

Waste Management Trends in the Washington Metropolitan Region 2001



Members

Chair, Honorable Carol Schwartz, District of Columbia
Honorable Mary K. Hill, Prince William County
Honorable Bruce R. Williams, Mayor Pro Tem,
City of Takoma Park
Honorable Robert E. Dorsey, City of Rockville

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Abstract

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AGENCY: The Metropolitan Washington Council of Governments is the regional planning organization of the Washington area's major local governments and their governing officials. COG works toward solutions to problems in such areas as growth, air and water quality, transportation, and housing, and serves as the metropolitan planning organization for the Washington region.

ABSTRACT: This report discusses the current municipal solid waste management trends in the Washington metropolitan region and the recommendations of the COG Board of Directors Solid Waste Task Force for regional action.

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**A Report of the COG Board of Directors
Solid Waste Task Force**

Members

Chair, Honorable Carol Schwartz, District of Columbia
Honorable Mary K. Hill, Prince William County
Honorable Bruce R. Williams, Mayor Pro Tem,
City of Takoma Park
Honorable Robert E. Dorsey, City of Rockville

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Table of Contents

Executive Summary	i
Introduction.....	1
I. Current Waste Management In the Region.....	2
A. Generation.....	2
B. Management.....	3
1. Waste Reduction	3
2. Collection.....	3
3. Recycling	5
4. Disposal.....	6
C. Funding	8
II. Facilities Serving the Region.....	12
III. Interstate Waste Transport	16
A. Import and Export Data.....	16
B. Transport	18
1. Trucking	18
2. Barging.....	21
IV. Market Outlook and Future Developments.....	23
A. Export of Solid Waste For Disposal	23
B. Markets.....	23
C. Single Stream Recycling	24
D. Electronics Recycling	24
V. Survey of Local Government Waste Management Staff	26
VI. Recommendations	28
Bibliography.....	31

List of Figures

Figure 1.	Per Capita Waste Generation – Washington Region and Nation	2
Figure 2.	Municipal Solid Waste Management – Washington Metropolitan Region.....	3
Figure 3.	Control of Municipal Solid Waste Disposal – Washington Metropolitan Region 2000	5
Figure 4.	Export of Municipal Solid Waste – Washington Metropolitan Region 2000.....	7
Figure 5.	Exports of Municipal Solid Waste – Washington Metropolitan Region 1997 and 2000.....	8
Figure 6.	Virginia Waste Imports 1997-2000	17
Figure 7.	Interstate Transport of Municipal Solid Waste in the Mid-Atlantic 2000	20

List of Tables

Table 1.	Regional Waste Generation and Management – 1996 and 2000	3
Table 2.	Local Government Waste Management Funding Sources.....	9
Table 3.	Recently Constructed Local Government MSW Disposal Facilities.....	10
Table 4.	Major Public Disposal and Transfer Facilities – Washington Metropolitan Region.....	12
Table 5.	Private Transfer Stations	13
Table 6.	Private Landfills in Virginia	14
Table 7.	Mega-Landfill Capacities in Virginia 2000	15
Table 8.	Top States Importing Municipal Solid Waste 1997-2000	16
Table 9.	Top States Exporting Municipal Solid Waste 1997-2000	17
Table 10.	Mid-Atlantic States Municipal Solid Waste Export 2000	19
Table 11.	Trash Transfer Truck Volume in the Metropolitan Area 1999-2000	21

Executive Summary

This report was prepared under the direction of the Metropolitan Washington Council of Governments Board of Directors Solid Waste Task Force. The purpose of the report was to inform policy makers about the latest municipal solid waste management trends affecting the region and to identify any opportunities for regional problem solving. This report also serves as an update to the December 1998 COG publication *Solid Waste Disposal Trends in the Washington Metropolitan Region*.

COG staff studied solid waste and recycling data and surveyed area government staff to identify 12 trends in regional waste management. These trends are listed below. The body of the report provides further discussion of each issue.

List of Trends

1. Total waste generation is increasing in the region due mainly to population growth. Per capita waste generation is also increasing at the same pace as in the rest of the nation.
2. Local governments are searching for methods to control the collection of municipal solid waste to ensure the steady flow of waste to government facilities.
3. The recycling rate for the region has leveled off in recent years. Reasons include the maturation of collection programs, a reduction in local recycling education, the reduction in weight of various consumer products, and the depressed markets for some recyclables.
4. Solid waste imports to the region for disposal have fallen as some local governments have been able to capture more locally generated waste.
5. Area governments are restructuring their funding systems for waste management to provide a more stable revenue stream. Several local jurisdictions have implemented household and business user fee systems for collection, disposal, and recycling services and others are studying possible implementation.
6. Waste imports to Virginia are stabilizing based on 1998 – 2000 data.
7. Waste exports from Maryland to Virginia are steadily increasing.
8. State and local governments are trying to crack down on trash transfer truck safety and environmental violations.
9. Exports of waste from the region are likely to increase significantly in the next several years as local governments support the construction of transfer stations to preserve existing landfill capacity or to address other concerns.
10. Municipal solid waste disposal prices are moving upward at private facilities; prices for construction and demolition debris disposal are also increasing in the region; recycling markets are suffering from the depressed economy.
11. “Single stream” recycling programs for residential curbside materials are gaining interest due to lower collection costs and the promise of higher participation rates.
12. Local governments are looking for solutions to the problem of recycling electronics for residents and small businesses.

Regional Issues of Concern

COG staff surveyed area solid waste managers about issues of concern that may benefit from regional cooperation. The list of issues below is in no particular order.

- Long-haul trash truck transportation safety through proper funding and enforcement of truck inspection programs.
- Promotion of recycling to residents and businesses through a regional program.
- Securing funding for local government waste facilities and programs.
- Location of public and private trash transfer stations to minimize nuisance.
- Endorsement of federal flow control legislation grandfathering jurisdictions that operate facilities constructed with flow control-based funding.
- Opposition to federal legislation limiting interstate waste transport.
- Opposition to Commonwealth of Virginia attempts to ban barging of waste.
- Developing and sustaining recycling markets.
- Coordination of waste management response to both natural and man-made disasters.
- Funding for solid waste planning.
- Further establishment of electronics recycling programs.
- Interest in converting curbside residential recyclable collection programs to “single-stream” collection programs.
- Support regional solutions for biosolids disposal/recycling.

The Task Force considered all of these issues and trends when formulating its 12 recommendations for waste management in the region. For further discussion of each point, please see the recommendations section.

Recommendations

1. Coordinate regional plan for waste management during natural and manmade disasters.
2. Compile information on regional trash transport truck violations and best enforcement practices elsewhere.
3. Seek funding and legislation for additional local government truck inspection programs.
4. Endorse regional recycling promotion campaign organized by COG.
5. Support the location of municipal solid waste transfer stations to minimize neighborhood nuisances.
6. Develop regional web-based resource for area electronics recycling, explore regional recycling opportunities.
7. Endorse Congressional solid waste flow control legislation that would grandfather powers to local governments with facilities financed on local flow control laws.
8. Oppose Congressional interstate waste legislation that would restrict a state’s ability to import and export waste for disposal.
9. Express concern regarding proposed Virginia legislation that would place a surcharge on every ton of waste disposed of in Virginia.
10. Oppose Commonwealth of Virginia attempts to ban the barge transport of municipal solid waste.
11. Direct COG Recycling Committee to continue research on “single stream” recycling.

12. Create a standing COG Board Solid Waste Task Force to communicate waste issues of concern to the COG Board of Directors.

###

The members of the Task Force: the Honorable Carol Schwartz (chair), District of Columbia; the Honorable Mary K. Hill, Prince William County; the Honorable Bruce R. Williams, Mayor Pro Tem, City of Takoma Park; and the Honorable Robert E. Dorsey, City of Rockville.

