



**WASTE COMPOSITION ANALYSIS**  
**for the**  
**STATE OF WASHINGTON**

**FINAL REPORT**

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# **EXECUTIVE SUMMARY**

## **INTRODUCTION**

This report uses data from several counties to provide an estimate of the composition of solid waste throughout the State of Washington. In addition to composition figures describing the breakdown of solid waste into materials such as paper and plastic, figures are also provided for the breakdown of waste quantities by source (residential and commercial).

This report focuses on municipal solid waste (MSW), or the garbage that typically is brought to landfills for disposal. Other types of wastes are not addressed by this analysis, including biosolids, petroleum-contaminated soils, and various types of wastes that are handled on-site at the point of generation (such as crop and logging residues). Hazardous wastes are not addressed by this report, except to the extent that these are disposed with solid waste. Finally, materials that are diverted through recycling and composting are also not included in this analysis.

## **OVERVIEW OF THE ANALYSIS**

This analysis employed waste composition data from 10 counties and one city to project the percentage breakdown of materials making up the solid waste stream of Washington State. The analysis began with an examination of the available data. Some data was discarded because it was outdated or limited in scope, and the remaining data was modified slightly to eliminate differences in categories. Once the material categories were adjusted for each of the studies being used in this analysis, that data was applied to the disposal tonnages for other counties with similar demographics. Those figures were then summed up to derive a statewide total.

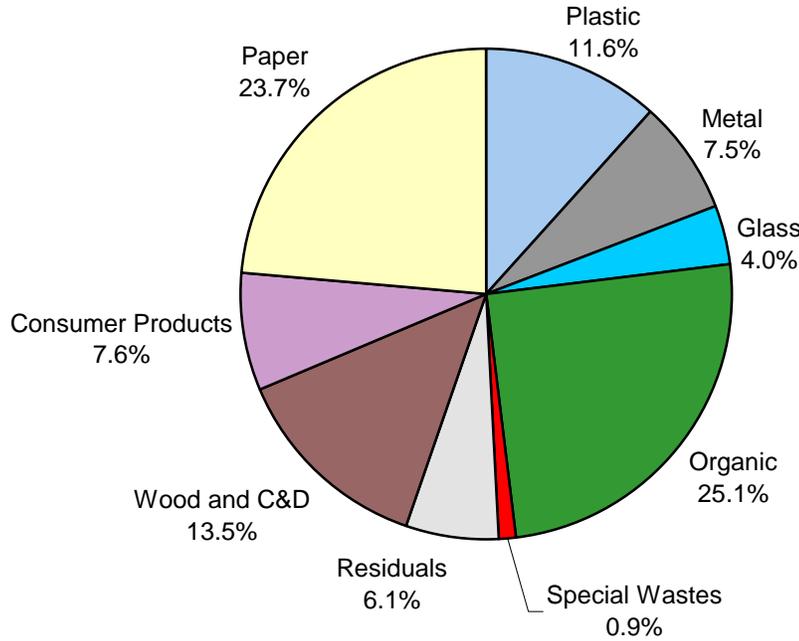
## **RESULTS**

The results of the analysis of waste tonnages and the breakdown by source led to the conclusion that the State's waste stream is very close to 50% residential and 50% commercial/industrial. The results of the composition analysis are shown in Figure E-1.

## **CONCLUSIONS AND RECOMMENDATIONS**

Waste composition and quantities can be expected to change in the future. Some of the more immediate impacts can be expected to occur due to the ban on mercury; the possible closure of many limited purpose landfills due to the new 350 standards and the materials disposed at those sites becoming part of the MSW; ongoing changes in packaging (PET, especially colored PET, continues to take market share away from glass and other plastics); ongoing efforts to improve waste diversion programs; and the increased emphasis on sustainability and zero waste.

**FIGURE E - 1: STATEWIDE WASTE COMPOSITION RESULTS**



**Summary of Waste Composition Results, Major Categories and Select Materials:**

Paper	23.7%	Organics	25.1%
Cardboard	5.2%	Yard Debris	4.7%
Newspaper	2.8%	Food Waste	15.7%
Compostable Paper	5.8%	Diapers	2.5%
Plastic	11.6%	Consumer Products	7.6%
PET Bottles	0.5%	Computers	0.1%
HDPE Bottles	0.6%	Other Electronics	0.2%
Film and Bags	4.9%	Textiles, Shoes	2.6%
Metals	7.5%	Tires	0.4%
Aluminum Cans	0.5%	Carpet	1.9%
Tin Cans	1.1%	Wood Wastes	8.6%
Glass	4.0%	C&D Wastes	4.9%
Clear Glass	1.7%	Hazardous/Special Wastes	0.9%
Brown Glass	0.7%	Residuals	6.1%
Green Glass	0.4%	Total Tons per Year Statewide	5,538,000

As a result of this analysis, the following areas have been identified that need further study:

- to provide critical information for planning and monitoring, additional waste composition data is needed. The highest priority is Spokane County and also a rural county along the eastern edge or in the southeastern corner. A few additional counties in western Washington would also help, especially in less-populated counties in the southwestern and northwestern corners of the state. One way to look at the gaps in data is to examine these on the basis of Ecology's regions:
  - in the Southwest region, there is a definite need for additional data for the more rural counties (it is anticipated that Clark and Thurston Counties will continue to conduct their own studies). The priority in this region is Pacific or Grays Harbor Counties, or an updated study for Lewis County. At some point in the next few years, an updated study for Pierce County is also a high priority.
  - in the Northwest region, good data exists for the more urban counties (King and Snohomish), but other counties in this area have significant employment and demographic differences. It would be interesting to examine the impacts of the unique demographics for San Juan County (and to a lesser extent, Island County), but this data could not be easily transferred to other counties and so Skagit and Whatcom Counties are considered to be the more immediate priorities.
  - in the Central region, there is also some concerns about the transferability of data from Yakima County (with their low disposal fee and huge agricultural base) and Okanogan County to other counties, and so it would be good to fill in some of the gaps in this region by conducting studies in additional counties. Any one of the other counties in this region would be good choices for additional work, but especially Benton County (with their larger population and higher waste amount) or the more populated counties in the center of the state (Chelan or Kittitas County).
  - in the Eastern region, an updated study is needed for Spokane County. An updated study for Whitman County may also be interesting, as this would provide an opportunity to look at historical trends, but otherwise a county in the southeastern corner of the state should be considered a high priority.
- more information about waste generation rates would be helpful for planning and monitoring purposes, for efforts on both the local and state levels, and in both the private and public sectors. At a minimum, more information about the amount of residential and non-residential wastes in every part of the State is needed (every part that is not already collecting that information through waste studies, that is). This type of data would allow the calculation of per capita and per employee rates for waste monitoring purposes, but additional information about employee generation rates by type of business or industry is also needed on a statewide basis.

- more information is also needed on waste densities by source (residential versus commercial, as well as by specific type of business and industry). This is a significant “missing link” for many waste planning and monitoring efforts.
- finally, if we are serious about influencing the production of waste in the future, more research is needed on the correlation between waste generation and demographic factors.

# STATEWIDE WASTE COMPOSITION REPORT

## INTRODUCTION

This report uses data from several counties to provide an estimate of the composition of solid waste throughout the State of Washington. In addition to composition figures describing the breakdown of solid waste into materials such as paper and plastic, figures are also provided for the breakdown of the waste by source (such as residential or commercial).

This report focuses on municipal solid waste (MSW), or the garbage that typically is brought to permitted landfills for disposal. Other types of wastes are not addressed by this analysis, including biosolids, petroleum-contaminated soils, and various types of industrial wastes that are handled on-site at the point of generation (such as crop and logging residues). Hazardous wastes are not addressed by this report except to the extent that these are disposed with municipal solid waste. Finally, materials that are diverted through recycling and composting are also not included in this analysis.

## BACKGROUND

The composition of solid waste in the State of Washington has been studied several times over the past 15 years. These studies have been conducted on a statewide basis (in 1987 and 1992) or on a more local basis (by various counties and cities). These studies have proved important for planning new programs for recycling and other types of solid waste management, and for evaluating the success of existing programs.

The data from previous statewide studies has become outdated by recent advancements in waste diversion programs (recycling and composting in particular) and by ongoing changes in consumer habits, shifts in packaging, and other factors. Increased interest in conducting a new statewide waste composition study led to discussions about the feasibility of providing that analysis by combining the results of existing studies conducted on a local level. Since the local studies have been conducted primarily by urban counties, and primarily in Western Washington, it was concluded that additional data was needed from rural and from Eastern Washington counties in order to effectively combine local studies into a statewide picture. Hence, in 2002 the Washington Department of Ecology (Ecology) provided funds for studies in Yakima, Clallam, Grant and Okanogan Counties. This report employs the results of those studies, together with the results of recent studies conducted for other counties, to estimate the composition of solid waste for all of Washington State.

Just as previous statewide studies have become outdated due to changes in disposal habits and material consumption, it is anticipated and even hoped that this study will become outdated as society puts increased emphasis on sustainability and better use of natural resources.

## AVAILABLE DATA

### Overview

Waste composition data is available from many sources:

- State - as mentioned above, previous studies were conducted in 1987 and 1992.
- Counties - several counties have conducted waste composition studies (see Table 1). Some of the counties (Clark and King) have conducted these studies on a regular basis, and intend to perform future studies as part of a waste monitoring strategy and evaluation tool. Other counties (such as Snohomish) have conducted more than one waste composition study but have not established a firm schedule for future studies.
- Cities - Seattle has conducted waste composition studies on a regular basis over the past ten years, and their most recent data is from the year 2000. Due to the separate disposal systems employed by Seattle and King County, waste composition studies for these two municipalities also do not overlap and the Seattle data must be considered along with the King County data to provide a complete picture for this county.

**TABLE 1: LOCAL WASTE COMPOSITION STUDIES**

County/City	Time Period for Data Collection*
Clallam	2002 - 2003
Clark	1999
Grant	2002 - 2003
King	1999 - 2000
Lewis	1996
Okanogan	2002-2003
Pierce	1995
Seattle	2000
Skagit	1990
Snohomish	1997 - 1998
Spokane	1993
Thurston	1999
Whitman	1994 - 1995
Yakima	2002 - 2003

\* The dates shown here are for the most recent reports available.

The City of Olympia contributed funding for additional studies as part of Thurston County’s study. Other large cities, such as Tacoma, Spokane and Everett, are included in the studies conducted by their county. Smaller cities have not had the resources to conduct such studies.

- Others - waste composition studies have been conducted by a few of the military bases in Washington, and various businesses and industries have performed their own studies as well. To the extent this data is publicly available, these results are shown in Appendix A of this report. As part of the Ecology projects in 2002-2003, surveys were conducted to research the wastes generated by nine types of agricultural and industrial groups. That data is shown in the report produced by Cascadia Consulting Group for Grant and Okanogan Counties.

In addition to the composition data, information about quantities of waste disposed by various types of waste generators is also available from the previous studies. A complicating factor in the use of this waste quantity data is the small differences in the categories and definitions used by the different studies. For instance, some studies have been able to address multi-family (apartments) as a separate source, whereas in rural areas this is not possible due to practical limitations (i.e., there are not loads of pure apartment wastes for sampling). Available data is shown in Table 2.

**TABLE 2: WASTE QUANTITY DATA**

Source (Type of Waste Generator)	Clallam	Clark	Grant	King	Lewis	Okanogan	Snohomish	Thurston	Yakima
<b>Residential:</b>	<b>47.9</b>	<b>53.1</b>	<b>32.8</b>	<b>57.6</b>	<b>49.2</b>	<b>32.3</b>	<b>48.7</b>	<b>43.8</b>	<b>46.8</b>
Single-Family	33.3	31.3		41.4	37.0		28.8	26.4	28.1
Apartments <sup>1</sup>		9.9					10.2		
Residential Self-Haul	14.6	11.9		16.2	12.2		9.7	17.4	18.8
<b>Non-Residential</b>	<b>52.1</b>	<b>46.9</b>	<b>67.2</b>	<b>42.4</b>	<b>50.7</b>	<b>67.7</b>	<b>51.3</b>	<b>56.2</b>	<b>52.4</b>
Commercial/Institutional <sup>2</sup>	28.5	35.6	44.9	38.5	41.4		42.0	43.0	47.3
Non-Residential Self-Haul	4.9	11.3		3.9	9.3		9.3	13.2	5.1
Industrial	18.8		22.3						

Notes: All figures are percent by weight.

1. Single-family category includes apartments for counties where a separate figure for apartments is not shown.
2. Commercial/institutional category includes industrial for counties where a separate figure for industrial is not shown.

## COMPARISON OF COUNTY PARAMETERS

Table 3 shows basic parameters for the Washington counties, including demographic and other data that could potentially impact waste disposal quantities and composition. Table 3 groups these parameters according to the part of the waste stream that they are most likely to impact.

The data shown in Table 3 is helpful in deciding how to group the counties, but the level of development in the science of solid waste management at this point in time does not allow an accurate correlation to be made between demographic factors and waste composition or waste quantities. The factors that are known to affect composition and quantities, however, include:

- recycling and composting programs - waste diversion programs affect both the composition and quantity of waste produced, and so have one of the larger impacts. Ideally, some assessment of the relative amount of recycling and composting could be used to compare the counties, and thus make more sense of the waste disposal rates, but that is beyond the scope of this analysis. In general, however, recycling programs are readily available in the more urban areas, and this includes curbside programs as well as opportunities such as scrap metal recyclers and cardboard collection companies. In other words, the availability of recycling programs in urban areas is a factor for both residential and non-residential wastes.
- types of business and industry - the types of businesses active in each county has an obvious impact on the makeup and amount of non-residential wastes. Some data is available on business waste (see the information in Appendix C, for instance), but insufficient data exists to “build up” to a detailed analysis of an area’s non-residential wastes beginning with the composition data for each business. In particular, waste generation rates for each industry are lacking, so that even if composition data is known then the quantities contributed by each type of business is still unknown. In addition, certain industries create large amounts of special wastes that are currently being handled outside of the MSW landfills (those amounts are not included in the tons of waste per year shown in Table 3).
- climate - climate affects waste composition in obvious ways, such by creating more or less yard debris, and in less obvious ways, such as affecting choices of building materials. In Washington, two distinct areas exist for climate (the drier and colder eastern part of the state, versus the wetter western side), but large differences can exist within any one county and so it is dangerous to generalize too much in this respect.
- geography - geography affects the availability of local resources (timber and agricultural lands), which have a significant impact on industries present in the area. Geography also affects the residential waste stream in less obvious ways, by influencing lifestyles and hence consumer patterns. Likewise, marine (coastal) activities also influence both residential and non-residential waste streams.
- amount of construction activity - counties with a larger amount of building activity are of course generating larger amounts of construction wastes. In those areas where building activity is taking place in areas already developed, as opposed to new construction, there is a relatively larger amount of demolition wastes and less land-clearing wastes. Demolition wastes can contain more hazardous materials, including asbestos and lead-based paints, whereas wastes from new construction include cleaner materials.

- floods, wind and ice storms, earthquakes, etc. - natural events or disasters can create huge amounts of waste, and the regular or sporadic occurrence of these can greatly impact one county's waste stream more than another county's waste stream.
- single-family versus multi-family (apartments) - the amount of yard debris (i.e., the amount of lawns and other landscaping on a per-capita basis) is one of the largest differences between single-family and multi-family waste streams. In addition, there are significant differences in construction wastes and special wastes, due to the larger amounts of building and yard associated with single-family homes. There are also the even less-defined impacts associated with lifestyle and consumption habits.
- rural versus urban - there is a general assumption that differences in lifestyle and other factors creates a difference in urban and rural waste streams, but the availability of recycling programs is probably one of the strongest factor. Other factors include increased space to handle organic wastes on-site in rural areas and increased amounts of backyard burning in rural areas.
- other factors affecting local waste generation include tourism and seasonal population, which can increase a county's waste quantities (or change the composition) without providing a measurable increase in population or other parameters, and "leakage" or transfers between areas due to differences in disposal rates or other reasons.

Many of these factors can be summed up with one concept - proximity. The climate, geography and, due to the population patterns in Washington, the urban concentrations and relative amounts of recycling and composting programs are largely grouped into broad regional areas.

### **Data to be used for Analysis**

As can be seen in Table 1, some of the studies that have been conducted by the counties are more than five years old, including Lewis, Pierce, Skagit, Spokane, and Whitman. While there are no firm guidelines for the acceptable age of this type of data, it is clear that as time passes the data becomes outdated by changes in composition caused by changes in products and packaging, changes in recycling and other waste diversion programs, changes in waste handling and disposal habits, and other factors.

Changes in the definitions of materials are also a problem. Certain materials, such as low-grade paper, have suffered from a shifting definition as various materials have been deemed acceptable for this category or not. A related problem is the different lists of materials used by different studies. Lewis County's study examined a shorter list of materials than most, which served their needs at the time but makes it difficult to incorporate their results into this analysis. The list of materials and definitions for Skagit County's study, and many other studies that date back to that time period, reflect the assumption that incineration would be the disposal method.

On the other hand, rejecting all of the data over five years old would leave serious gaps in the data for Eastern Washington, especially along the very eastern side of the state. Furthermore, Whitman County is somewhat unique in their demographics, and so it would be better to use their own data for them, even if it is somewhat outdated.

