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MAINE AGRICULTURAL AND FOREST EXPERIMENT STATION
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Maine's Household Garbage

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INTRODUCTION

Several years ago, Maine and the nation were experiencing a waste crisis. Major factors behind this crisis were

1. The nation's waste was increasing in complexity and volume (both per person and total state and national waste generation had been increasing);
2. State and federal environmental agencies were requiring the closing of older landfills that lacked modern engineering construction standards; and
3. The siting of replacement landfills and incinerators had been slowed due to political sensitivity.

This waste crisis resulted in a transformation of municipal solid waste management. Most municipalities have closed, or will soon close, their older town landfills and have begun some form of a more comprehensive solid waste management program. These solid waste management programs may include a waste transfer station, leaf composting, and recycling.

At many waste transfer stations, waste is brought in by town residents, waste haulers, and commercial establishments. The waste is then loaded or packed into a large truck for transfer to a waste disposal site outside the municipality, such as a regional landfill or incineration facility. Many transfer stations also serve as a recycling center for the community where materials such as newspaper and glass can be collected for shipment to recyclers. Various levels of preparation or processing of materials can occur at the transfer and/or recycling centers, and the waste and the materials collected for recycling may be shipped to various destinations.

This transition to more comprehensive and environmentally sound waste management programs also affected municipalities through higher solid waste management budgets, which have increased on average nearly three-fold between 1987 and 1990 (Criner, Jacobs, and Rock 1991). Appendix A provides more detail on how this transition affected the budget for a typical Maine town.

An important component of developing a municipal recycling program is knowing the composition of the waste stream. Equipment, facilities, and contracts need to be established based on accurate estimates of the materials available. Historically, municipalities used national data to estimate the components of their waste stream. In an effort to develop local waste composition data and investigate factors that may affect waste composition, the Maine Waste Management Agency sponsored this research.

OBJECTIVE

The objective of this report is to present findings from an analysis of Maine's nonbulky domestic waste stream.

MAINE'S MUNICIPAL WASTE STREAM

Municipal solid waste (MSW) is the normal nonliquid waste from households, commercial establishments, and institutions (e.g., schools and municipal offices). Liquid wastes, discarded automobiles, industrial wastes, hazardous and special wastes are usually excluded from MSW definitions. The portion of MSW which is generated by households is referred to as residential or domestic solid waste. Domestic solid waste, or DSW, has two primary subcomponents, bulky and nonbulky. Bulky DSW items include large items such as couches, large appliances, and tires, while nonbulky DSW consists of the everyday waste items that are normally placed in a common 30-gallon plastic garbage bag. Nonbulky DSW is sometimes called "baggable household waste." This analysis will concentrate solely upon nonbulky DSW, or NBDSW.

Nationally, NBDSW accounts for less than half of all municipal solid waste (OTA 1989). The Maine Waste Management Agency estimates that in 1991 Maine generated 1,245,750 tons of municipal solid waste (MWMA 1993). Domestic solid waste represented 587,950 tons, or 47.19%, while commercial solid waste represented 657,800 tons, or 52.81%. Of Maine's domestic solid waste, 443,200 tons, or 75.4%, was nonbulky, and 144,750 tons, or 24.6%, was bulky.

Table 1 presents bulky versus nonbulky waste generation from domestic versus commercial sources. On a per person basis, Maine citizens generate 5.4 pounds of municipal solid waste per day. Of this total, 2.5 pounds are from domestic (household) sources, while 2.8 pounds are from commercial sources. These per person estimates for Maine are very similar to national estimates. Based on data from 28 cities and nine counties, the U.S. Office of Technological Assessment found that per person domestic waste equaled 2.6 pounds per day and per person total MSW generation equaled 4.5 pounds per day.

An important aspect of solid waste management is that the composition of domestic versus commercial waste varies greatly with municipality size. Smaller communities have relatively few commercial establishments and thus have a much higher portion of domestic solid waste relative to commercial solid waste. Table 2

Table 1. Domestic and commercial Maine solid waste, by bulky and nonbulky categories, for 1991.

Solid Waste Category	Tons	Percentage of Category	Percentage of All Solid Waste
Domestic (Residential)			
Nonbulky	443,200	75.4	35.57
Bulky	144,750	24.6	11.62
Total Domestic	587,950	100	47.19
Commercial			
Nonbulky	511,600	77.8	41.07
Bulky	146,200	22.2	11.74
Total Commercial	657,800	100	52.81
Total (Commercial and Domestic Bulky and Nonbulky	1,245,750		100

Source: Maine Waste Management Agency, 1993.

Table 2. Domestic solid waste as a percentage of nonbulky municipal solid waste.

