

## 2. Generators

The JPA seeks to revise its current solid waste management strategy to effect the maximum feasible reduction in landfill disposal. The JPA and recycling staff in Victorville and Apple Valley expressed concerns about the significant quantities of recyclable materials currently collected in loads of waste from residential and non-residential waste generators as well as excess levels of waste in loads of recyclables. Clearly, the behaviors, attitudes and opinions of waste generators will have a significant bearing on the success of the JPA's strategy.

In order to obtain an in-depth understanding of generators' current perceptions, attitudes and behavior with respect to recycling and waste reduction, the GBB Team conducted the following research activities designed to obtain input from key stakeholders: residents, business leaders, elected officials, environmental leaders, school representatives, and waste industry officials:

- ❑ A focus group with 11 residents of Apple Valley and Victorville, October 21, 2008
- ❑ A focus group with solid waste managers from seven Apple Valley and Victorville businesses and organizations, October 22, 2008
- ❑ Stakeholder interviews with 11 opinion leaders from Apple Valley and Victorville, including two city council members, a business leader, a property manager for a large development, two chamber of commerce directors, one environmental leader, three waste industry officials and one school representative, October 20-23, 2008
- ❑ Review of public education and outreach materials, including websites, from Apple Valley, Victorville and the JPA
- ❑ Interviews with solid waste managers in both jurisdictions

This chapter of the report describes in greater detail our research activities, findings and recommendations. It should be noted that this research, which was exploratory and qualitative in nature, sought to develop insight and direction, rather than obtain quantitatively precise measures. For this reason, the research findings must be considered in a qualitative frame of reference. The reader is reminded that this report is intended to clarify issues and suggest recommendations for the JPA and communities of Victorville and Apple Valley to consider. The data presented here cannot be projected to a universe of similar respondents but they do provide a great deal of marketing insight and direction.

### 2.1 Focus Group Research: Residents

The GBB Team conducted one two-hour focus group with residents of Apple Valley and Victorville, held at the Victorville Department of Public Works conference room on Tuesday, October 21, 2008. The proceedings were audio taped.

Participants were 11 residents, five from Apple Valley and six from Victorville. All were residents who receive curbside trash and recycling services from Burrtec Waste Industries. The group was diverse with respect to age, gender and ethnicity:

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**Victorville Participants:** white female, 60-65; white female, 30-39; Hispanic female, 30-39; white female, 40-49; Hispanic male, 40-49; and African American male, 40-49.

**Apple Valley Participants:** white female, 50-59; white male, 30-39; white female, 40-49; white female 40-49; and Hispanic male, 50-59.

Diana McKeen (Municipal Services Manager, Apple Valley) and Dana Armstrong (Solid Waste Manager, Victorville) recruited participants using a screener guide provided by GBB. Mary-Jane Atwater of GBB moderated the group. Dana Armstrong provided extensive logistical support, including follow-up confirmation with respondents who agreed to participate, arrangements for the research facility, lunch for participants, and supplies.

This focus group with residents was designed to answer the following research questions:

- Opinions about current recycling services, including level of satisfaction
- Assessment of waste generation: What categories of materials does their household dispose of
- General opinions about recycling
  - Benefits and drawbacks
  - Are they recycling? If yes, why? If not, why not?
  - Perceived and actual barriers to recycling participation
  - Perceived and actual barriers to correct sorting of recyclables
  - What motivates them and others to recycle
- Awareness of and knowledge about program requirements in Apple Valley and Victorville curbside recycling collection programs
  - Knowledge about what is acceptable and not acceptable for recycling
  - Knowledge about proper sorting and set out practices
- Awareness of HHW disposal availability; barriers to proper HHW disposal
- Awareness of nontoxic alternatives to toxic household products
- Awareness of reuse options in the community
- Awareness of and participation in backyard composting and grass mulching
- Opinions about current recycling outreach materials and activities (e.g., Re-use, Recycle and Compost Day, website, Newsletter, Shred-Fest, Master Composter, etc.)
  - What messages resonate (what will speak to them)
  - Preferred methods to receive information
  - Awareness of where they can go to get information
- Suggestions for program and service improvements

### 2.1.1 Focus Group Findings: Residents

What follows are the highlights from the focus group discussion. An in-depth analysis, complete with selected respondent verbatims, can be found in Appendix A, Report: Residents Focus Group, Section III – Key Findings.

#### Discussion Highlights:

- Respondents are for the most part satisfied with their recycling services but wish they could recycle more materials at the curb, including grass and yard trimmings.
- Respondents, who are all consistent or regular recyclers either at the curb or at the buy-back centers, say they recycle to be less wasteful and contribute to the health of the planet.
- Respondents tended to characterize non-recyclers and those who put contaminants in the blue cart as “lazy,” but noted their own confusion about what can and can’t be recycled.
- While most residents correctly identify aluminum cans, cardboard/cardboard boxes, cereal boxes, glass bottles and jars, metal/tin cans, newspapers, plastic bottles and white paper as materials that can be recycled at the curb, they are confused about a range of other materials that in fact could be recycled (e.g., aerosol cans, aluminum foil, catalogs, colored and glossy paper, file folders, junk mail, phone books, and wrapping paper, among others). Several thought they could recycle plastic bags.
- Respondents regard the chief benefits of recycling to be landfill reduction and the money from California Refund Value (CRV) recycling redemption. Clutter in the home and the effort required to sort and rinse recyclables were mentioned as key drawbacks.
- While respondents find the blue cart commingled recycling programs in Apple Valley and Victorville to be convenient, they agreed that separate in-home recycling containers for sorting CRV containers from other recyclables would make recycling easier for residents who take CRV containers to the buy-back center. Space was not mentioned as a significant issue.
- To motivate them to recycle more, respondents cite the need to see results and know how recycling is affecting them. Because many residents take CRV beverage containers to the buy-back centers, they would also like the activity of sorting recyclables to be more convenient, especially in their homes. In addition, they would like greater clarification about what materials are and are not recyclable – and the reasons why some materials can’t be recycled.
- To reduce contamination in blue cart recycling loads, respondents believe that there needs to be greater community awareness about what is acceptable and not acceptable for recycling. They also believe that some people would respond to financial incentives or recycled properly if fined for contaminating loads.

