



Financing Solid Waste for the Future

Introduction

The present solid waste system in Washington is remarkably successful in many ways. This success is due to the people involved and the relationships they have developed over the years. Ecology is fortunate to have great partners in local government (both health jurisdictions and solid waste divisions), the private sector (haulers, recyclers, composters, landfill owners), state government (Washington Utilities and Transportation Commission, Dept. of Health), and others. While we envision changes to achieve the Beyond Waste vision, we see no reason that the current list of partners and some future partners, such as manufacturers, will not be successful in getting there. Together, we have made great strides to move from open burning dumps to our system of modern solid waste facilities. We can make similar strides to implement Beyond Waste. We will continue to partner and grow – including continued work to assure equitable, sufficient, and effective financing for the system.

Beyond Waste is much broader than our current waste management system. For every pound of discarded product now managed as a solid waste in Washington, 15 to 20 pounds of waste were produced in the extraction, production, transportation, and marketing of the product now being discarded. Beyond Waste has the bold vision of trying to reduce those upstream impacts. Beyond Waste does not intend to “fix” the current collection and disposal system. As stated above, that system functions very well. The true crisis that Beyond Waste intends to address is that Washington citizens create more garbage than ever before (both in total tonnage and on a per-person basis), and the production shows no signs of abating. Given finite global resources, the earth cannot sustain our continued wasteful practices.

The Beyond Waste Project looks to a future where fewer materials and toxic substances are needed to support our society, where materials are reused or recycled rather than disposed of, and where resources are brought back into the manufacturing process rather than incinerated or buried. This transformation will only be achieved through significant redesign of processes and products by industry, new programs and efforts by government, and new ways of buying, using, and recycling items by consumers and businesses. Business and government investment at all levels will be needed to meet these goals for the future. Waste haulers, who added the collection of yard debris and other recyclables to their services during the 1990s, may need to purchase new equipment to handle the challenges of recycling new or different materials. Achieving large increases in waste reduction and in closed-loop recycling will require more extensive technical assistance, education, planning and collaboration. Each program should be considered on its own merits. Those investments that are cost-effective should be carried out because assuring reliable funding sources for carrying out such changes is a crucial part of making Beyond Waste a reality.

Background

The “Waste Not Washington Act” in 1989 set hefty challenges (statewide recycling goal of 50%, emphasis on waste reduction and source-separated recycling, and safer disposal standards, to name a few) before our residents, local and state government, and the solid waste industry. Fifteen years later, the many successes resulting from that and other related legislation (recycling programs, safer landfills, safer handling of hazardous wastes) have brought significant benefits to our state.

The majority of these changes have been financed with increased user fees—primarily charged on disposal of solid waste. Residents and companies that received disposal services were charged for such benefits. Additionally, millions of dollars in startup financing for recycling and waste reduction programs including equipment, infrastructure, and education have been provided through state grants and contracts from funding sources that no longer exist (such as Referenda 26 & 39 grants and Solid Waste Management Account grants).

Prior to 1990, nearly all solid waste costs were directly related to collection, handling, and disposal. Instituting waste reduction, recycling, and hazardous waste programs affected this situation in two ways: it added non-disposal costs to the equation, and it reduced disposal tonnage from what it might have been. In some years, despite a growing population, total disposal tonnage actually decreased, for a variety of reasons. In some cases, per-ton disposal fees increased.

Increasing tip fees accompanied by decreasing volumes of waste do not necessarily mean a net increase in costs to customers, and higher tip fees could provide an incentive for the Beyond Waste vision. However, the reluctance of elected officials in the past to increase disposal fees to sufficient levels often led to insufficient revenues to cover program costs, and this in turn led to program cutbacks. This happened even though recycling rates (in many cases) rose only to 35-40% of the waste stream. One concern of local officials was potential loss of revenue due to leakage from the solid waste system, which could be exacerbated by increased tip fees.

Collection and disposal fees, energy sales, and various surcharges, currently pay for almost all solid waste services offered in Washington's communities. However, if the Beyond Waste vision is to be met, additional revenues, reallocation of existing revenues, or alternative funding sources may be needed to pay for some elements of the solid waste system.