**TABLE 3: COMPARISON OF COUNTIES**

County	TPY <sup>1</sup>	Waste Disposal Rates <sup>2</sup>	Residential Factors <sup>3</sup>				Commercial/Industrial Factors					
			Population	% SF Homes	Median HH Income, \$	Average HH Size	Employment <sup>4</sup>					Farms, % of Land Area <sup>5</sup>
							Total	Agr	Const	Mfg	Other	
Adams	12,481	4.16	16,428	66.8	33,888	3.09	6,490	<b>25.6</b>	3.7	13.7	<b>57.0</b>	89
Asotin	13,300	3.55	20,551	75.9	33,524	2.42	9,211	3.3	7.4	12.0	77.3	75
Benton	123,328	4.74	142,475	66.7	47,044	2.68	66,233	4.1	7.3	7.5	81.1	56
Chelan	65,099	5.35	66,616	73.0	37,316	2.62	28,507	8.9	6.9	6.6	77.6	6.6
<b>Clallam</b>	51,886	4.41	64,525	72.8	36,449	2.31	24,455	6.0	8.2	6.5	79.3	1.9
<b>Clark</b>	247,505	3.93	345,238	74.3	48,376	2.69	163,623	1.1	8.3	16.4	74.2	18
Columbia	2,385	3.22	4,064	80.6	33,500	2.36	1,720	13.3	6.3	8.7	71.7	56
Cowlitz	94,809	5.59	92,948	71.7	39,797	2.55	39,888	3.5	7.7	<b>20.9</b>	67.9	4.3
Douglas	18,019	3.03	32,603	68.6	38,464	2.76	14,158	12.2	7.1	7.9	72.8	78
Ferry	1,487	1.12	7,260	70.8	30,388	2.49	2,655	12.8	7.4	6.7	73.1	57
Franklin	104,791	11.64	49,347	63.1	38,991	<b>3.26</b>	19,513	17.0	6.3	11.6	65.1	71
Garfield	<b>1,109</b>	2.54	<b>2,397</b>	76.6	33,398	2.39	<b>976</b>	18.6	5.3	<b>2.7</b>	73.4	71
<b>Grant</b>	86,236	6.33	74,698	60.1	35,276	2.92	29,364	18.8	5.1	12.7	63.4	64
Grays Harbor	52,644	4.29	67,194	73.1	34,160	2.48	27,556	7.3	7.7	12.5	72.5	3.4
Island	40,828	3.13	71,558	78.9	45,513	2.52	27,023	1.7	8.0	11.8	78.5	12
Jefferson	16,037	3.39	25,953	75.6	37,869	2.21	10,865	3.7	10.5	10.4	75.4	1.1
<b>King</b>	<b>1,788,329</b>	5.64	<b>1,737,034</b>	62.3	<b>53,157</b>	2.39	<b>929,205</b>	<b>0.4</b>	5.7	12.6	81.3	3.1
Kitsap	246,004	5.81	231,969	73.3	46,840	2.60	98,146	0.9	7.7	11.0	80.4	7.4
Kittitas	27,322	4.49	33,362	66.8	32,546	2.33	15,509	5.2	7.3	5.4	82.1	12
Klickitat	23,633	6.76	19,161	68.2	34,267	2.54	7,848	13.1	7.6	12.2	67.1	49
<b>Lewis</b>	54,690	4.37	68,600	70.4	35,511	2.57	26,881	8.0	7.8	11.3	72.9	7.7
Lincoln	1,801	<b>0.97</b>	10,184	74.7	35,255	2.42	4,152	17.6	6.8	3.1	72.5	93
Mason	27,939	3.10	49,405	72.3	39,586	2.49	19,314	4.6	9.4	11.7	74.3	3.3
<b>Okanogan</b>	19,151	2.65	39,564	70.5	29,726	2.58	15,368	16.0	5.8	4.7	73.5	35
Pacific	11,011	2.88	20,984	69.4	31,209	2.27	7,989	8.3	6.8	9.9	75.0	6.7
Pend Oreille	5,524	2.58	11,732	72.4	31,677	2.51	4,044	5.6	8.4	13.9	72.1	7.0
<b>Pierce</b>	819,819	6.41	700,820	70.0	45,204	2.60	314,158	1.0	7.7	12.6	78.7	4.7
San Juan	10,262	3.99	14,077	<b>84.1</b>	43,491	<b>2.16</b>	6,606	3.3	<b>15.9</b>	6.3	74.5	15

**TABLE 3: COMPARISON OF COUNTIES, continued**

County	TPY <sup>1</sup>	Waste Disposal Rates <sup>2</sup>	Residential Factors <sup>3</sup>				Commercial/Industrial Factors					Farms, % of Land Area <sup>5</sup>
			Population	% SF Homes	Median HH Income, \$	Average HH Size	Employment <sup>4</sup>					
							Total	Agr	Const	Mfg	Other	
Skagit	86,240	4.59	102,979	74.8	42,381	2.60	45,729	5.9	9.0	13.5	71.6	8.4
Skamania	2,414	1.34	9,872	70.4	39,317	2.61	4,340	5.0	10.3	16.5	68.2	<b>0.3</b>
<b>Snohomish</b>	518,681	4.69	606,024	68.4	53,060	2.65	302,051	0.9	9.1	17.7	72.3	4.6
<b>Spokane</b>	331,193	4.34	417,939	72.5	37,308	2.46	191,295	0.9	6.4	10.1	82.6	52
Stevens	96,967	<b>13.26</b>	40,066	72.1	34,673	2.64	15,568	7.5	7.7	14.0	70.8	33
<b>Thurston</b>	145,551	3.85	207,355	69.5	46,975	2.50	100,487	2.1	6.8	6.7	86.5	12
Wahkiakum	1,683	2.41	3,824	71.0	39,444	2.42	1,554	14.6	7.9	10.1	67.4	7.7
Walla Walla	55,889	5.55	55,180	73.2	35,900	2.54	23,524	6.8	6.2	7.6	79.4	88
Whatcom	97,269	3.20	166,814	66.8	40,005	2.51	80,773	3.3	8.4	12.1	76.2	7.7
<b>Whitman</b>	20,939	2.82	40,740	<b>58.6</b>	<b>28,584</b>	2.31	18,870	6.4	<b>3.2</b>	2.7	<b>87.7</b>	<b>94</b>
<b>Yakima</b>	214,441	5.28	222,581	71.7	34,828	2.96	88,074	10.7	5.3	11.6	72.4	61
Statewide	5,538,696	5.15	5,894,121	68.2	45,776	2.53	2,793,722	2.5	7.0	12.5	78.0	36
Median Values	51,886	4.16	49,405	71.0	37,308	2.52	19,513	5.9	7.4	11.6	74.2	12

Notes: County names in bold denote a county with recent waste composition data. Data in the table that is shown in bold indicates the highest and lowest figures for that column.

1. TPY = Tons per Year, 2001 data. Figures are MSW only, and are from Ecology's annual survey of disposal facilities.
2. Per capita disposal rates are based on the annual disposal tonnages and population figures shown in this table.
3. Residential figures are from the U.S Census Bureau, from county profiles (year 2000 census data). For this analysis, single-family homes (SF) are defined to include one-unit houses and duplexes. HH = household.
4. Total = total employment, all civilian resident workers 16 years and older. All employment figures are from the U.S Census Bureau (year 2000 census data).
5. Percent of farmland is based on farm acreage figures from the 1997 Agriculture Census (USDA) and total land area from OFM.

Based on these considerations, data from the following counties will be used in this analysis: Clallam, Clark, Grant, King, Okanogan, Snohomish, Thurston, and Yakima. Data from Pierce and Whitman Counties will be used, too, but only for their own counties. Data from Seattle will also be used only for that city.

### **Grouping of Counties**

Based on a review of the above factors and matching the available data to the other counties, the proposed groupings are shown in Table 4 (see also Attachment A for a map of the counties). For these groupings, the data from the selected counties is being applied to the following tonnages:

Clallam - 210,610  
Clark - 346,410  
Grant - 558,020  
King - 1,313,300  
Okanogan - 123,130  
Pierce - 819,820  
Seattle - 474,980  
Snohomish - 702,190  
Thurston - 446,240  
Whitman - 20,940  
Yakima - 523,010  
Total - 5,538,650 tons per year

## **RESULTS**

### **Aggregation Method**

Combining data from studies with different lists of materials required “aggregating” (combining) some categories, and “dis-aggregating” (splitting) others. The goals of this part of the analysis were to retain as much detail as possible and to preserve the list of materials from the recent Ecology-funded studies as much as possible. For example, some studies divided HDPE bottles between natural and colored bottles. Differences in local programs made it questionable to attempt to divide the data for other studies, so these categories were added together (aggregated) for the studies that had divided these. Once each study’s data had been standardized in this manner for all materials, the data was applied to the allocated tonnages and the results summed up. Detailed descriptions of the modifications made for each study are shown in Attachment B. The modified data is shown in Table 5, and the original data is shown in Attachment C.

### **The Statewide Totals**

The results of the statewide analysis are shown in Table 6. The two top rows in that table show the total amounts of residential and non-residential wastes. These figures have coincidentally

**TABLE 4: APPLICATION OF DATA TO OTHER COUNTIES**

County	Clallam	Clark	Grant	King	Okanogan	Pierce	Seattle	Snohomish	Thurston	Whitman	Yakima
Adams			X								
Asotin											X
Benton											X
Chelan											X
<b>Clallam</b>	O										
<b>Clark</b>		O									
Columbia			X								
Cowlitz		X									
Douglas			X								
Ferry					X						
Franklin			X								
Garfield			X								
<b>Grant</b>			O								
Grays Harbor	X										
Island	X										
Jefferson	X										
<b>King, w/o Seattle</b>				O							
<b>Seattle</b>							O				
Kitsap									X		
Kittitas											X
Klickitat											X
Lewis									X		
Lincoln			X								
Mason	X										
<b>Okanogan</b>					O						
Pacific	X										
Pend Oreille					X						
<b>Pierce</b>						O					
San Juan	X										
Skagit								X			
Skamania		X									
<b>Snohomish</b>								O			
Spokane			X								
Stevens					X						
<b>Thurston</b>									O		
Wahkiakum		X									
Walla Walla											X
Whatcom								X			
<b>Whitman</b>										O	
<b>Yakima</b>											O

Key: O = denotes a county that has their own waste composition data. X denotes a county without their own data and indicates which other county's results will be applied to that county.

**TABLE 5: MODIFIED DATA FOR COUNTIES**

	Clallam	Clark	Grant	King	Okanogan	Pierce	Seattle	Snohomish	Thurston	Whitman	Yakima
<b>Paper</b>	19.6%	21.8%	19.2%	24.8%	27.7%	32.7%	21.7%	22.6%	20.4%	35.1%	16.7%
Cardboard	3.74%	4.72%	3.8%	6.2%	5.8%	7.1%	4.31%	4.92%	3.68%	7.7%	4.43%
Newspaper	1.86%	2.14%	1.6%	3.3%	2.3%	4.6%	2.92%	2.48%	1.82%	4.7%	2.11%
Other Groundwood	0.39%	0.29%	0.9%	0.4%	0.6%	0.4%	0.29%	0.29%	0.28%	0.9%	0.28%
High-Grade	0.91%	0.92%	1.7%	1.4%	1.2%	2.7%	1.76%	1.15%	0.49%	1.9%	0.77%
Magazines	1.69%	1.08%	0.9%	1.5%	2.2%	2.3%	1.52%	1.23%	1.38%	2.1%	0.70%
Mixed/Low-Grade	5.24%	4.10%	4.3%	5.1%	6.2%	4.8%	4.73%	4.26%	4.04%	10.5%	3.76%
Compostable	4.32%	6.43%	4.3%	5.1%	6.9%	8.8%	4.49%	6.26%	6.60%	6.2%	3.58%
Remainder/Composite	1.40%	2.09%	1.6%	1.7%	2.4%	2.0%	1.56%	2.03%	2.14%	1.1%	1.04%
<b>Plastic</b>	12.7%	13.0%	10.7%	10.1%	12.0%	11.0%	8.78%	13.4%	12.8%	7.0%	12.7%
PET Bottles	1.00%	0.39%	0.7%	0.4%	0.8%	0.4%	0.30%	0.46%	0.52%	0.4%	0.62%
HDPE Bottles	1.10%	0.53%	0.7%	0.5%	1.1%	0.4%	0.43%	0.66%	0.68%	0.7%	0.66%
Film and Bags	4.70%	4.51%	5.1%	5.3%	4.8%	4.7%	3.76%	4.83%	4.80%	1.6%	4.12%
Bottles Types 3 - 7	0.08%	0.06%	0.1%	0.8%	0.3%	0.7%	0.08%	0.06%	0.05%	0.1%	0.04%
Expanded Polystyrene	0.60%	0.78%	0.3%	0.5%	0.6%	0.7%	0.56%	0.80%	0.46%	0.3%	0.45%
Other Rigid Packaging	1.55%	1.49%	0.7%	0.5%	1.5%	2.2%	0.93%	1.59%	1.58%	2.3%	1.80%
Other Products	2.84%	4.33%	1.9%	1.3%	1.4%	1.5%	1.60%	4.04%	3.74%	0.5%	3.88%
Remainder/Composite	0.84%	0.91%	1.4%	0.9%	1.3%	0.4%	1.13%	0.96%	1.00%	1.1%	1.08%
<b>Metal</b>	7.2%	6.6%	8.6%	8.1%	9.8%	5.1%	8.2%	6.1%	7.9%	7.0%	10.9%
Aluminum Cans	0.87%	0.39%	0.5%	0.5%	0.6%	0.7%	0.28%	0.61%	0.42%	0.5%	0.48%
Alum, Foil/Containers	0.15%	0.12%	0.1%	0.18%	0.1%	0.11%	0.11%	0.22%	0.13%	0.5%	0.09%
Other Aluminum	0.06%	0.19%	0.16%	0.07%	0.2%	0.19%	0.10%	0.10%	0.10%	0.9%	0.73%
Other Non-Ferrous	0.05%	0.15%	0.06%	0.1%	0.1%	0.4%	0.11%	0.09%	0.08%	0.4%	0.28%
Tin Cans	1.66%	0.95%	0.8%	0.9%	1.7%	1.5%	0.67%	1.20%	1.00%	0.8%	0.99%
White Goods	0.84%	0.25%	0.0%	1.0%	0.0%	0.1%	0.00%	0.00%	0.71%	NA	0.33%
Other Ferrous	1.77%	2.26%	4.1%	2.1%	2.5%	2.1%	3.23%	2.28%	2.89%	1.6%	3.84%
Remainder/Composite	1.81%	2.29%	2.9%	3.3%	4.5%	NA	3.66%	1.62%	2.58%	2.3%	4.11%
<b>Glass</b>	3.50%	3.52%	3.1%	3.9%	6.1%	4.8%	3.08%	3.97%	4.46%	4.1%	4.28%
Clear Glass	1.84%	1.54%	1.1%	1.2%	3.7%	3.1%	1.18%	1.72%	1.74%	1.1%	1.35%
Green Glass	0.86%	0.72%	1.0%	0.5%	1.8%	0.7%	0.50%	0.70%	0.73%	1.0%	0.86%
Brown Glass	0.55%	0.39%	0.1%	0.4%	0.3%	0.6%	0.49%	0.33%	0.45%	1.1%	0.20%
Non-Glass Ceramics	0.14%	0.41%	0.0%	1.2%	0.2%	NA	0.13%	0.27%	0.59%	0.5%	0.31%
Remainder/Composite	0.12%	0.47%	0.9%	0.7%	0.1%	0.4%	0.78%	0.95%	0.95%	0.4%	1.55%
<b>Organics</b>	22.3%	22.6%	26.0%	27.3%	23.5%	29.7%	26.9%	19.6%	22.5%	15.7%	22.1%
Yard, Garden, Prunings	3.12%	3.29%	5.2%	7.4%	5.0%	3.7%	3.27%	2.22%	3.04%	3.9%	8.83%
Food Waste	15.2%	14.5%	17.3%	14.6%	15.7%	19.2%	19.6%	13.1%	15.5%	7.7%	10.5%
Manures	1.39%	1.52%	0.3%	2.0%	0.2%	NA	2.05%	1.47%	1.59%	0.9%	0.66%
Disposable Diapers	2.12%	3.08%	2.4%	2.3%	2.0%	4.0%	1.39%	2.35%	2.11%	2.0%	1.99%
Carcasses, Offal	0.02%	0.01%	0.0%	0.0%	0.0%	NA	0.01%	0.35%	0.09%	0.1%	0.09%
Remainder/Composite	0.16%	0.16%	0.9%	0.9%	0.5%	2.8%	0.54%	0.16%	0.16%	1.1%	0.07%
<b>Consumer Products</b>	7.63%	8.39%	8.6%	8.5%	4.9%	5.7%	10.6%	6.60%	6.63%	10.9%	7.95%
Computers	0.33%	0.21%	0.1%	NA	0.1%	NA	0.50%	NA	NA	NA	0.52%
Other Electronics	0.63%	0.41%	0.3%	NA	0.6%	NA	0.50%	NA	NA	NA	0.57%
Textiles, Shoes	3.14%	3.60%	2.4%	1.9%	3.3%	2.8%	2.46%	2.44%	2.60%	6.5%	2.66%

**TABLE 5: MODIFIED DATA FOR COUNTIES, continued**

	Clallam	Clark	Grant	King	Okanogan	Pierce	Seattle	Snohomish	Thurston	Whitman	Yakima
<b>Consumer Products, continued</b>											
Tires	0.24%	0.30%	1.5%	0.6%	0.2%	0.2%	0.11%	0.13%	0.16%	0.4%	0.15%
Other Rubber	0.33%	0.27%	2.2%	0.7%	0.4%	0.6%	0.49%	0.20%	0.35%	1.3%	0.31%
Furniture, Mattresses	0.75%	0.78%	1.1%	2.5%	0.2%	0.2%	3.16%	0.92%	1.02%	1.1%	2.19%
Carpet	1.36%	1.73%	1.1%	2.8%	0.0%	1.9%	3.37%	1.77%	1.54%	1.6%	1.56%
Carpet Padding	0.85%	1.09%	0.0%	NA	0.1%	NA	NA	1.13%	0.97%	0.00%	0.00%
<b>Wood Wastes</b>	7.71%	8.47%	8.6%	10.2%	6.6%	3.6%	10.3%	8.63%	10.9%	11.6%	12.8%
Natural Wood	0.22%	0.19%	0.1%	0.2%	0.0%	0.0%	0.43%	0.01%	0.04%	0.1%	0.37%
Treated Wood	0.97%	0.20%	0.0%	2.2%	0.1%	0.4%	0.80%	0.12%	0.08%	2.4%	0.14%
Painted Wood	1.39%	0.80%	0.7%	1.1%	0.5%	0.6%	1.15%	NA	NA	2.3%	3.03%
Dimensional Lumber	1.55%	2.82%	5.1%	3.9%	4.5%	1.0%	3.83%	3.16%	3.94%	0.7%	2.32%
Engineered Wood	1.79%	3.27%	1.1%	1.4%	0.5%	1.2%	NA	1.97%	4.05%	2.0%	2.71%
Wood Packaging	0.73%	0.57%	1.2%	0.57%	0.9%	0.2%	1.86%	1.61%	1.04%	1.3%	1.69%
Other Untreated Wood	0.07%	0.04%	0.0%	0.05%	0.0%	0.0%	NA	0.81%	0.86%	1.4%	0.77%
Wood Byproducts	0.04%	0.02%	0.0%	0.03%	0.0%	0.0%	NA	0.34%	NA	0.8%	1.03%
Remainder/Composite	0.95%	0.55%	0.3%	0.74%	0.1%	0.2%	2.26%	0.61%	0.84%	0.7%	0.78%
<b>Construction/Demo. Wastes</b>	6.76%	7.43%	3.7%	4.2%	4.1%	1.8%	8.75%	6.07%	6.88%	4.6%	5.11%
Insulation	0.13%	0.30%	0.0%	NA	0.1%	0.2%	0.14%	0.12%	0.28%	NA	0.10%
Asphalt	0.00%	0.09%	0.0%	NA	0.0%	NA	NA	0.00%	0.04%	NA	0.00%
Concrete	0.24%	0.67%	0.3%	NA	0.0%	0.4%	2.26%	1.56%	0.58%	NA	0.50%
Drywall	1.35%	2.17%	1.0%	1.4%	0.1%	0.5%	2.82%	1.55%	1.33%	3.0%	1.06%
Soil, Rocks and Sand	0.11%	1.86%	2.0%	NA	2.0%	NA	0.90%	0.56%	0.79%	NA	1.79%
Roofing Waste	4.40%	1.19%	0.3%	NA	0.4%	NA	0.70%	1.57%	2.17%	NA	1.08%
Ceramics	0.27%	0.23%	0.0%	NA	1.0%	NA	0.26%	0.11%	0.13%	NA	0.16%
Remainder/Composite	0.25%	0.92%	0.1%	2.8%	0.4%	0.7%	1.67%	0.60%	1.56%	1.6%	0.42%
<b>Haz and Special Wastes</b>	1.04%	0.91%	0.4%	0.8%	1.7%	0.6%	1.17%	1.23%	0.82%	0.5%	1.34%
Used Oil	0.01%	0.05%	0.0%	0.0%	0.0%	0.1%	0.01%	0.13%	0.01%	0.0%	0.01%
Oil Filters	0.05%	0.12%	0.1%	NA	0.1%	NA	0.04%	NA	0.07%	NA	0.06%
Antifreeze	0.00%	0.02%	0.0%	0.0%	0.0%	NA	NA	0.00%	0.00%	0.0%	0.00%
Auto Batteries	0.00%	0.03%	0.2%	0.0%	0.0%	0.0%	0.02%	0.00%	0.08%	0.0%	0.00%
Household Batteries	0.11%	0.10%	0.0%	0.1%	0.1%	0.1%	0.06%	0.12%	0.10%	0.0%	0.11%
Pesticides, Herbicides	0.00%	0.00%	0.0%	0.0%	0.0%	0.0%	0.03%	0.11%	0.01%	0.0%	0.01%
Latex Paint	0.07%	0.21%	0.0%	0.3%	0.0%	0.2%	0.10%	0.12%	0.09%	0.1%	0.19%
Oil Paint	0.07%	0.09%	0.0%	0.1%	0.0%	0.0%	0.01%	0.09%	0.01%	0.2%	0.08%
Medical Waste	0.16%	0.05%	0.0%	0.0%	1.2%	0.0%	NA	0.04%	0.10%	0.0%	0.04%
Fluorescent Tubes	0.01%	0.04%	0.0%	0.05%	0.0%	0.0%	0.02%	0.08%	0.08%	0.01%	0.02%
Asbestos	0.00%	0.00%	0.0%	NA	0.0%	0.0%	0.00%	NA	NA	NA	NA
Other Haz. Waste	0.11%	0.07%	0.0%	0.1%	0.2%	0.0%	0.68%	0.02%	0.01%	0.1%	0.02%
Other Non-Haz. Waste	0.45%	0.13%	0.0%	0.2%	0.1%	0.2%	0.19%	0.52%	0.27%	0.1%	0.81%
<b>Residuals</b>	11.9%	7.37%	10.9%	2.2%	3.5%	4.9%	0.92%	11.8%	6.73%	3.2%	6.18%
Ash, Dust	0.27%	0.34%	0.0%	0.2%	0.6%	NA	0.68%	2.53%	0.26%	2.6%	0.17%
Fines/Sorting Residues	7.87%	7.03%	0.9%	1.9%	2.9%	4.9%	0.24%	9.23%	6.47%	0.6%	6.01%
Sludge, Other Industrial	3.71%	0.00%	10.0%	NA	0.0%	NA	NA	NA	NA	NA	NA

All figures are percent by weight.

