# Comprehensive Solid Waste Plan FY 2003-2005



DC Department of Public Works Leslie Hotaling, Director

Solid Waste Management Administration Thomas Henderson, Administrator



#### GOVERNMENT OF THE DISTRICT OF COLUMBIA DEPARTMENT OF PUBLIC WORKS



#### SPECIAL MEMORANDUM TO CUSTOMERS AND STAKEHOLDERS

SUBJECT: Your Input on the Comprehensive Solid Waste Management Plan

The document you are about to read is only a first draft ... because it does not yet have your input, comments and feedback. This is "our" business plan at must address not only doing things right, but doing the right things. And to check that we are on the right course, we need the input from our customers and stakeholders.

We must all share and embrace the vision of where we want to be, as well as the strategies suggested to get us there, because in the end, achieving a clean city can only happen through true partnership between us all.

Please send back your comments, thoughts and feedback no later than May 2, 2003 to:

DC Department of Public Works 2000 14<sup>th</sup> Street, NW – 6<sup>th</sup> Floor Washington, DC 20009

> Attention: Hallie Clemm <u>Hallie.clemm@dc.gov</u>

Thank you for taking the time to provide your very valuable input into our planning process.

Sincerely,

Leslie A. Hotaling

Director of Public Works

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## Executive Summary

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District of Columbia Comprehensive Solid Waste Plan FY 2003 -2005



#### **EXECUTIVE SUMMARY**

The services provided by the District of Columbia's Solid Waste Management Administration (SWMA) are among the most essential and visible offered by the District government, and affect customers in a direct manner unique in government service. The character, well-being, and property values of the District's neighborhoods, as well as the location and success of businesses are directly linked to the cleanliness of the city's streets and alleys. The image of the Nation's Capital as a prime tourist destination, as well as a great place to live and work is based in no small part on SWMA's ability to keep clean the District's public spaces.

#### **Purpose**

The purpose of this Comprehensive Solid Waste Management Plan is three-fold. The plan provides an opportunity for SWMA to examine and take a high level snapshot – an environmental scan - of where the organization is today, its strengths, weaknesses, opportunities and threats. Second, the plan establishes a strategic roadmap for stakeholders, customers, and the organization itself for the next two to three years by presenting specific action items that will help shape SWMA's FY 2004 and 2005 budgets. Finally, the participatory process of developing this comprehensive plan ensures that all responsible parties and stakeholders align around the same goals – and understand their respective roles in achieving them.

#### The Solid Waste Management Administration's Mission, Vision and Goals.

A comprehensive strategic plan begins with a clear mission statement. From there, alignment of goals and objectives can lead to identifying core issues and developing strategies to address these issues. The mission of the District's solid waste management program is clear:

"To enhance the District's economic competitiveness and quality of life by ensuring safe, clean and aesthetic neighborhoods and public spaces."

SWMA's process to arrive at a vision started with creating perspectives from the standpoint of the customer, the DC Department of Public Works and SWMA leadership, and the employees.

These perspectives were distilled into the following vision statement for the Solid Waste Management Administration:

"The Solid Waste Management Administration will be a first-class organization: Its valued employees deliver reliable, cost-competitive sanitation services and partner with customers, community groups and other agencies to create safe, clean and aesthetic neighborhoods and public spaces"

The visioning process made it easy to translate the various perspectives of what the SWMA of the future should look like into three distinct goals for the organization.

- 1. <u>Effective external relations</u> to work with customers that are informed, responsible and satisfied partners in ensuring the safety, cleanliness and aesthetics of the city;
- 2. <u>Seamless service delivery</u> to provide reliable services that are accountable to customers and cost-competitive in the industry; and
- 3. <u>Supportive support systems</u> to have support services that provide the planning and resource management tools needed to meet performance goals.

#### **Environmental Scan**

An environmental scan is a valuable part of the strategic planning process. The scan identifies an organization's internal strengths and weaknesses, as well as the external opportunities and threats that may impact its ability to succeed.

Over the last five years, SWMA has strengthened its ability to provide reliable services through consistent funding, a renewed fleet, and strengthened legislative and enforcement mechanisms. SWMA's focus on quality and reliability has improved its reputation both inside and outside the District. These advancements, while good news, are tenuous at best. Sustaining SWMA's gains of the last five years is subject to the continued annual budget appropriations sufficient to provide expected service levels and the cooperation of support agencies to adapt to SWMA's service delivery needs.

SWMA's strengths, weaknesses, opportunities and threats are summarized in the following table:

#### **SWOT Summary Table**

#### Strengths

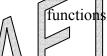
- Strengthened legislative and enforcement mechanisms
- Upgraded service delivery from improvements and advancements in technology
- Adequate funding
- Renewed fleet
- Improved organizational reputation
- Good working relationships with labor unions

#### **Opportunities**

- Building a performance based organization
- Emphasis on employee training
- Transfer station improvements
- Strategic business partnerships
- Integration of technology into daily operations

#### Weaknesses

- General Fund dependence means uncertain budget and continual competition for resources
- Lack of succession planning
- Managing flux of seasonal services
- SWMA's needs confound support



#### **Threats**

- Pressure from the private sector
- SWMA facility displacement
- Economic ups and downs

### Strategic Architecture for Change – How to Achieve SWMA's Vision Goals for the Organization Translated into Strategies

Webster's dictionary defines strategy as a plan of action for attaining a goal. SWMA's goals for what the organization will strive towards – effective external relations, seamless service delivery and supportive internal systems - are broad stroke, mutually supportive views of what the organization will look like five years from now. The purpose of this plan is to lay out the strategies SWMA will employ to achieve these intertwined goals while at the same time

capitalizing on the organizations strengths and addressing its weaknesses. SWMA's strategies can be focused into three primary areas:

- <u>Partnering</u>: Universally extending the partnership concept with customers, labor and other agencies, supported by an ingrained "virtual team" approach within the organization.
- <u>Delivering quality service</u>: Institutionalizing new accountability for quality service through improved operations, strong and skilled leadership, and up-to-date management systems, tools and equipment.
- <u>Bolstering Internal Support</u>: Leveraging new technology and training to optimize operations and working pro-actively as partners within the government to challenge and improve support systems and policies that impede effective service delivery.

These strategies are realistic, actionable and consensus driven. They provide the direction that every employee, stakeholder and customer needs in order to clearly understand how singular actions today will help drive SWMA to its vision for tomorrow.

#### The Specifics

Important to any strategic planning effort is the need to focus on the specifics - what must be done today in order to move toward the vision of tomorrow. The following discussion is an overview of initiatives designed to implement SWMA's three-pronged strategic focus. A more detailed discussion, complete with action items to be undertaken during FY 2003-2005, can be found in the text of the plan. These action items move SWMA down its directed path, and will be reflected in the budget submissions for FY 2004 and FY 2005.

#### Strategic Focus #1 – Partnering with Customers

- Improve customer feedback
- Establish a city-wide communications campaign
- Increase recycling in commercial properties

## • Expand the solid waste education and enforcement high impact visible enforcement strategy

SWMA's first strategic focus targets building and maintaining a partnership with the community to achieve and sustain a clean city. SWMA cannot achieve the desired level of cleanliness in a vacuum nor achieve its goal of effective external relations, absent cooperation from its stakeholders. Toward that end, this strategic focus emphasizes both the solicitation of community interest as responsible partners, and the necessary internal culture shift toward partnership to make it happen.

#### Strategic Focus #2 – Delivering Quality Service

- Enhance productivity in the public litter can installation and collection program
- Integrate Clean City ratings and neighborhood services data into routine operations
- Broaden the reach of performance measures
- Leverage technology to enhance field services
- Expand recycling opportunities

SWMA's second strategic focus is on achieving true accountability for program results by providing the necessary management, tools, and systems to do the job. Delivering quality service means deploying the right resources to meet the need. It means benchmarking against the best in the industry, reviewing best practices and implementing appropriate program improvements as a result. It means having the information and systems in place to make rational decisions. It means putting into place administrative mechanisms, such as performance contracts, financial and non-financial incentives, and real and virtual teams. It means possessing the appropriate managerial and analytical skill sets to perform all of the above.

Of the three strategic focus areas detailed in this plan, "delivering quality service" is the area where SWMA has experienced the most meaningful and visible progress. Significant headway has been made to build SWMA into an organization where routine services are consistently delivered on schedule and geographically based teams of employees are empowered to resolve

persistent neighborhood problems. Performance measures are established to evaluate overall cleanliness and on-time performance. SWMA's challenge for this strategic focus is to ratchet up its own expectations, and continue improving its service delivery capacity.

#### **Strategic Focus #3 -Bolstering Internal Support**

- Develop a comprehensive facilities plan
- Establish a dedicated funding source for transfer station maintenance
- Identify long-term disposal options
- Develop SWMA's workforce through training
- Institutionalize equipment replacement
- Embrace performance-based budgeting

The final prong of SWMA's strategic focus seeks to build and align the internal systems to support and bolster field operations. These are the services and functions that are outside the public eye, but integrally impact both SWMA's capacity to partner with its customers and to deliver quality service.

#### **Next Steps**

This plan maps out SWMA's strategic vision for the next two years and takes the organization through the FY 2005 budget cycle. The next version of this document is due by December 2004, and will reflect on and evaluate the action items presented here. It will examine the elements that drove the SWMA's current strategic focus, determine where changes are required, and propose new initiatives for the FY 2006 and 2007 budget.

## Introduction and Purpose



District of Columbia Comprehensive Solid Waste Plan FY 2003 -2005



#### INTRODUCTION

The services provided by the DC Department of Public Works' Solid Waste Management Administration (SWMA) are among the most essential and visible offered by the District government, and affect customers in a direct manner unique in government service. The character, well-being, and property values of the District's neighborhoods, as well as the location and success of businesses are directly linked to the cleanliness of the city's streets and alleys. The image of the Nation's Capital as a prime tourist destination, as well as a great place to live and work is based in no small part on SWMA's ability to keep elean the District's public spaces.

