

Table 4: Detailed Disposal Composition: Commercial

Commercial								
Material	Garbage		Recycle		Organics		Total Generation	
	Est. %	Est. Tons	Est. %	Est. Tons	Est. %	Est. Tons	Est. %	Est. Tons
Paper	24.4%	13,717	59.5%	8,809	12.2%	888	29.9%	23,410
Corrugated Cardboard and Kraft	3.9%	2,167	32.9%	4,873	0.8%	57	9.1%	7,095
Newspaper	1.2%	647	3.1%	457	0.2%	14	1.4%	1,117
Other Recyclable Paper	7.4%	4,178	19.2%	2,842	0.8%	57	9.0%	7,076
Polycoated Paper	0.2%	117	0.3%	41	1.0%	75	0.3%	234
Compostable Paper	10.2%	5,734	3.3%	483	8.8%	642	8.8%	6,859
Non-Recoverable Paper	1.6%	874	0.8%	113	0.6%	43	1.3%	1,030
Plastic	15.5%	8,697	9.6%	1,426	2.1%	151	13.1%	10,273
#1 & #2 Plastic Containers	1.9%	1,078	5.1%	748	0.1%	4	2.3%	1,831
Other Recyclable Plastics	3.0%	1,660	2.1%	313	0.3%	23	2.6%	1,997
Recoverable Film	1.7%	947	0.2%	30	0.0%	2	1.3%	979
Non-recoverable Film	5.8%	3,234	1.3%	198	1.0%	70	4.5%	3,502
Non-recoverable Plastics	3.2%	1,777	0.9%	136	0.7%	52	2.5%	1,964
Glass	2.8%	1,551	9.7%	1,442	0.4%	31	3.9%	3,024
Glass Containers	2.2%	1,220	8.6%	1,268	0.4%	31	3.2%	2,518
Non-recoverable Glass	0.6%	331	1.2%	175	0.0%	0	0.6%	506
Metal	3.8%	2,117	12.3%	1,818	0.3%	23	5.1%	3,954
Tin/Steel Cans	0.6%	339	1.9%	280	0.2%	16	0.8%	635
Aluminum Cans & Foil	0.4%	231	0.3%	48	0.0%	2	0.4%	281
Other Recoverable Metal	1.7%	957	9.9%	1,463	0.1%	5	3.1%	2,421
Non-recoverable Metal	1.1%	590	0.2%	26	0.0%	0	0.8%	617
Organics	36.0%	20,188	6.5%	955	73.0%	5,317	33.8%	26,460
Food	23.2%	13,002	5.3%	790	59.0%	4,298	23.1%	18,089
Yard Waste	4.9%	2,759	0.1%	19	13.8%	1,002	4.8%	3,781
Textiles	3.5%	1,939	0.6%	85	0.0%	3	2.6%	2,027
Non-recoverable Organics	4.4%	2,488	0.4%	61	0.2%	14	3.3%	2,563
Construction & Demolition	12.5%	7,007	1.7%	257	11.7%	853	10.4%	8,116
Recoverable Wood	4.2%	2,345	0.2%	28	11.3%	820	4.1%	3,194
Carpet	0.7%	386	0.2%	25	0.0%	-	0.5%	411
Recoverable C&D	3.2%	1,821	0.8%	111	0.0%	-	2.5%	1,932
Non-recoverable C&D	4.4%	2,455	0.6%	93	0.4%	32	3.3%	2,580
Other Materials	5.1%	2,873	0.6%	94	0.2%	17	3.8%	2,983
Household Hazardous Waste	0.7%	371	0.1%	13	0.0%	1	0.5%	385
Electronic Waste	0.6%	341	0.0%	6	0.0%	-	0.4%	348
Tires	0.2%	89	0.1%	8	0.0%	0	0.1%	97
Bulky Items	0.5%	274	0.0%	-	0.0%	-	0.4%	274
Non-recoverable Other	3.2%	1,797	0.4%	66	0.2%	16	2.4%	1,879
Totals	100.0%	56,150	100.0%	14,800	100.0%	7,280	100.0%	78,220

Percentages for material types may not total 100% due to rounding.