Municipality Size	Municipalities in Sample	Percentage NBDSW (of Total Nonbulky Solid Waste)
Under 1,000	6	92
1,000 to 1,999	13	91
2,000 to 4,999	16	75
5,000 to 9,999	4	61
10,000 and up	3	31

Source: Compilation of data from municipal officials, Penobscot Energy Recovery Company, Inc., and the Maine Waste Management Agency.

shows the portion of all nonbulky municipal solid waste that is composed of domestic solid waste. Note that the largest municipalities have nearly 70% commercial waste while the smaller communities have under 10% commercial waste.

METHODS

Town Selection

Initially, 10 municipalities were selected for analysis based upon the desire to have five population categories with two municipalities in each category. Within each population category, there was a desire to select municipalities in different geographical areas of the state. Selecting municipalities of different populations and geographical locations was done in order to represent rural versus urban differences and potential tourist influences.

Towns with fewer than 100 residents were eliminated from the selection process due to concern over the ability to gather enough waste in a one-day visit for analysis. Once ten sample municipalities had been randomly chosen, the geographic distribution and population characteristics of the municipalities as a group were examined and four additional municipalities were chosen in an attempt to more fully represent the diversity of towns in Maine. The selected municipalities and their population are listed in Table 3.

Sorter Selection

Prior to the first waste sort 24 people were hired and trained at an all-day training session which included a trial waste sort. From this group one person was hired to serve as crew leader.

Table 3. Characteristics of the selected Maine municipalities.

Municipality	Population	Geographic Area
Otis	355	Inland
Verona	515	Coastal
Industry	685	Inland
Pownal	1,262	Inland
Tremont	1,324	Coastal
Searsport	2,603	Coastal
Boothbay	6,573	Coastal
Norridgewock	3,105	Inland
Norway	9,246	Inland
Eliot	5,329	N.H. Border & Inland
Winslow	7,997	Inland
Gorham	11,856	Inland
Waterville	17,173	Inland
Bangor	33,181	Inland

Equipment

The waste sorting equipment included several types of plastic bins, two electronic scales, sorting tables, a trailer to haul equipment or waste, plastic aprons, plastic and leather gloves, particle masks, and lumber and tarpaulins which were constructed to make a tent. To increase the efficiency of the operation all bins were lined with plastic bags.

Collection and Sorting

The household waste was collected in a variety of ways. In some cases the sorting crew picked up the waste along the roadside, exactly like curbside trash pickup. Sometimes municipal employees would collect the waste in advance, and in other cases the crew would collect waste for analysis as citizens brought their garbage in for disposal at the municipal waste drop-off or transfer station.

The quantity of waste collected for analysis was limited to the hauling capacity of a pickup truck with a six-foot trailer. This volume weighed approximately 1,030 pounds and is roughly equivalent to one week's NBDSW from 25 households.

For the first set of waste sorts (fall 1991), six to seven workers were transported to each municipality for the sorting and weighing. While this procedure reduced handling and storage of the waste, the long road trips resulted in high labor costs. For the winter, spring, and summer sorts the waste was brought to the University of Maine, where the sorting and weighing were conducted. The winter and spring waste sorts took place indoors at one of the University of Maine Facilities Management buildings. During the summer waste sort, the warm weather and odors forced the sorting to be moved out-of-doors.

Waste Categories

The categories used for sorting the waste were selected in consultation with the MWMA staff. The primary criteria for selection was the anticipated potential opportunity to recycle a material. Some categories highlighted a package or product type that presents recycling or disposal problems. Table 4 presents the 33 waste categories used during the waste sorting. Appendix B presents the list of sorting categories with a description of typical items for inclusion under each category.

Table 4. Categories for waste sorting.

Batteries	Organic, Food Waste
Cat Litter/Pet Bedding	Organic, Grass Clippings
Composites	Organic, Leaves
Cosmetics/Toiletries	Organic, Mixed Yard Waste
Deposit Containers	Organic, Wood Waste
Disposable Diapers	Paper, Corrugated Cardboard
Furniture/Carpeting	Paper, High Grade
Glass, Clear	Paper, Magazines (recyclable)
Glass, Green/Brown	Paper, Newspaper
Glass, Other	Paper, Other
Hazardous Household	Paper, Telephone Books
Household Demo Debris	Plastic, Bags
Metal, Aluminum	Plastic, HDPE
Metal, Ferrous (no cans)	Plastic, Other
Metal, Tin/Steel Cans	Plastic, Rigid Containers, Other
Metal, Nonferrous	Textiles
Miscellaneous	

RESULTS

Table 5 lists the annual average NBDSW composition for all municipalities. The yard waste categories were omitted from the analysis due to the wide variations in disposal by households.[1] Also shown in Table 5 are the percentages of the subcomponents within the major categories. For instance, note that newspaper constitutes nearly 30% of all paper. Figure 1 graphically depicts the major components of the NBDSW.