#### The Organization

The Solid Waste Management Administration is a 651 full-time equivalent<sup>1</sup>, \$46 million organization built around four core services: solid waste collection, street and alley cleaning, sanitation education and enforcement, and solid waste disposal.

The **Solid Waste Collection Division** is responsible for the collection of household trash, bulk materials and recyclables from 110,000 residential premises with three or fewer dwelling units. District crews provide trash collection services with three-person crews utilizing a combination of manual and semi-automated technologies. Bulk waste collection is provided by appointment to residents eligible for SWMA-provided trash collection. A contractor currently provides recycling collection. Apartment buildings with more than three dwelling units, offices, and businesses are considered commercial properties whose owners are responsible to independently contract for these services with private haulers. The Division also collects dead animals and eviction remains from the District's public spaces.

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<sup>&</sup>lt;sup>1</sup> The actual number of people employed by SWMA is dependent on the needs of the season, and fluctuates between 550 and 850 people. The FY 2003 budget authorizes 651 full-time equivalent positions to SWMA.

The **Street and Alley Cleaning Division** is responsible for the routine cleaning of the District's public space, utilizing the full spectrum of methods ranging from manual cleaning to mechanical sweeping with alternate-side-of-the-street parking restrictions. Additional services include nuisance abatement (illegal dumping and vacant lot cleanup), installing and emptying the public littercans, seasonal leaf collection, cleaning the public space after special events, roadside mowing of rights-of-way, and participating in the Department's annual snow and ice removal program.

The Solid Waste Education and Enforcement Program (SWEEP) is responsible for providing the education about and enforcement of the District's sanitation and recycling regulations to ensure compliance by all residents, businesses and visitors. SWMA's SWEEP inspectors are DPW's representatives to the citywide reighborhood Services Initiative.

The **Solid Waste Disposal Division** is responsible for the safe and effective disposition of the District's solid waste stream. SWMA operates the District's two municipal solid waste transfer stations<sup>2</sup>, and manages the contractor provided hauling and disposal of waste.

SWMA's organizational chart, complete with FY 2003 budget and staffing information is found on page 9 of this plan.

Solid Waste Plan Public Draft 2 03 03

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<sup>&</sup>lt;sup>2</sup> Fort Totten Transfer Station, 4901 Bates Road, NE; Benning Road Transfer Station, 3200 Benning Road, NE.



### D.C. Department of Public Works Solid Waste Management Administration

2750 S. Capitol Street, SE Washington DC 20032 Phone: (202) 645-0744 Fax: (202) 645-6040

#### FY 2003 **Executive Direction & Executive Direction and Support** Total Local Funds = \$45,639,861 Support Administrative Services and Support FTE's: 651.15 Tom Henderson \$1,482,589 Administrator FTE's - 13 645-0744 Solid Waste Education & \$2,165,833 \$14,606,804 Solid Waste Collection FTE's - 211.90 FTE's - 52 **Enforcement Program** Division David Dyer, Chief Tony Duckett, Chief 645-7190 645-4301 Education and Enforcement Trash Collection Helping Hand/School Outreach Bulk Waste Collection Sanitation Information Center **Dead Animal Collection** Recycling Yard Waste Collection Street & Alley Cleaning Division Solid Waste Disposal \$15,553,732 \$11,830,903 Division FTE's - 336.25 FTE's - 38 Division Sylvestre Yorrick, Chief Donna Owens, Chief 645-3900 727-5909

- Alternate Side of the Street Sweeping
- Freeway, Arterial, and Outer Ring Sweeping
- Downtown Night Sweeping
- Truck Crew Cleaning
- Cart Routes
- Nuisance Abatement
- · Litter Can Collection, Replacement, and Repair
- Alley Cleaning
- Fall Leaf Collection

- Benning Road Transfer Station Operation
- Fort Totten Transfer Station Operation
- Citizen Disposal

Solid Waste Plan Public Draft 2.03.03

#### PURPOSE OF THIS PLAN

The purpose of this Comprehensive Solid Waste Management Plan is three-fold:

- The plan provides an opportunity for SWMA to take a high-level examination and snapshot of where the organization is today, its strengths, weaknesses, opportunities and threats. This snapshot is critical to steer SWMA's planning effort and provide a baseline from which progress, and success, can be gauged. This "current state" picture is framed in the Environmental Scan section of the plan.
- The plan establishes a strategic roadmap for stakeholders, customers, and the organization itself for the next two to three years. This roadmap details the specifics of SWMA's efforts to successfully fulfill its mission with creativity and substance. This strategic plan serves as a blueprint for how SWMA and its partners will direct its resources and hold each other accountable. The plan presents specific action items that address critical operational needs. These action items will help shape 8WMA's FY 2004 and FY 2005 budget requests.
- Finally, the process of developing this plan is as important as the plan itself. The mission, vision, strategy and performance goals for SWMA have been developed through the full participation of managers and front-line employees. Buy-in and ownership from those primarily responsible for meeting these objectives is key to success. Further, the process of widening consensus to include key changes suggested by stakeholders and customers who review and provide input into this plan will facilitate SWMA's long-term success. The participatory process enables people directly responsible for meeting the goals to help set them. It also ensures that all responsible parties and stakeholders align around the same goals and understand their roles in achieving them.

## How SWMA Aligns to City-Wide Goals

District of Columbia
Comprehensive Solid
Waste Plan
FY 2003 -2005



### HOW SWMA FITS INTO THE LARGER PICTURE – ALIGNMENT TO CITY-WIDE GOALS

Mayor Anthony A. William's focus on improving service and accountability has transformed the District government and has imprinted itself on every facet of SWMA and its parent organization, the Department of Public Works (DPW). The District government's strategic plan consists of a broad vision supported by five strategic priorities. It is incumbent upon both DPW and SWMA to align their mission, vision and goals to this larger picture.

#### The District of Columbia Government's Vision and Strategic Priorifies

The vision for the District of Columbia is "to be the world's capital city, America's crown jewel, which fulfills the highest aspirations, values and ideals of American society for democracy, diversity, education, culture neighborhoods, economic opportunity and government."

To achieve this vision, the District government is concentrating its resources on five strategic priorities:

- Building and sustaining healthy neighborhoods
- Strengthening children, youth, families, and individuals
- Making government work
- Promoting economic development
- Enhancing unity of purpose and democracy

The District has placed a particular emphasis on neighborhood strategic planning. An outcome of Mayor Williams' Citizen Summits has been the broad participation of residents and businesses in the development of blueprints for the District's 39 neighborhood clusters. For both DPW and SWMA, these plans identify and confirm neighborhood priorities, and influence the deployment of resources and the development of future program enhancements.

#### Department of Public Works Mission, Vision and Strategic Goals

The Department of Public Works (DPW) is SWMA's parent agency. DPW's mission, its reason to be, is to provide sanitation, parking enforcement, fleet maintenance and energy-related services to District residents, visitors, and businesses to ensure safe, clean, and aesthetic neighborhoods and public spaces.

DPW's vision is clear. It strives to be the nation's premier public works department providing reliable, scheduled services, with satisfied customers working in partnership with customers, community groups and other agencies to keep the District of Columbia clean.

DPW's strategic goals directly support the citywide strategic priorities of making government work and building and sustaining healthy neighborhood. The seven goals listed below are guideposts for DPW's progress towards achieving its vision:

- Ensure the cleanliness of the District's gateway corridors, high-visibility commercial areas, residential neighborhoods and industrial zones;
- Deliver scheduled services in a timely and reliable manner;
- Establish training and incentive programs to attract and retain a highly skilled workforce to improve performance and accountability;
- Develop integrated information systems to support business operations;
- Provide mission critical equipment for core services;
- Operate in attractive and safe facilities so that the department can deliver services efficiently; and
- Contribute to the citywide environmental agenda.

#### Mission, Vision and Strategic Goals for the Solid Waste Management Administration

#### Mission

The mission of the Solid Waste Management Administration is to enhance the District's economic competitiveness and quality of life by ensuring safe, clean and aesthetic neighborhoods and public spaces.

The services provided by SWMA are among the most basic, visible, and tangible services that residents expect from their local government. SWMA's four divisions collect residential trash, clean the city's streets and alleys, enforce sanitation laws, and transfer and dispose of residential trash. In addition, SWMA oversees the recycling program and participates in the snow removal program. Effective and efficient delivery of these services is essential if the District is to become the world-class city it aspires to be.

#### Vision

As the organization most closely associated with a clean city, SWMA has envisioned what it seeks to become and how it wants to be perceived. SWMA's process to arrive at a vision started with creating perspectives from the standpoints of the customer, the DPW and SWMA leadership, and the employees. The process was assisted by private sector stakeholder groups. These perspectives were distilled into the following vision statement for the Solid Waste Management Administration:

The Solid Waste Management Administration will be a first-class organization: Its valued employees deliver reliable, cost-competitive sanitation services and partner with customers, community groups and other agencies to create safe, clean and aesthetic neighborhoods and public spaces.

For the purpose of this strategic plan, customers are defined not only as residents and businesses that operate within the District of Columbia, but also the commuters and visitors who are affected by the appearance, safety, and cleanliness of the city. Also included in this definition are SWMA's strategic business partners such as the city's business improvement districts, the National Park Service, and our contractors who provide service for the District government.

#### Strategic Goals as Core Values for the Organization: What qualities define SWMA?

The visioning process made it easy to translate the various perspectives on what SWMA should look like into three distinct goals for the organization – its external relations, its direct service delivery capacity and its internal support systems:

#### 1. <u>Effective external relations</u>

- Effective and reliable two-way communication between SWMA and its varied constituencies to identify and solve problems;
- A constituency knowledgeable about its own responsibilities and doing its part;
- A community working in partnership to address persistent problems;
- Regular survey feedback on customer satisfaction; and
- Customer contacts with SWMA are clear, courteous and satisfying.