A systematic look at the solid waste financing system and the factors that affect it is needed. The shift from the disposal-focused solid waste system of the 1980s to a system focused on recycling, and waste and toxic reduction evolved without broad discussion and acknowledgment that the financing mechanisms might be affected. It was not until local governments began to prepare and implement solid waste management plans and the Washington Utilities and Transportation Commission began to review solid waste management plan “Cost Assessments” that the true costs of the “Waste Not Washington Act” became known. We need to follow a different path as we implement the Beyond Waste strategies.

Not so long ago, fast-growing waste tonnages represented a significant problem for solid waste haulers, disposal companies, and local governments. Everyone remembers the difficulties that the public and private sectors had locating new facilities here in Washington. The private and public sectors responded with a range of waste reduction and recycling programs that provided additional waste handling options to residents and businesses. Most new collection services (e.g., curbside recycling) were paid for through user fees while many education and outreach programs that promoted the new collection programs were funded through disposal fees, energy sales revenue, and state grants.

Success has not been universal. Some urban counties achieved the diversion levels anticipated by the “Waste Not Washington Act.” Smaller and rural governments never reached the fifty percent goal. In fact, the state as a whole never reached its goals.

What success we have achieved came at a significant cost. Counties that successfully achieved the state’s goals saw disposal tonnages decrease, and with it revenues necessary to fund education and outreach programs. Local governments could not maintain the level of outreach needed to partner with the private sector’s collection programs.

Beyond Waste posits a future in which customer and consumer behaviors change to a point that waste tonnages may significantly decrease over time. Local governments with responsibility for maintaining solid waste education and outreach programs are fearful that Beyond Waste will be implemented without attention being paid to the connection between disposal volumes, disposal fees, and local government revenue. Likewise, all involved in the solid waste sector are concerned that implementing Beyond Waste initiatives may require expenditures and/or adversely affect revenues. Finally, much time, labor, and capital have been invested in providing programs and services that go well beyond the traditional collection and disposal of garbage programs of the past.

This last point is key. It is essential to support the existing successful system through transition toward a Beyond Waste future. The private and public solid waste infrastructure has shown various levels of its ability to expand and diversify in response to changing demands of the marketplace, changing technologies, and evolving policy requirements. Evidence of this flexibility is the range of materials collected for reuse and recycling that were previously sent to disposal. While not overlooking the ability of the present system to accommodate moving toward Beyond Waste, it is important to seek ways in which funding structures can reinforce rather than work against Beyond Waste goals.

Continuing to move recycling toward greater cost-effectiveness can also help. If the demand for recyclable materials and recycled-content products significantly improves and if sales of recyclable materials can cover all the costs, then solving the funding problem could be easier. This could occur through development of technology, use of state and local government purchasing power, and other means.

Life-Cycle Costs

The complete costs of creating waste and using toxic substances are not reflected in the prices of products that eventually become those wastes, or in the costs for managing and disposing of those wastes. These external costs include pollutant emissions, depletion of natural resources, and impacts on human health and the environment. When external costs are not completely reflected in the market price for a product, the resources used for the product can be undervalued and may not be conserved for the long term.

Solid waste management has traditionally focused on wastes generated after product consumption. However, there are impacts before product consumption (upstream impacts) and impacts after disposal (downstream impacts), that are most often not considered in the total cost of the products. These costs are often borne by the general public and are not associated with the product itself.

One goal of the Beyond Waste effort is to have costs of a product's complete life cycle incorporated into product pricing, which can occur in various ways. This goal's focus ultimately lies in creating products in manners that conserve natural resources, minimize waste, are compatible with biological processes, and limit the use of materials that create significant negative impacts on the ecosystem. Incorporating external costs will affect pricing signals in the market in such a way that costs will reflect what is and what is not supportable.

This new perspective on accounting for external costs and setting appropriate prices does not imply only a one-way street of additional expenses. Less pollution means reduced health problems and cleanup costs; eliminating artificial subsidies can result in reduced use of resources; and actions that result in new, "green jobs" will produce economic benefits of their own. Investing in the Beyond Waste future today can reduce costs and liabilities for businesses, create new jobs, open new markets, and maintain economic vitality while simultaneously reducing environmental impacts to healthier and more sustainable levels. A healthier and more sustainable environment benefits every person in Washington. Some up-front expenses are needed to realize long-term environmental, health, and societal gains, and some of these actions and investments may bring economic gains more quickly.

