

**City of Manassas
Solid Waste Management Plan
2020 Update
(9 VAC 20-130-10 et seq)**

Prepared For:

**City of Manassas
and
Virginia Department of Environmental Quality
March 22, 2021**



**Blacksburg ♦ Charlottesville ♦ Hampton Roads ♦ Richmond,
Virginia**

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Solid Waste Management Plan
(9 VAC 20-130-10 et seq)
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**SWMP UPDATE
March 22, 2021**

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Topic from 9VAC20-130-120/130	Chapter	Appendix
C.7 Description of outreach programs for waste exchange, public education, and public participation	Ch 5.7 , Ch 10	7 , 8 , 9 , 12
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H. Plan shall clearly and explicitly demonstrate the manner which the goals of the chapter shall be accomplished and actions to take if these requirements are not met.	Ch 7 , Ch 8	10.2
I. Action Plan – Submit plan upon failure to meet requirements	NA	NA
130-A. public participation during plan development through such means as public meetings or citizen advisory committees.	Ch 10	12
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EXECUTIVE SUMMARY

A Solid Waste Management Plan is a document prepared in accordance with State regulation 9 VAC 20-130-10 et seq. which must address solid waste planning in an approved Planning Unit or Region. The City of Manassas is an approved Planning Unit. The plan sets forth solid waste management goals and objectives for a 20-year period and describes the planning and regulatory concepts to be employed by the adopting locality to meet those goals and objectives. The plan per the regulations must consider and address the components of the following hierarchy:

- Source reduction
- Reuse
- Recycling
- Resource Recovery (waste to energy)
- Incineration
- Landfilling

The plan must be adopted by the locality and will be used as a guide for future policy decisions concerning solid waste management. The plan must be updated every five years by the adopting region.

Failure to maintain a plan or meet certain regulatory goals, may impact future permitting of solid waste management facilities in the Planning Unit.

Goals and Objectives

The City of Manassas has developed and adopted this Solid Waste Management Plan with the following goals in mind:

1. Maintain Federal and State Laws and Regulations

- Following Federal and State regulations regarding solid waste and recycling management updating programs and delivery as required.

2. Meet the needs of its citizens

- Providing accessible, affordable, convenient and reliable trash and recycling services.
- Monitoring and maintaining a high standard of efficiency and quality in the delivery of trash and recycling services.

3. Programs should be environmentally sound

- Working to reduce waste and increase recycling through effective education and outreach.

- Ensuring that the trash and recycling services provided are sustainable and reduce the negative impact on our environment.
- Fostering partnerships that will enhance our local economy using environmental improvements that create cleaner safer neighborhoods.
- Improving the environment in our community by working with area businesses, community leaders and our citizens to create a clean and safe place to live and work.

4. Programs should be economically sound

- Providing efficient and cost effective contracted curbside trash and recycling collection services to residents.
- Providing residents with accessible, efficient and cost-effective drop-off services and opportunities for recyclable materials.

5. Empower citizens to become informed and active participants

- Ensuring citizen participation through appointments to the Citizen’s Advisory Committee on Solid Waste.
- Encouraging active volunteer participation in recycling and litter reduction program opportunities through Keep Manassas Beautiful.
- Providing clear and concise information and guidelines for safe trash and recycling disposal.
- Providing opportunities for engagement through events, projects and initiatives.

6. Work to enforce the City’s Solid Waste Code

- Ensuring adherence to City ordinances for trash and recycling through active enforcement.
- Monitoring and updating ordinances to ensure compliance with state and federal laws.

7. Seek new opportunities for improvements and expansion of the trash and recycling program

- Actively participating in local, regional and state organizations aimed at monitoring and improving trash and recycling practices.
- Seeking improvements in sustainability and innovation through the contracting and purchasing process.
- Piloting new programs to improve the development and delivery of services to citizens.

Plan Adoption

The original solid waste plan was adopted by the City of Manassas on July 23, 1991. The plan was updated and approved on September 9, 1997, June 25, 2004, and August 5, 2010 with an update letter on March 3, 2015. This current Update to the plan will be approved in accordance with the regulations.

Summary of Proposed Specific Actions

Past and Proposed Specific Actions to be taken under this update to the plan can be seen in [Appendix 10-2](#).

Recordkeeping

The City designated the Refuse and Recycling Coordinator as administrator for trash and recycling services and contract management within the City of Manassas.