Table 5: Detailed Disposal Composition: Self-haul

Self-haul								
Material	Garbage		Recycle		Organics		Total Generation	
	Est. %	Est. Tons	Est. %	Est. Tons	Est. %	Est. Tons	Est. %	Est. Tons
Paper	9.5%	1,698	37.2%	375	0.4%	2	10.8%	2,076
Corrugated Cardboard and Kraft	2.0%	350	22.5%	228	0.1%	0	3.0%	578
Newspaper	0.4%	72	0.2%	2	0.0%	0	0.4%	75
Other Recyclable Paper	4.9%	881	12.8%	129	0.0%	0	5.2%	1,011
Polycoated Paper	0.0%	9	0.1%	1	0.0%	0	0.0%	9
Compostable Paper	1.9%	336	1.5%	15	0.3%	1	1.8%	353
Non-Recoverable Paper	0.3%	51	0.0%	-	0.0%	0	0.3%	51
Plastic	6.3%	1,126	4.1%	41	0.1%	0	6.1%	1,168
#1 & #2 Plastic Containers	0.6%	106	2.4%	24	0.0%	0	0.7%	130
Other Recyclable Plastics	1.9%	336	0.5%	5	0.0%	-	1.8%	341
Recoverable Film	1.0%	173	0.2%	2	0.0%	0	0.9%	175
Non-recoverable Film	0.9%	168	0.2%	2	0.0%	0	0.9%	171
Non-recoverable Plastics	1.9%	343	0.8%	8	0.0%	0	1.8%	351
Glass	2.1%	372	8.6%	87	0.0%	0	2.4%	459
Glass Containers	0.8%	139	8.6%	87	0.0%	0	1.2%	226
Non-recoverable Glass	1.3%	233	0.0%	0	0.0%	-	1.2%	233
Metal	3.2%	574	24.5%	247	0.0%	0	4.3%	821
Tin/Steel Cans	0.3%	60	0.3%	3	0.0%	0	0.3%	63
Aluminum Cans & Foil	0.1%	17	0.3%	3	0.0%	0	0.1%	20
Other Recoverable Metal	2.1%	372	12.0%	121	0.0%	0	2.6%	493
Non-recoverable Metal	0.7%	124	11.9%	120	0.0%	0	1.3%	244
Organics	18.1%	3,241	16.7%	169	100.0%	410	19.8%	3,818
Food	3.5%	631	7.1%	72	0.0%	-	3.6%	703
Yard Waste	6.3%	1,118	5.1%	51	99.6%	408	8.2%	1,576
Textiles	4.2%	759	4.6%	46	0.0%	0	4.2%	805
Non-recoverable Organics	4.1%	732	0.0%	-	0.4%	2	3.8%	734
Construction & Demolition	51.0%	9,100	0.1%	1	0.0%	0	47.2%	9,101
Recoverable Wood	15.8%	2,815	0.0%	-	0.0%	-	14.6%	2,815
Carpet	5.2%	920	0.0%	-	0.0%	-	4.8%	920
Recoverable C&D	15.5%	2,760	0.0%	-	0.0%	0	14.3%	2,760
Non-recoverable C&D	14.6%	2,605	0.1%	1	0.0%	-	13.5%	2,606
Other Materials	9.8%	1,749	8.9%	90	0.0%	0	9.5%	1,839
Household Hazardous Waste	0.3%	47	0.0%	-	0.0%	0	0.2%	47
Electronic Waste	0.9%	158	1.1%	11	0.0%	0	0.9%	169
Tires	0.1%	25	0.0%	-	0.0%	-	0.1%	25
Bulky Items	6.3%	1,125	0.0%	-	0.0%	-	5.8%	1,125
Non-recoverable Other	2.2%	394	7.8%	79	0.0%	0	2.5%	472
Totals	100.0%	17,860	100.0%	1,010	100.0%	410	100.0%	19,280

Percentages for material types may not total 100% due to rounding.

Disposal Recoverability

Cascadia modeled the recoverability of disposed materials by assigning each of the 30 detailed material types to one of four recoverability categories:

- **Curbside recyclable:** materials readily accepted for recycling in Recology’s curbside recycling collection system.
- **Curbside compostable:** materials readily accepted for composting in Recology’s curbside organics collection system.
- **Other recoverable:** materials that could be recovered or diverted through other collection programs, such as household hazardous waste (HHW) or construction and demolition (C&D) materials.
- **Non-recoverable:** Any materials not readily accepted for recovery or diversion in Recology’s current curbside collection programs or in other programs (for example, HHW and C&D) currently in place for Santa Rosa.

Material class and recoverability classification by detailed material type are provided in Table 6.

Table 6: Detailed Material Types with Classifications

Material Class	Material Type	Recoverability Group	Class by Recoverability
Paper			
	Corrugated Cardboard and Kraft	Curbside Recyclable	Recyclable Paper
	Newspaper	Curbside Recyclable	Recyclable Paper
	Other Recyclable Paper	Curbside Recyclable	Recyclable Paper
	Polycoated Paper	Non-recoverable	Non-recoverable
	Compostable Paper	Curbside Compostable	Compostable Paper
	Non-Recoverable Paper	Non-recoverable	Non-recoverable
Plastic			
	#1 & #2 Plastic Containers	Curbside Recyclable	Plastic
	Other Recyclable Plastics	Curbside Recyclable	Plastic
	Recoverable Film	Other Recoverable	Plastic
	Non-recoverable Film	Non-recoverable	Non-recoverable
	Non-recoverable Plastics	Non-recoverable	Non-recoverable
Glass			
	Glass Containers	Curbside Recyclable	Glass
	Non-recoverable Glass	Non-recoverable	Non-recoverable
Metal			
	Tin/Steel Cans	Curbside Recyclable	Metal
	Aluminum Cans & Foil	Curbside Recyclable	Metal
	Other Recoverable Metal	Curbside Recyclable	Metal
	Non-recoverable Metal	Non-recoverable	Non-recoverable
Organics			
	Food	Curbside Compostable	Compostable Food
	Yard Waste	Curbside Compostable	Compostable Yard Waste & Wood
	Textiles	Other Recoverable	Other Recoverable
	Non-recoverable Organics	Non-recoverable	Non-recoverable
Construction & Demolition			
	Recoverable Wood	Curbside Compostable	Compostable Yard Waste & Wood
	Carpet	Other Recoverable	Other Recoverable
	Recoverable C&D	Other Recoverable	Other Recoverable
	Non-recoverable C&D	Non-recoverable	Non-recoverable
Other Materials			
	Household Hazardous Waste	Other Recoverable	Other Recoverable
	Electronic Waste	Other Recoverable	Other Recoverable
	Tires	Other Recoverable	Other Recoverable
	Bulky Items	Non-recoverable	Non-recoverable
	Non-recoverable Other	Non-recoverable	Non-recoverable

Figure 4 below displays the estimated recoverability of Santa Rosa’s disposed materials by sector. The tons of recoverable materials were modeled by summing the weight of detailed material types based on assigned recoverability. For the single family, multi-family, and commercial sectors shown, more than half of disposed waste – as represented by the row labeled “garbage” -- has the potential for recovery through existing recycling and organics programs. For the recycling and organics streams, the brown bars indicate the tons of reported contamination (materials that are incorrectly placed in those streams).

