Special thanks to Stephanie Anderberg who continued to push this project even as she was leaving the department, and also to Marie Killackey in the print shop, Diane Bongiorno, Linda Mannke at the front desk, also to our student volunteers Luna, Ashleigh, and the many other volunteers and City staff who contributed time, ideas, and their hard work to make CitySmart a success this year.
Executive Summary

The City of Cambridge received a grant from the Massachusetts Executive Office of Transportation, renewable over three years, to conduct a pilot social marketing program in Cambridge. The City planned to implement the pilot program in a different neighborhood each year, and if the results warranted its continuation, to roll it out throughout the city. In 2011, the third and last year, the program targeted East Cambridge residents, with the goal of shifting 10% of their drive-alone trips to more sustainable modes.

CitySmart used direct mail, outreach events, posters, and electronic media to reach out to residents in the target neighborhood. These efforts were supported with a CitySmart presence at several established neighborhood events, in combination with “tabling” within multifamily residential buildings. CitySmart events were designed to spread information about the program and to give residents a chance to learn more about their neighborhood at their own pace.

Interested residents were encouraged to order a free information kit, which included neighborhood-specific information about transportation options, discounts to local businesses, maps, and general information from the City. In addition to this basic kit, participants could select kits on walking, bicycling, transit and a newly combined carshare/carpool kit. Each kit contained detailed information about services and amenities available in and near the target neighborhood, plus helpful tools such as maps, pedometers, transit pass holders, or bicycle reflector sets.

A random telephone survey before the program outreach began set a base line for transportation mode splits, and a follow-up survey after the program ended measured the program results. Our base line survey indicated a drive alone mode share of 28%. Measured from our follow-up survey we achieved a 4% reduction to 24% in the measured drive alone mode share which amounts to a 14.3% shift in drive alone trips from our base line.
Program overview

The intent of the CitySmart pilot project was to test the effectiveness of social marketing on residents’ transportation choices.

Goals

- Reach 10% of households in the target neighborhood
- Deliver 800-1000 information kits
- Connect with each household an average of 3 times through marketing and events
- Effect a 10% shift away from drive-alone trips

Program summary

The CitySmart pilot project used social marketing techniques to encourage residents of the target neighborhood to shift drive-alone trips to more sustainable transportation modes. A baseline was set using a random telephone survey, and then a variety of outreach tools – collectively referred to as the intervention - were used before a follow-up survey measured results. The social marketing campaign used the following tools:

- Initial mailing (newsletter and order form) to all residential addresses in the target neighborhood
- Information kits for each mode, packaged in reusable grocery tote bags and delivered by bicycle to residents who requested them
- A series of supporting events to promote the program and encourage residents to try walking, bicycling, transit and ridesharing
- A focus on tabling events at neighborhood multifamily residential buildings.
- Reminder campaign including flyers in retail locations, posters in building lobbies, and a postcard mailing.

CitySmart staff based this pilot project on similar projects implemented in Europe, Australia, and the United States. The primary models were Portland, Oregon’s Travel Smart program and St. Paul, Minnesota’s Smart Trips program. These cities had refined the original model developed by the German program SocialData to exclude the more work-intensive steps such as home visits and costly steps such as thank you gifts for non-participants, yet had maintained similar success rates.

CitySmart is operating with significantly fewer resources than Portland had for its program. Portland, for example, employs 4.1 FTE of staff plus 3 part time (32 hours per week) administrative staff working...
exclusively on filling orders. The Portland program has an annual budget of $589,000, including staff time and staff overhead. The Cambridge program operated with less than 1 FTE, and a budget of just over $100,000, including staff time, a substantial portion of which went to conducting before and after phone surveys. Given that most municipalities will have much more limited resources than Portland, CitySmart may provide a much more replicable model for other communities.

Neighborhood selection

The pilot project is designed as a three-year grant program, funded by Massachusetts DOT and federal funds. As the first year of the pilot required additional steps such as branding, naming, developing basic materials, and other tasks which did not need to be replicated in future years, the CitySmart team looked for a target neighborhood with some beneficial characteristics for the initial year. The East Cambridge neighborhood was selected for our third year due to:

- Number of households and total population similar to the previous two neighborhoods
- Existing transportation options, including access to multiple subway lines, commuter rail and interstate rail. A walkable area with multiple bus routes and bicycle facilities
- Grid-based street network with mixed-use development including retail, commercial and recreation services nearby
- Car ownership levels between the two neighborhoods selected in previous years
- Large population increase compared to the other neighborhoods, indicating a potentially younger demographic less familiar with transportation options within the neighborhood.

