

Solid Waste Division

2004 Business Plan

September 2003



King County

Department of Natural Resources and Parks



King County

Solid Waste Division

Department of Natural Resources and Parks

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September 24, 2003

King County Solid Waste Division 2004 Business Plan Clarification Insert

Please Note: The first bullet under “Recommendations” on page 29 of this Business Plan, refers to the minimum operating days and hours at urban transfer stations. Our proposal for days of operation at urban transfer stations is seven days a week.

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SUMMARY OF THE 2004 BUSINESS PLAN

The Solid Waste Division – a Division of the King County Department of Natural Resources and Parks (DNRP) – presents this Business Plan that sets forth the operating strategies and institutional changes planned for 2004 and beyond. This plan incorporates the Executive’s direction for all County departments to change the way they operate – to become more efficient, more productive, and more entrepreneurial.

The purpose of this Business Plan is four-fold:

- ✓ To support the King County Executive’s 2004 Budget for the Division, describing the important improvements in efficiencies to Division operations contained therein
- ✓ To support the Solid Waste Omnibus Ordinance, which the King County Council must approve in order to implement the changes and efficiencies in the 2004 Budget
- ✓ To describe how the Division will accomplish the efficiencies described in this Business Plan over the next 3 to 5 years, while fulfilling its role as a regional solid waste service provider
- ✓ To continue to implement the *Final 2001 Comprehensive Solid Waste Management Plan (2001 Solid Waste Plan)*

The Division is charged with continually examining its business practices to become more efficient, using performance measures and benchmarks to evaluate our progress. The ultimate goal is to ensure that the citizens of King County have access to efficient and reliable regional solid waste handling and disposal services at rates as low as reasonably possible, and consistent with sound environmental stewardship.

The King County Executive has directed that the Division undertake these new efficiencies without seeking rate increases sooner – or at levels higher – than originally projected in the adopted 2001 Solid Waste Plan. In fact, the 2004 Budget postpones the planned increase of the basic tipping fee by two years until 2007. If adopted, the County will have held the basic tipping fee at \$82.50 for 8 years.

Background

The Division provides transfer, disposal, and waste reduction and recycling services to residents and businesses throughout King County, except for Seattle. It operates the Cedar Hills Regional Landfill located in Maple Valley, as well as eight geographically

dispersed transfer stations and two rural drop boxes. The 2001 Solid Waste Plan provided policy guidance for the Division to operate these facilities and manage associated programs over the next 20 years.

One of the alternatives considered in the 2001 Solid Waste Plan was early closure of the Cedar Hills Regional Landfill in Maple Valley and beginning waste export early. Currently, the landfill is not expected to reach capacity and close until about 2012 or later. For many years, the Cedar Hills landfill has enabled the County to charge a solid waste disposal rate of \$82.50 that is among the lowest in the region – primarily because owning a local landfill is a less costly disposal option for the ratepayer than solid waste export, which many local jurisdictions have already implemented. For example, the City of Seattle's per ton tipping fee for solid waste is \$99.15, Snohomish County's fee is \$89.00, and Pierce County's fee is \$88.00.

In about 10 years, however, the Cedar Hills landfill will reach capacity and close, and the County will privatize waste disposal. In 1995, the King County Council passed Ordinance 11949, which established that once Cedar Hills closes it will not be replaced with another landfill in King County, and the County will pursue waste export as its long-term disposal option. When Cedar Hills closes, the County will export more than one million tons of waste each year to a landfill outside of King County, which will likely provide additional revenue to the private sector of approximately \$40-\$50 million annually. In fact, the private-sector's share of the solid waste collection, transfer, and disposal market revenues will increase from about $\frac{2}{3}$ to $\frac{3}{4}$ in the region. Therefore, it is imperative that the County do all it can to protect consumers from higher rates once the County begins paying for waste export.

In late 2002, in light of current budget shortfalls, the Executive evaluated the possible sale of the County's entire solid waste system – including Cedar Hills. While proceeds from the sale would serve some short-term budget needs, the Executive determined that ratepayers would be best served if the County were to maintain a public presence in the solid waste market. The public sector has broader goals and responsibilities than the private sector, such as providing for health and environmental protection and a wide range of other services that may not be cost effective for the private-sector to provide. The Division hired independent economists to examine private-sector competition in the solid waste industry as a whole, and in King County's regional market. As discussed later in this section, results of these analyses indicated that ratepayers will benefit from the County's continued regional presence in terms of rates and extent and quality of services.

As recognized in the 2001 Solid Waste Plan, the Division must begin to make significant changes to system facilities to prepare for the transition to waste export well before the actual closure of Cedar Hills. This transition will require that the County secure intermodal capacity for the transport of wastes to a distant landfill. An intermodal facility is where solid wastes are transferred from trucks and containerized for rail lines or barges for waste export. The process of implementing waste export is discussed briefly below and in the *Next Steps* section of this document.

In late 2002, the Executive also determined that the Division should have been paying rent to the County general fund (called the CX fund) for the use of the Cedar Hills Regional Landfill property. The property was acquired from the State in 1992 and is, in fact, owned by the County and not the Division. An independent appraisal was used to decide that the Division will begin paying rent in 2004 for the past and future use of the property, at a rate of \$7 million per year with a 3% annual inflation escalation through 2028.

The following section describes the key elements that affect the Division's future planning.

Change Dynamics

With the current economic situation faced by the County, and nearly all private- and public-sector entities, the County's goal remains to provide high-quality solid waste services while keeping rates as low as possible to the consumer. In light of the privatization of disposal following the closure of Cedar Hills, there are two primary dynamics that are driving the current changes in the Division's budget and planning: 1) the long-term need to maintain a public presence in the solid waste transfer and disposal market in order to ensure robust competition for disposal, and 2) the need to become more efficient to pay rent for the use of the Cedar Hills property.

As with any successful business, continually improving efficiencies is not a new concept to the Division. Two independent consultant studies were conducted in the late 1990s – the *1996 Deloitte and Touche Performance Audit* and the *1997 Moss-Adams Staffing Needs Study*. These studies recommended a number of changes to the Division to improve operations. The recommendations centered on management/organizational efficiencies, operational efficiencies, fund policies, and staffing levels. Of 83 recommendations, 73 were implemented or are ongoing. Some of the remaining changes are being pursued via this Business Plan. Additionally, in 1999 and 2000 the Division conducted a competitiveness analysis that included benchmarking with other similar public and private solid waste entities, as well as process mapping of internal processes and procedures. Three of the major changes implemented as a result of this project were: 1) the development and use of performance measures to track our successes in meeting targets for infrastructure and process improvements, 2) a new work order processing system for on-call maintenance and repairs that provides a single point of contact for quick response, and 3) an automated timekeeping and project accounting system to streamline the payroll process.

Ensuring Competition in the Private Solid Waste Disposal Market through Securing Intermodal Capacity

The 2001 Solid Waste Plan recommends that the most cost-effective means of solid waste disposal after Cedar Hills closes will be waste export to a distant landfill. The ordinance adopting the plan also required the development of a *Waste Export Implementation and Coordination Plan* to evaluate system changes necessary to make an

efficient transition to waste export. While this Business Plan guides the next 3- to 5-year period, the waste export plan is a long-term planning document for the future of solid waste transfer and disposal when Cedar Hills closes and waste export begins. A more complete discussion of the scope and milestones for this report are provided in *Next Steps and Processes* (the final section of this Business Plan).

In the early stages of analysis for the waste export plan, the Division retained nationally known solid waste economists, from HDR Engineering Inc. (HDR) and Ecodata, Inc. (Ecodata), who advised the Division that insufficient competition in the private-sector disposal market both nationally and regionally could be detrimental to ratepayers. They strongly recommended that maintaining market competition in the disposal industry is key to the cost-effective provision of waste export services. The economists described many examples throughout the U.S. showing that significant savings to consumers have resulted when municipalities have taken proactive steps to enhance competition among private-sector solid waste companies. They further recommended that the Division maintain a public presence to foster competition when the private sector, rather than the County, disposes of the County's waste.

When the Cedar Hills landfill reaches capacity, the Division will remain accountable to ratepayers for low-cost, reliable, and environmentally protective disposal services. However, the challenges associated with ensuring low-cost disposal services will be quite different when the Division no longer operates a landfill.

The results of the economists' analyses – and testimony at a briefing to the King County Council in June 2003 – indicate the need for the Division to take steps to ensure that ratepayers enjoy the benefits of enhanced market competition. Their results did not disparage or diminish the role of the private sector; in fact, after Cedar Hills closes the Division anticipates relying on the private sector to provide high-quality, low-cost disposal services.

The detailed conclusions from HDR and Ecodata are contained in the *Business Case for a County-Owned Intermodal Facility* published in May 2003, which can be found on the Internet at: <http://dnr.metrokc.gov/swd/BusinessPlan/businesscase.htm>

In the Business Case, the Division evaluated numerous options to determine the best means to promote competition when the County transitions to waste export. The Division concluded that securing intermodal capacity with access to both major rail lines in the region is the most cost-effective way to keep customer rates as low as possible. An intermodal facility must meet the following minimum requirements for efficient transfer of solid waste from trucks to trains:

- **Size of the Site** – At least 10 acres
- **Site Configuration** – Able to support the facilities and space needed for intra-site truck and train traffic
- **Land Use Zoning** – Industrial

- **Proximity to Residential Areas** – Prefer sites that are not near, or do not impact, residential areas
- **Proximity to Railroads** – Within 200 feet

The Division and the City of Seattle jointly conducted a preliminary siting study for an intermodal facility as part of the Division's effort to develop the *Waste Export Implementation and Coordination Plan*. During the study, the County learned of a property for sale that appears to meet all of the key criteria for a solid waste intermodal facility: the former Fisher Flour Mill on Harbor Island in Seattle.

In July 2003 the King County Council approved the Executive's supplemental budget request to purchase the property on Harbor Island for potential use as an intermodal site. The County is land-banking the Harbor Island site, pending completion of a more formal siting study, as required by County Ordinance 14710. This siting study will be conducted in conjunction with the waste export plan and will include analysis of other potential sites and methods for providing intermodal capacity. The County Executive and Council acted quickly to take advantage of the availability of the Harbor Island property at favorable terms, even before they made decisions about how the County should implement waste export. The Council decision merely banks the property, preserving the option of developing the site as an intermodal facility in the future. The City of Seattle has acquired an option on a site just to the north of the County's site, providing the potential for joint development and associated efficiencies.

There is little risk from the Council's decision: the property was purchased for less than its appraised value, the market for the property is expected to strengthen, and the County will earn rental income in the interim from existing businesses on the site. If the Council ultimately decides not to develop the site as an intermodal facility, it can sell the property on the open market. Ordinance 14710 requires the Division to consider a number of other possible sites and methods for providing intermodal capacity, besides those presented in the Business Case cited above.

Paying Rent through Changes and Efficiencies

Recent evaluations of the solid waste system brought to light the fact that the Division should have been paying rent to the CX fund for the use of the Cedar Hills landfill property. Beginning in 2004 the Division will pay \$7 million to the CX fund, with an annual 3% escalation until 2028. A discussion of the history and agreement with the County for the rent payment is provided in Appendix A. The rent payment will be made through efficiencies and innovations, while keeping rates at or below those forecast in the 2001 Solid Waste Plan.

The County has owned the Cedar Hills property since it was acquired from the State in 1992, in return for the State being held harmless for all liabilities. King County extended the same protection from liability to cities under contract for waste disposal service. The Division is an enterprise fund operation that benefits from the use of the Cedar Hills property. Thus, to comply with sound accounting principles as an enterprise fund, the

Division should pay for its use of Cedar Hills – and should have paid rent since the County acquired the property in 1992. An independent appraiser determined the proper rental obligation for the Division, which includes discounted back rent to 1992 and future rent. The State Auditor is reviewing the rental obligation.

To come up with the \$7 million rent payment, the Division sought suggestions from the people who do the work – the Solid Waste employees. A total of 667 employee suggestions were received on ways to change work procedures, add new revenue sources, or eliminate procedures or programs that are no longer necessary. Nearly all of the efficiency changes incorporated into the 2004 Budget came from the employee suggestions.

In addition to working with employees, the Division has a long-term commitment to working with the Labor Unions as our new way of doing business unfolds and develops. It is only through this continued collaboration and their commitment to the process that the goals and efficiencies contained herein will be successful.

Some of the long-term savings must come from staff reductions, proposed to be 86 positions. This overall 19% reduction in staffing levels reflects a significant change in the way the Division does business. However, in anticipation of the need to cut costs, the Division has eliminated many of the staff reductions through attrition, keeping the number of layoff notices to only 36.

Other long-term savings will come from efficiencies described here and in the 2004 Budget, including matching facility hours more closely to customer demand. This process hinges on the King County Council granting the Executive authority to change hours as needed at the Division facilities – in lieu of the lengthy process of requiring an ordinance to be able to make even minor adjustments in hours of operation to promote cost-effective service. This Business Plan describes ways to save nearly \$3 million annually through more efficient scheduling (see section titled *Planned Business Improvements* for a description of the proposed changes in hours). The plan also discusses how performance measures will be used to guide these changes and allow the Division to report to the Council on their effectiveness. Other efficiencies include reducing the Division's management and administrative costs, refocusing programs and their implementation, and making other money-saving operational changes. The Division also proposes to refocus the waste reduction and recycling efforts to address the major categories of recyclable materials remaining in the waste disposal stream, as well as toxic materials, building on program successes over the past decade. In so doing, the Division will maintain and strengthen its commitment to waste reduction and recycling with a goal of Zero Waste of Resources for materials with economic value by 2030.

Another strategy is to look at opportunities for new and existing sources of revenue for the Division that are compatible with our core businesses. One source is to eliminate the regional direct subsidy that the County currently offers to the private hauling companies. The regional direct fee is the reduced rate the private hauling companies pay when they process solid waste at their own transfer stations, rather than a County-owned transfer

station, and then transport it directly to the Cedar Hills landfill. The haulers pay a lower disposal rate of \$59.50 at Cedar Hills, rather than the standard tipping fee of \$82.50 per ton at County transfer stations. Part of the difference in the rate is justified due to the reduced handling of the waste by the County, since the haulers take it directly to the landfill. However, an analysis of the cost of providing transfer services indicates that this reduced rate is too low, giving the haulers a subsidy of about \$10 per ton. In addition, the reduced disposal rate can cause system inefficiencies because the haulers often drive farther than necessary to take advantage of the rate reduction rather than delivering the wastes to the closest transfer station. State regulations allow haulers to charge customers the County's standard \$82.50 rate for disposal, even when the hauler disposes the waste for only \$59.50. In other words, the savings the haulers realize from the regional direct rate are generally not passed on to the ratepayer. In this Business Plan and the 2004 Budget, the Executive proposes to eliminate the \$10 subsidy and charge the haulers \$69.50 per ton for regional direct wastes. This change will not result in increased collection costs to consumers.

Another source of new revenue will come from the sale of the landfill gas generated at the Cedar Hills Regional Landfill. Contracts have been negotiated with Energy Developments Inc. (EDI), which provide for revenue of at least \$400,000 annually from the sale of landfill gas. EDI will finance and construct a facility at Cedar Hills to generate electricity from the landfill gas. The County's \$400,000 payment is a base and does not fluctuate with energy prices. However, the contract does contain profit sharing and other provisions that enable the County to receive additional revenue under certain circumstances. In addition to the gas sale revenue, there will be significant savings – \$90,000 to \$100,000 per year – because the Division will no longer need to operate gas flares at the landfill.

In summary, this combination of actions will allow the Division to accomplish necessary efficiencies, maintain stable and low customer rates, and make needed facility improvements. The King County Executive has directed that the Division undertake these new efficiencies without seeking rate increases sooner – or at levels higher – than originally projected in the adopted 2001 Solid Waste Plan (see rate commitment discussion in Appendix B). In fact, the 2004 Budget postpones the planned increase of the basic tipping fee until 2007. If adopted, the County will have kept the basic tipping fee at \$82.50 for 8 years. None of the changes proposed requires amendments to the 2001 Solid Waste Plan or the Interlocal Agreements with the cities.

Roadmap to the Remainder of the Business Plan

In the next two sections, the Business Plan describes the overall goals, mission, and vision for the Division, and discusses the Division's performance measures to evaluate our success in meeting them. A discussion follows on how the Division has used input from stakeholders in making decisions that effect change. The next two sections describe in detail the package of changes that will accomplish the goals of this Business Plan and how these changes are reflected in the proposed 2004 Budget and the Omnibus Ordinance. The final section discusses what the next steps are for implementing this

Business Plan and the 2001 Solid Waste Plan, highlighting key issues that need to be addressed regarding preparation for waste export and transfer system improvements over the next 3 to 5 years. Appendices with additional detail on various related topics are referenced throughout the document and are provided following the main text.

GOALS, MISSION, AND VISION

The mission, vision, and goals of the DNRP and the Division comprise the guiding principles on which all plans for the Division are based. They guide the operational decisions and resource allocation for the Division now and in the future. DNRP's overarching goals, and the Division's mission, vision, and business strategies that complement these goals, are described below.

DNRP'S Goals

Environmental Quality

Achieve a net gain in environmental quality by protecting and restoring the natural environment, ensuring public health and safety, and exceeding environmental standards.

Waste to Resource

Regard the region's waste products as resources and minimize the amount of residual waste disposed.

Community Investment

Contribute to healthy communities by providing recreation, education, and sound land management.

Price of Service

Price our services reasonably and competitively, while delivering the highest value to our citizens and maintaining safe and reliable systems.

Customer Satisfaction

Meet the needs of our customers through valued, high-quality, and responsive services.

Employee Involvement and Morale

Be a forward thinking workforce where employees are engaged in our business, involved in decisions that affect them, and understand their role in achieving the DNRP vision.

Leadership

Be a high performance regional environmental and resource management agency by providing high-quality services, working in partnerships, and leading by example.

Division Mission and Vision

The mission and strategic vision of the Division serve as the foundation of the Business Plan to guide operational decisions and resource allocation through the closure of Cedar Hills and beyond.

Mission:

To maximize ratepayer value by ensuring that citizens of King County have access to efficient and reliable regional solid waste handling and disposal services at rates as low as reasonably possible, consistent with sound environmental stewardship of our region.

Vision:

The Solid Waste strategic vision is to:

- Ensure the efficient provision of regional solid waste services
- Maximize value for ratepayers by promoting competition in the private solid waste market and obtaining public-sector efficiencies
- Work in partnership with cities and other stakeholders to protect health, safety, and the environment

Ensuring the Efficient Provision of Regional Services

The County should place primary importance on the efficient provision of regional solid waste services, i.e., transfer and disposal, because it is more efficient to provide these services on a regional level. Maintaining the integration of public-sector solid waste systems helps ensure the best prices for disposal and the ability of the Division to provide services efficiently. Fragmentation of the region's waste stream works against competitive pricing of disposal, reduces economies of scale of handling, and could lead to reduced public access to services and balkanization of rates. Therefore, the County should continue to operate the public transfer stations and provide regional transport within the County's service area.

The County should efficiently operate the Cedar Hills Regional Landfill until it reaches capacity and closes, maximizing the value of public-sector investment in that facility. Following its closure, disposal services should be provided by the private sector. There are only two major solid waste firms that currently operate in the region. Therefore, as discussed in detail in the *Business Case for a County-Owned Intermodal Facility*, the Division should maintain a presence in the solid waste market to enhance competition among private-sector disposal service providers, ensuring that ratepayers enjoy disposal prices as low as reasonably possible. Preliminary analyses indicate that public control of a regional intermodal facility is the most efficient means of promoting competition once Cedar Hills closes. However, the County should also consider partnerships with other jurisdictions, such as Seattle, Snohomish County, and/or Pierce County to integrate systems and enhance strong competition for the region's disposal of solid waste.