The City documents solid waste activities through:

- Daily service records of collections and disposal.
- Annual reports to the City Council indicating how the goals and objectives of the program have been met.
- Periodic updates presented to the City Council as requested.
- Regular submission of the Recycling Rate Report (Form 50-30) to the Virginia Department of Environmental Quality (VDEQ).
- Regular submission of program data to the Northern Virginia Regional Commission Solid Waste Board
- Contracts and service agreements with vendors.
- Citizen Advisory Committee Agenda, Minutes, and Annual Reports

The Director of VDEQ receives copies of the appropriate information through the following sources:

- Submission of the Recycling Rate Report (Form 50-30) to VDEQ.
- New permit requests.
- Permit amendments.
- Updates to the Solid Waste Management Plan.

1.0 INTRODUCTION

The City of Manassas¹ has been approved as a Planning Unit by the Virginia Department of Environmental Quality (VDEQ). As an approved Planning Unit, the City must maintain a current Solid Waste Management Plan in accordance with the Virginia Solid Waste Planning and Recycling Regulations, 9 VAC 20-130 et seq.

The Solid Waste Management Plan is required to be updated every five years based on the original date of approval by VDEQ or amended when significant solid waste management activities occur in the Planning Unit.

The original solid waste plan was adopted by the City of Manassas on July 23, 1991. The plan was updated and approved on September 9, 1997, June 25, 2004, and August 5, 2010 with an update letter on March 3, 2015. This current Update to the plan will be approved in accordance with the regulations.

This Plan will replace the previous submission and is considered an Update major amendment under the regulations because of the significant changes in the City's solid waste program. This Solid Waste Management Plan has been prepared for and adopted by the City of Manassas in accordance with regulatory requirements 9 VAC 20-130-175. Documentation adopting the plan as required by the regulations can be found in [Appendix 13](#).

1.1 Legislation

This Solid Waste Management Plan has been prepared in accordance with the Virginia Waste Management Board's, Regulations for Solid Waste Management Planning, Amendment 2, 9 VAC 20-130-10 et seq.,² effective November 28, 2007.

1.2 Authority (9 VAC 20-130-20)

The regulations were promulgated pursuant to Chapter 14 (Sec.10.1-1400 et seq.)³ and specifically Sections 10.1-1402, 10.1-1411 and 10.1-1413 of Title 10.1 of the Code of Virginia, which authorized the Virginia Waste Management Board to promulgate and enforce such regulations as may be necessary to carry out its duties and power, and the intent of the Virginia Waste Management Act and the federal acts.

¹ <http://manassascity.org/>

² <https://law.lis.virginia.gov/admincode/title9/agency20/chapter130/>

³ <https://law.lis.virginia.gov/vacode/title10.1/chapter14/>

1.3 Purpose 9 VAC 20-130-40

The purpose of the regulations as generally stated in 9 VAC 20-130-40 and elsewhere in the regulations is to:

1. Establish minimum solid waste management standards and planning requirements for protection of public health, public safety, the environment, and natural resources throughout the Commonwealth;
2. Require the development of a comprehensive and integrated Solid Waste Management Plan that addresses all components of the solid waste hierarchy established by the United States Environmental Protection Agency (EPA) as embraced by the Commonwealth including:
 - Source Reduction (most desirable activity)
 - Reuse
 - Recycling
 - Resource Recovery (waste-to-energy)
 - Incineration
 - Landfilling (least desirable activity)
3. Promote local and regional planning that provides for environmentally sound and compatible solid waste management with the most effective and efficient use of available resources;
4. Establish procedures and rules for designation of regional boundaries for Solid Waste Management Plans;
5. Establish state, local government, or regional responsibility for meeting and maintaining the minimum recycling rates of 25%;
6. Establish the requirement to withhold permits for failure to comply with the regulations;
7. Provide a method to request reasonable variance or exemptions from the regulations;
8. Provide for reporting and assessment of solid waste management in the Commonwealth.

1.4 Recycling 9 VAC 20-130-125

9 VAC 20-130-125 (Recycling Requirements)⁴ states:

A. Each solid waste planning unit shall maintain a minimum recycling rate for municipal solid waste generated within the solid waste planning unit pursuant to the following schedule:

- 1. Except as provided in subdivision 2 of this subsection, each solid waste planning unit shall maintain a minimum 25% recycling rate; or*
- 2. Each solid waste planning unit shall maintain a minimum 15% recycling rate if it has (i) a population density rate of less than 100 persons per square mile according to the most recent United States Census or (ii) a not seasonally adjusted civilian unemployment rate for the immediately preceding calendar year that is at least 50% greater than the state average as reported by the Virginia Employment Commission for such year.*

The 2010 census indicated the City of Manassas had a population of 37,821. The City has a reported size of 9.94 square miles and thus 3,805 persons per square mile. It must therefore meet the 25% recycling goal. Because the City has a population of less than 100,000 people, as of CY 2012 it must only report recycling information to VDEQ every four years although it is required to keep accurate statistics on recycling in the in between years.