- Respondents are aware of the need to reduce waste but beyond using reusable bags and trying to purchase products with minimal packaging, most respondents are not engaged in activities that would significantly reduce waste (including grasscycling and home composting). Respondents had minimal knowledge and many questions about grasscycling and home composting.
- Respondents are regular users of the HHW drop-off facilities, but would like to see expanded hours and greater clarity on what can and cannot be brought to the HHW recycling events. They also have questions about the effectiveness and cost of non-toxic alternatives to common household products that can be hazardous.
- Respondents favor public education materials that are brief with lists and bullets, and with photos or pictures. They want to know what to do and why, including what results accrue from their efforts. Materials that can be posted for easy reference, such as the Victorville magnet, generated enthusiastic support. Respondents favor online information but need to be told where to look for it, but they caution that some members of the community do not use websites.
- Public information that arrives in the home, either as a door hanger, direct mail piece or newspaper polybag insert, is favored as long as it is eye-catching. Residents were unaware of the large recycling section in the Victor Valley phone book.
- Respondents want to see recycling offered throughout the community: at gyms, supermarkets, restaurants, parks, etc.

## 2.2 Focus Group Research: Businesses and Organizations

In addition to the focus group with residents, the GBB Team conducted one two-hour focus group with business and property managers, held at the Victorville Department of Public Works conference room on Wednesday, October 22, 2008. The proceedings were audio taped.

Participants were seven business managers who handle solid waste decisions in their organizations: three from Apple Valley and four from Victorville. They represented a hospital, water company, the Apple Valley fire department, church, an apartment complex, and extended-stay hotel, and a paint manufacturer

Diana McKeen (Municipal Services Manager, Apple Valley) and Dana Armstrong (Solid Waste Manager, Victorville) recruited participants using a screener guide provided by GBB. Mary-Jane Atwater of GBB moderated the group. Dana Armstrong provided extensive logistical support, including phone calls to participants to confirm attendance, arrangements for the research facility, lunch for participants, and supplies. Diana McKeen assisted with phone calls to participants as well.

This focus group with solid waste managers was designed to answer the following research questions:

- Assessment of waste generation: What categories of materials do their organizations dispose of?

- Perceptions about the costs and benefits of recycling in their organizations
- Perceived and actual barriers to setting up a commercial recycling program
- What would motivate them to recycle – and recycle more?
- Knowledge about setting up a recycling program in the workplace; additional information needed
  - How to maximize recovery for recycling and minimize waste; what materials can be recycled
  - Commercial recycling best practices
  - How to work with a service provider
  - What to do with hazardous materials
- Awareness about additional waste reduction best practices in the workplace
- Opinions about buying recycled products
- Opinions about current recycling outreach materials for the commercial and nonprofit sector (e.g., Window decal)
  - Messages that resonate (what speaks to them)
  - Preferred methods to receive information
  - Awareness of where they can go to get information
- Suggestions for program and service improvements

### **2.2.1 Focus Group Findings: Businesses and Organizations**

What follows are the highlights from the focus group discussion. An in-depth analysis, complete with selected respondent verbatims, can be found in Appendix B, Report: Business Managers Focus Group, Section III – Key Findings.

#### **Discussion Highlights:**

- Respondents perceive the key benefit of recycling to be environmental (reduces waste going to the landfill and conserves resources), but when it comes to the benefits for their organizations, they highlighted economic factors, including a reduction in trash disposal fees and revenue generation. They believe many consumers today expect businesses to be “green.”
- Respondents appear to discount (and even reject) the link between recycling and greenhouse gas emissions reduction.
- When it comes to the drawbacks of recycling, respondents highlighted space constraints, the effort required, the need to train staff, and the challenge of securing staff and cleaning service cooperation. Some respondents mentioned damage to the concrete pads when dumpsters are replaced/dropped after collection by trucks with hydraulic lifts.
- Respondents expressed a desire to recycle green waste.

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- All respondents but one said they have recycling programs in their organizations. [Note: the one respondent who said she has no program was evidently not aware that her organization does have a program, as confirmed by the City solid waste manager.] They had encountered a number of barriers in setting up their programs, including finding space to put in-office recycling containers and the recycling dumpster, obtaining buy-in from staff, and the lack of cooperation by cleaning staff who throw previously separated recyclables and trash together.
- Apartment managers face special challenges with their residents, many of whom are transients and do not heed recycling instructions.
- Respondents expressed the need for more outlets to recycle batteries, electronics and other potentially hazardous but recyclable products. They would like small businesses to be able to participate in the Town and City HHW events.
- City staff were very helpful in setting up a highly successful recycling program in one respondent's company, enabling that business to save \$6,000 monthly on disposal costs.
- Respondents expressed the opinion that the recycling symbol is often used on products that can't be recycled and this causes confusion.
- Cardboard/cardboard boxes, paper and paper products, containers (plastic, aluminum and metal), hazardous materials (batteries and electronics) and aerosol cans were among the top generated materials in respondents' organizations. Green waste was also mentioned as prevalent.
- Respondents are aware of what can be recycled but would like more options than they currently have – or at least guidance about where to take recyclables that can't go in the white dumpster.
- Respondents suggested that the most difficult phases in setting up a recycling program were designing the program, minimizing contamination, monitoring progress and evaluating the costs and benefits.
- Respondents who had used City assistance to set up their programs were pleased; others want more help, information and assistance, including locked bins for dumpsters and drop-off centers for bulky items.
- Respondents are aware of some opportunities to reduce waste, and they are taking steps to reduce paper waste.
- Respondents did not have overwhelmingly positive impressions of the public education materials they reviewed. They prefer simple, basic instructional materials, with photos and minimal text. They also wondered why the recycling and trash dumpsters don't have decals with information about what can and cannot be placed in them.
- Most respondents seek recycling information by calling the City or Town, and they welcome personalized assistance.

- Website use was limited among this group.
- Respondents suggested a targeted approach to information dissemination, with information specific to the scope and level of the organization's current recycling program.
- Several respondents objected to the state passing recycling mandates without funding.