Introduction

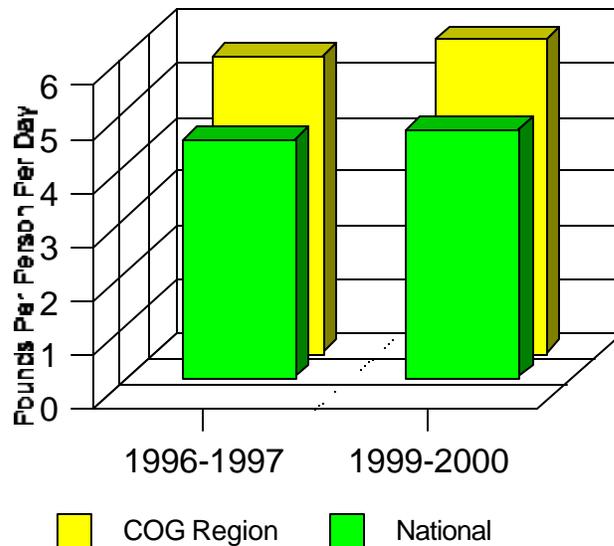
The following report reviews the current state of municipal solid waste (MSW) management in the region and the trends that have emerged over the past five years. Section I covers regional waste generation and management data. Section II summarizes the solid waste facilities in the area. Section III discusses interstate waste transport and how it impacts the region. Section IV reviews some emerging trends not obvious from the existing data. Section V is a compilation of solid waste issues of potential regional concern as recommended by local government solid waste staff. Finally, Section VI presents the recommendations of the COG Board Solid Waste Task Force. This data in this report is largely an update to the December 1998 COG publication *Solid Waste Disposal Trends in the Washington Metropolitan Region*. Solid waste generation and recycling data for 1996 as listed in that report have been revised slightly due to the availability of better information.

I. Current Waste Management in the Region

A. Generation

Municipal solid waste (MSW) generation is the sum of material recycled and disposed by area residences and businesses. In the Washington metropolitan area, waste generation increased from 1996 to 2000. The recent data show that generation has gone up by 13% and the population by 7% over this time. These figures indicate that per capita waste generation has increased by 5% over the past four years from 5.5 pounds per person per day to 5.8 pounds per person per day, or to roughly one ton per person per year. Over the four-year period between 1995 and 1999, the U.S. Environmental Protection Agency found that per capita generation nationally increased from 4.4 to 4.6 pounds per person per day. The increase over this period may be attributable to the booming economy, which tends to result in the higher consumption of material and more waste. See Figure 1 and Table 1 for detail.

Figure 1
Per Capita Waste Generation
Washington Region and Nation



Sources: Regional Data for 1997 and 2000 from COG surveys;
National data for 1996 and 1999 from U.S. EPA *National Source
Reduction Characterization Report*

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The region also generates construction, demolition and landclearing debris. Local governments do not typically have accounting systems for this type of waste.

TREND: Total waste generation is increasing in the region due mainly to population growth. Per capita waste generation is also increasing at the same pace as in the rest of the nation.

B. Management

A COG survey of local and state governments revealed that 28% of the waste generated in the region in 2000 was recycled. Collection crews disposed of the remaining 72% of the waste in landfills or at one of the three area waste-to-energy incinerators. See Figure 2 and Table 1 for detail.

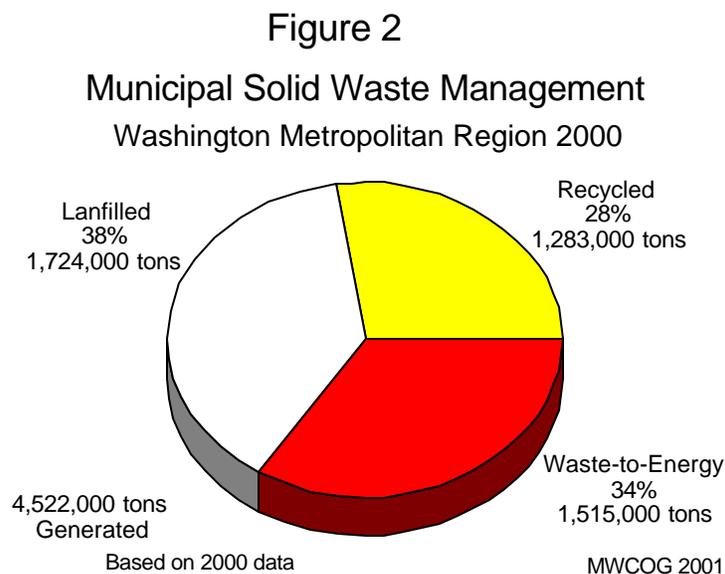


Table 1: Regional Waste Generation and Management 1996 and 2000 (in tons)

Year	Landfilled	Waste-to-Energy	Recycled	Total Generation
1996	1,455,000	1,340,000	1,210,000	4,005,000
2000	1,724,000	1,515,000	1,283,000	4,522,000

Regional data compiled by COG staff.

Region defined as Loudoun County, Fairfax County, Prince William County, Arlington County, City of Alexandria, District of Columbia, Montgomery County, Prince George’s County, Frederick County and all inclusive jurisdictions.

1. Waste Reduction

Waste reduction is difficult to measure. The amount of waste generated may be impacted by a variety of factors including the health of the economy, the accuracy of municipal tracking systems, and the success of programs designed to reduce waste. A popular waste reduction program promoted by several local governments asks residents to leave grass clippings on their lawns instead of sending them for disposal or composting. Waste reduction efforts lower the total amount of materials requiring recycling or disposal, but may also lower overall recycling rate figures because material that was previously recycled has been reused. The Maryland Department of the Environment has attempted to compensate for this effect by allowing counties

to earn a waste reduction credit to their state certified recycling rate. The credit is calculated based on the achievement of criteria and not on a straight quantitative measure.

2. Collection

Residential solid waste collection in the region is handled by public, publicly-contracted, and private crews. Generally, private hauling companies collect waste and recyclables from businesses, which include multi-family residences. The invalidation of local government waste flow control laws in 1994 by the U.S. Supreme Court has created a free market where private haulers may take the waste to any licensed facility for transfer or disposal.

Local governments may employ any or all of the three collection methods for residential collections. Jurisdictions that use public crews or contracted private service for their residential collection routes control where the material is sent for recycling or disposal. The governments that allow residents to subscribe directly with a private hauler for services do not have command of where the material is handled.

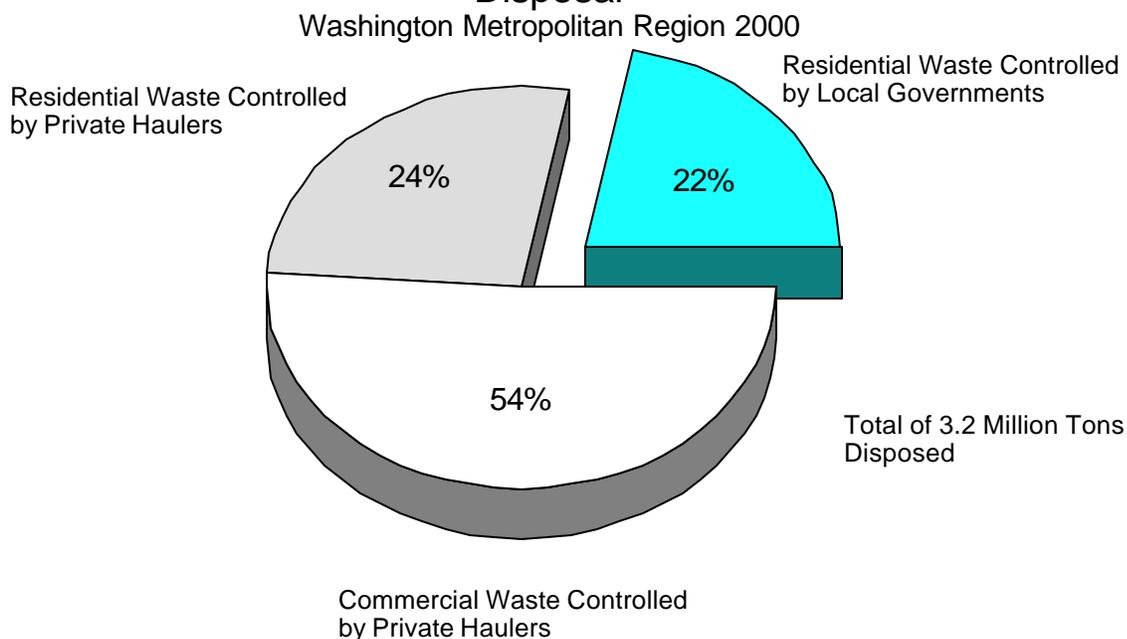
Figure 3 shows that 22% of the municipal solid waste is controlled by local governments; private hauling companies control the remaining waste. This percentage has not changed over the last four years significantly because local governments are still servicing approximately the same number of households.

In the post-flow control era, local government control of collection routes is one way to continue to direct material to public disposal and recycling facilities to ensure revenue for bond payments. Several local governments have studied an expansion of control as a means to ensure a more stable flow of waste to municipal facilities. Assuming control of residential and commercial collections routes previously serviced by private haulers can be a difficult and contentious process. Virginia law requires that any jurisdiction that intends to assume control of private routes must give a five-year advance notice before taking action or pay haulers for lost revenues. To date, only Prince William County has given the five-year notice (1998). The county does not necessarily intend to take control of any routes, but it will have the option of doing so.