Figure 4: Recoverability of Disposed Materials and Contamination of Recovery Streams by Generator Group

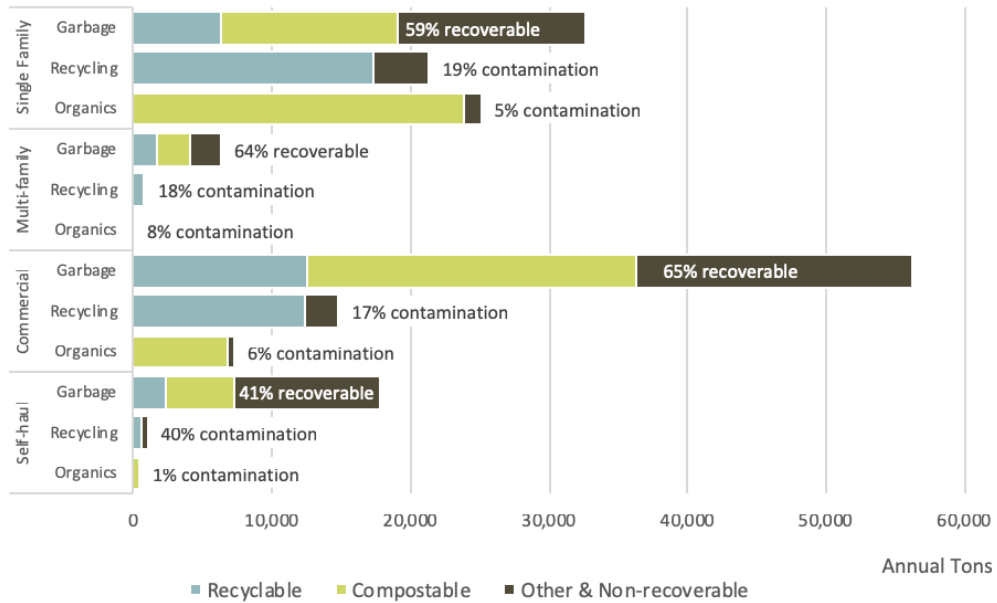
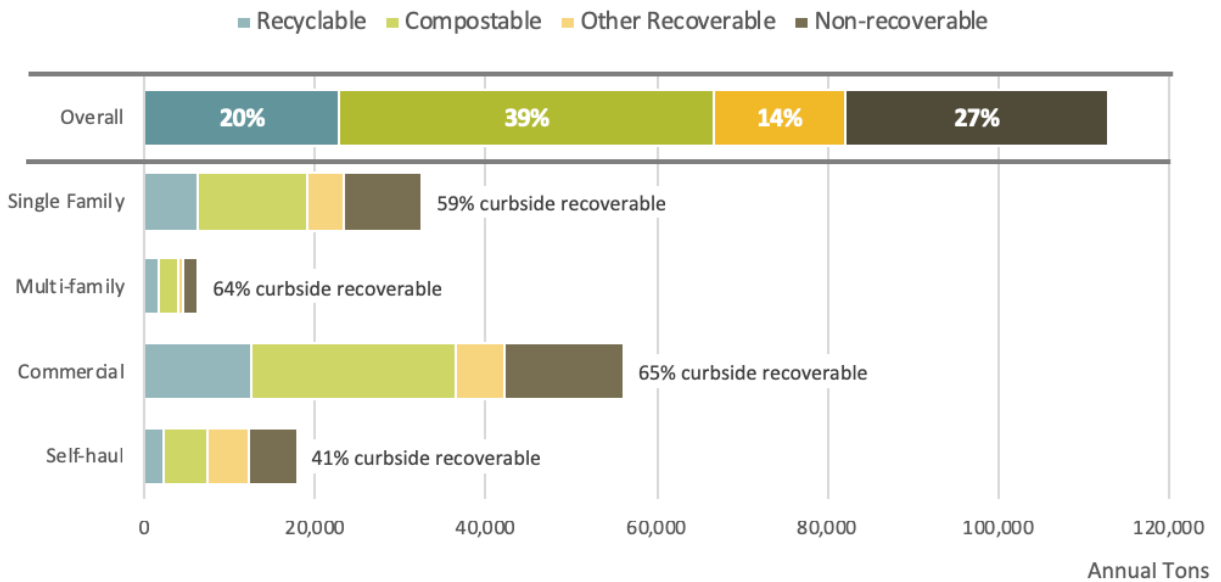


