Sending emails to committed individuals is a great way to send a prompt to do the behavior, provide feedback on progress, and inform them of other project goals.

Figure 3.3 displays an example of a commitment card used in the Broadlands Project. The card was designed to be easily mailed, left on a cart, or delivered by hand through a door knocking campaign. The pledge was made public on the project website *unless* people opted out of the public commitment.

Figure 3.3| Example of a Commitment Card

Thank you for taking the My Green Broadlands Challenge!

Please commit to at least 2 of the following **recycling actions** by checking the box next to the action:

- ☐ I pledge to recycle 7 lbs more per week
- ☐ I pledge to recycle all of my cardboard, paper, and junk mail
- ☐ I pledge to talk to one other Broadlands resident about recycling
- ☐ I pledge to grass cycle or mulch mow this summer



☐ I am making the pledge alone
☐ My entire household is making the pledge (if yes, how many people____)



Please print your name _____

Signature _____ **Email** _____

Check here if you don't want your name listed with others on www.mygreenbroadlands.com as a recycler taking the pledge - ☐

Step 2: Collecting Commitments. No matter how perfectly you design your commitment card, if you cannot get your target audience to sign the commitment it will not be effective. This is where door-to-door outreach plays a significant role. In the Broadlands Project Route 2 (with all of the exact same materials as Route 3 but without the door-to-

door intervention), only 4% of the households committed to recycling more. On the other hand, 42% of Route 3 households (the route with a door to door intervention) committed to additional recycling actions. In addition to door-to-door sign ups, allowing household to commit on-line, through the mail, and via other methods is also recommended.

Tips

Creating a Norm: While curbside recycling tends to be a public action (you can see on trash day which of your neighbors set out recycling bins) drop-off recycling, mulch mowing, backyard composting, and many other recycling-related actions are not visible. So in effect, you are trying to “sell” households a good/behavior that is invisible; no one knows whether or not they undertook the action and the only satisfaction may

Using a Commitment: A classic social marketing example of the power of commitments found in the literature is the energy efficiency outreach program conducted in 1973 Iowa City, IA, by Pallak, Cook and Sullivan. The goal of the project was to reduce residential consumption of gas and electricity in Iowa City. The program administrators created three groups for the study; Group 1) had a visit and were asked to make a verbal commitment to reduce energy use, Group 2) had a visit and were asked to make a commitment and were told that at the end of the project the names of the residents who made the commitment would be published in the report, in effect, a public commitment, and Group 3) a control group. At the end of the project period the group that made the public commitment (Group 2) reduced their energy consumption by 10-20%. There was no significant change in energy consumption for the other two groups.

be self-derived. By making the action public, it helps to create a social norm for the behavior. In the Broadlands Project households that signed the commitment card were also asked to put a bumper sticker on their recycling cart (Figure 10) to let others know they took the commitment and to establish a social norm. By the end of the outreach period households in the targeted neighborhood were calling the SERA offices to ask us how they could get a recycling sticker like their neighbor had.

Incentives: As an added incentive to get households to make a public commitment SERA donated \$1 to a local non-profit in the Broadlands area for any household that made a commitment. This small incentive (a total of \$227 over 9 months) helped to get additional households on board with the project.

Leave/send a reminder: If you are doing door-to-door outreach leave a copy of the commitment card with each household that makes a commitment. If they do not have a copy of what they committed to it is easier for them to forget the commitment. If you are doing mail only, use a commitment that they can rip off the bottom and keep for themselves. Also, use emails, direct mail, phone calls, Facebook, Twitter, or other

methods to occasionally remind household of their commitment and prompt them to undertake action.

Figure 3.4| Example of Cart Bumper Sticker



“Perfect Recycler” Contest

The Perfect Recycler Contest can be adapted to suit a variety of programs. The goal is to get people to take note of the program, drum up excitement, and encourage participation. Prizes need not be expensive and can range from gift cards, a month free trash service, and recreation center coupons, to simple write ups in local publications.

Staff and Time Commitment:

| Step | Time commitment | Staff Commitment |
|------------------------|--|---|
| Planning | 1-2 hours (one time) | 1 staff member |
| Prep time per outing | 1 min to establish route (recurring) | 1 staff member |
| Performing House Calls | 1 hour per outing (recurring) | 1 trained staff member (2 is desirable) |
| Follow up announcement | 1 min per winner (recurring) | 1 staff member |
| Totals | 4 to 5 hours first time 3 hours each additional | 1 staff member |

Materials needed:

| Material | Cost |
|---|--|
| I.D. Tags | \$0-\$8 (one time cost) |
| “Sorry We Missed You” flyers | \$0 (print off copies) |
| Safety Vests, gloves, mask, eye protection | \$0-\$40 (can use from other tasks) (one time cost) |
| Tarp (preferable) or plastic tablecloth | \$25 (one time cost) |
| Rake, hoe, or other sorting tool | \$25 (one time cost) |
| List of acceptable materials | \$0 (print off copies) |
| Prizes per outing –both consolation and winner prizes are recommended | Depends on choice of prize (Prize needed for every winner) |
| Total Materials Cost | \$50- \$100 not including prizes |

Total Cost Estimate:

| | Staff Rates at \$25/Hour | Staff Rates at \$45/Hour |
|---------------|--------------------------|--------------------------|
| Low estimate | \$150 | \$225 |
| High estimate | \$225 | \$325 |

Procedure

Step One: *Planning.*

- A) Determine the name and frequency of your contest, (once per week, once of month).
- B) Plan which prizes you would like to use. A small consolation prize is a good idea for those households that were selected, but did not meet the requirements, (we used \$5 Starbucks cards). Determine where winners will be announced.