How Solid Waste Management Is Paid for Today

The current solid waste system has proven its ability to effectively and efficiently evolve to provide services and infrastructure needed, and is expected to continue evolving to help meet the needs of the future. Washington's current solid waste system consists of a number of programs, services, and activities provided to residents and businesses/organizations by the solid waste industry, manufacturers, counties, cities, state government, the federal government, and various non-governmental organizations. These activities are aimed primarily at managing wastes in the municipal solid waste stream. Large quantities of wastes are also generated from agricultural, industrial, and large institutional settings. These wastes are not generally included in the municipal solid waste stream.

Background Paper for Beyond Waste Summary Document

The costs for providing solid waste services and programs to residents and businesses are paid primarily with user fees. Households and commercial businesses pay collection fees to waste haulers; transfer stations and landfills charge disposal fees; and recycling companies charge monthly collection or per-visit fees.

The following spreadsheet displays a number of solid waste program financing mechanisms that are currently in use. A brief description of each financing mechanism is included after the spreadsheet.

Background Paper for Beyond Waste Summary Document

Current Mechanisms for Funding the Solid Waste System in Washington State (marked by X)																					
		User Fees, Rates, Surcharges								Taxes			Specialized Fees		Other						
		Cost of Service Based Rates	Other Volume Based Rates	Fixed (or Flat) Per Customer Rates	Collection / Recycling Surcharges	Planning Fee (RCW 36.63.045)	Weight or Volume Based Disposal Fees	Disposal Surcharges	MTCAs Funds	State "Litter" Tax	Disposal District Excise Tax	Franchise Fees / Gross Receipt Taxes	Advance Recovery Fees, Voluntary or Mandatory	Permit Fees	Enforcement Infractions / Fines / Penalties	Sales of Recyclable Materials	Sales of Recovered Energy	Gov't Collected Funds To Private Sector	General Fund Revenue Sources	Bond Financing	Public Works Trust Fund
Major Program Areas Primary Service Providers		Major Program Areas Primary Service Providers																			
Solid Waste Collection		Solid Waste Collection																			
City Government		X	X	X							X										City Government
Hauling Companies		X	X	X												X					Hauling Companies
Recycling Collection & Facilities		Recycling Collection & Facilities																			
City Government				X			X	X	X		X				X	X					City Government
County Government				X			X	X	X						X	X					County Government
Hauling Companies				X			X	X	X						X	X		X			Hauling Companies
Private Recyclers															X	X					Private Recyclers
Retailers & Manufacturers												X			X	X					Retailers & Manufacturers
HHW & SQG Collection & Facilities		HHW & SQG Collection & Facilities																			
City Government		X	X				X	X	X	X											City Government
County Government							X	X	X	X											County Government
Hauling and Disposal Companies							X	X	X								X				Hauling and Disposal Companies
Retailers & Manufacturers											X										Retailers & Manufacturers
Waste Prevention and Recycling (Outreach) Programs		Waste Prevention and Recycling (Outreach) Programs																			
City Government				X	X		X	X	X	X	X										City Government
County Government				X	X	X	X	X	X	X	X										County Government
Hauling Companies				X													X				Hauling Companies
Disposal Companies							X	X									X				Disposal Companies
Health Departments										X											Health Departments
Dept of Ecology										X	X										Dept of Ecology
Retailers & Manufacturers												X									Retailers & Manufacturers
Regulation/Administration		Regulation/Administration																			
City Government		X	X		X		X	X	X	X		X									City Government
County Government					X	X	X	X	X	X		X									County Government
Health Departments					X		X	X	X	X			X								Health Departments
Dept of Ecology										X	X										Dept of Ecology
WUTC												X									WUTC
Handling/Transport/Disposal		Handling/Transport/Disposal																			
City Government		X	X	X	X		X	X	X									X	X		City Government
County Government		X	X	X	X		X	X	X							X		X	X		County Government
Hauling or Disposal Companies		X	X	X			X	X								X	X				Hauling or Disposal Companies
Retailers & Manufacturers											X										Retailers & Manufacturers
Enforcement		Enforcement																			
City Government							X	X	X												City Government
County Government							X	X	X												County Government
Health Departments							X	X	X	X			X	X				X			Health Departments
Dept of Ecology										X											Dept of Ecology
WUTC											X										WUTC
Closure/Post Closure		Closure/Post Closure																			
City Government					X		X	X	X	X								X			City Government
County Government					X		X	X	X	X								X			County Government
Hauling Companies							X	X	X	X								X			Hauling Companies
Disposal Companies							X	X	X	X								X			Disposal Companies
Illegal Dump Cleanup		Illegal Dump Cleanup																			
City Government							X	X	X									X			City Government
County Government							X	X	X	X								X			County Government