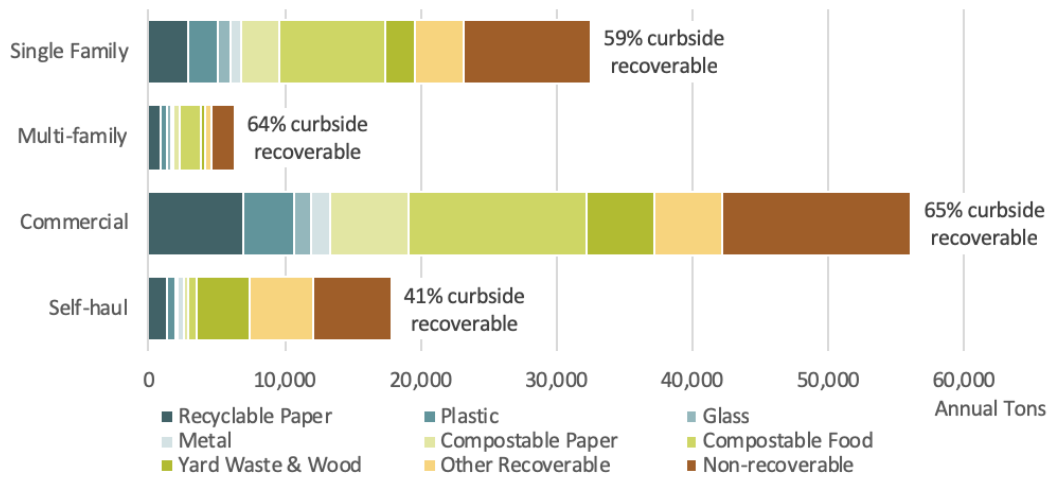
Figure 5 below shows the annual tonnage and composition of garbage by recoverability class. Overall, 73% of Santa Rosa’s garbage stream is recoverable or potentially recoverable. An estimated 39% is compostable and another 20% is recyclable.

Figure 5: Recoverability of Materials in the Garbage Stream by Generator Group



In Figure 6, estimated tons of recoverable materials in Santa Rosa’s landfilled waste is presented by recoverability class and sector. As shown below, compostable food and recyclable paper are the most prevalent disposed materials that could be diverted.

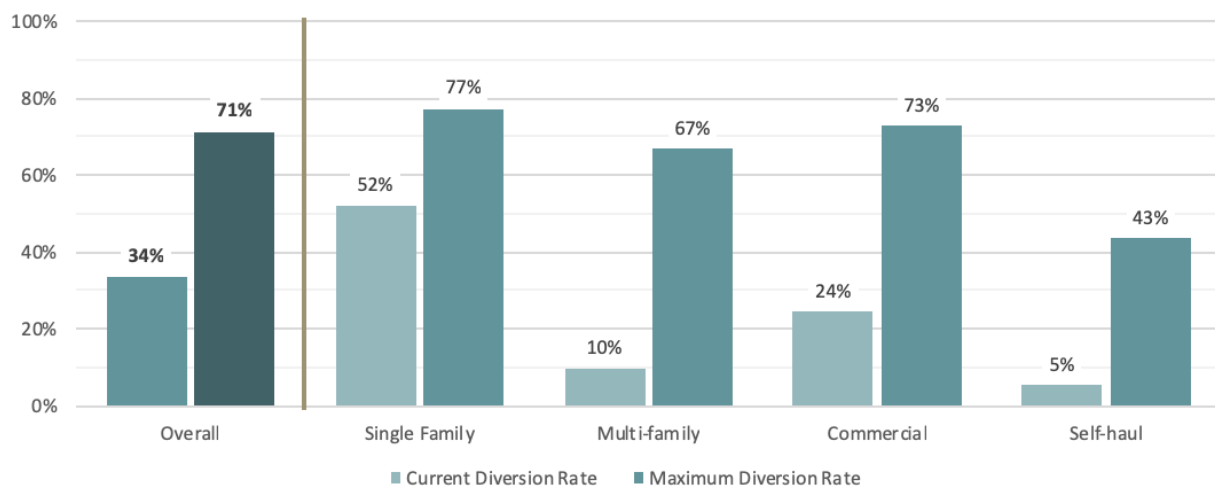
Figure 6: Recoverability and Class of Materials in the Garbage Stream by Generator Group



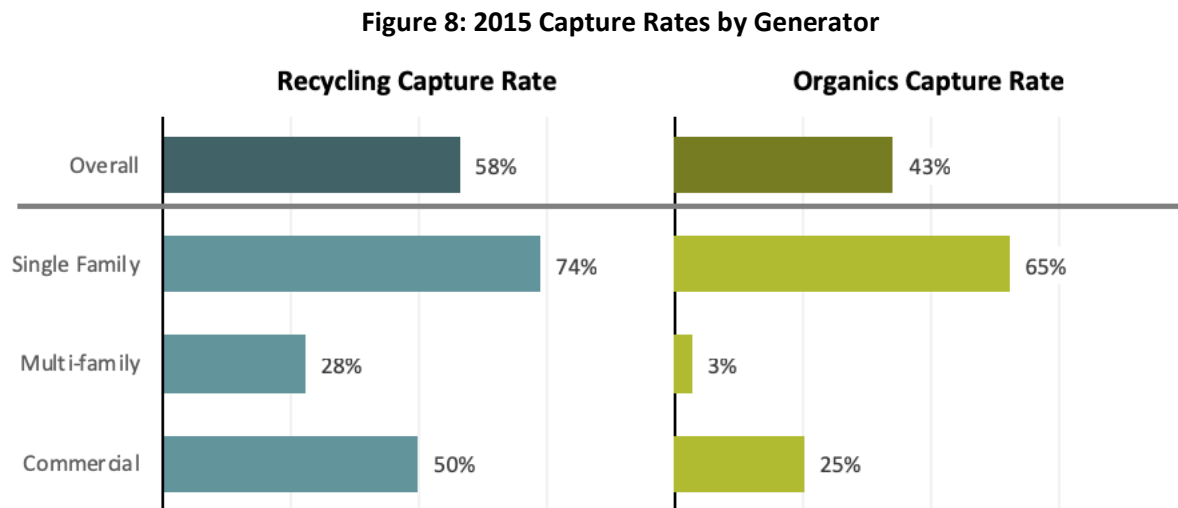
Recoverability and Projected Recovery Rates