NA = Not Available, data is not available for that parameter.

**TABLE 6: STATEWIDE COMPOSITION RESULTS**

	Statewide Totals	
	Tons per Year	Percent by Weight
<b>Residential Waste</b>	<b>2,724,800</b>	<b>49.2%</b>
<b>Non-Residential Waste</b>	<b>2,813,900</b>	<b>50.8%</b>
<b>Paper</b>	<b>1,313,700</b>	<b>23.7%</b>
Cardboard	288,700	5.2%
Newspaper	156,700	2.8%
Other Groundwood	22,470	0.4%
High-Grade	81,210	1.5%
Magazines	80,330	1.5%
Mixed/Low-Grade	260,500	4.7%
Compostable	323,500	5.8%
Remainder/Composite	98,770	1.8%
<b>Plastic</b>	<b>640,100</b>	<b>11.6%</b>
PET Bottles	27,860	0.5%
HDPE Bottles, Clear	32,340	0.6%
Film and Bags	268,800	4.9%
Bottles Types 3 - 7	18,270	0.3%
Expanded Polystyrene	32,110	0.6%
Other Rigid Packaging	75,530	1.3%
Other Products	136,100	2.5%
Remainder/Composite	52,500	0.9%
<b>Metal</b>	<b>415,000</b>	<b>7.5%</b>
Aluminum Cans	29,150	0.5%
Alum, Foil/Containers	7,690	0.14%
Other Aluminum	9,540	0.2%
Other Non-Ferrous	8,640	0.2%
Tin Cans	58,610	1.1%
White Goods	22,220	0.4%
Other Ferrous	145,500	2.6%
Remainder/Composite	133,300	2.4%
<b>Glass</b>	<b>222,800</b>	<b>4.0%</b>
Clear Glass	93,430	1.7%
Brown Glass	39,880	0.7%
Green Glass	21,540	0.4%
Non-Glass Ceramics	24,610	0.4%
Remainder/Composite	43,380	0.8%
<b>Organics</b>	<b>1,390,100</b>	<b>25.1%</b>
Yard, Garden, Prunings	262,700	4.7%
Food Waste	869,800	15.7%
Manures	66,820	1.2%
Disposable Diapers	140,300	2.5%
Carcasses, Offal	3,800	0.07%
Remainder/Composite	46,740	0.8%
<b>Consumer Products</b>	<b>420,150</b>	<b>7.6%</b>
Computers	7,780	0.14%
Other Electronics	8,910	0.16%

**TABLE 6: STATEWIDE COMPOSITION RESULTS, continued**

	Statewide Totals	
	Tons per Year	Percent by Weight
<b>Consumer Products, continued</b>		
Textiles	142,400	2.6%
Tires	22,150	0.4%
Other Rubber	35,200	0.6%
Furniture, Mattresses	75,790	1.4%
Carpet	107,400	1.9%
Carpet Padding	20,320	0.4%
<b>Wood Wastes</b>	<b>476,400</b>	<b>8.6%</b>
Natural Wood	7,670	0.14%
Treated Wood	40,910	0.7%
Painted Wood	43,470	0.8%
Dimension Lumber	175,940	3.2%
Engineered Wood	91,870	1.7%
Wood Packaging	54,690	1.0%
Other Untreated Wood	14,710	0.3%
Wood Byproducts	9,190	0.17%
Remainder/Composite	38,420	0.7%
<b>Const/Demo. Wastes</b>	<b>270,700</b>	<b>4.9%</b>
Insulation	6,490	0.12%
Asphalt	470	0.01%
Concrete	33,990	0.6%
Drywall	73,830	1.3%
Soil, Rocks and Sand	36,480	0.7%
Roofing Waste	43,020	0.8%
Ceramics	6,380	0.12%
Remainder/Composite	69,650	1.3%
<b>Haz and Special Wastes</b>	<b>50,090</b>	<b>0.9%</b>
Used Oil	2,340	0.04%
Oil Filters	1,870	0.03%
Antifreeze	70	0.001%
Auto Batteries	1,560	0.03%
Household Batteries	4,650	0.08%
Pesticides, Herbicides	1,140	0.02%
Latex Paint	8,250	0.15%
Oil Paint	2,810	0.05%
Medical Waste	3,620	0.07%
Fluorescent Tubes	1,970	0.04%
Asbestos	60	0.001%
Other Haz. Waste	5,540	0.10%
Other Non-Haz. Waste	16,730	0.3%
<b>Residuals</b>	<b>339,670</b>	<b>6.1%</b>
Ash, Dust	29,240	0.5%
Fines/Sorting Residues	247,390	4.5%
Sludge, Other Industrial	62,600	1.1%
<b>Totals</b>	<b>5,538,000</b>	<b>100.0%</b>

come out very close to 50-50. The figures are derived in the same manner as the waste composition data, by applying data from each of the local studies (the 10 counties and one city) used for this analysis to the tonnages allocated to that study, and then summing up the tons from each. The original data (see Table 2) varies significantly, from a low of 32% residential waste to a high of almost 58% residential waste (with non-residential waste making up the remainder of course), so it is rather coincidental that the end result is so close to 50-50. The data for many of the counties, however, is close to 50-50 residential and non-residential wastes, so the final result is not completely unexpected.

The rest of Table 6 shows annual tonnages statewide and the percentage breakdown (percent by weight) for the materials that make up the solid waste stream in Washington State. The tonnage figures have been rounded off as appropriate, but still it should be kept in mind that there is a significant degree of error associated with each of these figures. The degree of error could have been calculated based on the error ranges reported by each of the studies used in this analysis, but those numbers would have been meaningless. Clearly the largest source of error in this analysis is the simple act of extending an area's data to other counties, with all of the associated assumptions about similar demographics and other factors, and the amount of error introduced by that act cannot be precisely quantified.

## CONCLUSIONS AND RECOMMENDATIONS

Waste composition and quantities can be expected to change in the future. Some of the more immediate impacts can be expected to occur due to the ban on the sale of products containing mercury; the possible closure of many limited purpose landfills due to new "350" (Chapter 173-350 WAC) standards and the materials disposed at those sites becoming part of the MSW; a possible electronics stewardship program; ongoing changes in packaging (PET, especially colored PET, continues to take market share away from glass and other plastics); ongoing efforts to improve waste diversion programs; and the increased emphasis on sustainability and zero waste.

As a result of this analysis, the following areas have been identified that need further study:

- to provide critical information for planning and monitoring, additional waste composition data is needed. The highest priority is Spokane County and also a rural county along the eastern edge or in the southeastern corner. A few additional counties in western Washington would also help, especially in less-populated counties in the southwestern and northwestern corners of the state. One way to look at the gaps in data is to examine these on the basis of Ecology's regions:
  - in the Southwest region, there is a definite need for additional data for the more rural counties (it is anticipated that Clark and Thurston Counties will continue to conduct their own studies). The priority in this region is Pacific or Grays Harbor Counties, or an updated study for Lewis County. At some point in the next few years, an updated study for Pierce County is also a high priority.
  - in the Northwest region, good data exists for the more urban counties (King and Snohomish), but other counties in this area have significant employment and

demographic differences. It would be interesting to examine the impacts of the unique demographics for San Juan County (and to a lesser extent, Island County), but this data could not be easily transferred to other counties and so Skagit and Whatcom Counties are considered to be the more immediate priorities.

- in the Central region, there is also some concerns about the transferability of data from Yakima County (with their low disposal fee and huge agricultural base) and Okanogan County to other counties, and so it would be good to fill in some of the gaps in this region by conducting studies in additional counties. Any one of the other counties in this region would be good choices for additional work, but especially Benton County (with their larger population and higher waste amount) or the more populated counties in the center of the state (Chelan or Kittitas County).
- in the Eastern region, an updated study is needed for Spokane County. An updated study for Whitman County may also be interesting, as this would provide an opportunity to look at historical trends, but otherwise a county in the southeastern corner of the state should be considered a high priority.
- more information about waste generation rates would be helpful for planning and monitoring purposes, for efforts on both the local and state levels, and in both the private and public sectors. At a minimum, more information about the amount of residential and non-residential wastes in every part of the State is needed (every part that is not already collecting that information through waste studies, that is). This type of data would allow the calculation of per capita and per employee rates for waste monitoring purposes, but additional information about employee generation rates by type of business or industry is also needed on a statewide basis.
- more information is also needed on waste densities by source (residential versus commercial, as well as by specific type of business and industry). This is a significant “missing link” for many waste planning and monitoring efforts.
- finally, if we are serious about influencing the production of waste in the future, more research is needed on the correlation between waste generation and demographic factors.

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## **GLOSSARY**

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# GLOSSARY

## INTRODUCTION

This glossary contains definitions for the types of generators and for the waste sorting categories used in this report

## GENERATOR CATEGORIES

Apartment Waste: waste originating from a multi-family dwelling, which is typically defined as four or more housing units in the same building (duplexes and triplexes are typically included with single-family).

Commercial / Institutional: non-residential waste, including waste from businesses and institutions in SIC's 40-89 and municipal functions (SIC's 91-97), delivered to a disposal facility by a municipal or private garbage hauler, or by another third party. Depending on the study, may also include industrial waste.

Industrial: waste originating from SIC's 01-39, including agricultural, mining, construction and manufacturing.

Non-Residential Self-Haul: nonresidential waste delivered to the disposal facility by the same company that generated the waste. For most studies, this includes construction and demolition waste brought in by the construction company that created the waste.

Residential Self-Haul: residential waste delivered to the transfer station by a homeowner, renter or landlord, typically using cars, vans, jeeps, pick-up trucks, and other "personal" vehicles.

Single-Family Waste: waste originating from single-family homes. This category typically excludes self-haul waste.

## WASTE SORTING CATEGORIES

### PAPER

Newspaper: printed groundwood newsprint, including glossy ads and Sunday edition magazines that are delivered with the newspaper (unless these are found separately during sorting).

Cardboard: unwaxed kraft paper corrugated containers and boxes, unless poly- or foil-laminated. Note that this category typically includes brown kraft paper bags.

Other Groundwood: other products made from groundwood paper, including phone books, paperback books, and egg cartons.

High-Grade Paper: high-grade white or light-colored bond and copy machine papers and envelopes, and continuous-feed computer printouts and forms of all types, except multiple-copy carbonless paper.

Magazines: magazines, catalogs and similar products with glossy paper.

Mixed / Low-Grade Paper: low-grade recyclable papers, including colored papers, notebook or other lined paper, envelopes with plastic windows, non-corrugated paperboard, carbonless copy paper, polycoated paperboard packaging, and junk mail.

Compostable: non-recyclable papers that can be composted, such as towels, cups, tissues, plates, pizza boxes, and waxed cardboard. This category includes paper that is contaminated or soiled with food or liquid in its normal use.

Remainder / Composite Paper: non-recyclable and non-compostable types of papers such as carbon paper and hardcover books, and composite materials such as paper packaging with metal or plastic parts.

Processing Sludges, Other Industrial: paper-based materials from industrial sources that do not easily fit into the above categories, such as sludges.

## **PLASTIC**

PET Bottles: polyethylene terephthalate (PET) bottles, including soda, oil, liquor and other types of bottles. The SPI code for PET is 1.

HDPE Bottles, Clear: high density polyethylene (HDPE) milk and other bottles that are not colored. The SPI code for HDPE is 2.

HDPE Bottles, Pigmented: high density polyethylene (HDPE) juice, detergent, and other bottles that are colored. The SPI code for HDPE is 2.

Film and Bags: all plastic packaging films and bags. To be counted in this category, the material must have been flexible (i.e., can be bent without making a noise).

Bottles Types 3 - 7: all bottles, where the neck of the container is narrower than the body, that are not PET or HDPE. Includes SPI codes 3 - 7.

Expanded Polystyrene: packaging and finished products made of expanded polystyrene. The SPI code for polystyrene (PS) is 6.

Other Rigid Plastic Packaging: all plastic packaging that is not a bottle and is not film or bag.

Other Plastic Products: finished plastic products such as toys, toothbrushes, vinyl hose and shower curtains.

Remainder / Composite Plastic: other types of plastic that do not fit into the above categories and items that are composites of plastic and other materials.

## **METAL**

Aluminum Cans: aluminum beverage cans.

Aluminum Foil / Containers: aluminum foil, food trays and similar items.

Other Aluminum: aluminum scrap and products that do not fit into the above two categories.

Copper: copper scrap and products, excluding composites such as electrical wire.

Other Non-Ferrous Metals: metallic products and pieces that are not derived from iron (see “other ferrous”), are not aluminum or copper (for those studies that measured “other aluminum” and “copper” separately) and that and which are not significantly contaminated with other metals or materials (see “residual/composite”).

Tin Cans: tin-coated steel food containers.

White Goods: large household appliances or parts thereof.

Other Ferrous: products and pieces made from metal to which a magnet will adhere (including stainless steel), and which are not significantly contaminated with other metals or materials (in the latter case, the item is instead classified under “residual/composite”). This category includes paint and other non-food “tin cans”, as well as aerosol cans.

Remainder / Composite: items made of a mixture of ferrous and non-ferrous or a mixture of metal and non-metallic materials (as long as these are primarily metal). Examples include small appliances, motors, and insulated wire.

## **GLASS**

Clear, Green and Brown Beverage Glass: these are three separate categories for beverage bottles that are clear, green or brown in color.

Other Glass Containers; Clear, Green and Brown: these are three separate categories for bottles (other than beverage bottles) and jars that are clear, green or brown in color.

Plate Glass: flat glass products such as windows, mirrors, and flat products.

Remainder / Composite Glass: other types of glass products and scrap that do not fit into the above categories, including light bulbs, glassware and non-C&D fiberglass. Note that ceramics (plates and knickknacks) are not included here but are included in “Non-Glass Ceramics” below.

Non-Glass Ceramics: ceramics not composed of true glass and not typically used as building materials, such as dishes.

## **ORGANICS**

Yard, Garden and Prunings: grass clippings, leaves and weeds, and prunings six inches or less in diameter.

Food Waste: food waste and scraps, including bones, rinds, etc., and including the food container when the container weight was not appreciable compared to the food inside.

Manures: animal manures and human feces, including kitty litter and any materials contaminated with manures and feces.

Disposable Diapers: disposable baby diapers and protective undergarments for adults (including feminine hygiene products).

Carcasses, Offal: carcasses and pieces of small and large animal, unless the item is the result of food preparation in a household or commercial setting. For instance, fish or chicken entrails from food preparation and raw, plucked chickens is typically classified as food, not as an animal carcass.

Crop Residues: vegetative materials that are left over from growing crops, and that are treated as a waste.

Remainder / Composite: other organics that do not easily fit into the above categories.

## **CONSUMER PRODUCTS**

Computers: computers and parts of computers, including monitors, base units, keyboards, other accessories and laptops.

Other Electronics: other appliances and products that contain circuit boards and other electronic components (as a significant portion of the product), such as radios and microwave ovens.

Textiles, Synthetic: cloth, clothing, and rope made of synthetic materials.

Textiles, Organic: cloth, clothing, and rope made of 100% cotton, leather, wool and/or other naturally-occurring fibers. The working guideline for this category was whether the item could be composted without leaving an identifiable residue or part.

Textiles, Mixed or Unknown: cloth, clothing, and rope made of unknown fibers or made from a mixture of synthetic and natural materials, or containing non-textile parts such as metal zippers or plastic buttons.

Shoes: all shoes and boots, whether made of leather, rubber, other materials, or a combination thereof.

Tires and Other Rubber: vehicle tires of all types, including bicycle tires and including the rims if present, and finished products and scrap materials made of rubber, such as bath mats, inner tubes, rubber hose and foam rubber (except carpet padding, see below).

Furniture and Mattresses: furniture and mattresses made of various materials and in any condition.

Carpet: pieces of carpet and rugs made of similar material.

Carpet Padding: foam rubber and other materials used as padding under carpets.

Rejected Products: for industrial samples only, various products that failed internal QA/QC tests.

Other Composite: this is a catch-all category for objects consisting of more than one material.

## **WOOD WASTES**

Natural Wood: wood that is not been processed, including stumps of trees and shrubs, with the adhering soil (if any), and other natural woods, such as logs and branches in excess of six inches in diameter.

Treated Wood: wood treated with preservatives such as creosote, CCA and ACQ, but not including painted or varnished wood. This category may also include some plywood (especially “marine plywood”), strandboard, and other wood.

Painted Wood: wood that has been painted, varnished or coated in similar ways.

Dimension Lumber: wood commonly used in construction for framing and related uses, including 2 x 4's, 2 x 6's and posts/headers (4 x 8's, etc.).

Engineered: building materials that have been manufactured and that generally include adhesive as one or more layers. Examples include plywood (sheets of wood built up of two or more veneer sheets glued or cemented together under pressure), particle board (wood chips pressed together to form large sheets or boards), fiberboard (like particle board but with fibers), "glu-lam" beams and boards (built up from dimensional or smaller lumber), and similar products.

Packaging: partial or whole pallets, crates and similar shipping containers.