Table 6 presents the results of a statistical test of average values of the five major components. The purpose of the tests was to determine whether the factors of municipal size and geographic location affect the waste generation rates in a statistically significant manner. The results indicate that the larger municipalities have considerably more paper and slightly less of the remaining waste items. These results are statistically significant for paper, metal, and glass, but are not significant for plastic and food. The coastal versus inland location factor was not statistically significant for any of the major five waste categories.

[1]Unlike the majority of items disposed of by households, yard waste is usually discarded sporadically in very large quantities (relative to other household waste). Given that this study's sampling procedure was not designed for such disposal practice, yard wastes were omitted from the analysis.

Table 5. Annual average percentage weight of waste categories for all municipalities.

Waste Category	Percentage NBDSW	Percentage of Category
Paper		
Corrugated	2.92	8.83
Highgrade	3.04	9.22
Magazines	2.92	8.84
Newspaper	9.88	29.91
Other	14.09	42.64
Telephone Books	0.19	0.56
Total Paper	33.04	100
Plastic		
Bags	1.59	23.81
HDPE	1.23	18.41
Other	2.75	41.07
Rigid	1.12	16.71
Total Plastic	6.69	100
Glass		
Clear	3.39	83.46
Green/Brown	0.17	4.28
Other	0.50	12.26
Total Glass	4.06	100
Metal		
Aluminum	0.39	11.76
Ferrous	0.55	16.72
Nonferrous	0.07	2.09
Tin/Steel Cans	2.28	69.43
Total Metal	3.29	100
Other		
Food Waste	27.81	52.56
Batteries	0.13	0.25
Cat-Pet	3.86	7.30
Composite	4.74	8.96
Cosmetic/Toilet	0.61	1.15
Deposit Cont.	0.67	1.27
Diapers	3.78	7.14
Furniture/Carpeting	0.46	0.87
Hazardous	1.32	2.49
Household Demo	2.14	4.04
Miscellaneous	3.15	5.95
Textiles	4.24	8.01
Total Other Waste	52.91	100

Note: Some sub-columns rounded to 100.

Paper

Paper waste constituted the single largest component of the household waste stream, accounting for one-third of all NBDSW. Other Paper, which is a catch-all for a variety of paper materials including paper towels and tissues, pizza and cereal boxes, is the largest paper subcategory and accounts for over 42% of all paper. Newspaper is the second largest paper subcategory accounting for just under 30% of total paper weight. Figure 2 presents the annual average paper percentage by municipal population.

Prior to the analysis, the authors suspected that the larger municipalities would dispose of more paper waste than smaller communities. This hypothesis was based on the notion that households in more rural areas may burn a significant portion of their waste paper. It was also thought that households in larger municipalities might have a higher newspaper subscription rate. Although there is considerable variation shown in Figure 2, municipalities with more than 5000 residents disposed of a statistically larger percentage of paper than residents of smaller municipalities (see Table 6). Even when based upon the summer data only, when one would expect that home burning of newspaper would be nonexistent or very low, the larger municipalities generated a statistically significant higher percentage of newspaper waste than the smaller communities.

Table 6. Average waste percentages for the major waste categories by municipal size and inland versus coastal location.

Explanatory Variable	Waste Category				
	Paper	Plastic	Food	Metal	Glass
Pop <= 5,000	29.69*	6.77	28.75	3.96*	4.48*
Pop > 5,000	36.38*	6.62	26.86	2.62*	3.64*
Coastal	32.34	6.99	28.91	3.10	3.99
Inland	33.34	6.53	27.19	3.39	4.10

* significantly different mean values at 95% level using t-test.