1.5 Planning Area

The planning area is the City of Manassas. See [Appendix 1.1](#) for a vicinity map.

1.6 Planning Period

The planning period for this Solid Waste Management Plan is 20 years from 2020 – 2040.

1.7 Definitions

Definitions relating to solid waste collection and disposal are contained in the Code of Ordinances for the City of Manassas, Virginia⁵ Chapter 98.1 Section 1-2

Definitions relating to solid waste management are also included in the Virginia Solid Waste Management Regulations 9 VAC 20-81-10⁶.

⁴ <https://law.lis.virginia.gov/admincode/title9/agency20/chapter130/section125/>

⁵ https://library.municode.com/va/manassas/codes/code_of_ordinances?nodeId=PTIICOOR_CH98.1SOWA

⁶ <https://law.lis.virginia.gov/admincode/title9/agency20/chapter81/section10/>

1.8 Figures

The following figures are provided in Appendix 1:

- [Appendix 1.1](#)- Orientation Map, Northern Virginia Regional Commission
- [Appendix 1.2](#)- Waste Facilities Map
- [Appendix 1.3](#)- Zoning Map
- [Appendix 1.4](#)- City Street Map

For interactive maps and GIS information visit the City of Manassas Webpage⁷.

2.0 BACKGROUND INFORMATION

To provide background to the discussions contained in this Solid Waste Management Plan, a discussion of the status of solid waste management nationally and an overview of the City's historical solid waste events are being provided in this Section. See Manassas City's Trash and Recycling Webpage⁸ for more information on ongoing planning area solid waste operations and public reporting. A list of past and future Solid Waste actions of the City can be found in [Appendix 10.2](#)

2.1 Solid Waste Facilities Used By The City

See [Appendix 2.1](#) for a list of facility information. This list will be updated as Facilities and Contractors change.

2.2 Status of Solid Waste Management Nationally

[Appendix 2.2](#) contains the latest published information from the United States Environmental Protection Agency in regard to solid waste management in the United States and should be consulted as interest dictates.⁹

⁸ <http://www.manassascity.org/270/Trash-and-Recycling>

⁹ <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling>

3.0 DEMOGRAPHIC DATA

3.1 Location

The City of Manassas is located in Northern Virginia within the Washington, DC Metropolitan Statistical Area (MSA). The City is 35 miles southwest of Washington DC and is surrounded by Prince William County. Manassas has a total area of 10.2 square miles as of 1984. See the Maps and Figures in [Appendix 1](#) for more information.

3.2 Population

The City of Manassas compares in area and population with the cities of Falls Church, Leesburg, and Fairfax City. The City's population grew by nearly 8% from 37,821 to 41,379 between 2010 and 2017. For more information see the City's Comprehensive Plan¹⁰ Chapter 2 and Appendix B2 which provides more information as well as the City's strategies and planning. See [Appendix 3.1](#) for population projections for the planning period with data sourced from The Weldon Cooper Center¹¹.

3.3 Geographic Conditions

3.3.1 Geographic Setting

The City of Manassas is in the Occoquan watershed with approximately one half of its water draining into Broad Run and the other half into the Bull Run tributary that leads to the Occoquan reservoir.

See [Appendix 3.2](#) for the Northern Virginia Community Profile for more information on Manassas and the region.

3.3.2 Physiography

The City of Manassas is located in the Piedmont physiographic province and situated in the Culpeper Basin, a large Mesozoic trough that stretches across the central Piedmont from Culpeper County north through Fauquier, Prince William, and Loudoun Counties into Maryland. The Culpeper Basin is a distinctive regional landscape with relatively low relief and gently rolling to nearly level topography.

3.3.3 Climate

Manassas has an average annual temperature of 12.8 degrees C. The warmest month is July with an average temp of 24.7 degrees C. The coldest month is January with an average temperature of 0.3 degrees

¹⁰ <http://manassascity.org/2431/Comprehensive-Plan-Update>

¹¹ <https://demographics.coopercenter.org/virginia-population-projections>

C. The annual average precipitation is 993mm with the driest month in February averaging 68mm of rainfall and the wettest month in August averaging 98mm.¹²

3.4 Transportation

Manassas is on the outer edge of the Northern Virginia/Washington, D.C. metro area. Easy automobile access to the metro area is provided along two major interstates: I-66 is approximately 5 miles to the north of the City, and I-95 is approximately 15 miles to the southeast. Route 28 enters the City on the North East corner, which borders the city of Manassas Park, and almost bisects the City as it travels through the historic district and then turns southwest towards Nokesville. The City's other main artery is Route 234, which connects I-66 through the City to I-95 in the southern part of Prince William County.