## 2.3 Stakeholder Interviews

In addition to conducting the focus groups, the GBB Team representative Mary-Jane Atwater conducted a series of in-depth interviews with key stakeholders and opinion leaders in Apple Valley and Victorville, October 20-23, 2008. The purpose of the interviews was to determine stakeholders' opinions about current trash and recycling services as well as about directions for the future, including the implementation of a mandatory recycling ordinance. Ms. Atwater interviewed 11 individuals: two elected officials, two chamber of commerce leaders in Apple Valley and Victorville, the high school district superintendent, a local business leader, a Sierra Club leader, the general manager of a homeowners association, and three officials of Burrtec Waste Industries. Recycling managers in Victorville and Apple Valley selected the following stakeholders and scheduled the interviews:

**Peter Allan**, Apple Valley Council Member, attorney and an instructor at Victor Valley Community College

**Bill Arlington**, Division Manager, AVCO Disposal – Victorville Disposal, Burrtec Waste Industries, Inc.

**Deborah Baker**, General Manager, Solera at Apple Valley Community Association

**Estelle Delgado**, Sierra Club, Mojave Group, San Gorgonio Chapter

**Maribel Hernandez**, Customer Service Manager, AVCO Disposal – Victorville Disposal, Burrtec Waste Industries, Inc.

**Ed Hunt**, Operations Manager, Victor Valley Material Recovery Facility

**Janice Moore**, President and CEO, Apple Valley Chamber of Commerce

Also joining the interview/meeting at the request of Ms. Moore:

**Bill Pettus**, Manager, KVFG 103.1 FM (CBS Radio)

**Virgil and Almeda Murphy**, Office Manager/Real Estate Agent [Virgil], Ambassador program [Almeda]

**Mike Rothschild**, Victorville City Council Member, member of JPA board, former mayor and math teacher

**Michele Spears**, President, CEO, Victorville Chamber of Commerce

**Bob Tinsley**, President, B.R. Tinsley, Inc. (Real Estate & Construction, Heating & Air Conditioning)

**Julian Weaver**, Superintendent, Victor Valley Union High School District

### 2.3.1 Stakeholder Comments and General Themes

The following general comments and themes emerged from individual interviews with key stakeholders in Victorville and Apple Valley:

#### 2.3.1.1 Residential Recycling Services

- Respondents remarked that both Victorville and Apple Valley recycling programs are well run, but they could be better with additional public information, especially about the economics of recycling and evidence of cost and energy savings. “Is the cost of separation at the MRF worth the end result?” “People like to see what happens to the materials they recycle and are interested in facts about energy savings. Everyone wants to see the results of their recycling efforts.” “Show people the recyclables ending up in the trash and what their value is.”
- The City and Town’s HHW collection events and Clean-up Days are valued programs, but the HHW program should be available every Saturday. One respondent said she thought many people don’t know about the HHW collection events.
- There was a lack of awareness among several respondents of two current programs: the buy-back program at the MRF and the reuse program.
- Several respondents expressed the wish/need for a green waste recycling program. “The time has come to do something about this. People [restaurants, retailers, residents] don’t know what to do with this material and it’s ending up in the landfill.”
- Some residents don’t have the motivation to recycle and don’t care. “We need to instill in them a reason to care.” “People don’t feel connected to the community and they don’t care.” “We need to convince people that recycling is important by stressing cost savings in a concrete way...Pocketbook issues are important.”
- Focusing on the link between recycling and GHG reductions should not be the basis for promoting recycling. People don’t understand the linkage and some are skeptical that GHGs cause climate change.
- Public education, which is much better than it was 10 years ago, needs to be consistent and regular, with rewards as an incentive. “Residents...have no incentive to recycle.” “The important thing is to make recycling fun.” One respondent suggested appealing to residents that the area could be a recycling leader, but she wasn’t sure if this appeal would resonate.
- Primary contamination from residents is food waste, but also wet paper, plastic bags and diapers.

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- It should be possible to identify the collection routes with the most contamination and target those residents for recycling education and attention. Code enforcement personnel in Victorville are helpful in dealing with repeat violators. Some respondents suggested a fine for those who repeatedly put contaminants in the recycling cart [not possible without a mandatory ordinance].
- Several respondents remarked that recycling is good public policy but specific recovery for recycling goals should not be mandated by the state or localities.
- Trash dumpsters allowed on residential properties are a disincentive for recycling, but the recycling managers in Apple Valley and Victorville are targeting these residents for recycling promotion.
- The one homeowners association in Apple Valley is open to promoting recycling among its residents through its newsletter, website, and speakers.

### 2.3.1.2 Commercial Recycling

- Recycling managers in Apple Valley and Victorville are doing a great job reaching out to businesses.
- Businesses need more encouragement to recycle, especially property managers.
- Businesses need assistance to dispose of electronics, office furniture, white goods and hazardous waste. "Many businesses have nowhere to turn to get rid of these items."
- The best way to motivate businesses to recycle is to show concrete cost savings. "Show how going green makes good business sense." "It can cut disposal costs in half." City should put a notice about cost savings in the trash bills.
- It is also important to focus on convenience. "Lots of businesses here recycle but the real problem is the employees who don't care." "Make it easy." "Make recycling fun."
- Property managers must be a marketing target, but small businesses can "push" the property managers to launch recycling programs.
- Respondents did not stress space considerations as a barrier to recycling.
- Both chambers of commerce in Apple Valley and Victorville are eager to help promote recycling through newsletter articles, e-mail blasts, tips on their website and survey research to determine how many member businesses are actually recycling.
- Respondents said the City and Town should provide businesses with in-office recycling containers for office paper and commingled recyclables. [Burrtec will provide in-office containers upon request, as well as the white recycling dumpsters.]