#### 2. Seamless service delivery

- Services tailored and responsive to diversity of customer needs
- Coordinated scheduled service delivery:
- Programs designed to comply with the District's solid waste hierarchy source reduction, recycling, composting, and reuse, and disposal;
- Clear, consistent performance expectations and goals;
- Institutionalized performance management;
- Re-engineered key processes to leverage investments in equipment and people;
- Service requests are handled expeditiously, whether involving one person or ten;
- Routine services delivered reliably; and
- A model culture of proud and accountable employees.

#### 3. <u>Supportive internal systems</u>

- Appropriate investment strategy and planning for equipment, technology, managerial talent, and employee development and training;
- Incentives to deliver on the results that customers care about; and
- Financial stability to ensure quality services can be provided without interruption.

These strategic goals serve as the foundation of SWMA's strategy moving forward. This three-pronged strategy is flushed out in more detail beginning on page 27. But before this document details where SWMA goes in the future, it is first important to get a picture of where it is now.

## Environmental Scan

District of Columbia Comprehensive Solid Waste Plan FY 2003 -2005



## ENVIRONMENTAL SCAN - SWMA's Strengths, Weaknesses, Opportunities and Threats

An environmental scan is a valuable part of the strategic planning process. The scan identifies an organization's internal strengths and weaknesses, as well as the external opportunities and threats that may impact its ability to succeed. SWMA's environmental scan indicates an organization at the crossroads; tremendous improvements in service delivery and quality are counter-balanced by key infrastructure weaknesses and an uncertain financial future.

#### Solid Waste Management Administration

#### SWOT Summary Table

#### **Strengths**

- Strengthened legislative and enforcement mechanisms
- Upgraded service delivery from improvements and advancements in technology
- Adequate funding
- Renewed fleet
- Improved organizational reputation
- Good working relationships with labor unions

#### **Meaknesses**

- General Fund dependence means uncertain budget and continual competition for resources
- Lack of succession planning
- Managing flux of seasonal services
- SWMA's needs confound support functions

#### **Opportunities**

- Building a performance-based organization
- Emphasis on employee training
- Transfer station improvements
- Strategic business partnerships
- Integration of technology into daily operations

#### **Threats**

- Pressure from the private sector
- SWMA facility displacement
- Economic ups and downs

#### **Strengths:**

- <u>Strengthened legislative and enforcement mechanisms</u> after years of independent, parallel enforcement efforts, the District government has cobbled together a partnership among several regulatory agencies seeking to hold property owners and occupants responsible for adhering to basic sanitation and public space use regulations. SWMA is actively involved in this partnership and has primary responsibility for enforcing the legislative centerpiece of this effort the Litter Control Administration Act (LCAA). Four cornerstones provide the foundation of this multi-agency effort:
  - Administration Act decriminalized the vast majority of sanitation related laws and regulations allowing for civil enforcement and adjudication. The missing piece of this equation was strong "teeth" that provide District residents, property and businesses owners the necessary incentive to abude by the rules. The law originally allowed the city to place a lien on the property of those violators who failed to pay what they owe in fines, penalties and abatement costs. While in theory a lien appeared to be a foolproof enforcement mechanism, in reality, it was only effective once the owner put the property up for sale.

In 2001, the City Council amended the LCAA to allow the city to convert an unpaid lien to a "special assessment" on the property tax bill. As a result, all outstanding violations fines, penalties and abatement costs not settled within six months are included as a line item on the semi-annual property tax bill. Failure to pay will result in the property being placed for sale by the District. SWMA estimates that this action will improve collections by 400%, all of which will be used to enhance the enforcement program.

➤ Harmonized fines. Although SWMA is the primary enforcer of the LCAA, the Department of Health's Environmental Health Administration (EHA) also writes notices of violation for a number its provisions. Code harmonization under the LCAA is expected to be achieved in 2003, ensuring that the regulation cited for a specific violation, and the fines carried by that violation are consistent no matter which District

agency issues the violation. At the same time, the fines will be increased and step up with repeated violations. Most residential fines will increase from \$35 to \$75; commercial fines will increase from \$75 to \$150 in most instances. Repeat offenders can be fined up to \$2,000.

- Cross Enforcement. The larger discussion of how the District, as a whole, engages in code enforcement activities has begun. Currently, one agency is responsible for the exterior of a property, one is responsible for the interior of the same property, and yet a third is responsible for the public space abutting the property. This is clearly an inefficient use of resources, particularly when all that is required is a sight inspection complemented by some general training. The Departments of Public Works, Health and Consumer and Regulatory Affairs, the Metropolitan Police and others have realized the benefits of cross enforcement by signing a Memorandum of Understanding (MOU) authorizing the ten most frequent violations of the LCAA and other administrative enforcement laws to be enforced across the agencies.
- ➤ Office of Administrative Hearings. One of the greatest impediments to the success of cross enforcement is the existence of separate administrative tribunals for each agency authorized to issue quality of life violations. Beginning in FY 2004, this impediment will be resolved with the creation of a single Office of Administrative Hearings (OAH). OAH is modeled after similar offices in New York and Baltimore and provides a single location where the wide array of decriminalized quality of life violations can be contested.

Taken as a whole, these four cornerstones provide a strong framework for the improved enforcement of the District's sanitation, housing and public space use regulations not only by SWMA, but also by the full strength of the District government. In the end, this regulatory schematic will result in a cleaner city and a stronger partnership between the District government and its citizens and businesses.

- <u>Upgraded service delivery from improvements and advancements in technology</u> SWMA's services are tangible. You know if your street has been swept or your trash collected. Beginning in 1999, SWMA has systematically established standards for service delivery expectations in terms of quality and timeliness, and has measured its performance against these standards on a monthly basis. On-time service delivery has improved substantially, with most services meeting timeliness standards at least 90% of the time. Core trash collection service, arguably SWMA's most visible service, has improved to 99.8% on-time performance. Technology has played a large part in this improvement:
  - PW Works resource management system in both the Solid Waste Collection and Street and Alley Cleaning Divisions is providing SWMA with the data necessary to improve its field management. PW Works provides the data for SWMA's managers to analyze productivity by route, track absenteeism, and manage the deployment of its fleet more effectively. The ultimate benefit of this analysis is improved service delivery.
  - ➤ Mechanizing Street Cleaning. The conversion from manual street sweeping to an emphasis on mechanical sweeping technology has broadened SWMA's capability to provide on time sweeping services to a larger portion of the city. This expanded capability is due wholly to the renewal and expansion of SWMA's mechanical sweeper fleet to include not only the large 3- and 4-wheeled sweepers designed to clean heavily trafficked roadways, but also alley sweepers and litter vacuums to mechanize those areas historically cleaned by hand.

To understand the effect this mechanization has had on productivity, look at the gains SWMA has achieved in the commercial corridor cleaning program. Three years ago, the commercial corridors were cleaned by hand, with a person using a broom and a cart to remove debris. At best, this person was able to cover one mile of blockface each day. Today, that same person cleans the area with a mechanized litter

vacuum and is able to cover five miles of blockface each day. With this one change, SWMA's productivity in this area increased 500%! The results are clear. Not only are the corridors cleaner, but so too are the surrounding neighborhoods as technology has allowed SWMA to expand sweeping services to a larger area.

- Adequate funding to rebuild over several years—SWMA success hinges on having sufficient resources to deploy the right complement of employees and equipment to get the job done well. Since 1998, SWMA's annual budget has been crafted as an activity budget with the objective of identifying true program costs. This process has been successful. A majority of SWMA's fleet been replaced. Staffing levels have grown 20% from 540 in FY 1998 to 650 in FY 2003. SWMA's annual appropriation has increased from \$36 million in FY 1998 to \$46 million in FY 2003, a 28% increase. This growth is not just bracket creep. The growth has fueled an increased capacity to deliver better and more reliable sanitation services to District residents and businesses. The 20% growth in staff from 540 to 651 has directly fed core services: 40% to strengthen the fall leaf collection program, 35% to improve SWMA's enforcement response and to clear illegal dump sites quicker; 10% to reinvigorate the recycling program, 10% to improve litter can collection and 5% to add to SWMA's mechanical street sweeping corps.
- Renewed fleet through the institutionalized replacement program Investment in equipment is reaping its rewards. The average age of SWMA's equipment has dropped from eight years in FY 2000 to three years in FY 2002. This has resulted in fewer equipment breakdowns and improved program performance. A key example of these benefits can be found in the story of SWMA's residential trash collection fleet. SWMA's residential trash collection program requires the deployment of 41 trucks each day. A few years ago, it was a daily struggle to put 24 packer trucks on the street, leaving 17 routes in jeopardy of not being completed on schedule. Overtime costs were out of control. Today, a new fleet of 55 trucks ensures that daily collections are made on schedule 99.8% of the time

The fleet replacement is a wonderful achievement, and is reflected in SWMA employees' new-found pride in their jobs. The opportunity facing not only SWMA, but also District

budget and policy officials is to institutionalize the equipment replacement program as a fixed cost. The service advancements achieved as a result of a renewed fleet are short-lived should the investment be discontinued.

- Improved organizational reputation Time after time, comprehensive overviews of the District's performance over the past four years note the progress that has been made in the areas of Public Works in general, and in sanitation services specifically. The biennial survey of city service conducted by the Washington Post in 2002 reveals that residents rate trash collection as the most improved service in the city. Similarly, an article in the Washington Post in September 2002 cites Public Works, and more precisely, SWMA as the prime example of what has improved the most during Mayor Williams first term in office. SWMA's attention to detail, coupled with expanded capabilities, has achieved the desired results.
- Good working relationship with unions as a result of labor management partnership The Solid Waste Management Administration and AFSCME Local 2091 have a solid working relationship as a result of their new Labor-Management partnership. The partnership replaces the adversarial relationship of the past with one based on mutual interest that embraces problem solving as a team approach, brainstorming options and consensus building. The partnership's ground rules have been set, and the team meets monthly to discuss topics of mutual concern including a skills assessment audit and training strategy, safety and personnel issues, and general topics such as employee bulletin boards and new employee orientation. Both Management and Labor view this as a great opportunity to share ideas and discuss problem issues before they become grievances. Under the terms of the recently signed Master Agreement, SWMA and AFSCME Local 2091 will be partnering on the development a more effective recycling collection program.