Promoting Public-Sector Efficiencies

The County should encourage, in conjunction with the cities it serves, private haulers, and the WUTC, efficient use of local collection services of solid waste and recyclable materials. Curbside service is the most efficient means of collection of solid waste. In partnership with cities and others, incentives or other means could be provided to encourage greater use of curbside collection, thereby reducing self-hauling at transfer stations. Such efficiencies could allow certain services to be moved out of transfer stations, significantly reducing capital and operating costs (putting downward pressure on rates).

The County, the Washington Utilities and Transportation Committee (WUTC) and the regulated haulers are responsible for local solid waste services in the unincorporated areas until annexed. To maintain reasonable rates and ensure fairness among classes of customers, the County should efficiently provide levels of service consistent with the demand, costs, and benefits of such services.

Criteria for determining whether the Division should provide direct services include:

- 1) whether a regional approach to the service is necessary or desirable and lawful,
- 2) whether alternative providers or services are available (e.g., is there market failure?),
- 3) whether providing direct service would enhance competition in the solid waste market,
- 4) whether the Division can provide services efficiently and at reasonable cost,
- 5) whether support exists for public-sector involvement, and
- 6) the Division's experience and expertise in providing the service.

Environmental Stewardship in Partnership with Stakeholders

The County should work in partnership with cities it serves, the City of Seattle, private solid waste companies, and the public to manage solid waste in an environmentally sound manner to protect public health, safety, and the environment. This includes managing solid waste as a potential resource; providing and/or funding effective regional waste reduction and recycling services and household hazardous waste programs; providing cost-effective incentives to cities, businesses, and citizens to promote environmental stewardship; regulating the types of waste handled in the County solid waste system; and monitoring the impacts of solid waste handling on the region's environment. The County should also maintain "good neighbor" practices for those communities in which solid waste facilities are located.

Division Business Strategy

The following Division business strategy forms our contribution to meeting DNRP's goals as a whole. It guides this Business Plan and the 2004 Budget.

- Operate an efficient regional system where decisions are based on maximizing ratepayer value while supporting environmental, public service, and public health goals. We will:
 - Balance services offered with the cost to provide them – rural and urban services will be different
 - Match staffing to business need – staff to ensure service and safety while limiting costs
 - Continuously review and improve business practices
- Encourage the most cost-effective collection methods for solid waste and recyclables
- Ensure that rate increases for consumers for the next 20 years are not higher or earlier than projected in the 2001 Solid Waste Plan
- Operate an efficient regional system (public transfer stations and transport systems) to handle solid waste generated in King County
- Operate the state-of-the-art Cedar Hills Regional Landfill until it reaches capacity
- Secure intermodal capacity that gives access to multiple landfills to ensure competition for disposal once the Cedar Hills landfill closes
- Provide needed public services where not otherwise available
- Maintain closed and current solid waste facilities to minimize risk to public health and the environment, and protect public finances
- Manage solid waste as a potential resource by providing and encouraging effective waste reduction and recycling programs
- Promote environmental stewardship to citizens and businesses
- Respect and value employees and work with their Labor representatives
- Maintain and strengthen relationships with cities that have Interlocal Agreements and other partners

MEASURING FOR RESULTS

As the Division implements this Business Plan, it is more important than ever to measure the results of our efforts. As part of the DNRP's performance management system, the Division is using a variety of goal-related measures that capture a balanced, complete picture of the Division as a whole. The Division contributed to 19 of the 41 Department-wide DNRP performance measures (see *Measuring for Results: King County Department of Natural Resources & Parks First Annual Performance Measure Report*), and uses many others in addition to those 20 measures. Most performance measures include a quantitative target, typically expressed in terms of percentages, averages, costs per ton, or per capita measures. These targets help the Division identify problem areas that need a closer look, and assist in making decisions about what to do to improve performance. A table of key performance measures and targets, listed by core business area, is provided in Appendix C. A description of the organization and its core business areas is provided in Appendix D.

All of the performance measures listed in Appendix C are important to ensure the Division attains its mission, vision, and goals. Some of the performance measures listed in the appendix relate directly to the efficiency changes described in this document, and are reflected in the proposed 2004 Budget and Solid Waste Omnibus Ordinance. In particular, six measures described below will help guide the Division in balancing efforts to achieve the lowest, reasonable price of service, with efforts to drive performance toward a high level of regional solid waste services. Tracking the measures over time will allow the Executive, the Council, and the cities to monitor the success of the efficiency improvements.

The six measures described here and summarized in Table 1 that follows include:

1) System-wide average cost per ton of transfer: This measure allows the Division to track improvements in efficiency at transfer stations, brought about by such actions as tailoring hours of operations to meet customer demand. Improvements in transfer operation efficiency will bring down average costs of transfer. Since the Division's tipping fee is based on average costs, efforts that lower average costs of transfer will reduce the need to raise rates.

The Division has determined that its average cost per ton of transfer is \$6.70 in 2003, based on the 2003 adopted budget. This includes only the cost of operating transfer stations (i.e., labor and equipment). Assuming the ability to implement changes in the hours of operation (summarized in *Planned Business Improvements*), the Division is setting a target for the average cost per ton of transfer at no more than \$6.30 in 2004 after the changes are implemented and beyond (adjusted for inflation). The Division believes that this performance measure target can be achieved in a manner that will not substantially affect the levels or quality of services customers receive, nor the high environmental standards by which the facilities are managed.

This system-wide performance measure target will provide the Division with flexibility to manage the transfer system in an efficient manner. Over time, the Division may need to implement other hours of operation to meet changing patterns of facility use, for example, to keep the transfer stations open during times that best suit the commercial haulers' changing collection routes and patterns. Performance measures #5 and #6, described below, will ensure that efficiency improvements do not compromise customer satisfaction with the services the Division provides, or the environmental integrity of the Division's facilities.

2) Percent participation in curbside garbage collection: This measure is the estimated percent of single-family households in the County that subscribe to commercial curbside garbage collection.

This measure is an important indicator of the overall efficiency of solid waste handling in the County, because it is more efficient for garbage to be collected at the curb and brought to transfer stations by commercial haulers than for individuals to bring garbage directly to the transfer stations themselves. Increased participation in curbside service will improve the overall efficiency of the system to the extent it reduces self-haul activity.

Clearly, this is a regional measure, as the Division does not provide collection services. Rather, collection is carried out by commercial haulers, through contracts with individual cities or as regulated by the WUTC, or by city workforces. However, the Division will work with cities, haulers, and others to encourage the use of curbside service, and to promote the use of curbside collection.

No target is specified for this measure at this time (apart from continuously increasing the percentage of subscription to curbside service), as improvements will depend upon measures taken by several entities, including the cities, the WUTC, the private-sector haulers, and the County. It is also clear that reductions in self-haul activity will require a variety of measures and incentives, not merely an increase in the percentage of participation in curbside collection. But because of the importance of self-haul services to the efficiency of the solid waste system as a whole, this measure will be very important for the region to track. As discussed in *Next Steps*, self-haul services will be a key element of future transfer system planning.

3) Programmatic expenditure on waste reduction and recycling per capita, without any increase in per capita solid waste disposal: This measure addresses how the Division will improve the efficiency of its efforts to promote waste reduction and recycling. The per capita expenditures on waste reduction and recycling reflect simply the applicable program budget¹ divided by the number of residents of the County; per capita disposal is simply the total disposed tons divided by the number of residents.

¹ In calculating this measure, the programs included in WRR expenditures over time will be consistent, accounting for any organizational changes within the Division.

The Division's baseline level in the 2003 budget is \$5.60 per person, which appears to be sufficient to keep solid waste disposal at 1.28 tons per person per year. The target for 2004 and beyond is to have program expenditures of \$4.80 per person, while still maintaining solid waste disposal at 1.28 tons per person. As described in *Planned Business Improvements*, the Division proposes to do this by refocusing many of its efforts on waste streams such as food and yard waste, and on other materials where future gains can be achieved.

This measure is consistent with the waste reduction and recycling goals in the 2001 Solid Waste Plan, which specify overall disposal targets. It accounts for gains in both recycling and waste reduction. The measure will allow the Division, the Council, cities, and others to monitor the success of efforts to reduce program expenditures and re-allocate program resources. If program reductions are followed by increases in per capita disposal, then reductions in program expenditures may need to be re-considered. The Division is not proposing any backsliding in its efforts to promote waste reduction and recycling; rather, it believes that it can increase the success of these programs, and can do it in an efficient manner.

4) Actual tipping fee compared to forecast in 2001 Solid Waste Plan: This measure simply lists the current tipping fee, comparing it against what was forecast in the 2001 Solid Waste Plan. It is important for the Division to demonstrate adherence to the rate commitment (provided in Appendix B).

5) Customer satisfaction ratings for transfer stations and drop boxes, and waste reduction and recycling (WRR) programs and services: This measure reports the degree of satisfaction customers have with services provided at the Division's facilities, based on independently administered customer surveys. Satisfaction is ranked on a scale of 1 to 5, with 5 being extremely satisfied and 1 being extremely dissatisfied.

This measure will be increasingly important to track as the Division makes efficiency improvements described in this Business Plan. It will allow the Division, the Council, cities, and other stakeholders to ensure that the quality of the Division's services is not degraded by improvements in efficiency. The Division believes that the efficiency improvements described in this document will not significantly impact services, and this measure will help demonstrate that customer satisfaction remains high over time.

6) Percent of satisfactory Health Inspection Reports: This measure reports on the percentage of Health Inspection Reports received by the Division's facilities, conducted by Public Health – Seattle & King County, that receive a satisfactory rating. Public Health inspects for possible leachate, litter, rodents, or other problems that could potentially create an unhealthy environment.

It will be important to track this measure for the same reason as customer satisfaction. The measure will allow the Division, the Council, cities, and other stakeholders to ensure that any improvements in efficiencies do not degrade the standard to which facilities are operated and maintained. The Division is confident that none of the efficiency

improvements will compromise the ability to achieve a perfect record on Health Inspection Reports. The target for this measure is a 100% satisfactory rating for inspection reports administered to the Division's transfer stations, drop boxes, the Cedar Hills Regional Landfill, and closed and custodial landfills.

Table 1. Key Performance Measures Related to the Division's Core Businesses

Measure	2003 Data	2004 (and beyond) Target	Comments
System-wide average transfer cost per ton	\$6.70/ton	Not to exceed \$6.30/ton, adjusted annually for inflation (reduction of 6% from 2003 level)	Data are from the Division, reflecting transfer costs after proposed changes are implemented, including facility labor, equipment, and utilities. Measure affected by efficiencies realized in transfer operations, such as reducing inefficient hours of operation at transfer stations. After 2004, measure to be adjusted for increased tonnage due to regional direct rate change and inflation, consistent with rate commitment. Will be monitored in future years based on actual levels (2003 and 2004 are based on budget figures).
Percent of single family households that subscribe to curbside garbage collection service	91%	To continuously improve, in conjunction with the cities, WUTC, and others	Data are derived from Waste Reduction and Recycling surveys. No numerical target (see text).
Annual per capita recycling program expenditures compared to per capita disposal	Expenditures of \$5.60 per person, disposal of 1.28 tons/person	Expenditures of \$4.80 or less per person, keeping disposal at 1.28 tons/person or less	Data are from the Division budget and tonnage figures, and County population estimates. Recycling program expenditures included are consistent from year to year, and include only programs funded through tipping fees. Target represents a 14% reduction in recycling program expenditures. Target adjusted only for inflation, consistent with rate commitment.
Actual tipping fee compared to forecast in 2001 Solid Waste Plan	\$82.50	At or below the rate forecast in the 2001 Solid Waste Plan	See Appendix B for description of rate commitment. The Division currently anticipates maintaining the rate at \$82.50 until 2007.
Customer satisfaction ratings	Rating for 2002 was ≥ 4.5 for transfer stations/drop boxes and WRR programs	Maintain existing level of customer satisfaction	Data are collected via surveys conducted by independent contractors at least every 2 years. Ratings are on a 5-point scale, 5 being extremely satisfied, 1 being extremely dissatisfied.
Percent of satisfactory Health Inspection Reports (transfer stations/drop boxes, Cedar Hills, and closed/custodial landfills)	100%	100%	Data from inspections conducted by Public Health – Seattle & King County.

STAKEHOLDER INVOLVEMENT

This section describes the Division's long-standing commitment to and success with the stakeholder involvement process. It provides some background on the Division's stakeholder process, along with examples of past, current, and future stakeholder involvement efforts.

Division Philosophy

One of the Division's guiding principles is to involve stakeholders in making service, policy, and capital project decisions. The goal of the stakeholder involvement process is to seek input on and gain support for Division initiatives and build positive long-term relationships with key constituencies, including the cities that are part of the County's solid waste system, King County citizens, Division employees, Labor representatives, private-sector collection companies, neighbors, and stakeholder forums, such as the King County Solid Waste Advisory Committee (SWAC).

The Division employs a wide variety of strategies in its efforts to provide information and gather input from stakeholders. From written materials to citizen advisory committees, the Division endeavors to ensure that all stakeholders are given the opportunity to be involved in decision-making processes. The Division has also begun to follow up its stakeholder efforts with surveys to determine how successful it has been in meeting stakeholder needs.

Strategies employed by the Division include:

- Providing written information through letters and fliers
- Using surveys to seek input during the outreach process and after project completion to ascertain the effectiveness of the Division's outreach efforts; both mail-in surveys and in-person interviews have been used
- Hosting public meetings to provide information, answer questions, and seek input
- Forming citizen advisory committees from a diverse group of stakeholders who will follow a project from inception to completion, such as on a transfer station renovation project
- Forming a Cities' Work Group to seek input on regional solid waste policies and rate structure

Past Stakeholder Involvement Process

During the development of the *Final 2001 Comprehensive Solid Waste Management Plan*, the Division implemented a comprehensive stakeholder involvement process, to provide information and ask for input, that included more than 10 public meetings, meetings with employees, dozens of meetings with elected officials and solid waste coordinators of the cities – individually and in groups, meetings with the unincorporated

area councils, briefings before the Regional Policy Committee and Utilities & Technology Committee of the Council, and many discussions with the SWAC, all of which resulted in extensive feedback and ideas.

Additionally, in 2002 the Division conducted an in-person survey of stakeholders from 28 cities as part of its performance measures program. Cities commented that overall they were pleased with the 2001 Solid Waste Plan development process and felt it was inclusive and responsive to their needs.

Current Stakeholder Involvement Process

Since the beginning of the current Solid Waste Division Change Initiative (the term used for change efficiencies discussed in this Business Plan), the Division has sought input from the cities, SWAC, employees, Labor representatives, and others. Following is a summary of the Division's stakeholder involvement efforts for this initiative.

Cities' Work Group

During the development of the 2001 Solid Waste Plan, the cities asked that a Cities' Work Group be created to give them an opportunity for input into the development of regional solid waste policies and rate structures. The idea for the Cities' Work Group was formalized in the 2001 Solid Waste Plan, and the group first met in early 2003 to hear presentations from the Department and provide input on the Division Change Initiative.

The Division identified the following two phases of its outreach efforts with the cities on the Change Initiative:

- The first phase focused on the immediate business decisions to be considered by the Council including:
 - Acquisition of the Harbor Island property as a possible location for an intermodal facility
 - Development of new Division business practices and operational efficiencies that are consistent with the city/county Interlocal Agreements and the 2001 Solid Waste Plan – including the rate commitments contained in the plan.
- The second phase will focus on the examination of choices for implementing this new Business Plan. Likely topic areas are discussed below under *Future Stakeholder Involvement Process*.

To date, the DNRP and the Division have briefed the cities and received feedback via the following meetings and written correspondence:

Surveys

- January 30, 2003: A survey was sent to all cities asking them to help the Division evaluate WRR program and service priorities. Fifteen cities responded. There was no consensus among cities about which WRR programs should be prioritized. Generally, cities wanted to maintain all programs.

Correspondence

- February 13, 2003: A letter was sent to city mayors/managers explaining the Change Initiative and the timeline for developing and submitting the Business Plan and 2004 Budget to the Executive.
- February 13, 2003: A letter was sent to cities' public works directors inviting them to meet as the Cities' Work Group to discuss and work with DNRP and the Division on regional solid waste policies.
- July 28, 2003: A letter was sent to cities' mayors explaining the proposed changes in hours of operation at the transfer stations.

Group Briefings with City Elected Officials, Management, and Staff

- January 9, 2003: Pam Bissonnette, the Director of DNRP, met with elected officials of the Suburban Cities Association (SCA) Executive Committee to brief them on the Change Initiative; 20 cities attended.
- January 29, 2003: Division staff convened a meeting of cities' recycling coordinator staff to brief them on the Change Initiative; 11 cities attended.
- February 5, 2003: DNRP staff gave a briefing at the King County City Managers/Administrators meeting; 12 cities attended.
- February 19, 2003: Pam Bissonnette and Geraldine Cole, Division Planning and Communications Manager, briefed cities' mayors and managers; 11 cities attended.
- March 5, 2003: Pam Bissonnette attended the King County City Managers/Administrators meeting to answer questions.
- March 6, 2003: The cities' public works directors convened as the Cities' Work Group. Department and Division management briefed them on the Change Initiative; 15 cities attended.
- May 8, 2003: Second meeting of the Cities' Work Group comprising elected officials, management, and staff; 15 cities attended.
- May 14, 2003: Pam Bissonnette briefed the SCA Executive Committee.
- June 4, 2003: Pam Bissonnette briefed city managers at their monthly meeting.
- June 11, 2003: Pam Bissonnette and other County staff attended the SCA Intercity Cooperation Policy Board and answered questions about the Change Initiative.
- May/June 2003: Mark Buscher, Lead Planner for the Division, met twice with the Vashon/Maury Island Community Council to brief them on the Change Initiative.

Individual City Briefings with Pam Bissonnette

- May 30, 2003: Mayor, City of Renton
- June 2, 2003: Mayor, City of Auburn
- June 5, 2003: Mayor, City of Enumclaw
- June 10, 2003: Mayor, City of Kirkland; Council Member, City of Newcastle; Mayor, City of Tukwila; Mayor, City of Kent
- July 28, 2003: Public Works Director, City of Bellevue

SWAC Meetings

The Division staffed a SWAC-initiated Ad Hoc Committee that was formed to consider the Change Initiative in detail. The Ad Hoc Committee developed recommendations that were presented to the full SWAC. The full SWAC submitted nine recommendations on the Change Initiative to the Executive. These recommendations are provided in Appendix E.

Employee Outreach

To keep employees informed about the Change Initiative processes and decisions, the Division began publishing an internal newsletter called *Change News*. To date, 10 issues of the newsletter have been published.

To solicit input from employees, the Division set up a comprehensive employee suggestion system. Nearly all of the changes that the Division will be implementing came from employee suggestions.

In developing the package of efficiencies and changes that affect employees, the Division used the following guiding principles:

- Communicate with employees early and often by informing them about decisions as soon as they are firm.
- Spread the internal organizational changes across the Division to include management as well as operations and administration. Include the private-sector haulers in communications when the staffing changes may affect their operations.
- Work with Labor representatives and management to make and communicate decisions.
- Re-evaluate all plans for facilities and services and consider all ideas, including those that might have been dismissed before.

Overall, employees made 667 suggestions on a range of topics, including ways to change or improve work procedures, add new revenue sources, and eliminate programs or

services that may no longer be needed. A team of Division employees responded to each employee who submitted an idea, and developed a database housed on the intranet where employees could view responses to all ideas and suggestions. Not all ideas could be implemented at this time, but all viable suggestions are still under consideration.

Commitment to Labor Involvement

In addition to working with employees, the Division has a long-term commitment to working with the Labor Unions as our new way of doing business unfolds and develops. It is only through this continued collaboration and their commitment to the process that the goals and efficiencies contained herein will be successful.