- Privacy issues affect paper recycling. While there are private contractors who offer shredding service, one respondent wishes the City would offer a shredding program for small businesses.
- One suggestion: Encourage small businesses to work with nonprofits to develop a revenue-producing collection program, which would pick up recyclables from small businesses. [Note: With volatile markets for recyclables, this option may not be attractive to many nonprofits.]
- The area's largest employers need to take the lead in recycling.
- Burrtec's recycling dumpsters are not well marked and there are no specific instructions about what is acceptable and not acceptable. Several respondents thought that such instructional signage would be useful.
- The primary contamination from businesses (and residents) is plastic bags and packing material.
- Burrtec provides new customers with a flyer that outlines what can and cannot be recycled.
- Recycling businesses should be encouraged (economic development office, policies).

#### **2.3.1.3 Multi-family Recycling**

- Apartment residents tend to be young and transient, making recycling in multi-family properties a difficult challenge.
- Burrtec representatives have worked with the recycling managers to distribute recycling information to property managers, and they have assisted a "significant number" with bins, barrels and dumpsters.
- To get multi-family residents to recycle: "Hit them in their pocketbook," said one respondent.

#### **2.3.1.4 School Recycling**

- Victorville's efforts to start a recycling program (primarily for paper and plastic) in the high school district have been a huge success.
- The City's solid waste manager was instrumental in starting this program and provided significant assistance.

#### **2.3.1.5 C&D Recycling**

- Burrtec does a good job diverting C&D and wood waste that comes to the landfill; however, many construction companies are not aware of what can be recycled. A special flyer might help inform these companies about recycling opportunities for C&D.

- Explore ways to recycle C&D materials. Recycled concrete and asphalt can be used in roadbeds. Wood waste and gypsum should not go to the landfill. “Why can’t C&D be used as feedstock for the three cement plants in the high desert?”
- One respondent would favor a C&D facility at the MRF as long as it is economically viable and sustainable. Two others thought considerable material could be diverted at a C&D facility but expressed concerns about its sustainability.

#### **2.3.1.6 Hazardous Wastes**

- Respondents applauded the HHW events for residents, but businesses have difficulty disposing of hazardous materials.
- At present, if hazardous materials are found in the trash or recycling carts, Burrtec’s customer service representative calls the customer and tells them about proper disposal.
- One suggestion: open a “one-stop-shop” at the landfill where residents can recycle sharps, batteries, HHW, electronics, fluorescent lights, etc.

#### **2.3.1.7 Composting**

- Businesses should receive incentives for composting their food and vegetative waste.
- There is limited community awareness about home composting, even though many residents have grass and yard clippings/debris.
- Backyard composting is a problem if residents don’t garden and can’t use the compost.

#### **2.3.1.8 Mandatory Ordinance**

Respondents were asked for their opinions about a mandatory ordinance for residential and commercial recycling. Opinions were mixed.

- One respondent said an ordinance sounds “reasonable” but the issue would need to be carefully weighed.
- “A mandatory ordinance would be good,” said another respondent.
- Another respondent favored such an ordinance for both residents and businesses, with a warning after the first violation, fines for contamination after the second violation, and doubling of trash fees after the third violation.
- Another respondent said it would be an “unenforceable nightmare,” costly to enforce.
- An ordinance would be a burden on the commercial property owner.

- Commercial recycling ordinance: In order for an ordinance to be effective, it cannot be a surprise for businesses; a marketing campaign must demonstrate cost savings and a dumpster would need to be provided on-site.
- Try out such a requirement on a pilot basis. The Victorville Chamber would be in a position to help out.
- Illegal dumping and dumpster diving would need to be addressed, perhaps with a secure enclosure.

#### **2.3.1.9 Public Education**

"It's all about education," said one respondent. The following are suggestions from respondents:

- Develop a special flyer to inform construction companies about recycling opportunities for C&D.
- Put a notice about cost savings in commercial establishments' trash bills.
- Stress cost savings and pocketbook issues in educational outreach.
- Work with the chambers of commerce to promote recycling to their members.
- Post instructional signage on trash and recycling dumpsters (at commercial properties and multi-family properties) in order to reduce contamination and educate residents and businesses.
- Media market is fragmented so many communications vehicles need to be used.

#### **2.3.1.10 Future of Solid Waste Management**

- The private sector should assist in solving solid waste challenges.
- There should be tax incentives to help develop recycling businesses.
- Area will continue to grow after the current recession ends. "Will the area be prepared for the increase in solid waste that accompanies new growth?" "We need to be ahead of the curve!"
- Over the short-term, implement green waste recycling.
- Over the long-term, pass an ordinance forbidding plastic bags and packaging; start educating children early; and consider "pay as you throw."
- The current landfill's life is limited and can't be sustained for more than 20 years. A key issue going forward is the availability of recycling facilities.
- Make conservation profitable for residents; reward those who conserve and assess a charge on those who are wasteful.
- There has been talk of building a WTE facility.

## 2.4 Review of Public Education Materials

Recycling managers in Victorville and Apple Valley provided the GBB Team with a representative sample of public education materials. We reviewed the following:

### Apple Valley

- Disposal and Recycling Services brochure
- Household Hazardous Waste Services brochure
- Tire Amnesty Day: Waste Tire Drop-off brochure
- Why Bag the Grass? Brochure
- Household Hazardous Waste Disposal flyer
- Recycle Used Oil flyer
- Can I Recycle It or Not? Flyers (English and Spanish)

### Victorville

- Welcome to the City of Victorville flyer for new residents
- What Goes Where? flyer (English and Spanish)
- Recycle 1<sup>st</sup> at the MRF! Flyer (English and Spanish – Apple Valley, Victorville and Burrtec Industries)
- Victor Valley Builder's and Contractor's Guide to Recycling and Reuse
- Join the City of Victorville's Curbside Recycling Program. Featuring Blue Bin brochure (English and Spanish)
- Business Community Recycling Partnership brochure
- Victor Valley Buy Back Recycling Centers colored flyer
- City of Victorville Business Recycling Program brochure
- Composting: Nature's Way to Recycle brochure
- Attention Victorville Businesses & Organizations: Recycle your "CRV" Bottles and Cans
- Where to Get Rid of Your Stuff donation guide
- Residential Trash and Recycling Collection Information
- All About the MRF

- Household Hazardous Waste Collection Center Is Now Accepting TV's, Computers, Microwaves, Stereos, and Fluorescent Light Bulbs flyer
- Take Pride in Victorville! flyer

### **JPA Materials**

- Newsletters – Victor Valley edition
- Looking for a few good GARDENERS! flyer

In addition, we reviewed the websites of the JPA ([www.urecycle.org](http://www.urecycle.org)), Victorville ([www.victorvillerecycles.com](http://www.victorvillerecycles.com)) and Apple Valley (<http://www.applevalley.org/Index.aspx?page=222>).