Current Mechanisms for Financing the Solid Waste System in Washington State

User Fees, Rates, Surcharges

1. Cost-of-Service-Based Rates

■ Description

Cost-of-service-based rates, which allow for rates to cover the actual costs of providing the services, is a rate-setting methodology used by both the Washington Utilities and Transportation Commission (WUTC) and some cities. Under Chapter 81.77 RCW, the WUTC established cost-of-service-based rates for regulated solid waste collection from residents and commercial businesses in areas where franchises exist for solid waste collection companies. Under RCW 35.21.130 and 35.21.135, cities and towns may set rates through a solid waste or recyclable materials collection ordinance.

Both cities and counties can provide for reduced rates as incentives. Cities and towns may, and some do, provide reduced solid waste collection rates as incentives to residents participating in recycling programs. In WUTC-regulated areas, counties can, by ordinance, provide for reduced solid waste collection rates as incentives to residents participating in recycling programs, subject to WUTC approval.

2. Other Volume-Based Rates

■ Description

This represents an alternative range of pricing options for solid waste collection and disposal services, such as using the rates to provide incentives for reducing wastes and incentives for separating recyclables. An example would be setting a rate where subscribers to two-can service would pay double the rate of one-can subscribers. Specific authority for counties to set such rates does not exist.

■ Considerations

These types of rates may be problematic under cost-of-service models, as they are currently used to set rates that cover costs. Both cities and counties can provide for reduced rates as incentives.

Cities and towns may, and some do, provide reduced solid waste collection rates as incentives to residents participating in recycling programs. In WUTC-regulated areas, counties can, by ordinance, provide for reduced solid waste collection rates as incentives to residents participating in recycling programs, subject to WUTC approval.

3. "Fixed or flat" Per-Customer Rates

■ Description

Fixed or flat per-customer rates charge each customer the same amount regardless of the volume of service. Very simply, the total costs divided by the number of households equals the rate per household. For example: \$10 per household applies to

one can of garbage or ten cans of garbage. Some cities use a flat rate for all or some services (garbage, recycling, and yard waste). The WUTC uses flat rates for mandatory-pay recycling and yard waste services, but not garbage.

4. Solid Waste/Recycling Collection Rate Surcharges

■ Description

As noted, Chapter 35.21 RCW provides authority to cities to set collection and disposal rates, which may include surcharges/fees to cover additional costs of managing the solid waste system beyond actual collection and disposal costs. Similarly, RCW 81.77.160 directs the WUTC to establish collection rates that include "all known and measurable costs related to implementation of the approved county or city comprehensive solid waste management plan."

5. Planning Fees

■ Description

RCW 36.58.045 authorizes counties to impose a fee on collection services throughout its unincorporated areas to pay for "the administration and planning expenses that may be incurred by the county in complying with the requirements in RCW 70.95.090."

6. Weight or Volume Based Disposal Fees

■ Description

Both cities (RCW 35.21.120 and 35.21.152) and counties (RCW 36.58.040) are authorized to develop solid waste disposal sites and set user fees. Weight/volume based fees involve per-ton or per-cubic yard fees charged for disposal of solid waste at a transfer facility, landfill, or incinerator; these fees may also apply to moderate-risk waste drop-off, vector waste separation and treatment, and other similar services. The basic premise is that the user pays for the service according to the amount of material disposed.

7. "Fixed or flat" Per-Customer Disposal Fees

■ Description

Both cities (RCW 35.21.120 and 35.21.152) and counties (RCW 36.58.040) are authorized to develop solid waste disposal sites and set user fees. These fees may be set on a per-customer or per-trip basis instead of the more common weight or disposal basis.

