

SMaRT Station® Annual Report 2015-2016

SMaRT Partners – Mountain View, Palo Alto and Sunnyvale



Unprecedented Recycling Levels Continue

The SMaRT Station operator, Bay Counties Waste Services (BCWS), has completed implementation of the MRF (Materials Recovery Facility) organics diversion obligations of its 2015-2021 contract. After application of new sorting technology that removes problematic glass fragments from the organic MRF “fines,” 100% of the fines material generated by SMaRT’s garbage sorting system is being composted.

Diverting all of the MRF fines to composting is expected to keep an additional 13,000 tons out of the SMaRT Station’s landfill-bound trucks each year. Measured on a monthly basis, the SMaRT Station is now diverting from disposal 30-35% of the mixed garbage received. When deliveries of source-separated recyclables and yard trimmings from Mountain View, Sunnyvale, and the public are factored in, approximately 45% of the material arriving at SMaRT ends up going to a destination other than the landfill.

Diverting from landfill over 30% of mixed garbage from communities that have already removed recyclables and yard trimmings with source-separated collections is an accomplishment that is unprecedented in California and, perhaps, in North America. The cities have been working with private sector partners BCWS and Z-Best for several years to find the right mix of creativity, technology, institutional arrangements and markets to make this extraordinary breakthrough.

PaintCare Program Proves Popular

The SMaRT Station Recycling Center began accepting water and oil based paints along with many other paint based products from residents in October of 2015. PaintCare, the product stewardship program that operates collection programs on behalf of paint manufacturers, worked with BCWS to set up the program. PaintCare covered the cost of a metal storage shed and the regular paint collections, which started as once every six weeks but are now happening every other week due to the program’s popularity. As of November 2016, 38,000 pounds of paint had been collected. This offsets the program costs of the County’s Household Hazardous Waste Program by about \$70,000 per year. Currently paint is accepted from the public Monday through Friday during operating hours.



CITY OF
**PALO
ALTO**

Mike Sartor
Public Works Director
City of Palo Alto



CITY OF MOUNTAIN VIEW

Michael A. Fuller
Public Works Director
City of Mountain View



John Stuffelbean
Environmental Services Director
City of Sunnyvale

Costs, Revenues and Diversion 2015-2016

Financial Summary of Costs and Revenues

	Mtn. View	Palo Alto	Sunnyvale	Totals
City Population	77,925	68,207	148,372	294,504
Cost Sharing Percentage	30%	17%	53%	
COSTS (in thousands)				
Operating costs	\$4,196	\$2,324	\$7,365	\$13,885
Landfill Fees and Taxes	\$2,561	\$1,949	\$5,320	\$9,830
Yardwaste Recycling costs	\$74	\$12	\$149	\$235
Capital Replacement Fund	\$65	\$58	\$152	\$275
Host Fees to General Fund	\$237	\$131	\$406	\$774
Total Costs	\$7,133	\$4,474	\$13,392	\$24,999
REVENUES (in thousands)				
MRF Recovered Recycling Revenues	-\$68	-\$38	-\$119	-\$225
Source Separated Recycling Revenues	\$388	\$0	\$455	\$843
Public Haul Fees collected	\$313	\$173	\$549	\$1,035
Total Revenues	\$633	\$135	\$885	\$1,653
NET COSTS (in thousands)	\$6,500	\$4,339	\$12,507	\$23,346