For planning purposes, Cascadia estimated a maximum diversion rate for each sector. The maximum diversion rate is based on capturing 100% diversion of recyclable and compostable materials accepted in Santa Rosa’s existing programs. Figure 7 shows the maximum potential diversion rate compared to the current estimated diversion rate.

Figure 7: Current and Maximum Diversion Rates Overall and by Generator



A capture rate is different from the recovery rate in that it reflects the proportion of recyclable and compostable material that is recovered by the programs out of all the recyclable and compostable material that is generated by that sector. The estimated capture rates for recyclable and compostable materials are shown in Figure 8. As depicted below, 58% of all the recyclable materials generated in Santa Rosa are captured by the recycling programs, and 43% of all the compostable materials generated in Santa Rosa are captured by the composting programs.



Future Diversion Potential

The majority of waste in Santa Rosa is generated by the single family residential and commercial sectors. The largest amount of recoverable materials not currently being captured in existing programs are compostable paper, recyclable paper, and compostable food, as shown in Figure 6.

The highest potential to substantially increase diversion is in the commercial sector. Given that the maximum potential diversion rate for the commercial sector is 73%, but the current diversion rate in that sector is only 23%, there is much room for improvement. As shown in Table 7 below, the top five recoverable materials found in the commercial garbage stream include food, compostable paper, yard waste and wood. Providing composting technical assistance to Santa Rosa businesses that generate a large amount of food waste and compostable paper – restaurants, hotels, senior living centers, and schools – has the potential to significantly increase diversion in the commercial sector.

Table 7: Top 5 Recoverable Materials in Garbage: Commercial

Material	Est. Percent	Est. Tons
Food	23.2%	13,002
Compostable Paper	10.2%	5,734
Other Recyclable Paper	7.4%	4,178
Yard Waste	4.9%	2,759
Recoverable Wood	4.2%	2,345
Total	49.9%	28,018

The single family residential sector’s diversion rate of 52% could also be improved by recovering additional compostable food and recyclable paper that is currently being thrown in the garbage. Given that the maximum potential diversion in the single family residential sector is 77%, programs should be designed to encourage participation in existing curbside recycling and composting programs. However, outreach to this sector can be resource-intensive, since each single family residence generates only a small amount of waste.

Although the multi-family sector also has a low diversion rate, it represents a small proportion of Santa Rosa’s total waste generation. Therefore, efforts to increase multi-family diversion will have less of an impact on the Santa Rosa’s overall diversion rate. Self-haul waste is also a small proportion of Santa Rosa’s total waste generation. However, sorting programs at transfer stations in Santa Rosa could target increased diversion from the self-haul sector.

Appendix A: Material Category Definitions

Paper

Corrugated Cardboard and Kraft: Unwaxed corrugated products and kraft paper and bags made predominantly from paper, unless poly- or foil-laminated.

Newspaper: Printed groundwood newsprint and other minimally bleached groundwood. This category also includes some glossy paper typically used in newspaper insert advertisements.

Other Recyclable Paper: High-grade and low-grade recyclable papers. This includes white or light-colored bond and copy machine papers and envelopes, magazines, phone books, paperback books, colored papers, notebook or other lined paper, envelopes with plastic windows, non-corrugated paperboard, carbonless copy paper, and junk mail.

Polycoated Paper: Predominantly polycoated paper packaging, including milk, ice cream, and aseptic juice containers. This also includes recyclable paper cups of all kinds, including single use coffee cups and cold cups.

Compostable Paper: Includes paper contaminated with food residues at the time of disposal. Examples include pizza boxes and napkins. This also includes compostable paper plates, bowls, tubs, and clamshells that are coated with a compostable/PLA plastic or are non-coated.

Non-recoverable Paper: Paper items that do not fall into another paper category and other non-recoverable paper. Also includes composite items that are predominantly paper by weight.

Plastic

#1 & #2 Plastic Containers: Includes any containers used as packaging marked with a #1 or #2. This includes plastic bottles, jars, tubs, other ridged packaging, clamshells, trays, and plastic cup lids.

Other Recyclable Plastics: All other recyclable containers used as packaging marked with a # 3, #4, #5, #6 or #7 except expanded polystyrene (Styrofoam). Includes bottles, plastic jars, tubs, other ridged packaging, clamshells, trays, and plastic cup lids. Does not include plastics labeled compostable or PLA.

Recoverable Film: Bags made predominantly from plastic. Includes merchandise bags and bulk food bags such as grain or potato bags, pallet wrap, garment bags, newspaper bags, and plastic sleeve packaging.