## **2.4.1 Review Findings of Public Education Materials**

Both Victorville and Apple Valley have developed a wide range of public education materials to describe their solid waste and recycling programs, and promote public participation. Many of these materials are produced inexpensively and with such software programs as MS Publisher. Several of the materials are printed in Spanish or are bilingual English and Spanish. Some of these materials (e.g., Victorville Welcome flyer) are distributed to new customers/residents, while others are distributed in the Town Hall/City Hall, at events, through schools and during meetings with businesses and property managers.

### **2.4.1.1 Public Education Budgets**

Victorville's solid waste manager receives a California Department of Conservation (DOC) grant of \$25,000 each year, which she considered a "gift" that enables her to supplement her advertising budget for recycling and waste reduction promotion. DOC grants are awarded to localities using funds from unredeemed deposits on beverage containers (CRV program). While the grants are intended to promote CRV recycling, the manager has wide latitude in how the funds are used. She has used DOC grants to provide businesses with recycling containers, and she uses the funds to produce brochures and buy giveaways for kids as well as cable and movie ads, although she doubts whether the movie ads were effective. When we met, she was planning to bring recycling magician Timothy Wink to Victorville for the Nov. 3-7 Victorville Recycles Week.

Apple Valley also receives about \$17,000 in DOC grant funds but they are generally not available for public education materials. The current grant is being used to purchase recycled-content play equipment for a park.

Both Apple Valley and Victorville spend approximately \$ .51 and \$ 1.74, respectively, per household/residential trash account per year to promote recycling and waste reduction. The difference is largely due to the DOC funds that Victorville is able to use for public outreach. The general rule of thumb is that public education expenditures should be \$1 per household for programs that are in a "maintenance mode" – that is, programs that have no new elements but where the community wants to maintain interest and participation at the current levels. The recommended expenditure rises to about \$3 per household for programs introducing new services and public education campaigns.

**Table 2-1 – Public Education Costs**

<b>Funding Source</b>	<b>Apple Valley Residential Trash Accounts: 21,484</b>	<b>Victorville Residential Trash Accounts: 26,342</b>
DOC Grant	\$17,000 (but not used for public education 2008-09)	\$26,899 (2009)
Landfill Mitigation		\$16,000 (2009)
Recycling/Cost	Printing \$2,000 Public Information \$5,000 Misc. \$4,000	\$3,000 (2009)
Total	\$11,000	\$45,899
Amt./Household	\$.51	\$ 1.74

**2.4.1.2 Comments on Printed Public Education Materials**

While the public education materials we reviewed are comprehensive in covering the various components of the Victorville and Apple Valley’s recycling, trash collection and waste reduction programs, we make the following observations:

- The materials are not branded in a way that clearly identifies them with as public education for solid waste and recycling. There is no consistent color and graphic design in the materials in either jurisdiction. For example, the Victorville Recycles logo appears on some outreach materials but not on others. The Apple Valley Town logo appears on some materials and not on others, and the Town logo does not convey recycling or waste reduction. The fonts used vary considerably, and flyers are various colors (pink, blue, green, etc.).
- There appears to be no consistent messaging across public outreach platforms: print or web. The materials provide information but do not contain succinct messages or a campaign slogan carried across all outreach.
- Printed materials are not printed on recycled paper – or if they are, it is not noted.
- The urls for Town and City recycling websites do not appear on most printed outreach materials.
- Very few of the printed materials have a date of publication listed.
- Many of the information materials are text heavy and do not make optimal use of bullets and photos or graphics to engage the reader and make the text easier to read.
- Although Victorville and Apple Valley have very similar programs, the materials have a different “look and feel” in each community. Perhaps because Victorville has a larger budget for public education, due in large part to the DOC grants, some of its outreach materials are professionally designed and printed on glossy paper. Apple Valley materials make use of in-house design

software, which is a good use of resources, but again, there is a general lack of branding through color, font and graphic design.

- The JPA Newsletter is a great resource, and its professional design invites and engages the reader. However, it could benefit from tighter copy (fewer long paragraphs) and more photos of actual residents at the activities it promotes.

#### 2.4.1.3 Comments on Websites

Victorville and Apple Valley each have recycling and waste reduction information on their websites:

Victorville: [www.victorvillerecycles.com](http://www.victorvillerecycles.com). These recycling pages were recently revamped with a main page that contains photos and a link to sub-pages with information about trash disposal, recycling, and household hazardous waste programs. A link to the JPA website is provided on the (bottom of the) page the viewer is directed to via the bullet Curbside Recycling Program on the "Victorville Recycles" page. Information about grass mulching and composting was listed as "coming soon." The sub-pages contain few photos.

Apple Valley: <http://www.applevalley.org/Index.aspx?page=211>. This page contains links to information about recycling, trash collection, the materials recovery facility, yard waste, composting, Master Composter program, greenhouse gas emissions and household hazardous waste. There is also a link to information about the JPA but the link to the JPA site needs highlighting. The sub-pages contain instructions and information, largely in paragraphs with few photos.

Victorville and Apple Valley were unable to provide tracking data for their websites.

In addition, the JPA's website, [www.urecycle.org](http://www.urecycle.org), contains information about recycling and waste reduction, geared for residents and businesses – with links to recycling programs in Apple Valley and Victorville. Much of the information on this website is easy to access with links to sub-pages.