#### Weaknesses:

General Fund dependence means uncertain budget and continual competition for resources – SWMA is almost 100% dependent on local funds. This means that although service expectations remain high from year to year, each budget cycle becomes a competition for resources to sustain SWMA's capacity to deliver these services. SWMA represents over 40% of DPW's local funds budget. As a result, SWMA takes the largest hit when DPW must incur local budget reductions. Personnel and procurement freezes and curtailments have a much greater impact on SWMA than other agencies because of its higher attrition rate and the seasonal nature of its programs. DPW and SWMA staff must consistently justify clean city programs that should be held out as fixed costs similar to rent and utilities.

A perfect example of this challenge was the FY 2003 debate over the budget appropriation for the solid waste hauling contract. This contract charges a per ton rate to haul and dispose of solid waste received at the District's two municipal transfer stations. The annual appropriation to fund this contract should be considered a fixed cost. Yet, the request to increase the funding for this service in FY 2003 in response to a per ton rate increase was a major struggle. An excessive amount of staff resources had to be dedicated to ensure that SWMA's budget included sufficient funding for this fixed cost without sacrificing other SWMA activities.

- Lack of succession planning implementation will impact future management and leadership corps The average age of SWMA's top leadership corps is 50+ years. They possess the lion's share of the organization's institutional memory. They also have enough years of service to retire tomorrow. It is essential that succession plans be developed and supported to ensure a consistent and seamless transition of leadership over the next several years. To achieve this support, greater flexibility is needed in training and promotional opportunities for SWMA's next generation of leaders.
- Managing flux of seasonal services On first glance SWMA's core services trash and recycling collection, street cleaning, disposal, and education and enforcement seem stable with consistent service demand throughout the year. Nothing can be further from the truth.

Fall sees SWMA's workforce grow by more than 25% with the addition of seasonal leaf collection staff. Winter requires additional drivers for the snow program. Summer sees a surge in trash and recycling set outs by DC residents, increased use of street litter cans, and special events requiring cleanup at the same time that employee vacations peak, leaving the staff consistently short handed and playing catch-up. The key to managing these seasonal spikes is the ability to have flexible hiring practices that allow the workforce to easily grow and shrink as needed.

• <u>SWMA's needs challenge support functions</u> – The one-size fits all approach of the District's support functions – financial services, budget, procurement and personnel – challenge SWMA service delivery capabilities. For example, promoting a person more than one grade, regardless of their skill level, is difficult at best. Providing an employee the training necessary to be successful as a supervisor is limited until the employee actually becomes a supervisor. Advanced training and preparation for the job is the key to success. Withholding that training until the person is in an actual leadership position is penny wise and pound-foolish.

Likewise, financial services hold such tight reign over financial plans (understandably, to ensure the District's solvency) that new or expanded programs are not always adequately funded. For example, SWMA has doubled its mechanical sweeping fleet. Yet, funds to maintain the larger fleet have not been increased under the premise that new equipment doesn't require as much maintenance. The truth is that when you expand the fleet by 100%, the need for sweeper supplies such as brooms and brushes expand as well.

One result of this disconnect is last minute scrambling for such basic tools as sweeper brushes, brooms, shovels, and bags. The ultimate cost of this ongoing struggle is a dirtier city.

#### **Opportunities**:

- <u>Building a performance-based organization-</u> In FY 2003, DPW migrated to performance-based budgeting (PBB). One of the major benefits of PBB is the alignment of performance expectations with funding. This alignment is summarized in the DPW Strategic Business Plan. SWMA's portion of DPW's Strategic Business Plan is provided in Appendix A. The District's commitment to PBB offers SWMA the opportunity to tell its story through measured performance and make the case for stable or increased resources through the successful achievement of outcomes.
- Renewed emphasis on training SWMA is all about people and equipment. Focus and attention must be paid to both in equal measure to ensure that the service gains SWMA has achieved over the past several years are sustained. Fortunately, the District government has recognized the correlation between a well-trained workforce and performance. There is now a full menu of training options for SWMA employees including classes offered through the DPW Academy and the District is Center for Workforce Development. To complement this effort, supervisory and management staff must complete Individual Performance Plans each year in partnership with their supervisor. There is opportunity for SWMA to leverage the funds and time necessary to take full advantage of these workforce development options and to expand the training opportunities to its field and clerical staff.
- <u>Transfer Station improvements</u> By the beginning of 2004, more than \$10 million will have been spent to renovate the two District-owned trash transfer facilities. The renovated stations will be significantly upgraded and have a capacity to handle the almost one million tons of trash moving through the District each year, and simultaneously increase recycling opportunities for District residents. For the first time in over a decade, privately collected waste in the city will be able to be deposited at both the Fort Totten and Benning Road transfer facilities. This change in business practice is a key component of recently signed agreements with the owners and operators of two improperly zoned private trash transfer stations located in residential neighborhoods. These stations have long been the focus of citizen and government concern.

The long-sought renovations offer SWMA the opportunity to revise its outdated system of paying for maintenance of these facilities from general fund revenues and migrating to a special purpose fund receiving revenue from both the public and private users of the transfer stations. Isolating operating and maintenance revenues from Local funds ensure sustained and continued maintenance of the transfer facilities regardless of the flux in budgeted appropriations.

• <u>Strategic business partnerships</u> - SWMA's strategic business partners – the city's business improvement districts, the National Park Service, SWMA contractors who provide service for the District government, and concerned neighborhood volunteers – offer the organization the access of an otherwise untapped network to disseminate information about SWMA, and to expand the breadth of services SWMA provides to keep the District clean. SWMA needs to expand its flexibility and leverage the skill and resources of its strategic business partners to reap the full benefits that these relationships offer in the areas of recycling, sanitation education and enforcement, and in trained observer activities.

#### Threats:

- Pressure from the private sector Try as it may, SWMA cannot dispel the myth that the
  private sector can perform many of its direct field services cheaper, better, and faster. While
  SWMA is beginning to implement the analytical systems that provide data to refute the
  claims, the threat of difficult fiscal times during the next several years continues to raise the
  specter of privatizing services.
- SWMA facility displacement as a result of economic development After years of neglect, many of SWMA's facilities are substandard and minimally safe. Further, economic development activities in the District of Columbia are forcing the relocation of many of SWMA's deployment and staging yards. Already, SWMA has lost its only yard in the northwest quadrant of the city (33<sup>rd</sup> and Water Streets, NW), and one of its two trash truck yards (Brentwood Road, NE) to development. Its mechanical sweeper and night operation yard (900 New Jersey Avenue, SE) is in the Hope VI redevelopment corridor, and dislocation may occur within the next several years. A citywide comprehensive facility plan

must be completed. SWMA's resulting relocation plan has yet to be defined, compromising the overall coordination of the physical space necessary to house the trucks and people who provide SMWA's services to its customers.

• DC economic ups and downs — As discussed throughout this document, SWMA's almost total reliance on the yearly process of Local fund appropriations poses a true threat to the service gains SWMA has made over the past several years. Not only do tough fiscal times threaten new service initiatives, they threaten the organization's capacity to sustain services at existing levels. For example, a projected \$323 million deficit in the District's FY 2003 budget required SWMA to prioritize its programs to identify which could be scaled back or stopped altogether. Fortunately, and true to Mayor Wilhams' commitment to a clean city, SWMA emerged from the reductions almost whole. While SWMA will forego some planned enhancements, current services will remain intact. It is essential, however, to identify specific elements of SWMA's operation that will be insulated from the periodic budget ax, including but not limited to fleet replacement, solid waste disposal fees, and transfer station infrastructure maintenance.

## The Plan

District of Columbia
Comprehensive Solid
Waste Plan
FY 2003 –2005



#### THE PLAN

#### Strategic Architecture for Change – How to Achieve SWMA's Vision

#### **Goals for the Organization Translated into Strategies**

Webster's dictionary defines strategy as a plan of action for attaining a goal. SWMA's goals for what the organization will strive towards – effective external relations, seamless service delivery and supportive internal systems - are broad stroke, mutually supportive views of what the organization will look like five years from now. The purpose of this plan is to map out the strategies SWMA will employ to achieve these intertwined goals while at the same time capitalizing on the organizations strengths and addressing its weaknesses.

These strategies provide the framework from which SWMA launches new initiatives and builds annual budgets. Each new initiative supports a strategy, which in turn aligns to one or more of the organization's goals. SWMA's strategies can be focused into three primary areas:

- Partnering: Universally extending the partnership concept with customers, labor and other agencies, supported by an ingrained "virtual team" approach within the Department.
- Delivering quality service: Institutionalizing new accountability for quality service through improved operations, strong and skilled leadership, and up-to-date management systems, tools and equipment.
- Bolstering Internal Support: Leveraging new technology and training to optimize operations
  and working pro-actively as partners within the Government to challenge and improve
  internal support systems and policies that are the lifeblood of effective service delivery.

These strategies are realistic, actionable, and consensus driven. They provide the direction that every employee, stakeholder and customer need to clearly understand how singular actions today will help drive SWMA to its vision for tomorrow.

#### THE SPECIFICS

Important to any strategic planning effort is the need to focus on the specifics - what must be done today in order to move smoothly toward the vision of tomorrow. The following discussion is a more detailed examination of initiatives designed to implement SWMA's three-pronged strategic focus, complete with action items to be undertaken during FY 2003-2005. These action items move SWMA down its directed path, and will be reflected in the budget submissions for FY 2004 and FY 2005.