8. Disposal Surcharges

■ Description

Chapter 35.21 RCW provides authority to cities to set collection and disposal rates, and those rates may include surcharges to cover additional costs of managing the solid waste system over and above the costs calculated to cover actual collection and disposal.

RCW 36.58.040 allows counties to set rates and charges for solid waste disposal, which includes the ability to impose disposal fee surcharges.

Taxes

9. Model Toxics Control Act Funds--Hazardous Substance Tax

■ Description

Also referred to as a “pollution tax,” this tax is established by Chapter 82.21 RCW and is imposed on persons who first possess, in Washington State, hazardous substances. The substances subject to this tax include those defined under federal law (CERCLA), registered pesticides, petroleum products, and any other substance that Ecology determines by rule to present a threat to human health or the environment if released into the environment. Revenues collected from this tax go into the Toxic Control Accounts (RCW 70.105D.070). Both a state toxics control account and a local toxics control account were established, and monies deposited into those accounts are to be used for a broad array of hazardous waste and solid waste activities and programs at the state and local government levels.

All counties are eligible to receive biennial Coordinated Prevention Grants (CPG), which come from the local toxics control account. The CPG funding is based in large part on population. Some portions of CPG monies go to local health authorities for inspection and enforcement activities. The other main use of the toxics control account monies is for Remedial Action Grants (RAG), given to local jurisdictions for cleanup activities, such as landfill closures.

■ Considerations

CPG grants require local matching dollars, which are typically paid for with disposal revenues. This means that if the disposal fee revenues decrease, the counties may have to look for other sources for their matching funds.

CPG grants are very important to the rural counties. A breakout of how counties are classed in this respect statewide in 2003 is shown below.

Grant % of revenues	# of counties
0 - 10%	23
11 - 25%	5
26 - 50%	2
51 - 75%	3
76 - 100%	1
<i>Note: Only 34 of Washington's 39 counties responded to the 2003 survey summarized by the data in this table.</i>	

10. State Litter Tax

■ Description

The Waste Reduction, Recycling and Model Litter Control Account (WRRMLCA), imposed through Chapter 82.19 RCW, is funded by a tax collected from manufacturers, wholesalers, and retailers of items or packaging deemed to contribute to roadside litter. Chapter 70.93 RCW directs that the WRRMLCA be used for litter cleanup and prevention, and also for waste reduction and recycling efforts at both the state government and local community levels.

■ **Considerations**

The litter tax that funds the WRRMLCA has not been amended or revised since its adoption in the early 1970s. The tax rate has not changed, nor has the list of items that are taxed, despite evidence that suggests the list of taxed items does not adequately reflect the types of items found on the roadside as litter or in illegal dumps. The Department of Revenue says the tax is difficult to administer and can be somewhat volatile. Since the need for cleanup and prevention programs will continue in the future, an examination of the litter tax and the overall WRRMLCA is warranted.

11. Disposal District Excise Tax

■ **Description**

RCW 36.58.100-150 authorizes counties with populations of less than 1 million to create one or more disposal districts in unincorporated areas, which become junior taxing districts. Excise taxes may be levied upon citizens and businesses within a district (again, unincorporated areas only, unless city approval allows districts to expand into incorporated areas).

■ **Considerations**

A disposal district is potentially in competition for taxing authority with other junior taxing districts, including ports, fire districts and utility districts.

Three counties have instituted Disposal Districts: Lewis, Whatcom, and San Juan. Each situation is somewhat different from the others.

- a. In Lewis County, the District was used to form a cohesive financial and control structure between the County and its principal cities to respond to the demands of a Superfund landfill site. The District does charge a fee, but it is a tipping fee, not an excise tax.
- b. Whatcom County has implemented an excise tax on authorized waste collection services as allowed by state law. This effectively charges haulers \$8.50 per ton, which haulers pass on to their customers and pay to the County regardless of where they take their waste.
- c. Similarly, San Juan County (which runs its own transfer station system, unlike Whatcom) faced significant tonnage and revenue loss over the last year due to price competition. It too developed a disposal district, moved some of its expenses to an excise tax, thus lowering its tip fee, and has apparently resolved the tonnage problem.