We make the following observations:

- The JPA website has an easy-to-remember url: [www.urecycle.org](http://www.urecycle.org). But this url is not included in the printed public information from Victorville and Apple Valley.
- The Victorville website has an easy-to-remember url: [www.victorvillerecycles.com](http://www.victorvillerecycles.com). The Victorville recycling home page is easy to navigate and the photos are engaging; however, once on the sub-pages there are few photos or graphics.
- The Apple Valley recycling pages are difficult to find on the Town's website unless the visitor first clicks on Solid Waste and Trash under Government Services. Once on the Solid Waste page, there are links to recycling and waste reduction information, but the visitor needs to get there first, which may deter some visitors.

- Much of the information on the Victorville and Apple Valley websites is text heavy and makes little use of bullets, which are more reader-friendly than paragraphs of text.
- Victorville, Apple Valley and JPA sites contain few photos to illustrate the content and show Town and City residents engaged in recycling and waste reduction.

## 2.5 Recommendations

The following are recommendations for improving residential recycling. These recommendations result from the two focus groups, the stakeholder interviews, discussions with recycling managers from Victorville and Apple Valley, and a review of the City and Town's public education materials. Cognizant of limited resources for recycling promotion, we suggest a number of strategies that could be implemented for low or no cost. We have indicated ballpark estimated budgets for these recommendations and conclude with a section on evaluation to determine the effectiveness of these activities. Our approach relies on a range of strategies because we know that focusing on a single strategy or tactic will not reach the maximum target audience of residents or business/organization customers. For that reason—and for maximum impact, we suggest that these recommendations be implemented in their entirety if at all possible.

### 2.5.1 Residential Recycling Recommendations

#### 1. **Re-energize recycling with a “back to basics” public information campaign that promotes blue cart recycling and clears up confusion.**

There is a need to re-energize recycling in both Victorville and Apple Valley! Despite the tireless work and best efforts of the solid waste managers in Victorville and Apple Valley, who are making best use of limited resources, residents appear to be confused about the materials that can and cannot be recycled in their blue carts. While there is a general perception that contamination is due to some “lazy” residents who don't care, even consistent recyclers appear to be unclear about which materials go in the blue cart. Since JPA communities are diverse with respect to income and education, a back to basics public information needs to be broadly targeted and tightly focused on how to recycle properly in order to resonate with the entire community.

#### Suggested Strategies:

- Launch a school contest to create a name for the blue cart and a campaign slogan, to be used in the campaign.
- Develop a “brand” for all public education and outreach materials, to include consistent design elements (e.g., fonts, colors, etc.), use of slogan and logos, and messaging. If budget does not permit contracting with a professional designer, explore working with a graphic design class at Victor Valley Community College.
- Develop a limited number of widely distributed, high-impact instructional materials that residents will retain for reference:

- Distribute a branded refrigerator magnet or door hanger with magnet to each customer home, with photos and basic information about recycling services – and links to the JPA website (also Apple Valley and Victorville websites) for more information. The Victorville magnet is a good model.
  - Distribute a sticker or label for each blue cart that uses photos (and a few basic instructions) to portray what materials should and should not be put in the cart. Burrtec collectors could affix the stickers during collection.
- Work with the media. Explore partnerships with the Daily Press, Pennysaver and other media to distribute/air recycling information or public service ads. The challenge will be to break through the clutter with messages that resonate with residents. In a 2005 survey by Yankelovich Partners, two thirds of respondents said they feel “constantly bombarded” by ads, and 59 percent said the ads they see have little or no relevance to them.<sup>1</sup> Featuring local residents in print ads is likely to resonate better with residents than stock photos. In all advertising, include the campaign slogan and consistent graphic look of the new “brand.” Consider creating a series of ads, each dealing with an aspect of recycling and waste reduction.
  - On an annual or semi-annual basis, let the Victor Valley community know how much money is saved by recycling as well as the tons diverted. Issue a press release, write an op ed, arrange for a billboard PSA or print ad, or explore other avenues to convey the results of residents’ efforts. Let them see the results of their efforts.
  - Create a blue cart mascot for parades and community events. A business sponsor could be recruited to cover the costs.
- 2. Coordinate recycling public education among member jurisdictions.** Apple Valley and Victorville each have their own public education materials. Explore how the two jurisdictions (and perhaps other jurisdictions) might achieve economies of scale by combining forces on elements of a new branded campaign that will re-energize recycling. Brand this program so it is easily recognized in both communities, since many people live in Apple Valley but work in Victorville and vice versa. Seek out printers who will print materials for a discounted rate.
- 3. Print all outreach on recycled paper or materials.** It is important for some residents to close the loop on recycling and see that the materials they place in the blue cart is actually recycled. Printing all outreach on recycled paper, and prominently noting this fact, is essential.
- 4. Make recycling easier and more convenient with in-home containers.** Because many residents take CRV containers to the buy-back centers, offer residents in-home containers to sort those containers from other commingled recyclables. DOC funds or sponsor funds could be used to purchase these containers. When in-home containers are distributed, attach a label or sticker to each container showing what can and cannot be recycled in the CRV and blue cart recycling programs.

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<sup>1</sup> David H. Freedman, “The Future of Advertising is Here,” INC Magazine, August 2005. [www.inc.com](http://www.inc.com)