Future Stakeholder Involvement Process

Outreach to stakeholders will continue as the Division works to implement the decisions made during the Change Initiative development process. The Division will continue to keep stakeholders apprised of program and policy changes and will seek feedback which will be used to help shape the proposed changes.

Additional stakeholder outreach efforts will be initiated for two major studies – the *Waste Export Implementation and Coordination Plan* and the related *Intermodal Facility Siting Study* – that the Division will be preparing over the next two years.

The Division will also host workshops for city stakeholders on key components of the solid waste system. For example, in October 2003, the Division will offer a workshop on self-hauler activity. This workshop will present data on who self hauls and why, what is being self hauled, and the cost of self hauling.

Summary

All of the stakeholder involvement processes that have taken place have resulted in a wealth of suggestions and positive feedback, as well as constructive criticism. The Division has considered all input and integrated stakeholder feedback into its plans and projects wherever practical and feasible. As previously mentioned, when the cities asked that a Cities' Work Group be formed to give them input into solid waste policy setting and rate development, the Division responded by formalizing plans for the work group into the 2001 Solid Waste Plan.

While it's clear from the input received from the diverse group of solid waste stakeholders that they don't always share a unified vision of the regional solid waste system, it is evident that they are passionate about the future of the system. This Business Plan reflects the direction the Executive believes is the best long-term alternative for County ratepayers, after considering stakeholders' input and perspectives.

PLANNED BUSINESS IMPROVEMENTS

As the County continues to address long-term fiscal issues, the Business Plan becomes a vital tool for providing a clear link between expenditures and efficiencies that will ensure the continuation of quality services to the consumer. This section discusses two types of planned business improvements. First is the discussion of efficiencies that will be implemented by the Division, including organizational changes, operational changes, and best management practices. Next is a discussion of other changes that will save the Division money or generate new revenues. Combined, these new initiatives will balance the services offered with the cost to provide them and ensure that rate increases to consumers are not higher or earlier than projected.

The Division has developed efficiencies and changes that will provide the ongoing savings necessary to:

- Invest in facilities needed for cost-effective waste export
- Provide rate stability in the short- and long-term
- Pay the rent for use of the Cedar Hills property

Related performance measures for planned efficiencies are provided in Appendix C. The estimated cost savings and new revenues anticipated from all of the planned improvements are provided in Table 4 at the end of this section. Companion Table 5 shows the allocation of those estimated savings and revenues to accomplish the three objectives mentioned above.

Planned Efficiencies

Key to implementing Division cost savings is Council passage of the 2004 Budget and Omnibus Ordinance (discussed in the following section). Like similar legislation passed to allow the Parks and Recreation Division to be more entrepreneurial, this ordinance will be instrumental in allowing the Solid Waste Division to implement efficiencies, which fall into three functional categories:

Management and Administrative Efficiencies

1. Management and Administrative Staffing Reductions
2. Reducing Use of Consultants

Operations Efficiencies

3. Revising Hours of Operation to Better Match Customer Demand
4. Implementing Facility Maintenance Efficiencies
5. Reducing Contributions for Equipment Replacement
6. Using Different Equipment to Clean Out Drains
7. Increasing Shop Savings
8. Reducing Laundry Services and Use of Consumable Supplies

9. Maximizing Revenue from Capital Assets

Waste Reduction and Recycling Efficiencies

10. Refocusing Waste Reduction and Recycling Programs

These efficiencies will be implemented in 2003-2004, but it will take some time to realize savings from some of them. They are discussed in more detail below, and costs are summarized in Table 4 at the end of this section.

Management and Administrative Efficiencies

Management and administrative efficiencies will save the Division about \$1.5 million in 2004 and an average of about \$1.9 annually through 2012 (shown in Table 4 at the end of this section).

1. Management and Administrative Staffing Reductions

Strategy

Staffing levels were considered as one component of operating efficiencies and were balanced against the need to maintain essential programs and services for ratepayers and keep rates low. Nearly half of the savings discussed in this section are from staff reductions and facility scheduling changes (discussed under *Operations* in this section).

Staffing-level decisions were made in view of the Division's goal to achieve reductions at all levels, not just from the front lines. With that in mind, reductions are made across all employee classes, including Managers/Supervisors, Professional, Clerical/Technical, and Line/Craft.

Background

As shown in Table 2, current staffing levels Division-wide include 28 managers/supervisors; 82 professionals, which include engineers and program staff; 72 clerical/technical positions; and 273 line/craft positions.

Recommendations

The following planned reductions in staff spread the reductions across all employee classes while ensuring that customers will not experience significant reductions in programs and services.

As shown in Table 2, the Division proposes to reduce its workforce by 7 managers and supervisors (25%) and 16 professional-level staff (20%). While the Division will need to work smarter and more efficiently with 23 fewer administrative positions, the elimination of these positions should not be visible to the Division's customers. The reductions will

be accomplished by consolidating some work groups and increasing supervisory span of control.

The estimated savings from staff reductions shown in Table 4 (at the end of this section) reflect only management and administrative staff. Savings from other staff reductions are reflected in the operations and waste reduction and recycling efficiencies.

Table 2. Summary of Staff Reductions

Class	Current Budgeted Positions	% of Workforce	Proposed Position Reductions	% of Class Reduced
Manager/Supervisor	28	6%	7	25%
Professional	82	18%	16	20%
Clerical/Technical	72	16%	5	7%
Line/Craft	273	60%	58	21%
Totals	455		86	

2. Reducing the Use of Consultants

Strategy

Here, the goal is to save money by using in-house staff, rather than consultants, to do program development, research, writing, and partnership building, and to reduce the frequency of recurring studies (i.e., waste characterization and telephone surveys). While we will be reducing the use of consultants Division-wide, the dollar figure cited in Table 4 is for consultant reductions in general management and administration. Consultant reductions in waste reduction and recycling, for example, are accounted for under *Waste Reduction and Recycling Efficiencies* (Item #10).

The estimated outcome of reducing consulting costs in management and administration is a savings of approximately \$130,000 annually.

Background

The Division hires local, regional, and national consulting firms to perform special analysis, provide on-call services, and assist with planning and implementation of various programs. Consultant contracts currently account for approximately 5% of the Division-wide operating budget, including WRR.

Recommendations

The recommended change is for the Division to have in-house staff do some of the work that might otherwise have been done by consultants.

The Division will limit consultant expenditures by reducing the frequency with which we do certain recurring studies, such as the waste characterization study, customer surveys at facilities, and telephone surveys of the general public. Performing these studies less frequently should not adversely impact their effectiveness or usefulness since the results do not change much over short periods of time. We will continue to be able to measure trends effectively, despite reductions in the frequency of studies and surveys.

Operations Efficiencies

3. Revising Hours of Operation to Better Match Customer Demand

Strategy

The strategy is to operate an efficient transfer station system where decisions are based on business needs while supporting environmental, public service, and public health goals by:

- Obtaining Executive authority to adjust hours of operation at our facilities to more cost effectively serve our customers
- Balancing services offered with the cost to provide them at rural and urban facilities
- Matching staffing needs to business needs, while ensuring quality service, maximizing safety, and controlling costs
- Continually reviewing business practices and making needed improvements

The Division believes that it can initially save approximately \$3 million annually by adjusting operating hours to meet demand and implementing work schedules that correspond to those operating hours.

Background

Currently, regular transfer station hours of operation are 8:00 a.m. to 5:30 p.m., 7 days per week, 362 days per year. An exception is the Factoria Transfer Station, which is open on weekdays from 6:15 a.m. to 11:30 p.m. The Cedar Falls drop box is open 8:00 a.m. to 5:00 p.m. standard time and 9:00 a.m. to 6:00 p.m. daylight savings time 7 days a week. The Cedar Hills Regional Landfill is open every day of the week. All sites close on three holidays per year.

Currently, the operating hours are defined by King County Code, and any changes must be approved by ordinance by the Council.

Recommendations

The proposed change is to adjust the hours of operation at our facilities, balancing the need to provide appropriate services to customers while using the most cost-effective means of doing so. To be able to respond to customer, commercial hauler, and community needs in a flexible and timely manner would best be accomplished by allowing the Executive to adjust hours of operation. However, any changes will maintain minimum hours and days of operation at the stations, as follows:

- Urban transfer stations will be open to the public between at least 9:00 a.m. and 4:00 p.m., six days per week
- Rural transfer facilities will be open to the public between at least 9:00 a.m. and 4:00 p.m., four days per week, including at least one weekend day

As with any business, the Division must have the flexibility to match operating hours to meet customer needs efficiently, as those customer needs change. For example, operating hours typically need to be longer during the summer. In addition, solid waste collection companies by far bring the most tonnage to Division facilities – about 78%. Their disposal needs at particular facilities often change as their routes or service areas change. Each of the Division’s facilities is unique and has its own traffic patterns, waste stream compositions, capacity constraints, and other factors that can require changes in hours to accommodate customer needs.

The proposed adjustments to hours of operation reflected in the 2004 Budget are to reduce hours at facilities when there is little historical activity and add hours at facilities that have particular hours of high customer demand. To determine the optimum hours that transfer stations should be open, the Division looked at hourly staffing and operational costs, as well as monthly usage data by hour and day of week at urban and rural stations and at each facility individually. Both tonnage amounts and number of customers affect the proposed hours of operation. For example, weekday hours at urban stations are driven primarily by tonnage received, whereas weekend hours are driven by customer counts, and all hours at rural sites are driven primarily by customer counts.

In addition, we looked at the operations of the Cedar Hills landfill to determine if there were adjustments to the hours of operation that could be made without affecting service to the public.

As a result of these analyses, the following changes are proposed:

- *Urban Sites* – Relatively minor changes are proposed for urban sites. In general, the recommended opening times are earlier to meet demands from the commercial haulers. Evening hours at the Factoria Transfer Station will be

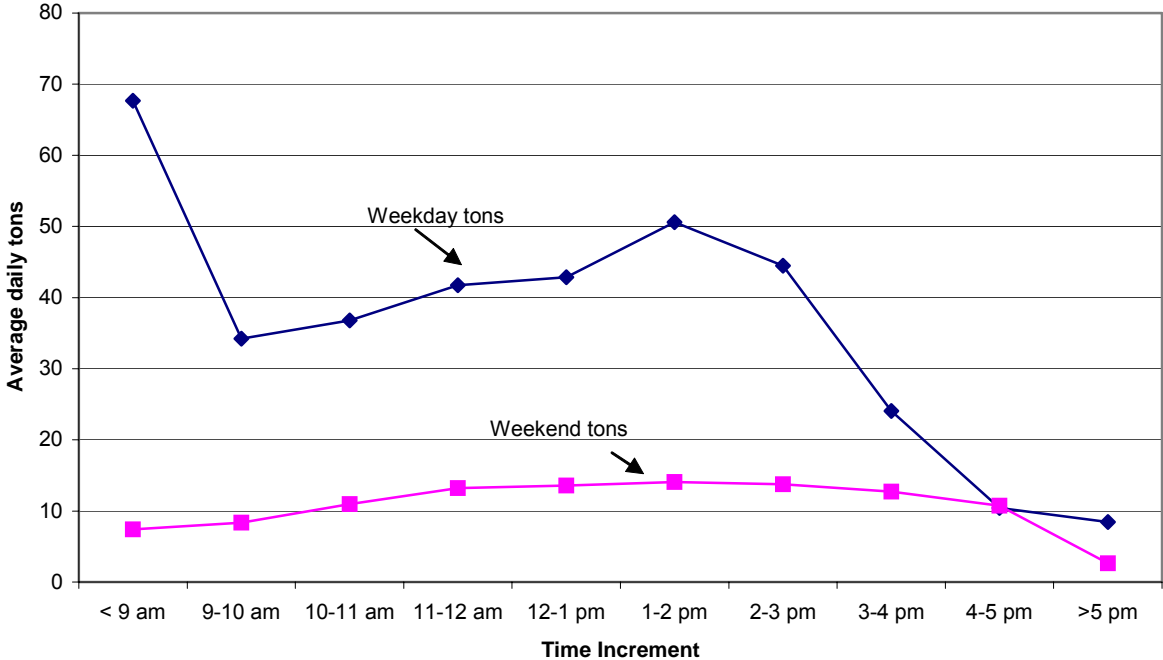
eliminated, and hours of operation on the weekends at all stations will be reduced from 9½ to 8 during the slower winter months.

- *Rural Sites* – Changes to the hours at the rural sites are more substantial as entire days of operation will be eliminated. The Enumclaw and Vashon stations will be closed on two days, and the Cedar Falls drop box will be closed on three days. This reduction in days of operation is consistent with service levels in other rural communities.
- *Cedar Hills* – The landfill will be closed on Sunday; this will not affect service to the public, although Division hauling patterns will change.
- *Seasonal hours* – At most stations, there will be some extension in hours during the busier summer months – April 15 to September 15. During this time, the Cedar Falls drop box will be open one additional day, and will be open more hours each day. Vashon will also be open for slightly more hours. Weekend hours at urban stations will also be extended.

The Division will employ three performance measures to guide future decisions about how to adjust operating hours to achieve operational efficiencies (see Table 1 in *Measuring for Results*). First, the performance measure for overall average cost of transfer will demonstrate the efficiency of changes that affect station operating hours. Efforts to reduce station hours when there is a very low volume of activity will reduce the system-wide average costs of transfer, and will be reflected in this measure. Over time, as customer use patterns change, the Division may need to adjust the station hours again, or conduct other activities to attain the target for this performance measure (Table 1). Second, tracking the customer satisfaction performance measure will assure policy-makers that adjustments in hours of operation do not adversely affect customers. Finally, monitoring the performance measure for satisfactory Health Inspection Reports will ensure that facilities are managed in a manner that protects public health and the environment.

Figures 1, 2, and 3 illustrate why the Division believes adjusting hours of operation will not substantially impact customers. Figure 1 shows tonnage received at urban stations by hour (though individual stations differ, the aggregate figure reveals some clear patterns). On weekdays, a high level of tonnage is typically received at urban stations prior to 10 a.m. Tonnage drops off significantly in the afternoon on weekdays. The figure suggests that a shift in hours toward the early morning would better meet customer needs, and that reducing hours in the afternoon would not impact many customers. Figure 2 shows tonnage patterns at rural stations (Enumclaw and Vashon). The scale on Figure 2 reveals that rural stations receive a much lower volume of tonnage than urban stations. It suggests that opening rural stations on fewer days of the week would provide substantial efficiency gains, allowing for operational cost savings while impacting few customers. Figure 3 shows the daily use patterns of the Cedar Hills Regional Landfill. It shows that there is a very low volume of tonnage received on weekends, and Sundays are only used by County transfer vehicles. If County transfer vehicles could use other days of the week, there will be significant cost savings with no customer impacts.

**Figure 1. Average Daily Tons at Urban Facilities
(by time increment, 2002*)**



* Urban facilities include Algona, Bow Lake, Facteria, First Northeast, Houghton, and Renton. Most stations open at 8 a.m. except Facteria (opens at 6:15 a.m. weekdays) and close at 5:30 p.m. except Facteria (closes at 11:30 p.m. weekdays).

**Figure 2. Average Daily Tons at Rural Transfer Stations
(Enumclaw and Vashon, by time increment, 2002)**

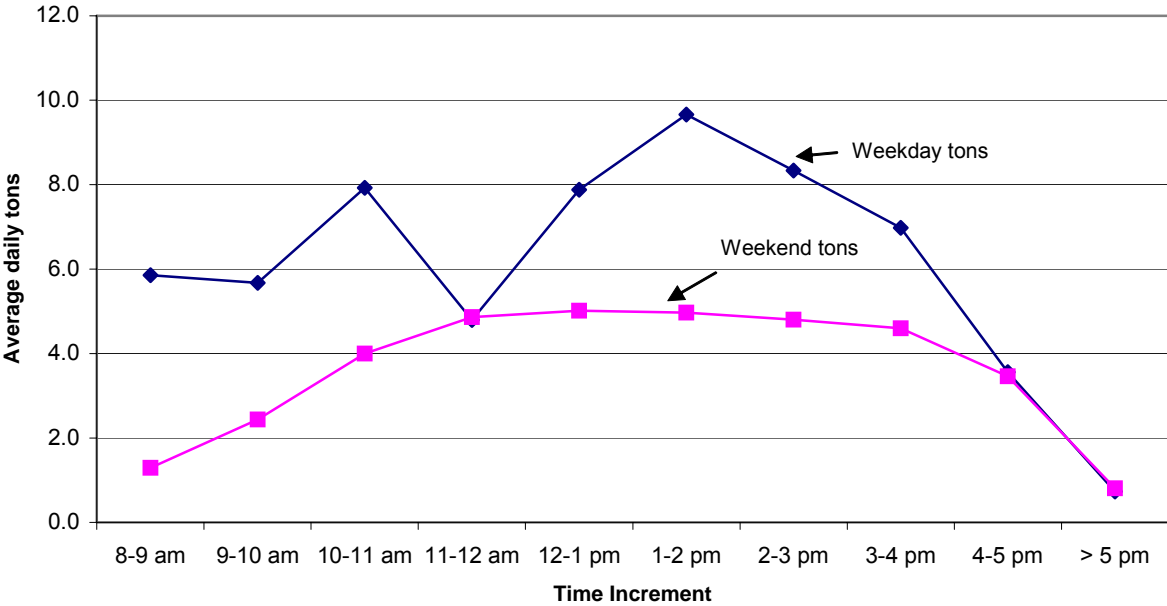
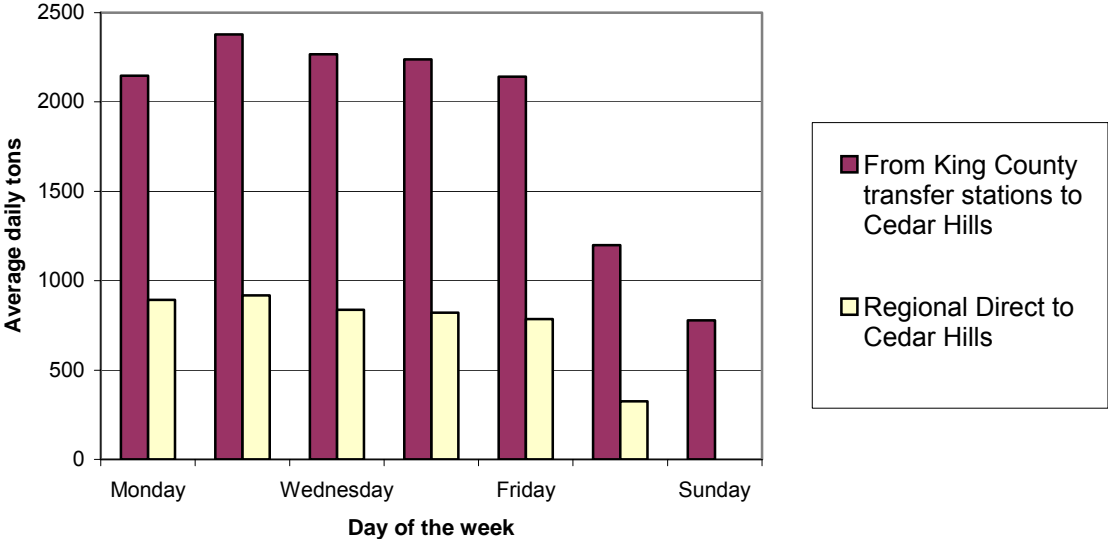


Figure 3. Cedar Hills tons by day of the week, 2002



To continue to monitor the effectiveness of the changes to operating hours, the Division will track the average transfer costs per ton at urban and rural stations along with the degree of customer satisfaction. Changes to hours will continue to be made, as necessary, to ensure continued efficiency and provision of services if demand for these services changes over time.

Before any changes to operating hours are made, the Division will provide the appropriate notice to the commercial haulers, cities, and the public. A complete discussion of the stakeholder outreach plan is provided in Appendix F.