Non-recoverable Film: Plastic food packaging films, including food-contaminated saran wrap, bulk soup/sauce pouches, and branded packaging. Sometimes includes foil/plastic or paper/plastic composite. Includes candy bar wrappers, chip bags, garbage bags, paper/plastic hybrid sandwich bags, food service tissue with a plastic/foil layer, and mylar coffee pouches.

Non-recoverable Plastic: Plastic items that do not fall into another plastic category and other non-recoverable plastics, such as, expanded polystyrene food service or packaging, empty tubes of toothpaste and toothbrushes, and plastics labeled compostable or PLA. Also includes composite items that are predominantly plastic by weight.

Glass

Glass Jars and Bottles: Clear and colored bottles and jars that are used for food, soft drinks, beer, and wine. This does not include glass serving glasses, glass blocks, or flat glass.

Non-recoverable Glass: Glass items that do not fall into the Glass Jars and Bottles category. Also includes composite items that are predominantly glass by weight.

Metal

Tin/Steel Cans: Food cans, including zinc, tin, plastic-coated, and lined steel food containers.

Aluminum Cans & Foil: Beverage cans composed of aluminum only and other types of aluminum containers such as pans and trays.

Other Recyclable Metals: Commonly recyclable ferrous and non-ferrous metal items such as sheet metal, cable, paint and other non-food “tin cans,” empty aerosol cans, and appliances. Excludes composite materials or electronics.

Non-recoverable Metal: Metal items that do not fall into other metal categories, including metal caps/lids. Also includes composite items predominantly metal by weight, such as umbrellas and coated wire.

Organics

Food: Food material resulting from the processing, storage, preparation, cooking, handling, or consumption of food.

Yard Waste: Compostable plants, pruning, and trimmings including incidental amounts of soil. Woody material must be less than four inches in diameter.

Textiles: Cloth, clothing, shoes and boots, purses, belts, and rope made of 100% cotton, leather, wool, other naturally-occurring fibers, unknown fibers, synthetic fibers, rubber, or a mixture of materials.

Non-recoverable Organics: Includes combustible materials such as wax, bar soap, cigarette butts, scraps of leather and <100% leather products including shoes and belts, feminine hygiene products, ash, and other organic materials not classified elsewhere.

C&D

Recoverable Wood: Wood pallets, dimensional lumber, and other unpainted or stained wood products with only trace amounts of metal, glue, or other contaminants.

Carpet: General category of flooring applications consisting of various natural or synthetic fibers bonded to some type of backing material, including carpet pad.

Recoverable C&D: Recoverable construction, demolition, or land clearing waste such as concrete, asphalt shingles, and clean gypsum wallboard.

Non-recoverable C&D: Construction debris that cannot be classified elsewhere and mixed fine building material scraps. Includes other roofing, ceramics, demolition gypsum board, dried latex paints, ceiling tiles, and fiberglass insulation.

Other Materials

Household Hazardous Waste: Items that are hazardous to human and environmental health. Examples include vehicle and equipment fluids, fluorescent lights, lead acid car batteries, cleaning products, and medical waste.

Electronic Waste: Any items with circuitry powered by electricity including televisions, computers, cell phones, and tablets.

Tires: Vehicle tires of all types.

Bulky Items: Furniture such as upholstered chairs, mattresses, microwaves, and other over-sized items.

Non-recoverable Other: All materials not fitting into one of the above categories, multi-material composite or indistinct items not elsewhere defined including materials such as residual, personal care products (shampoo, cosmetics), ash, and plastic fiber wipes (baby wipes or Swiffer sheets).

Appendix B: Additional Tables

The tables below provide (1) additional detail about materials that could potentially be recovered from the garbage streams in the various sectors, (2) top appropriate materials found in various streams, and (3) top contaminants, or incorrect materials, found in various streams.

Table 8: Top 5 Materials in Single Family Garbage

Material	Est. Percent	Est. Tons
Food	24.1%	7,840
Non-recoverable Organics	9.7%	3,155
Compostable Paper	8.5%	2,780
Non-recoverable Other	6.7%	2,190
Other Recyclable Paper	5.7%	1,850
Total	54.7%	17,815

Table 9: Top 5 Recoverable Materials in Single Family Garbage

Material	Est. Percent	Est. Tons
Food	24.1%	7,840
Compostable Paper	8.5%	2,780
Other Recyclable Paper	5.7%	1,850
Yard Waste	4.7%	1,545
Other Recyclable Plastics	3.5%	1,141
Total	46.5%	15,156

Table 10: Top 5 Materials in Single Family Recycling

Material	Est. Percent	Est. Tons
Other Recyclable Paper	28.8%	6,153
Corrugated Cardboard and Kraft	18.4%	3,934
Newspaper	13.0%	2,786
Glass Containers	12.8%	2,738
Non-recoverable Glass	6.1%	1,299
Total	79.2%	16,910

Table 11: Top 5 Contaminants (Materials that cannot be recycled) in Single Family Recycling

Material	Est. Percent	Est. Tons
Non-recoverable Glass	6.1%	1,299
Non-Recoverable Paper	2.4%	510
Non-recoverable Other	1.5%	310
Non-recoverable Plastics	1.3%	277
Textiles	1.3%	275
Total	12.5%	2,671