12. Mandatory Collection

Collection districts in unincorporated areas may be formed by counties, under the authority of RCW 36.58A. Collection districts do not directly raise revenues, however. They can impose mandatory collection service at minimum levels for all unincorporated areas, which provides the structure for a service-area wide fee to be included in collection rates. The appropriate local health authority must find that mandatory collection of solid waste is necessary for public health reasons.

Within cities, under authority of RCW 35.21.130, property owners and residents may be required to subscribe to a minimum service level for solid waste and/or recyclable collection.

13. Franchise Fees/Gross Receipt Taxes

■ Description

Some cities charge franchise fees or taxes on gross receipts upon solid waste collection companies for the privilege of entering into a contract with or doing business within a city. These fees sometimes fund solid waste-related activities.

The WUTC assesses a regulatory fee on gross solid waste collection revenues of regulated solid waste collection companies.

Specialized Fees

14. Advance Recovery Fees (Voluntary or Mandatory)

■ Description

Advance recovery fees (ARFs) are a front-end financing method whereby some or all costs for end-of-life management of products are paid/collected when the product is sold. ARFs may be voluntary or mandated, visible or invisible. Invisible fees occur when manufacturers include the end-of-life collection, recycling, and disposal costs in the price of the product. This is called cost internalization, and examples include the Rechargeable Battery Recycling Corporation (RBRC), Thermostat Recycling Corporation (TRC), and Office Depot and Hewlett Packard (HP) programs described below.

ARFs can be used by manufacturers to pay for manufacturer-funded programs or can be used to pay for the costs incurred by other parties such as haulers, recyclers, or governments. Some forms of ARFs provide incentives to manufacturers to increase recyclability and reduce toxicity of their products, thereby reducing program costs of other entities.

Some examples of ARFs in Washington State include:

Under RCW 70.95.640, retailers in Washington State are required to collect a core charge of at least \$5 when selling a lead-acid vehicle battery, unless the customer is exchanging an old battery at the time of sale. After a core charge is collected, the customer can obtain a refund by bringing the old battery in to the retailer.

At the national level, many rechargeable battery manufacturers contribute to the funding of the RBRC, which carries on a multifaceted program for collecting small rechargeable batteries from consumers, businesses, and governmental agencies. The manufacturer's contributions are covered in the purchase price of the batteries, and this makes it possible for RBRC to collect spent batteries from consumers at no charge and from businesses at a reduced charge. Participating retailers and local government sites provide collection points for consumers.

Contractors in King and Pierce Counties can bring out-of-service mercury thermostats to participating wholesalers. In most cases, the costs of recycling are covered by the TRC, composed of Honeywell, White Rodgers, and General Electric. This program can be set up by any jurisdiction that has Heating Ventilating and Air Conditioning wholesalers in their area.

Various electronics recycling programs implemented in Washington have been financed or partially financed by manufacturers and/or retailers. One example is the Office Depot and HP program, which collected and recycled a broad range of electronics for eight weeks. HP and Office Depot financed the program; there were no charges to the customer. Another example is the Good Guys program, which collected TVs in four stores for a month. Reduced fees were charged, with six manufacturers providing financial assistance.

15. Permitting fees

■ Description

Permits are required for legal solid waste management facilities. Fees for permitting activities are imposed and collected by jurisdictional health departments. These monies are used for the health department's operating expenses. (RCW 70.95.180; WAC 173-350-700 and 710)

Biosolid management system permit fees collected from entities engaged in the management of municipal sewage sludge are intended to cover the costs of the permit program. The monies are directed to the biosolids permit account and may be spent only after appropriation. (RCW 70.95J.025; WAC 173-308-320)

In accordance with Chapter 90.48 RCW, anyone conducting a commercial or industrial operation that results in disposal of solid waste or liquid waste into the waters of the state (including municipal wastewater treatment plants) must pay a permit fee and obtain a state permit for the discharge. Wastewater discharge permit fees are deposited in the water quality permit account (Chapter 173-224 WAC).

Other

16. Enforcement Infractions/Fines/Penalties

■ Description

Fees collected through enforcement actions taken against solid waste facilities are nearly always paid into a jurisdiction's general fund. However, they are not necessarily directed to help pay for the jurisdiction's enforcement or other solid waste management activities.

17. Sales of Recyclable Materials

■ Description

Revenues from selling collected recyclable materials can be used to help pay for solid waste programs. Prices for recyclables fluctuate widely.