- 5. Update the JPA website; add photos and perhaps a blog.** The JPA website contains information about recycling for residents and businesses (with an easy-to-remember url) with links to member jurisdictions' recycling pages. Once updated and expanded with additional information about recycling (including the campaign slogan), this website could be the key portal for recycling information and should be a key element of the back to basics campaign described above. The website should add actual photos of recycling in member jurisdictions as well as the ability for visitors to e-mail questions and comments. Include the [www.urecycle.org](http://www.urecycle.org) address on all public education outreach in member jurisdictions. The website might also include a blog that contains commentary from the JPA director on recycling activities in member jurisdictions, and "big picture" issues such as federal and state environmental legislative initiatives.
- 6. Update the Victorville and Apple Valley websites; add photos, edit copy; institute tracking.** Apple Valley should explore an easy-to-remember domain name for its recycling program that would re-direct to its solid waste and recycling pages. For example, [www.applevalleyrecycles.org](http://www.applevalleyrecycles.org) is currently available. Both sites could benefit from fine-tuning copy and adding photos of local events and residents, which will give a more personalized face to the websites. It is essential to work with the IT departments to track visitors to the site.
- 7. Promote recycling – and visitors to the JPA website– with an online contest.** Consider collaborating with a business sponsor to reward visitors to the website who correctly answer questions about recycling. For example, the 25<sup>th</sup> respondent to the question who answers correctly would get a prize (Starbucks card for example). Questions are posted monthly or at some other defined interval. If the City and Town would prefer to drive traffic to their recycling pages, this contest could be posted there instead. Again, tracking visitors to the site is essential.
- 8. Include the urls for JPA and member jurisdiction recycling information on all outreach materials.** While not all residents have access to computers, the availability of recycling information needs to be highlighted on all outreach materials.
- 9. Include publication date on all printed materials.** Assuming all materials are branded as we suggest (e.g., a new brochure on HHW has a similar look as the brochure it replaces), a publication date will enable residents to determine what is new information and what is outdated.
- 10. Work with Burrtec to place recycling containers at parks and other public places.** Containers/dumpsters should be clearly marked with a sticker or sign that clearly shows what can and cannot go into the container.
- 11. Work with Burrtec on contamination notification.** Currently, recycling truck drivers will leave notification if there is evident contamination in the blue cart. Notification should include a special recycling flyer with dos and don'ts, especially with respect to placing gravel and sand in recycling and trash carts.
- 12. HHW.** It appears that some residents don't know what can be brought to the Town and City's HHW events. Capturing this material is essential, both to reduce illegal dumping and to promote an environmentally safer community. HHW

collection should be featured on the magnet or door hanger and in flyers at libraries and municipal buildings.

**13. Waste reduction, including grasscycling and home composting.**

Grasscycling and home composting are important ways to reduce waste; however, the focus group respondents appeared generally unaware of how to grasscycle and home compost. Recommendations for promoting these practices are included in Chapter 3.

**14. JPA Newsletter.**

The JPA Newsletter is an excellent resource for residents. Since many residents don't have computers, this newsletter should continue to be available in print form and distributed widely. Explore a one-time distribution to all Apple Valley and Victorville customers in the water or other utility bills or a "back to basics" issue that will promote recycling and waste reduction programs, provide tips, and refer residents to [www.urecycle.org](http://www.urecycle.org) and local members' websites to sign up for future issues, either print or online.

**15. E-mail Lists.**

Lists of customer e-mail addresses would provide the JPA, Victorville and Apple Valley with an easy, cost-free way to communicate with residents about upcoming events (e.g., HHW collection, changes to holiday collections, results of recycling, etc.). An effort should be made to develop (or expand) these lists, through sign-ups at events, advertisements and through the websites.

**2.5.1.1 Cost Estimate**

We are cognizant of the recession that has hit the High Desert as well as other areas of the state and nation. As noted above, the recommended expenditure for maintenance activities is \$1 per household, while \$3/household is recommended for a new campaign. Our proposals fall in the lower end of this range, and with an expenditure of just over \$1 per household in Apple Valley and Victorville, we believe it will be possible to implement many if not all of our recommendations. In the menu of strategies listed above, several activities can be accomplished with few budget implications or with assistance from Burrtec or sponsors:

Back to Basics Public Information Campaign:

Brand development	\$ 1,800 - \$2,500 for a designer
Magnet and flyers	\$.80 per household
Flyer/stickers on blue carts	\$.05 per household
Advertising	\$.10 per household

Assume sponsors can be recruited to cover JPA newsletter, mascot, containers in parks, CRV containers, etc.

**2.5.1.2 Evaluation**

Campaign evaluation is essential to determine the effectiveness of outreach dollars spent. Short of an expensive survey (telephone or mail) to determine awareness of recycling both before and after a campaign intervention, what tools can the JPA, Apple Valley and Victorville use? Fortunately, there are a number of inexpensive tools, including:

- Tracking website visitors. Did the number of visitors increase following distribution of a magnet or door hanger with the url for more information? Did an online contest draw visitors to the website? It is important to work with IT departments to ensure that the Town and City have the ability to track visitors to individual pages, amount of time spent on the site and on specific pages.
- Online surveys. While we are aware that many people in Apple Valley and Victorville may not use computers regularly at home, online surveys are still a useful and inexpensive tool. SurveyMonkey.com and Zoomerang.com provide free or very low cost survey tools with complete real time analysis of results. The Town and City should seek to develop (or expand) lists of e-mail customers to be used in outreach communications and online surveys.
- Intercept interviews. Intercept interviews, conducted in public places or at events, would permit an assessment of general awareness about recycling and waste reduction programs. Did residents recall receiving the magnet or door hanger? Did they read the information? Is it posted on the refrigerator for future reference? These types of questions can be answered through intercept interviews conducted by staff or trained volunteers equipped with an interview script.

## 2.5.2 Business Recycling Recommendations

According to the information we received, Victorville has 1,940 commercial trash customers who use carts, bins or roll-off compactors. Of these, 495 are recycling accounts (source separated and Commercial Select). Apple Valley has 639 commercial trash accounts, of which 80 are recycling accounts and 146 are commercial select accounts. Commercial Select customers have “clean trash” that generally can be recycled. These customers are serviced on separate routes, and their loads are sent to the MRF.

As for apartment complexes, Apple Valley has 3,605 multifamily units in 780 complexes. Very few complexes have more than six units, which indicates that there are few property managers in Apple Valley.

The goals of the commercial recycling effort should be: 1. To reduce contamination among those organizations that currently recycle; and 2. To foster and encourage development of recycling programs among businesses and organizations. The following are recommendations to improve business and organization recycling. These recommendations result from the two focus groups, the stakeholder interviews, discussions with recycling managers from Victorville and Apple Valley, and a review of the City and Town’s public education materials and collection information. We include recommendations for businesses as well as property managers of multifamily complexes. We have indicated ballpark estimated budgets for these recommendations and conclude with a section on evaluation to determine the effectiveness of these activities. Our approach relies on a range of strategies because we know that focusing on a single strategy or tactic will not reach the maximum target audience of business/organization customers.