Table 12: Top 5 Materials in Single Family Organics

Material	Est. Percent	Est. Tons
Yard Waste	72.2%	18,133
Food	18.0%	4,524
Compostable Paper	2.8%	708
Non-recoverable Other	2.5%	632
Corrugated Cardboard and Kraft	1.2%	308
Total	96.8%	24,305

Table 13: Top 5 Contaminants (Materials that cannot be composted) in Single Family Organics

Material	Est. Percent	Est. Tons
Non-recoverable Other	2.5%	632
Non-recoverable C&D	1.1%	275
Polycoated Paper	0.2%	51
Non-recoverable Film	0.1%	33
Non-recoverable Organics	0.1%	26
Total	4.1%	1,017

Table 14: Top 5 Materials in Multi-family Garbage

Material	Est. Percent	Est. Tons
Food	25.5%	1,608
Other Recyclable Paper	9.1%	576
Compostable Paper	6.8%	429
Glass Containers	4.0%	253
Other Recyclable Plastics	3.5%	219
Total	48.9%	3,085

Table 15: Top 5 Recoverable Materials in Multi-family Garbage

Material	Est. Percent	Est. Tons
Food	25.5%	1,608
Other Recyclable Paper	9.1%	576
Non-recoverable Organics	8.7%	549
Compostable Paper	6.8%	429
Textiles	5.1%	322
Total	55.2%	3,484

Table 16: Top 5 Materials in Multi-family Recycling

Material	Est. Percent	Est. Tons
Corrugated Cardboard and Kraft	26.8%	220
Other Recyclable Paper	18.8%	154
Glass Containers	15.9%	130
Newspaper	11.3%	93
Food	3.9%	32
Total	76.7%	629

Table 17: Top 5 Contaminants in Multi-family Recycling

Material	Est. Percent	Est. Tons
Non-recoverable Glass	2.5%	20
Non-Recoverable Paper	2.2%	18
Non-recoverable Film	1.1%	9
Textiles	1.0%	8
Non-recoverable Plastics	1.0%	8
Total	7.7%	63

Table 18: Top 5 Materials in Multi-family Organics

Material	Est. Percent	Est. Tons
Food	60.4%	18
Yard Waste	23.0%	7
Compostable Paper	5.8%	2
Corrugated Cardboard and Kraft	1.9%	1
Non-recoverable Plastics	1.1%	0
Total	92.4%	28

Table 19: Top 5 Contaminants in Multi-family Organics

Material	Est. Percent	Est. Tons
Non-recoverable Plastics	1.1%	0
Polycoated Paper	1.1%	0
Non-recoverable Film	1.0%	0
Non-recoverable C&D	0.7%	0
Non-recoverable Other	0.7%	0
Total	4.7%	0

Table 20: Top 5 Materials in Garbage: Commercial

Material	Est. Percent	Est. Tons
Food	23.2%	13,002
Compostable Paper	10.2%	5,734
Other Recyclable Paper	7.4%	4,178
Non-recoverable Film	5.8%	3,234
Yard Waste	4.9%	2,759
Total	51.5%	28,907

Table 21: Top 5 Recoverable Materials in Garbage: Commercial

Material	Est. Percent	Est. Tons
Food	23.2%	13,002
Compostable Paper	10.2%	5,734
Other Recyclable Paper	7.4%	4,178
Yard Waste	4.9%	2,759
Recoverable Wood	4.2%	2,345
Total	49.9%	28,018

Table 22: Top 5 Materials in Recycling: Commercial

Material	Est. Percent	Est. Tons
Corrugated Cardboard and Kraft	32.9%	4,873
Other Recyclable Paper	19.2%	2,842
Other Recoverable Metal	9.9%	1,463
Glass Containers	8.6%	1,268
Food	5.3%	790
Total	75.9%	11,236

Table 23. Top 5 Contaminants in Recycling: Commercial

Material	Est. Percent	Est. Tons
Other Recoverable Metal	9.9%	1,463
Non-recoverable Film	1.3%	198
Non-recoverable Glass	1.2%	175
Non-recoverable Plastics	0.9%	136
Non-Recoverable Paper	0.8%	113
Total	14.1%	2,085

Table 24. Top 5 Materials in Organics: Commercial

Material	Est. Percent	Est. Tons
Food	59.0%	4,298
Yard Waste	13.8%	1,002
Recoverable Wood	11.3%	820
Compostable Paper	8.8%	642
Polycoated Paper	1.0%	75
Total	93.9%	6,837

Table 25. Top 5 Contaminants in Organics: Commercial

Material	Est. Percent	Est. Tons
Polycoated Paper	1.0%	75
Non-recoverable Film	1.0%	70
Non-recoverable Plastics	0.7%	52
Non-Recoverable Paper	0.6%	43
Non-recoverable C&D	0.4%	32
Total	3.7%	272

Table 26. Top 5 Materials in Self-haul Garbage

Material	Est. Percent	Est. Tons
Recoverable Wood	15.8%	2,815
Recoverable C&D	15.5%	2,760
Non-recoverable C&D	14.6%	2,605
Bulky Items	6.3%	1,125
Yard Waste	6.3%	1,118
Total	58.4%	10,423

Table 27. Top 5 Recoverable Materials in Self-haul Garbage

Material	Est. Percent	Est. Tons
Recoverable Wood	15.8%	2,815
Yard Waste	6.3%	1,118
Other Recyclable Paper	4.9%	881
Food	3.5%	631
Corrugated Cardboard and Kraft	2.0%	350
Total	32.4%	5,795