Other Untreated Wood: other types of wood products and materials that do not fit into the above categories, excluding composite materials (See Residual / Composites, below).

Wood Byproducts: sawdust and shavings, not otherwise identifiable.

Remainder / Composite: items that consist primarily of wood but that do not fit into the above categories, including composite materials that consist primarily (over 50%) of wood. Examples of composites include wood with sheetrock nailed to it or with tiles glued to it (such that the materials cannot be easily separated)

## **CONSTRUCTION AND DEMOLITION (C&D) WASTES**

Insulation: all pad, roll, or blown-in types of insulation, but not expanded polystyrene.

Asphalt: asphalt paving material.

Concrete: cement (mixed or unmixed), concrete blocks, and similar wastes.

Drywall: used or new gypsum wallboard, sheetrock or drywall.

Soil, Rocks and Sand: rock, gravel, soil, sand and similar naturally-occurring materials.

Roofing Waste: asphalt and fiberglass shingles, tar paper, and similar wastes from demolition or installation of roofs. Does not include wooden roofing materials (cedar shingles or shakes).

Ceramics: includes clay, porcelain bricks and tiles, such as used toilets, sinks and bricks of various types and sizes.

Remainder / Composite: other construction and demolition materials that do not fit easily into the above categories or that are composites made up of two or more different materials.

## **HAZARDOUS AND SPECIAL WASTES**

Used Oil: used or new lubricating oils and related products.

Oil Filters: used oil filters, primarily those used in cars but including similar filters from other types of vehicles and other applications.

Antifreeze: automobile and other antifreeze mixtures based on ethylene or propylene glycol, also brake and other fluids if based on these compounds.

Auto Batteries: car, motorcycle, and other lead-acid batteries used for motorized vehicles.

Household Batteries: batteries of various sizes and types, as commonly used in households.

Pesticides and Herbicides: includes a variety of poisons whose purpose is to discourage or kill pests, weeds or microorganisms, including fungicides and wood preservatives, such as pentachlorophenol.

Latex Paint: water-based paints.

Oil Paint: solvent-based paints.

Medical Waste: wastes related to medical activities, including syringes, IV tubing, bandages, medications, and other wastes, and not restricted to just those wastes typically classified as pathogenic or infectious.

Fluorescent Tubes: in addition to the typical fluorescent tube, this category includes mercury vapor and other lamps listed as universal wastes.

Asbestos: pure asbestos, and asbestos-containing products where the asbestos present is the most distinguishing characteristic of the material.

Other Hazardous Waste: hazardous or problem wastes that do not fall into one of the above categories, such as gasoline, solvents, gunpowder, other unspent ammunition, fertilizers, and radioactive materials.

Other Non-Hazardous Waste: chemicals or other problem wastes that do not fall into one of the above categories and that are not hazardous, such as adhesives, weak acids and bases (cleaners), and automotive products (car wax, etc.).

## **RESIDUALS**

Ash: fireplace, burn barrel or firepit ash, as well as boiler and ash from industrial sources.

Dust: baghouse and other dusts from industrial sources, as well as bags of vacuum cleaner dust.

Fines / Sorting Residues: mixed waste remaining on the sorting table after all the materials that could practicably be removed were sorted out. This material consisted primarily of small pieces of various types of paper and plastic, but also included small pieces of broken glass and other materials.

Sludges and Other Special Industrial Wastes: sludges and other wastes from industrial sources that do easily fit into any of the above categories.

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**APPENDIX A**  
**COUNTIES WITH WASTE**  
**COMPOSITION DATA**

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**APPENDIX B**  
**AGGREGATION METHODS**

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# **APPENDIX B**

## **AGGREGATION METHODS**

### **INTRODUCTION**

This appendix provides the details of the modifications that were made to the data from different counties in order to combine that data into the statewide totals.

### **DATA MODIFICATIONS**

The data from the different studies used in this report was combined carefully but this process also leads to some compromises and uncertainties. The adjustments that could be made are detailed below, but differences in the data were not all clear in all cases. Factors such as definitions that change over time and personal interpretation by the sorting crew could potentially make several of the categories different in ways that are not easy to detect. For instance, all of the studies measured “low-grade paper” (or mixed waste paper), but the actual materials included in that category has changed over the years due to changing acceptance policies by the paper markets (12-pack cartons, for instance, were previously considered unacceptable but now are allowed). Personal interpretation of sorting categories could also affect many of the categories, such as the division of materials between plastic packaging and plastic containers. Some of these problems are non-resolvable, even when it is clear from the definitions that there are differences in the categories, because hard data on the amount of specific minor materials is lacking.

The modifications made to combine data from the different studies are listed below for each study.

#### **All Current Ecology Studies (Clallam, Grant, and Okanogan Counties)**

For the purpose of this analysis, the following adjustments were made:

- “processing sludge” under the paper category was deleted, and the small amount shown in this category for Grant County was included in the “sludge and other industrial” category (under residuals).
- clear and colored HDPE bottles were combined.
- copper was combined with “other non-ferrous.”
- beverage bottles and other containers were combined for the three colors of glass.
- “plate glass” was combined with “remainder/composite glass.”
- “crop residues” under the organics category was deleted, and data in this category for Grant County was included in the “remainder/composite organics” category.
- all textiles and shoes were combined into a single category.
- the category for “tires and other rubber” was split into two categories based on the average results for the Clark, Snohomish and Thurston County studies (41% tires and 59% other rubber).
- “rejected products” and “other composite consumer products” were added to the “fines/sorting residue” category.

## **Clark County Data**

The following adjustments were made to prepare the Clark County data to be combined with the other counties:

- the amount of “other groundwood” was extracted from “mixed waste paper” based on Clallam County’s relative amounts of these two materials.
- “milk cartons/other” was added to “low grade paper.”
- “compostable paper” was extracted from the “remainder/composite amount” based on Clallam County’s relative amounts of these two materials.
- “plastic packaging” was divided into “film and bags”, “other rigid packaging” and “remainder/composite” based on Clallam County’s relative amounts of these materials.
- “cosmetics” was added to “remainder/composite plastics.”
- “aerosol cans” was added to “other ferrous.”
- a figure for other “other aluminum” was extracted from “other non-ferrous” based on Clallam County’s relative amounts of these materials.
- “miscellaneous inorganics” was assumed to be “non-glass ceramics.”
- the amount of “remainder/composite organics” was assumed to be the same as Clallam County’s amount and this was subtracted from Clark County’s “miscellaneous organics.”
- “electronics” was divided between “computers” and “other electronics” based on Clallam County’s relative amounts of these two materials.
- “leather” was added to “textiles” to create the category for “textiles and shoes.”
- “carpeting” was divided between “carpet” and “carpet padding” based on Clallam County’s relative amounts of these two materials.
- Clark County’s categories for “roofing wood,” “wood products” and “other wood” were divided into “painted wood”, “other untreated,” “wood byproducts” and “remainder/composite” based on Clallam County’s relative amounts of these materials.
- “fluorescent bulbs” was extracted from “remainder/composite glass” based on Clallam County’s relative amounts of these materials.

## **King County Data**

The following adjustments were made to prepare the King County data to be combined with the other counties:

- the amount of “other groundwood” and “magazines” were extracted from “mixed waste paper” based on Clallam County’s relative amounts of these materials.
- “bleached polycoated” was added to the “low-grade paper” amount.
- “compostable paper” was extracted from the “remainder/composite” amount based on Clallam County’s relative amounts of these two materials.
- “other aluminum” was divided between “other aluminum” and “aluminum foil” based on Clallam County’s relative amounts of these materials.

## King County Data, continued

- an amount for “white goods” was extracted from “other ferrous” based on Clallam County’s relative amounts of these materials.
- “small appliances” was added to “remainder/composite metals.”
- “miscellaneous inorganics” was assumed to be “non-glass ceramics.”
- King County’s categories for “contaminated wood,” “roofing and siding” and “other wood” were combined and then allocated to “painted wood,” “engineered wood,” “pallets/crates,” “other untreated,” “wood byproducts” and “remainder/composite” based on Clallam County’s relative amounts of these materials.
- “fluorescent bulbs” was extracted from “remainder/composite glass” based on Clallam County’s relative amounts of these materials.

## Pierce County Data

Only data for MSW from the Pierce County report was used for this analysis. Figures reported for “other wastes” (including automobile shredder fluff, ash and sludge) were not included in the waste figures used in this report. The following adjustments were made to prepare the Pierce County data to be combined with the other counties:

- the category of “telephone books” was used for the “other groundwood paper” category.
- the categories of “uncoated paperboard,” “bleached polycoats” and “aseptic packaging” were combined for the “low-grade” paper category.
- “other recyclable/compostable paper” was used for the “compostable paper” category.
- “non-recyclable/compostable paper” was used for the “remainder/composite paper” category.
- “PET - other” and “HDPE - other” were combined with the “other packaging” category to create the “other rigid plastic packaging category.”
- “other plastic” was dis-aggregated using Clallam County data to create the “plastic product” and “remainder/composite plastic” categories.
- “other aluminum” was divided between “other aluminum” and “aluminum foil” based on Clallam County’s relative amounts of these materials.
- “aerosol cans” was added to “other ferrous.”
- materials included in “other chemicals” were assumed to be non-hazardous.
- “treated/painted lumber” was dis-aggregated using Clallam County data to create the “treated wood” and “painted wood” categories; “land-clearing debris” was assumed to be the same as the “natural wood” category; and “untreated lumber” was dis-aggregated using Clallam County data to create the remaining wood categories.
- “mixed materials” and “miscellaneous non-combustibles” were combined to create the “sorting residue” category.

## Seattle Data

The following adjustments were made to prepare the Seattle data to be combined with the counties:

- the category of “telephone books” was used for the “other groundwood paper” category.
- “mixed low-grade,” “milk/juice polycoats” and “frozen food polycoats” were combined to create the “low-grade paper” category, and then “magazines” were extracted from this amount using Clallam County data.
- “waxed OCC” was included in “compostable paper.”
- “container glass” was allocated to the three colors of glass bottles based on the relative amounts of the non-beverage glass found in Clallam County.
- “small appliances” and “AV equipment” were added to the “remainder/composite metal” category.
- “porcelain and ceramics” was dis-aggregated using Clallam County data to create the “non-glass ceramics” and “ceramics” category under C&D wastes.
- “animal byproducts” was dis-aggregated using King County data to create the “manure” and “carcasses” categories.
- “leather” was added to “textiles.”
- “treated lumber” was dis-aggregated using Clallam County data to create the “treated wood” and “painted wood” categories.
- “miscellaneous inorganics,” which is defined as vacuum cleaner bags and other materials, was put into the “ash and dust” category.

## Snohomish County Data

The following adjustments were made to prepare the Snohomish County data to be combined with the other counties:

- the amount of “other groundwood” was extracted from “mixed waste paper” based on Clallam County’s relative amounts of these two materials.
- “milk cartons/other” was added to “low grade paper.”
- “compostable paper” was extracted from the “remainder/composite amount” based on Clallam County’s relative amounts of these two materials.
- “plastic packaging” was divided into “film and bags”, “other rigid packaging” and “remainder/composite” based on Clallam County’s relative amounts of these materials.
- “cosmetics” was added to “remainder/composite plastics.”
- a figure for “other aluminum” was extracted from “other non-ferrous” based on Clallam County’s relative amounts of these materials.
- “aerosol cans” was added to “other ferrous.”
- “miscellaneous inorganics” was assumed to be “non-glass ceramics.”
- the amount of “remainder/composite organics” was assumed to be the same as Clallam County’s amount and this was subtracted from Snohomish County’s “miscellaneous organics.”
- “leather” was added to “textiles” to create the category for “textiles and shoes.”

### **Snohomish County Data, continued**

- “carpeting” was divided between “carpet” and “carpet padding” based on Clallam County’s relative amounts of these two materials.
- “fluorescent bulbs” was extracted from “remainder/composite glass” based on Clallam County’s relative amounts of these materials.

### **Thurston County Data**

The following adjustments were made to prepare the Thurston County data to be combined with the other counties:

- the amount of “other groundwood” was extracted from “mixed waste paper” based on Clallam County’s relative amounts of these two materials.
- “milk cartons/other” was added to “low grade paper.”
- “compostable paper” was extracted from the amount of “remainder/composite paper” based on Clallam County’s relative amounts of these two materials.
- “plastic packaging” was divided into “film and bags”, “other rigid packaging” and “remainder/composite” based on Clallam County’s relative amounts of these materials.
- “cosmetics” was added to “remainder/composite plastics.”
- a figure for other “other aluminum” was extracted from “other non-ferrous” based on Clallam County’s relative amounts of these materials.
- “aerosol cans” was added to “other ferrous.”
- “miscellaneous inorganics” was assumed to be “non-glass ceramics.”
- the amount of “remainder/composite organics” was assumed to be the same as Clallam County’s amount and this was subtracted from Thurston County’s “miscellaneous organics.”
- “leather” was added to “textiles” to create the category for “textiles and shoes.”
- “carpeting” was divided between “carpet” and “carpet padding” based on Clallam County’s relative amounts of these two materials.
- “fluorescent bulbs” was extracted from “remainder/composite glass” based on Clallam County’s relative amounts of these materials.

### **Whitman County Data**

The following adjustments were made to prepare the Whitman County data to be combined with the other counties:

- the categories of “bleached polycoated” and “frozen food polycoat” were added to the “low-grade paper” amount, and then the amounts of “other groundwood” and “magazines” were extracted from that category based on Yakima County’s relative amounts of these materials.

### **Whitman County Data, continued**

- “other plastic containers” and “other plastic packaging” were combined to create the “other rigid plastic packaging” category.
- “other aluminum” was divided between “other aluminum” and “aluminum foil” based on Yakima County’s relative amounts of these materials.
- “small appliances” was added to “remainder/composite metals.”
- “refillable beer bottles” was assumed to be “brown glass.”
- “miscellaneous inorganics” was used to be “non-glass ceramics.”
- “animal byproducts” was dis-aggregated using Yakima County data to create the “manure” and “carcasses” categories.
- “other wood” was divided into “painted wood”, “engineered wood”, “pallets/crates” and “wood byproducts” based on Yakima County’s relative amounts of these materials.
- “other chemicals” was assumed to be non-hazardous.
- an amount for “fluorescent bulbs” was extracted from “remainder/composite glass” based on Yakima County’s relative amounts of these materials.

### **Yakima County Data**

The following adjustments were made to prepare the Yakima County data to be combined with the other counties:

- the categories for clear and colored HDPE bottles were combined.
- a figure for other “other aluminum” was extracted from “other non-ferrous” based on Grant County’s relative amounts of these materials.
- “aerosol cans” was added to “other ferrous.”
- “miscellaneous inorganics” was assumed to be “non-glass ceramics.”
- “cosmetics” was added to “remainder/composite plastics.”
- “carpeting” was divided between “carpet” and “carpet padding” based on Grant County’s relative amounts of these two materials.

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**APPENDIX C**  
**COMPOSITION DATA**

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# **APPENDIX C COMPOSITION DATA**

## **INTRODUCTION**

This appendix shows waste composition data for specific counties, institutions and businesses. This data is provided here as supplemental information that may assist local recycling or other programs.

## **WASTE COMPOSITION DATA**

The tables in this appendix show:

- the original data from the studies used for the analysis in this report (Tables C-1, C-2 and C-3).
- data from local studies not used in this analysis (Table C-4).
- data for select commercial generators, from the studies conducted for Snohomish, Thurston and Clark Counties (See Tables C-5, C-6 and C-7).
- data for military bases (Table C-8).
- data from other states (Table C-9).

It is hoped that this information will provide the foundation for a database that will continue to grow.

Table C-1: Original Data from Counties Used in the Analysis (counties with Ecology Grants, conducted 2002-03)

Clallam County		Grant County	Okanogan County	Yakima County		
Cardboard	3.86%	<b>Paper</b>	<b>19.4%</b>	<b>27.7%</b>	Cardboard	4.43%
Newspaper	1.92%	Cardboard	3.8%	5.8%	Newspaper	2.11%
Other Groundwood	0.38%	Newspaper	1.6%	2.3%	Other Groundwood	0.28%
High-Grade Paper	1.03%	Other Groundwood	0.9%	0.6%	High-Grade Paper	0.77%
Magazines	1.71%	High-grade Paper	1.7%	1.2%	Magazines	0.70%
Low-Grade Paper	5.29%	Magazines	0.9%	2.2%	Low-Grade Paper	3.76%
Compostable	4.35%	Mixed/Low-grade	4.3%	6.2%	Compostable	3.58%
Other Paper	1.36%	Compostable Paper	4.3%	6.9%	Other Paper	1.04%
<b>Paper Subtotal</b>	<b>19.90%</b>	Remainder/Composite	1.6%	2.4%	<b>Paper Subtotal</b>	<b>16.67%</b>
PET Bottles	1.15%	Sludge/Other Industrial	0.2%	0.0%	PET Bottles	0.62%
HDPE Bottles, Clear	0.57%	<b>Plastic</b>	<b>10.8%</b>	<b>12.0%</b>	HDPE Bottles, Clear	0.38%
HDPE Bot., Colored	0.53%	PET Bottles	0.7%	0.8%	HDPE Bot., Colored	0.28%
Film and Bags	4.77%	HDPE Bottles, Clear	0.4%	0.4%	Bottles 3-7	0.04%
Bottles 3-7	0.07%	HDPE Bottles, Colored	0.4%	0.7%	Expanded Polysty.	0.45%
Expanded Polysty.	0.68%	Plastic Film and Bags	5.1%	4.8%	Film and Bags	4.12%
Other Plastic Pkg	1.52%	Bottles, Types 3 - 7	0.1%	0.3%	Other Plastic Pkg	1.80%
Other Plastic Prod.	2.83%	Expanded Polystyrene	0.3%	0.6%	Other Plastic Prod.	3.88%
Other Plastic	0.78%	Other Rigid Plastic Pkg	0.7%	1.5%	Other Plastic	0.96%
<b>Plastic Subtotal</b>	<b>12.91%</b>	Other Plastic Products	1.9%	1.4%	<b>Plastic Subtotal</b>	<b>12.55%</b>
Aluminum Cans	0.91%	Remainder/Composite	1.4%	1.3%	Aluminum Cans	0.48%
Aluminum Foil	0.15%	<b>Metal</b>	<b>8.6%</b>	<b>9.8%</b>	Aluminum Foil	0.09%
Other Aluminum	0.06%	Aluminum Cans	0.5%	0.6%	Non-Ferrous Metals	1.01%
Copper	0.01%	Aluminum Foil/Contain.	0.1%	0.1%	Tin Cans	0.99%
Other Non-Ferrous	0.04%	Other Aluminum	0.2%	0.2%	Aerosol Cans	0.15%
Tin Cans	1.63%	Copper	0.0%	0.0%	White Goods	0.33%
White Goods	0.82%	Other Non-ferrous	0.1%	0.1%	Ferrous Metals	3.69%
Ferrous	1.79%	Tin Cans	0.8%	1.7%	Computers	0.52%
Mixed	1.79%	White Goods	0.0%	0.0%	Other Electronics	0.57%
<b>Metal Subtotal</b>	<b>7.18%</b>	Other Ferrous Metals	4.1%	2.5%	Mixed Metals	4.11%
Clear Beverage	1.29%	Remainder/Composite	2.9%	4.5%	<b>Metal Subtotal</b>	<b>11.94%</b>
Clear Other	0.55%	<b>Glass</b>	<b>3.1%</b>	<b>6.1%</b>	Clear Bottles	1.35%
Brown Beverage	0.91%	Clear Glass Beverage	0.7%	1.2%	Brown Bottles	0.86%
Brown Other	0.01%	Green Glass Beverage	0.1%	0.3%	Green Bottles	0.20%
Green Beverage	0.53%	Brown Glass Beverage	1.0%	1.8%	Non-Recy. Glass	1.55%
Green Other	0.01%	Clear Glass Container	0.4%	2.5%	<b>Glass Subtotal</b>	<b>3.97%</b>
Plate Glass	0.02%	Green Glass Container	0.0%	0.0%	Food Waste	5.05%
Non-Glass Ceramics	0.13%	Brown Glass Container	0.0%	0.1%	Mixed Food, Other	5.42%
Other Glass	0.10%	Plate Glass	0.6%	0.0%	Yard Debris	8.29%
<b>Glass Subt.</b>	<b>3.56%</b>	Remainder/Comp. Glass	0.3%	0.1%	Brush and Prunings	0.54%
Yard Debris	3.11%	Non-glass Ceramics	0.0%	0.2%	<b>Org. Subtotal</b>	<b>19.30%</b>
Food Waste	15.37%	<b>Organics</b>	<b>26.1%</b>	<b>23.5%</b>	Textiles	2.66%
Manure	1.39%	Yard, Garden, Prunings	5.2%	5.0%	Carpeting	1.56%
Diapers	2.23%	Food Waste	17.3%	15.7%	Disposable Diapers	1.99%
Carcasses	0.02%	Manures	0.3%	0.2%	Tires	0.15%
Other Organics	0.15%	Disposable Diapers	2.4%	2.0%	Rubber Products	0.31%
<b>Organics Subtotal</b>	<b>22.26%</b>	Carcasses, Offal	0.0%	0.0%	Cosmetics	0.12%
Computers	0.32%	Crop Residues	0.8%	0.0%	Furniture	2.19%
Other Electronics	0.64%	Remainder/Comp. Organics	0.2%	0.5%	Ash, Dust	0.17%
Synthetic Textiles	0.33%	<b>Consumer Products</b>	<b>8.8%</b>	<b>5.0%</b>	Misc. Organics	0.07%
Organic Textiles	0.46%	Computers	0.1%	0.1%	Misc. Inorganics	0.31%
Mixed Textiles	2.18%	Other Electronics	0.3%	0.6%	Fines	1.66%
Shoes	0.24%	Textiles, Synthetic	0.3%	0.3%	Residuals	4.35%
Tires, Other Rubber	0.55%	Textiles, Organic	0.8%	0.7%	<b>Other Waste Subt.</b>	<b>15.53%</b>
Furniture	0.81%	Textiles, Mixed/Unknown	1.0%	1.4%	Natural Woods	0.37%
Carpet	1.37%	Shoes	0.3%	0.8%	Treated Wood	0.14%