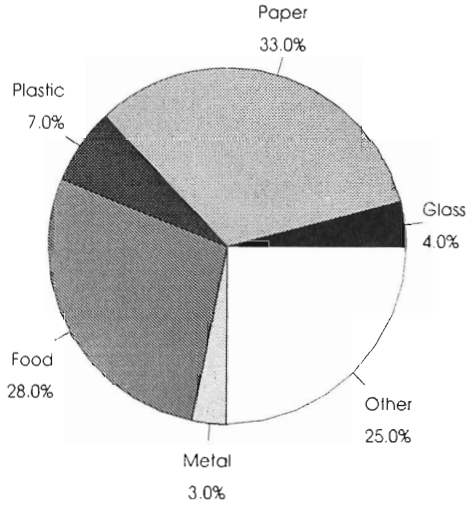

Figure 1. Overall NBDSW Composition

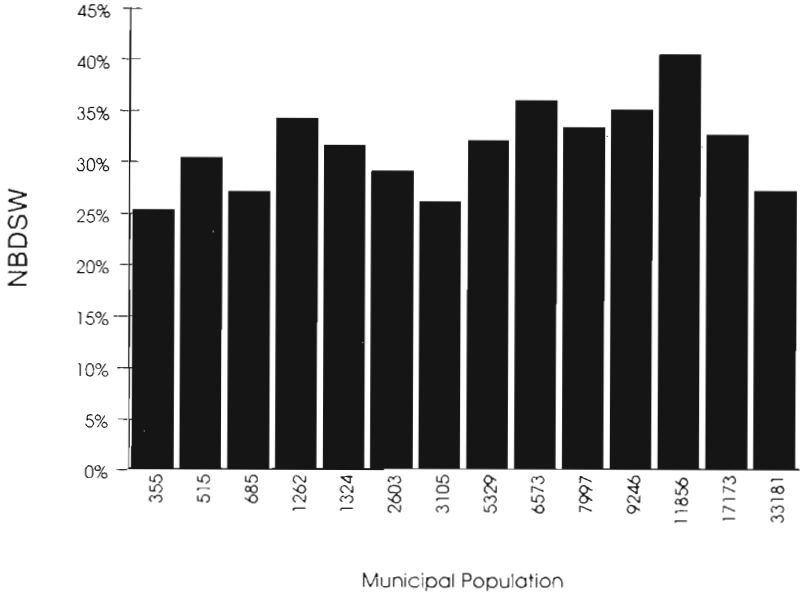

Figure 2. Paper Percentage by Municipal Population

Plastic

Plastic constituted just under 7% of the sampled NBDSW. The four plastic subcategories are Bags, High Density Polyethylene (HDPE) Containers, Rigid Containers, and Other Plastic. Plastic bags were grouped together since they have significant volume and are difficult to distinguish by plastic type. At the household level, plastic items made of HDPE are primarily milk jugs, detergent bottles, and plastic motor oil containers. Note that HDPE plastic, which contains milk jugs (a relatively visible component of the waste stream), constitutes just over 1% of the waste steam by weight. The Other Plastic category consisted of articles made of plastic that could not be categorized as Bags, HDPE, or Rigid Containers. Rigid Containers were plastic containers such as margarine and shampoo containers that were not made of HDPE. The largest category of plastics was Other Plastics, which accounted for approximately 40% of all plastic. Figure 3 presents the annual average percentage of plastics within NBDSW by municipal population. Although a general decrease in plastic by population size appears to exist, the variation in plastic percentage in municipalities above 5000 residents was relatively high. No major statistical relations between the plastic waste composition and municipal size or geographic location was found.

Food

Food waste, constituting nearly 28% of the sampled NBDSW, is the second largest NBDSW category. In the summer waste sort, the food percentage increased significantly over the other seasons (roughly 37% versus 28%). This summer increase in food percentage appeared to be partially or wholly due to the large amount of fresh produce waste (e.g., melon rinds and corn husks) found. A summer increase in food waste due to increased consumption of fresh produce has also been noted in the study by Melosi (1981).

As shown in Figure 4, the annual average percentage of NBDSW comprised of food generally decreases as municipal size increases. A potential reason for this significantly smaller portion of food waste is the fact that many smaller communities do not have sewer systems. In the large communities, which are usually served by sewer systems, there may be less food waste disposed at curbside due to greater use of in-sink garbage disposals. Greater dining out options has also been mentioned as a potential cause for less domestic food waste from larger municipalities.