Partners

Working with our outreach coordinator intern, the following groups assisted in project planning, providing information kit materials, including articles and links in newsletters, and/or events staffing:

- Cambridge Arts Council
- Cambridge Bicycle Committee
- Northern New England Passenger Rail Authority
- Cambridge Health Alliance
- Cambridge Historical Commission
- Green Streets Initiative
- Charles River TMA
- Multicultural Arts Center
- Cambridge Energy Alliance
- MBTA
- Cambridge Local First
- Cambridge Energy Alliance
- Cambridge Housing Authority
- East Side Bar and Grill
- East End House
- Walk Boston
- Green Streets Initiative
- Charles River TMA
- MBTA
- East End House
- Walk Boston
- Paddle Boston
- East Side Bar and Grill
- Urban Adventours
- MintCar
- Relayrides

Love the info and the activities!
Stefanie – CitySmart participant
Survey process

The CitySmart pilot program evaluation is largely based on the results of base-line and follow-up surveys. The paired surveys asked similar before and after questions about each respondent’s trips and mode choice for the previous day. Additional questions helped to identify a household’s range of options, including access to motor vehicles, bicycles, and parking. In the follow-up survey, we also asked respondents about various elements of the CitySmart program.

Our survey contractor used a random selection of East Cambridge telephone numbers to comprise the survey sample. One difficulty with surveying by telephone is the increasing number of households with no land-line telephone service. As more households shift to cell phones or voice-over-internet communication, they become unavailable for random telephone surveying. If the households surveyed are not representative of the neighborhood as a whole (for example, if they are wealthier, or they are older), the survey results could be skewed. In the case of our telephone surveys, the mean age of respondents was approximately 53. This is significantly higher than the average age in East Cambridge as of the 2010 census, which is around 41 (about 33 if you include residents under 18). Interestingly our email survey noted a more representative average age, somewhere in the 36-45 age range. This shows that there is a skew in the data, especially the phone survey, to the older demographic, which for a variety of reasons may have different trip needs or trip purposes than the average resident in East Cambridge.

Our survey results are based on 213 respondents in the baseline survey and 205 respondents in the follow-up survey. With an address to phone number match rate of 22% as opposed to over 50% in the previous two years, our contractor mailed survey call-in request postcards to over 2000 households. This low match rate may in part be due to the growth in a younger demographic that may be much less likely to have a land line phone. Both phone survey samples were taken from the neighborhood as a whole, not limited to just those households who had participated in CitySmart.

As part of the CitySmart follow-up evaluation, households who participated in CitySmart were asked to complete a qualitative online survey. This survey allowed for more open-ended responses and asked for opinions about the value of various items in the information kits and event programming. The online survey received over 130 responses.
Promotional Materials

Initial newsletter – contained helpful tips on each mode, a resource list of transportation services, a basic calendar of events, descriptions of each information kit, and ordering information. The newsletter was mailed to more than 5,000 residential addresses.

Postcard order form – contained simplified order form and was sent to addresses that hadn’t yet requested an information kit delivery. The postcards were mailed to approximately 3500 addresses.

Building newsletters and blog posts – These internet and email based marketing promotions reached out to residents in major buildings with information on the program and a link to our order form. This contact reached over 1200 addresses.

Information kits

Participants were encouraged to request one or more of the information kits available. Every delivery included a basic kit with general program and services information. Information kits about each mode were included as requested so that each household got the information of interest to them.

Available kits included the following materials:

Basic kit – contained a Getting Around Cambridge multi-modal map and map scale overlay, information on upcoming events, citywide map of seasonal farmers’ market locations, local business guide and coupons, energy efficiency information, and information for car owners.

Walking information kit – contained a pedometer, city parks map, reusable water bottle, walking tips, WalkBoston program information, and East Cambridge walking routes.

Bicycling information kit – contained a bicycle reflector set and tire patch kit, plus regional bicycle map, maps on bicycle rack location and bike lane designations, local coupons, MassBike brochure on proper bike locking protocol, and Urban Adventours information. Residents who indicated that they did not have bicycle helmets also received information on getting a free helmet from CitySmart.

Transit information kit – contained a transit pass key ring, plus MBTA route and schedule information, transit maps, EZ ride information, Amtrak Downeaster travel guide, and GreenStreets Initiative.
information. Residents who indicated that they did not have a Charlie Card for MBTA fare discounts also received a reloadable fare Charlie Card.