Table C-1: Original Data from the Counties Used in the Analysis (Counties with Ecology Grants, conducted 2002-2003), continued

Clallam County	Grant County	Okanogan County	Yakima County
<b>Cons. Products, continued</b>	<b>Consumer Products, continued</b>		<b>Wood, continued</b>
Carpet Padding 0.85%	Tires and Other Rubber 3.7%	0.6%	Painted 3.03%
Rejected Products 0.67%	Furniture and Mattresses 1.1%	0.2%	Contaminated 0.78%
Other Composite 0.18%	Carpet 1.1%	0.0%	Dimension Lumber 2.32%
<b>Cons. Prod. Subt. 8.61%</b>	Carpet Padding 0.0%	0.1%	Engineered 2.71%
Natural Woods 0.21%	Rejected Products 0.0%	0.0%	Roofing, Siding 0.77%
Treated Wood 0.93%	Other Composites 0.2%	0.1%	Pallets, Crates 1.69%
Painted 1.36%	<b>Wood Wastes 8.6%</b>	<b>6.6%</b>	Other Wood 1.03%
Dimension Lumber 1.48%	Natural Wood 0.1%	0.0%	<b>Wood Subtotal 12.83%</b>
Engineered 1.71%	Treated Wood 0.0%	0.1%	Ceramics, China 0.16%
Pallets, Crates 0.71%	Painted Wood 0.7%	0.5%	Soil, Rocks 1.79%
Other Untreated 0.07%	Dimensional Lumber 5.1%	4.5%	Concrete 0.50%
Byproducts 0.04%	Engineered Wood 1.1%	0.5%	Drywall 1.06%
Other Wood 0.96%	Wood Packaging 1.2%	0.9%	Fiberglass Insul. 0.10%
<b>Wood Subtotal 7.48%</b>	Other Untreated Wood 0.0%	0.0%	Roofing 1.08%
Insulation 0.13%	Wood Byproducts 0.0%	0.0%	Asphalt 0.00%
Asphalt 0.00%	Remainder/Comp. Wood 0.3%	0.1%	Other CDL 0.42%
Concrete 0.25%	<b>CDL Wastes 3.7%</b>	<b>4.1%</b>	<b>CDL Subtotal 5.11%</b>
Drywall 1.30%	Insulation 0.0%	0.1%	Motor Oil, Other 0.01%
Soils, Rocks 0.12%	Asphalt 0.0%	0.0%	Oil Filters 0.06%
Roofing 4.22%	Concrete 0.3%	0.0%	Antifreeze 0.00%
Ceramics, Porc. 0.27%	Drywall 1.0%	0.1%	Batteries, Car 0.00%
Other C&D 0.25%	Soil, Rocks and Sand 2.0%	2.0%	Household Batteries 0.11%
<b>C&amp;D Subtotal 6.55%</b>	Roofing Waste 0.3%	0.4%	Pesticides, Herb. 0.01%
Oil 0.01%	Ceramics 0.0%	1.0%	Latex Paint 0.19%
Oil Filters 0.05%	Remainder/Comp. CDL 0.1%	0.4%	Oil-Based Paint 0.08%
Antifreeze 0.00%	<b>Haz / Special Wastes 0.4%</b>	<b>1.7%</b>	Solvents 0.02%
Car Batteries 0.00%	Used Oil 0.0%	0.0%	Adhesives, Glues 0.50%
HH Batteries 0.11%	Oil Filters 0.1%	0.1%	Cleaners, Corros 0.04%
Pesticides, Herb. 0.00%	Antifreeze 0.0%	0.0%	Gasoline, Fuel Oil 0.00%
Latex Paint 0.07%	Auto Batteries 0.2%	0.0%	Medical Wastes 0.04%
Oil Paint 0.07%	Household Batteries 0.0%	0.1%	Fluorescent Tubes 0.02%
Medical Waste 0.16%	Pesticides, Herbicides 0.0%	0.0%	Animal Carcasses 0.09%
Fluorescent Bulbs 0.01%	Latex Paint 0.0%	0.0%	Animal Excrement 0.66%
Asbestos 0.00%	Oil Paint 0.0%	0.0%	Other Spec. Wastes 0.27%
Other Hazardous 0.10%	Medical Waste 0.0%	1.2%	Truly Haz. Waste 0.76%
Other Non-Haz. 0.41%	Fluorescent Tubes 0.0%	0.0%	<b>Haz. Waste Subt. 2.08%</b>
Actual Hazardous 0.26%	Asbestos 0.0%	0.0%	
<b>Spec. Waste Subt. 0.99%</b>	Other Hazardous Waste 0.0%	0.2%	
Ash 0.10%	Other Non-Haz. Waste 0.0%	0.1%	
Dust 0.15%	<b>Residuals 10.5%</b>	<b>3.5%</b>	
Fines/Residue 7.05%	Ash 0.0%	0.4%	
Sludges/Other 3.28%	Dust 0.0%	0.2%	
<b>Residual Subtotal 10.57%</b>	Fines/Sorting Residues 0.7%	2.8%	
	Sludge, Other Industrial 9.8%	0.0%	

All figures are percent by weight.

Table C-2: Original Data from the Counties Used in the Analysis (Recent Studies performed by Green Solutions)

Clark County, 1999		Thurston County, 1999		Snohomish County, 1997-98	
Newspaper	2.14%	Cardboard	3.68%	Newspaper	2.48%
Cardboard	4.72%	Newspaper	1.82%	Cardboard	4.92%
Office and Computer	0.92%	Office and Computer	0.49%	Office and Computer	1.15%
Mixed Waste Paper	4.16%	Mixed Waste Paper	4.02%	Mixed Waste Paper	4.22%
Magazines	1.08%	Magazines	1.38%	Magazines	1.23%
Milk Cartons, Other	0.24%	Milk Cartons, Other	0.30%	Milk Cartons, Other	0.33%
Non-Recyclable Paper	8.52%	Non-Recyclable Paper	8.74%	Non-Recyclable Paper	8.29%
<b>Paper Subtotal</b>	<b>21.78%</b>	<b>Paper Subtotal</b>	<b>20.43%</b>	<b>Paper Subtotal</b>	<b>22.61%</b>
PET Bottles	0.39%	PET Bottles	0.52%	PET Bottles	0.46%
HDPE Bottles	0.53%	HDPE Bottles	0.68%	HDPE Bottles	0.66%
Bottles 3-7	0.06%	Bottles 3-7	0.05%	Bottles 3-7	0.06%
Plastic Packaging	6.80%	Plastic Packaging	7.24%	Plastic Packaging	7.29%
Other Plastic Products	4.33%	Other Plastic Products	3.74%	Other Plastic Products	4.04%
Expanded Polystyrene	0.78%	Expanded Polystyrene	0.46%	Expanded Polystyrene	0.80%
<b>Plastic Subtotal</b>	<b>12.89%</b>	<b>Plastic Subtotal</b>	<b>12.69%</b>	<b>Plastic Subtotal</b>	<b>13.31%</b>
Aluminum Cans	0.39%	Aluminum Cans	0.42%	Aluminum Cans	0.61%
Aluminum Foil	0.12%	Aluminum Foil	0.13%	Aluminum Foil	0.22%
Tin Cans	0.95%	Tin Cans	1.00%	Tin Cans	1.20%
Mixed Metals	2.29%	Mixed Metals	2.58%	Mixed Metals	1.62%
Ferrous Metals	2.09%	Ferrous Metals	2.69%	Ferrous Metals	2.08%
White Goods	0.25%	White Goods	0.71%	White Goods	0.00%
Non-Ferrous Metals	0.34%	Non-Ferrous Metals	0.18%	Non-Ferrous Metals	0.19%
Aerosol Cans	0.17%	Aerosol Cans	0.20%	Aerosol Cans	0.20%
Electronics	0.62%	<b>Metal Subtotal</b>	<b>7.91%</b>	<b>Metal Subtotal</b>	<b>6.11%</b>
<b>Metal Subtotal</b>	<b>7.21%</b>	Clear Bottles	1.74%	Clear Bottles	1.72%
Latex Paint	0.21%	Brown Bottles	0.73%	Brown Bottles	0.70%
Oil-Based Paint	0.09%	Green Bottles	0.45%	Green Bottles	0.33%
Solvents	0.01%	Non-Recyclable Glass	1.03%	Non-Recyclable Glass	1.03%
Adhesives, Glues	0.07%	<b>Glass Subtotal</b>	<b>3.94%</b>	<b>Glass Subtotal</b>	<b>3.79%</b>
Cleaners, Corrosives	0.04%	Food Waste	15.46%	Rubber Products	0.20%
Medical Wastes	0.05%	Yard Waste	3.04%	Tires	0.13%
Motor Oil, Other	0.05%	<b>Org. Subtotal</b>	<b>18.50%</b>	Food Waste	13.06%
Oil Filters	0.12%	Tires	0.16%	Yard Waste	2.22%
Gasoline, Fuel Oil	0.00%	Rubber Products	0.35%	<b>Rubber/Org. Subt.</b>	<b>15.62%</b>
Antifreeze	0.02%	Cosmetics	0.14%	Cosmetics	0.09%
Other Auto Maint.	0.00%	Disposable Diapers	2.11%	Disposable Diapers	2.35%
Batteries, Car	0.03%	Textiles	2.57%	Textiles	2.32%
HH Batt	0.10%	Carpeting	2.51%	Carpeting	2.90%
Animal Excrement	1.52%	Leather	0.03%	Leather	0.12%
Animal Carcasses	0.01%	Furniture	1.02%	Furniture	0.92%
Gas Cylinders	0.02%	Fines	2.29%	Fines	3.33%
Pesticides, Herbicides	0.00%	Ash, Dust	0.26%	Ash, Dust	2.53%
Fert. w/pest	0.01%	Misc. Organics	4.34%	Misc. Organics	6.06%
Fert. w/o pest	0.02%	Misc. Inorganics	0.59%	Misc. Inorganics	0.27%
Other Special Wastes	0.03%	<b>Other Waste Subtotal</b>	<b>16.36%</b>	<b>Other Subtotal</b>	<b>20.89%</b>
Truly Haz. Waste	0.14%	Dimension Lumber	3.94%	Dimension Lumber	3.16%
<b>Special Waste Subtotal</b>	<b>2.39%</b>	Pallets/Crates	1.04%	Pallets/Crates	1.61%
Food Waste	14.49%	Treated Wood	0.08%	Treated Wood	0.12%
Yard Waste	3.29%	Roofing	0.86%	Roofing	0.81%
<b>Organics Subtotal</b>	<b>17.78%</b>	Contaminated	0.50%	Contaminated	0.16%
Clear Bottles	1.54%	Stumps/Other Bulky	0.04%	Stumps/Other Bulky	0.01%
Brown Bottles	0.72%	Plywood	1.85%	Plywood	0.81%
Green Bottles	0.39%	Particleboard/Fiberboard	2.20%	Particleboard/Fiberbd	1.16%
Non-Recyclable Glass	0.51%	Wood Products	0.29%	Wood Products	0.45%
<b>Glass Subtotal</b>	<b>3.16%</b>	Other Wood	0.05%	Other Wood	0.34%
Tires	0.30%	Clean Wood Subtotal	5.10%	<b>Wood Subtotal</b>	<b>8.63%</b>

Table C-2: Original Data from the Counties Used in the Analysis (Recent Studies performed by Green Solutions), continued

Clark County, 1999		Thurston County, 1999		Snohomish County, 1997-98	
<b>Other Waste, continued</b>		<b>Wood, continued</b>		<b>CDL, continued</b>	
Rubber Products	0.27%	Dirty Wood Subt.	3.89%	Ceramics, Porc., China	0.11%
Cosmetics	0.11%	<b>Wood Subtotal</b>	<b>10.86%</b>	Rocks, Bricks	0.45%
Disposable Diapers	3.08%	Ceramics, Porc., China	0.13%	Concrete	1.56%
Textiles	3.47%	Rocks, Bricks	0.32%	Soil, Dirt, Fines	0.11%
Carpeting	2.82%	Concrete	0.58%	Gypsum Board	1.55%
Leather	0.13%	Soil, Dirt, Fines	0.47%	Fiberglass Insulation	0.12%
Furniture	0.78%	Gypsum Board	1.33%	Other Fiberglass	0.25%
Fines	2.75%	Fiberglass Insulation	0.28%	Roofing	1.57%
Ash, Dust	0.34%	Other Fiberglass	0.56%	Asphalt	0.00%
Misc. Organics	4.44%	Roofing	2.17%	Other CDL	0.34%
Misc. Inorganics	0.41%	Asphalt	0.04%	<b>CDL Subtotal</b>	<b>6.06%</b>
<b>Other Waste Subtotal</b>	<b>18.88%</b>	Other CDL	1.00%	Latex Paint	0.12%
Dimension Lumber	2.82%	<b>CDL Subtotal</b>	<b>6.88%</b>	Oil-Based Paint	0.09%
Pallets/Crates	0.57%	Latex Paint	0.09%	Solvents	0.01%
Treated Wood	0.20%	Oil-Based Paint	0.01%	Adhesives, Glues	0.04%
Roofing	0.07%	Solvents	0.01%	Cleaners, Corrosives	0.10%
Contaminated	0.19%	Adhesives, Glues	0.06%	Pesticides, Herb.	0.11%
Stumps/Other Bulky	0.19%	Cleaners, Corrosives	0.12%	Medical Wastes	0.04%
Plywood	1.15%	Medical Wastes	0.10%	Gasoline, Fuel Oil	0.01%
Particleboard/Fiberboard	2.12%	Motor Oil, Other	0.01%	Motor Oil	0.13%
Wood Products	0.74%	Oil Filters	0.07%	Batteries, Car	0.00%
Other Wood	0.41%	Gasoline, Fuel Oil	0.00%	Batteries, Household	0.12%
<b>Wood Subtotal</b>	<b>8.48%</b>	Antifreeze	0.00%	Antifreeze	0.00%
Ceramics, Porc., China	0.23%	Other Auto Maint.	0.01%	Animal Excrement	1.47%
Rocks, Bricks	0.23%	Batteries, Car	0.08%	Animal Carcasses	0.35%
Concrete	0.67%	HH Batteries	0.10%	Other Spec. Wastes	0.38%
Soil, Dirt, Fines	1.63%	Animal Excrement	1.59%	<b>Haz./Special Subtotal</b>	<b>2.97%</b>
Gypsum Board	2.17%	Animal Carcasses	0.09%		
Fiberglass Insulation	0.30%	Gas Cylinders	0.02%		
Other Fiberglass	0.00%	Pesticides, Herbicides	0.01%		
Roofing	1.19%	Fert. w/pest	0.00%		
Asphalt	0.09%	Fert. w/o pest	0.01%		
Other C&D	0.92%	Other Haz./Spec. Wastes	0.05%		
<b>C&amp;D Subtotal</b>	<b>7.43%</b>	<b>Haz. Waste Subtotal</b>	<b>2.43%</b>		

All figures are percent by weight.