- C) Advertise contest in other outreach or local papers. Make sure to include a statement that contest staff will not be sorting through trash without first obtaining permission.

Step Two: Performing House Calls.

- A) Prior to going out, establish a list of about 10 random addresses to account for those not home and verify there is recycling pickup that week. (You can also do this on non-recycling days and just check for recyclables in the trash).
- B) Make sure you have all your id, equipment, prizes and flyers.
- C) Clearly identify yourself and ask permission.
- D) Lay out the tarp and tip over can so that spilled material is collected on the tarp for ease of returning to the cart.
- E) If a resident does not meet the requirements, explain to them why and hand out flyer along with consolation prize. If they win, ask permission to post their name (a picture is a good idea) and give them the prize!



Tips: Although this toolkit highlights one particular contest, do not be limited to this idea and consider other creative ideas. In the Broadlands Project SERA researchers also undertook a neighborhood contest to get commitments. The target audience was broken into 5 “blocks” and each block was challenged with getting the highest number of household committing to undertake recycling actions. The households on the winning block that took commitments were all given \$5 gift cards. In the winning block, 1 out of every 2 households made a recycling commitment! Although this toolkit highlights one type of contest don’t be afraid to think creatively and plan your own contest. Apartment competition, dormitory or school competitions, zero waste months, zero waste household contests, and others are all fun ideas that can raise awareness and interest in your outreach.

Phase 4: Measurement and Impacts

The most important information has been saved for last... how much does social marketing cost, and is the “bang for the buck” worth it? For that, we need three elements:

- Costs for the program overall and any individual components,
- *Net* impacts associated with the program overall and individual components, and
- The retention or lifetime over which those impacts last.

It is these types of data you will try to measure for your program. To do so, you will need to track the impacts pre- and post “treatment” (either through measured tonnage, or in some cases, behaviors will need to be tracked by pre-post surveys). However, if it is at all possible, you should track the same information for a control route – a “similar” group of households that do not have access to the social marketing efforts. If you can achieve a “pre” period over time (a baseline), for the social marketing treatment area and the control route that is ideal. There are three advantages to including a control route:

- Your results will not be subject to things like seasons, weather, etc. You will be able to “net these impacts out” if you have a control route for the same period. Recycling might be higher at the holidays; composting might be higher generally in summer, and if you ended your measurements at those times you might falsely attribute more impact to your program than you should.
- You will be able to compare your results on an on-going basis – comparing at any time to the control route.
- You can identify the impact of factors other than your own.

There are many other benefits as well. A simple control route, and detailed pre-post measurement of impacts AND COSTS will be valuable to your future planning efforts, and likely will be important elements in defending your expenditures on the program during budget season.

How to Measure Net-Net – An Example

The importance of a control and pre-post measurement is easily highlighted in a poorly run pilot program SERA examined a few years ago. An unnamed city was investigating the potential of adding neighborhood drop-off organics locations to decrease trash disposal at the curb. The City started the compost drop-off for a pilot neighborhood in May, ran the program until November of the same year, then discontinued the pilot to analyze the impacts on overall trash disposal and organics collected. From May to November the amount of trash disposed at the curb decreased significantly and the organics at the drop-off increased, indicating the program was diverted organics and was a success for the pilot neighborhood. However, without a control area, the City was

unable to compare the impacts of the drop-off to a similar neighborhood without an organics drop-off. This unfortunately, led to the City overestimated the impacts of the drop-off.

When they started the program in May, the amount of trash generated per household, including organics, was just beginning to increase for the year as households were undertaking spring cleaning, home repairs, and yard clean-up from the winter. At the end of the program, in November, trash and organics generation was at a low point with or without the yard waste drop-off. This annual fluctuation in generation coinciding with the start and end dates of the pilot program skewed the results of the pilot making it seem more successful than it really was. If the city had incorporated a control route they would have been able to compare the pre and post data in the pilot neighborhood with the control route and see the incremental changes over a baseline area, providing more accurate and meaningful results.

Our Findings – Measurement and Our Judgment

We based the results in this section on a combination of the results from a specific social marketing project SERA conducted – “My Green Broadlands”, but we also brought knowledge from other work and research as well.

It was easy to identify some cost and cost-effectiveness information; it was difficult to obtain others. We set up our experiment to measure difficult to isolate impacts (and costs) associated with the door-to-door element of our CBSM program, as that was potentially the most controversial and most costly element. The week-to-week variations in tonnage always make it more difficult to tease out everything else we might like to know; however, we used statistics and our best judgment to provide at least guidance-level information. We found little to no information on cost-effectiveness and retention in the literature. Thus, we brought together the results of the specific project behind this toolkit (“The My Broadlands Project”) plus other work SERA has conducted to provide some guidance on the topic of ‘what works’ and at what cost.