#### Strategic Focus #1 – Partnering with Customers

- Improve customer feedback
- Establish a city-wide communications campaign
- Increase recycling in commercial properties
- Expand the solid waste education and enforcement high impact visible enforcement strategy

SWMA's first strategic focus targets building and maintaining a partnership with the community to achieve and sustain a clean city. SWMA cannot achieve the desired level of cleanliness in a vacuum nor achieve its goal of effective external relations, absent cooperation from its stakeholders. Toward that end, this strategic focus emphasizes both the solicitation of community interest as responsible partners, and the necessary internal culture shift toward partnership to make it happen.

#### Improve Customer Feedback

Customer communication, coordination and satisfaction are goals widely acknowledged, variably understood, and only seriously sought by some SWMA employees. While SWMA has made significant strides in identifying and addressing customer expectations, an increased emphasis must be placed on ensuring that a new customer relation paradigm takes hold within the entire organization.

In the world of customer satisfaction, perception is reality. While SWMA strives to be a responsive, high performing organization – doing the right things and doing them well – its

customers' perceptions may be otherwise. The challenge is how to manage customer expectations and continue to tailor services to meet their ever-changing needs. The key to addressing this challenge is to develop mechanisms to hear and understand customer needs, and to analyze and respond to them in a timely fashion.

Two survey tools have provided SWMA with insight into how the organization perceived by the general public. The <u>Washington Post</u> conducts a biennial survey of District residents' opinions on the overall performance of the District government. The survey includes one question on the quality of household garbage collection by District crews. In the 2002 survey, more than two of three respondents rated the service as good or excellent, up 20% from the previous survey conducted in 2000. Though limited, the <u>Washington Post</u> survey provides valuable trend data to indicate that the organization is on the right track

The second, more detailed feedback tool available to SWMA is the data gleaned from the Mayor's Office of Customer Service tester calls to constituents on Call Center service requests. The testers call constituents to assess the effectiveness and quality of service provided. Four questions related to their overall experience - the staff's professionalism, the timeliness of response, and the effectiveness of service - are posed to residents who have recently logged a service request through Call Center. The data highlights that most services are provided in a professional and effective manner, however SWMA still needs to improve its performance with regard to timeliness.

While this information is valuable, it still doesn't provide the ongoing dialogue that SWMA desires or needs to gauge customer thoughts on the quality and variety of SWMA's services. To achieve this, SWMA proposes creating a focus group of citizens from across the city to provide an informal sounding board for new ideas and to road test new programs. This type of focus group was used with great success in 2001 to refine the fall leaf collection program in Wards 2 and 3 in the northwest quadrant of the city.

#### Action item:

To gauge SWMA's success in providing the quality and selection of services its customers demand, SWMA will establish periodic focus groups comprised of residents and businesses. These focus groups will begin in FY 2004.

While performing a widespread customer survey on SWMA services would be valuable, SWMA will yield to other citywide efforts to survey customers about government services across the board.

# Establish a City-wide Communications Campaign

Crafting a citywide message and strategy for a comprehensive outreach campaign about sanitation laws, responsibilities and partnerships has been flagged by SWMA management as a critical piece of customer education.

SWMA has a patchwork of leaflets and other communications. What is lacking is an overall plan for public education, a coordinated message, and the capacity to lead and produce results.

#### Action item:

Develop and implement an on-going public information program that disseminates and instills the message that keeping the city clean is a partnership where all stakeholders have a role and responsibilities. SWMA's FY 2003 budget has earmarked \$150,000 through the storm water management program to fund a contractor to develop the program. In FY 2004, SWMA intends to request funds from the same funding source to launch this campaign as a multi-media outreach tool. Subsequent requests will seek to institutionalize this expenditure into SWMA's annual budget appropriation. Estimated request: \$100,000 per year.

# <u>Increase Recycling in Commercial Properties</u>

The expansion of recycling programs to the commercial sector poses another opportunity for partnership to achieve a clean city. Working with commercial property owners and managers, business associations, and private haulers, SWMA will act as an advisory partner to develop

commercial sector recycling programs. SWMA staff dedicated to this program has been hired. Education will precede enforcement of the District's recycling law, consistent with SWMA's approach of "educate first" prior to enforcing sanitation-related violations.

#### Action item:

Expand the District's recycling program to commercial properties, with an emphasis on crafting recycling plans, providing information, and offering technical support. To be successful, this project will be highly interactive with customers, providing high volume and quality feedback from the commercial sector. An intensive education campaign will commence in FY 2003 followed by ongoing enforcement. Special purpose revenues will enhance Local funds already earmarked for this program in FY 2003 and FY 2004.

Expand the Solid Waste Education and Enforcement (HIVE) Strategy. Each year, the city meets with each of its 39 neighborhood clusters to identify their community's service priorities. A review of the District's 39 Strategic Neighborhood Action Plans for FY 2002 reveals a significant demand for the education and enforcement services provided by the Solid Waste Education and Enforcement Program (SWEEP). These services have proven to be one of the government's most requested, cutting across all socio-economic lines.

Over the past five years, SWEEP has been transformed into an organization focused on solving problems, closing cases and satisfying customers instead of one that simply counts the number of inspectors' activities. SWEEP three-pronged strategy for its High Impact Visible Enforcement (HIVE) approach shows promise:

- Assigning inspectors to geographic sections and holding them accountable for that sector's cleanliness and customer satisfaction;
- ➤ Leading DPW's partnership with the District government's Neighborhood Services Initiative, the inter-agency, cross-functional team approach to resolving persistent problem areas; and
- Attacking longstanding problems and bolstering community responsibility by focusing on those residential and commercial property owners that continually ignore the law.

The strategy is producing results, yet is compromised by chronic inspector understaffing. SWEEP's FY 2003 staffing complement, once filled, is sufficient to provide scheduled nighttime and weekend coverage in persistent problem areas for the first time.

#### Action item:

Work with Office of Personnel to recruit and hire the fully authorized level of SWEEP inspectors to ensure comprehensive coverage across the District. Institute outcome performance measures that examine quality of results, rather than the quantity of output.

# **Strategic Focus #2 – Delivering Quality Service**

- Enhance productivity in the public litter can installation and collection program
- Integrate Clean City ratings and neighborhood services data into routine operations
- Broaden the reach of performance measures
- Leverage technology to enhance field services
- Expand recycling opportunities

SWMA's second strategic focus is on achieving true accountability for program results by providing the necessary management, tools, and systems to do the job. Delivering quality service means deploying the right resources to meet the need. It means benchmarking against the best in the industry, reviewing best practices and implementing appropriate program improvements as a result. It means having the information and systems in place to make rational decisions. It means putting into place administrative mechanisms, such as performance contracts, financial and non-financial incentives, and real and virtual teams. It means possessing the appropriate managerial and analytical skill sets to perform all of the above.

Of the three strategic focus areas detailed in this plan, "delivering quality service" is the area where SWMA has experienced the most meaningful and visible progress. Significant headway has been made to build SWMA into an organization where routine services are consistently delivered on schedule and geographically based teams of employees are empowered to resolve neighborhood nuisances. Performance measures are established to evaluate overall cleanliness

and on-time performance. SWMA's challenge for this strategic focus is to ratchet up its own expectations, and continue improving its service delivery capacity.

The following discussion highlights several areas where progress has been made, but where further action is needed to sustain these gains.

## Enhance productivity in the public litter can installation and collection program:

Litter cans are placed throughout the city in heavily trafficked pedestrian areas and adjacent to bus stops. They have literally and physically become a symbol of SWMA's presence in the community. Not only do they represent the city government's resurgence, they also play a significant role in reducing litter and non-point source storm water pollution<sup>3</sup> by providing pedestrians an alternative to littering.

Each year, the city meets with each of its 32 neighborhood clusters to identify their individual needs. Nearly all of these clusters indicate the desire for additional public litter cans installed on their most heavily trafficked streets and intersections.

Over the past three years, SWMA's Street and Alley Cleaning Division has installed 2,324 new litter cans across the city and replaced 824 deteriorating cans. This represents a 30% increase over the number of cans on city streets since 1999. The number of cans on the street continues to grow. In FY 2002, SWMA bought an additional 324 containers by leveraging storm water funding. In FY 2003, SWMA will purchase a minimum of 500 cans. While the increase in the number litter cans across the city is good news, SWMA needs to take advantage of its existing productivity-enhancing tools such as an automated routing application and *DPW Works* work management software to ensure these cans are serviced on time and within existing resource constraints.

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<sup>&</sup>lt;sup>3</sup> Nonpoint source pollution has been identified as a major contributor to pollutant discharge to the Potomac and Anacostia rivers from the District's municipal separate storm sewer system (MS4). EPA has issued a permit requiring the District to identify and reduce sources of pollutant discharge from the MS4 in compliance with the Clean Water Act. DPW's litter can program is an integral part of the District's coordinated storm water management program.

#### Action Item:

In FY 2003, SWMA will perform a wholesale review of litter can collection routes using automated routing software to increase crew productivity and rationalize service routes. To complement this effort, SWMA is right-sizing its littercan collection fleet and workforce allocation to better match equipment and service needs. This effort includes implementing additional midday collections where pedestrian traffic is heavy, particularly during the warmer months.

Further increases in the number of litter cans on the District's streets will ultimately require an increase in collection crews. Should funding not be available, a reduction in the number of cans on the street, or a decrease in collection frequency will be required. This analysis will be presented during the FY 2005 budget formulation process.

Integrate Clean City ratings and neighborhood services data into routine operations:

Sanitation services are not a one-size fits all proposition. Some neighborhoods need education, others need enforcement. Some neighborhoods need mechanical sweeping four times each year, others need mechanical sweeping weekly. Some have lots of leaves; others have a lot of illegal dumping. In the perfect world, SWMA would have all the crews and equipment to offer programs to ensure that each neighborhood received all the services they wanted. Reality dictates, however, that SWMA has limited resources, and priorities need to be established to guide crew deployment. But how?