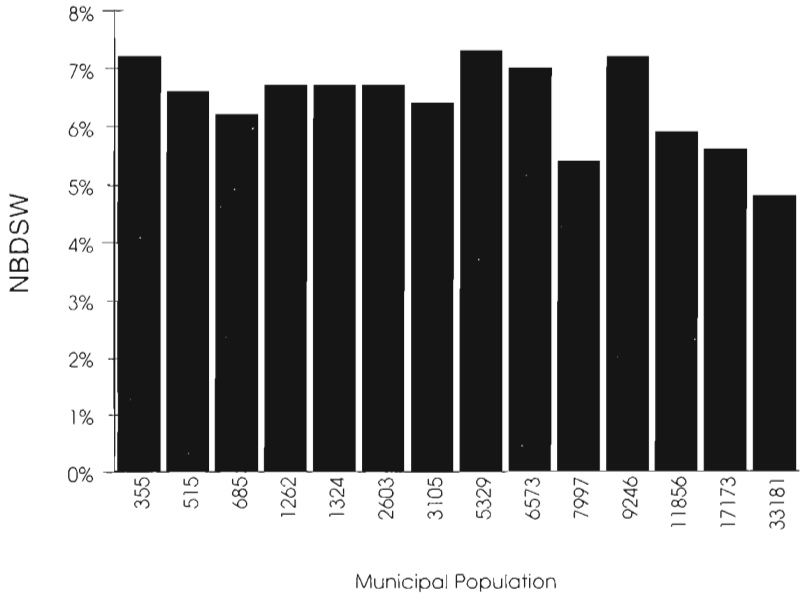

Figure 3. Plastic Percentage by Municipal Population

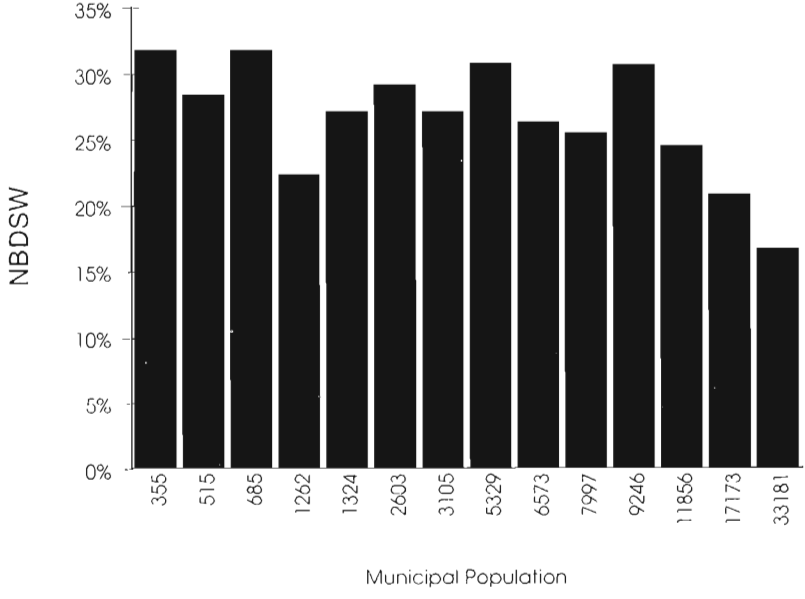

Figure 4. Food Percentage by Municipal Population

Glass

Glass accounted for roughly 4% of the sampled NBDSW. Only container glass is regularly recycled since window glass and other glass objects can contain contaminates such as lead. The container glass category is primarily made up of items such as mayonnaise jars. Container glass accounted for approximately 88% of Total Glass waste. Figure 5 graphically depicts the annual average percentage of NBDSW comprised of glass by municipal population.

Although a statistically significant negative relation was found between Total Glass percentage and population, the impact was very slight. The summer season glass was statistically below the spring season, although the impact was slight in terms of overall NBDSW (approximately 1%). No other statistical relations between the glass waste composition and the explanatory variables were noted.

Metal

Metal accounted for approximately 3% of the sampled NBDSW. Metals were divided into four subcategories: Aluminum, Ferrous Metal (no cans), Nonferrous Metal, and Tin/Steel Cans. Tin/Steel Can waste constituted 69% of the Total Metal waste category. It was observed that food and pet food cans accounted for the majority of the Tin/Steel Can waste. Figure 6 presents the annual average percentage of NBDSW comprised of metals by municipal population.

Other Waste Categories

The remaining waste, which is not represented in the five major waste categories of paper, plastic, food, glass, and metal, constituted approximately one-fourth of the sampled NBDSW. The largest contributors were composites, textiles, cat litter/pet bedding, and diapers. A result that was surprising to the researchers was that cat litter and pet bedding exceeded diapers as percentages of the waste stream (3.9% versus 3.8%). Cat litter and pet bedding waste primarily consisted of cat litter box material.

Miscellaneous wastes are articles that did not fall into any of the predefined waste categories. A composite material is a material made of two or more materials. For this study, the composites category consists almost exclusively of packaging material, primarily food packaging, comprised of two or more materials. This includes frozen concentrate juice containers, frozen vegetable boxes, and paper milk cartons, which all have plastic laminate. This waste category, which is difficult to recycle, encompasses a large number