18. Fees/Charges for Recycling

■ Description

Public and private recycling entities may charge fees to cover the costs of recovering or recycling a variety of discarded products.

19. Sales of Recovered Energy

■ Description

Some solid waste facilities, such as waste-to-energy facilities and landfills, are able to recover energy from the waste materials. Some landfills create energy by burning landfill gas. Sales of this energy can be used to help pay for solid waste programs.

20. Government-Collected Funds from Private Sector Activities

■ Description

In some instances, pursuant to RCW 81.77.020, cities contract with private parties to provide various solid waste collection services but retain the billing function.

Revenues received above the amount remitted to the contractor can be directed to other solid-waste-related programs and activities by the applicable municipality.

21. General Fund Revenue Sources

■ Description

Governments may use general fund revenues to pay for solid waste activities, and some do rely to some extent on such funding.

22. Bond Financing

■ Description

RCW 36.67.010 authorizes counties to sell bonds to pay for major solid waste projects. Bonding is used for capital projects (landfills, transfer stations, etc.) or large landfill remediation efforts. It is not used for regular operating expenses. Bonds can be general obligation (G.O.) or revenue bonds. Typically, debt service is paid with disposal fees.

23. Public Works Assistance Account

■ Description

An existing statewide solid waste collection tax has been in place since 1989. Chapter 82.18 RCW imposes a 3.6% “solid waste collection tax” on all persons using such service. Revenues collected via this tax go into the Public Works Assistance Account, which is used to provide loans and financial guarantees to local governments for public works projects, including solid waste and recycling infrastructure. This tax replaced an earlier “refuse collection tax,” and that name continues to be applied to the new tax.

Money comes into this account from the proceeds of authorized bonds or any other lawful source (such as the solid waste tax, see above). These funds are to be used to make loans or give financial guarantees to local governments for public works projects.

Criteria and Objectives

Any system for funding the state's solid waste program needs to address the objective needs of each of the system's service providers as well as the concerns of the stakeholders and the general public. The state's solid waste funding system should:

- Provide sufficient long-term funding tools to support local government, state government, and private sector efforts to plan and implement solid waste disposal and recycling systems and related programs
- Ensure adequate funds for permitting, enforcement, and oversight efforts
- Address the financial viability of local infrastructure, public or private, including collection programs, transportation, recycling and disposal
- Cover the costs of public or private collection, handling, recycling and disposal programs

In addition to these objectives, funding strategies and mechanisms need to address a variety of more subjective criteria for distributing resources and changing behavior. Potential state and local funding options should be evaluated by the following criteria:

- They should use incentives to affect behaviors and avoid subsidizing wrong behavior.
- They should protect against future cleanups.
- They should be fair.
- They should be practical to implement.
- They should be flexible enough to address changing conditions.
- They should support high environmental standards.
- They should provide feedback to manufacturers about product design whenever possible.

Conclusions and Recommendations

Reducing wastes and toxins, recycling, waste prevention, and safe handling all require constant diligence, ongoing information and education, and resource investments. Such activities and services often yield intangible results. These types of services and activities are pivotal to moving Beyond Waste and helping to create a stronger and healthier future for Washington.

In some communities, there is significant disparity that exists today between the goals and activities listed in local solid waste and hazardous waste plans and what is actually carried out. Despite great success, some jurisdictions are not providing funding for all activities and services identified in their solid waste management plans. It is important to ensure reliable and adequate funding for all elements of the solid waste system, including reduction and recycling, as we implement Beyond Waste. Therefore, regular evaluation is needed of financing mechanisms for solid waste infrastructure, services, programs and activities. Long-range financing goals and potential actions for working toward them must be articulated.

Proposed Actions

Recommendation #14SW---Evaluate financing for the solid waste system, including moving toward Beyond Waste, in consultation with the SWAC and interested parties

Conduct evaluations of how solid waste is financed currently, and the extent to which needs are able to be met. The first evaluation should be completed within five years, and ongoing evaluations should be conducted as needed, but at least every five years. The state Solid Waste Advisory Committee (SWAC) should play a key role in monitoring the solid waste financing situation, and should alert Ecology when discussions and evaluations are needed. These evaluations should be done in collaboration with key stakeholders of the solid waste system, and parties (of differing perspectives), including, but not limited to, business, industry, citizens, and elected officials. When discussions addressing specific waste streams are called for, stakeholders having a particular interest in such materials or products should be identified and encouraged to participate.