Some of the changes to hours at specific transfer stations are provided below. *Note: All percentages, tonnages, and customer statistics used below are based on recent historical averages.*

Algona: Regular Algona hours are currently 8:00 to 5:30 every day (9½ open hours). Proposed weekday hours are 7:00 to 4:30 (also 9½ open hours). Currently, 98% of tonnage is received during these hours.

Proposed weekend hours at Algona are 9:00 to 5:00; currently, 93% of customers use the site during these hours. Recognizing that Algona has significantly more self-haul customers in the summer months (April 15 to September 15), the hours during those months will be increased to serve the higher number of customers; on Saturdays the hours will be 9:00 to 7:00, one-half hour more than current hours, and on Sundays the hours will be 9:00 to 6:00. This adjustment is based on usage patterns that show customers tend to come to the site later in the day on weekends.

Bow Lake: Regular Bow Lake hours are currently 8:00 to 5:30 every day (9½ open hours). Proposed weekday hours are 6:30 to 4:00 (also 9½ open hours). Currently, 97% of tonnage is received during these hours.

Proposed weekend hours at Bow Lake are 9:00 to 5:00; currently, 94% of customers use the site during these hours. Recognizing that more self-haul customers use the site in the summer months (April 15 to September 15), the hours during those months will be increased to serve the higher number of customers; on both Saturday and Sunday, the hours will be 9:00 to 6:00. This adjustment is based on usage patterns that show customers tend to come to the site later in the day on weekends.

First Northeast, Houghton, and Renton: Regular hours at these sites are currently 8:00 to 5:30 every day (9½ open hours). Proposed weekday hours are 7:30 to 4:30, which would reduce open hours by 30 minutes per day. Currently, 96–99% of tonnage is received during these hours.

Proposed weekend hours at these sites are 9:00 to 5:00; currently, 93–94% of customers use the sites during these hours. Recognizing that more self-haul customers use the sites in the summer months (April 15 to September 15), the hours during those months will be increased to serve the higher number of customers; on both Saturday and Sunday, the hours will be 9:00 to 6:00. This adjustment is based on usage patterns that show customers tend to come to the sites later in the day on weekends.

Factoria: Regular hours on weekdays only are currently 6:15 a.m. to 11:30 p.m. Proposed weekday hours are 6:30 to 4:00 (9½ open hours), which is consistent with other urban service levels. Currently, 93% of tonnage is received during these hours.

Regular weekend hours at Factoria are currently 8:00 to 5:30. Proposed weekend hours are 9:00 to 5:00; currently, 93% of customers use the site during these hours. Recognizing that more self-haul customers use the site in the summer months (April 15 to September 15), the hours during those months will be increased to serve the higher number of customers; on both Saturday and Sunday, the hours will be 9:00 to 6:00.

Enumclaw: Regular hours at Enumclaw are currently 8:00 to 5:30 every day. Proposed hours are 9:00 to 5:00 Monday, Tuesday, Friday, Saturday, and Sunday; the station will be closed on Wednesday and Thursday. Wednesday and Thursday were selected for closure because they are two of the lowest tonnage days.

For comparison, Enumclaw currently has the same hours as the Houghton Transfer Station despite a sizeable disparity in annual tonnage, about 30,000 tons annually at Enumclaw compared to more than 160,000 tons annually at Houghton.

Vashon: Currently, regular hours at Vashon are 8:00 to 5:30 every day. Proposed hours are 10:00 to 4:00 on Monday, Wednesday, and Friday, and 9:00 to 5:00 on Saturday and Sunday; the station will be closed on Tuesday and Thursday. Tuesday and Thursday were selected for closure because they have the lowest tonnage. Recognizing that more customers use the site in the summer months (April 15 to

September 15), the hours during those months will be increased; hours on Monday, Wednesday, and Friday, as well as Saturday and Sunday, will be 9:00 to 5:00.

For comparison, Vashon currently has the same operating hours as the Houghton Transfer Station despite a huge disparity in annual tonnage, about 8,300 tons at Vashon compared to 160,000 tons at Houghton, and in number of customers served, about 23,000 annually at Vashon and about 135,000 annually at Houghton.

Cedar Falls: Regular hours at the Cedar Falls drop box are currently 8:00 to 5:00 standard time and 9:00 to 6:00 daylight savings time. Proposed hours are 10:00 to 4:00 Monday and Friday, and 9:00 to 5:00 on Saturday and Sunday. Recognizing that more customers use the site in the summer months (April 15 to September 15), the hours and days during those months will be increased; hours will be 9:00 to 5:00 on Monday, Wednesday, and Friday, as well as Saturday and Sunday.

For comparison, the Cedar Falls drop box serves about 20,000 customers annually, while the Houghton, Algona, and Bow Lake Transfer Stations each serve more than 130,000 customers annually.

4. Implementing Facility Maintenance Efficiencies

Strategy

The strategy is to defer lower priority maintenance projects at facilities and, whenever possible, package projects together to attain economies of scale. An estimated average annual savings of \$300,000 is expected from this change.

Background

Each fall, the Engineering Section, along with Operations supervisors and other key staff, performs a site inspection of all of our operating and closed facilities. A list of projects is developed from these inspections, and reports are written for each including the scope of the project, the cost, and the type of maintenance project. This “wish” list includes all maintenance and repair projects both large and small. Initial screening and prioritization of these projects is then done by site engineers and Operations staff. Projects are prioritized according to the following criteria:

- First priority is given to those projects that are necessary to keep the Division in compliance with regulatory, environmental, and safety requirements
- Second priority is given to those projects needed to maintain our existing systems in working order
- Third priority is given to those projects that are enhancements to our existing system or may ease operations

Using these criteria, the list of projects is finalized and the budget request is developed for the following year. Once the budget is approved, maintenance projects can begin with the new year.

Maintenance projects are paid for out of two funds – the Capital Asset Maintenance Program operating fund appropriation and the Post Closure Maintenance Fund. The Capital Asset Maintenance Program pays for maintenance projects at our transfer facilities, while the Post Closure Maintenance Fund pays for maintenance projects at our closed landfills.

Recommendations

The recommended change is to determine which of the projects in the second and third categories are necessary to complete in the coming year. When possible, projects will be delayed if they do not adversely impact the overall integrity of a facility. For instance, road maintenance at a facility may be delayed until there is another project that includes some sort of road improvement (e.g., the expansion of a recycling area). Necessary maintenance will not be neglected but, where possible, the timing of the project will be adjusted. We will not defer projects that affect the integrity of the facility or that might cause the County to violate any warranties. Engineers will routinely assess the cost effectiveness of delays in project schedules to ensure that costs are not higher as a result of the delay.

The Division will monitor this change through the Health Inspection Reports that Public Health – Seattle & King County conducts on a regular basis. The performance measure target is to maintain 100% compliance on these reports.

5. Reducing Contributions for Equipment Replacement

Strategy

The strategy is to expand the repair/rebuild program (as opposed to replacement) of Division equipment and extend the life of capital equipment, whenever possible. An estimated average annual savings of \$650,000 is expected from this change.

Background

Each year, the Division budgets for planned capital equipment replacement. Equipment is replaced based on a schedule that takes into account how many miles it has been driven, how many hours it has been used, and how old it is. A five-year replacement schedule has been standard for most types of equipment. To cover the yearly projected expenses, a transfer is made from the operating fund to the Capital Equipment Replacement Program (CERP) fund. The CERP fund transfer is driven by a policy which states that the beginning annual fund balance will be equal to or greater than planned equipment purchases.

To reduce replacement costs, the Division has implemented a successful capital equipment rebuild program over the past 10 years. The rebuilding of bulldozers,

scrapers, excavators, and other types of equipment has saved millions of dollars over the years by extending the equipment life.

Over the past several years, the Division has been gradually increasing the useful life of our long-haul tractors. Tractors used to be traded in at 250,000 miles because there was a financial incentive to do so. We now have several tractors that have 400,000 miles on them and have found that maintenance costs have not increased.

In 2002, we began a program to rebuild the trailers that are used to haul solid waste. The cost to rebuild a trailer is about \$20,000 versus the \$70,000 replacement cost.

Recommendations

The Division is recommending that we expand our repair/rebuild program to include more types of equipment, extend the life of long-haul tractors to 500,000 miles, and continue the trailer rebuild program. In this way, we can reduce the transfer from the operating fund to the CERP fund.

A few years ago, the Division purchased a new software program that centralizes the work order function, helping us to monitor the effectiveness of expanding the repair/rebuild program. The widely used software, CCG Faster, can provide reports that detail equipment use, out-of-service downtime, and life expectancy and replacement information. This system will be used to track equipment maintenance and operating costs to make sure that these changes continue to show a net savings.

6. Using Different Equipment to Clean Out Drains

Strategy

To save money, the Division can change the equipment (vacator truck) used to vacuum debris out of storm and other drains. An estimated average annual savings of \$120,000 is expected from this change.

Background

The equipment used currently to vacuum out storm and other drains requires a Truck Driver III to drive the vacator truck, and a Utility Worker to assist. In addition, a Wastewater Operator must often go to the same site to deal with any system issues beyond simple vacuuming (e.g., when equipment such as pumps, level alarms, or control panels are involved).

The current vacator truck requires maintenance that costs more than \$23,000 per year. In addition, the truck is scheduled for \$150,000 in maintenance and upgrades in 2003.

Recommendations

The proposed change is to sell the existing vector truck and purchase a trailer that has the vector equipment on it. The trailer can be pulled by a wastewater truck and the work performed by Wastewater Operators. This will allow the Truck Driver to return to hauling solid waste. Maintenance costs for the trailer are estimated at \$1,300 per year. This new combination will be more efficient from the standpoint of requiring fewer staff to operate it and lower costs for equipment maintenance. The new equipment can also be used to clean out and maintain additional fixtures, such as the truck wash.

This fall, we will conduct a pilot of this program to ensure that the new equipment can adequately perform the job. We will rent the equipment and then purchase it once we know that all environmental and performance criteria can be met.

7. Increasing Shop Savings

Strategy

The goal is to implement process changes, improve workload tracking, and change schedules to reduce overtime in the Cedar Hills Regional Landfill Shop. An estimated average annual savings of \$210,000 is expected from this change.

Background

The Shop at the Cedar Hills Regional Landfill supports the equipment and facility maintenance and repair needs of the Operations Section.

In early 2003, a new work order assignment and tracking system, CCG Faster, was installed; it is improving our ability to more effectively assign work, track parts use, and determine staffing needs.

Staff need to be available seven days a week to support operations, but current schedules dictate that all weekend coverage is paid at the overtime rate; more than 60% of total Shop overtime is for weekend coverage.

Recommendations

The Division recommends that the Shop continue to become more efficient and effective by optimizing the use of CCG Faster and changing work schedules to eliminate weekend overtime. Implementation will begin in 2003.

8. Reducing Laundry Services and Use of Consumable Supplies

Strategy

Laundry – Standardize number and type of uniforms for staff, and reduce inventory of shop rags, towels, and floor mats

Consumable Supplies – Reduce use of consumable supplies

An estimated average annual savings of \$150,000 is expected from this change.

Background

Laundry – The Division has historically provided uniforms and towels for employees' personal use at work, rags for work use, and floor mats for facilities. Prompted by employee suggestions, the Division will reduce all items to reduce laundry costs.

Consumable Supplies – The Division provides gloves, safety t-shirts, raingear, brooms, window cleaner, batteries, hand warmers, and other consumable supplies for employees to safely and effectively perform their jobs. Prompted by employee suggestions, the Division will reduce all items to reduce costs, without impacting health and safety.

Recommendations

Laundry – The Division will standardize the number and type of uniforms provided (based on industry standards) and issue uniforms only to employees for whom a justifiable business need exists, stop providing bath towels, and reduce inventory of rags and mats. Implementation began in 2003.

Consumable Supplies – The Division will reduce consumable supplies allowed, standardize distribution and improve tracking, educate staff, and require strong involvement of supervisors and Stores to reinforce accountability. Implementation will begin in 2003.

9. Maximizing Revenue from Capital Assets

Strategy

The goal here is to maximize potential revenue streams from our facilities and equipment by marketing space for compatible revenue-generating uses, such as advertisements at our transfer stations and on our transfer trailers, and lease space for cell phone towers. Estimated average annual revenue of \$80,000 is expected from this change.

Background

Facility-related advertising has long been common in a number of settings. Advertising can be seen at Little League Ball fields, covered bus stops, health clubs, parking garages, and shopping malls, among other places. Any facility that has a captive audience and good traffic volumes could be a candidate for advertising. Likewise, mobile billboards are not a new concept (mobile billboard advertising is a growing industry). Additionally, locating cell phone towers where space permits is a common practice.

The Division currently receives \$15,300 annually per wireless provider that uses a cell phone tower at one of our sites. We have commercial cell phone towers located at three facilities – the Bow Lake and First Northeast transfer stations, and the Cedar Hills landfill. The cell tower at Bow Lake is the most lucrative because it has antennae for three providers, bringing in \$45,900 a year for the Division.

The Division currently does not have any commercial advertising at transfer stations or on its trailers.

Recommendations

The Division will attempt to market our facilities for additional revenue-generating uses compatible with the Division's operations. Some uses that have been identified include space for advertising at our transfer stations and on our transfer trailers, and space for locating cell phone antennae and towers.

In the past, King County's Property Services Section marketed cell tower sites, but it has not done so in the past five years. Property Services has given approval to the Division to market its own facilities. Likewise, the Division has been given permission by the County's Economic Development Section to market its sites for advertising and other revenue-generating ventures. We will partner with other DNRP marketing efforts as well.

Waste Reduction and Recycling Efficiencies

10. Refocusing Waste Reduction and Recycling Programs

Strategy

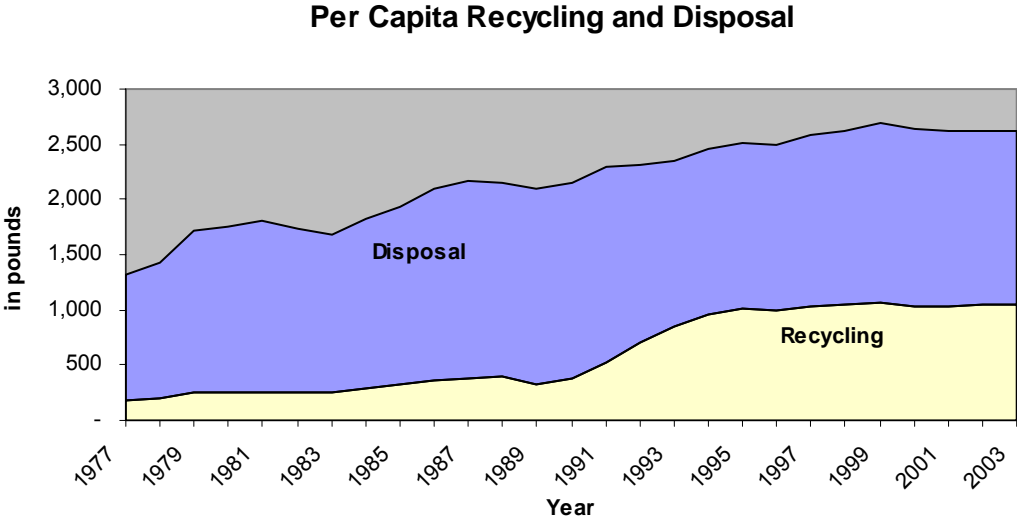
The Division can continue to increase its role as a regional leader in solid waste environmental stewardship while reducing the waste reduction and recycling budget about \$1 million by:

- Establishing a Zero Waste of Resources by 2030 goal (*materials with economic value will not be disposed*)

- Efficiently balancing educational and regulatory programs
- Focusing on target materials

Background

Recycling rates have been flat for the past few years, indicating a need to shift to some new strategies. Starting in 1989 a sharp rise in recycling occurred due to



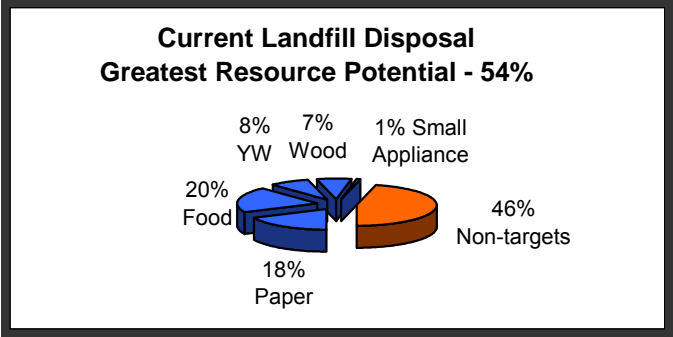
implementation of curbside recycling programs and a countywide ban on the curbside disposal of yard waste. Commercial recycling has not increased to expected levels.

Recycling Rates and Budget: The Division's budget for recycling programs increased steadily in the early 1990s because of the development of new recycling programs, including putting recycling drop boxes at County transfer stations. After this initial investment, the recycling budget decreased and remained steady throughout the 1990s to support on-going programs. In the late 1990s the budget increased slightly to emphasize new Solid Waste Plan priorities, including sustainable development and organics and resource conservation. In 2001, the Marketing Commission was incorporated into the Solid Waste Division; this merging of programs resulted in an overall savings for programs funded by the tipping fee.

The Division has also consistently provided grant funds to cities to support their local recycling programs. Over the last eight years, the Division has provided on average of nearly \$800,000 per year in grants to fund city recycling efforts. The grant fund is currently \$1 million per year, and plans are to continue funding at that level.

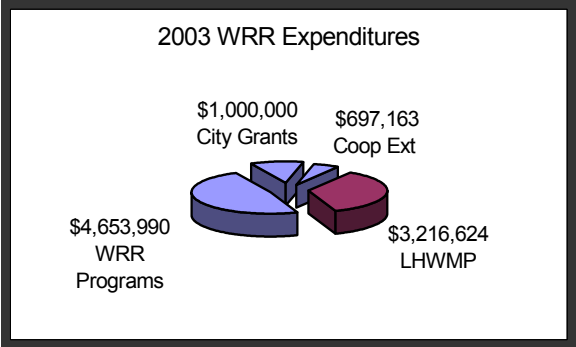
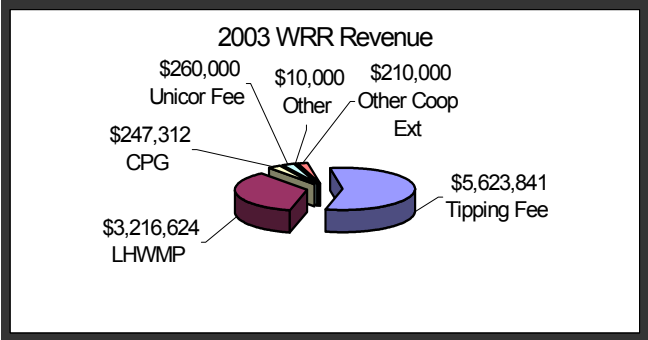
Currently Disposed Resources:

Paper, food, wood, and yard wastes comprise more than 50% of the current disposal stream. These materials provide the greatest opportunity for recycling back into the economy as resources. Other materials may be targeted in the future depending on market conditions and King County’s ability to cost effectively influence change.



2003 Budget Revenues and Expenditures:

- WRR programs are funded by several revenue sources in addition to the solid waste tipping fee
- Two external programs are part of the budget: \$1 million in grants to cities and \$697,163 for the Washington State University Cooperative Extension
- 5.7% of the tipping fee (\$4.69 of \$82.50/ton) supports recycling programs.