SMaRT Station Diversion Summary

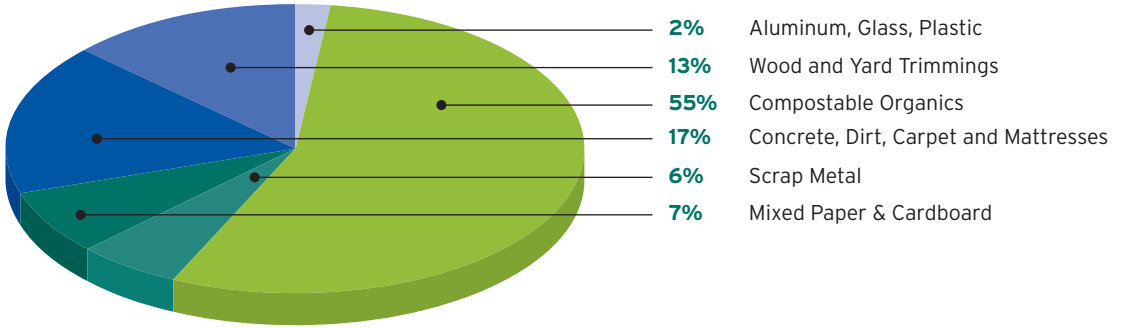
(in tons)	Mtn. View	Palo Alto	Sunnyvale	Totals
City Population	77,925	68,207	148,372	294,504
MSW* delivered to SMaRT Station	55,050	30,487	96,643	182,180
MSW Public haul	1,951	1,232	15,064	18,247
Total MSW Delivered to SMaRT	57,001	31,719	111,707	200,427
MSW disposed at Kirby Canyon landfill	43,530	24,125	76,295	143,950
MSW disposed at other landfills	7,599	21,994	17,883	47,476
Total MSW disposed	51,129	46,119	94,178	191,426
MSW material diverted from the landfill at the SMaRT Station	13,471	7,594	35,412	56,477
Yard trimmings brought to SMaRT Station	7,070	1,147	14,310	22,527
Recyclables brought to SMaRT Station	10,735	0	12,714	23,449
Total Delivered	74,806	32,866	138,731	246,403
Total amount of material delivered to the SMaRT Station and diverted from the landfill	31,308	8,777	62,368	102,453

* MSW = Municipal Solid Waste

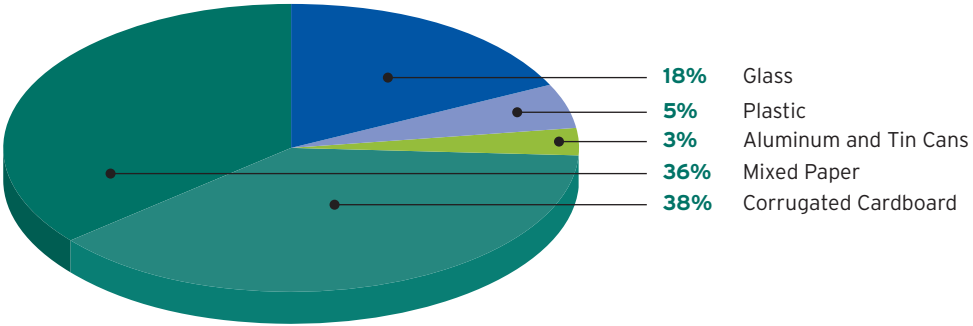
Marketing Success

Percentages shown on these charts for diverted and marketed materials reflect material weight.