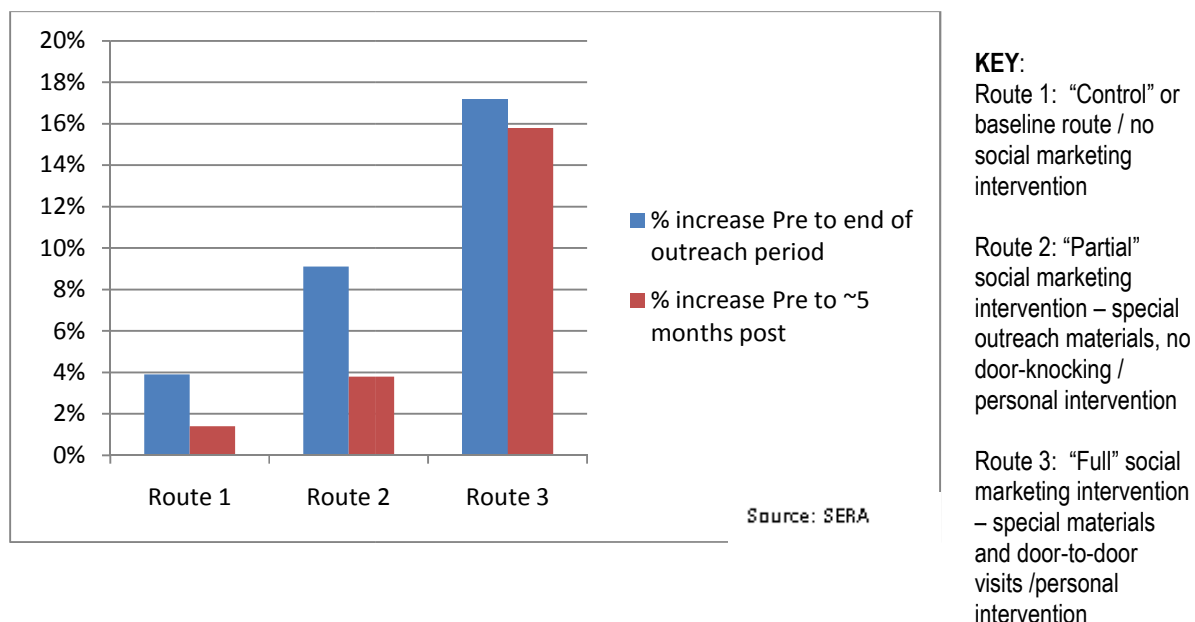
Table 4.1 provides our estimates of the cost per household to deliver various kinds of outreach that may be possible options for your social marketing program. We also include our results on “recall” from our residential survey conducted after the outreach work for the Broadlands project. The recycling impacts assessment derives from our review of the tonnage impacts we found following up the interventions. Given all the variations in data, we can only provide approximate estimates for each *individual* intervention method.

However, we provide a fairly compelling graph in Figure 4.1 that shows the increase in recycling from our overall set of efforts from the Broadlands Project. It shows that the recycling tonnage increased 17% (13% over the control group) when we included door-to-door outreach; and only 8% (4% net impact) for the neighborhood not receiving the door-to-door visits. The second bars show that the behavior is much better retained in the door-knocking neighborhood as well.

Table 4.1| Outreach / Delivery Costs Per Household
(excluding design work, all time “valued”, including volunteer)

| | Cost per Household \$25/hr | Cost per Household \$45/hr | Residential Recall | Impact on Recycling |
|-----------------------|-------------------------------|-------------------------------|--------------------|---------------------|
| Bill Inserts | \$0.03 to \$0.05 | \$0.05 - \$0.08 | Not tested | Not tested |
| Cart Hangers | \$0.46 to \$0.76 | \$0.74 - \$1.20 | High | High |
| Direct Mail | \$0.53 to \$0.58 | \$0.61 - \$0.66 | High | Medium |
| Door to Door Outreach | \$3.50 to \$4.00 | \$5.20-\$11.75 | Medium | High |
| Email | \$0.00 to \$0.01 | \$0.00 to \$0.01 | High | Medium to High |
| Newspaper/Radio | Depends | Depends | Not tested | Not tested |
| Phone Calls | \$0.65 to \$0.73 | \$1.08 - \$1.23 | Low | Low |

Figure 4.2| Percent Increase in Recycling Tons per Household – SERA’s “Broadlands” Project³²



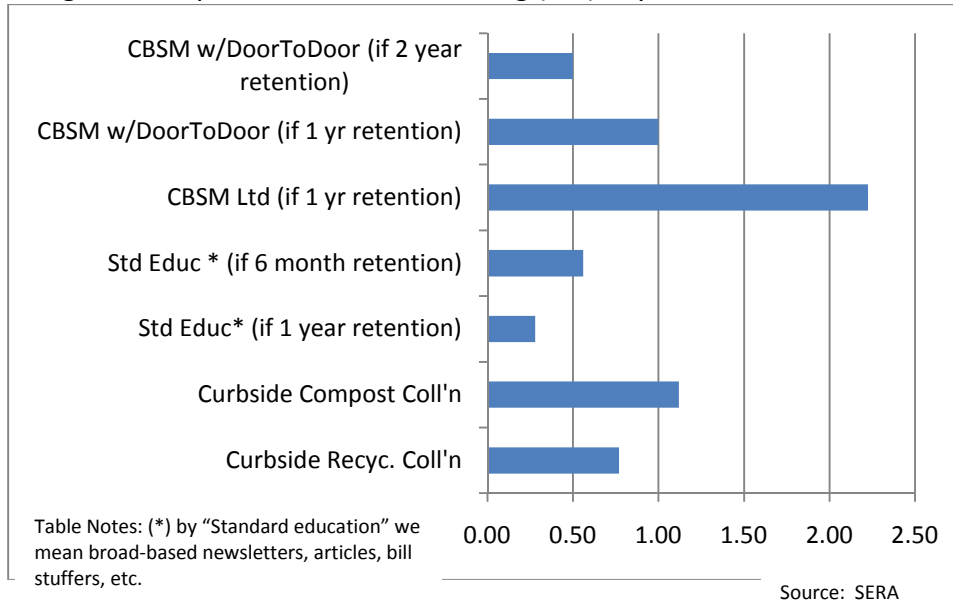
We used a number of sources to put social marketing cost-effectiveness (cost per ton) in the context of other recycling initiatives. The results are presented in Figure 4.2 below. One important result is that *the results of our study indicate that the cost per impact is cheaper in the full outreach (door knocking) route compared to the partial outreach route³³.*