Table 28. Top 5 Materials in Self-haul Recycling

Material	Est. Percent	Est. Tons
Corrugated Cardboard and Kraft	22.5%	228
Other Recyclable Paper	12.8%	129
Other Recoverable Metal	12.0%	121
Non-recoverable Metal	11.9%	120
Glass Containers	8.6%	87
Total	67.8%	685

Table 29. Top 5 Contaminants in Self-haul Recycling

Material	Est. Percent	Est. Tons
Other Recoverable Metal	12.0%	121
Non-recoverable Metal	11.9%	120
Non-recoverable Other	7.8%	79
Textiles	4.6%	46
Electronic Waste	1.1%	11
Total	37.3%	377

Table 30. Top 5 Materials in Self-haul Organics

Material	Est. Percent	Est. Tons
Yard Waste	99.6%	408
Non-recoverable Organics	0.4%	2
Compostable Paper	0.3%	1
Corrugated Cardboard and Kraft	0.1%	0
Polycoated Paper	0.0%	0
Total	100.4%	411

Table 31. Top 5 Contaminants in Self-haul Organics

Material	Est. Percent	Est. Tons
Non-recoverable Organics	0.4%	2
Polycoated Paper	0.0%	0
Recoverable Film	0.0%	0
Non-recoverable Plastics	0.0%	0
Other Recoverable Metal	0.0%	0
Total	0.5%	2

Appendix C: Tables for Schools

Table 32: Detailed Disposal Composition: Schools

Commercial - Schools								
Material	Garbage		Recycle		Organics		Total Generation	
	Est. %	Est. Tons	Est. %	Est. Tons	Est. %	Est. Tons	Est. %	Est. Tons
Paper	23.0%	766	74.4%	275	42.7%	38	28.4%	1,078
Corrugated Cardboard and Kraft	4.2%	140	47.1%	174	0.0%	-	8.2%	312
Newspaper	1.7%	56	4.5%	17	0.0%	-	1.9%	72
Other Recyclable Paper	8.1%	271	12.8%	47	1.4%	1	8.4%	320
Polycoated Paper	0.1%	3	0.5%	2	1.0%	1	0.1%	5
Compostable Paper	7.6%	254	9.0%	33	40.4%	36	8.6%	324
Non-Recoverable Paper	1.2%	42	0.6%	2	0.0%	-	1.2%	44
Plastic	13.1%	435	10.7%	40	0.1%	0	12.5%	474
#1 & #2 Plastic Containers	2.1%	71	1.4%	5	0.0%	-	2.0%	76
Other Recyclable Plastics	2.4%	79	0.8%	3	0.1%	0	2.2%	82
Recoverable Film	1.5%	50	0.0%	0	0.0%	-	1.3%	50
Non-recoverable Film	3.0%	99	0.7%	3	0.0%	-	2.7%	102
Non-recoverable Plastics	4.1%	136	7.7%	29	0.0%	-	4.3%	165
Glass	0.9%	30	7.1%	26	0.0%	-	1.5%	55
Glass Containers	0.8%	27	7.1%	26	0.0%	-	1.4%	53
Non-recoverable Glass	0.1%	3	0.0%	-	0.0%	-	0.1%	3
Metal	2.6%	87	0.4%	2	0.0%	-	2.3%	88
Tin/Steel Cans	0.2%	7	0.3%	1	0.0%	-	0.2%	8
Aluminum Cans & Foil	0.1%	4	0.0%	0	0.0%	-	0.1%	4
Other Recoverable Metal	1.4%	47	0.0%	-	0.0%	-	1.3%	47
Non-recoverable Metal	0.9%	29	0.1%	0	0.0%	-	0.8%	29
Organics	41.2%	1,371	0.6%	2	57.2%	51	37.6%	1,427
Food	21.5%	717	0.6%	2	27.8%	25	19.7%	745
Yard Waste	14.0%	467	0.0%	-	29.4%	26	13.0%	494
Textiles	3.2%	107	0.0%	-	0.0%	-	2.8%	107
Non-recoverable Organics	2.4%	81	0.0%	-	0.0%	-	2.1%	81
Construction & Demolition	14.4%	478	6.6%	25	0.0%	-	13.3%	503
Recoverable Wood	4.9%	163	0.0%	-	0.0%	-	4.3%	163
Carpet	0.4%	14	6.6%	25	0.0%	-	1.0%	38
Recoverable C&D	2.6%	88	0.0%	-	0.0%	-	2.3%	88
Non-recoverable C&D	6.4%	213	0.0%	-	0.0%	-	5.6%	214
Other Materials	4.9%	164	0.1%	1	0.0%	-	4.3%	165
Household Hazardous Waste	0.6%	19	0.0%	-	0.0%	-	0.5%	19
Electronic Waste	0.0%	1	0.0%	0	0.0%	-	0.0%	1
Tires	0.0%	-	0.0%	-	0.0%	-	0.0%	-
Bulky Items	0.8%	27	0.0%	-	0.0%	-	0.7%	27
Non-recoverable Other	3.5%	117	0.1%	0	0.0%	-	3.1%	118
Totals	100.0%	3,330	100.0%	370	100.0%	90	100.0%	3,790

Percentages for material types may not total 100% due to rounding.

Figure 9: Recoverability of Garbage Stream Waste: Schools