WRR Revenue Graph:

LHWMP – Local Hazardous Waste Management Program
 CPG – Washington Department of Ecology Coordinated Prevention Grant
 Unicorn Fee – County fee on unincorporated curbside customers

Other – Fees collected at special recycling events
 Other Coop – Outside grant funds
 Tipping Fee – Portion of solid waste tipping fee for recycling

WRR Expenditures Graph:

Dark Gray – Hazardous Waste Programs
 Light Gray – Recycling programs

A Change in State Law that Will Promote More Curbside Recycling: A recent change in State law will allow commercial collection companies to keep more of the revenues generated from recycling collection services. This will provide commercial collection companies a greater incentive to enhance their curbside recycling services. In fact, one of the collection companies in the region has already expanded their range of recycling services in unincorporated areas. This change means that the County may be able to expend fewer resources in providing education and advocacy related to curbside

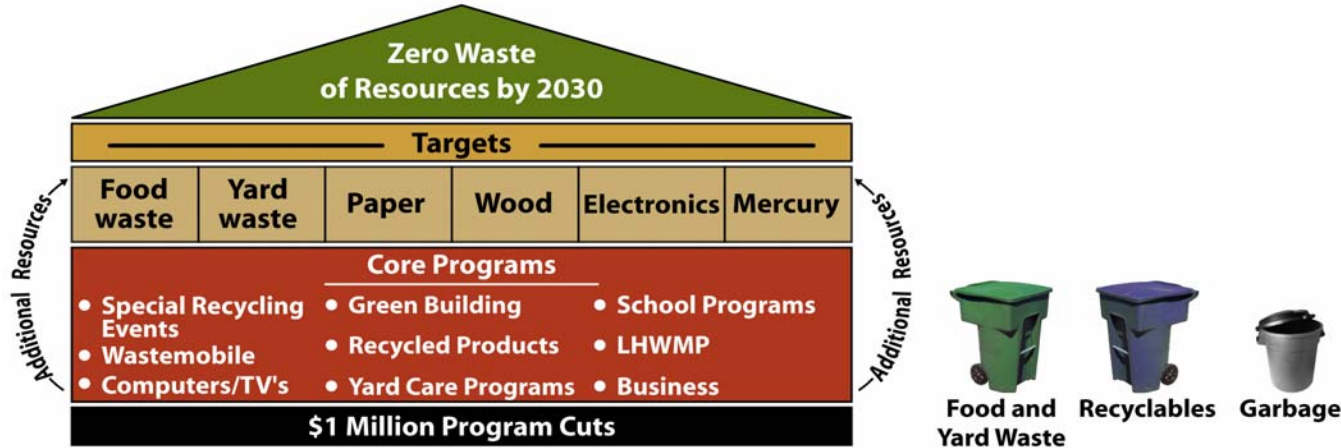
recycling, and focus instead on other programs or materials that are not currently collected at the curb.

Recommendations

Reduce WRR Budget by About \$1 Million:

- Reduce general recycling education. Some general recycling messages have saturated the audience and are of limited continued effectiveness.
- Reduce money spent on consultants who provide staffing for program development and implementation. Only 20% of the recycling budget is for staff, and the remaining 80% is for consultants/program delivery. To achieve savings, there need to be significant cuts in the consultant budget. This will have an impact on the mix of programs that can be delivered, primarily waste reduction and recycling programs. However, the reduction in consultant expenditures will not impact the direct services that we provide (e.g., the Wastemobile and Special Recycling Events). Some programs, such as grasscycling and composting programs, will be combined to gain greater efficiencies in program delivery.
- Eliminate some programs where impact is not easily demonstrated (e.g., business newsletter, new homeowner kit, pre-school program).
- Combine some programs into one program to achieve implementation efficiencies (e.g., grasscycling/compost programs).
- Rely more on electronic media (web and e-mail) to provide information to our customers, rather than printed materials. Web statistics show huge increases in Internet use by the public. In 2002 use of the Division site more than doubled from the year before to more than 1 million hits and 300,000 visitor sessions.

Refocus WRR Programs:



The new focus of the WRR program will capture a greater percentage of waste for beneficial use. This focus will:

- Concentrate on regional programs
- Provide technical assistance and strengthen partnerships with cities
- Monitor the effectiveness of programs in achieving conversion of waste to resources

A more detailed discussion on various components of the refocusing of WRR is provided below:

- ***Establish a Zero Waste of Resources 2030 Goal – material with economic value will not be disposed***

Zero waste does not mean zero garbage but rather setting a course for no disposal of material with economic value. King County has already taken a number of significant steps on a Zero Waste of Resources path. Yard waste provides an example where programs have included on-site/backyard management, curbside collection, curbside banning, and compost education that have led to virtually no disposal of yard waste at single-family curbs. Establishing a Zero Waste of Resources goal commits King County toward a sustainable future where no material that has value is disposed.

- ***Maintain Direct Service and Regional Programs***

Effective waste reduction and recycling programs that provide regional services will continue, such as the hazardous Wastemobile and Special Recycling Events. Increasing garbage and recycling subscriptions can potentially be attained by sending billing inserts, requiring delivery of recycling containers to all customers, and supporting hauler efforts to increase recycling.

- ***Continue Cost-Effective Voluntary Education Programs***

Certain voluntary programs provide promise for diversion and resource conservation, such as schools education, technical assistance to manufacturers, natural yard care education, green building outreach, and curbside recycling promotion. Future voluntary efforts will be implemented where they will be most effective – food, wood, and yard waste (see below).

- ***Implement Required/Regulatory Programs***

Voluntary efforts have been effective in achieving current recycling rates. Regulatory tools have also been effective at diverting recyclables. Yard waste provides an example of the virtual elimination of a residential waste from disposal at the landfill. In 1993, a ban was instituted at the curb where garbage cans with yard waste were not picked up. The ban was preceded by education about homeowner options (backyard composting, self-haul services, and yard waste curbside collection), tagging containers with yard waste, and eventually not picking up garbage containers containing yard waste. As a result of these programs, there is a very minimal amount of residential yard waste disposed, and instead it is now composted and turned into a valuable soil amendment.

An additional example of a regulatory approach is product stewardship. Product stewardship is defined as follows: whoever designs, produces, sells, or uses a product takes responsibility for minimizing the product's environmental impact throughout all stages of the product's life cycle. Product stewardship focuses a greater attention up the chain of the waste stream to those who can be more responsible for product disposal, and currently have little responsibility. This approach is now being used to improve recycling options for computer and other electronic equipment. See the discussion under *Electronics* below for more information on this approach.

The City of Seattle is paving the way for a commercial paper and cardboard ban proposed to begin in 2004. King County is analyzing opportunities to increase paper recycling and could adopt a similar approach phased in over several years, educating business on recycling options and diverting a waste to a resource.

- ***Focus on Targeted Materials***

The targeted materials on which WRR programs will focus are materials that make up a large part of the waste stream or are most toxic. The following targeted materials represent the more than half the waste stream and are of value today. Recycling programs will focus on these materials:

- *Food waste: Comprises about 20% of disposed waste with 8% (75,000 tons) from single-family residences.* Four residential collection pilot programs have been conducted during 2002 and 2003, adding food waste and soiled paper to existing yard waste curbside programs. This has demonstrated that collection and composting can occur with minimal detrimental impact. Several eastside cities have included this service in their new garbage collection contracts. King County will continue to further assist cities to include this service in contracts and work with the WUTC to pilot and implement it in regulated areas. The County will also work with cities, the WUTC, and businesses to provide incentives through commercial rate structures to encourage food recycling by businesses.
- *Yard waste: Comprises about 7% of disposed waste with 3% (32,000 tons) from self haulers.* With implementation of yard waste programs, virtually all residential curbside yard waste has been eliminated from the disposal waste stream. Yard waste generated from self haulers is not recycled because most transfer stations do not have collection capability. King County will work to determine the adequacy of private options (drop box and curbside services) and analyze the appropriate role of transfer stations in providing this service.
- *Electronics: More than 200,000 King County households are storing one or more computers; more than 125,000 televisions are in storage in County households.* Electronic equipment such as TVs and computer monitors contain heavy metals and other toxic components that are designated as hazardous waste and should not be disposed along with the garbage. These

components are also costly to recycle. Rapid technological advances are shortening the lifespan of electronic goods. The television industry's conversion to broadcasting in high-density TV is expected to increase the disposal of TVs in the next few years. Through the National Electronics Product Stewardship Initiative dialogues, an attempt has been made to institute a national voluntary product stewardship system that will share the costs of handling this equipment between manufacturers, retailers, government, and consumers. King County will work on state, regional, and national product stewardship efforts to divert these products from disposal.

- *Mercury: An estimated 550-1,900 lbs per year is released into the environment in the County from human sources.* Recent state legislation requires that fluorescent lamps be labeled; phases out the sale of mercury novelty items, thermometers, and manometers; restricts the sale of mercury thermostats unless manufacturers participate in recycling programs; prohibits the sale of automobiles with mercury switches; and requires that an education plan be developed regarding mercury disposal methods. King County will support the implementation of product bans adopted by the Board of Health and the State, promote alternatives to mercury-containing products, and provide education to the public and businesses. Mercury programs are funded by the Local Hazardous Waste Management Program.
- *Paper. Comprises about 18% of disposed waste with 9% (80,000 tons) from the commercial sector.* Significant education programs to recycle commercial paper have not been effective in converting this waste to a resource. The County will research the adequacy of services and markets now available; hold discussions with cities, haulers, and recyclers; and build upon the City of Seattle's knowledge to develop a strategy to increase paper recycling, such as a ban on commercial disposal.
- *Wood: Comprises about 7% of disposed waste with 6% (54,000 tons) from commercial and self-haul sources. An additional 61,000 tons are disposed at private transfer facilities.* King County will work to develop and implement programs and markets to divert construction-, home-, and business-generated wood waste.

The Division and County will track the success of refocusing the WRR programs while making it more efficient, through the use of a performance measure. This measure will track programmatic spending on WRR programs per capita, while at the same time tracking per capita disposal levels. In 2004, per capita spending on WRR programs is projected to fall to \$4.80 per person (from \$5.60 per person in 2003). If disposal per capita remains the same over time, then it will become clear that the effort to refocus the WRR programs has succeeded. If disposal per capita goes up over time, the Division will examine the reason for the increase in disposal and determine how it should be addressed.

Additional Division-wide Changes

Three additional changes will be implemented to save money or generate revenues for the Division as follows:

Groundwater Program Funding – For the past several years, the Division has been funding a portion of the County-wide Groundwater Program implemented by the Water and Land Resources Division of DNRP. It was intended that this arrangement and funding amount would be refined when County policy-makers could determine an appropriate long-term funding solution for the program. Beginning in 2004, the Solid Waste Division will reduce its contribution to the program from \$290,000 to \$70,000, and the work program will be adjusted to reflect a shift in the funding burden to the Surface Water Management/Rural Drainage Program and Wastewater Treatment Division revenues. The Division will continue to monitor groundwater around its facilities to ensure that environmental systems continue to protect neighbors and the environment.

Landfill Gas-to-Energy Project – As garbage decomposes, it produces several types of gas comprising methane, carbon monoxide, and trace amounts of hydrogen, oxygen, nitrogen, and other gases. Currently, the gas at the Cedar Hills Regional Landfill is collected and burned off in a high-temperature flare unit. The Division has recognized that the gas is a viable resource that can be used to generate energy, and has taken steps to market the gas. Currently, the Division has completed contract negotiations with Energy Developments Inc, who will purchase the landfill gas and build the fourth largest landfill gas-to-energy facility in the nation at the landfill. The energy it produces will be capable of generating 22 to 26 megawatts of electricity, enough to service about 16,000 homes. Projected new revenue from the sale of the gas and energy cost savings through 2012 average about \$490,000 per year. The power plant should come on line within the next two years.

Regional Direct Subsidy – The regional direct rate is a discounted rate that private solid waste companies pay when they handle waste at their own transfer stations and then transport it directly to Cedar Hills.

Private companies take approximately two-thirds of the waste they collect to County-owned transfer stations, where the disposal rate is \$82.50 per ton. The remaining one-third is regional direct waste – waste that the companies take to their own transfer stations. The companies currently pay \$59.50 to dispose of that waste directly at Cedar Hills, which does not fairly reflect the County's avoided transfer costs. As a result, the private-sector haulers are not paying for their fair share of fixed system costs on the regional direct tonnage.

When private companies handle waste at their own transfer stations, the County incurs fewer costs in handling that waste. However, the current regional direct rate does not reflect the actual costs that the County avoids when the private companies use their

own transfer stations. Currently, the regional direct rate is \$23 per ton less than the County’s basic tipping fee charged at the County’s transfer stations. The \$23 spread between the County’s basic tipping fee of \$82.50 and the regional direct rate of \$59.50 has not changed since 1992.

The \$23 spread is much higher than the County’s marginal costs of handling additional waste at County transfer stations. The County’s current estimate of transfer system marginal costs is \$13 per ton (see Table 3). This means that every ton of regional direct waste results in a *loss* to County ratepayers of approximately \$10 per ton.

**Table 3. Transfer System Marginal Costs
(2004 dollars)**

Transportation	
- Truck driver labor	\$4.25
- Equipment repair, maintenance and replacement, fuel	<u>3.15</u>
Subtotal	\$7.40
Transfer Stations	
- Transfer Station Operator labor	\$2.30
- Equipment repair, maintenance and replacement; fuel	<u>1.65</u>
Subtotal	\$3.95
Other Costs	0.40
Total Operating Costs	\$11.75
Marginal Capital Costs^a	<u>1.25</u>
Transfer System Marginal Cost	\$13.00

^a The estimate of marginal capital costs was developed by comparing capital costs for two sizes of commercial-only transfer stations. The estimate uses a commercial-only transfer station design because any shifts in tonnage from regional direct would come to transfer stations in commercial vehicles.

The \$23 spread results in a significant subsidy to the private waste handling companies that is borne by ratepayers. Although the private companies pay only \$59.50 per ton to dispose of waste at Cedar Hills if they use their own transfer stations, the companies still typically charge their collection customers \$82.50 per ton (the amount of the County’s basic tipping fee) for disposing of that waste – so the savings are not passed along to collection customers in cities or unincorporated areas. Not surprisingly, the regional direct rate has created an incentive for the private haulers to use their own transfer stations in Seattle – even if that station is not the shortest destination from the

point where the waste was collected. Currently, approximately 250,000 tons of waste per year is regional direct waste handled through private transfer stations.

The proposed regional direct rate would increase \$10 per ton to \$69.50. This increase would ensure that the regional direct rate compensates the private haulers for savings to the County from the use of private transfer stations, while helping to keep County disposal rates low. Consumer collection rates will not rise since the WUTC already includes the \$82.50 per ton in the regulated collection rate.

Removing the subsidy from the regional direct rate will also remove the haulers' incentive to bypass County-owned transfer stations that are closer to the companies' collection areas. This should reduce wear and tear on roads and improve air quality.

Under the Omnibus Ordinance, the haulers are given 90 days' advance notice of the rate change to enable them to make any routing changes they deem appropriate. If the subsidy is removed from the regional direct rate, the County estimates that the private collection companies will transport more waste to County-owned transfer stations. The County has planned for this increase in tonnage at its facilities, and the facilities where increases are expected have the capacity to handle the additional waste. The ability to set hours provides flexibility to handle additional capacity if needed.

Estimated average annual revenue of \$1.8 million is expected from this change.

Summary

Table 4 itemizes the 2004 and annual average cost to implement all of the changes discussed above. Table 5 below shows that these savings are fully allocated to paying rent for the use of Cedar Hills, for the capital program, and to keep rates low, consistent with the rate commitment (Appendix B).

**Table 4. Estimated Savings and New Revenues
from Planned Business Improvements
(Solid Waste Operating Fund, millions of 2004 dollars)**

	<u>2004^a</u>	<u>Annual Average 2004-2012</u>
Management and administration		
Staff reductions	\$1.40	\$1.75
Reducing consultants ^b	\$0.13	\$0.13
Operations		
Revising hours of operation to better match customer demand		
Close rural facilities 2-3 days/wk	\$0.61	\$0.75
Eliminate unproductive urban hours	\$0.82	\$1.10
Close landfill on Sundays	\$1.08	\$1.19
Implementing facility maintenance efficiencies	\$0.30	\$0.30
Reducing contributions for equipment replacement	\$1.59	\$0.65
Using different equipment to clean out drains	\$0.12	\$0.12
Increasing shop savings	\$0.21	\$0.21
Reducing laundry services and use of consumable supplies	\$0.15	\$0.15
Maximizing revenue from capital assets		
Advertising on trailers		\$0.05
Cell towers		\$0.03
Refocusing Waste Reduction and Recycling Programs^b	\$1.19	\$1.19
Other Items		
Groundwater program funding	\$0.22	\$0.28
Landfill gas-to-energy project		\$0.49
Regional direct subsidy	\$1.61	\$1.81
Total savings/revenues	\$9.43	\$10.20

Notes:

^a All of these figures are reflected in the 2004 Budget submittal

^b WRR savings also accrue from reducing consultants

**Table 5. Allocation of Estimated Savings and New Revenues
(in millions, 2004 dollars)**

	<u>2004</u>	<u>Annual Average 2004-2012</u>
Rent for Cedar Hills	\$7.0	\$7.0
Capital Program	\$0.6	\$1.3
Rate Stabilization	\$1.83	\$1.9
Total	\$9.43	\$10.20

IMPLEMENTING THE CHANGE STRATEGIES

Solid Waste provisions of the King County Code have not been comprehensively amended in many years. They contain outdated provisions and operational requirements that need to be updated to enable the Division to meet the challenges of implementing waste export and maximizing ratepayer value. The following bulleted items are proposed updates or additional code provisions affecting the Division, with an accompanying discussion of the change and its effects on the Division's ability to implement the change strategies outlined in the previous section.

Solid Waste Omnibus Ordinance

The Division is poised to take advantage of opportunities that will provide lasting benefits to the public for decades to come. The Executive looks forward to a productive dialogue with the Council about these opportunities in the months leading up to adoption of the 2004 Budget. The next step will be submittal by the Executive of an ordinance proposing changes to the King County Code that will enable the Division to implement efficiencies that are a critical first step in maximizing value for ratepayer dollars. The purpose of the omnibus is to give the County the authority needed to be more entrepreneurial, and use more of a business model in responding to industry changes. The Executive will ask the Council to adopt this ordinance with the 2004 Budget.

The Ordinance will contain provisions to address the following:

- ***Revising the schedule for updating the Comprehensive Solid Waste Management Plan to be consistent with State requirements***

This change will benefit ratepayers by making the Comprehensive Solid Waste Management Plan update process more efficient. Chapter 70.95 RCW requires the County to prepare a Comprehensive Solid Waste Management Plan. The purpose of a Comprehensive Solid Waste Management Plan is to provide the overarching goals and policies that guide all solid waste and recycling programs in the system. Under State law, plans must be updated every five years; the King County Code requires updates every three years.

The process of updating a Comprehensive Solid Waste Management Plan is a substantial undertaking, given the extensive requirements under the King County Code. For example, under the King County Code, at a minimum, a Solid Waste Plan must address the following:

- Goals for solid waste management in King County, including maximum feasible reduction of solid waste going to landfills and other facilities, conservation of energy and natural resources, and environmental protection;
- Annual tonnage projections;

- Five, ten and twenty year plans for waste reduction through recycling and waste reduction incentives, packaging changes, source separation, and waste processing alternatives, and other methods deemed effective by the division;
- Analysis of alternative waste reduction and disposal methods showing the impact of each on landfill capacity, energy consumption, natural resource consumption, and environmental quality;
- A detailed inventory and description of all existing solid waste handling facilities including an inventory of any deficiencies, including operating efficiencies and public service needs, in meeting current solid waste handling needs;
- The estimated long-range needs for solid waste handling facilities projected twenty years into the future;
- A program for the orderly development of solid waste handling facilities in a manner consistent with the plans for the entire county which must:
 - ◇ Meet the minimum functional standards for solid waste handling adopted by the State of Washington Department of Ecology and all laws and regulations relating to air and water pollution, fire prevention, flood control, and protection of public health;
 - ◇ Take into account the comprehensive land use plan of each jurisdiction;
 - ◇ Contain a six year construction and capital acquisition program for solid waste handling facilities; and
 - ◇ Contain a plan for financing both capital costs and operational expenditures of the proposed solid waste management system.
- A program for surveillance and control;
- A current inventory and description of solid waste collection needs and operations within each respective jurisdiction which shall include:
 - ◇ Any franchise for solid waste collection granted by the utilities and transportation commission in the respective jurisdictions
 - ◇ Rates charged in comparison to disposal costs;
 - ◇ Any city solid waste operational plan, including boundaries and identification of responsibilities;
 - ◇ The population density of each area serviced by a city operation or by a franchised operation within the respective jurisdictions; and
 - ◇ The projected solid waste collection needs for the respective jurisdictions for the next six years.