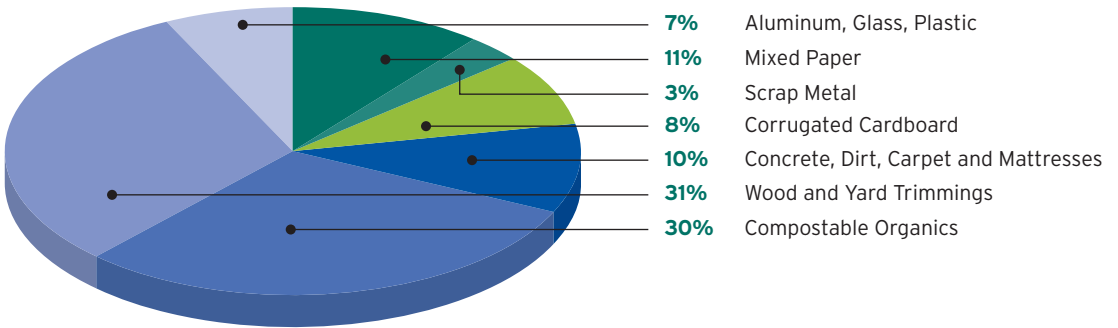
Materials Diverted from MSW



Materials Marketed from Curbside Collection



SMaRT Station All Materials Marketed



Partners in Leadership 2015-2016

CITY OF SUNNYVALE

Mayor Jim Griffith
 Vice Mayor Tara Martin-Milius
 Councilmember Glenn Hendricks
 Councilmember Dave Whittum
 Councilmember Pat Meyering
 Councilmember Gustav Larsson
 Councilmember Jim Davis

City Manager Deanna J. Santana

CITY OF PALO ALTO

Mayor Patrick Burt
 Vice Mayor Gregory Scharff
 Councilmember Marc Berman
 Councilmember Tom DuBois
 Councilmember Eric Filseth
 Councilmember Karen Holman
 Councilmember Liz Kniss
 Councilmember Greg Schmid
 Councilmember Cory Wolbach

City Manager James Keene

CITY OF MOUNTAIN VIEW

Mayor John McAlister
 Vice Mayor Patricia Showalter
 Councilmember Chris Clark
 Councilmember John Inks
 Councilmember Mike Kasperzak
 Councilmember Ken Rosenberg
 Councilmember Lenny Siegel

City Manager Dan Rich

SMaRT Station Highlights

SMaRT Partner Cities Tailor Food Scraps Collection to Communities

With food scraps and other organics the largest remaining component of the material they dispose, the SMaRT cities tested different collection methods and outreach messages for residential food scraps programs. Each city is moving ahead with an approach tailored for acceptance in its community.

Palo Alto was the first to ask residents to separate food scraps and other organics. Since July 1, 2015, Palo Alto residents can place their food scraps and soiled paper with yard trimmings for weekly collection. The material is processed at a facility using a dry anaerobic digestion process resulting in the generation of methane gas that is converted to create electricity. The remaining digestate is composted. Approximately 60 percent of Palo Alto households participated during the first year of the program resulting in over 1,500 tons of food scraps diverted from the landfill. This year, participation has increased and Palo Alto projects that over 2,000 tons will be diverted.



Mountain View piloted weekly collection of food mixed with yard trimmings, an increase of service from the current biweekly yard trimmings collection schedule. The pilot also tested the effects on diversion and cost of combining more frequent organics collection with every-other week garbage collection. While the pilot showed significant increases in diversion and cost savings, community support was less enthusiastic. The Mountain View City Council recently approved implementing a food scraps collection program while maintaining weekly garbage collection. Implementation of the service will begin in July 2017, at which time the organics will be transferred to a compost facility to be converted into soil amendments.

Sunnyvale conducted a pilot that tested the use of “split” carts and two-compartment trucks for weekly collection of garbage and food scraps, similar to carts and trucks used for the curbside recycling program. After seeing the pilot results, which included a 74 percent participation rate, the Sunnyvale City Council approved a staff recommendation to expand the program Citywide. The City anticipates implementing food scraps collection in the second half of 2017. After collection, the food scraps will undergo a process in which they will become an animal feed ingredient for fish, chickens, and pigs.

Electrical Switchboard Upgrades to Accommodate Rooftop Solar

In 2013, the 3000 amp main electrical switchboard at the SMaRT Station failed, requiring immediate, temporary repairs. A temporary 2000 amp service was installed to restore a minimal electrical service to the facility and keep it operational. After careful consideration of the options for replacement, the decision was made in 2016 to upgrade to a medium voltage switchboard to accommodate additional capacity for new facility equipment and a future solar photovoltaic rooftop array. Once installed, the solar panels are expected to offset 82% of the SMaRT Station's energy use and save approximately \$3.2 million in energy costs over 20 years.



A partnership of the cities of Mountain View, Palo Alto and Sunnyvale
Operated by Bay Counties Waste Services