Table C-3: Original Data from the Counties Used in the Analysis (Recent Studies performed by Others)

Seattle, 2000		King County, 1999-2000		Whitman County, 1994-95		Pierce County, 1995	
<b>PAPER</b>	<b>21.57%</b>	<b>PAPER</b>	<b>24.8%</b>	<b>PAPER</b>	<b>35.1%</b>	<b>PAPER</b>	<b>32.7%</b>
Newspaper	2.92%	Newspaper	3.3%	Newspaper	4.7%	Newspaper	4.6%
OCC, unwaxed	4.31%	OCC/Kraft	6.2%	OCC/Kraft	7.7%	OCC/Kraft	7.1%
OCC, waxed	0.41%	Low Grade Recyclable	6.6%	Low Grade Recyclable	12.9%	Uncoated Paperbd	3.4%
Office Paper	1.65%	High Grade Printing	1.2%	High Grade Printing	1.7%	Computer Paper	0.2%
Computer Paper	0.11%	Computer Paper	0.3%	Computer Paper	0.2%	High Grade Printing	2.5%
Mixed Low Grade	5.79%	Bleached Polycoats	0.4%	Bleached Polycoats	0.5%	Magazines/Catalogs	2.3%
Phone Books	0.29%	Paper/Other Materials	1.7%	Frozen Food Polycoat	0.1%	Telephone Books	0.4%
Milk/Juice Polycr.	0.33%	Other Paper	5.1%	Compostable	6.2%	Bleached Polycoats	1.3%
Frozen Food Polycr	0.13%	<b>PLASTIC</b>	<b>10.1%</b>	Paper/Other Materials	1.0%	Aseptic Packaging	0.1%
Compostable/Soiled	4.08%	PET #1 Bottles	0.4%	Other Paper	0.1%	Other Recy. Paper	8.8%
Paper/Other Mtls	1.29%	HDPE #2 Bottles	0.5%	<b>PLASTIC</b>	<b>7.0%</b>	Non-Recy. Paper	2.0%
Other Paper	0.27%	Other Containers	0.8%	PET #1 Bottles	0.4%	<b>PLASTIC</b>	<b>10.9%</b>
<b>PLASTIC</b>	<b>8.78%</b>	Polystyrene Foam	0.5%	HDPE #2 Bottles	0.7%	PET #1 Bottles	0.4%
PET Pop and Liquor	0.18%	Film and Bags	5.3%	PVC #3 Bottles	0.0%	PET - Other	0.3%
Other PET Bottles	0.12%	Other Packaging	0.5%	LDPE #4 Bottles	0.0%	HDPE - Milk, Other	0.4%
HDPE Milk, Juice	0.17%	Plastic Products	1.3%	PP #5 Bottles	0.1%	HDPE - Other	1.0%
Other HDPE Bottles	0.26%	Plastic/Other Mtls	0.9%	PS #6 Polystyrene	0.3%	Polystyrene	0.7%
Other Plastic Bottles	0.08%	<b>ORGANICS (WOOD/ YARD/FOOD)</b>	<b>32.3%</b>	Other Containers	0.3%	Other Plastic	0.7%
Jars and Tubs	0.36%	Dimension Lumber	3.9%	Film and Bags	1.6%	Containers	
Ex. Polystyrene	0.56%	Treated Wood	2.2%	Other Packaging	2.0%	Film and Bags	4.7%
Other Rigid Pkg	0.57%	Contaminated Wood	0.7%	Plastic Products	0.5%	Other Packaging	0.9%
Grocery/Bread Bags	0.50%	Roofing/Siding	0.2%	Plastic/Other Mtls	1.1%	Other Plastic	1.9%
Garbage Bags	0.97%	Stumps	0.0%	<b>ORGANICS (WOOD/ YARD/FOOD)</b>	<b>15.5%</b>	<b>GLASS</b>	<b>4.8%</b>
Other Film	2.30%	Large Prunings	0.2%	Dimension Lumber	0.7%	Clear Containers	3.1%
Plastic Products	1.60%	Yard Wastes	7.4%	Treated Wood	2.4%	Green Containers	0.6%
Plastic/Other Mtls	1.13%	Other Wood	3.0%	Contaminated Wood	0.7%	Brown Containers	0.7%
<b>GLASS</b>	<b>2.98%</b>	Food Wastes	14.6%	Roofing/Siding	1.4%	Fluorescent Bulbs	0.0%
Clear Beverage	0.80%	<b>OTHER ORGANICS</b>	<b>11.3%</b>	Stumps	0.0%	Other Glass	0.4%
Green Beverage	0.49%	Textiles/ Clothes	1.9%	Large Prunings	0.1%	<b>METAL</b>	<b>5.1%</b>
Brown Beverage	0.49%	Carpet/Upholstery	2.8%	Yard Wastes	3.9%	Aluminum Cans	0.7%
Container Glass	0.39%	Disposable Diapers	2.3%	Other Wood	6.3%	Other Aluminum	0.3%
Fluorescent Tubes	0.02%	Rubber Products	0.7%	<b>GLASS</b>	<b>3.6%</b>	Tinned Food Cans	1.5%
Other Glass	0.78%	Tires	0.6%	Clear Containers	1.1%	Other Ferrous	1.9%
<b>METAL</b>	<b>7.31%</b>	Animal Carcasses	0.0%	Green Containers	1.1%	Other Nonferrous	0.4%
Aluminum Cans	0.28%	Animal Feces	2.0%	Brown Containers	0.7%	Aerosol Cans	0.2%
Alum. Foil/ Contain	0.11%	Misc. Organics	0.9%	Refillable Beer	0.3%	White Goods	0.1%
Other Aluminum	0.10%	<b>GLASS</b>	<b>2.8%</b>	Other Glass	0.4%	<b>ORGANICS</b>	<b>28.8%</b>
Other Nonferrous	0.11%	Clear Containers	1.2%	<b>OTHER ORGANICS</b>	<b>21.7%</b>	Food Wastes	19.2%
Tin Food Cans	0.67%	Green Containers	0.4%	Food Wastes	7.7%	Textiles/ Clothes	2.8%
Aerosol Cans	0.13%	Brown Containers	0.5%	Textiles/ Clothes	6.5%	Disposable Diapers	4.0%
Other Ferrous	3.10%	Other Glass	0.7%	Carpet/Upholstery	1.6%	Misc. Organics	2.8%
Mixed Metals/Mtls	2.76%	<b>METAL</b>	<b>7.1%</b>	Disposable Diapers	2.0%	<b>YARD WASTE</b>	<b>3.7%</b>
Motor Oil Filters	0.04%	Aluminum Cans	0.5%	Rubber Products	1.3%	Yard Wastes	1.1%
<b>ORGANICS</b>	<b>24.72%</b>	Other Aluminum	0.2%	Tires	0.4%	Prunings	2.6%
Pallets	1.59%	Tinned Food Cans	0.9%	Animal Byproducts	1.0%	<b>CONST. DEBRIS</b>	<b>7.5%</b>
Crates/Boxes	0.27%	Other Ferrous	3.1%	Misc. Organics	1.1%	Land Clearing	0.0%
Leaves and Grass	2.42%	Other Nonferrous	0.1%	<b>METAL</b>	<b>6.0%</b>	Drywall	0.5%
Prunings	0.84%	Mixed Metals/Mtls	2.3%	Aluminum Cans	0.5%	Concrete	0.4%
Food	19.60%	<b>OTHER WASTES</b>	<b>11.0%</b>	Other Aluminum	0.5%	Furniture	0.2%
<b>OTHER</b>	<b>16.57%</b>	Const/Demo Wastes	2.8%	Tinned Food Cans	0.8%	Insulation	0.2%
Textiles/Clothing	2.33%	Ashes	0.2%	Other Ferrous	1.6%	Carpeting	1.9%
Carpet/Upholstery	3.37%	Nondistinct Fines	1.9%	Other Nonferrous	1.3%	Untreated Lumber	2.6%
Leather	0.13%	Gypsum Wallboard	1.4%	Mixed Metals/Mtls	1.3%	Treated/Paint Wood	1.0%
						Other Const. Debris	0.7%

Table C-3: Original Data from the Counties Used in the Analysis (Recent Studies performed by Others), continued

Seattle, 2000		King County, 1999-2000		Whitman County, 1994-95		Pierce County, 1995	
<b>Other, continued</b>		<b>Other Wastes, continued</b>		<b>OTHER WASTES 10.5%</b>		<b>OTHER 5.7%</b>	
Disposable Diapers	1.39%	Furniture/Mattresses	2.5%	Const/Demo Wastes	1.6%	Tires	0.2%
Animal By-Products	2.06%	Small Appliances	1.0%	Ashes	2.6%	Rubber Products	0.6%
Rubber Products	0.49%	Misc. Inorganics	1.2%	Nondistinct Fines	0.6%	Mixed Materials	1.8%
Tires	0.11%	<b>HOUSEHOLD HAZ. 0.7%</b>		Gypsum Wallboard	3.0%	Misc. Non-Combust.	3.1%
Ash	0.16%	Used Oil	0.0%	Furniture/Mattresses	1.1%	<b>HAZARDOUS 0.8%</b>	
Furniture	2.79%	Vehicle Batteries	0.0%	Small Appliances	1.0%	Paint	0.2%
Mattresses	0.37%	Household Batteries	0.1%	Misc. Inorganics	0.5%	Adhesives/Solvents	0.0%
Small Appliances	0.48%	Latex Paint	0.3%	<b>HOUSEHOLD HAZ. 0.6%</b>		Cleaners	0.0%
A/V Equipment	0.42%	Oil-Based Paint	0.1%	Used Oil	0.0%	Oil-Based Paints	0.0%
Monitors and TVs	0.50%	Solvents/Thinners	0.0%	Vehicle Batteries	0.0%	Pesticides/Herb.	0.0%
Other Computer	0.50%	Adhesives/Glues	0.1%	Household Batteries	0.0%	Vehicle Batteries	0.0%
Ceramics/Porcelain	0.39%	Cleaners, Corrosives	0.0%	Latex Paint	0.1%	Ni-Cd Batteries	0.0%
Non-distinct Fines	0.24%	Pesticides/Herbicides	0.0%	Oil-Based Paint	0.2%	Household Batteries	0.1%
Misc. Organics	0.54%	Gas/ Fuel Oil	0.0%	Solvents/Thinners	0.1%	Gasoline	0.0%
Misc. Inorganics	0.52%	Antifreeze	0.0%	Adhesives/Glues	0.0%	Used Oil	0.1%
<b>CDL WASTES 16.96%</b>		Medical Waste	0.0%	Cleaners, Corrosives	0.0%	Asbestos	0.0%
Dimension Lumber	3.83%	Other Hazardous	0.0%	Pesticides/Herbicides	0.0%	Explosives	0.0%
Other Unt. Wood	0.43%			Gas/ Fuel Oil	0.0%	Medical Waste	0.0%
Treated Wood	1.95%			Antifreeze	0.0%	Other Chemicals	0.2%
Contaminated Wood	2.26%			Medical Waste	0.0%		
New Gypsum Scrap	0.75%			Other Chemicals	0.1%		
Demo Gypsum Scrap	2.07%						
Fiberglass Insul.	0.14%						
Rock/Concrete/Brick	2.26%						
Asphaltic Roofing	0.70%						
Other Const Debris	1.67%						
Sand/Soil/Dirt	0.90%						
<b>HAZARDOUS 1.10%</b>							
Latex Paints	0.10%						
Haz. Adh./Glues	0.04%						
NonHaz. Adh/Glues	0.11%						
Oil-based Paints	0.01%						
Cleaners	0.01%						
Pesticides/Herb.	0.03%						
Dry-Cell Batteries	0.06%						
Wet-Cell Batteries	0.02%						
Gasoline/Kerosene	0.00%						
Motor Oil/Diesel Oil	0.01%						
Asbestos	0.00%						
Explosives	0.00%						
Other Hazardous	0.64%						
Chemicals							
Other NonHaz.	0.07%						
Chemicals							

All figures are percent by weight.

Table C-4: Data from other Counties

Lewis, 1996		Skagit County, 1990		Spokane County, 1993	
<b>PAPER</b>		<b>PAPER</b>	<b>31.1%</b>	<b>PAPER</b>	<b>36.1%</b>
Newspaper	2.14%	Newspaper	3.6%	Newspaper	2.6%
Cardboard	4.78%	Cardboard	8.1%	Cardboard	8.7%
Magazines	1.41%	Computer Paper	0.2%	Office Paper	1.1%
Mixed Waste Paper	9.92%	Office Paper	0.7%	Mixed Recy. Paper	10.5%
Milk/Other Paper	0.48%	Mixed Scrap Paper	7.6%	Other Paper	13.3%
<b>PLASTIC</b>		Non-Recyclable Paper	11.0%	<b>PLASTIC</b>	<b>13.1%</b>
PET Bottles	1.10%	<b>PLASTIC</b>	<b>10.4%</b>	PET Containers	0.2%
HDPE Bottles	0.93%	PET Bottles	0.2%	HDPE Containers	0.6%
Bottles 3-7	0.12%	HDPE Bottles	0.5%	Other Plastics	12.3%
Ex. Polystyrene	0.61%	Other Bottles	1.1%	<b>GLASS</b>	<b>1.8%</b>
Film and Bags	5.33%	Polystyrene	0.7%	<b>FERROUS METALS</b>	<b>0.0%</b>
<b>GLASS</b>		Other Packaging	6.6%	Tin Cans	0.0%
Clear Bottles	2.42%	Plastic Products	1.4%	White/Brown Goods	0.0%
Brown Bottles	0.71%	<b>GLASS</b>	<b>7.1%</b>	Other Ferrous Metals	0.0%
Green Bottles	0.38%	Nonrefillable Beer	1.1%	<b>NON-FERROUS</b>	<b>0.5%</b>
<b>ORGANICS</b>		Refillable Beer	0.2%	Aluminum Cans	0.5%
Yard Waste	3.49%	Nonrefillable Pop	1.0%	Nonferrous Metals	0.1%
Food Waste	16.08%	Refillable Pop	0.1%	<b>ORGANICS</b>	<b>30.3%</b>
<b>METAL</b>		Container Glass	4.4%	Food Waste	11.8%
Aluminum Cans	0.93%	Nonrecyclable Glass	0.3%	Yard Waste	8.3%
Tin Cans	1.53%	<b>METAL</b>	<b>10.8%</b>	Other Organics	10.2%
Aerosol Cans	0.18%	Aluminum Cans	0.7%	<b>CONST. DEBRIS</b>	<b>13.0%</b>
Scrap Metal	5.64%	Aluminum Containers	0.2%	Wood Wastes	9.3%
<b>WOOD</b>		Tin Cans	2.5%	Gypsum Drywall	0.9%
Dimension Lumber	3.67%	Bi-Metal Cans	negligible	Other Const. Debris	2.8%
Other Wood	2.83%	Ferrous Metals	2.5%	<b>OTHER WASTES</b>	<b>4.6%</b>
<b>C&amp;D</b>		Nonferrous Metals	1.2%	Disposable Diapers	2.6%
Gypsum	1.65%	Mixed Metals/Mtls	3.7%	Textiles	1.0%
Other C&D	3.25%	<b>RUBBER</b>	<b>1.0%</b>	Rubber Products	0.3%
<b>OTHER</b>		Rubber Products	0.9%	Large Bulky Items	0.5%
Textiles	6.37%	Tires	0.1%	Other Materials	0.3%
Tires	0.18%	<b>ORGANICS</b>	<b>21.7%</b>	<b>HAZ. WASTES</b>	<b>0.3%</b>
Bulky Items	1.38%	Food	12.5%	Paint/Adh/Solvents	0.1%
Fines	1.02%	Yard	2.8%	Cleaners	0.0%
HH Haz. Waste	1.93%	Leaves and Grass	4.1%	Pesticides/Herb.	0.0%
<b>REMAINDER</b>	<b>19.54%</b>	Other Organics	2.3%	Non-Veh. Batteries	0.0%
		<b>OTHER</b>	<b>17.2%</b>	Other Haz. Wastes	0.2%
		Wood	3.6%	<b>SPECIAL WASTES</b>	<b>0.2%</b>
		Textiles	2.6%	Used Oil	0.2%
		Leather	0.1%	Tires	0.0%
		Disposable Diapers	1.9%	Vehicle Batteries	0.0%
		Ash	1.2%	Ferrous Veh. Parts	0.0%
		Ceramic/China	0.2%		
		Rock/Concrete/Brick	0.7%		
		Soil/Dirt/Fines	5.4%		
		Drywall	0.1%		
		Fiberglass Insulation	0.3%		
		Other Const. Debris	0.8%		
		Bulky Waste	0.3%		
		<b>HAZARDOUS</b>	<b>0.7%</b>		
		Paint	0.1%		
		Household Batteries	0.1%		
		Other	0.5%		

All figures are percent by weight.

Table C-5: Data for Select Commercial Generators, from Snohomish County Study (1997-98)

	Boeing	Carpet Stores	General Retail	Grocery Stores	Hardware Stores	Hot Tub Mfg.	Schools	Spectrum Glass
Newspaper	2.4%	0.1%	1.8%	0.4%	0.4%	0.5%	2.8%	0.1%
Cardboard	2.8%	0.8%	8.8%	7.7%	5.2%	5.4%	7.1%	9.6%
Office and Computer	1.6%	0.5%	1.8%	0.5%	0.0%	0.6%	1.5%	0.6%
Mixed Waste Paper	7.8%	0.9%	5.2%	3.6%	1.3%	4.8%	12.0%	3.8%
Magazines	0.3%	1.3%	0.0%	0.0%	0.0%	0.0%	0.8%	0.2%
Milk Cartons, Other	0.3%	0.0%	0.1%	0.3%	0.0%	0.0%	3.5%	0.1%
Non-Recyclable Paper	15.6%	1.5%	7.3%	9.2%	3.7%	3.3%	18.4%	8.3%
<b>Paper Subtotal</b>	<b>30.9%</b>	<b>5.3%</b>	<b>24.9%</b>	<b>21.8%</b>	<b>10.7%</b>	<b>14.6%</b>	<b>46.1%</b>	<b>22.7%</b>
PET Bottles	0.5%	0.0%	0.2%	0.2%	0.0%	0.1%	0.9%	0.6%
HDPE Bottles	0.1%	0.0%	0.5%	1.3%	0.0%	0.1%	0.3%	0.2%
Bottles 3-7	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.3%	0.0%
Plastic Packaging	21.7%	5.3%	14.5%	12.4%	7.9%	4.7%	6.3%	12.5%
Other Plastic Products	13.9%	0.2%	4.6%	1.4%	8.8%	57.8%	1.7%	7.6%
Expanded Polystyrene	2.7%	0.3%	0.2%	1.4%	0.2%	0.0%	0.2%	0.7%
<b>Plastic Subtotal</b>	<b>39.0%</b>	<b>5.8%</b>	<b>20.0%</b>	<b>16.7%</b>	<b>16.9%</b>	<b>62.6%</b>	<b>9.7%</b>	<b>21.6%</b>
Aluminum Cans	0.5%	0.0%	0.2%	0.2%	0.2%	0.1%	1.2%	0.1%
Aluminum Foil	0.1%	0.0%	0.3%	0.5%	0.0%	0.0%	0.2%	0.0%
Tin Cans	0.4%	0.0%	0.4%	0.2%	0.0%	0.1%	1.2%	0.5%
Mixed Metals	0.3%	0.1%	0.1%	1.0%	0.2%	0.0%	0.0%	8.1%
Ferrous Metals	3.6%	0.4%	6.3%	0.1%	3.4%	0.1%	3.8%	8.8%
White Goods	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Ferrous Metals	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.4%
Aerosol Cans	0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.1%	0.1%
<b>Metal Subtotal</b>	<b>5.1%</b>	<b>0.5%</b>	<b>7.4%</b>	<b>2.1%</b>	<b>4.0%</b>	<b>0.3%</b>	<b>6.4%</b>	<b>17.9%</b>
Clear Bottles	2.4%	0.3%	0.7%	1.0%	0.0%	0.1%	0.7%	0.6%
Brown Bottles	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.5%
Green Bottles	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.1%
Non-Recyclable Glass	0.0%	0.2%	0.3%	0.3%	0.1%	0.0%	0.3%	0.5%
<b>Glass Subtotal</b>	<b>2.5%</b>	<b>0.5%</b>	<b>3.3%</b>	<b>1.4%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>1.1%</b>	<b>1.7%</b>
Food Waste	12.0%	0.0%	25.7%	46.3%	0.5%	1.7%	22.1%	2.2%
Yard Debris	0.0%	4.2%	0.0%	2.9%	5.2%	0.0%	0.9%	0.0%
<b>Organics Subtotal</b>	<b>12.0%</b>	<b>4.2%</b>	<b>25.7%</b>	<b>49.2%</b>	<b>5.7%</b>	<b>1.7%</b>	<b>23.1%</b>	<b>2.2%</b>
Tires	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rubber Products	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	2.3%
Cosmetics	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
Disposable Diapers	0.0%	1.5%	0.2%	0.0%	0.0%	0.0%	0.7%	0.1%
Textiles	1.2%	0.0%	1.5%	0.1%	0.1%	0.0%	1.4%	11.9%
Carpeting	0.0%	72.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Leather	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.6%
Furniture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fines	1.2%	0.2%	2.8%	1.6%	24.1%	0.7%	4.6%	5.2%
Ash, Dust	1.6%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. Organics	2.9%	0.1%	9.8%	3.5%	2.2%	0.2%	5.2%	2.2%
Misc. Inorganics	2.5%	0.0%	0.2%	0.0%	0.7%	0.0%	0.5%	1.9%
Special Wastes	0.1%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Other Subtotal</b>	<b>9.6%</b>	<b>74.7%</b>	<b>16.5%</b>	<b>5.2%</b>	<b>27.1%</b>	<b>0.9%</b>	<b>12.6%</b>	<b>24.1%</b>
Wood	0.4%	6.9%	1.7%	3.6%	31.9%	12.8%	0.6%	8.4%
CDL	0.5%	2.1%	0.5%	0.0%	3.6%	6.9%	0.4%	1.6%
<b>Wood, CDL Subtotal</b>	<b>0.9%</b>	<b>9.0%</b>	<b>2.2%</b>	<b>3.6%</b>	<b>35.5%</b>	<b>19.7%</b>	<b>1.1%</b>	<b>9.9%</b>

All figures are percent by weight.