³² Because it was also a research project, SERA’s “The Broadlands” project conducted more rounds of outreach than other programs might find necessary or cost-effective. For information (see also the case study in the appendix), we conducted 4 rounds of cart hangers to all households; 1 round of direct mail postcards to all households on Routes 2 and 3 (impact routes); 2 rounds of on-site visits (only on Route 3, Route 2 received cart hangers of the exact same materials); 2 recycling contests; 2 rounds of phone calls reminding residents of recycling day, and providing a recycling “tip”.

³³ Skumatz and Freeman, 2011.

Figure 4.3 | Putting Social Marketing into Context - Approximate Relative Cost per Ton for Alternative Recycling-Related Interventions

All figures compared to Social marketing (full), 1 year life=1³⁴



Certainly, and importantly, the results will vary based on how well designed and how locally appropriate is your campaign. However, we think these are reasonable benchmarks as you design your outreach efforts and plan your budgets.

Final Comments

Social marketing can have impressive results. As an example, SERA's Broadlands project found:

- Full social marketing efforts increased recycling tonnage per household by 17% (13% net over the control route); eliminating door-to-door components led to an increase of 9% (5% over control group).³⁵
- The retention of recycling behaviors and tonnage impact is much stronger in the door-to-door neighborhood. After 6 months, we lost only 1 percentage point of our gain in the door-knocking neighborhood, but lost 5 percentage points in the social marketing without door-knocking (partial treatment) route.

³⁴ For this graph, we estimate the cost per ton for this outreach is about \$100-\$125/ton. The Broadlands value – which included extra rounds of outreach, was closer to \$177 per ton, assuming a 1 year life.

³⁵ We estimate the project will achieve 100 extra tons of recycling over what would have occurred without the project. This assumes a two-year retention from the door-to-door route (but not from the partial treatment route). Keep posted on www.mygreenbroadlands.com for updates over time to see how long the impacts are retained!

- Although much more expensive to conduct per home (about \$4 extra per household per visit), the cost per impact – particularly the cost-per recycled ton – was considerably lower for the door-knocking neighborhood. The recycling was so much higher it more than paid back the extra outreach cost.

Combining our results from this project, with results from earlier SERA work,³⁶ we find that the cost of social marketing is more expensive than traditional outreach. However, we have rarely seen newsletters that increase recycling by 13% (and have it last 6 months).

Social marketing has received a lot of hype over the last 10 years, but that literature has not compared its impact per dollar to other alternatives that jurisdictions have for increasing recycling (enhancing programs, traditional outreach, adding composting / food, etc.). Saving up outreach budget for a couple years to conduct a community based social marketing project may, in fact, be a very effective use of scarce dollars. Other communities simply may not have the budget. We hope this guidebook is useful to communities trying to assess the tradeoffs – and provides the steps forward for those that choose social marketing options.

³⁶ Skumatz and Green, 2000.

Community Toolkit Appendix

Appendix One: Review of the Broadlands Project (Case Study)

Most of the information on costs and impacts contained within this toolkit came out of the “My Green Broadlands” (MGB) Project. The data collected through the project has been supplemented with data from previous SERA research, interviews and the literature in this toolkit. The project was designed using scientific experimental procedures (control and test groups) to measure the changes in recycling and trash disposal in the Broadlands neighborhood of Broomfield. The project design allowed SERA to track the exact costs of various outreach methods and tools. The project began in the spring of 2009 and encompassed nearly 1,600 households.

Details on the Project Design

SERA worked with Western Disposal to design a project using three “comparable” routes – routes of households with similar demographics and social-economic status - to control for variations in baseline disposal behavior and support reliable measurement and attribution of project effects. Each route also contained approximately 500 households, all of which belonged to the same homeowners association and received the same trash and recycling services. Trash is collected weekly with an automated truck in 96-gallon carts, 64-gallon trash carts are available upon request but trash rates are built into the HOA fees, so there is no discount for disposing of lower amounts of trash. Recycling collection is single stream and is collected in 96-gallon carts on an every-other week basis. All household are supplied with a recycling cart. There is no yard waste or food waste collection available at the curb.

Once the three routes were chosen, we conducted exhaustive measurement work to document the “baseline” for each route, and to allow us to estimate changes due to our social marketing intentions. The baseline included set out surveys, web surveys, focus groups, and analysis of tonnage reports.