Fairfax County is employing another potential method of controlling the flow of waste. The county modified its existing flow control ordinance to apply only to waste generated in Fairfax County and sent for disposal to a Virginia facility. This modification legally avoids the Constitutional commerce clause violation issue identified by the U.S. Supreme Court because waste can be exported out of the state for disposal. Essentially, the Fairfax ordinance is an intra-state waste flow control law. It has the potential to be effective because most of the waste exported from the region for disposal goes to central and southern Virginia. The ordinance has yet to be challenged in court.

TREND: Local governments are searching for methods to control the collection of municipal solid waste to ensure the steady flow of waste to government facilities.

Figure 3
Control of Municipal Solid Waste
Disposal



NOTES:

-2000 data for COG member jurisdictions.

- Rate of 1.3 lbs. of refuse disposed per household per year used to estimate residential quantities.

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3. Recycling

Recycling rates have been relatively stable from 1996 to 2000. COG data for the region shows a slight decline from 30% recycling in 1996 to 28% in 2000, but the difference is well within the margin of error for this type of survey. Explanations for the change also include the stricter recycling definition COG staff was attempting to employ for the 2000 data and the inconsistent approaches used by area jurisdictions to measure recycling.

Maryland, Virginia, and the District all use different methodologies to compile recycling data. COG attempted to make the rates as consistent as possible for the regional measure by following the U.S. Environmental Protection Agency national standard measurement methodology that is beginning to gain favor; therefore, some recyclables counted in 1996 may not have been included in the 2000 data. Additionally, the precision of each jurisdiction's recycling data is affected by the amount of resources available to compile it. In the past few years, several jurisdictions have been striving for greater precision, which sometimes results in lower rates when the data is scrutinized.

Area recycling professionals widely agree that recycling rates have tended to plateau in the past few years. The reasons for the leveling off are not always obvious. The easiest explanation is that the types materials collected by area recycling programs have not changed much over this period, so there has not been an opportunity to recycle more. However, several local

governments have been adding mixed paper recycling to their curbside residential programs, which has the potential to boost recycling rates.

Industry's accelerating conversion of containers from glass to much lighter plastics has also contributed to a reduction in the weight of recyclables. The net effect of this weight reduction, as with waste reduction programs that stress less yard debris, is a net reduction in recycling rates. Other recycling staples, such as newspapers, have also been downsized in recent years. The 1999 EPA *National Source Reduction Characterization Report* found that the U.S. waste stream has been experiencing long-term waste reduction from 1960 through 1996.

The strength of markets for recyclables can also affect the success of recycling programs. Markets are generally not as strong for paper and for other recyclables as they were in the mid-1990s. Depressed markets typically do not affect the success of municipally run residential collection programs because the government is committed to collecting certain materials; however, the private haulers that collect the commercially-generated recyclables may not be able to offer the service at attractive prices when the recyclables markets are depressed. Because the commercial sector generates about half of all waste, area recycling rates depend on business recycling programs. While most area jurisdictions have some form of business recycling mandate, support and enforcement of these programs varies widely.

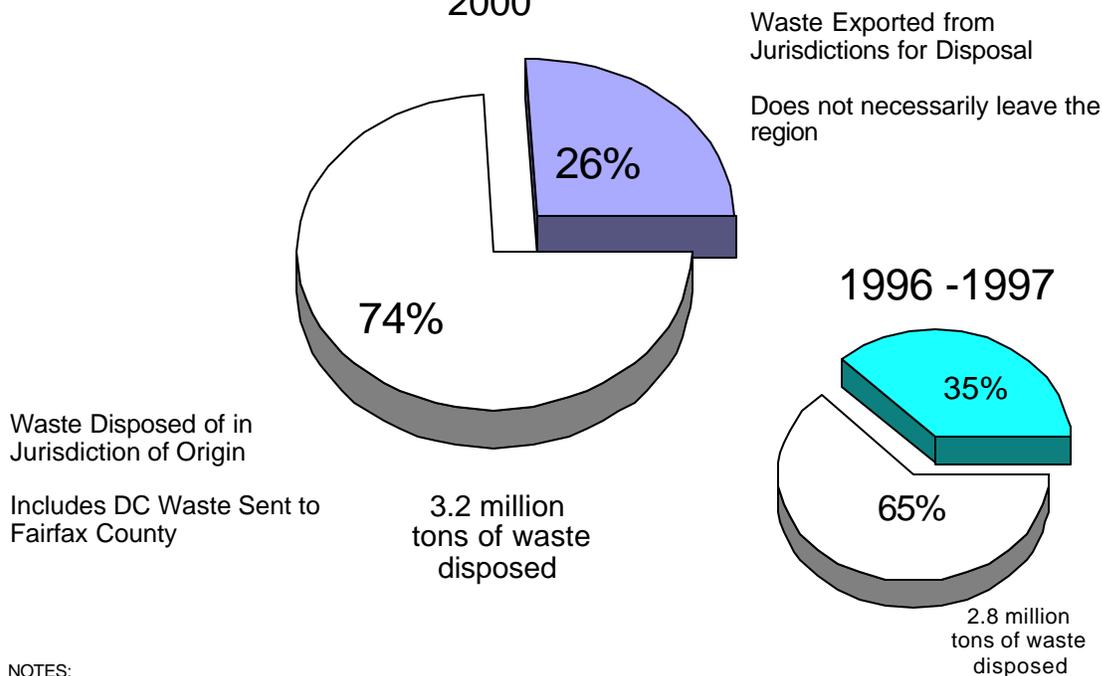
The last explanation for stagnant recycling rates is reduced government promotion. Local governments heavily promoted recycling programs in the early 1990's start-up period. Since then, the instruction residents and business have received on recycling has lessened. The public's understanding of what to recycle and how to recycle tends to erode due to the passage of time, the turnover in local population, and the introduction of new products. Recent surveys done by several area governments suggest that the public is often confused about what to recycle and what happens to the material once it is collected. This confusion is most pronounced for plastic containers, which are taking a greater percentage of the container market away from glass and metal every year. Many jurisdictions are trying to simplify their plastics recycling message for residents to "all plastic bottles" to avoid confusion and the contamination of the other recyclables.

TREND: The recycling rate for the region has leveled off in recent years. Reasons include the maturation of collection programs, a reduction in local recycling education, the reduction in weight of various consumer products, and the depressed markets for some recyclables.

4. Disposal

All area counties have publicly-owned or publicly-contracted capacity to dispose of municipal solid waste (see the Facilities section). Some of the waste collected for disposal leaves the region. It is difficult to estimate how much of the region's waste is exported. Local governments do not have any formal system for tracking the individual disposal decisions of private waste haulers. Waste disposal imports, and in some cases exports, are tracked by the District, Maryland, and Virginia state officials. These accounting systems can miss waste that leaves the state without going through a transfer facility or that is simply passing through the state.

Figure 4
Export of Municipal Solid Waste
 Washington Metropolitan Region
 2000



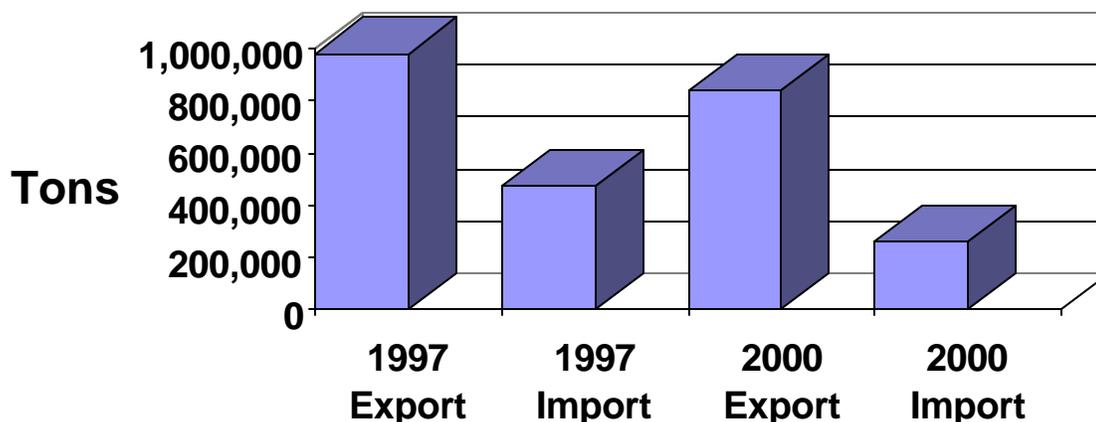
NOTES:
 -Jurisdiction refers to large jurisdictions: counties, the City of Alexandria, and the District of Columbia
 -1996, 1997 and 2000 data for COG member jurisdictions.