Beginning in 1999, the Office of the Clean City Coordinator has published neighborhood cleanliness ratings by conducting quarterly windshield surveys. The surveys are conducted by trained community volunteers who have long been active in neighborhood clean-ups and, at times, vocal critics of DPW services. The value of these ratings is two-fold. First, the ratings are key in helping SWMA focus its resources. Areas rated clean receive services at a frequency necessary to sustain that cleanliness level. Dirtier areas see an increased concentration of crews and equipment. Second, the ratings are an unbiased quality control indicator of SWMA's effectiveness and a valuable tool in assessing performance over time. The weakness, if any, of the ratings is that the small survey sample from each ward does not provide a statistically

reliable picture of the entire community's cleanliness. SWMA is working with the Office of the Clean City Coordinator to refine the survey tool.

Similarly, the citywide Neighborhood Services Initiative (NSI) has provided SWMA with critical information designed to improve the effectiveness of its services. The NSI is a team of front-line inspectors and supervisors representing a cross-section of District agencies with the specific goal of resolving long-standing, persistent neighborhood problems. Eight SWEEP inspectors are the SWMA representatives to the NSI teams. The Street and Alley Cleaning Division ward foremen support these inspectors. Each team has its finger on the pulse of their ward, thereby being uniquely positioned to advise SWMA on how to best deliver the full complement of sanitation services so they are the most effectively executed.

This "street intelligence" coupled with the service requests from the Mayor's City-wide Call Center, offers SMWA the ground level information it needs to deliver neighborhood-based menu of services tailored to individual community need.

#### Action Item:

In FY 2003, SWMA will work with the Office of the Clean City Coordinator to refine their survey tool and to expand their survey sample to give a more comprehensive picture of the city's cleanliness. Further, work will occur to integrate the Clean City and Call Center databases into the citywide GIS system to provide field personnel with timely and accurate information. The results of these efforts should be seen in FY 2004.

# Broaden the reach of performance measures

Performance management – the integrated process of tying performance to budget allocations – has taken hold of the District government in a hard and fast way. During the past five years, SWMA has emerged as an organization where routine services are delivered on schedule (most of the time) and geographically based teams are empowered to resolve persistent neighborhood nuisances. Performance measures now evaluate cleanliness and on time service delivery (SWMA's suite of performance measures are part of the Strategic Business Plan in Appendix A).

The importance of measuring performance has not uniformly reached beyond SWMA's managerial ranks. Some of the organization's front-line workers have yet to be exposed to the value that performance measures bring to the overall focus of the administration, impacting everything from budget allocations, program development, and staffing. SWMA will focus its energies in FY 2003 to develop tangible ways to communicate the importance of performance measure results to everyone in the organization.

#### Action Item:

While broadening the reach of performance measures throughout all layers of SWMA will be time intensive, rewarding front-line staff for achieving their goals will drive their importance to the future of the organization home. The FY 2005 budget proposal will include a pilot program for this purpose and will offer monetary and in-kind incentives for achievement consistent with the provisions of the new Master Union Agreement. The estimate budget request will be \$200,000.

# Leverage Technology to Enhance Field Services

Automated routing. Global positioning systems. Geographic information systems. These technology tools will join DPW Works and be integrated into SWMA's daily operations over the next several years. First on the list for implementation is automated routing technology – SWMA is using the  $RouteSmart^{TM}$  software application.  $Routesmart^{TM}$  will be used to revise the routing for a number of services including trash collection, litter can collection, bulk collection and mechanical sweeping. These services have long relied on incremental adjustments to manually designed routes developed years ago. As a result, routes are unevenly distributed and do not adequately reflect efficiencies from updated equipment or shifts and growth in the service population.  $RouteSmart^{TM}$  will help SWMA balance routes, ensuring that each crew has a full day of work than can be run in the most efficient way.

The citywide geographic information system (GIS) initiative will offer a visual snapshot of SWMA daily service delivery areas, including littercan placements, Call Center requests, and Clean City ratings. With this technology, SWMA staff will be able to view and modify its

service delivery complement in a selected area. SWMA expects to integrate its services into the city's GIS platform by FY 2004

SWMA will also explore the value of installing a global positioning system in its field vehicles to provide real time information about where critical fleet is located. A robust vehicle location system with GPS offers the capability to communicate system-wide alerts, bulletins and general information and operating instructions. A pilot program will be implemented in FY 2003 to determine whether expanded GPS capability will provide the increase in productivity its supporters promise.

#### Action Item:

In FY 2003, the Solid Waste Collection Division will reconfigure its trash collection route using Routesmart<sup> $\mathsf{TM}$ </sup>. That effort will be followed by the Street and Alley Cleaning Division's use of RouteSmart<sup> $\mathsf{TM}$ </sup> to right-size litter can collection routes. Further routing efforts will take place in FY 2004.

The demonstration project for the GPS system will be developed in FY 2003. A successful pilot effort will result in a request to fund full implementation across SWMA's fleet in FY 2005.

#### Expand recycling opportunities

The District's recycling law – the Solid Waste and Multi-Material Recycling Act of 1988 – established a comprehensive recycling program for District residents, businesses and government offices. The law also established a solid waste management hierarchy for the District:

- Volume reduction at the source
- Recycling, composting, and reuse, and
- Disposal in landfills.

Twelve years later, the assumptions surrounding recycling are being rethought. Recycling is no longer about making money. It's about taking a long-term view of the environmental benefits

recycling offers and reducing the amount of valuable materials thrown away. The District has embraced the benefits not only of recycling, but the value inherent in the solid waste hierarchy defined by the law. FY 2003 will witness a major effort to launch a comprehensive recycling program consistent with the spirit in which the law was intended. SWMA will focus its efforts on improving residential collections and that initiative is discussed in more detail below.

SWMA, through its Office of Recycling is working with District businesses, multi-family units, and commercial properties offering technical assistance to encourage source reduction and reuse opportunities throughout the District. The Office of Recycling is also working with the District's public schools to incorporate the benefits of source reduction, recycling, and proper sanitation practices into the school curriculum.

#### Action item:

Develop a K-12 teaching tool that emphasizes proper sunitation practices and management that District teachers can incorporate into their curricula without taking away valuable classroom time. This tool – Project Learning Tree –will be introduced to the school system in FY 2003 followed by implementation in FY 2004 and 2005.

## Contracting-in residential recycling collections:

Four years ago, SWMA contracted out residential recycling collections for the 110,000 residences in its service population. At that time, SWMA was unable to hire the staff or identify the equipment to do the job in-house. The private contractor's performance has not met expectations. However, until FY 2002, SWMA did not have the staff to adequately monitor the contract.

SWMA is now poised to demonstrate its commitment to delivering quality services by contracting–in recycling collections for almost 74,000 households in the District's outer ring beginning in FY 2003<sup>4</sup>. The effort will start with a demonstration project in Ward 7 and eventually expand to the District's entire outer ring. Using single stream collection and

<sup>&</sup>lt;sup>4</sup> This initiative is contingent on the timely passage of the FY 2003 District appropriation by Congress and the subsequent approval of DPW's O-type budget request.

processing technologies, this initiative seeks to increase the waste diversion rate for these households from the meager 14% reported in FY 2001 to 25% in FY 2005. SWMA will provide each of the 74,000 households with a 32-gallon wheeled cart to hold the paper, bottles and cans residents choose to recycle No sorting is required; no heavy bins need to be lifted. SWMA's Solid Waste Collection Division will provide service with three-person crews using the same type of vehicle as the rest of its fleet (standardizing the fleet improves maintenance and performance). SWMA will continue to provide recycling collection services to the 36,000 residences in the inner city through a private contractor who will be held to tighter performance standards under a new contract.

#### Action Item:

In order to achieve a 25% residential waste diversion rate, it is critical for SWMA to understand what is in fact being recycled and what is being thrown away. Only then can a truly effective collection program be developed and public information dollars be spent wisely. The best way to gain this insight is to perform an actual waste sort of the materials being thrown away. Funds have been earmarked in FY 2003 to fund the waste sort, perform the necessary data analysis, and recommend strategies to increase waste diversion. As indicated earlier, this successful completion of this action item is contingent upon the establishment of a special funds budget for the recycling initiative.

### **Strategic Focus #3 -Bolstering Internal Support**

- Develop a comprehensive facilities plan
- Establish a dedicated funding source for transfer station maintenance
- Identify long-term disposal options
- Develop SWMA's workforce through training
- Institutionalize equipment replacement
- Embrace performance-based budgeting

The final prong of SWMA's strategic focus seeks to build and align the internal systems to support and bolster field operations. These are the services and functions that are outside the public eye, but integrally impact both SWMA's capacity to partner with its customers and to deliver quality service.

## Develop a Comprehensive Facilities Plan

After years of neglect, many of SWMA's facilities are substandard and minimally safe. Further, economic development activities in the District are continually pressing up against SWMA's deployment and staging yards. Already, one of two trash collection staging areas has been relocated to a temporary yard that was still under construction when crews moved in (1241 W Street, NE). The redevelopment of the Anacostia Waterfront combined with the Hope VI community redevelopment grants threaten both Street and Alley Cleaning Division's two yards as well as SWMA's central administrative office. There are no worksites for SWMA's operations in the entire northwest quadrant of the city.

SWMA is awaiting the government's completion of its comprehensive facilities plan for the Department of Public Works and other city operations. In the interim, SWMA is pressing ahead with existing capital projects to expand DPW's West Virginia Avenue, NE campus. However, these plans will not be sufficient to absorb all of SWMA's needs.

#### Action Item:

In concert with the Offices of Planning, Property Management and Economic Development identify SWMA's long-term facility needs and complete a comprehensive facilities plan that can be executed, as development needs dictate and funds are available. The plan must be finished during the first half of FY 2003, as more of SWMA's staging yards are marked for development. Funding for relocation and build out should be paid by the private or public project developers and incorporated as a requirement of any development deal the District pursues.