The City has many transportation options including freight service, passenger rail service, bus service, and easy access to the Washington Metropolitan Area Transit Authority Metro Rail Service. CSX and Norfolk Southern provide freight service while Amtrak and Virginia Railway Express (VRE) provide passenger rail service from the city.

See the City's Comprehensive Plan¹³ dated 02/24/2020 Chapter 6 and Appendix C1, which provides information on transportation in the city. See the Transportation Master Plan developed as part of the Comprehensive Plan¹⁴.

3.5 Utilities and Services

See the City's Comprehensive Plan dated 02/24/2020 Chapter 7 and Comprehensive Plan Appendix C2 which provide information and strategies for planning the City's Community Facilities and Infrastructure.

The City of Manassas is fortunate to have a robust system of utilities that it owns and maintains. City residents and businesses speak highly of the City's utilities for their reliability and low cost of service. An overview of major City departments is given in a presentation attached in [Appendix 3.3](#).

The City provides water, sewer, electricity, solid waste management and stormwater management services to its citizens. Gas is provided by Columbia Gas. Telephone service is through Verizon and Cable through Comcast and Verizon.

¹² <https://en.climate-data.org/north-america/united-states-of-america/virginia/manassas-18553/>

¹³ <http://manassascity.org/2431/Comprehensive-Plan-Update>

¹⁴ <https://www.manassascity.org/2530/Transportation-Master-Plan>

3.6 Economic Growth

See the City's Comprehensive Plan¹⁵ dated 02/24/2020 Chapter 5 and Appendix B2, which provides information on economic growth projections.

3.7 Land Use

See the City's Comprehensive Plan dated 02/24/2020 Chapter 3, which provides information on land use both existing and future projections.

3.8 Environmental Stewardship and Sustainability

See the City's Comprehensive Plan dated 02/24/2020 Chapter 8, for information on the City's goals and objectives for Environmental Sustainability & Health.

¹⁵ <http://manassascity.org/2431/Comprehensive-Plan-Update>

4.0 WASTE GENERATION AND COMPOSITION

4.1 Historical Waste Generation

Table 4-A in [Appendix 4.1](#) provides information on the historical waste generation in the City and per collection tonnage taken from 2010 to 2018 City records. Table 4-B shows greater information on per capita waste including business and recycling tonnage from 2010 to 2016. Tables 4-C provides monthly refuse tonnage information for 2016 through 2018. Table 4-D provides the yearly tonnage from 2003-2018.

4.2 Projected Waste Generation Rates Relative to Disposal Needs

Assuming that waste generation can be generally correlated with population growth and based on the average per capita projections based on the published US EPA per capita generation rate, Table 4-E in [Appendix 4.2](#) was developed projecting waste generation through 2040.

4.3 Waste Composition

Table 4-F in [Appendix 4.3](#) was developed projecting the City's waste generation by various categories through 2040.

Data used for projection of waste generation and for ongoing reporting and evaluation is gathered by The Refuse and Recycling Reporting Form included in [Appendix 4.4](#) and the residential tonnage information compiled by the city included in [Appendix 4.5](#).

5.0 EXISTING SOLID WASTE MANAGEMENT SYSTEM

The following section describes the major components of the City's current solid waste management system.

5.1 Collection

The City of Manassas provides curbside collection services to single family residents, townhome residents within the City, and businesses (excluding restaurants) within Historic Downtown Manassas.

See [Appendix 5.1](#) for a detailed description of the current collection activities and the future goals for the program. An example of a Violation Warning for improper refuse disposal is given in [Appendix 5.2](#). A copy of the collection contract with American Disposal services is provided in [Appendix 5.3](#).

5.2 Disposal

The City of Manassas currently uses Waste Management Inc.'s Manassas Transfer Station (SUP #2008-01) to transfer waste to King George Landfill and Recycling Center (SWP586.) See [Appendix 6.1](#) for detailed information on disposal.

5.3 Transfer Station

The Manassas Transfer Station is owned by Waste Management Inc. and operated under special use permit (SUP #2008-01). The transfer station is located at 8305 Quarry Road in the city of Manassas. The transfer station has a capacity of 650 tons per day. See [Appendix 6.2](#) for SUP #2008-01.

City Residents may use the Waste transfer station operated by Waste Management Inc. The charges for disposal are \$10.00 up to 300 pounds, \$15 for 500 pounds and \$60 a ton for anything over that amount.