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A survey of area governments and state records suggests that approximately one million tons of solid waste is currently exported from the COG member jurisdictions for disposal. Not all of this waste necessarily leaves the region (see Figure 4). Some waste goes to neighboring government facilities for final disposal. The largest example of intra-regional transfer is the approximate 200,000 tons sent by the District government through a contractor to the Fairfax County waste-to-energy plant. COG staff estimates that approximately 830,000 tons, or 26% of all waste generated for disposal, leaves the region. The vast majority of the exported waste goes to private landfills in Virginia and a small amount to landfills in Pennsylvania. Net waste exports have decreased by total of about 150,000 tons per year since 1997 (see Figure 5); the exports as a percentage of all waste generated for disposal have decreased by about 9% (see Figure 4).

Waste imports to the region have slowed significantly over the past few years for a number of reasons. Prince William County changed its solid waste program from a tip fee to a user fee system in 1999. This change allowed it to close its landfill to all out-of-county waste with the exception of some waste brought in under an agreement with Fairfax County. Additionally, Prince George's County closed the Sandy Hill Landfill, which had been accepting waste from outside the county. And the Fairfax waste-to-energy plant has not had to actively seek waste imports recently. COG staff estimates that waste imports accepted by local facilities from outside the region or from neighboring jurisdictions have fallen by 44% from 472,000 to about 263,000 tons since 1997.

Figure 5
Import and Exports of Municipal Solid Waste
Washington Metropolitan Region 1997 and 2000



Excludes DC waste sent to Fairfax County

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Waste does continue to flow through the region by truck and rail from the north to southern Virginia landfills. See the Interstate Transport section for more detail.

TREND: Solid waste imports to the region for disposal have fallen as some local governments have been able to capture more locally generated waste.

C. Funding

Government waste management systems can be funded by per ton tipping fees at public facilities, by general tax fund revenue, and by user fees for services. Tipping fees at public transfer stations, disposal sites, or recycling facilities traditionally have paid for the cost of operating these facilities. Additionally, surcharges on tip fees have often funded other program areas, such as recycling and household hazardous waste collection.

Many local governments have had to reduce tip fees during the past decade to compete with private disposal options. These rate cuts combined with the loss of some disposal business have frequently meant the end of subsidies for programs other than facility operations. Most local jurisdictions have had to restructure how their waste management systems receive funding. See Table 2 for a listing of funding sources by jurisdiction.

Table 2: Local Government Waste Management Funding Sources

Jurisdiction	Funding Mechanism
City of Alexandria	All households pay user fee on property tax bill for city service; tip fees
Arlington County	All households pay user fee on utility bill; tip fees
City of Bowie	General tax revenue
City of College Park	General tax revenue
District of Columbia	General tax revenue; tip fee surcharge for DC waste
City of Fairfax	All households pay user fee on property tax bill for city service.
Fairfax County	Property tax bill charge only for households receiving service directly from county; tip fee at waste facilities; general tax revenue
City of Falls Church	General tax revenue
Frederick County	Landfill tip fees
Loudoun County	General tax revenue; tip fees
City of Manassas	All households pay user fee on property tax bill for city service; private transfer station host fees
Montgomery County	Solid waste/recycling user fee for households and businesses on property tax bill depending on level of services, but all parties pay a base fee regardless of service level; tip fees
Prince Georges's County	Solid waste/recycling user fee for all households and businesses on property tax bill depending on level of services, but all parties pay a base fee regardless of service level; tip fees
Prince William County	Solid Waste/Recycling User Fee for all households and businesses on property tax bill; fee covers basic recycling and disposal services; collection services are privately provided and billed.
City of Rockville	User fee for households on water bill and on county user fee system.
City of Takoma Park	General tax revenue

Sources:

Survey of Public Residential Solid Waste Services in the Washington Metropolitan Region. Northern Virginia Regional Council. May 2001; COG staff survey.

Montgomery County, Prince William County, and Prince George's County have made the most dramatic system funding changes. The complex Montgomery system charges separate user fees for disposal, recycling, and collection for both businesses and residences. Since there is no publicly-controlled collection in Prince William, its single system fee covers disposal and recycling-related services. Residents pay a flat fee based on their type of home (single family or town home) and companies pay based on business type and square footage. The charges allow Prince William to reduce its tip fee to \$0 for all in-county waste. Prince George's county has also been charging residents a fee for disposal and recycling services and just implemented a fee for businesses in July 2001.

These fees differ from older funding systems because the municipal charge applies to both businesses and residents. Also under newer fee systems, Governments are charging for disposal services at the municipal facility regardless of whether the waste generator's waste is collected by the county or even disposed of in the county. The benefit of this system is that it provides a

guaranteed funding source to meet bond payments and other expenses. Table 3 shows the most recently constructed local government facilities and their outstanding debt.

Table 3. Recently Constructed Local Government MSW Disposal Facilities

Local Government	Facility	Bonds	Comments
Arlington & Alexandria	975 TPD Waste-to-Energy Plant	\$75.65 million in 20 year bonds issued in 1988 — \$61.7 million outstanding Approximately \$48.5 million in bonds for air pollution retrofit issued in November 1998	opened 1988
Fairfax County	3,000 TPD Waste-to-Energy Plant	\$237.18 million issued in 1988; refinanced in 1998 for \$195.5 million	opened 1990
Frederick County	Reich's Ford Road Landfill Site B	\$20.7 million issued — \$18.6 million outstanding	opened 1997
Loudoun County	Loudoun County Landfill Wood Road Landfill	2 issues for old landfill: \$12.1 million issued (1989, 1993) — \$11.2 million outstanding 1 issue for new landfill: \$13.5 million issued in 1990 — \$2.8 million outstanding	Wood Road Landfill has been permitted but not constructed
Montgomery County	1,800 TPD Waste-to-Energy Plant	\$360 million in bonds issued by Northeast Maryland Waste Disposal Authority (NMWDA) — \$340 million outstanding; Montgomery owes \$40 in bond payments under a separate issue	opened 1995 Montgomery pays NMWDA a service fee to cover the bond debt payments
Prince George's County	Brown Station Road Landfill	several bond issues - \$78 million outstanding	under expansion; bond issues of \$10-\$15 million per year will continue over the next few years
Prince William County	County Landfill	\$29 million in 25 year bonds issued in 1990 — \$23 million currently outstanding	expanded in 1990

1998 data compiled by COG
Outstanding amounts are approximately for 1998

TREND: Area governments are restructuring their funding systems for waste management to provide a more stable revenue stream. Several local jurisdictions have implemented household

and business user fee systems for collection, disposal, and recycling services and others are studying possible implementation.

II. Facilities Serving the Region

A collection of public and private facilities serve the waste disposal needs of the Washington area. These facilities include landfills, transfer stations, and waste-to-energy plants. Table 4 shows the major public facilities in the region.

**Table 4: Major Public Disposal and Transfer Facilities,
Washington Metropolitan Area**

Location/Name	Owner/ Operator	Tip Fee FY 2002	TPD Accepted 2000	TPD Limit	Notes
Alexandria Alexandria/Arlington Waste-to-Energy Facility	COVANTA	\$58.68	875	975	ash to Fairfax ash monofill
District of Columbia Benning Road Transfer Station	District of Columbia	\$64.39	220	600	Facility scheduled for renovation and expansion
District of Columbia Fort Totten Transfer Station	District of Columbia	\$64.39	440	900	Facility scheduled for renovation and expansion
Fairfax County I-95 Ash Monofill	Fairfax County	\$11.50	N/A	N/A	Accepts MSW ash from Arl/Alex & Fairfax WTE plants
Fairfax County I-66 Transfer Station	Fairfax County	\$37.95	1,700	N/A	Sends waste to I-95 WTE plant
Fairfax County I-95 Energy/Resource Recovery Facility	COVANTA	\$37.95	2,500 - 3,000	3,000	
Frederick County Reichs Ford Road Landfill	Frederick County	\$50	550	N/A	Under expansion
Loudoun County Loudoun Landfill	Loudoun County	\$55	45	N/A	New landfill is permitted, but not constructed
Montgomery County Shady Grove Transfer Station	Montgomery County	\$44	1,500	N/A	Sends waste to Montgomery Resource Recovery Facility
Montgomery County Resource Recovery Facility	COVANTA/ Montgomery Co.	--	1,475	1,800	All waste taken from county transfer station
Prince George's County Brown Station Road Landfill	Prince George's County	\$49	1,300	N/A	
Prince William County Sanitary Landfill	Prince William County	\$0	600	N/A	Only accepts waste generated in county

Table 5 lists the private solid waste transfer stations in the region. These stations serve as a consolidation point where the curbside collection trucks can load waste into 18 wheel trash transfer trucks that remove the waste to a disposal facility. The District of Columbia in particular has had difficulty with private transfer stations that create a nuisance because they are too close to residential neighborhoods. A recent zoning law will require these stations to close by July 2002. See the COG report *Solid Waste Transfer Station Regulation in the Metropolitan Washington Region* (June 2000) for further discussion.