Further, the FY 2004 capital budget submission includes a request to establish new project funding to relocate the Mechanical Sweeper Garage to 401 Bryant Street, NW. This facility relocation will build SWMA's first operations facility/garage in the District's northwest quadrant in almost a decade.

# Establish a Dedicated Funding Source for Transfer Station Maintenance:

Move forward to April 2004. Renovations at SWMA's two transfers stations – Fort Totten and Benning Road - will be complete. Improperly zoned private sector transfer stations will be closed. And the controversy surrounding solid waste disposal facilities in the District will be silenced. All of these accomplishments will be jeopardized should the District be unable to identify sufficient funding through the annual budget appropriation to maintain the Fort Totten and Benning Road transfer stations. SWMA recommends establishing a special purpose fund dedicated to transfer station maintenance. Funding will come directly from gate fees paid by those solid waste haulers using the facilities.

#### Action Item:

In FY 2003, SWMA will request the Council of the District of Columbia to establish a special purpose fund for the purpose of maintaining the renovated Fort Totten and Benning Road transfer stations. Maintenance of these stations is crucial for the District to receive the maximum return on its more than \$10.5 million investment in the upgrade of these facilities. It is also is a key component of the agreements between the District and private transfer station owners to close their facilities and transfer their waste through Fort Totten and Benning Road. The revenue to fund the maintenance will come from a portion of the transfer and disposal fee paid by users of the facilities.

#### **Identify Long-Term Disposal Options:**

Until 1994, the District of Columbia relied on a combination of in-town incinerators and a city-owned landfill located in Lorton, Virginia for the disposal of solid waste generated in the city. Since 1994, District-collected solid waste has been transported out of the city for disposal to the Fairfax County's I-95 Energy Resource Recovery Facility, originally by city crews and since 1997, by contractors. The current contract for transfer and disposal of solid waste from the Fort Totten and Benning Road transfer stations expires in the October 2003. Given the price instability of relying on the open market for short-term disposal alternatives, it is in the District's best interest to develop a long-term strategy (5-10 year horizon) to meet its solid waste disposal needs. SWMA will continue to contract for hauling services.

#### Action Item:

Develop a multi-pronged disposal strategy in FY 2003 to address the District's disposal needs for the next 5 to 10 years. This strategy may include contracting for disposal capacity outside the District and will also examine the feasibility of entering into a regional agreement to utilize municipal disposal capacity in the surrounding jurisdictions.

## **Develop SWMA's Workforce Through Training:**

SWMA must have a fully trained workforce with the skills set required to deliver quality service. This need dictates the development of training plans for each position in the organization, as a traditional one-size fits all training program will meet neither employee nor customer needs. The workforce development initiative will deally include coaching and a performance-based incentive system to complement the raised expectations the training will provide. The menu of classes will include sessions on basic skills development, as well as customer service, leadership, supervisions, and the use and reporting of performance measures. In addition, technical equipment training, computer training, safety and health training are ongoing needs.

#### Action Item:

Training plans for each position in SWMA's staffing complement are currently being developed. SWMA will work with the DPW Academy, the Center for Workforce Development and the Office of Personnel to ensure that these training requirements are incorporated into employee job description and that the employees are made aware of the required competencies. Simultaneously, SWMA will seek the flexibility to provide qualified candidates the required supervisory and specialized equipment training they need to succeed in more senior positions in advance of their promotion.

In FY 2004, SWMA will explore establishing a vocational academy in partnership with the District's public schools to secure a young pool of talent poised to assume front-line service positions that could lead to supervisory status.

## Institutionalize Equipment Replacement

SWMA has successfully replaced almost 100% of its major fleet elements – packers, sweepers, dump trucks – over the past four years thanks to the strategic partnership forged between SWMA, DPW leadership, Fleet Management, the Chief Financial Officer, the Office of Contracting and Procurement, Mayor Williams and the City Council. These parties universally recognized that SWMA needed reliable equipment to deliver its services on schedule every day. The District's economic boom of the late 1990's allowed funds to be made available. The new equipment produced the desired results: improved on-time service delivery with a marked reduction in overtime. The renewed fleet has instilled a newfound pride into SWMA's front line employees. This, in turn, has resulted in an improved quality of service and satisfied customers. The annual cost of an equipment replacement program for SWMA is \$3.5 million each year

FY 2003 and beyond pose a very different economic picture, just at the time when a renewed commitment to an institutionalized equipment replacement program is needed. Trucks and sweepers purchased four years ago are rapidly approaching the end of their industry standard useful life. Expansion of residential recycling services to municipal crews and expanded littercan collections will require the fleet to grow. SWMA's equipment needs cannot be ignored even in the face of lean budgets. A return to the days of sporadic service due to excessive fleet breakdowns is untenable.

#### Action Item:

Maximize use of the Master Lease financing tool and continue to partner with DPW support operations, including Fleet, Procurement and Finance to ensure appropriate, reliable and cost-effective equipment replacement program. The cost for the equipment replacement program will appear each year as a separate project in the capital budget submission. The replacement program should not proceed as a straight-line replacement – 20% of the entire fleet each year. Rather, fleet dedicated to a specific purpose should be replaced in its entirety. For example, all trash collection packers should turnover in one year. This replacement strategy offers the District the benefits of fleet standardization for maintenance purposes and economies of scale in pricing.

# Embrace Performance-Based Budgeting (PBB)

Beginning in October 2003, SWMA migrated to a performance-based budget aligned around the services SWMA provides – Sanitation Collections and Removals, Public Space Cleaning, Sanitation Enforcement, Sanitation Disposal (SWMA's Strategic Business Plan is found in Appendix A). This migration is a natural for SWMA because it is already a program based organization that delivers clear and tangible results. SWMA's success in achieving its mission will be clearly evident as the year progresses and the suite of performance measures SWMA has defined get flushed out. This initiative is part of a government-wide movement to performance-based budgeting that is expected to shift the budget dialogue away from rhetoric and incremental budgeting to one that is driven by services and results. Resources will be allocated in terms of-performance and what the organization strives to accomplish in the upcoming year.

#### Action Item:

SWMA staff will adhere to the framework established by the performance-based budgeting initiative, including performance measure reporting to gain improved information to better manage resources. Budget proposals will be tailored to sustain performance levels and to enhance sub-par service. Better- managed resources will result in improved service delivery and partnering capacity.

#### **NEXT STEPS**

This plan maps out SWMA's strategic vision for the next two years and outlines steps for the organization through the FY 2005 budget development process. The next version of this document is due by December 2004, and will reflect on and evaluate the action items present here. It will examine the elements that drove the SWMA's current strategic focus, determine where changes are required, and propose new initiatives for the FY 2006 and 2007 budget.

# Appendix A

SWMA Strategic Business Plan

> District of Columbia Comprehensive Solid Waste Plan FY 2003 -2005



# Appendix A – Department of Public Works Strategic Business Plan

# **Agency Mission**

The Mission of the Department of Public Works is to provide sanitation, parking enforcement, fleet maintenance and energy related services to District residents, visitors, and businesses to ensure safe, clean and aesthetic neighborhoods and public spaces.

#### **Issue Statements**

Due to DC's unique customer expectations, DPW faces challenges to meet those expectations while focusing on its core businesses.

Due to a demographically changing workforce and employee expectations, DPW faces new challenges to meet these expectations while focusing on its core business.

Technical advancements challenge DPW to incorporate this technology into our business operations.

The aging condition of equipment challenges DRW to operate efficiently and limits its ability to effectively and safely deliver services.

Due to increased economic development and the accompanying competition for land, DPW must operate out of remote and inadequate locations.

Due to increasing levels of enforcement and regulations by EPA and other environmental agencies, DPW is challenged to support the District 's compliance with these increasing standards.

# **Strategic Result Goals**

# Ensure the cleanliness of the District's gateway corridors, high-visibility commercial areas, residential neighborhoods and industrial zones.

• By FY 2003, 85% of District's gateways, commercial and residential areas will be rated clean or moderately clean on the Office of the Clean City Coordinator 's Environmental rating scale.

#### Scheduled services will be delivered in a timely and reliable manner.

- By FY 2003, 100% of DPW core services will have published schedules or service delivery expectations.
- By FY 2004, 95% of DPW services will be delivered within established time frames.

# DPW will establish training and incentive programs to attract and retain a highly skilled workforce to improve performance and accountability.

- By FY 2004, 95% of core service delivery positions will be filled.
- By FY 2004, 95% of DPW staff will have attended at least one training program during the fiscal year.
- By FY 2004, DPW will increase its multilingual personnel by 40% each year.

# DPW will develop integrated information systems to support business operations.

• By FY 2003, 95% of DPW activities will have long-range information systems plans.

## Mission critical equipment will be available for core services.

- By FY 2003, 90% of DPW's mission critical equipment will be on an industry standard replacement schedule.
- By FY 2003, 80% of DPW's equipment and vehicles will be on a regular preventive maintenance schedule.
- By FY 2004, 99% of mission critical equipment will be available on a daily basis.

# DPW will operate in attractive and safe facilities so that the department can deliver services efficiently.

• By FY 2004, 100% of core service delivery worksites will have been improved within the past three years.

#### DPW programs will contribute to the citywide environmental agenda.

- By FY 2003, 100% of DPW facilities will participate in the government building recycling program.
- The District of Columbia Comprehensive Energy Plan will be completed in FY 2002.

