Overall Residential Waste

The project team hand sorted 181 samples of city-collected single family refuse and 93 samples of franchise-collected multifamily refuse. The field crew also visually characterized another 177 samples from the disposed residential self-haul substream for a total of 451 samples from the overall residential waste stream. The city-collected and franchise-collected were refuse generated in San Diego. The self-haul samples were either refuse or C&D materials generated both inside and outside the City limits. The substreams used to create the composition tables and their associated tonnages are shown in Table 6.

Table 6. Included Substreams and Tons,
Overall Residential Waste

Included Substreams	Tons
City Collected Single Family w/o Green Waste Service	107,310
City Collected Single Family with Green Waste Service	199,291
Franchise Collected Multifamily	250,661
Residential Self-haul Flat Rate Vehicles	34,230
Residential Self-haul Small Vehicles	6,153
Residential Self-haul Large Vehicles	2,008
Total Disposal in Substream	**599,653**

Key Findings

The key recoverability and material class findings for the overall residential waste are shown in Figure 8 and Figure 9, respectively. Nearly 80% of the City's overall residential waste is recoverable (46% is Compostable/Potentially Compostable, 17% is Recyclable, and 16% is Potentially Recoverable). **Organics** (48%) and **Paper** (17%) are the two most prevalent material classes.

Figure 8. Composition by Recoverability Group, Overall Residential, 2012
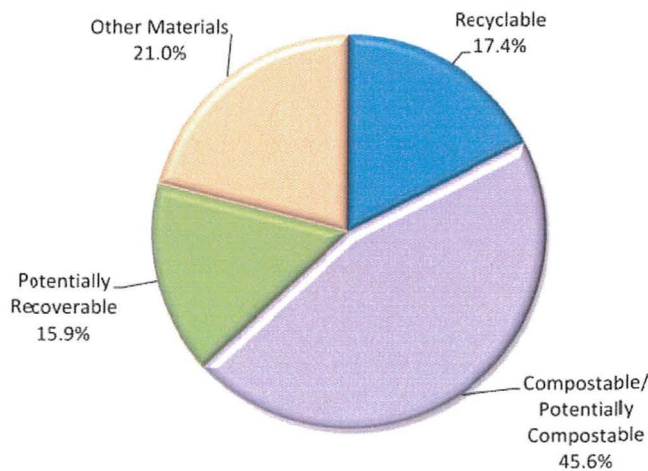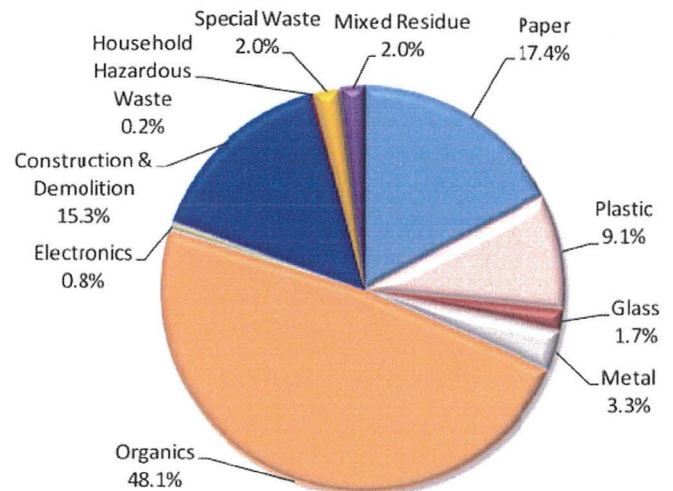
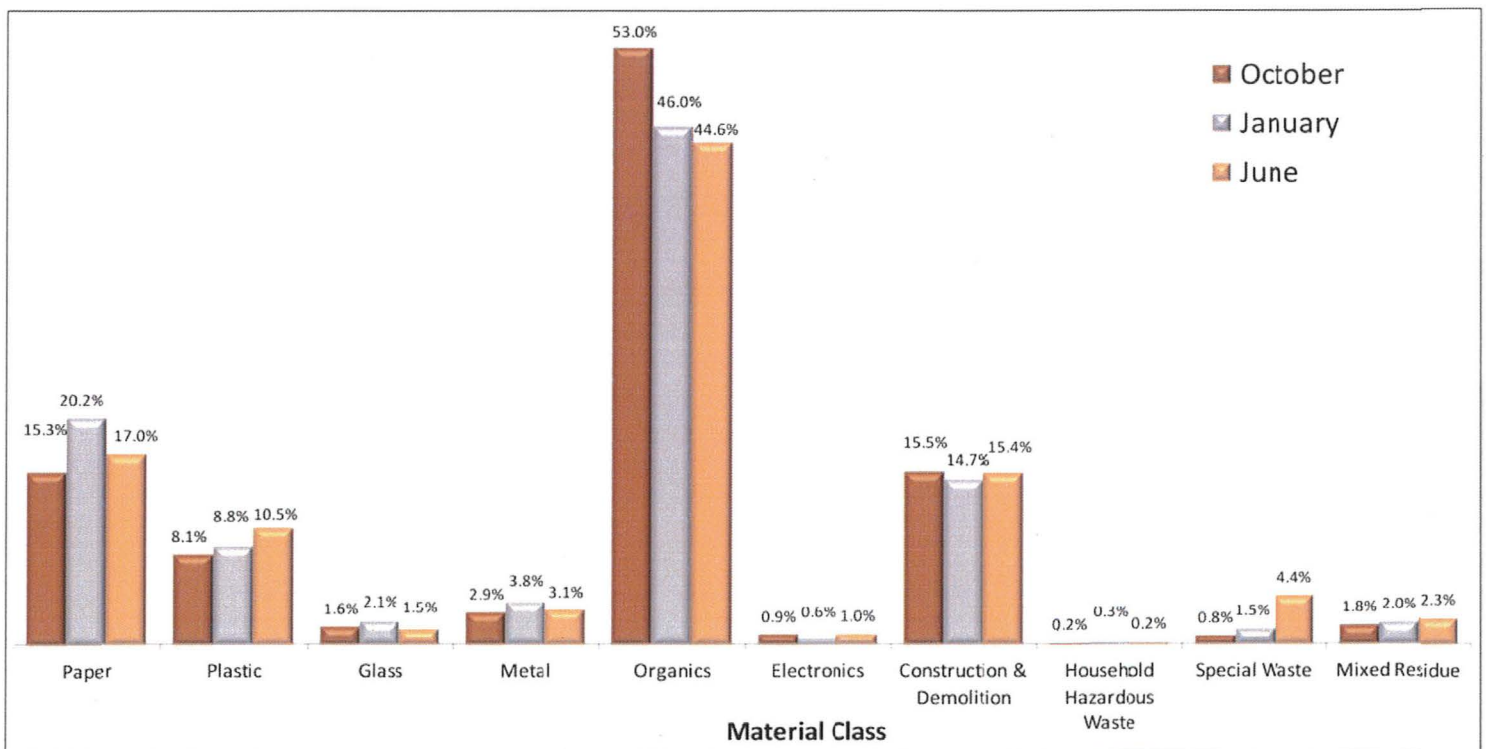Figure 9. Composition by Material Class, Overall Residential, 2012