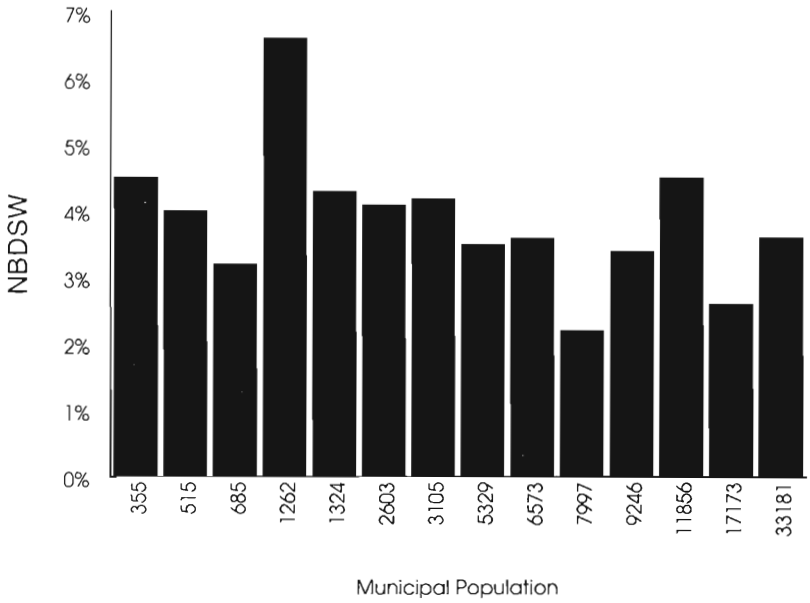

Figure 5. Glass Percentage by Municipal Population

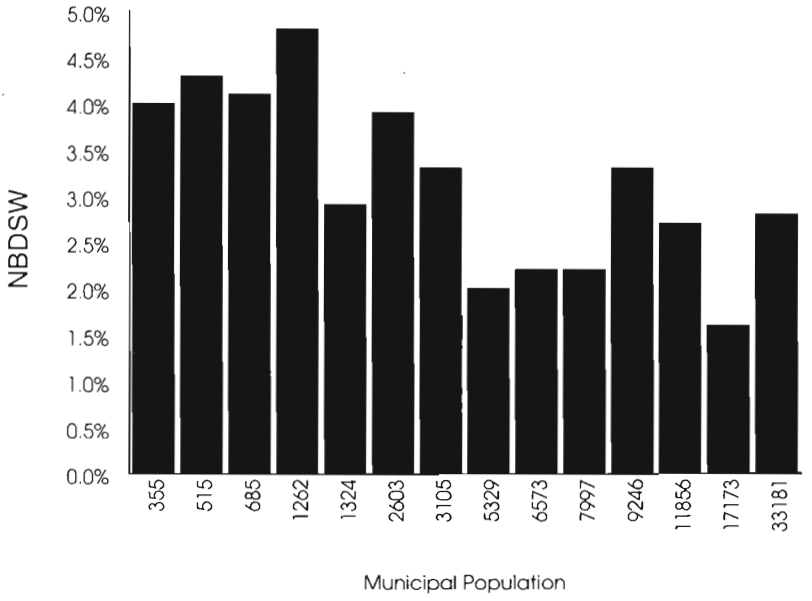

Figure 6. Metal Percentage by Municipal Population

of items. Unfortunately with respect to recycling ease, this sort of packaging is growing in popularity and its future use will likely increase (OTA 1989).

SUMMARY

Summarizing the relation between the explanatory factors and the various waste components, the authors found that

1. The factor with the greatest impact on waste composition was the seasons of the year. In many cases the seasonal impacts were statistically significant and relatively large. Figure 7 shows the seasonal percentage of NBDSW comprised of each of the five major waste categories.

2. Municipal population level was the second most influential explanatory factor with a positive impact on the percentage of paper and a negative impact on the percentage of food.

3. The estimated impact of the inland versus coastal location factor was negligible and was calculated to be statistically insignificant.

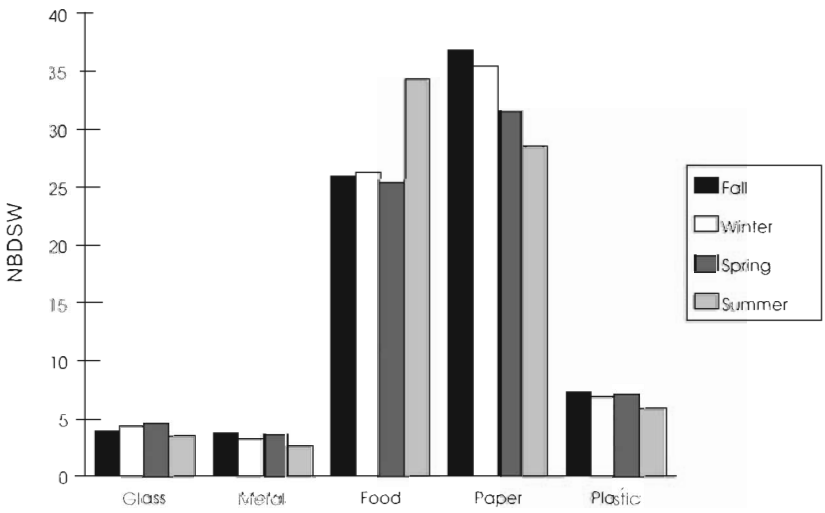

Figure 7. Waste Categories by Season

IMPLICATIONS AND RECOMMENDATIONS

The major implication of this research relates to the finding that a relatively small portion of the waste stream is composed of items traditionally collected for recycling. The items regularly collected for recycling from residential sources are newspaper (9.88%), HDPE plastic (1.23%), glass (4.06%), and metals (3.29%). Even if one includes all plastics and all paper categories, except the subcategory Other Paper, the recyclable portion is only 33%. Since recycling programs often only collect 60% to 80% of the recyclable material available, the likely reduction in NBDSW through traditional recycling is only 20% to 26% (60% of 33% and 80% of 33%, respectively).