Carshare/pool information kit – contained a flashlight key ring plus discounts to ZipCar, Mint Car, and Relay Rides. It included information on carshare options in Cambridge as well as carpooling tips and information from MassRides and Zimride. It also included a ride/gas log notebook and MassRides pen.

Kids’ kit – contained informational coloring books and tips, stickers, reflectors, chalk and crayons.

Information kits were delivered to 833 households, or 17% of the target neighborhood, meeting our goal for kit delivery (800 to 1000) and exceeding our goal of reaching 10% of neighborhood households.

Events

Based on challenges experienced with events in the first year of the pilot program, primarily as a result of poor weather, the CitySmart team focused more on existing neighborhood events in the second year. For the third year, we decided to not hold any CitySmart-specific events because of the time and planning needed, weather dependence, and low return on investment. We did join, or have information available at, a number of existing neighborhood events, notably Cambridge Discovery days, East Cambridge Business Association movie nights, GreenStreets Walk/Ride days, Boomtown Fest, and the East End House summer block party.

The main focus for year three events was coordinating neighborhood building tabling events. In year two, one event had been held at a building and had a high success rate. This year fourteen tabling events were held at different neighborhood multifamily residential buildings from June through September. A special focus was given to Cambridge Housing Authority residents, providing paratransit and walking information. Typically, CitySmart staff were stationed in the main lobby, with order forms and full information kit supplies. Interested residents were able to fill out an order form and immediately receive their customized information kits. We averaged about 20 kits delivered per 90-minute event. Our greatest success was 51 orders at a building where we partnered with two local restaurants with food samples.

In all, 261 CitySmart information kit orders (31%) came as a result of building tabling with an additional 18 (2%) coming from neighborhood tabling.
Information kit distribution

CitySmart continued our contract with the bicycle delivery service Metro Pedal Power to deliver the kits via tricycle trucks. The kits were packaged in large red reusable grocery tote bags with the CitySmart label. Metro Pedal Power delivered the tote bags to the front door of smaller buildings, and to the lobby of larger complexes. Deliveries were scheduled mostly for the weekends, in the hope of reaching residents who worked standard shifts during the day. If no one was home for the delivery, however, it was left at the door. The high visibility of the tote bags and delivery tricycles served as a reminder to neighbors to turn in their own order forms.

Measurements

There were 833 orders for kits, representing 17% of households. Average household size in East Cambridge (2010 census) is 1.8, indicating that the 833 kits reached approximately 1500 residents.

The requests included 833 basic kits, 741 walking kits, 666 transit kits, 563 bicycling kits, 369 carshare/pool kits, and 207 kids’ kits.

The initial newsletter was mailed to all residential addresses in East Cambridge (approximately 5,000). The follow-up reminder postcard was mailed to all households that had not responded to the initial mailing (approximately 3,500). Email blasts from building management went out to over 800 residents of apartment buildings in East Cambridge announcing our events. They also went out again to announce the end of the program and last chance to order. Additionally 279 orders came from building tabling, 21 requests from referrals, and 38 through flyers and other media. These quantifiable activities translate to 2.1 contacts per household.

As we do not have exact measurements for how many times each poster was viewed, or how many people saw the delivery vehicle, our online email survey provides some useful estimates. The online survey revealed that 53% of respondents saw CitySmart information flyers and 16% remembered seeing information from an email list or blog post. In addition, 35% saw Metro Pedal Power deliveries taking place, 15% saw CitySmart shopping bags being used by others, and 17% reported seeing CitySmart team members at events. One hundred thirty three respondents indicated that they saw CitySmart messaging a total of 312 times, for an average of 2.3 times per household.

...I will definitely be using the map and maybe even going on...rides/taking classes...

Mike – CitySmart Participant
Additional exposure came via partner email newsletters, neighborhood blogs, posters, and business outreach. Comparing the quantifiable outreach such as mailings and handouts with data from the participant survey, it seems reasonable to conclude that the CitySmart pilot met its goal to reach each household with CitySmart messaging an average of 3 times. That our online respondents also recalled a large variety of our outreach tools indicates success in branding the CitySmart program.

Results

To set a base-line mode split, a telephone survey contractor conducted a random survey of East Cambridge residents in late May, 2011. In October 2011, another random telephone survey was conducted to determine any change in mode split. As a share of all trips, drive-alone trips decreased from 28% in the pre-program survey to 24% in the post-program survey. There was a decrease in the overall share of trips by private vehicle (drive-alone and carpool) from 44% to 43% despite an increase in carpooling. The relative change in drive-alone trips (4% of the original 28%) indicates a 14.3% shift away from this less sustainable option. In the post-program survey, there was also a smaller share of respondents (57% as compared to 63% in the pre-program survey) who had used a private vehicle for any of the previous day’s trips.