Specific Steps

- ✓ Within two years of plan adoption, the state SWAC, together with the other stakeholders, will examine how programs and services are funded now, including consideration of the extent to which the current system supports waste disposal over recycling and/or waste reduction. The SWAC, in coordination with Ecology staff, will create a report on these issues.

Within five years:

- ✓ Evaluate the extent to which the existing financing mechanisms will be able to cover the identifiable costs to implement Beyond Waste effectively and determine whether changes are needed.
- ✓ Examine a range of potential financing mechanisms and other actions, if needed, and collaboratively work to inform and educate all parties, and to implement successful options.
- ✓ Evaluate options for moving from end-of-life financing to up-front financing.
- ✓ Evaluate current opportunities to incorporate complete cost models into solid waste system decision making.
- ✓ Identify regulatory barriers that may need to be addressed.
- ✓ Expand partnerships--some needs can be funded and carried out by non-governmental organizations and the business sector
- ✓ Work toward the elimination of subsidies, tax breaks and incentives that serve to encourage waste generation and toxic substance use. Replace with incentives to reduce wastes, use fewer resources, reduce use of toxic substances, and reduce overall environmental footprints.

As part of the evaluation, consider the following potential actions to help move toward a long-term Beyond Waste future.

Background Paper for Beyond Waste Summary Document

1. While continuing to rely on user fees to fund solid waste programs and services, begin shifting from predominantly end-of-life fees (such as disposal fees) to up-front fees (such as cost internalization) where practical opportunities exist.
2. Begin incorporating complete cost and benefit models into solid waste system decision making.
 - Most solid waste management decisions are based on traditional cost-benefit analysis. More informed decisions can be made by incorporating external costs not captured by current accounting practices.
 - Life-Cycle Assessment (LCA) is a tool that can be used to evaluate traditional (internal) costs and benefits as well as external costs and benefits. LCA is an emerging policy tool that provides a way to connect solid waste practices and policy to sustainability.

Potential Actions for the-Long Term

As actions are taken and progress is made toward achieving the Beyond Waste goals, a stable and long-term financing system must be in place to assure the delivery of solid waste programs. These mechanisms must have the flexibility to meet the needs of urban and rural areas of Washington. It is not possible to fully anticipate what will be needed in the coming decades as we shift toward the Beyond Waste goals. Performance indicators and regular evaluation will help to determine next steps along the way. Entities involved in the current system (WUTC, local governments, haulers, Ecology, and others) should discuss and consider the following long-term actions:

- Continue to promote all facets of product stewardship, including product and process redesign, take-back, advance recovery fees and leasing services instead of owning products.
- Continue to ensure that incentives to encourage more sustainable behaviors are maintained.
- Incorporate the complete costs of solid waste collection and disposal into the prices charged for them.

Definitions

- **Flat fee:** Each customer pays the same amount of money for a commodity or service regardless of how much is used.
- **Unit fee:** The fee charged for a commodity or service is based on the units consumed, expressed as dollar amount per unit (\$/unit).
- **User fee:** A fee charged for a service, such as collection of solid wastes and/or recyclables, or for depositing wastes at a disposal facility.
- **Tip or tipping fee:** A fee charged for depositing waste materials at a disposal facility, such as at a landfill or waste-to-energy facility.

- **Solid waste system:** The network of facilities, services, programs and activities that provide for collection, recycling, reduction, reuse and disposal of solid waste across Washington.
- **Complete costs:** Costs that include internal costs (all transactions tracked using traditional accounting methods and practices), future costs, and external costs (those, such as environmental, societal, and health costs, not accounted for by traditional accounting methods and practices), so that all costs are included.

Bibliography

Please note that significant amounts of information and text are included courtesy of Washington State County Solid Waste Survey Report, 1999, and updated survey 2003, produced by the Washington State Association of Counties and Washington Solid Waste Policy Forum.

Parts of this paper are based on earlier documents produced as part of the Beyond Waste project, particularly *Issue Paper 10: Solid Waste Costs and Barriers to Recycling*.