The project then used the following experimental design for administering the campaign:

- *Route 1 – Control:* This route received only the minimal level (“standard”) outreach materials. This included the information on recycling provided by Western Disposal for new accounts and the limited outreach completed by the City of Broomfield. This route served as a comparison or “no treatment” route.
- *Route 2 – Social marketing, outreach and door hangers:* This route received the full treatment of social marketing materials developed in the project, with the exception of door-to-door outreach. The route was used to determine the

impacts of (the least expensive elements of) various levels of social marketing outreach.

- *Route 3 – Social marketing plus on-site visits, or full-outreach route:* Route 3 received all the same outreach materials as the second route, with the addition of door-to-door, personalized visits, including a verbal request to make a written (and public) commitment.

The assumption behind the three treatments was that the door-to-door outreach, while being effective, would also be the most labor and cost intensive portion of the outreach campaign. If similar results could be obtained without the personalized visits (Route 2), it may be at significant cost savings. Figure 1 contains a brief review of the project design.

Figure 1 | Review of Project Design

| | |
|---|--|
| Three routes of comparable ³⁷ single family households in Broomfield Colorado were each given different experimental treatments. Baselines were established for each route and weekly measurements were recorded to measure impacts of the outreach. Approximately 500 households on each route. | |
| Route 1: Control or no-treatment route | Minimal level (standard) outreach materials |
| Route 2: Low treatment route: Social marketing- outreach and door-hangers | Received full treatment of social marketing materials with the exception of door-to-door personalized visits |
| Route 3: Full- or High-treatment route - Social marketing outreach materials plus door to door visits | Received the same outreach as Route 2 with the addition of door-to-door personalized visits and phone call reminders |

Outreach tools

The outreach plan was designed to test a full range of social marketing tools as well as various modes of information delivery to allow SERA to gauge effectiveness. In addition, the outreach plan was fluid, with portions of the message being influenced by early results of the project. For instance, the focus groups and survey results, in the early stages of the project, directly influenced how the rounds of outreach messages were crafted, observations of the target audience behaviors and the data analysis contributed to the outreach material design. Overall, SERA had 7 outreach pieces over a 12-month period, not including the surveys (pre and post), focus group efforts, and behavior retention measurement.

Figure 2 highlights a number of the outreach activities undertaken throughout the project. More detail on the outreach tools and delivery modes are contained in the toolkit.

³⁷ Households in all routes had similar demographics and received the same trash and recycling program.

Figure 2 | My Green Broadlands Outreach Activities

| Project Activities | Common Social Marketing Tools Tested |
|---|--|
| <ul style="list-style-type: none"> • Pre- and post- set out surveys (July of each year) • 4 rounds of cart hangers to all households • 1 round of direct mail postcards to all households on Routes 2 and 3 (impact routes) • 2 rounds of on-site visits (only on Route 3, Route 2 received cart hangers of the exact same materials) • 2 recycling contests • 2 rounds of phone calls reminding residents of recycling day, and providing a recycling “tip”. | <ul style="list-style-type: none"> • Prompts • Incentives • Contests • Social norms • Commitment cards • Personalized visits • Segmentation analysis • Feedback mechanisms • Social media and web media |

Impacts from the Project

The costs for including the door-to-door work made the costs for the high-treatment route three times as expensive per household as the low treatment route (the route without personal visits or calls).

Commitment and Action Impacts (to date):

- A total of 227 of the households on the two test routes joined the Broadlands Recycling Club (BRC). Joining the BRC requires households to make a commitment to undertake source reduction, recycling and diversion actions. These commitments represent nearly 2,400 committed green actions by BRC members (multiplied by family members, where appropriate, and number of actions).
- More than 500 residents committed to increasing their diversion either through recycling more, mulch mowing, composting, or a number of other options.
- In the full-treatment, Route 3), 42% of households took the challenge, compared to just 4% of the partial treatment homes – 10 times better penetration of these commitments.
- In the block that won the neighborhood challenge, 1 out of every 2 households has joined the recycling club and taken the challenge.