Walking decreased slightly, from 39% to 36%. Bicycle use was the only data that showed a statistically significant increase from 3% to 6% of trip, with most of the increase coming from weekday work trips. Of other options, transit had an increase, rising from 9% of trips in the pre-program survey to 13% of trips after the program, mainly due to increased usage of bus and subway. The increase in transit is encouraging because it may support one underlying theory to this project: that one barrier to transit use is a lack of information. By providing current copies of all East Cambridge bus routes, subway timetables, simplified GIS transit maps, and commuter rail information to households requesting transit info kits, we may have succeeded in removing that barrier for some residents. The increase is also despite the fact that the neighborhood’s major transit station and transfer hub was closed to subway traffic from May to November, though frequent shuttle service was available. Due to the number of survey respondents and the data point for each mode share the percentage change for transit, walking, and drive alone is unfortunately not statistically significant. However, analysis of specific trips within the data gives us a fuller picture and highlights mode shifts that are statistically significant and are meeting the goals of the program.

This was the first year we asked a specific question regarding carshare. We were unable to get the question into the pre-program survey, but we did add it into the end of our post-program survey. The results show that 20% of all respondents have used a carshare program, with about 12% of those using one weekly. The highest percentage was in regard to a yearly usage (41%). This is encouraging information as it gives us some insight into the current amount of drive-alone trips, of which driving alone in a carshare would be considered. One interesting note on carshare use: approximately 67% of

...Cambridge is always thinking (of) its citizens, and this is another example.

Araceli – CitySmart Participant
respondents would be somewhat or very unlikely to use a carshare car. Since this is a significant part of the survey population, it may be useful to provide specific information about carshare programs and how they work. Especially in regard to residents who may be retired and not using their car daily but still need to go the grocery store once a week.

Given the general improvements and changes in program delivery this year, the results are reassuring. We experienced greater reach this year, with 833 information kits delivered, as compared to 599 in 2009, and 803 in 2010. Marketing was more extensive and creative, focusing on building tabling and connections with local business. This was all accomplished in a shorter timeframe, with fewer follow-up postcards, and the loss of the program supervisor. However, other staff and volunteers stepped up to help successfully complete our final year, exceeding our goal of reducing drive alone trips with a 14.3% reduction.

Mode share details from baseline and follow-up survey data are outlined in the following graph:

**Trip mode by percent of all trip segments**

The data does show improvements, but, critically, the reduction in drive alone trips was within the margin of error of the survey. However, the reduction in walking was as well. Respondents also felt they were driving less than earlier this year, backing up the reported trip mode changes.
Program identity

In the follow-up telephone survey, 65% of respondents recalled reading, seeing, or hearing about the CitySmart program (a significant increase from 44% in year one and 47% in year two). Of those, 98% were able to describe the purpose of the CitySmart program with a good amount of accuracy.

In the online survey of CitySmart participants, 133 people responded to the question “To the best of your knowledge, what is the purpose of the CitySmart program?” All but five responses included transportation and/or “green” themes.

Lessons Learned

- Once again, direct mail was by far our most successful outreach effort, in terms of reach, response, and the effectiveness of the effort. In future years, the budget should continue to include direct mail pieces and postage. The reminder postcards should be sent out earlier than this year (August & September). A July mailing of the postcards would allow more time between the intervention and the follow-up survey for participants to implement changes in their transportation routines. However the postcard mailer as we did it is a very time and effort intensive project and finding ways to streamline the process, while still providing the information, is critical.
- Despite the late start, very few new orders came in during the end of September and beginning of October, which shows that our work this year to promote awareness of the order deadline was successful.
- Following up on year two, residential building tabling events were a critical element of our outreach this year. However it is critical to start planning for an event many months in advance to coordinate with condominium associations and other building-specific events which have the potential to prevent a CitySmart event from happening at the ideal time. Because a majority of apartments/condos turn over on September 1, holding events in May, June, and July, with effort focused on follow-up events near the end of the program, is a good two-step process.
- Food is critical for boosting attendance at events. This was evident with our building tabling events but also for other neighborhood events. High turnout numbers depend on food, and developing relationships with local businesses is a great way to help promote them while attracting more people to an event.
- The CitySmart team was fortunate to have several volunteers available to assist in our third year efforts. They helped with stuffing kits and packets, organizing postcard mailers, and prepping for tabling events.
- Telephone surveys are becoming less reliable. With the discrepancy in age demographics for ownership of landlines and large turnovers in apartments/condos halfway through the program year, a better and more cost effective metric must be developed to capture what is truly going on; email surveys would certainly be a part of that metric.
Conclusion