Table 5: Private Transfer Stations

Location/Name	Owner/Operator	TPD Accepted	Access	Distance from DC(miles)	Notes
District of Columbia BFI 1220 W St., NE	BFI	690	Truck	0	
District of Columbia Eastern Transit Waste 1315 1st St., SE	Eastern Transit Waste	390	Truck	0	
District of Columbia Waste Management 1140 3rd St., NE	Waste Management	675	Truck	0	In former Uline Arena
District of Columbia Waste Management 2160 Queens Ch. Rd., NE	Waste Management	620	Truck	0	
Anne Arundel Co., MD Annapolis Junction	Waste Management/MD Env. Service	1,750	Truck, rail	29	
Anne Arundel Co., MD Curtis Creek	Curtis Creek Recovery Systems	350	Truck	30	
Calvert County, MD Appeal	Calvert County/ Waste Management	500	Truck	64	opened Oct. 97
Loudoun County, VA Old Dominion	Waste Management	460	Truck	36	
Manassas, VA Waste Mgmt. Station	Waste Management	350	Truck	30	Rail access under consideration

TPD = tons per day

Sources: COG survey 2001;

Needs Assessment for Municipal Solid Waste Transfer for the District of Columbia 2000. SCS Engineers
Maryland Department of the Environment Annual Tonnage Report 2000

Table 6 details the large private landfills in Virginia that accept much waste from the metropolitan area. Notably, some landfills only accept waste generated in Virginia. Some of the landfills also have host community agreements that limit their daily or annual intake amounts. The tip fees listed, know as gate rates, are much higher than the contract prices most haulers pay to use the facilities.

Table 6: Private Landfills in Virginia

Location/Name	Owner/ Operator	Tip Fee	TPD Accepted	TPD Limit	Access	Notes
Amelia County Maplewood	Waste Management	\$38	1,200	5,000	Truck, rail, barge	
Brunswick County Brunswick Waste Mgmt. Facility	Allied Waste Industries	\$35	3,000	No limit	Truck, rail access at Petersburg 42 mi. away	Plan to have on-site rail in future; also seeking 200 acre site expansion
Charles City County Charles City Landfill	Waste Management	\$38	3,400	6,000	Truck, rail 5 mi. away, barge 12 mi. away	Building permanent barge station.
Chesterfield County Shoosmith	Shoosmith Brothers	N/A	2,500	no limit	Truck, rail 20 mi. away	Planning expansion to increase life by 30 years
Gloucester County Middle Peninsula	Gloucester Co./Waste Management	\$35	2,000	2,000	Truck, 15 mi. from rail (not used)	
City of Hampton Big Bethel	City of Hampton/Wa ste Management	\$38	1,300	No limit	Truck	30 yr. disposal contracts with Hampton and Newport News
Henrico County Old Dominion	BFI	\$48	2,000	No limit	Truck, rail	Only accepts VA waste
King George County K.G. Landfill & Rec. Center	King George Co./Waste Management	\$34	4,000	4,000- 4,500	Truck, rail	Receives waste from Annapolis Junction (MD) transfer station; 121 acres dedicated to MSW ash disposal
King and Queen County King and Queen	King and Queen Co./BFI	\$42	2,000	4,000	Truck	
Sussex County Brambles Landfill	Sussex County/Waste Management	\$40	4,600	No limit	Truck, rail	Unique in having no limits on hours or TPD disposed

TPD = tons per day

N/A = not available

Source: COG staff telephone interviews summer 1998 and summer 2001

Table 7 summarizes the available landfill capacity at the large private Virginia landfills. In some cases the capacity is limited by a local government host agreement and in some cases only by the operational restrictions of the landfill (these limits are rough estimates). Obviously, there remains much excess capacity to accept in-state and out-of-state waste.

Table 7: Mega-Landfill Capacities in Virginia 2000

Facility	Accepted TPD	Capacity TPD*	Limits
Sussex County - Brambles	4,600	10,000	no limit
Charles City County	3,400	6,000	host agreement
Amelia County	1,200	5,000	host agreement
Hampton - Big Bethel	1,300	5,000	no limit
King George County	4,000	4,000	host agreement
King & Queen County	2,000	4,000	host agreement
Henrico County	2,000	4,000	no limit
Shoosmith Landfill	2,500	4,000	no limit
Brunswick County	3,000	3,000	no limit
Gloucester County	2,000	2,000	host agreement
TOTAL	26,000	47,000	

TPD = tons per day

* = capacities for landfills with no host agreement limit are based on operational limits provided by Virginia environmental officials to Northern Virginia Regional Council; COG phone interviews

Source: COG telephone survey summer 1998 and 2001

II. Interstate Waste Transport

The interstate shipment of municipal solid waste has been steadily increasing over the past 10 years. According to the Congressional Research Service (CRS), waste imports have more than doubled over the last seven years from 14.5 million tons in 1993 to 32.0 million tons in 2000. Most of these interstate shipments occur in the Mid-West, Mid-Atlantic, and Northwest regions. The CRS estimates that 14.6% of all municipal solid waste generated in the United States is exported to another state for disposal. The United States Constitution's Commerce Clause protection of waste shipments, as clarified by the Supreme Court, severely limits a state's ability to control imports or exports.

A. Import and Export Data

Table 8 shows the leading state importers of municipal solid waste for disposal for 1997 – 2000. By far, Pennsylvania is the top importer followed by Virginia. Other major importing states are in the Midwest and West.

Table 8: Top States Importing Municipal Solid Waste 1997 - 2000 (in tons)

	State	1997 Quantity Imported (in tons)	1998 Quantity Imported (in tons)	1999 Quantity Imported (in tons)	2000 Quantity Imported (in tons)
1.	Pennsylvania	6,340,891	7,241,924	N/A	9,764,147
2.	Virginia	2,800,000	3,921,227	4,123,031	3,891,320
3.	Michigan	1,691,349	1,728,501	N/A	2,840,338
4.	Ohio	1,018,128	1,089,649	N/A	1,774,134
5.	Illinois	1,310,306	1,507,526	1,541,913	N/A
6.	Indiana	2,116,513	2,181,309	N/A	1,439,431
7.	Oregon	1,136,422	1,185,099	N/A	1,239,579
8.	Wisconsin	1,163,217	1,216,363	N/A	1,067,926

Sources:

Interstate Shipment of Municipal Solid Waste: 1998 Update. Congressional Research Service

Interstate Shipment of Municipal Solid Waste: 2000 Update. Congressional Research Service

Interstate Shipment of Municipal Solid Waste: 2001 Update. Congressional Research Service

Table 9 lists the top waste exporting states. New York tops the list at 6.8 million tons per year. New York City's only landfill, Fresh Kills, closed in the Spring of 2001 after a multi-year phase out of service. Most of the city's waste is now exported from the state. New Jersey, the number two exporter, has seen a dramatic increase in exports due to the recent loss of flow control. Maryland's exports have increased steadily over the recent years.