The ten most prevalent disposed materials can be found in Table 7. *Food* (18%), *leaves and grass* (9%), and *compostable/soiled paper* (6%) are the three most prevalent material types; together they represent more than 33% of the overall residential waste.

Table 7. Ten Most Prevalent Disposed Material Types, Overall Residential, 2012

Material Type	Estimated Percent	Cumulative Percent	Estimated Tons
Food	17.9%	17.9%	107,203
Leaves and Grass	9.3%	27.2%	55,687
Compostable/Soiled Paper	6.0%	33.2%	36,072
Palm, Succulent, Coral Tree	5.7%	38.9%	34,108
Prunings and Trimmings	4.8%	43.7%	28,768
Textiles	4.2%	47.9%	25,318
Other Wood Waste	4.2%	52.1%	25,081
Uncoated Corrugated Cardboard	3.7%	55.8%	22,261
Mixed Waste Paper	3.4%	59.2%	20,441
Diapers	3.3%	62.5%	19,909
Subtotal	*62.5%*		*374,849*
All other material types (excluding residuals)	37.5%		224,804
Total (excluding residuals)	**100.0%**		**599,653**

As illustrated in Figure 10, **Organics** exhibited a downward trend over the three field seasons, declining from 53% in October to 45% in June.

Figure 10. Seasonal Composition by Material Class, Overall Residential, 2012

The detailed composition of the overall residential waste is shown in Table 8.