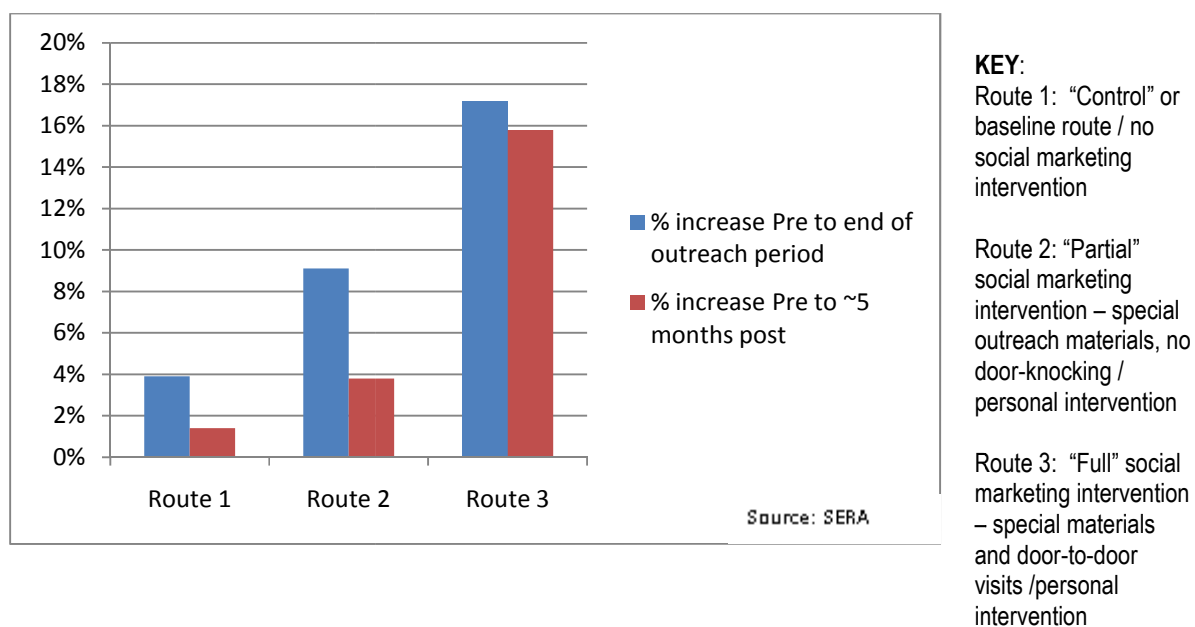
Tonnage Impacts

The analysis of the tonnage data made it clear that the social marketing efforts were highly successful in increasing recycling tonnage in the Broadlands neighborhood. There are two key outcomes illustrated in Figure 1.1:

- **Much more recycling in “Full” Test Route:** The test routes experienced significantly higher recycling as a result of the social marketing campaign – a net of 5% extra increase in the “partial” test route over changes in the baseline / control route, and an impressive 13% more recycling in the full test route.

- **Much better retention of recycling in “Full” Test Route:** Comparing the results “during” the campaign (the first, blue bars) to the results 5-6 months after the last outreach efforts shows that the recycling behaviors had far better retention in the “full” test route than for households that did not have the extra “personal visit” part of the program. The recycling rate in the full test route lost only 1 percentage point of what they’d gained (15% more than the baseline route). The large fallback in the partial test route left them recycling only 3% more than the baseline route.

Figure 3| Percent Increase in Recycling Tons per Household



Greenhouse Gas Impacts

- If all the commitment-based impacts were realized (people met their commitments), we estimate 184 metric tons of carbon equivalent (MTCE) of GHG were avoided from the program since the beginning of the outreach (some commitments came later in the program, and we only counted the impact over the covered period to the end of year).
- Tonnage-based impacts. The GHG associated with the tonnage reduced by the end of year is around 24 MTCE.

Cost-Effectiveness of Door-To-Door Efforts

SERA was also interested in identifying the costs – and the cost-effectiveness – of the social marketing outreach efforts. In particular, although the tonnage outcomes were higher, were these impacts enough to outweigh the significant additional cost involved in delivering that door-to-door service? Table 1.4 presents the total costs per household

for the array of outreach activities we conducted as part of this project. Note that the cost per home for the full outreach is \$14, more than twice (2.7 times) the cost of the “partial” outreach program (which was \$5.15 per home). The extra cost associated with our several rounds of door-to-door work was \$8.85 per home. However, when divided by the higher total tons diverted from the full test route (partly due to the longer period over which the tons are being diverted), the cost per ton recycled is significantly lower in the “full” test route than in the “partial” route – less than half the cost per ton. The cost per household is higher, but the cost per impact is markedly lower. Similarly, the cost per impact for other actions is also lower in the “full impact” route (cost per GHG, per action, and per commitment).

Figure 4| Cost per Household, and Per Impact

| Total Cost Per... | Route 2 (partial) | Route 3 (full) |
|-------------------|-------------------|----------------|
| House | \$5.25 | \$14.00 |
| Committed HH | \$118.75 | \$33.25 |
| Action | \$12.50 | \$3.25 |
| Ton GHG Avoided | \$70.50 | \$19.75 |
| Ton Recycling | \$394.00 | \$177.50 |

These figures – in total - are higher than we believe would result from a well-designed, efficient CBSM program. In particular, a program might be unlikely to need 4 rounds of cart hangers plus two contests plus two door-to-door elements (plus the rest) within one year (although you might!). Given our innate belief in efficiency, if we assume our program, if optimized, might have been able to obtain 75% of the impact for 50% of the cost, then the cost per ton for the full outreach would have been approximately \$100 per ton. This might be a fair planning number for programs. If the impact lasts two years then the cost is more like \$50 per ton, which is quite a respectable number next to the cost of other types of recycling initiatives. We present a graph of where these programs might rank next to other programs - information that might be useful in a budget hearing. However, note that if you want to use your program to increase recycling, you do not want to present it as either/or against other possible expenditures!³⁸ As an outcome of this project, we believe well-designed social marketing program can provide a valuable boost to recycling rates from already-existing programs (improving their “bang for the buck”), and can be adapted to effectively encourage other “green behaviors” as well.³⁹

Put succinctly, our project found:

³⁸ Social marketing to increase use of a recycling program requires both be in place!

³⁹ With or without capital investments... for instance, encouraging mulch mowing, source reduction, and other programs with minimal capital investment. However, challenges occur in adapting the lessons on providing prompts, and other elements of the CBSM toolkit to achieve and retain the behaviors.