### **1. Use graphic signage to clear up confusion about recycling in the workplace and apartment complexes that have recycling dumpsters.**

Currently, signage has been posted on some white recycling dumpsters to indicate which materials are acceptable or not acceptable. Continue working with Burrtec to

post decals/stickers on all white recycling dumpsters. Include photos of the materials that can be recycled and photos with the “Do Not” symbol (red circle with slash) for the materials that cannot be placed in the bin. Similarly, post decals on the green trash dumpsters with photos of the types of materials that can and cannot be placed in those containers. Make sure that the recycling symbol appears on the white dumpsters.

- 2. Collaborate with the Victorville and Apple Valley Chambers of Commerce to promote recycling in the workplace.** In interviews with the GBB Team, both chambers of commerce expressed an interest in promoting business recycling. Such collaboration might include business recycling workshops for businesses and property management companies, newsletter articles, case studies showing actual savings on disposal costs and revenue generation, e-mail blasts, and website links from chamber websites to information on [www.urecycle.org](http://www.urecycle.org) or the Town and City recycling pages. The Victorville Chamber is also willing to conduct a survey of its membership to determine how many are recycling and what types of assistance would be helpful in setting up a recycling program. A survey would be an excellent way to help establish a benchmark from which to evaluate the success of business recycling promotion.
- 3. Go back to basics with educational materials that promote recycling in the workplace.** Create a simple business recycling brochure that can be used by businesses in both Victorville and Apple Valley. The brochure developed for Plano, Texas, serves as an example (Appendix D). Use graphics, color and photos, branded to be consistent and identifiable as recycling program information. Print the brochure and any other materials, such as a poster that depicts what can be recycled, on recycled paper, but not glossy stock, and note “Printed on recycled paper.” For content, rely on bullets, short paragraphs and point size no smaller than 11 pt. Show what can and cannot be recycled. Include websites of the JPA and each jurisdiction. Distribute recycling information through the chambers of commerce, in the business licensing offices, and at community events. Publicize through the chambers of commerce and business licensing offices the JPA decal program for businesses that recycle.
- 4. Provide personalized assistance in designing a workplace program; establish recycling mentor program.** Recycling managers in Victorville and Apple Valley already provide recycling consultation services and assistance to businesses. The challenge is to expand this program given staff time and budget constraints. One approach: Target the largest businesses first, and make sure all government offices participate. To leverage what the Town and City can do with limited staff, establish a recycling mentor program, whereby a business that is successfully recycling serves as a “mentor” for another, similar size business. Work with Burrtec to provide low-cost in-office recycling containers [cardboard containers for paper, for example] to businesses that set up programs. Containers should be marked for what materials are acceptable and not acceptable.
- 5. Provide educational outreach to cleaning service companies.** Work with these companies to include recycling instructions as part of their staff training. Provide flyers with pictures of recyclable products and information in Spanish and English about proper separation of office materials.
- 6. Work with Burrtec to minimize damage to concrete pads during collection.** Explore how collection might be accomplished without damage to the concrete

pads. If damage continues, work with the City or Town offices that regulate the size of these pads and increase their depth.

- 7. Make [www.urecycle.org](http://www.urecycle.org) a portal for information about workplace recycling.** Include case studies that highlight cost savings. Show photos of workplace recycling containers in offices. Show the website address on all printed materials and any advertisements.
- 8. Target apartment complexes for special outreach.** Apartment complexes pose a special challenge for recycling outreach, since many residents are transient and sometimes do not speak or read English. A number of the strategies we recommend above can be used to reach apartment residents (e.g., magnet or door hanger). Some other communities have developed effective materials to promote recycling in multifamily complexes – materials that can serve as models for Victorville and Apple Valley. For example, Portland Metro has targeted property managers for special outreach using an attractive, branded brochure: Recycle at Home: The Property Manager’s Guide to a Successful Multifamily Recycling and Garbage Program (Appendix C). This brochure is effective both in its attractive design and comprehensive content, which features waste tonnage and cost saving data, testimonials from Metro-area property managers, photos of materials that should be recycled, and tips for setting up a program. The message in this brochure: “No matter where you live, recycling is easy. And we’ll make it even easier.” The brochure’s title is matched with the url for Metro’s recycling programs: [www.recycleathome.org](http://www.recycleathome.org). And the design is branded with other recycling program materials.

Other ideas in addition to targeting property managers: Post large flyers or posters near mailboxes and other common areas with promotional messages and photos of what can and cannot be recycled. Work with a sponsoring business (e.g., WalMart or Target) to establish an award program that provides prizes for the residents of those complexes that recycle the most and recycle properly, based on number of units or residents.

### 2.5.2.1 Cost Estimate

Given the fiscal constraints on local budgets, it is essential to ensure that each dollar spent is used effectively. Assuming that there are about 1,940 trash customers in Victorville, and 639 trash customers in Apple Valley—a total of 2,579, plus some apartment complexes with property managers, a budget of approximately \$1.50 to \$1.75 per account (\$4,500, total) might be spent as follows:

Decals/stickers for trash containers	Supplied by Burrtec
Business recycling brochure (design and printing)	\$ 2,000
Property managers recycling brochure (design and printing)	\$ 1,500
Business recycling posters (design and printing)	\$ 1,000

Some outside sponsors, such as the CBS affiliate, appear interested in contributing to recycling promotion in the workplace.

### 2.5.2.2 Evaluation

As with the residential recycling campaign, evaluation is essential to determine the effectiveness of outreach dollars spent. Many of the same evaluation tools would apply, including:

- Tracking website visitors to the business recycling pages of the JPA, Victorville and Apple Valley websites.
- Online surveys. The chambers of commerce can be approached to provide their e-mail lists or to help distribute online surveys to their members. SurveyMonkey.com and Zoomerang.com provide free or very low cost survey tools with complete real time analysis of results. Surveys can be used to establish a recycling benchmark among chamber members and to track progress over time with additional survey research.
- Intercept interviews. Intercept interviews, conducted at chamber meetings and luncheons as well as by visiting businesses, would permit an assessment of general awareness about recycling and waste reduction programs. Intercept interviews can be conducted by staff or trained volunteers equipped with an interview script.