Table 9: Top States Exporting Municipal Solid Waste 1997 - 2000 (in tons)

State		1997 Quantity Exported (in tons)	1998 Quantity Exported (in tons)	1999 Quantity Exported (in tons)	2000 Quantity Exported (in tons)
1.	New York	5,450,00	5,776,502	N/A	6,807,167
2.	New Jersey	2,380,683	3,495,376	N/A	4,158,060
3.	Illinois	2,800,000	3,807,141	N/A	3,145,821
4.	Missouri	1,569,033	1,551,417	N/A	1,792,753
5.	Maryland	1,000,000	1,300,000	1,514,676	1,727,626

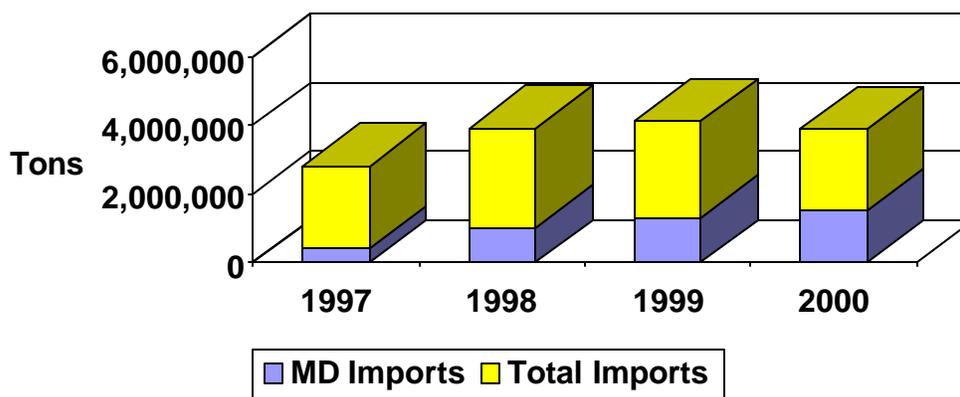
Sources:

Interstate Shipment of Municipal Solid Waste: 1998 Update. Congressional Research Service
Interstate Shipment of Municipal Solid Waste: 2000 Update. Congressional Research Service
Interstate Shipment of Municipal Solid Waste: 2001 Update. Congressional Research Service
Maryland Department of the Environment Annual Tonnage Report 1999

Table 10 details the waste import and export activities of the major mid-Atlantic states. It provides information, where available, on waste export destinations and sources of imports. Due to the inconsistent accounting systems employed by the states, waste import and export data do not always agree. Figure 6 depicts the movement of waste exports around the mid-Atlantic states.

The tables above show that waste imports for disposal to Virginia have stabilized over the past three years. During this time, the leading importer to Virginia has shifted from New York to Maryland. Waste from New York, mainly New York City, has found additional disposal capacity in New Jersey and Pennsylvania instead of Virginia. City officials indicate that long-term disposal deals may send much of this waste to South Carolina and Georgia by rail in the future. At the same time, many Maryland counties have decided to preserve their remaining public landfill capacity by exporting waste via private transfer stations.

**Figure 6
Virginia Waste Imports 1997-2000**



TREND: Waste imports to Virginia are stabilizing based on 1998 – 2000 data.

TREND: Waste exports from Maryland to Virginia are steadily increasing.

B. Transport

Municipal solid waste may be moved by truck, railroad, or barge to disposal sites around the country. In the Washington area, trucks and rail move waste southward through the region en route to the large landfills in central Virginia. COG staff estimates that trains haul 25% of this solid waste brought into Virginia for disposal and trucks haul the remaining 75%.

1. Trucking

Large tractor trailer trucks haul loads of municipal solid waste through the Washington area for disposal in Virginia. The trucks are known to travel the I-95 corridor, the Bay Bridge, and Route 301 into Virginia. Inside the COG region, trucks also originate from transfer stations in the District of Columbia and Northern Virginia. The majority of these trucks are not owned by the major waste collection and disposal companies, but operated by private contractors.

Data specifically on trash transfer truck movements is difficult to find. Using the data available, COG staff estimates that roughly 870 trash transfer truck trips (both delivery and return trips) are passing through the region per day based on 1999 and 2000 data. Additionally, staff estimates that 267 trash transfer truck trips (both delivery and return trips) are originating from the region to disposal areas outside the region. See Table 11. Based on truck transportation estimates developed by COG's Department of Transportation, trash transfer trailers are likely less than 5% of all similar truck traffic passing through or originating from the region. See Table 11 for detail.

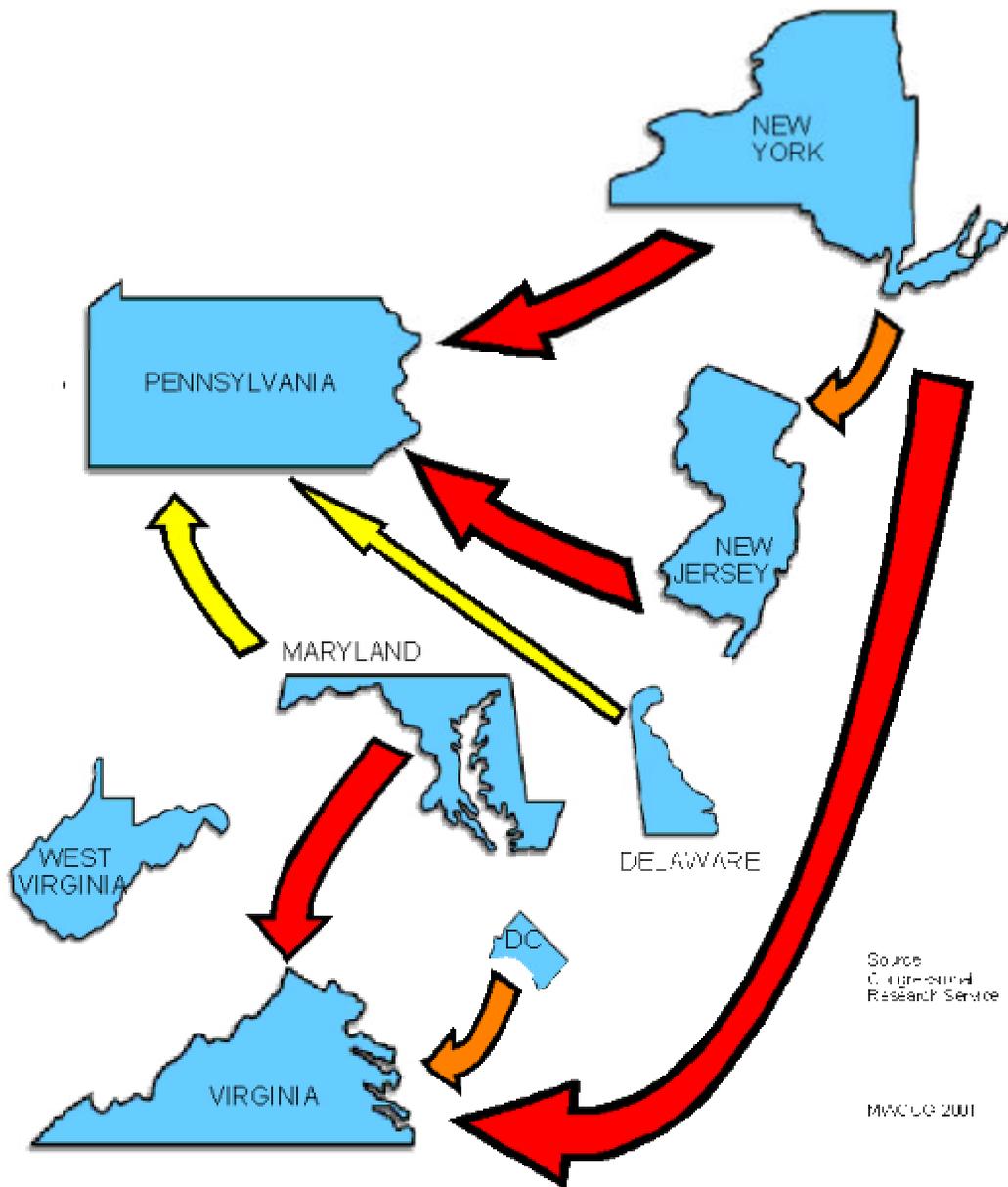
Table 10: Mid-Atlantic States Municipal Solid Waste Export 2000 (in tons)

State	Export		Import	
	Amount of MSW	Destination of MSW	Amount of MSW	Sources of MSW
Delaware	24,618	Almost all to PA	None	Not applicable
District of Columbia	978,900	88% to VA 12% to PA	None, but 366,900 tons of out of state waste passed through transfer stations	Mostly MD
Maryland	1,727,626 transfer facility records show 1,000,000 tons leaving the state	87% to VA 13% to PA	68,872	PA and WV
New Jersey	4,158,000	Mostly to PA	836,154 in 1999, most to Essex Co. incinerator	78% from NY 14% from PA 6% from CT
New York	6,807,167	70% to PA 15% to VA 10% NJ 5% to Ohio	539,000 (many include C&D waste)	N/A
Pennsylvania	553,000	77% to OH 22% to NJ 1% to VA	9,764,147	48% from NY 40% from NJ 4% from CT 4% from MD 4% from MA 4% from DC
Virginia	150,000	TN and NC	3,891,320	37% from MD 27% from NY 22% from DC 12% from NC
West Virginia	305,000	40% to KY 30% to OH 17% to PA 13% to VA	250,000 in 1998	N/A

Sources:

Interstate Shipment of Municipal Solid Waste: 2001 Update. Congressional Research Service;
Needs Assessment for Municipal Solid Waste Transfer for the District of Columbia 2000. SCS Engineers
Maryland Department of the Environment Annual Tonnage Report 2000

**Figure 7:
Interstate Transport of Municipal Solid Waste in the Mid-Atlantic 2000**



Source:
Congressional
Research Service

MWCG 2001

KEY	
	More than 1,000,000 tons per year
	Between 500,000 and 1,000,000 tons per year
	Between 100,000 and 500,000 tons per year

Table 11: Trash Transfer Truck Volume in the Metropolitan Area 1999-2000

Trips	Delivery Trips Per Day	Return Trips Per Day	Total Trips Per Day
Passing Thorough the Region (to VA)	435	435	870
Originating from DC area to Points Outside the Region (to VA)	133.5	133.5	267

Calculations based on 1999 and 2000 data; a six day week; 22 tons of waste per truck delivery.