- Full social marketing efforts increased recycling tonnage per household by 17% (13% net over the control route); eliminating door-to-door components led to an increase of 9% (5% over control group).⁴⁰
- The retention of recycling behaviors and tonnage impact is much stronger in the door-to-door neighborhood. After 6 months, we lost only 1 percentage point of our gain in the door-knocking neighborhood, but lost 5 percentage points in the social marketing without door-knocking (partial treatment) route.
- Although much more expensive to conduct per home (about \$3.50-\$4 extra per household per visit), the cost per impact – particularly the cost-per recycled ton – was considerably lower for the door-knocking neighborhood. The recycling was so much higher it more than paid back the extra outreach cost.

Figure 5| Outreach / Delivery Costs Per Household
(excluding design work, all time “valued”, including volunteer)

| | Cost per Household \$25/hr | Cost per Household \$45/hr | Residential Recall | Impact on Recycling |
|-----------------------|----------------------------|----------------------------|--------------------|---------------------|
| Bill Inserts | \$0.03 to \$0.05 | \$0.05 - \$0.08 | Not tested | Not tested |
| Cart Hangers | \$0.46 to \$0.76 | \$0.74 - \$1.20 | High | High |
| Direct Mail | \$0.53 to \$0.58 | \$0.61 - \$0.66 | High | Medium |
| Door to Door Outreach | \$3.50 to \$4.00 | \$5.20-\$11.75 | Medium | High |
| Email | \$0.00 to \$0.01 | \$0.00 to \$0.01 | High | Medium to High |
| Newspaper/Radio | Depends | Depends | Not tested | Not tested |
| Phone Calls | \$0.65 to \$0.73 | \$1.08 - \$1.23 | Low | Low |

Combining our results from this project, with results from earlier SERA work,⁴¹ we find that the cost of social marketing is more expensive than traditional outreach. However, we have rarely seen newsletters that increase recycling by 13% (and have it last 6 months).

Community-based social marketing (CBSM) has received a lot of hype over the last 10 years, but that literature has not compared its impact per dollar to other alternatives that jurisdictions have for increasing recycling (enhancing programs, traditional outreach, adding composting / food, etc.). Saving up outreach budget for a couple years to conduct a social marketing outreach project may, in fact, be a very effective use of scarce dollars. Other communities simply may not have the budget. We hope this

⁴⁰ We estimate the project will achieve 100 extra tons of recycling over what would have occurred without the project. This assumes a two-year retention from the door-to-door route (but not from the partial treatment route). Keep posted on www.mygreenbroadlands.com for updates over time to see how long the impacts are retained!

⁴¹ Skumatz and Green, 2000.

guidebook is useful to communities trying to assess the tradeoffs – and provides the steps forward for those that choose social marketing outreach options.

The results of our study indicate that the cost per impact is cheaper in the full outreach route compared to the partial outreach route.

Caveats and Important Notes

The Broadlands project had two main goals – to actually use social marketing methods to increase recycling in a specific neighborhood, and to develop a useful toolkit for use by other communities. To achieve the wide range of information we needed for the second objective, we conducted MUCH more outreach to the specific community than was probably needed or than was optimal. We almost certainly reached diminishing returns to scale with some of the later rounds of outreach (however, without that outreach, we wouldn't have learned some of the lessons we outline in this report)! Therefore, on a per-unit basis, the cost information is directly useful. The extra impact and cost-effectiveness from door-to-door visits is directly useful. However, the cost per ton overall from the program's efforts is higher than a program would likely experience. For guidance purposes, we have included an assessment of which elements of the outreach were the "biggest bang", particularly in terms of recall, and in terms of our review of the impact data. We have also made judgments about the cost-effectiveness or cost-per-ton range that we believe would result from an efficient and integrated social marketing program, with an without door-to-door elements.

Appendix Two: References

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Appendix Three: Social Marketing Cost Estimator Tool

SERA developed an Excel™ social marketing cost estimator that computes approximate budget and staff needs associated with the outreach elements selected by the user. These rough estimates can help a community examine social marketing steps and options to select what will fit within the available budget. For users of the model, note that the costs are based on a suburban example; costs in a rural and an urban environment – especially for elements related to door-to-door delivery or interventions – are likely to be more expensive than the results from the SERA “Calculator”.

Social Marketing Cost Estimator

SOCIAL MARKETING COST ESTIMATOR

By Skumatz Economic Research Associates, Inc. skumatz@serainc.com, 303/494-1178
Prepared Under Grant for Colorado Department of Public Health & Environment (CDPHE)
File: SocMktgCostCalculator SERA_v6.xls

SERA

OBJECTIVE: This spreadsheet calculates estimates of the cost of a social marketing campaign / program based on user selections on outreach elements and assumptions.
INSTRUCTIONS: Fill in the purple, yellow and green cells below to derive a computation of the cost of your social marketing plan (totalled in red cells at bottom). Note we do not specifically include radio, TV, newspaper because costs for markets are local AND social marketing usually works through outreach methods OTHER than these broad media.

==> NOTE: KEY TO UNLOCK GREEN, YELLOW, PURPLE & PINK CELLS IS THE WORD "cbasm" (small letters, no quotes)

Answer the following questions about your Community in the green spaces...

How many households will this cover? (this might not include all your multi-family units; you may elect to use "businesses" instead...)
What will you pay staff or analysts PER HOUR?
What will you pay other staff that will work on your outreach campaign (may be temp staff, volunteers, staff, or analysts) PER HOUR?