# **Activity Purpose Statements and Performance Measures**

PROGRAM	Sanitation Services				
Activity	<b>Enforcement of Sanitation Regulations</b>				
Activity Purpose Statement	The purpose of the enforcement of sanitation regulations activity is to				
	provide inspection and enforcement services to residents, visitors and				
	businesses so they can enjoy a safe and clean environment, free from				
	illegally placed trash and debris.				
Services that Comprise the	Enforcement of solid waste regulations (tickets)				
Activity	Enforcement of recycling regulations (tickets)				
	Private collector inspections				
Activity Performance Measures	Results: (Key Result Measures Italicized)				
(Target & Measure)	80% of sanitation enforcement requests will be investigated within 5				
	business days.				
	10% reduction in the incidence of violation by premises in the High				
	Impact Visible Enforcement (HIVE) target areas as compared with FY				
	2002 baseline data				
	90% of HIVE target areas will be inspected semi-annually.  Outputs:				
	# of tickets issued				
	# of warnings issued				
	# of inspections conducted				
	# of complaints responded to				
	Demand:				
	# of properties in violation expected				
	# of blocks in high impact areas expected				
	# of complaints expected				
	Efficiency:				
	\$ per ticket issued				
	\$ per illegal dump investigation				
D 11 D 14	\$ per complaint response				
Responsible Program Manager	Tom Henderson				
Responsible Activity Manager	David Dyer				
FY 2003 Budget (Gross Funds) FTE's	\$ 4,542,180				
FIES	76				

PROGRAM	Sanitation Services			
TROOM IVI	Samtation Scrvices			
Activity	Public Space Cleaning			
Activity Purpose Statement	The purpose of the public space cleaning activity is to provide			
	comprehensive street and alley cleaning services to residents, visitors and			
	businesses so they can live, work and play in clean neighborhoods.			
Services that Comprise the	Rights-of-way mowed			
Activity	Rights-of-way cleaned: manual			
	Rights-of way swept: mechanical			
	Graffiti/poster-sign removals			
	Litter can collections			
	Nuisance lots and illegal dumping cleanings			
	Rights-of-way litter collections			
	Leaf collections			
	Sanitation Emergency Responses			
	Community outreach events cleanups (small)			
	Supported special events (large			
	Snow/Ice Removal Support			
A / : ' D C M	Activity Management			
Activity Performance Measures	Results: (Key Result Measures Italicized)			
(Target & Measure)	95% of major corridors rated "clean" or "moderately clean"			
	95% of streets in high visibility areas rated "clean" or "moderately clean"			
	65% of alleys in high visibility areas rated "clean" or "moderately clean"			
	95% of streets in residential areas rated "clean" or "moderately clean"			
	70 % of alleys in residential areas rated "clean" or "moderately clean"			
	95% of signed sweeping routes cleaned on schedule			
	Outputs:			
	# of miles swept			
	# of litter can collections			
	# of alleys cleaned			
	# of nuisance lots cleared			
	# of acres mowed			
	# of graffiti cleanings			
	Demand:			
	# of miles needing to be swept			
	# of litter can collections expected			
	# of alleys to be cleaned			
	# of nuisance lots expected to need clearing			
	# of acres needing mowing			
	# of graffiti cleanings anticipated			
	Efficiency:			
	\$ per output (see above)			
Responsible Program Manager	Tom Henderson			
Responsible Activity Manager	Donna Owens			
FY 2003 Budget (Gross Funds)	\$ 16,099,355			
FTE's	347			

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PROGRAM	Sanitation Services				
Activity	Sanitation Collections & Removals				
Activity Purpose Statement	The purpose of the sanitation collections and removals activity is to				
	provide solid waste collection services to residents of single-family homes				
	so they can have their trash removed conveniently and regularly.				
Services that Comprise the	Household trash collections				
Activity	Household recycling collections				
	Household bulk waste collections				
	Dead animal collections				
	Trash container distributions				
	Activity Management				
Activity Performance Measures	Results: (Key Result Measures Italicized)				
(Target & Measure)	99.8% of on-time trash collection (same day collection)				
	94% of on-time trash collection during scheduled hours				
	97% of bulk pick-ups collected on scheduled day 20% of residential waste stream diverted through recycling				
	20% of residential waste stream diverted through recycling				
	Complaint rate of fewer than 60 per 100,000 collections				
	Outputs:				
	# of household collections				
	# of tons trash collected				
	# of bulk appointments				
	# of tons recycling collected				
	Demand:				
	# of collection opportunities per month  Efficiency:				
	\$ per household collected				
	\$ per ton trash collected				
	\$ per ton recyclables collected				
Responsible Program Manager	Tom Henderson				
Responsible Activity Manager	Tony Duckett				
FY 2003 Budget (Gross Funds)	\$ 14,474,804				
FTE's	195.2				
	170.2				

PROGRAM	Sanitation Services		
Activity	Sanitation Disposal		
Activity Purpose Statement	The purpose of the sanitation disposal activity is to provide municipal waste disposal services to DPW, other D.C. agencies and residents so they can unload collected waste safely, conveniently and legally.		
Services that Comprise the Activity	Construction and demolition debris disposals Trash disposals White goods disposals Citizen drop off-special waste disposals Activity Management		
Activity Performance Measures (Target & Measure)	Results: (Key Result Measures Italicized)  90% of waste collection vehicles unloading within 15 minutes of arrival at the transfer station  95% of waste received transferred within same business day  Outputs: # of tons disposed # of deliveries Demand: # of tons expected # of deliveries expected  Efficiency:  \$ per ton disposed		
Responsible Program Manager	Tom Henderson		
Responsible Activity Manager	Sylvester Yorrick		
FY 2003 Budget (Gross Funds) FTE's	\$ 9,628,251 33		

PROGRAM	Communications			
Activity	Public Education			
Activity Purpose Statement	The purpose of the public education activity is to provide recycling and sanitation training and information services to residents, businesses,			
	schools and other institutions so they can reduce consumption, reuse and/or recycle resources.			
Services that Comprise the	Workshops			
Activity	School curricula			
	School patrols			
Activity Performance Measures (Target & Measure)	Results: (Key Result Measures Italicized) 20% of DC public schools participating in education programs 50% of households participating in recycling programs  Outputs: # of schools served through workshops  Demand: # of schools  Efficiency: \$ cost per school served # of household in DPW's service population (residential buildings of 3 or fewer dwelling units are eligible for DPW trash collection services – 120,000 units)			
Responsible Program Manager	Tom Henderson			
Responsible Activity Managers	David Dyer, Kay Phillips Clean City Coordinator			
FY 2003 Budget (Gross Funds)	\$ 30,000			
FTE's	0			

# Appendix B

Characterization of Existing and Projected Waste Stream

District of Columbia Comprehensive Solid Waste Plan FY 2003 -2005



# **Appendix B - Characterization of Existing and Projected Waste Stream** (2002-2015)

The quantity of waste that the District will need to manage in future years is difficult to predict. Generally, the waste managed by the District has two sources – waste generated in the District and waste imports. The quantity of waste generated in the District is more predictable, a function of population and employment growth. Predicting the amount of waste imported into the city is more difficult, a function of regional economics (including labor, travel time, tipping fees, and available transfer and disposal sites). The quantity of imported waste entering the District from other jurisdictions could remain the same, decrease, or increase.

For planning purposes, it is useful to assume that waste imports will be expected to increase. A 2 percent per annum increase has been assumed for waste imports based on the limited number of available transfer and disposal sites in the region and the need for waste transfer facilities operating in or very near the District. The District solid waste management system is well-positioned to meet this need as a result of the restoration of the District owned and operated Fort Totten and Benning Road transfer stations to their original designed capacity (a combined 1.3 million tons per year) and the expected continued operation of two privately owned and operated transfer stations inside the city.

Projected District Generated Waste Quantities 2005, 2010 and 2015

	Total Populațion*		Projected District Generated Waste	
Year	Residential	Employment	Tons/year	Tons/day <sup>+</sup>
2002 Actual	570,898	694,960	592,875	2,280
2005	575,865	720,400	681,850	2,623
2010	610,415	752,000	716,650	2,756
2015	647,040	783,700	752,600	2,895

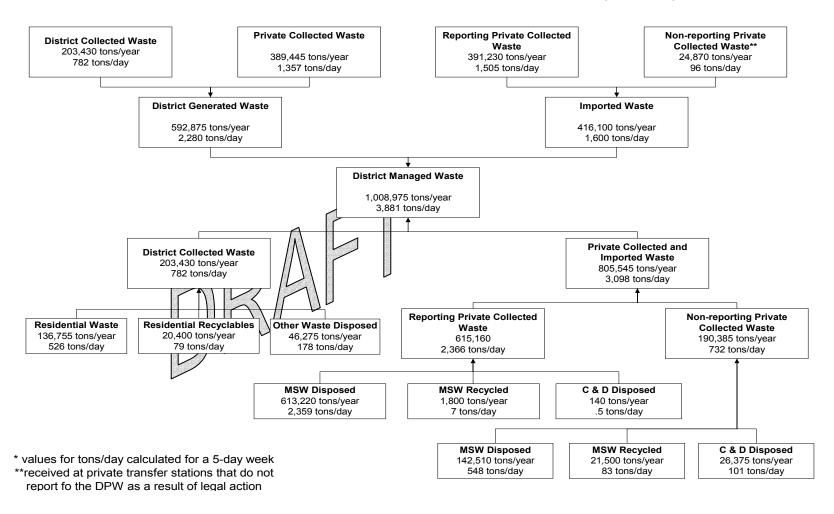
<sup>\*</sup> Source: Office of Planning State Data Center

# Projected District Managed Waste Quantities 2005, 2010 and 2015

	<b>Projected District</b>	<b>Projected Import</b>	Projected District Managed Waste	
	<b>Generated Waste</b>	Waste	Tons/Year	Tons/Day
2002 Actual	592,875	416,100	1,008,975	3,881
2005	681,850	441,065	1,122,915	4,319
2010	716,650	485,170	1,201,285	4,620
2015	752,600	533,685	1,286,285	4,947

<sup>&</sup>lt;sup>+</sup> Values for tons/days calculated for a 5-day week.

# WASTE MANAGED AND GENERATED IN THE DISTRICT (FY 2002)\*



Solid Waste Plan Public Draft 2.03.03