This truck traffic obviously shares some of the air, road damage, and congestion impacts that all trucks have on the region. Several local governments also have some safety, environmental, and nuisance concerns about trash transfer trucks. Specifically, Fairfax and Prince William Counties have reported problems with illegal truck and trailer parking along public streets and on vacant parking lots. The truck operators use these points as parking, sometimes overnight, until a driver with the legally defined amount of rest can arrive to continue down the road. Fairfax County officials found the trucks were often leaking trash, had insufficient structures to contain the trash, and had several safety violations. Fairfax County has changed its ordinance to address the problem and the Virginia General Assembly passed legislation in 2001 to allow all jurisdictions to address the problem.

Other states have also reported specific problems with trash transfer trucks. Over the past few years, several mid-Atlantic states have participated in the TrashNet operations to crack down on trash truck violations on a given day or week. TrashNet was organized by Pennsylvania, which conducted the extensive Operation Clean Sweep in its state in May 2001. Of the 35,000 trucks inspected for environmental violations, 8% had problems; of the 2,000 trucks inspected for safety, 25% were taken out of service.

Clearly, trash transfer trucks have problems, but the motivation of Clean Sweep as designed by then-Governor Tom Ridge was as much to frustrate the waste industry as to find violations. It is not clear if trash transfer trucks have significantly worse safety records than other large trucks. In May, Governor Ridge proposed a two-year moratorium on all landfill construction or expansion, a requirement that waste haulers must ask for permission to operate in the Pennsylvania, and the ability to raise per truck fees to cover inspection costs.

2. Barging

No waste is currently barged into Virginia for disposal. Waste Management, Inc., (WMI) was pursuing this method when the state legislature passed a law forbidding barging in 1999. WMI, along with other parties, challenged the law in federal court. The U.S. Fourth Circuit Court found that the law violated the commerce clause of the U.S. Constitution. This ruling was upheld by the Court of Appeals in June 2001 with the exception of a barging safety issue raised by Virginia. The safety issue, the dangers of stacking waste containers, was sent back to the

lower federal court for trial. Virginia is appealing the larger issue of commerce clause violations for barging and other waste laws passed in 1999 to the U.S. Supreme Court. If authorized, waste barges have the potential to replace some of the trash transport trucks currently traveling through the metropolitan region. This replacement could reduce air, road and congestion impacts on the region.

TREND: State and local governments are trying to crack down on trash transfer truck safety and environmental violations.

IV. Market Outlook and Future Developments

The purpose of this section is to consider some trends in waste management that are just beginning to develop, but are likely to have impacts on the region.

A. Export of Solid Waste For Disposal

As discussed previously, Maryland has become the number one importer of waste to Virginia. Many counties in Maryland are choosing to preserve their remaining public landfill capacity by exporting waste via private transfer stations. Counties often contract with a private operator to build the transfer station, which pays the home county a host fee for every ton transferred. The incentive for this arrangement is that landfills are becoming increasingly costly and difficult to build in suburban areas and the cost of sending waste to private Virginia landfills is relatively low.

While no local government in the COG region with the exception of the City of Manassas has adopted this option for waste that it controls, it is likely that several governments will turn to this option in the future as their landfill space diminishes. Both Prince George's County and Frederick County are considering the construction of a transfer station. Loudoun County has also preserved landfill space due to a nearby private station, but the county has no business relationship with the station. Additionally, the District of Columbia is renovating its two public transfer stations in anticipation of higher waste volumes as antiquated private stations in the city close. The waste from the District's transfer stations currently goes to Fairfax County's waste-to-energy plant through a contractor. It is possible that the District waste could be exported to a different disposal facility in the future as the Fairfax plant would not have the capacity to handle increased volumes delivered by the city's contractor or may not be the best financial deal for the city.

TREND: Exports of waste from the region are likely to increase significantly in the next several years as local governments support the construction of transfer stations to preserve existing landfill capacity or to address other concerns.

B. Markets

The markets for waste disposal and recycling are changing. There is some indication that the per ton disposal prices available in long-term contracts from private Virginia landfills are beginning to rise. Such an increase would be good news for local governments that owe debt payments on a disposal facility and have had to lower their prices in recent years to compete with the large landfills.

The prices paid for construction and demolition debris disposal in the region are also increasing due to new regulations in Maryland that require all construction and demolition (C&D) debris landfills to be lined as of July 2001. Prices have been increasing at Maryland and Virginia C&D landfills since some Maryland facilities have closed.

Recycling markets have generally been depressed the last few years for materials collected in area programs. The recent economic down turn has not helped as the recycling industry usually

sees the prices paid for materials decline during recessions. Glass prices have been particularly hard hit in recent months as standards for recyclable glass have increased.

Recyclable glass has some unique impacts on curbside recycling programs. Glass is by far the heaviest of the container types collected in curbside programs, so it contributes significantly to the recycling rate, which is measured by weight. But glass causes collection problems because the resulting broken glass is a hazard to collection crews, is the major contaminant in “single stream” collection programs (discussed below), and is difficult to market. Additionally, plastics are replacing many traditional glass containers on supermarket shelves. Several communities around the country have removed glass from their curbside collection programs.

TREND: Municipal solid waste disposal prices are moving upward at private facilities; prices for construction and demolition debris disposal are also increasing in the region; recycling markets are suffering from the depressed economy.

C. Single Stream Recycling

Communities as close as Virginia Beach and Richmond are trying a new residential curbside recycling collection system called “single stream” recycling. Under the system, residents receive an additional waste cart which holds all the household’s recyclables (various paper grades, glass, metal cans, plastic bottles) mixed together. The system is more efficient than traditional curbside programs because only one truck is required to collect all the recyclables. In some cases, existing refuse trucks can be retrofitted to collect the recyclables.

Single stream collection systems typically boost the recycling rate for their community. Collection costs for single stream recycling are lower and the program is also simpler for residents to understand since it requires less sorting. Processing costs are naturally higher because the recyclable processing facility must have more sophisticated sorting equipment and procedures. The potential for contaminated recyclables is higher with single stream recycling than with traditional systems. The paper industry is concerned that the paper product will become so contaminated with glass shards and other items that it will be worthless. Several area local governments are interested in exploring the program.

TREND: “Single stream” recycling programs for residential curbside materials are gaining interest due to lower collection costs and the promise of higher participation rates.

D. Electronics Recycling

The public is demanding recycling services for personal computers and other consumer electronics. The rapid obsolescence of today’s electronic equipment is creating an increase in electronics waste from both businesses and residents. The demand for electronic recycling is stimulated both by the public’s desire to see their once-expensive computers go to a higher use than the garbage pile and also by the regulatory concern that computer monitors and television should be kept out of disposal facilities. Monitors and televisions both contain leaded glass that has the potential to be a hazardous material according to the U.S. Environmental Protection Agency.

Several local governments have established one-day or weekly electronic recycling events. In some cases, the resident must pay to recycle computer monitors and televisions, in other cases it is subsidized by the local government. EPA Region III is attempting to establish the E-Cycle program with support from computer manufacturers and retailers to help subsidize the cost of electronics recycling for residents of the mid-Atlantic states. The program is still under development.

TREND: Local governments are looking for solutions to the problem of recycling electronics for residents and small businesses.

V. Survey of Local Government Waste Management Staff

COG surveyed local government waste management staff in the region at the direction of the COG Board Solid Waste Task Force. COG asked the staff to identify waste management issues of concern to area local governments that may benefit from regional cooperation. The respondents did not rank the issues in any particular order.