Based on experience, it takes at least three years to complete a comprehensive solid waste management update, given the extensive work required to update and analyze all of the information needed to meet the requirements and obtain stakeholder input and approval.

Therefore, the Executive will be proposing to change the updating requirement in the King County Code from three years to five years, to be consistent with State law. The change will make the update process more efficient, without affecting stakeholder input or Division operations.

- ***Allowing for flexible capital budgeting, consistent with other divisions with large Capital Improvement Programs***

This change will benefit ratepayers, making the Division's budgeting process more efficient, while maintaining Council oversight. Consistent with ordinances previously approved by Council for Capital Improvement Program (CIP) budgeting in the Roads, Wastewater, and the Water and Land Resources divisions, this change would have the Council authorize the CIP budget by fund, rather than at the individual project level. This change would allow the Division the ability to make budget adjustments on projects when necessary to make use of over- or under-funding by being able to shift available funds where necessary. It would also allow for adjusting the timing of certain expenditures if required for safety or other critical timing issues.

For example, this budgeting change would allow the Division to substitute a project that must be postponed with another project in the adopted Solid Waste CIP six-year plan without the need for an amendatory budget ordinance. This ability will ensure that resources can be used in a timely manner to account for unforeseen circumstances, should they occur.

The Division will report fully to the Council on any reprogramming of CIP activities. By May 1 of each year, the Division will prepare and submit to the Council a complete Solid Waste CIP reprogramming report. The report will contain a review of the status of all projects contained in the current adopted six-year Solid Waste CIP as well as those projects carried forward from previous adopted six-year Solid Waste CIPs.

The report will identify which projects will be ready to implement in the current budget year within the constraints of the total current year fund appropriation. The report will also identify any current-year project that is not ready for implementation and explain the reasons that the project needs to be postponed. The report will include a reallocated Solid Waste six-year CIP including all changes to projects, estimated costs, schedules, and scopes of work to be pursued for the current year, and programmed in the remaining years of the six-year program. The explanation for each project postponement and substitution will be included in the report. The report will also include an accounting summary of the current project status and the amount of unexpended project budget balance by expenditure option and revenue account for each project in the current year of the program.

- ***Adjusting the regional direct rate to eliminate subsidies to private industry***

This change will benefit ratepayers by removing a subsidy to private solid waste companies that currently exists in the regional direct rate. In the Omnibus Ordinance, the Division is proposing to increase the regional direct rate by \$10 per ton to \$69.50. This will still be significantly lower than the County's transfer station fee, but the difference would represent the operational savings that County ratepayers realize when tonnage bypasses the transfer system and is taken directly to Cedar Hills. The \$69.50 regional direct rate will compensate the haulers for savings to the County from

the use of private transfer stations, while helping to keep basic County disposal rates low. For a more detailed discussion of this proposal, see the previous section titled *Planned Business Improvements*.

- ***Authorizing the Executive to modify facility operating hours, after providing for minimum hours and days of operation and consistent with policies approved by Council***

This change will benefit ratepayers without materially impacting service, by enabling the Division to change operating hours to reflect demand, consistent with Council policy direction. In order to implement best management practices and operate as efficiently as possible, the Division needs the ability to make changes in operating hours to meet demand. This is an important item in terms of cost savings. In fact, the Division believes that it can initially save approximately \$3 million annually by adjusting operating hours to meet demand and implementing work schedules that correspond to those operating hours.

Currently, any changes in hours, however slight, at any County solid waste facility must be approved by Ordinance by the Council. This process prevents the Division from being able to respond quickly to demand at particular facilities or to try more efficient ways to provide the services.

Moreover, each facility has different capacity issues, traffic patterns, tonnage peaks, waste stream composition, customer characteristics, neighborhood constraints, and other variations. These differences result in differing demands on facilities that can change over time – sometimes over a short period. In addition, the proposed change to the regional direct rate is likely to affect demand at transfer stations – as private haulers no longer have an incentive to bypass nearby County-owned transfer stations.

Given these variations, the Division proposes to use efficiency-based performance measures – approved by the Council – to guide changes in operating hours to meet demand and implement improvements (see *Measuring for Results* and *Planned Business Improvements* sections). The ability to change hours will enable the Division to react to market forces and to meet demand as efficiently as possible – while policy control remains with the Council. This change is necessary to reduce costs, as required to implement this Business Plan. A more detailed discussion of changes in hours is provided in the section titled *Planned Business Improvements*.

- ***Change the city recycling grant program to an ongoing program***

This change will promote efficiency by changing the city grant program, which currently must be renewed every two years, to an ongoing program. City recycling grant programs have significant support from the cities and the public, and this change would make the program more efficient by making it ongoing. Currently, the Council approves the grant program in two-year cycles by Motion and then approves the funding for the grant program each year as part of the annual budget process. This change

would eliminate the need for additional Council Motions, while retaining the Council's control over annual funding for the grant program.

- ***Modifying provisions governing curbside recyclables collection in unincorporated King County and recycled product procurement***

This change will modify the King County Code to reflect changes in the recycling industry to enable the County to continue to be a leader in resource recycling and recovery. KCC 10.18 was written 10 years ago to implement single and multi-family recycling. The code needs to be updated to reflect significant changes in the recycling industry and new directions in the Division, including:

- "Single-stream" recyclables collection
- Greater targeting of educational materials
- An expansion of the scope of recyclables collected
- Upcoming changes to collection services (e.g., adding food recycling to yard waste services)
- Other changes to ensure that King County remains a leader in waste reduction, recycling, and resource recovery

In addition, KCC 10.16 has not been updated for several years. Updating this code will bring it in line with current best practices for encouraging the purchase of recycled products by King County agencies.

- ***Title 10 Technical Changes***

This change will update or eliminate out-of-date provisions. The King County Solid Waste Code has been modified piecemeal over the last 14 years and needs technical corrections to remove or modify out-of-date provisions. These include:

- Updating certain definitions to reflect current or potential operational changes
- Updating waste handling provisions to reflect new laws
- Deletion of references to Seattle (which is no longer part of the King County Solid Waste System)
- Deletion of provisions that have expired.

- ***Other Changes***

Other provisions will make small changes in various business practices to promote efficiencies. The Omnibus Ordinance also contains provisions to improve various business practices, such as billing and collection and charging for miscellaneous services that the Division routinely provides (e.g., fixing flat tires on collection vehicles).

NEXT STEPS AND PROCESSES

This Business Plan has focused on providing background information and planned efficiencies and changes to support the 2004 Budget and accompanying Omnibus Ordinance. Following the King County Council's review and adoption of the 2004 Budget and accompanying Omnibus Ordinance in the fall of 2003, the Division will begin to implement the changes called for in this Business Plan.

In 2004 and beyond, the Division will use performance measures and other tools to continuously monitor and refine the efficiency changes outlined herein. The Division will seek to identify additional efficiencies, the benefits of which will be returned to ratepayers in the form of lower than anticipated rate increases and/or regional service enhancements (based on regional needs articulated by the Council, cities, and other stakeholders). The DNRP and Division goals, mission, and vision, along with the adopted 2001 Solid Waste Plan, will guide the Division in making operational decisions and allocating resources in the coming years. The Division will continue to inform and incorporate input from cities and stakeholders as it makes additional efficiency improvements and adjusts its programs or services. The Division will strive to keep rates as low as reasonably possible, consistent with its role as a regional service provider.

In addition to implementing the changes described in this Business Plan, the Division will undertake several other important policy development efforts over the next few years. The following section describes several interrelated upcoming and/or ongoing processes that will have a pivotal impact on future regional solid waste facilities, programs, and policies. These include:

- Development of two documents pertaining to waste export: 1) the *Waste Export Implementation and Coordination Plan* and 2) the *Intermodal Facility Siting Study*, and associated *Environmental Impact Analysis*
- Determining the future of the transfer system, in particular:
 - Meeting the needs of the Northeast Lake Washington area of the County
 - Provision of cost-effective recycling services
 - Managing self-haul services

Development of a *Waste Export Implementation and Coordination Plan*

When the Council adopted the 2001 Solid Waste Plan, it also directed the Division to develop a *Waste Export Implementation and Coordination Plan* (Export Plan) by March 31, 2003. The Division began work on the Export Plan in September 2002 in anticipation of meeting this date. However, in the process of working on the plan, it became clear that several significant issues and opportunities would make it necessary to extend the timeline to December 2004 for completing a more comprehensive Export Plan. This plan would include environmental review and processes for stakeholder

involvement. The Division has developed a proposed process for completing the Export Plan that will include providing a detailed plan outline to Council as early as October 2003. The outline will present various alternatives for implementing waste export. The King County Council will hire an independent consultant to review those alternatives. All other stakeholders will also have an opportunity to review the plan outline. Subsequently, the Division will hold regular briefings to discuss the final outline and allow time for review of a draft Export Plan well before the final document is completed.

The most significant of the new developments that led to the extended timeline was the County's decision in the spring of 2003 to purchase 12.1 acres on Harbor Island for a potential intermodal facility. Purchasing the property in advance of the Export Plan development was necessary because the site was currently for sale at terms favorable to the County. Sites with the characteristics necessary for an intermodal facility are rare, so purchasing the site in advance preserved an option for proceeding with waste export that may not otherwise be possible. The process of evaluating and purchasing the site made it possible to develop a more informed Export Plan, but also necessitated additional time.

Other significant issues and opportunities that supported the need to extend the timeline for completion of the Export Plan include:

- Working with multiple jurisdictions in the Puget Sound Region and east of the Cascade Mountains to identify and evaluate opportunities for a coordinated waste export system(s)
- Conducting a thorough examination of alternative intermodal and waste transport methods
- Completing a siting study to determine the best location for a dedicated solid waste intermodal facility, if development of such a facility appears feasible and cost effective

Purpose and Content of the Export Plan

The purpose of the Export Plan is to identify the best means of providing dependable waste export services for non-recycled waste to County ratepayers at the lowest reasonable cost, consistent with the mission and vision of the Division. Moving to waste export will mark a significant change in the Division's operations, as it transitions from providing disposal services directly (through County operation of the Cedar Hills Regional Landfill) to privatizing disposal services. In developing the Export Plan, the Division has identified the following goals for its waste export system, which comprises the network of solid waste facilities and management methods that allow the County to dispose its waste through waste export. These goals will help ensure that waste export is implemented efficiently and maximize value for ratepayers.

Goals

Promoting Competition: The market for waste export services has grown over the last 10 to 15 years. There are numerous jurisdictions throughout Washington that export waste, and at least four large private-sector landfills in the Northwest that could potentially receive the County's waste. Ratepayers will receive the lowest price possible for waste export services if there is maximum competition between these potential bidders. To obtain the best price for waste export services, it is therefore necessary to ensure there is a physical point of entry into the market that allows all possible landfill operators to have an equal opportunity to access the County's waste and compete to provide waste export services. The County's waste export system should ensure such competition is maximized, both for the initial procurement and for the long-term.

Integration with the Regional Transfer System: Efficient waste export requires compaction of all waste to minimize the number of waste containers that must be exported daily. Currently, the County's transfer system is not equipped to compact all waste. Planning for waste export must consider how to develop necessary compaction capacity at the least capital and operating cost to ratepayers.

Coordination with Other Jurisdictions: The City of Seattle, Snohomish County, and other jurisdictions in the state are already exporting their waste for disposal, and the County can benefit from their experience. Opportunities exist for combining waste streams and operations that may increase economies of scale and therefore reduce costs to ratepayers. Planning for waste export must include a thorough examination of inter-jurisdictional coordination.

Reliability: Access to consistent and adequate intermodal capacity for solid waste trains is a necessity for the County's waste export system. Solid waste trains must arrive and depart daily to handle the constant flow of solid waste to be disposed, which is projected at 1 million tons annually. It is important that the waste export system be reliable for the long term as well as cost effective.

Approach

At a minimum, the following questions (and/or options) will be analyzed to determine the elements of a waste export system that best achieve the goals identified above.

Transfer Capacity for Export:

- Feasibility and cost of exporting waste from public and private transfer stations where compaction currently exists
- Feasibility and costs of upgrading all existing transfer stations to be waste export compatible
- Feasibility and cost of developing separate compaction capacity (e.g., a compaction/reloading facility at an intermodal facility)

Intermodal Capacity for Export:

- Feasibility and cost of using existing rail intermodal capacity for export
- Feasibility and cost of using an independent private third-party to provide rail intermodal capacity
- Feasibility and cost of developing dedicated publicly or privately owned rail intermodal capacity
- Feasibility and cost of developing other forms of intermodal transport (e.g., truck to barge)
- Feasibility and cost of exporting waste by truck therefore eliminating the need for intermodal transport operations

Siting Analysis:

If the development of dedicated intermodal capacity appears feasible and cost-effective, then the following siting questions will be analyzed.

- What candidate sites exist in the County where a solid waste intermodal facility could be feasibly located, given the minimum requirements of such a site?
(*Note: The Harbor Island site will be included as one of at least eight candidate sites.*)
- Of those sites found to be potentially feasible, what is the environmental condition of the site, and what potential impacts could a solid waste intermodal operation have on the site, traffic, and surrounding community?

Development of an *Intermodal Facility Siting Study* and Associated *Environmental Impact Analysis*

The *Intermodal Facility Siting Study* is a component of the overall *Waste Export Implementation and Coordination Plan* outlined above. However, it will be conducted concurrently to the plan by consultants, and will be a separate product.

In July 2003, the King County Council passed Ordinance 14710, authorizing the purchase of 12.1 acres on Harbor Island, preserving the option for, but not committing to, developing the site as an intermodal facility for waste export. Purchase of the Harbor Island site was based on a preliminary analysis of its suitability for siting an intermodal facility, since the site was for sale at the time. Ordinance 14710 requires the Division to consider a number of potential sites and methods for providing intermodal capacity to meet the region's needs for export of solid waste once Cedar Hills closes. Much of the work for developing and evaluating alternatives will be undertaken in the Export Plan. In addition, the Division is currently in the process of writing the Request for Proposals to select a contractor for the siting study. The State Environmental Protection Act (SEPA) 197-11-800 requires that major land use and siting decisions such as this be subject to environmental review, thus an environmental analysis will accompany the siting study.

The Harbor Island site appears to meet the requirements for an intermodal facility, because it is 1) situated in an industrial zone, 2) accessible to both major rail lines in the region, 3) located adjacent to a navigable waterway so it could be accessed by barge, should that transport method prove cost-effective or necessary in an emergency, 4) strategically located so as to minimize the costs of short-hauling waste from the County's network of transfer stations, 5) of sufficient size to handle the intra-site truck and train traffic needed to handle the County's solid waste stream, and 6) able to provide capacity for compacting and re-loading waste. It also offers the potential for opportunities to team with other jurisdictions, such as the City of Seattle, to take advantage of further economies of scale.

The siting study, to be completed by December 2004, will identify other potential sites for providing intermodal capacity to meet the region's needs for solid waste export and recommend the most appropriate site, if the Export Plan determines that a new intermodal facility will be needed. Consistent with SEPA requirements, the study will include an environmental analysis of the alternative sites. The results of these studies, in conjunction with the Export Plan, will provide the basis for Council decisions on whether and how to proceed with developing the Harbor Island site, or whether to pursue some other approach to meeting the region's needs for waste export. The Council will implement these decisions through future budget approvals.

Determining the Future of the Transfer System

A broad area of ongoing work is the development and implementation of changes to the Division's network of facilities (transfer stations and drop boxes), to accommodate both regional growth and the changing needs of the Division's customers. Clearly, any changes to the transfer system must be linked to improvements needed to prepare the system for waste export. However, certain facility changes are necessary to keep the system operating safely and current with existing demand.

The transfer system continues to serve both self-haul and commercial customers throughout the County (not including Seattle). Transfer stations provide for collection of selected recyclables, more often constrained by limited space at the stations than by customer demand for these services. Pilot projects for collection of reusable household items and household hazardous wastes have been implemented at some stations, although these are also constrained by space limitations at existing facilities.

With the adoption of the 2001 Solid Waste Plan, the Division began to implement selected improvements to the transfer system. Since the plan was adopted, the roof at the Algona Transfer Station has been replaced, and it now accommodates modern (and bigger) solid waste collection trucks. The Renton Transfer Station roof will be replaced by the end of 2003. The King County Council has approved a facility master plan for the modernization of the First Northeast Transfer Station, and a similar plan is being prepared for the Bow Lake Transfer Station.

Over the next few years, the Division will continue to develop and propose transfer system changes to meet regional needs, which will be implemented through Council review and approval of future budget requests and facility master plans. These decisions will be guided by recommendations made in the 2001 Solid Waste Plan, which discusses the processes and guidelines for making facility improvements (see page 6-18 of the plan). While allowing for flexibility in making decisions, the plan calls for a strategy for transfer system improvements that makes maximum use of the existing transfer stations, prepares the system for waste export, and improves the capacity for providing the full range of collection services for solid waste and recyclable materials at larger sites. It discusses categories of facilities, including larger (expandable) stations, smaller (constrained) facilities, existing adjunct (private-sector) facilities, and new stations. The Division will be developing transfer system alternatives through targeted analyses of system constraints and customer needs, incorporating input from cities and other stakeholders.

Within this broad category of transfer system improvements, three topics in addition to waste export that are likely to require significant discussion and development over the next few years are highlighted below. It should be noted that this information is presented merely to forecast upcoming discussions and decisions that will need to be made. They include:

- Addressing facility needs to serve the Northeast Lake Washington area
- Providing recycling services at stations
- Managing self-haul services at stations

Addressing Facility Needs of the Northeast Lake Washington Area

A key area of future work will involve potential facility changes and upgrades to meet the needs of the Northeast Lake Washington area of the County. The Northeast Lake Washington area of the County includes cities such as Bellevue, Kenmore, Bothell, Woodinville, Kirkland, Issaquah, Redmond, Mercer Island, and Sammamish. Currently, the Northeast Lake Washington area of the County is served primarily by two transfer stations, Houghton and Factoria:

- The Houghton Transfer Station is located on a former landfill, but is now surrounded by suburban development. Due to growth in the area, Houghton now receives the most tonnage of any of the Division's transfer facilities. Given the adjacent land uses, significant expansion of the site to meet additional demand is not likely. Moreover, the combination of heavy use and the perceived incompatibility with its neighbors has led some to seek the facility's closure.
- The Factoria Transfer Station is located on a highly constrained site, surrounded by steep slopes, wetlands, and fuel pipelines. The Division acquired an adjacent property (on Eastgate Way) and the land-use permits to develop a new transfer facility, but suspended that project in 1994 while re-evaluating solid waste policy

issues. In recent years, some officials from the City of Bellevue have voiced opposition to use of the Eastgate property, indicating a preference for other types of development on that site. The property is temporarily used by King County's Transit Division for a Park-and-Ride facility.