Table 8. Detailed Waste Composition, Overall Residential, 2012

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
Paper	**17.4%**		**104,572**	**Electronics**	**0.8%**		**4,806**
Uncoated Corrugated Cardboard	3.7%	0.5%	22,261	Brown Goods	0.5%	0.2%	2,714
Waxed Corrugated Cardboard	0.1%	0.1%	543	CRT	0.1%	0.1%	597
Paper Bags	0.4%	0.1%	2,170	Computer-Related Electronics	0.0%	0.0%	179
Newspaper	1.2%	0.2%	7,245	Other Consumer Electronics	0.2%	0.1%	1,061
White Ledger Paper	0.7%	0.1%	4,467	Video Display Devices (non-CRT devices)	0.0%	0.0%	256
Mixed Waste Paper	3.4%	0.2%	20,441				
Magazines	0.8%	0.2%	4,623	**Construction & Demolition**	**15.3%**		**91,707**
Phone Books and Directories	0.1%	0.1%	352	Concrete	1.5%	0.6%	9,106
Compostable/Soiled Paper	6.0%	0.4%	36,072	Asphalt Paving	0.0%	0.0%	0
Aseptic/Milk Containers	0.1%	0.0%	846	Asphalt Composition Shingles	0.1%	0.1%	769
Remainder/Composite Paper	0.9%	0.2%	5,553	Roofing Tar Paper/Felt	0.0%	0.0%	250
				Roofing Mastic	0.0%	0.0%	0
Plastic	**9.1%**		**54,389**	Built-Up Roofing	0.0%	0.0%	0
CRV HDPE Containers	0.0%	0.0%	138	Other Asphalt Roofing Material	0.0%	0.0%	234
Non-CRV HDPE Containers	0.6%	0.1%	3,375	Clean Dimensional Lumber	0.6%	0.2%	3,744
CRV PETE Containers	0.3%	0.0%	1,519	Clean Engineered Wood	0.6%	0.2%	3,431
Non-CRV PETE Containers	0.3%	0.0%	2,007	Clean Pallets and Crates	0.3%	0.3%	1,995
Compostable Biodegradable Plastic Containers	0.0%	0.0%	43	Other Wood Waste	4.2%	0.7%	25,081
Miscellaneous Plastic Containers	0.7%	0.0%	4,130	Clean Gypsum Board	0.5%	0.3%	3,069
Plastic Grocery and Merchandise Bags	0.4%	0.0%	2,412	Painted/Demolition Gypsum Board	0.6%	0.3%	3,389
Clean Film Plastic	0.3%	0.1%	1,628	Carpet & Carpet Padding	3.1%	0.8%	18,819
Dirty Film Plastic	2.7%	0.2%	15,980	Rock, Soil and Fines	1.4%	0.5%	8,527
Durable Plastic Items	2.4%	0.4%	14,375	Contaminated Soil, Street Sweepings, Drain Cleaning	0.1%	0.2%	791
Expanded Polystyrene	0.5%	0.0%	2,972	Remainder/Composite C&D	2.1%	0.5%	12,502
Remainder/Composite Plastic	1.0%	0.2%	5,809				
				Household Hazardous Waste	**0.2%**		**1,356**
Glass	**1.7%**		**10,477**	Oil-Based Paint	0.0%	0.0%	185
CRV Clear Glass Bottles	0.2%	0.0%	1,212	Water-Based Paint	0.0%	0.0%	247
Non-CRV Clear Glass Bottles and Containers	0.4%	0.1%	2,587	Vehicle and Equipment Fluids	0.0%	0.0%	0
CRV Brown Glass Bottles	0.2%	0.0%	1,408	Used Oil	0.0%	0.0%	0
Non-CRV Brown Glass Bottles and Containers	0.0%	0.0%	263	Lead-Acid Batteries	0.0%	0.1%	270
CRV Other Colored Glass Bottles	0.1%	0.0%	425	Household Batteries	0.0%	0.0%	109
Non-CRV other Colored Glass Bottles and Containers	0.2%	0.0%	1,399	Sharps	0.0%	0.0%	10
Flat Glass	0.2%	0.1%	1,016	Pharmaceuticals	0.0%	0.0%	93
Remainder/Composite Glass	0.4%	0.1%	2,167	CFL, Fluorescent Tube and Other Mercury-Containing	0.0%	0.0%	70
				Remainder/Composite Household Hazardous	0.1%	0.1%	372
Metal	**3.3%**		**19,686**				
Tin/Steel Cans	0.6%	0.1%	3,585	**Special Waste**	**2.0%**		**12,263**
Major Appliances	0.0%	0.0%	92	Ash	0.0%	0.0%	33
Other Ferrous Metal	1.1%	0.3%	6,818	Sewage Solids	0.0%	0.0%	0
CRV Aluminum & Tin Cans	0.2%	0.1%	1,046	Industrial Sludge	0.0%	0.0%	0
Non-CRV Aluminum Cans	0.0%	0.0%	233	Treated Medical Waste	0.0%	0.0%	29
Used Oil Filters	0.0%	0.0%	0	Bulky Items	1.7%	0.5%	9,924
Other Non-Ferrous Metal	0.4%	0.1%	2,437	Tire	0.3%	0.2%	1,785
Remainder/Composite Metal	0.9%	0.2%	5,474	Remainder/Composite Special Waste	0.1%	0.1%	493
Organics	**48.1%**		**288,495**	**Mixed Residue**	**2.0%**		**11,901**
Food	17.9%	1.1%	107,203	Mixed Residue	2.0%	0.4%	11,901
Palm, Succulent, Coral Tree	5.7%	0.8%	34,108				
Leaves and Grass	9.3%	1.1%	55,687	**Total**	**100.0%**		**599,653**
Prunings and Trimmings	4.8%	0.8%	28,768				
Branches and Stumps	0.7%	0.3%	4,455	Curbside Residential Recycling Processing Residuals			10,422
Agricultural Crop Residues	0.0%	0.0%	0	C&D Processing Residuals			0
Grass Sod	0.1%	0.1%	730				
Manures	0.0%	0.0%	237	**Total Including Residuals**			**610,075**
Diapers	3.3%	0.4%	19,909				
Textiles	4.2%	0.5%	25,318	**Sample Count**			**451**
Remainder/Composite Organics	2.0%	0.3%	12,079				

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

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