COG staff supplied some suggested topics known to have support. The respondents were generally in agreement with the topics and added some additional interests. Below are listed the issues suggested by COG staff:

- Long-haul trash truck transportation safety
- Promotion of recycling to residents and businesses through a regional program
- Securing funding for local government waste facilities and programs
- Location of public and private transfer stations
- Endorsement of federal flow control legislation grandfathering jurisdictions that operate facilities constructed with flow control-based funding
- Opposition to federal legislation limiting interstate waste transport
- Opposition to Commonwealth of Virginia attempts to ban barging of waste

Additionally, area waste management staff suggested the following issues, which are refinements of the issues above in some cases:

- Support funding and enforcement of truck inspection programs
- Eliminate public nuisance transfer stations that are not up to standards
- Developing and sustaining recycling markets
- Coordination of waste management response to both natural and man-made disasters
- Funding for solid waste planning
- Further establishment of electronics recycling programs
- Interest in converting curbside residential collection programs to “single-stream” collection programs
- Support regional solutions for biosolids disposal/recycling

The responses reflect staff reactions to many of the trends identified in this report. Many issues are long-standing. Several areas have been supported by previous COG Board of Directors’ resolutions, such as support for federal flow control legislation, concern over trash transportation safety, and concern over the effects of interstate waste restrictions and state barge bans on the regional waste management system. Many jurisdictions have individually taken action to prevent or eliminate private trash transfer stations from becoming nuisances, although not all these actions have yet succeeded.

Some issues deal with the need for coordinated planning in the metropolitan area. The District of Columbia and the surrounding state regulatory bodies control solid waste management planning and require periodic plans from their local governments. The planning structure of the VA-MD-DC area does not encourage area governments to plan together for the future. An issue

like disaster planning lends itself more to regional coordination across state lines. Additionally, a de-emphasis on long-range planning at the state level has also contributed to some of the over-capacity for waste disposal in Virginia and the resulting waste imports that flow through the region. Funds for this type of planning are typically not provided by the states.

The recycling issues in the survey center around improving the efficiency of existing programs and dealing with demands on local governments to recycle new materials. The effectiveness of area recycling programs appears to be leveling off. There may be benefits to streamlining the collection system for both residents and collection staff, to placing more emphasis on regional promotional campaigns, to developing area markets for recyclables, and to examining regional solutions to recycling the increasing amount of electronics in the waste stream.

The issue of biosolids recycling and disposal is outside of the traditional scope of municipal solid waste management. There is some overlap with solid waste programs because the material, which had in many cases has been land applied as fertilizer, is now frequently being banned from land application and sent to traditional solid waste disposal facilities. COG has a working group currently examining this issue.

VI. Recommendations

The COG Board Solid Waste Task Force reviewed the trends identified in this report and the concerns of area local government waste management staff. After discussing this information, the Task Force developed 12 recommendations for solid waste management in the region. The following text summarizes the reason for each recommendation.

1. Coordinate regional plan for waste management during natural and manmade disasters.

Each local government generally has its own waste management plan to deal with debris removal following major storms. The recent terrorist attacks in New York and Washington have shown that there may be a previously unplanned for need to dispose of large amounts of debris following the destruction of building or other disaster.

Concern over how to handle materials contaminated by Anthrax has also highlighted the need to protect municipal solid waste handling facilities from exposure to dangerous material. These facilities, both public and private, should receive timely information on where suspicious material may have gone for disposal and on what will happen to quarantined material. The Task Force recommends that COG coordinate discussions toward developing a regional plan.

2. Compile information on regional trash transport truck violations and best enforcement practices elsewhere.

3. Seek funding and legislation for additional local government truck inspection programs.

As discussed in the report, private hauling companies are transporting high volumes of solid waste through, and from, the region to disposal facilities in central and southern Virginia. The safety and environmental impacts of some of the tractor trailers hauling the waste are a concern to several area jurisdictions. Some states in the mid-Atlantic have held surprise inspections of these trucks and sought stricter inspection and licensing requirements. The state police typically are responsible for routine and special inspections, but often have limited resources to devote to enforcement. The Task Force recommends that COG compile information on trash transport truck violations in the region and practices by jurisdictions outside the region. COG should also seek funding so that local governments can support their own police inspection units to enforce trucking laws.

4. Endorse regional recycling promotion campaign organized by COG.

Recycling rates in the region have plateaued in recent years. An overall reduction in recycling education as recycling programs have reached maturity is one of the primary reasons local governments see for this stagnation. Recycling program managers universally acknowledge the need for continual recycling education to keep programs operating effectively. The COG Recycling Committee and Environment and Public Works Committee have endorsed the concept of a regional recycling promotional campaign organized by COG. The advantages of such a campaign would be the economies of scale of buying a single recycling radio advertisement for

the region as opposed to each individual county creating its own similar message. The Task Force agrees that COG should move forward with developing this program.

5. Support the location of municipal solid waste transfer stations to minimize neighborhood nuisances.

The problems associated with solid waste transfer stations being located too close to residences and other businesses are well documented. These problems are most evident in the District of Columbia, but can affect any jurisdiction. As the demand for trash transfer services is likely to grow in coming years, the Task Force believes that local government officials should strongly consider the impact of facilities that they construct, approve, or utilize on surrounding neighborhoods.

6. Develop regional web-based resource for area electronics recycling, explore regional recycling opportunities.

Increasingly, area residents are demanding recycling services for computers and other electronics. Local governments are trying to respond to this demand with various types of collection events and drop-off programs. Region III of the Environmental Protection agency is attempting to facilitate a subsidized program for the mid-Atlantic. The Task Force recommends that COG coordinate this information into a Washington specific web-based resource to help citizens understand how to best recycle an electronic device as these programs evolve. COG should also explore any opportunities for regional cooperation.

7. Endorse Congressional solid waste flow control legislation that would grandfather powers to local governments with facilities financed on local flow control laws.

8. Oppose Congressional interstate waste legislation that would restrict a state's ability to import and export waste for disposal.

The COG Board of Directors has adopted resolutions in the past that support Congressional legislation grandfathering flow control power for municipal solid waste to local governments that built facilities financed on flow control laws. These powers end when the facility bonds are paid off. The Board has also opposed Congressional legislation that would restrict the transfer of waste across state lines for disposal because of the difficulties it would create for area jurisdictions. The Task Force recommends continuing these positions as such legislation is still active in Congress.

9. Express concern regarding proposed Virginia legislation that would place a surcharge on every ton of waste disposed of in Virginia.

10. Oppose Commonwealth of Virginia attempts to ban the barge transport of municipal solid waste.

The Commonwealth of Virginia has adopted and considered adoption of several laws to limit the import of waste to the state for disposal. One such 1999 law banned the barging of solid waste on Virginia waterways. The law was in response to attempts by a private company to barge waste from the New York area to Virginia. Waste from that part of the country is now largely brought to Virginia by trucks that pass through the Washington region. The Task Force recommends opposition to the barge ban because barging could help remove trash transport

trucks from regional roads, thereby, reducing impacts on traffic and air quality. The barge ban law is currently under challenge in federal court.

There has also been a proposal by the Virginia Recycling Markets Development Council to impose a five-dollar surcharge on every ton of waste disposed of in Virginia. The surcharge plan may be introduced as legislation in 2002. The proceeds of the surcharge would theoretically go to fund a state recycling coordinator position and return funds to local governments for recycling programs. Obviously, the surcharge would also raise the cost of disposal at all waste facilities for all users and would potentially discourage the import of waste. The Task Force recommends caution in supporting this potential legislation as it will raise the cost of disposal for all in-state and out-of-state users of these facilities and it may not guarantee a return of funds to local governments.

11. Direct COG Recycling Committee to continue research on “single stream” recycling.

“Single stream” recycling is a simpler way for residents to sort their recyclables and for haulers to collect them. This method has the potential to boost residential curbside recycling participation and to lower collection costs, but it does raise the cost and complexity of processing the material for recycling. Several local governments are interested in exploring “single stream” collection. COG has already held a meeting on this subject. The Task Force recommends that the Recycling Committee continue to investigate its application.

12. Create a standing COG Board Solid Waste Task Force to communicate waste issues of concern to the COG Board of Directors.

Lastly, the Task Force recommends that the COG Board create a standing Solid Waste Task Force that will convene as needed. The purpose of the task force would be to create a mechanism to communicate waste issues of concern to the COG Board of Directors for timely consideration.

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The purpose of this report was to identify the major municipal solid waste management trends affecting the Washington metropolitan area. The Task Force has recommended regional action based on these trends and on the concerns of area local government solid waste staff. Given the diverse set of management systems and laws controlling waste handling in the regional, the Task Force hopes that regional action through COG can respond to the interrelated problems that affect all jurisdictions.

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