Both the Houghton and Factoria Transfer Stations are about 40 years old. Over this period of time their capacity to handle solid waste has not grown significantly, while the areas they serve have. Solid waste handling has changed substantially since these facilities were built, and they have outlived their useful lives. They are vulnerable to natural disasters such as earthquakes and heavy snow storms. The facilities are relatively near each other and serve overlapping areas. They cannot easily be adapted to compact waste for export, nor do they easily accommodate modern solid waste hauling vehicles. In short, accommodating growing regional demand for solid waste services at these facilities as they now exist is a challenge; doing nothing to address the situation will degrade services and raise safety concerns.

As discussed in Appendix G, preliminary analyses have yielded four alternatives for County action to address how best to accommodate service in the Northeast Lake Washington area, while meeting the need to upgrade the system for waste export. The preferred approach is to provide some compaction capacity at a central intermodal facility, continue to operate the Houghton Transfer Station making limited safety improvements (with no waste compactor), build a smaller Factoria Transfer Station using the upper Eastgate property, and not build a new northeast area station.² Clearly, the implementation of this alternative requires several Council decisions, not the least of which is a decision to develop a central intermodal/compaction facility. It will also require demand management to meet traffic demands of self haulers at Factoria. However, this alternative offers several advantages. It allows the Division to meet regional needs for solid waste transfer services, avoids the high costs and uncertainty associated with the development of a new transfer station in a highly populated urban area, and provides for needed system flexibility. It offers the possibility of partnering with Bellevue for development of part of the property at Factoria.

Providing Recycling Services

One element of the Division's mission is to enhance the recycling and recovery of waste materials to reduce the overall cost of disposal and help protect the environment by saving resources. One of the ways the Division directly influences this is by providing for free recycling of particular materials at public transfer stations.

Currently, basic recyclables are accepted free of charge at all County transfer stations, except Algona, and at the Cedar Falls, Skykomish, and Snoqualmie Pass drop boxes. Collection of secondary recyclables (such as appliances, yard waste, and wood waste)

² The Division has submitted a response to a Council Budget Proviso to investigate the feasibility of siting and building a new transfer station in the Northeast Lake Washington service area. The document analyzes the time it would take to site and develop a new facility, the costs, and a preliminary list of potential locations.

is provided at only a few stations, due to space constraints. In general, private-sector haulers take recyclables from the County's transfer stations to private processors.

In 2004 and future years, the Division will be assessing the services that are provided at transfer stations to determine which services can most cost-effectively help the region meet its recycling goals. In assessing the services provided, it will be important to balance the desire for more recycling services with the limited space available at stations, and the need to provide for efficient handling and export of solid waste. It will also be important to consider whether and how an equivalent array of services can be provided throughout the County, and the manner in which these services are provided. Cities, the Council, and stakeholders clearly value recycling services, and have an interest in the extent and nature of recycling services provided at the stations. The Division anticipates that decisions regarding transfer station recycling services will need to be developed and implemented over the next few years, in conjunction with facility improvements to prepare the system for waste export.

Managing Self-Haul Services

Another upcoming issue that will require extensive discussion and potential policy development is the extent to which the Division should provide for self-haul services at each of its transfer stations. Curbside service is the most efficient means of solid waste collection. It is more costly to serve self haulers than commercial haulers. Self haulers bring far less tonnage but make more trips to the transfer stations, increasing the size and staffing requirements at stations, including providing services on the weekends. Self haulers also increase traffic and cause additional road wear in the neighborhoods surrounding transfer stations. Additional efficiencies and other regional benefits can be gained by efforts to maximize curbside collection and implement other measures to reduce self-haul traffic.

The provision of self-haul services is a key difference between public and private transfer stations. Private-sector stations generally do not serve self haulers. Although there appears to be some regional demand for the Division to continue to provide a variety of self-haul services, there is also a regional priority for the Division to keep transfer costs and rates low. The issue of self haul is not new; it was highlighted in the 2001 Solid Waste Plan as an area for future discussion. An increased emphasis on efficiency has made the regional dialogue on this topic much more imperative.

Cities and commercial haulers (under contract with cities or regulated by the WUTC) provide for collection services, which is a primary tool to address self-haul activity. The Division is preparing to engage cities and other stakeholders on this important issue over the next few years, beginning in the fall of 2003. These discussions are likely to result in transfer system recommendations that will affect transfer station capital improvements, the type and levels of services provided, and rates. County action to implement any decisions resulting from such discussions will require Council approval, through adoption of specific policy language and budget requests.

APPENDIX A

Appendix A

Basis for Rent

1992 Cedar Hills Acquisition

A significant new challenge for the Division will be to pay rent for the Division's use of the Cedar Hills landfill – without raising rates more than projected in the *Final 2001 Comprehensive Solid Waste Management Plan*. The Division will start paying rent to the CX fund beginning in 2004.

Originally, the County leased the Cedar Hills landfill property from the Washington State Department of Natural Resources, and the property was used for a landfill and other purposes. Although the term of the lease ran from 1968 through 2023, the County acquired title to property in 1992 pursuant to a quitclaim deed from the State of Washington. Title reports indicate that the County at large, rather than the Solid Waste Division, holds title to Cedar Hills.

The consideration for the transaction included the County's agreement to accept and indemnify the State against all past, present and future liability related to the property's use as a landfill. In connection with the transaction, the State did not place material limitations on the use of the property. Therefore, the County could lawfully use the property for virtually any purpose.

Division Should Pay Rent for the Benefit of Using Cedar Hills

After the County acquired Cedar Hills, the County continued to allow the Division to use the property as a landfill at no cost and to generate the associated revenue. The Division is an enterprise fund operation. The purpose of an enterprise fund operation is to fully account for costs and to ensure that those costs are reflected in rates. Thus, to comply with sound accounting principles, the Division should pay for its use of Cedar Hills – and should have paid rent since the County acquired the property in 1992. The Prosecuting Attorney's Office has analyzed this issue exhaustively and has determined that the payment of rent is both legal and justified under the circumstances.

Cushman & Wakefield Appraisal

The Division retained Cushman & Wakefield to determine the amount of rent that the Division owed to the CX fund. Using an income approach, Cushman & Wakefield prepared an appraisal that established the fair rental value of the land. The appraisal did not factor in improvements that had been paid for by the Division – so the appraisal reflects only the benefits of the land that the CX fund provides to the Division.

Rental Agreement: \$7 million in annual rent until 2028

Based on the information from Cushman & Wakefield, the County discounted the back rent that is owed by about 50 percent. This is a standard practice for arms-length transactions that occur under similar circumstances. In addition, to ensure that the rental obligation would not impair the Division's financial health, the rental obligation was extended over the entire term of the County's Interlocal Agreements with cities to operate the King County Solid Waste System. Ending the rental payments in 2012 when the Cedar Hills landfill is expected to close would have resulted in a much higher annual rental obligation. Therefore, the Division entered into a lease with the County to pay rent of \$7 million annually, plus a **3%** escalator, until 2028.

Rent payments from the Division to the CX fund of \$7 million annually, plus the escalator, are both legal and justified under the circumstances – given the benefit that the Division has received (and continues to receive) from the use of the County's Cedar Hills property and would be paid if the Division were a private company or subsidiary of one. In addition, the rental amount is reasonable and was established using sound appraisal practices. However, the factors that justify rental charges to the Division for the use of Cedar Hills do not apply to other property and facilities used by the Division. For example, most of the transfer station properties were purchased with Division funds and generally are not suited for other beneficial uses. Therefore, the Executive has determined that rent will not be charged to the Division for any property or facilities other than the Cedar Hills landfill.

APPENDIX B

Appendix B

Rate Commitment

As indicated previously, the Executive has charged the Division with accomplishing the development of the intermodal facility (if approved by Council) and begin paying rent to the CX fund – without increasing the solid waste tipping fee sooner, or at levels higher than, originally projected in the adopted 2001 Solid Waste Plan. Therefore, unless the Division can document that circumstances beyond its control have changed related to the assumptions built into this rate forecast, the Division will undertake the initiatives in the Business Plan (e.g., intermodal development and payment of rent) within the rate parameters of the 2001 Solid Waste Plan.

The King County solid waste tipping fee (Basic Fee) is currently among the lowest in the region, and the primary goal of the Business Plan is to keep the Basic Fee low over the long term, as shown in Table B-1, taken from the 2001 Solid Waste Plan.

Table B-1. Basic Fee through 2019

Year	Basic Fee	Year	Basic Fee
2004	\$82.50	2012	\$102
2005	\$89	2013	\$102
2006	\$89	2014	\$111
2007	\$89	2015	\$111
2008	\$92	2016	\$118
2009	\$92	2017	\$118
2010	\$92	2018	\$125
2011	\$92	2019	\$125

Future rate proposals by the Division will document the effects of changes in tonnage forecasts, significant cost elements, and the timing of capital expenditures on the need for required Basic Fee revenues. In addition:

- Cedar Hills rent payments to the CX Fund will be funded entirely through cost savings and elimination of rate class subsidies (e.g., regional direct rate restructuring), as described in this Business Plan. These savings will be documented in future rate proposals.
- If the Division proposes an added increase in the Basic Fee, relative to the baseline 2001 Solid Waste Plan forecast, due to reduced tonnage or significant cost increases beyond the Division’s control, the rate proposal will fully document the nature and extent of changes in costs and revenues relative to the baseline forecast.

This rate commitment is intended as an upper limit on future increases to the Basic Fee. The County will maintain a goal of keeping rates as low as possible while maintaining efficient service levels, programs, and environmental commitments. The Division fully expects that rate increases to the Basic Fee over the long-term (post-closure of Cedar Hills) will be lower than those projected in the baseline forecast, if the County develops an intermodal facility as contemplated by the Executive to promote robust competition in the solid waste transfer and disposal market.

APPENDIX C

Appendix C

Solid Waste Division Performance Measures

MISSION:

To maximize ratepayer value by ensuring that citizens of King County have access to efficient and reliable regional solid waste handling and disposal services at rates as low as reasonably possible, consistent with sound environmental stewardship of our region.

VISION:

The Solid Waste strategic vision is to:

- Ensure the efficient provision of regional solid waste services
- Maximize value for ratepayers by promoting both competition in the private solid waste market and obtaining public-sector efficiencies
- Work in partnership with cities and other stakeholders to protect health, safety, and the environment

DIVISION GOALS:

- **Environmental Quality:** Our physical facilities and those we contract for will be designed, constructed, and operated to meet or exceed environmental and public health regulations and to minimize impacts on communities nearby.
- **Waste to Resource:** We will implement programs that prioritize waste prevention and recycling choices over disposal, that will encourage behavior changes, and that will seek to make these changes a fundamental part of the economy.
- **Price of Service:** Our programs and policies will protect the public's financial interests and safeguard the County's assets as well as providing the resources necessary to achieve our mission and goals in a cost-effective manner. Our rates will continue to be among the lowest in the region and the ratepayers will receive increasingly efficient services and programs for their money.
- **Customer Satisfaction:** Our physical facilities and those we contract for will be designed, constructed, and operated to provide high standards of public services, to educate our customers about solid waste management practices and priorities, and to ensure employee and customer safety.
- **Employee Involvement & Morale:** We will respect and value the creativity, talents, skills, knowledge, and diversity that our fellow employees bring to the Division.
- **Leadership:** We will provide visionary leadership in all aspects of solid waste management and will use collaborative planning processes to involve the public in the development and implementation of our programs and priorities.

NOTE:

Solid Waste Division goals related to employee involvement and leadership measures are reflected in the DNRP Department-wide 2003 *Measuring for Results* report.

Solid Waste Division Performance Measurement Data Reporting Form

GOAL	CORE BUSINESS	MEASURE	2000	2001	2002	2003 TARGET	COMMENTS
Environmental Quality	Solid Waste Disposal, Land Stewardship, Waste Reduction & Recycling, Moderate Risk Waste	Percent of satisfactory Health Inspection Reports (transfer stations/drop boxes, Cedar Hills, and closed/custodial landfills)	100%	100%	100%	100%	Data from inspections conducted by the Public Health – Seattle & King County.
Waste to Resource	Waste Reduction & Recycling, Moderate Risk Waste	Single family curbside recycling rate (tons recycled divided by tons generated)	48.4%	50.4%	50.6% (projected)	50.6%	Data provided by private haulers. Benchmarks: national average is 30%; City of Seattle rate was 57% in 2001 (this figure includes an estimate of waste diverted from backyard/on-site yard waste programs). Goal: 52%.
Waste to Resource	Waste Reduction & Recycling, Moderate Risk Waste	Percent of single-family households in King County (excluding Seattle) participating in curbside recycling	77%	79%	88%	84% (actual data; ±4%)	Data from telephone survey. Goal: 90% participation.
Waste to Resource	Waste Reduction & Recycling, Moderate Risk Waste	Amount of solid waste (in pounds) being disposed per week: <ul style="list-style-type: none"> • Per resident • Per employee 	18.5 23.5	No data	17.3 23.6	18.5 23.5	Benchmark: National average in 2000 was 22.4 pounds per capita Goal: maintain 2000 waste disposal levels. This will require focused reduction and recycling practices such as continued education, promotion, incentives and technical assistance programs, and/or mandatory measures.

GOAL	CORE BUSINESS	MEASURE	2000	2001	2002	2003 TARGET	COMMENTS
Waste to Resource	Waste Reduction & Recycling, Moderate Risk Waste	Percent of materials with economic value that are disposed	54%	54%	55%	54% (preliminary actual data)	Goal: reduce the percentage of materials with economic value being disposed to 50% or less. Reductions are expected to be primarily in the food waste and commercial paper portions of the waste stream. Waste stream characterization studies, which serve as the basis for this measure, are done every five years with the next survey to be done in 2007.
Price of Service	Solid Waste Disposal	System-wide average transfer cost per ton of transfer	Not yet available	Not yet available	Not yet available	\$6.70/ton (data from 2003 budget)	2004 target is not to exceed \$6.30/ton. Data are from the Division, reflecting transfer costs after proposed changes are implemented, including facility labor, equipment, and utilities. Measure affected by efficiencies realized in transfer operations, such as reducing inefficient hours of operation at transfer stations. After 2004, measure to be adjusted for increased tonnage due to regional direct rate change and inflation, consistent with rate commitment. Will be monitored in future years based on actual levels (2003 and 2004 are based on budget figures).
Price of Service	Solid Waste Disposal	Percent of planned savings realized by operations efficiencies	Not applicable	Not applicable	Not applicable	New measure	This measure will track savings from operational changes in the vector program, uniform laundering, consumable supplies, equipment shop savings, reducing contributions for equipment replacement, and savings in facility maintenance. The 2004 target is 100% with a savings goal of \$2,370,000.

GOAL	CORE BUSINESS	MEASURE	2000	2001	2002	2003 TARGET	COMMENTS
Price of Service	Solid Waste Disposal	Amount of new revenue from capital assets	Not applicable	Not applicable	Not applicable	New measure	Starting in 2004, the Division will be working on identifying new revenues from rental agreements for advertising on trailers (\$50,000) and additional cell towers (\$30,000). Revenues will be received starting in 2005.
Price of Service	Solid Waste Disposal	Actual tipping fee compared to forecast in 2001 Solid Waste Plan	\$82.50	\$82.50	\$82.50	\$82.50	The Division currently anticipates maintaining the rate at \$82.50 until 2007.
Price of Service	Waste Reduction & Recycling, Moderate Risk Waste	Percent of single family households that subscribe to curbside garbage collection service	88%	No data	89%	91% (actual data)	Data are derived from Waste Reduction and Recycling surveys. No numerical target.
Price of Service	Waste Reduction & Recycling	Annual per capita recycling program expenditures compared to per capita disposal	Not yet available	Not yet available	Not yet available	Expenditures of \$5.60 per person, disposal of 1.28 tons per person (actual and budget data)	The 2004 target of \$4.80 or less per person, keeping disposal at 1.28 tons/person or less represents a 14% reduction in recycling program expenditures. Data are from the Division (budget cost data and tonnage figures), and County population projections. Recycling program expenditures included are consistent from year to year, and include only programs funded through tipping fees. Future targets adjusted only for inflation, consistent with rate commitment.

GOAL	CORE BUSINESS	MEASURE	2000	2001	2002	2003 TARGET	COMMENTS
Price of Service	Urban and Rural Transfer, Landfill Disposal	Percent of CIP expenditure to planned expenditures: <ul style="list-style-type: none"> • Landfill reserve • Construction 	NA	NA	NA 71%	75% 75%	Goal: 75% annually for both funds
Customer Satisfaction	Solid Waste Disposal	Customer satisfaction ratings for transfer stations and drop boxes	4.4	No data	4.5	No data	Data are collected every other year via surveys conducted by an independent contractor. Ratings are on a 5-point scale, 1 being extremely dissatisfied, 5 being extremely satisfied.
Customer Satisfaction	Waste Reduction & Recycling, Moderate Risk Waste	Customer satisfaction ratings for: <ul style="list-style-type: none"> • Wastemobile services • School education program 	No data	4.6 4.5	4.6 4.5	4.6 4.5	Goal: maintain customer satisfaction rating of at least 4.5 on a five-point scale. Areas for future improvement are in frequency of Wastemobile service and student satisfaction with education program.

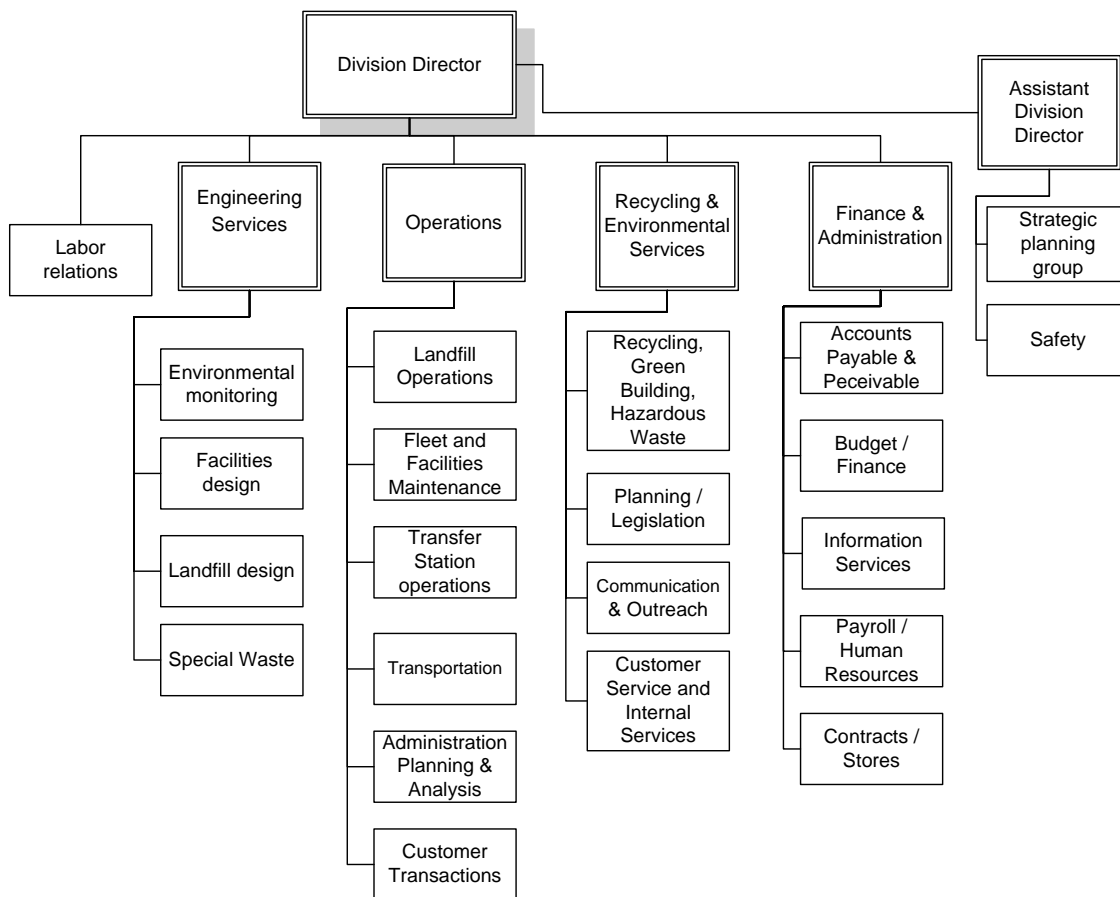
APPENDIX D

Appendix D

Background and Description of Solid Waste Division Organization and Core Businesses

Organization

The Solid Waste Division is divided into four functional sections, plus the functions of the Director's Office: engineering services, operations, recycling and environmental services, and finance and administration. The Division Director and Assistant Division Director oversee all of the sections.