Which of the following activities / outreach do you want to conduct?

Answer "yes" (in purple cells) for those activities you wish to include, and answer questions in corresponding yellow (and pink) cells.

Put "Yes" or "No"

In PURPLE Cells

Yes

<==FOCUS GROUP (to identify barriers, attractive "branding" words, etc.)

Number of focus groups planned
How many attendees EACH group (6-10 ideal)
Food served (1=yes, 0=no)?

Free room available (1=yes, 0=no)?

Cost for room PER session, if known; otherwise put \$250 placeholder
Incentive PER attendee (usually \$25-\$50)

Yes

<==SET OUT SURVEY (could conduct pre, post, both, during...)

How many surveys of this general type would you like to conduct?
Is Recycling collected on the same day as trash? (1=yes, 0=no)
Put a '1' for the accuracy level desired for these surveys in ONE of the pink boxes below:
Very accurate & highest cost (+/-5% accuracy at 95% confidence)
Moderate accuracy (and cost) (+/-5% at 90%)

Number of Persons per 'set out' team?

Number of 'set out' team that is staff (not temp labor)

PUT '0's in the others.

Lower accuracy (and cost) (+/-10% at 95%)

Basic accuracy (+/-10% at 90%)

Yes

<==WEB SURVEY, BROAD NON-STATISTICAL (could conduct pre, post, both)

How many surveys of this general type would you like to conduct?

Yes

<==WEB SURVEY, STATISTICAL (could conduct pre, post, both)

How many surveys of this general type would you like to conduct?
What percent response do you expect? (Put 3% if unknown, or see manual)
Put a '1' for the accuracy level desired for these surveys in ONE of the pink boxes below:
Very accurate & highest cost (+/-5% accuracy at 95% confidence)
Moderate accuracy (and cost) (+/-5% at 90%)

Do you plan a '2nd' mail of postcards to increase the response rate? (1=yes, 0=no)

PUT '0's in the others.

Lower accuracy (and cost) (+/-10% at 95%)

Basic accuracy (+/-10% at 90%)

Yes

<==BILL INSERTS (for messages, challenges, feedback...)

Number of rounds of bill inserts
Put amount of postage required (zero if covered by bill; or how many cents per unit you must contribute if shared)

Put '1' if just xeroxed flyer; put '0' if professional color product

Yes

<==DIRECT MAIL OUTREACH (for messages, challenges, feedback...)

Number of rounds of letter size in envelopes
Number of rounds of postcard types

Yes

<==CART HANGERS, DELIVERED DOOR TO DOOR - NO CONVERSATIONS (for messages, challenges, feedback...)

Number of rounds of cart hangers, delivered to doors or carts

Yes

<==EMAIL OUTREACH (for messages, challenges, feedback...)

Number of rounds (using emails you already have, or have obtained from surveys, etc. No purchase of email addresses included)

Yes

<==PHONE CALLS / REMINDERS (for messages, challenges, feedback...)

Number of rounds of Staff calls, (about 30 second intro / outreach; discussions varied) (can be 0)
Number of rounds of Robocalls (about 30 second intro / outreach; discussions varied) (can be 0)

Yes

<==DOOR-TO-DOOR (DTD) PERSONAL OUTREACH (for messages, challenges, education, connection, feedback...)

Percent of City you want to reach in a year (Note - DTD is expensive!)
Number of rounds of DTD outreach
Number of Persons per door to door (DTD) team that will be paid at 'staff' pay rate

No. of Persons per DTD team that will be paid at 'temp labor' pay rate

No. of Persons per DTD team that are volunteers (not paid)

Yes

<==OTHER MATERIALS (for messages, challenges, rewards, contests, prompts, feedback...)

Stickers (number wanted)
Number of Web domain names (incorporates simple website development)
Number of years of web hosting (incorporates simple updates to website)
Contest prizes, total dollar amount

Other 1, dollar amount

Other 2, dollar amount

Other 3, dollar amount

Other 4, dollar amount

SUMMARY OF ESTIMATED COSTS, STAFF HOURS & EXPENSES

| Total Cost | Staff HOURS | Temp Staff HOURS | Volunteer HOURS | Labor Cost | Postage | Materials, Expenses | for outreach type: |
|----------------------|-------------|------------------|-----------------|------------|---------|---------------------|--|
| \$0 | 5 | 0 | 0 | \$0 | \$0 | \$0 | <==FOCUS GROUP |
| \$0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | <==SET OUT SURVEY |
| \$0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | <==WEB SURVEY, BROAD NON-STATISTICAL |
| \$0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | <==WEB SURVEY, STATISTICAL |
| \$0 | 6 | 0 | 0 | \$0 | \$0 | \$0 | <==BILL INSERTS |
| \$0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | <==DIRECT MAIL OUTREACH |
| \$0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | <==CART HANGERS, DELIVERED DOOR TO DOOR - NO CONVERSATIONS |
| \$0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | <==EMAIL OUTREACH |
| \$0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | <==PHONE CALLS / REMINDERS |
| \$0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | <==DOOR-TO-DOOR (DTD) PERSONAL OUTREACH |
| \$0 | 12 | 0 | 0 | \$0 | \$0 | \$0 | <==OTHER MATERIALS |
| \$0 | 23 | 0 | 0 | \$0 | \$0 | \$0 | Total by element |
| GRAND TOTAL = | \$0 | | | | | | |