Given the large portion of NBDSW that consists of food and other paper, the potential for composting is favorable.[2] Based on this analysis, food and all paper combine to represent over 60% of all NBDSW. Also, since yard waste is also compostable, the portion of NBDSW which is compostable is greater still.

Composting can occur at the household or the municipal level. To compost large quantities of NBDSW several constraints must be considered. First, household separation of food wastes is fundamental. Secondly, for municipal-level food composting the collection of food wastes from households is required. Collection of food from households is sometimes called "wet collection." Some individuals in waste management see an increase in "wet/dry" collection, where residences separate wet or food wastes from dry wastes (Grogan 1992). A system similar to the wet/dry system is a compostable/noncompostable collection. Collection of compostables along with noncompostables might be efficient with a two-sided compactor truck.

While backyard composting is an option for dealing with food waste, not all food wastes are recommended for composting. An unknown percentage of food waste consists of meat, dairy products, and other food stuffs that are not compostable in most low-technology municipal or backyard compost operations. While this material (and the compostable segment) may be processed in an anaerobic system, the technological requirements of anaerobic systems have thus far precluded their adoption by municipalities. Further, composting at the backyard level requires dedication by citizens, especially in inclement weather. A good feature of backyard

[2]Composting is the degradation and stabilization of organic wastes through aerobic bacteria action. The conditions for composting include proper moisture level, pH, carbon/nitrogen ratio, and air. Composting operations can range from simple backyard versions to large municipal operations conducted within large buildings or vessels.

composting is that citizens are most likely to participate in the summer when the food waste percentage increase by nearly 10%.

A few Maine communities are introducing backyard composting programs. Some of these communities have incentives for composting through a "pay-by-the-bag" waste collection system. With a pay-by-the-bag system, households must pay for stickers which they place on their trash bags. Only bags with the stickers are then collected by the waste haulers. Such a waste collection fee system directly translates to savings for households that compost. Research currently being conducted at the University of Maine will estimate the costs of composting organics under various scenarios.

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APPENDIX A

Economic Impact of Municipal Waste Management Transition

Shawn Small, Civil Engineer at Civil Engineering Services, Inc., of Brewer, Maine, estimates that the costs for closure of a town landfill and the construction and operation of a new solid waste management system for a small municipality (a population of approximately 2,800), is $775,000 in up-front capital costs, and $181,000 in annual operations costs (with an annual recycling benefit or revenue of $8,200 already included). Appendix A Table 1 shows these capital and annual costs. To help put these costs in perspective, Small also estimates a typical budget for a 2,800 person municipality (Appendix A Table 2). The budget values shown in Appendix A Table 2 were compared with actual annual budgets for municipalities of similar size and were found to be of comparable magnitude.

Appendix A Table 1. Typical capital and annual costs for new solid waste management system for Maine municipality of 2,800.

Item	Annual $	Capital $
Solid Waste Transfer Station	153,650	240,000
Landfill Closure	6,800	360,000*
Recycling Program	28,750	175,000*
Recycling Revenue	(8,200)	
Total	181,000	775,000

Source: Shawn Small, Civil Engineering Services, Brewer, Maine, 1992. *The towns are eligible for a 75% reimbursement from the state.

Under the budget shown in Appendix A Table 2 and the estimated solid waste management costs shown in Appendix A Table 1, a municipality of 2,800 that closes its landfill and constructs a transfer station with recycling, will see their solid waste management costs increase from $30,000 per year to $181,000 per year. This is an increase of $151,000 per year or a 7.57% increase in the annual budget. Given the current state of municipal and state budgets, these budget increases are certainly ill timed.

While the cost increases associated with town dump closures are large, the costs associated with a leaking dump can dwarf the costs of landfill closure and transfer station construction. A landfill that contains a plume of contaminated groundwater can cost

between $200,000 and $350,000 for an array of wells. A slurry trench wall used to trap groundwater can cost more than $500,000 (New Mexico Waste Resource Institute 1993). Replacing a single residential well with another source of water can cost $20,000 to $50,000 or more (Prysunka 1992). Treatment options such as bioremediation, air stripping, and carbon filtration can drive the costs to over $1 million. Even with these efforts, some experts suggest that a contaminated aquifer can never be completely cleaned up.

Appendix A Table 2. Typical annual budget components for Maine municipality of 2,800.