The key functions of each section are:

- Director's Office – Oversees strategic planning and communications, safety and labor relations.
- Engineering Services – Designs and builds capital improvement and maintenance construction projects for operations facilities, including active and closed landfills. Provides environmental monitoring for permit

compliance, provides special waste services, and manages the construction, demolition, and landclearing (CDL) contracts.

- Operations – Operates transfer stations, loads and compacts garbage for transport, provides customer service and public information on Division programs and services, manages cash and credit transaction for general public and commercial customers, provides transportation of solid waste and other materials, manages facility recycling contracts, maintains equipment and facilities, monitors closed landfills, and manages and operates the active landfill and associated landfill gas and wastewater systems. Provides related analytical and administrative functions.
- Recycling and Environmental Services – Provides environmental programs and services, including the Wastemobile, special recycling events, computer recycling, mulching mowers, Master Recycler Composters, residential food-waste recycling, construction recycling assistance and contaminated site assistance. Provides educational programs for schools and businesses, internal and external communications services, graphics services, customer service and grant programs for cities.
- Finance and Administration – Accounts for the money, pays the bills, manages the budget and financial plan, and provides payroll, human resources and computer services.

Core Businesses

The Solid Waste Division has four core business categories that fulfill its regional mission:

- Solid Waste Disposal
- Land Stewardship
- Regional Planning
- Waste Reduction/Recycling and Moderate Risk Waste Programs.

Each of the four categories is made up of core programs. A brief discussion of the core businesses and programs follows.

Solid Waste Disposal

The core business of solid waste disposal includes all activities related to the transfer, transport and disposal of solid wastes. These core programs include:

- Urban commercial, urban self-haul and rural transfer services
- Landfill disposal
- Construction, demolition, and land clearing (CDL) disposal contract.

Land Stewardship

The core business of land stewardship includes activities to bring past disposal sites up to current environmental standards, site maintenance, cleanup and

development of contaminated sites, and litter and illegal dump cleanup. Core programs making up this business line are:

- Post-disposal landfill management
- Litter/illegal dump cleanup
- Contaminated sites cleanup and development
- Environmental management system implementation.

Regional Planning

Regional planning includes preparation of the Comprehensive Solid Waste Management Plan (CSWMP) and the Local Hazardous Waste Management Plan (LHWMP) in coordination with the cities, the public and the haulers.

Waste Reduction/Recycling and Moderate Risk Waste Programs

The core business of waste reduction/recycling and moderate risk waste programs includes collection, technical assistance, education, and outreach for businesses, residences and schools; program coordination with cities; and sustainable development, and organics and soils programs.

- Materials management
- Education and outreach
- Targeted materials.

APPENDIX E

Appendix E

SWAC Recommendations on the Change Initiative



Recommendations - SWD Initiative May 16, 2003

- #1 - Supports the policy of King County to maintain a viable, effective Solid Waste Division that is and supports:
 - Financially sound;
 - Cost competitive
 - Environmentally responsible and conscientious; waste handling and recycling for its customers.

- #2 - Agrees that the SWD should pay a fair rent for the use of the Cedar Hills Landfill:
 - Based on fair market value;
 - Exclusive of the facilities constructed by SWD;
 - For operations from 2004 until the landfill reaches capacity.

- #3 - Opposes the concept that King County should require retroactive compensation from 1992, when the Cedar Hills Regional Landfill property was transferred by Washington State to King County, through 2003.

- #4 - Is concerned that the proposed \$7 million per annum annually-adjusted annuity payment projected to 2028 will result in higher rates for customers, impaired service, and may indeed jeopardize the viability of the enterprise.

- #5 – SWAC will review and comment on the policy and service implications of SWD’s proposed cost reductions to cover the proposed annuity payment.

- #6 - Strongly recommends that the County give clear title of all transfer stations to SWD.

- #7 – Before a decision is made for long-haul and disposal, bids for comparable services will be solicited from private industry for service.

#8 – Over the next several years work towards improving alternative service options for self-haulers and achieving 100% cost recovery for self-haul service.

#9 – Recommends that King County ensure that high quality environmental education programs continue to be provided in as efficient and effective way possible and cuts in funding for education programs should not be disproportionately high when compared with cuts in other services and programs provided by SWD.

APPENDIX F

Appendix F

Transfer Station Hours of Operation Changes Stakeholder Outreach Plan

Gathering Input prior to Recommended Changes in Hours of Operation

Background:

Meetings with cities to discuss Solid Waste efficiencies have been ongoing. In a letter all cities have been asked for their comments on proposed hours of operations. Their comments will be considered in the development of hours changes.

Goal:

To give cities an opportunity to comment on proposed hours of operations.

Tactics:

- Letter to all cities soliciting input with proposed hours of operation attached.
- One-on-one meetings to discuss policy behind recommended changes.

Communicating Hours Changes

Background:

Proposed changes in hours of operation at King County transfer stations will go into effect mid-2004. The Solid Waste Division will initiate a public outreach effort to alert self-haulers to the changes.

The 2003 Residential Waste Reduction and Recycling Survey provides insight into the use patterns and motivations of self-haulers, which is integral to the development of this plan. Below is pertinent information revealed by the survey and used as background in developing this plan.

- Most self-haulers are occasional users of transfer stations, visiting once or twice a year.
- The primary reasons for using transfer stations are to dispose of large objects not collected curbside or to dispose of large volumes.
- Self-haulers are motivated primarily by limitations in garbage service, instead of price or convenience.
- Residents in unincorporated King County are more likely to use transfer stations than those in incorporated King County.

- Residents living in single-family homes are much more likely to use a transfer station than those living in multi-family residences.
- Nearly one-third of residents surveyed in 2003 have visited the King County website last year and a third of these respondents visited the website for information on garbage service and recycling.

Goal:

To inform self-haulers and major stakeholders about changes in hours of operation so they understand the basis for change and the benefit to them.

Also, to avoid any gap in service due to lack of knowledge of hours changes.

Key Messages:

- The Solid Waste Division is seeking a more efficient and entrepreneurial way of doing business.
- The changes will help keep rates low.
- We will remain open during heaviest use.
- The reduction in hours is small but important to becoming more cost-effective.
- We are dedicated to offering the best service at the times most people use the transfer stations.

Target audience:

- Self-haulers
- Cities
- Media
- General public

Tactics:

- Direct Mail
- Media Outreach
 - Announcement of hours changes
 - New hours become effective
 - Dailies as well as weeklies serving transfer station areas
 - Op-ed
- Signage at transfer stations
- Fliers at transfer stations
- Cities notified in advance via a variety of methods including but not limited to e-mail notification letters, and meetings
- The division will separately inform the commercial haulers of the change in hours of operation. Changes are not expected to significantly impact commercial haulers.
- Billing inserts for account customers

Timeline:

- Public outreach will begin at the start of 2004, following fall 2003 Council adoption of the Solid Waste Omnibus Ordinance and the 2004 Budget.

APPENDIX G

Appendix G

Transfer System Options for the Northeast Lake Washington Service Area

The Division's transfer system continues to evolve to accommodate regional growth and the changing needs of the customers. Even in times of budget reductions and scrutiny, certain facility changes are necessary to keep the system operating safely and current with demand. This appendix discusses the Northeast Lake Washington service area because it is an area for which policy changes clearly must be made to accommodate future needs.

Overview of the Division's Transfer System

The Division's transfer system consists of eight transfer stations (six urban and two rural facilities), and two rural drop boxes. These facilities receive waste from both commercial haulers who collect residential and commercial wastes as well as from individual residences and businesses that choose to bring their garbage directly to the facilities (self-haulers). The network of transfer stations is convenient for customers, who can deposit waste close to where it is generated. It also reduces regional traffic, allowing many customers to drive to a nearby facility so that fewer, large County trucks can make the longer trip to the landfill. These facilities also provide recycling collection services for a range of commodities, and in some cases they serve as collection points for wastes bound for disposal but inappropriate for the landfill, such as household hazardous wastes.

The transfer system was developed in conjunction with the Cedar Hills Regional Landfill. As the County became more urbanized and neighborhood dumps became unacceptable, a network of transfer stations was developed along the I-5/I-405 corridor. Five identical facilities were built between 1964 and 1967 (Algona, Factoria, First Northeast, Houghton, and Renton). A sixth facility was built at the Bow Lake dump in the early 1960s and rebuilt in 1976. These facilities operated without significant changes through the 1990s.

During that period, there were significant changes in King County and in solid waste handling. Significant population growth has increased both tonnage and traffic through some of the facilities. Garbage trucks have increased in size to the point where they often hit the roof of older facilities. The demand for recycling services has increased, and there is a need for a means of handling some wastes other than disposal when those materials may pose a risk to the environment. The Cedar Hills Regional Landfill, which the transfer system was developed to serve, is nearing the end of its useful life, and the system must be adapted to an alternative disposal method. That alternative will be the export to a

distant landfill, most likely via rail. Transfer system waste will need to be compacted before it is transported in order to obtain the least costly transportation rates. This compaction may occur at either transfer stations or at a reloading/intermodal facility. Two rural facilities, at Enumclaw and Vashon, were developed in the 1990s when local landfills were closed, and those facilities were built to accommodate current and future solid waste needs, such as the installation of waste compactors.

The Division began a program to upgrade its transfer system in the early 1990s. That program was put on hold while significant policy issues were re-evaluated. Those issues included what costs should be incurred for system upgrades, what services should be provided by the County, and where those services should be provided. A particularly important service question is how solid waste services are provided, by solid waste haulers via curbside pickup or by individuals and businesses self-hauling their garbage. The County provides both services, with about three quarters of its tonnage coming in large solid waste hauling vehicles and three quarters of its traffic from the self-haulers.

With the adoption of the *Final 2001 Comprehensive Solid Waste Management Plan* (Solid Waste Plan), the Division began to implement selected improvements to the transfer system. The system continues to serve both self-haul and commercial customers. Selected recyclables are collected, more often constrained by limited space at the transfer stations than customer demand for services. Pilot projects for collection of re-usable household items and household hazardous wastes have been implemented. These programs are also constrained by space limitations at the existing facilities.

Since the Solid Waste Plan was adopted, the roof at the Algona Transfer Station has been replaced, and it now accommodates modern solid waste collection trucks. The Renton Transfer Station roof will be replaced by the end of 2003. The King County Council has approved a facility master plan for the modernization of the First Northeast Transfer Station, and a similar plan is being prepared for the Bow Lake Transfer Station. But there is no consensus on how best to proceed with the Houghton and Factoria Transfer Stations serving the Northeast Lake Washington part of the County's service area—cities such as Bellevue, Kenmore, Bothell, Woodinville, Kirkland, Issaquah, Redmond, Mercer Island, and Sammamish. The following discussion provides some background and alternatives for potential future improvements for this important part of the county.

Existing Transfer Services at the Northeast Lake Washington Service Area

Two transfer stations primarily serve the Northeast Lake Washington service area—Factoria and Houghton. Although Houghton is located on a former landfill, dense suburban development now surrounds it. That development and other growth throughout the vicinity have made Houghton the most heavily used facility in the system. The combination of heavy use and the perceived incompatibility

with its neighbors has led some to seek the facility closure. Given the adjacent land uses, expansion of the site to fully meet the current and anticipated level of demand for transfer services is not likely to be feasible.

The Factoria Transfer Station is located on a highly constrained site, surrounded by steep slopes, wetlands, and fuel pipelines. The Division acquired an adjacent property and the land use permits to develop a new transfer facility on Eastgate Way. The Division suspended that project in 1994 while re-evaluating solid waste policy issues. Subsequent to that suspension, some officials of the City of Bellevue have voiced opposition to use of the Eastgate property, indicating other development of that parcel would be more suitable. The property is currently being used by King County's Transit Division for a temporary Park-and-Ride facility.

The Houghton and Factoria Transfer Stations are both approaching 40 years old. They have been in use significantly more than their 20 year design life and their structures do not meet current seismic standards. Structural engineering studies indicate they can pose a risk to employees and customers during an earthquake or other natural disaster. They cannot easily be adapted to compact waste for export. They do not easily fit modern solid waste hauler vehicles, and those vehicles sometimes hit the roof, weakening its structure. These facilities are relatively near to one another and serve overlapping areas. The areas have grown significantly, while the transfer capacity has not. Accommodating this growth at obsolete facilities is a challenge. No action is not an alternative, as safety concerns and capacity needs will only increase over time.

The Division has received Council direction to consider siting and building a new transfer station in northeast King County. The Division has prepared a response, which analyzes the time it would take to site and develop a new facility, the costs, and a preliminary review of potential locations.

Using information from this analysis as well as other information, the Division has identified four alternatives for serving the Northeast Lake Washington service area, and developed planning-level cost estimates for each alternative. The costs are based on current year estimates and will increase with inflation dependant on the year implemented. Unanticipated permit requirements imposed by host cities could also increase costs. These alternatives are summarized below, and in Table G-1.

Alternative 1 (\$80 million)

- Build reload capacity at a central intermodal facility
- Build a new Factoria Transfer Station to full capacity with compaction capability (1994 design)
- Close Houghton

Advantages

- Serves customers by providing a full range of services on the Eastside

- Addresses nearby neighbor concerns regarding Houghton impacts
- Does not require a new transfer facility site selection with extended time frame and uncertain success
- Provides the system flexibility with transfer capability at intermodal site

Disadvantages

- Reduces self-haul and recycling convenience for Bothell, Woodinville, Kenmore, Kirkland, Redmond, and other neighboring customers, requiring longer travel times as fewer facilities are available
- Reduces commercial service by providing fewer facilities; this will increase curbside collection costs as travel times are increased for haulers
- Self-haul capacity will be exceeded soon after opening, with off-site queues on peak days unless self haul use is limited
- Traffic impacts and wait times are increased, or some use controls (peak pricing, hour limits) will be needed
- Some Bellevue officials oppose development of the Eastgate Way property

Alternative 2 (\$78 million)

- Build reload capacity at a central intermodal facility
- Build a smaller Factoria Transfer Station using existing site and upper property on Eastgate Way with compaction capability
- Continue to operate the Houghton Transfer Station making only safety improvements, with no compactor

Advantages

- Does not require new transfer facility site selection with extended time frame and uncertain success
- Maintains Houghton service, although some self-haul service reductions may be necessary at both Houghton and Factoria, as capacity is not expanded to the extent previously proposed
- Maintains potential for alternate use of portions of the Eastgate Way site
- Provides the system flexibility of transfer capability at an intermodal site

Disadvantages

- Does not increase service to fully accommodate projected growth for Bellevue and surrounding communities
- Kirkland's interests are unclear but some officials may oppose continued operation of the Houghton station
- Some Bellevue officials oppose development of the Eastgate Way property

Alternative 3 (\$126 million)

- Build reload capacity at a central intermodal facility
- Build a smaller Factoria station using lower property and acquiring additional adjacent property
- Build a new transfer station in northeast King County with compaction capability and close the Houghton Transfer Station

Advantages

- Addresses both Kirkland and Bellevue stated interests
- Serves customers by providing a full range of services on the Eastside
- Provides system flexibility of transfer capability at an intermodal site

Disadvantages

- Highest cost option
- Requires new facility site selection with extended time frame, unknown location, and uncertain success
- Ten-year minimum implementation, which continues operation of Houghton in the interim; potential need for interim safety improvements
- Will require unplanned rate increase to support new facility
- Requires acquisition of additional property near Factoria from unwilling sellers; businesses will be displaced
- Off-site traffic impacts and/or use controls will be needed
- Requires sensitive area variances from Bellevue to develop in wetlands and sensitive slopes, requiring new State Environmental Protection Act (SEPA) and land use processes at additional expense with uncertain outcome

Alternative 4 (\$72 million)

- Secure an intermodal facility without reload capacity
- Build a new Factoria Transfer Station to full capacity (1994 Design) using the Eastgate Property
- Implement full upgrade and continue to operate Houghton with compaction capability

Advantages

- Provides the highest level of customer service
- Does not require new facility site selection with extended time frame and uncertain success

Disadvantages

- Less system flexibility without reload capability at intermodal site
- Requires either additional capital expense (compactors at Algona, Houghton, and Renton) or higher operating cost (double handling waste or rail haul of non-compacted waste)
- Site constraints make feasibility of compactor installation at Algona questionable without reduction in service
- Kirkland's interests are unclear but some officials may oppose continued operation of Houghton
- Some Bellevue officials oppose development of Eastgate Way property

Table G-1: Summary of Transfer System Alternatives for the Northeast Lake Washington Service Area

Key Characteristics	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Houghton Transfer Station Open/Closed Compaction	Closed --	Open N	Closed --	Open Y
Factoria Transfer Station Development Plan Eastgate Property Wetlands Impacts	Develop to full capacity (1994 design) Small portion of Eastgate property surplus On-site wetlands protected	Develop smaller facility using both Eastgate and existing site Potential for joint development of site On-site wetlands protected	Develop smaller facility on existing property with additional adjacent property Surplus entire Eastgate property Requires displacement of existing wetlands on site and related permitting variances	Develop to full capacity (1994 design) Small portion of Eastgate property surplus On-site wetlands protected
New Transfer Station	N	N	Y	N
Reload Capability at Intermodal Facility	Y	Y	Y	N
Estimated Cost	\$80 million	\$78 million	\$126 million	\$72 million (includes compactors at Renton and Algona)
Customer Service Level	Reduced Eastside service. Increased collection costs.	Maintains existing level of convenience. Does not fully accommodate projected growth. Will require some demand management	Service level depends on location and size of new facility.	Maintains existing level of convenience. Better accommodates projected growth than Alt. 2. Will require some demand management
Other Issues	--	--	Outcome of siting process and facility costs uncertain. Requires a cooperative host community.	Ability to install compactors at Renton and Algona uncertain due to site constraints.

Preferred Approach

The Executive's preferred option to meet the solid waste transfer needs for the Northeast Lake Washington Service area is Alternative 2. The addition of reload capacity at the intermodal site provides system flexibility and saves approximately \$10 million in capital costs at the Algona and Renton Transfer Stations by eliminating the need for compactors. This alternative incorporates traffic management strategies to accommodate future growth in Bellevue and surrounding communities. It maintains the potential for alternate use of portions of the Eastgate property, offering the possibility for partnering with the City of Bellevue to meet development objectives for the site. It reduces the proposed projects at both the Houghton and Factoria stations. It is consistent with the 2001 Solid Waste Comprehensive Plan.

The estimated cost difference between Alternatives 1, 2, and 4 is less than 10% (when other system costs are considered). Alternative 3 is significantly more costly; both the higher cost and the uncertainty of a new site selection process make this alternative less attractive. It also requires the purchase of additional property at Factoria to expand at the lower level, and will displace existing businesses.

Alternative 1 reduces service levels and concentrates traffic impacts at one site. This increase in traffic may require additional environmental review. Alternative 4 does not provide the reload capability. It proposes larger projects at the Houghton and Factoria stations, which increases likely opposition.

Alternative 4 was not chosen because it requires maximum expansion at both the Houghton and Factoria stations, and also requires that compactors be installed at Algona and Renton. Site constraints make compactor installation at Algona extremely difficult, and, in fact, may not be feasible without significant reductions in service.



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