Table C-5: Data for Select Commercial Generators, from Snohomish County Study (1997-98), continued

	Construction and Demolition Wastes			
	New Homes	Remodeling	Roofing	General <sup>1</sup>
Newspaper	0.2%	0.1%	0.1%	0.0%
Cardboard	12.9%	2.0%	0.5%	5.3%
Office and Computer	0.2%	0.1%	0.1%	0.1%
Mixed Waste Paper	0.9%	0.5%	0.3%	0.8%
Magazines	0.1%	0.3%	0.0%	0.0%
Milk Cartons, Other	0.0%	0.0%	0.0%	0.0%
Non-Recyclable Paper	3.6%	0.9%	1.2%	1.3%
<b>Paper Subtotal</b>	<b>17.9%</b>	<b>3.9%</b>	<b>2.3%</b>	<b>7.5%</b>
PET Bottles	0.0%	0.0%	0.0%	0.1%
HDPE Bottles	0.1%	0.0%	0.0%	0.0%
Bottles 3-7	0.0%	0.0%	0.0%	0.0%
Plastic Packaging	2.7%	2.0%	0.6%	2.4%
Other Plastic Products	0.4%	1.4%	0.8%	0.9%
Expanded Polystyrene	0.2%	0.9%	0.0%	0.4%
<b>Plastic Subtotal</b>	<b>3.5%</b>	<b>4.4%</b>	<b>1.5%</b>	<b>3.7%</b>
Aluminum Cans	0.0%	0.1%	0.1%	0.0%
Aluminum Foil	0.0%	0.0%	0.0%	0.0%
Tin Cans	0.0%	0.0%	0.0%	0.0%
Mixed Metals	0.1%	4.3%	0.0%	0.6%
Ferrous Metals	2.1%	2.1%	4.7%	2.0%
White Goods	0.2%	0.9%	0.0%	0.0%
Non-Ferrous Metals	0.1%	0.1%	0.1%	0.2%
Aerosol Cans	0.0%	0.0%	0.0%	0.0%
<b>Metal Subtotal</b>	<b>2.6%</b>	<b>7.5%</b>	<b>5.0%</b>	<b>2.9%</b>
Clear Bottles	0.0%	0.1%	0.1%	0.1%
Brown Bottles	0.0%	0.0%	0.1%	0.0%
Green Bottles	0.0%	0.0%	0.0%	0.0%
Non-Recyclable Glass	0.0%	0.6%	0.0%	0.0%
<b>Glass Subtotal</b>	<b>0.0%</b>	<b>0.7%</b>	<b>0.2%</b>	<b>0.1%</b>
Food Waste	0.0%	0.2%	1.0%	0.1%
Yard Debris	0.0%	2.4%	1.6%	0.2%
<b>Organics Subtotal</b>	<b>0.0%</b>	<b>2.6%</b>	<b>2.5%</b>	<b>0.3%</b>
Tires	0.0%	1.5%	0.0%	0.0%
Rubber Products	0.0%	0.0%	0.5%	1.2%
Cosmetics	0.1%	0.0%	0.0%	0.0%
Disposable Diapers	0.0%	0.0%	0.0%	0.1%
Textiles	0.6%	0.1%	0.1%	0.2%
Carpeting	6.1%	1.7%	0.4%	0.2%
Leather	0.0%	0.0%	0.0%	0.0%
Furniture	0.0%	0.4%	0.7%	0.0%
Fines	2.5%	0.9%	1.0%	0.9%
Ash, Dust	0.0%	0.0%	0.0%	0.0%
Misc. Organics	0.8%	0.9%	1.0%	2.9%
Misc. Inorganics	0.0%	0.0%	0.1%	0.4%
Special Wastes	0.8%	0.2%	0.4%	0.6%
<b>Other Subtotal</b>	<b>10.8%</b>	<b>5.8%</b>	<b>4.1%</b>	<b>6.4%</b>
Wood	52.4%	58.0%	28.8%	45.9%
CDL	12.7%	17.2%	55.6%	33.2%
<b>Wood, CDL Subtotal</b>	<b>65.2%</b>	<b>75.2%</b>	<b>84.4%</b>	<b>79.1%</b>

Notes: 1. Exact source is unknown for "general" samples.  
All figures are percent by weight.

Table C-6: Data for Select Commercial Generators, from Thurston County Study (1999)

	Schools	General Retail	Retail, Lumber	Grocery Stores	Hotels
Newspaper	0.9%	2.5%	0.0%	1.0%	2.9%
Cardboard	2.1%	13.6%	4.8%	5.3%	1.0%
Office and Computer	0.8%	2.0%	0.0%	0.3%	3.1%
Mixed Waste Paper	5.0%	8.1%	0.0%	1.0%	3.5%
Magazines	1.2%	0.3%	0.0%	0.1%	0.1%
Milk Cartons, Other	2.8%	0.1%	0.0%	0.2%	0.6%
Non-Recyclable Paper	15.7%	8.3%	2.0%	20.2%	10.1%
<b>Paper Subtotal</b>	<b>28.4%</b>	<b>34.9%</b>	<b>6.7%</b>	<b>28.1%</b>	<b>21.4%</b>
PET Bottles	2.2%	0.4%	0.0%	0.2%	0.8%
HDPE Bottles	0.6%	0.1%	0.0%	0.5%	0.4%
Bottles 3-7	0.0%	0.0%	0.0%	0.0%	0.0%
Plastic Packaging	9.7%	10.8%	3.9%	11.2%	5.6%
Other Plastic Products	1.4%	8.7%	0.0%	0.6%	2.0%
Expanded Polystyrene	0.8%	1.1%	0.0%	0.8%	0.0%
<b>Plastic Subtotal</b>	<b>14.7%</b>	<b>21.2%</b>	<b>3.9%</b>	<b>13.4%</b>	<b>8.9%</b>
Aluminum Cans	0.8%	0.4%	0.1%	0.1%	0.7%
Aluminum Foil	0.3%	0.0%	0.0%	0.2%	0.1%
Tin Cans	1.0%	0.3%	0.0%	1.1%	0.6%
Mixed Metals	1.1%	0.8%	1.6%	0.0%	0.1%
Ferrous Metals	0.5%	5.9%	1.3%	0.2%	0.4%
White Goods	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Ferrous Metals	0.3%	0.2%	0.0%	0.0%	0.2%
Aerosol Cans	0.0%	0.2%	0.0%	0.1%	0.4%
<b>Metal Subtotal</b>	<b>4.1%</b>	<b>7.8%</b>	<b>2.9%</b>	<b>1.8%</b>	<b>2.5%</b>
Clear Bottles	2.8%	0.8%	0.0%	0.7%	3.1%
Brown Bottles	0.1%	0.1%	0.0%	0.0%	4.0%
Green Bottles	0.0%	0.2%	0.0%	0.1%	4.6%
Non-Recyclable Glass	0.0%	0.0%	0.0%	0.0%	0.4%
<b>Glass Subtotal</b>	<b>2.9%</b>	<b>1.2%</b>	<b>0.0%</b>	<b>0.8%</b>	<b>12.1%</b>
Food Waste	29.8%	14.2%	0.0%	47.3%	44.8%
Yard Debris	2.7%	0.2%	0.0%	2.4%	1.0%
<b>Organics Subtotal</b>	<b>32.5%</b>	<b>14.4%</b>	<b>0.0%</b>	<b>49.7%</b>	<b>45.9%</b>
Tires	0.0%	0.0%	0.0%	0.0%	0.0%
Rubber Products	0.1%	0.4%	0.0%	0.0%	0.1%
Cosmetics	0.0%	0.2%	0.0%	0.0%	0.9%
Disposable Diapers	0.7%	0.2%	0.0%	0.0%	0.8%
Textiles	2.3%	0.1%	0.0%	0.2%	0.7%
Carpeting	0.0%	0.0%	0.0%	0.0%	0.0%
Leather	0.0%	0.0%	0.0%	0.0%	0.0%
Furniture	0.0%	0.0%	0.0%	0.0%	0.0%
Fines	3.4%	2.2%	3.0%	0.9%	1.7%
Ash, Dust	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. Organics	6.3%	2.1%	0.0%	2.4%	4.4%
Misc. Inorganics	0.8%	1.0%	0.0%	0.1%	0.2%
Special Wastes	0.1%	2.1%	0.0%	0.0%	0.1%
<b>Other Subtotal</b>	<b>13.9%</b>	<b>8.2%</b>	<b>3.0%</b>	<b>3.6%</b>	<b>8.9%</b>
Wood	3.0%	10.4%	71.0%	2.4%	0.3%
C&D	0.6%	2.0%	12.4%	0.1%	0.0%
<b>Wood, C&amp;D Subtotal</b>	<b>3.6%</b>	<b>12.4%</b>	<b>83.4%</b>	<b>2.6%</b>	<b>0.3%</b>

All figures are percent by weight.

Table C-6: Data for Select Commercial Generators, from Thurston County Study (1999), continued

	State Capitol	Beverage Bottlers and Dist.	Country Clubs	Construction/Demolition	
				Roofing	All Const.
Newspaper	0.5%	0.0%	0.9%	0.3%	0.1%
Cardboard	9.8%	4.1%	5.8%	0.4%	4.2%
Office and Computer	1.0%	0.0%	0.5%	0.1%	0.1%
Mixed Waste Paper	1.9%	4.8%	6.2%	2.4%	0.5%
Magazines	0.4%	0.0%	4.3%	0.9%	0.1%
Milk Cartons, Other	0.4%	0.0%	0.0%	0.1%	0.0%
Non-Recyclable Paper	11.8%	11.9%	5.3%	2.8%	2.6%
<b>Paper Subtotal</b>	<b>25.9%</b>	<b>20.7%</b>	<b>23.1%</b>	<b>6.9%</b>	<b>7.6%</b>
PET Bottles	0.3%	0.2%	0.4%	0.0%	0.1%
HDPE Bottles	0.8%	5.5%	0.4%	0.2%	0.1%
Bottles 3-7	0.0%	0.0%	0.0%	0.0%	0.0%
Plastic Packaging	5.3%	25.1%	3.1%	0.4%	2.4%
Other Plastic Products	1.4%	1.1%	0.8%	0.7%	3.5%
Expanded Polystyrene	0.7%	0.0%	0.4%	0.0%	0.1%
<b>Plastic Subtotal</b>	<b>8.5%</b>	<b>31.8%</b>	<b>5.0%</b>	<b>1.4%</b>	<b>6.2%</b>
Aluminum Cans	0.4%	0.1%	0.8%	0.0%	0.0%
Aluminum Foil	0.1%	0.0%	0.2%	0.0%	0.0%
Tin Cans	0.8%	0.0%	0.6%	0.2%	0.1%
Mixed Metals	0.3%	0.0%	0.2%	0.4%	3.1%
Ferrous Metals	1.0%	0.1%	3.5%	0.4%	5.7%
White Goods	0.0%	0.0%	0.0%	0.0%	2.2%
Non-Ferrous Metals	0.9%	0.0%	0.5%	0.0%	0.9%
Aerosol Cans	0.0%	0.0%	0.2%	0.0%	0.0%
<b>Metal Subtotal</b>	<b>3.5%</b>	<b>0.2%</b>	<b>6.0%</b>	<b>1.0%</b>	<b>12.0%</b>
Clear Bottles	1.1%	0.1%	1.5%	0.2%	0.1%
Brown Bottles	0.2%	0.5%	1.2%	0.0%	0.0%
Green Bottles	0.0%	0.3%	0.0%	0.0%	0.0%
Non-Recyclable Glass	0.1%	12.8%	0.0%	0.0%	1.6%
<b>Glass Subtotal</b>	<b>1.4%</b>	<b>13.7%</b>	<b>2.6%</b>	<b>0.2%</b>	<b>1.7%</b>
Food Waste	6.9%	3.5%	3.0%	0.3%	0.3%
Yard Debris	0.0%	0.0%	5.8%	0.2%	0.3%
<b>Organics Subtotal</b>	<b>7.0%</b>	<b>3.5%</b>	<b>8.8%</b>	<b>0.5%</b>	<b>0.7%</b>
Tires	0.0%	0.0%	0.7%	0.0%	0.0%
Rubber Products	0.2%	1.0%	0.0%	0.0%	0.0%
Cosmetics	0.0%	0.0%	0.0%	0.0%	0.0%
Disposable Diapers	0.0%	0.0%	0.0%	0.0%	0.0%
Textiles	0.1%	0.0%	1.6%	0.1%	0.7%
Carpeting	0.0%	0.0%	0.0%	0.0%	5.7%
Leather	0.0%	0.0%	0.0%	0.0%	0.0%
Furniture	0.0%	0.0%	0.0%	0.0%	1.9%
Fines	0.8%	0.5%	0.6%	0.2%	0.9%
Ash, Dust	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. Organics	4.5%	1.1%	4.5%	0.9%	1.8%
Misc. Inorganics	0.0%	0.0%	0.8%	0.0%	1.7%
Special Wastes	0.1%	0.0%	0.9%	0.1%	0.1%
<b>Other Subtotal</b>	<b>5.7%</b>	<b>2.6%</b>	<b>9.2%</b>	<b>1.4%</b>	<b>13.0%</b>
Wood	3.9%	27.3%	44.7%	31.9%	37.8%
C&D	44.1%	0.0%	0.6%	56.8%	21.0%
<b>Wood, C&amp;D Subtotal</b>	<b>48.1%</b>	<b>27.3%</b>	<b>45.2%</b>	<b>88.6%</b>	<b>58.9%</b>

All figures are percent by weight.

Table C-7: Data for Select Commercial Generators, from Clark County Study (1999)

	Retail Stores	Grocery Stores	Schools	Thrft Stores	Construction/Demolition		
					New Homes	Roofing	All Const.
Newspaper	0.1%	1.8%	0.5%	0.1%	0.8%	0.4%	0.4%
Cardboard	25.2%	3.9%	4.4%	9.0%	6.5%	2.1%	8.1%
Office and Computer	0.5%	0.5%	1.9%	0.0%	0.2%	0.1%	0.1%
Mixed Waste Paper	3.3%	2.0%	7.9%	12.0%	1.2%	0.4%	0.8%
Magazines	0.0%	0.1%	0.2%	0.2%	0.1%	0.2%	0.1%
Milk Cartons, Other	0.0%	0.2%	5.0%	0.0%	0.0%	0.0%	0.0%
Non-Recyclable Paper	11.1%	10.5%	19.0%	5.1%	7.3%	2.3%	5.7%
<b>Paper Subtotal</b>	<b>40.2%</b>	<b>18.9%</b>	<b>39.0%</b>	<b>26.3%</b>	<b>16.2%</b>	<b>5.4%</b>	<b>15.1%</b>
PET Bottles	0.0%	0.0%	1.3%	0.0%	0.1%	0.1%	0.1%
HDPE Bottles	0.2%	0.4%	0.3%	0.0%	0.0%	0.1%	0.0%
Bottles 3-7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Plastic Packaging	9.0%	9.2%	10.1%	1.1%	2.7%	0.8%	2.5%
Other Plastic Products	1.3%	0.1%	1.2%	17.2%	5.7%	2.6%	4.7%
Expanded Polystyrene	0.5%	0.7%	0.8%	0.0%	3.1%	0.0%	0.8%
<b>Plastic Subtotal</b>	<b>11.0%</b>	<b>10.4%</b>	<b>13.7%</b>	<b>18.3%</b>	<b>11.7%</b>	<b>3.6%</b>	<b>8.2%</b>
Aluminum Cans	0.0%	0.1%	1.1%	0.0%	0.1%	0.0%	0.1%
Aluminum Foil	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Tin Cans	0.1%	0.2%	0.5%	0.0%	0.0%	0.0%	0.1%
Mixed Metals	0.0%	3.0%	3.4%	10.9%	2.0%	0.7%	2.9%
Ferrous Metals	2.2%	6.4%	1.3%	1.4%	2.8%	19.1%	4.8%
White Goods	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Non-Ferrous Metals	0.1%	0.0%	0.0%	0.3%	0.4%	0.0%	0.9%
Aerosol Cans	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%
Electronics	0.0%	0.0%	0.0%	0.4%	0.0%	0.1%	0.0%
<b>Metal Subtotal</b>	<b>2.8%</b>	<b>9.8%</b>	<b>6.6%</b>	<b>13.1%</b>	<b>5.4%</b>	<b>19.9%</b>	<b>9.0%</b>
Clear Bottles	0.1%	0.4%	3.2%	0.0%	0.2%	0.1%	0.2%
Brown Bottles	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.5%
Green Bottles	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Non-Recyclable Glass	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	1.0%
<b>Glass Subtotal</b>	<b>0.1%</b>	<b>0.6%</b>	<b>3.3%</b>	<b>1.1%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>1.7%</b>
Food Waste	42.7%	47.6%	18.6%	0.0%	0.8%	0.2%	0.6%
Yard Debris	0.0%	1.2%	1.3%	0.0%	0.0%	0.1%	1.9%
<b>Organics Subtotal</b>	<b>42.7%</b>	<b>48.8%</b>	<b>19.9%</b>	<b>0.0%</b>	<b>0.9%</b>	<b>0.3%</b>	<b>2.6%</b>
Tires	0.2%	0.0%	0.0%	0.0%	0.8%	0.1%	0.2%
Rubber Products	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%
Cosmetics	0.3%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%
Disposable Diapers	0.0%	0.0%	0.3%	0.0%	0.1%	0.0%	0.1%
Textiles	0.0%	0.0%	0.8%	28.8%	1.3%	0.3%	2.3%
Carpeting	0.0%	0.0%	3.0%	1.6%	0.7%	0.0%	9.0%
Leather	0.0%	0.0%	0.1%	2.9%	0.0%	0.0%	0.0%
Furniture	0.0%	0.0%	2.7%	0.0%	2.5%	0.0%	0.7%
Fines	0.5%	0.3%	2.3%	0.3%	1.9%	0.8%	2.2%
Ash, Dust	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. Organics	0.7%	0.9%	5.3%	0.7%	1.3%	0.6%	1.4%
Misc. Inorganics	0.0%	0.2%	0.1%	3.3%	0.5%	0.0%	0.3%
Special Wastes	0.0%	0.0%	0.1%	0.0%	1.8%	0.2%	0.8%
<b>Other Subtotal</b>	<b>1.7%</b>	<b>1.8%</b>	<b>14.9%</b>	<b>37.8%</b>	<b>11.0%</b>	<b>2.0%</b>	<b>16.9%</b>
Wood	1.2%	8.9%	2.6%	3.4%	32.2%	13.9%	21.5%
C&D	0.3%	0.9%	0.0%	0.0%	22.4%	54.9%	25.0%
<b>Wood, C&amp;D Subtotal</b>	<b>1.5%</b>	<b>9.8%</b>	<b>2.6%</b>	<b>3.4%</b>	<b>54.5%</b>	<b>68.8%</b>	<b>46.5%</b>

All figures are percent by weight.