Item	Annual $
School	1,100,000
Payment to County	70,000
Public Safety	130,000
Fire	75,000
Solid Waste (municipality dump)	30,000
Public Works	165,700
Capital Improvements	55,000
Health and Welfare	40,000
General Government	330,000
Total	1,995,700

Note: This budget corresponds to the situation where the municipality is using the town dump; that is, there are no landfill closure costs, transfer station costs, etc.
Source: Shawn Small, Civil Engineering Services, Brewer, Maine, 1992.

APPENDIX B
RESIDENTIAL WASTE SORTING CATEGORIES AND EXAMPLES

Paper

High Grade
- Computer paper
- Notebook paper
- Envelopes (w/o windows, without other materials)
- Bills, receipts (carbonless)
- Mail advertisements (colored included)

Newspaper
- Newspaper (including colored sections)
- Grocery bags
- Other brown paper bags

Corrugated Cardboard
- Corrugated cardboard (not waxed or coated)

Magazines
- Magazines bound with staples (no glue bindings)
- Weekly TV inserts (if stapled)

Telephone Books
- All telephone books

Other
- Tissues
- Napkins
- Some ice cream (paperboard) containers
- Coffee filters
- Glue-bound magazines

Glass

Clear Containers
- Food containers (mayonnaise, salad dressing, spaghetti sauce;
- food waste removed, may include covers)
- Drinking glass, clear

Green/Brown Containers
- lemon juice
- medicine bottles

Other
- Light bulbs
- Mirror glass
- Window glass
- Crystal
- Ceramics
- Dishes
- Coffee cups

Metals

Aluminum
- Foil
- Pie plates
- Food packaging
- Aluminum cans (mostly pet food, deposit containers)

Tin/Steel Cans
- Tin cans (including labels, tops & bottoms; most food waste removed)

Ferrous Metals
- Coat hangers
- Frying pans
- Steel wire cleaning pads (soapless)

Nonferrous Metals
- Nonmagnetic metals other than aluminum
- Copper, brass, and other nonferrous metals

Plastics

HDPE Containers
- Milk Jugs
- Laundry detergent
- Containers with #2 (excluding oil, antifreeze, and other hazardous cont.)

Other Rigid Containers
- Windex bottles
- Yogurt containers
- Peanut butter
- Prescription container (without pills)
- Shampoo
- Mustard
- Syrup

Bags

Grocery
Bread
Bird seed
Garbage
Produce

Other Plastics

Styrofoam plates and packaging
Plastic wrap
Coat hanger
Acetate report cover
Semirigid clear salad container covers
Meat-juice pad

Deposit Containers

Includes all containers marked for deposit. Unmarked soda and beer containers (perhaps from N.H.) were put into the appropriate material category (aluminum or plastic).

Textiles, Leather, Rubber

Shoes and sneakers
Socks
Shirts
Pants
Dryer sheets
Cloth bows
Lint
Curtains
Rubber products

Organics

Mixed Yard Waste

Cut flowers
Indoor plants with soil
Rocks
Wreaths
Brush

Food Waste
Food
Coffee grounds
Animal carcasses (if used for food)
Shells from shellfish
Meat bones
Tea bags

Wood Waste
Sawdust
Picture frames

Leaves
Leaves, may include twigs and some sandy materials

Grass clippings
Lawn mower clippings

Disposable Diapers
Baby diapers only, no adult diapers

Batteries
All sizes and shapes

Household Hazardous
Cleanser containers (empty or full)
Oil containers (empty or full)
Oil filters
Antifreeze containers (empty or full)
Paint cans (empty or full)
Paint thinner and other solvents (empty or full containers)
Spray paint cans

Household Demolition Debris
Window frames
Lumber
Plaster board
Wire
Insulation
Plywood scraps
Wallpaper

Furnishings/Carpeting

Carpet

Cosmetics/Toiletries

Sanitary napkins
Lipstick
Hairspray
Baby powder container
Q-Tips
Adult Diapers

Composites

Frozen concentrate juice containers
Frozen vegetable boxes
Paper milk cartons (plastic laminate)
Plastic and paper combined packaging
Windowed envelope
Bottle caps from jars
Pet food & litter bags
Cat food containers (foil and plastic)
Waxed bakery bags
Plastic handle paper bag
Composite food containers
Mailer with plastic air pockets
Toys - plastic/metal
Potato chip bags (with foil inside)
Pringles-like can
Pre-sliced sandwich meat container
Aseptic packaging
Waxed cardboard
Paper plates
Fast food take-out package
Cigarette boxes

Miscellaneous

Vacuum cleaner bags
Cigarette butts
Pets (birds, cats, etc.)
Medical (syringes, containers with drugs, gauze, bags with bodily fluids)
Table and floor sweepings at end of sample