The first two years of our pilot project were a good learning experience, with a mixture of success and challenges in the results. Several key initial tasks, such as naming and branding the program, contracting with a survey consultant and designing surveys, were completed in Year 1, allowing more time and energy to be put toward outreach and implementation in subsequent years.

With a decrease in drive-alone travel, as indicated by our surveys, modest improvements in more sustainable trip modes, along with much greater awareness of transportation options and their many benefits; this year was certainly a success. Preliminary data from an email follow-up survey also shows that for the previous two years 40% of participants made a change and of those who did, 92% have stayed with that change. This certainly bodes well for continuing the successes this year in encouraging East Cambridge residents to choose more sustainable methods of travel.

We were also able to expand upon and think more creatively about materials, outreach methods, and events. Lessons learned will help us to produce not just a better program into Phase Four but can help with outreach efforts, connections, and data presentation across the Community Development Department. For example, we learned that bringing the CitySmart kits to an apartment building for onsite customization and instant delivery yielded strong results in a short time while also saving on delivery costs. Food is also critical to a successful tabling event, and partnering the events with a local business was very successful. Of all of our outreach methods, most program participants found out about the program from the postcard (49%), newsletter (28%), and flyers in their building (22%). However, 42% of the orders came through the web interface, showcasing the need for a robust infrastructure that can allow people to easily order without mailing something in. The postcards were less expensive to produce and mail than the newsletter; however they were much more time intensive, and doing them in-house pushed the mailroom to the limit of their capability. Designing a postcard to be more easily printed in-house, or producing something more creative and contracting out the printing and mailing is a very good idea, considering the success rate of this method of outreach.

As we develop the program toward integration into existing citywide initiatives, the learning experiences from this year will be critical to maximizing outreach while minimizing expenditures. Connecting with multifamily housing residents of all income levels; developing a better postcard; providing a great online database both for orders as well as packet information; and continuing use of email based surveys will all be critical to broadening the program. Developing a calendar of community events that could be used as tabling and outreach opportunities, as well as a database of partners and program supporters is critically needed to realize outreach goals and implement a successful program. This will continue to inform and improve outreach initiatives from the Community Development Department, as well as other City departments, as we all work to make Cambridge an even better place to work and live.

I think this was a great program and I'd like to see it expanded and improved!
Danielle – CitySmart participant
Appendix A

Year Three Project Timeline

January – March 2011
- Program set-up
- Intern hiring process
- Initial contacts with potential partner agencies

April - May 2011
- Intern hired and trained
- Drafted, tested and completed baseline survey
- Updated newsletter articles and outreach materials
- Contacted local businesses to invite participation
- Continued work with partner agencies
- Developed new materials for carpool/carshare kit

June 2011
- Printed and mailed newsletter/order form
- Visited three apartment buildings for tabling events
- Began info kit delivery

July 2011
- Held five building tabling events
- Presented program at East Cambridge Business monthly meeting.
- Attended or provided information to two additional neighborhood events
- Held five helmet fittings
- Continued to receive and process requests for information kit delivery

August 2011
- Began mailing reminder postcards near end of month
- Held five helmet fittings
- Attended one building tabling event
- Continued information kit deliveries
- Program responsibilities officially switched from Stephanie Anderberg to the Outreach Coordinator, John Pelletier
September 2011

- Attended five building tabling events
- Edited follow-up survey for inclusion of carshare information
- Gave program update to the East Cambridge Business Association
- Connected with The Kendall Square Association on tabling partners and discounts
- Continued information kit deliveries

October 2011

- Completed information kit deliveries
- Consultant began follow-up survey
- Developed, edited, and deployed email survey to program participants

November 2011

- Completed follow-up survey and received survey results
- Closed email survey with a 30% response rate
- Began compiling graphs for data presentation of phone and email survey
- Began notes and discussion for possible continuation of program

December 2011

- Drafted and edited year three report
- Developed and presented to department on year three data
- Helped finalize report on year four opportunities

January 2012

- Published year three report
- Final meeting with East Cambridge Business Association on program success and future development.