Table C-8: Data for Military Bases (1998-1999)

	Naval Station Whidbey, 1999			
	Administrative	Industrial	Residential	Food Service
Newspaper	1.76%	1.82%	2.50%	0.83%
Cardboard	2.84%	3.87%	3.01%	19.04%
Office and Computer	1.23%	1.54%	0.79%	0.31%
Mixed Waste Paper	7.78%	9.05%	7.64%	2.65%
Magazines	0.56%	1.16%	1.58%	0.10%
Milk Cartons, Other	0.57%	0.32%	0.49%	0.38%
Non-Recyclable Paper	12.14%	12.56%	9.01%	12.29%
<b>Paper Subtotal</b>	<b>26.88%</b>	<b>30.31%</b>	<b>25.02%</b>	<b>35.59%</b>
PET Bottles	0.72%	0.86%	1.19%	0.12%
HDPE Bottles	0.53%	0.33%	3.01%	0.22%
Bottles 3-7	0.01%	0.05%	0.19%	0.09%
Plastic Packaging	12.66%	9.41%	6.85%	6.71%
Other Plastic Products	1.20%	2.18%	2.08%	0.56%
Expanded Polystyrene	1.00%	0.82%	0.53%	0.13%
<b>Plastic Subtotal</b>	<b>16.12%</b>	<b>13.65%</b>	<b>13.86%</b>	<b>7.82%</b>
Aluminum Cans	0.99%	0.96%	1.04%	0.11%
Aluminum Foil	0.29%	0.11%	0.17%	0.77%
Tin Cans	1.02%	0.68%	1.51%	1.01%
Mixed Metals	1.22%	1.97%	0.75%	0.00%
Ferrous Metals	0.53%	1.44%	2.31%	0.17%
White Goods	0.00%	0.00%	0.00%	0.00%
Non-Ferrous Metals	0.14%	0.45%	0.10%	0.10%
Aerosol Cans	0.35%	0.06%	0.31%	0.05%
<b>Metal Subtotal</b>	<b>4.53%</b>	<b>5.66%</b>	<b>6.19%</b>	<b>2.21%</b>
Clear Bottles	2.85%	5.33%	5.16%	0.77%
Brown Bottles	0.52%	1.44%	2.57%	0.56%
Green Bottles	0.50%	0.23%	0.62%	0.23%
Non-Recyclable Glass	0.29%	0.16%	0.30%	0.27%
<b>Glass Subtotal</b>	<b>4.17%</b>	<b>7.15%</b>	<b>8.65%</b>	<b>1.82%</b>
Food Waste	17.27%	8.71%	20.66%	41.10%
Yard Debris	4.10%	0.05%	0.39%	0.00%
<b>Organics Subtotal</b>	<b>21.38%</b>	<b>8.76%</b>	<b>21.04%</b>	<b>41.10%</b>
Tires	0.00%	0.00%	0.29%	0.00%
Rubber Products	0.01%	0.13%	0.10%	0.12%
Cosmetics	0.11%	0.02%	1.09%	0.00%
Disposable Diapers	0.90%	0.11%	7.39%	0.02%
Textiles	2.52%	1.78%	3.18%	0.62%
Carpeting	0.00%	7.81%	0.00%	0.00%
Leather	0.36%	0.02%	0.01%	0.00%
Furniture	0.73%	0.22%	0.00%	0.00%
Fines	2.30%	2.16%	2.83%	2.06%
Ash, Dust	0.17%	0.00%	0.44%	0.11%
Misc. Organics	6.84%	6.89%	6.68%	6.83%
Misc. Inorganics	1.54%	0.10%	0.14%	0.86%
Special Wastes	1.43%	1.45%	1.79%	0.00%
<b>Other Subtotal</b>	<b>16.91%</b>	<b>20.69%</b>	<b>23.96%</b>	<b>10.63%</b>
Wood	7.03%	9.82%	0.60%	0.82%
C&D	2.99%	3.95%	0.68%	0.00%
<b>Wood, C&amp;D Subtotal</b>	<b>10.01%</b>	<b>13.77%</b>	<b>1.27%</b>	<b>0.82%</b>

All figures are percent by weight.

Table C-8: Data for Military Bases (1998-1999), continued

	Naval Station Everett, 1999							
	Admin- istrative	Indus- trial	Residen- tial	Carrier	Public Works	Commissary/ Exchange	Food Service	Small Ships
Newspaper	5.17%	5.25%	9.20%	0.59%	6.73%	1.03%	2.18%	1.45%
Cardboard	5.34%	6.19%	4.63%	9.37%	6.65%	6.67%	6.87%	13.81%
Office and Computer	1.93%	4.48%	0.96%	1.34%	2.06%	2.36%	0.16%	1.33%
Mixed Waste Paper	7.52%	7.04%	6.11%	2.86%	2.53%	5.16%	3.48%	4.23%
Magazines	1.06%	1.47%	1.63%	0.91%	0.58%	1.61%	0.12%	1.13%
Milk Cartons, Other	0.49%	0.21%	0.22%	0.13%	0.16%	0.11%	0.46%	0.15%
Non-Recyclable Paper	18.43%	14.46%	9.76%	7.48%	16.21%	16.33%	9.56%	4.79%
<b>Paper Subtotal</b>	<b>39.94%</b>	<b>39.10%</b>	<b>32.50%</b>	<b>22.68%</b>	<b>34.92%</b>	<b>33.28%</b>	<b>22.84%</b>	<b>26.90%</b>
PET Bottles	0.57%	0.51%	1.12%	0.32%	0.75%	0.21%	0.07%	0.55%
HDPE Bottles	0.76%	0.71%	0.83%	0.59%	0.36%	0.64%	1.32%	0.64%
Bottles 3-7	0.00%	0.00%	0.03%	0.10%	0.06%	0.00%	0.00%	0.01%
Plastic Packaging	9.61%	8.40%	8.01%	4.05%	7.44%	20.94%	6.15%	4.69%
Other Plastic Products	2.25%	1.94%	1.92%	1.36%	4.22%	5.24%	5.22%	2.26%
Expanded Polystyrene	0.45%	0.56%	0.26%	0.11%	1.13%	2.16%	0.49%	0.24%
<b>Plastic Subtotal</b>	<b>13.63%</b>	<b>12.11%</b>	<b>12.17%</b>	<b>6.54%</b>	<b>13.95%</b>	<b>29.19%</b>	<b>13.25%</b>	<b>8.40%</b>
Aluminum Cans	0.92%	1.30%	1.65%	2.19%	0.79%	0.34%	0.04%	0.71%
Aluminum Foil	0.22%	0.16%	0.08%	0.32%	0.06%	0.02%	0.70%	0.35%
Tin Cans	1.55%	1.25%	1.07%	3.19%	0.84%	0.02%	3.01%	4.89%
Mixed Metals	2.39%	1.97%	0.44%	0.79%	0.96%	0.93%	0.41%	0.62%
Ferrous Metals	0.74%	2.43%	0.90%	1.07%	2.14%	1.06%	0.34%	1.50%
White Goods	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Non-Ferrous Metals	0.04%	0.20%	0.04%	0.84%	0.25%	0.22%	0.03%	0.44%
Aerosol Cans	0.12%	0.28%	0.31%	0.18%	0.09%	0.18%	0.13%	0.11%
<b>Metal Subtotal</b>	<b>5.97%</b>	<b>7.59%</b>	<b>4.50%</b>	<b>8.59%</b>	<b>5.13%</b>	<b>2.78%</b>	<b>4.65%</b>	<b>8.62%</b>
Clear Bottles	3.64%	2.12%	7.38%	1.34%	2.66%	1.10%	2.40%	1.38%
Brown Bottles	2.20%	0.61%	1.74%	0.10%	0.61%	0.03%	0.25%	0.16%
Green Bottles	1.35%	0.39%	2.06%	0.00%	0.02%	0.00%	0.10%	0.00%
Non-Recyclable Glass	0.36%	0.06%	0.10%	0.01%	0.26%	0.10%	0.05%	0.04%
<b>Glass Subtotal</b>	<b>7.55%</b>	<b>3.18%</b>	<b>11.28%</b>	<b>1.46%</b>	<b>3.55%</b>	<b>1.23%</b>	<b>2.80%</b>	<b>1.58%</b>
Food Waste	16.14%	9.80%	15.65%	43.20%	6.59%	23.75%	42.01%	26.86%
Yard Debris	0.19%	0.36%	0.11%	0.00%	0.19%	0.49%	0.03%	0.13%
<b>Organics Subtotal</b>	<b>16.33%</b>	<b>10.16%</b>	<b>15.76%</b>	<b>43.20%</b>	<b>6.78%</b>	<b>24.24%</b>	<b>42.04%</b>	<b>26.98%</b>
Tires	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Rubber Products	0.52%	0.55%	0.27%	0.10%	0.38%	0.08%	0.06%	0.05%
Cosmetics	0.18%	0.04%	0.95%	0.32%	0.04%	0.02%	0.00%	0.28%
Disposable Diapers	4.28%	1.07%	1.40%	0.12%	1.39%	0.12%	0.00%	0.03%
Textiles	2.27%	3.64%	10.37%	9.52%	5.07%	0.80%	0.37%	4.04%
Carpeting	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%
Leather	0.00%	0.00%	0.03%	0.10%	0.00%	0.00%	0.00%	0.50%
Furniture	0.39%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Fines	2.37%	2.76%	1.90%	1.70%	8.33%	1.51%	2.53%	1.28%
Ash, Dust	0.01%	0.00%	0.68%	0.00%	0.00%	0.01%	0.00%	0.00%
Misc. Organics	5.75%	5.11%	7.79%	4.22%	4.80%	4.38%	4.01%	3.85%
Misc. Inorganics	0.09%	6.61%	0.11%	0.12%	1.09%	0.17%	0.21%	0.04%
Special Wastes	0.15%	1.28%	0.23%	0.79%	3.03%	0.15%	0.00%	1.86%
<b>Other Subtotal</b>	<b>16.01%</b>	<b>21.08%</b>	<b>23.71%</b>	<b>16.98%</b>	<b>24.15%</b>	<b>7.24%</b>	<b>7.19%</b>	<b>11.93%</b>
Wood	0.53%	6.11%	0.07%	0.56%	11.52%	2.04%	7.23%	6.88%
CDL	0.04%	0.67%	0.00%	0.01%	0.00%	0.00%	0.00%	8.71%
<b>Wood, CDL Subtotal</b>	<b>0.57%</b>	<b>6.77%</b>	<b>0.07%</b>	<b>0.56%</b>	<b>11.52%</b>	<b>2.04%</b>	<b>7.23%</b>	<b>15.58%</b>

Table C-9: Data from Other States

Oregon, 2000		California, 1999		Minnesota, 1999	
Cardboard/Brown Bags	3.69%	Cardboard	4.6%	Newspaper	2.48%
Low-Grade Pkg.	2.25%	Paper Bags	0.7%	High-Grade Office	4.92%
Bleached Polycoats	0.54%	Newspaper	4.3%	Magazines, Catalogs	1.15%
Non-Recy. Pkg	1.37%	White Ledger Paper	2.3%	Uncoated OCC, Recy.	4.22%
Mixed Paper / Mtls	1.73%	Colored Ledger Paper	0.2%	Uncoat. OCC, Non-Recy.	1.23%
Newspaper	2.79%	Computer Paper	0.3%	Coated OCC	0.33%
Magazines	1.47%	Other Office Paper	1.7%	Boxboard	8.29%
High-Grade Paper	1.83%	Magazines and Catalogs	1.9%	Mixed Paper, Recyclable	
Hardcover Books	0.28%	Phone Books	0.3%	Mixed Paper, Non-Recy.	
Low-Grade Paper	2.85%	Other Misc. Paper	4.4%	<b>Paper Subtotal</b>	<b>22.61%</b>
Other Non-Recy. Paper	4.30%	Remainder/Composite	9.6%	PET Bottles, Clear	0.4%
<b>Paper Subtotal</b>	<b>23.10%</b>	<b>Paper Subtotal</b>	<b>30.2%</b>	PET Bottles, Colored	0.2%
Rigid Plastic Containers	1.51%	Clear Bottles	1.4%	Other PET	0.1%
Other Rigid Pkg.	0.91%	Brown Bottles	0.5%	HDPE Bottles, Natural	0.3%
Plastic Film	4.32%	Green Bottles	0.4%	HDPE Bottles, Colored	0.2%
Rigid Plastic Products	1.74%	Other Colored Glass	0.0%	PVC	0.1%
Mixed Plastic / Mtls	1.21%	Flat Glass	0.1%	Polystyrene	0.8%
<b>Plastic Subtotal</b>	<b>9.70%</b>	Remainder/Composite	0.4%	Film, Transport Pkg.	0.3%
Leaves and Grass	4.36%	<b>Glass Subtotal</b>	<b>2.8%</b>	Other Film	3.5%
Prunings, under 2"	0.93%	Tin Cans	1.0%	Other Containers	0.5%
Prunings, over 2"	0.39%	Major Appliances	0.1%	Other Non-Containers	4.9%
Stumps	0.25%	Other Ferrous	2.4%	<b>Plastic Subtotal</b>	<b>11.4%</b>
Untreated Lumber	3.12%	Aluminum Cans	0.2%	Aluminum Cans	0.7%
Clean HogFuel Lumber	1.45%	Non-Ferrous Metals	0.3%	Other Aluminum	0.5%
Painted Lumber	1.07%	Remainder/Composite	2.1%	Ferrous Containers	0.9%
Treated Lumber	0.47%	<b>Metal Subtotal</b>	<b>6.1%</b>	Other Ferrous	2.9%
Pallets and Crates	1.23%	PET Bottles	0.5%	Other Non-Ferrous	0.1%
Wood Furniture	0.69%	HDPE Bottles	0.8%	<b>Metal Subtotal</b>	<b>5.1%</b>
Other Wood Products	0.24%	Misc. Plastic Containers	0.7%	Yard Waste, Grass	2.1%
Mixed Wood / Mtls	0.54%	Film	3.9%	Yard Waste, Woody Mtl	0.2%
Food	16.22%	Durable Plastic Items	1.8%	Food Waste	12.4%
Tires	0.17%	Remainder/Composite	1.3%	Wood Pallets	2.6%
Rubber Products	0.89%	<b>Plastic Subtotal</b>	<b>8.9%</b>	Treated Wood	3.0%
Disposable Diapers	2.31%	Food Waste	15.7%	Untreated Wood	1.9%
Carpet	1.46%	Leaves and Grass	7.9%	Diapers	2.1%
Textiles	2.92%	Prunings	2.2%	Other Organic Material	1.4%
Roofing/Tarpaper	2.94%	Branches and Stumps	0.1%	<b>Organic Subtotal</b>	<b>25.7%</b>
Other Furniture	0.61%	Agr. Crop Residues	0.0%	Televisions	<0.1%
Other Organics	1.24%	Manures	0.1%	Computer Monitors	<0.1%
<b>Other Organics Subt.</b>	<b>43.48%</b>	Textiles	2.1%	Other Computer Parts	0.2%
Deposit Beverage Glass	0.28%	Remainder/Composite	6.9%	Electric Prod., Electronics	1.6%
Other Clear Bottles	0.55%	<b>Other Organics Subt.</b>	<b>35.1%</b>	Batteries	0.1%
Other Colored Bottles	0.28%	Concrete	1.2%	Other	<0.1%
Clear Container Glass	0.59%	Asphalt Paving	0.1%	<b>Problem Material Subt.</b>	<b>1.9%</b>
Flat Window Glass	0.13%	Asphalt Roofing	0.7%	Latex Paint	<0.1%
Other Non-Recy. Glass	0.43%	Lumber	4.9%	Oil Paint	<0.1%
<b>Glass Subtotal</b>	<b>2.29%</b>	Gypsum Board	1.1%	Pesticides, Herbicides	<0.1%
Aluminum Bev. Cans	0.13%	Rock, Soil, Fines	1.3%	Cleaners, Solvents	<0.1%
Aluminum Foil	0.16%	Remainder/Composite	2.2%	Compressed Fuel Cont.	<0.1%
Other Aluminum	0.09%	<b>C&amp;D Subtotal</b>	<b>11.6%</b>	Antifreeze	<0.1%
Tin Cans	1.07%	Paint	0.1%	Used Oil Filters	0.1%
Other Non-Ferrous	0.21%	Vehicle/Equip. Fluids	0.0%	Other	0.4%
Other Ferrous Metals	2.43%	Used Oil	0.0%	<b>Haz./Special Subtotal</b>	<b>0.6%</b>
White Goods	0.16%	Batteries	0.1%		
Computers	0.68%	Remainder/Composite	0.1%		
Brown Goods	0.98%	<b>Haz. Waste Subtotal</b>	<b>0.3%</b>		

Table C-9: Data from Other States, continued

Oregon, 2000		California, 1999	
<b>Metals, continued</b>		Ash	0.1%
Small Appliances	0.56%	Sewage Solids	0.0%
Aerosol Cans	0.13%	Industrial Sludge	0.0%
Used Oil Filters	0.10%	Treated Medical Waste	0.0%
Mixed Metals	2.18%	Bulky Items	1.8%
<b>Metal Subtotal</b>	<b>8.88%</b>	Tires	0.4%
Rock, Concrete, Brick	3.02%	Remainder/Composite	0.8%
Soil, Sand, Dirt	1.07%	<b>Special Waste Subtotal</b>	<b>3.1%</b>
Pet Litter, Animal Feces	1.65%	<b>Mixed Residue</b>	<b>1.8%</b>
Gypsum Board	3.83%		
Fiberglass Insulation	0.49%		
Other Inorganics	1.73%		
<b>Other Inorganics Subt.</b>	<b>11.79%</b>		
Medical Wastes	0.35%		
Latex Paint	0.03%		
Oil Paints/Thinners	0.06%		
Pesticides, Herbicides	0.02%		
Motor Oil	0.04%		
Fuels	0.00%		
Adhesives/Sealants	0.10%		
Caustic Cleaners	0.02%		
Lead-Acid Batteries	0.04%		
Dry-Cell Batteries	0.08%		
Asbestos	0.00%		
Other Haz. Chemicals	0.03%		
<b>Haz./Special Subtotal</b>	<b>0.77%</b>		

All figures are percent by weight.