The City's residential contract specifies that the City's contractor will bring City trash to the transfer Station however the jurisdiction has the right to dispose of its trash at other facilities if appropriate. This leaves options open to use other county or Northern Virginia facilities if needed.

5.4 Previously Operated or Permitted Landfills

The City of Manassas has no previously operated or permitted landfills within the city limits.

5.5 Recycling

Manassas began a curbside recycling program for the residents of the City in 1989 with newspaper and glass collection, in 1991 metal and aluminum cans were added to collections. These changes, and reporting by the local IBM facility, led to a 12.5% recycling rate in 1991. #1 and #2 plastic collections were added in 1992, and the addition of mixed office paper followed in 1998. In 2008, single stream recycling collection was introduced.

[Appendix 7.1](#) provides additional information on the City's current recycling program. Included in this appendix are the following:

- the City's recycling rate report for 2016 is attached in [Appendix 7.2](#)
- A Copy of the annual reporting form for businesses is in [Appendix 4.4](#)
- Other information pertinent to the program that the City may choose to include in following sections of [Appendix 7](#).

5.6 Treatment

Based on the definition included in the Solid Waste Management Regulations, the City does not currently treat municipal solid waste, nor is treatment planned for the future.

5.7 Public Education

The City of Manassas is responsible for adopting policies and procedures that protect and enhance the community. The challenge lies in developing clear and consistent messaging, regarding the importance of good waste reduction and disposal practice.

The City that engages the community and empowers citizens to act consistently and responsibly through the following public outreach and educational tools:

- the City website: <http://www.manassascity.org/270/Trash-and-Recycling>
- the City Connection Newsletter: <http://www.manassascity.org/Archive.aspx?AMID=90>
- Facebook: <https://www.facebook.com/cityofmanassas/>
- Nextdoor: <https://nextdoor.com/city/manassas--va/>

More information on education efforts can be found in [Appendix 8.1](#). Other [Appendix 8](#) sections contain examples of education efforts, posters, presentations, and public education materials.

5.8 Public/Private Partnership

The City of Manassas works in partnership with businesses and organizations throughout the City to inform, encourage and support litter reduction, responsible waste management, and recycling.

The City contracts with American disposal services for collection of refuse, recycling and yard waste within the city. Single stream recycling is collected and sorted at the American Recycling Center at the western end of the City.

The City partners with Waste Management Inc., which owns and operates the Manassas Transfer Station, to receive the City's refuse and provide residential drop-off events for household hazardous waste, electronics, and shredding collection

The City also works with C2 and Potomac eCycle to recycle electronics. and Safeguard Shredding for community drop-off events. The City website¹⁶ has links to partner websites. [Appendix 7.1](#) has more information on The City's partners in recycling

The City contracts with Didlake for litter collection services in City parks and the Historic Downtown area.

5.9 Litter Prevention

The City supports litter control within the City through their Litter Prevention and Control Ordinance.

In 2017 Manassas became an Affiliate of Keep America Beautiful and established Keep Manassas Beautiful. Manassas received the Keep America Beautiful President's Circle award for 2017 and 2018. The Keep Manassas Beautiful Committee Bylaws and affiliate summaries are provided in [Appendix 9.5](#). The City's Litter Audit route and scoring sheets are included in [Appendix 9.6](#).

[Appendix 9.1](#) provides additional information on the City's Litter Prevention Programs. The City's Litter Prevention Plan is included in [Appendix 9.2](#). A copy of the City's contract with Didlake is provided in [Appendix 9.4](#)

More information on specific litter events and actions are given in [Appendix 9](#)

¹⁶ <http://www.manassascity.org/2033/How-to-Recycle-Electronic-Waste>

5.10 Solid Waste Evaluation

The City continuously evaluates their system for improvements.

The City evaluates solid waste in conjunction with its residents through the Citizen Advisory Committee on Solid Waste (CAC)¹⁷. The CAC advises Manassas City Council, as appropriate, on matters regarding solid waste and recycling within the City and advises the department of Public Works via the Refuse and Recycling Coordinator. The CAC evaluates and formulates policy recommendations for approval by the City Council. This includes, but is not limited to, strategic planning. The CAC explore opportunities for improving refuse and recycling services and community outreach and provide staff with valuable knowledge and insight in developing new and improved way of keeping the City of Manassas clean, safe and beautiful. The Citizen Advisory Committee on Solid Waste Bylaws are included in [Appendix 10.3](#) and the CAC 2019 annual year in review is included in [Appendix 10.4](#).

The Solid Waste Division provides an annual report that evaluates effectiveness in meeting objectives and Division highlights to the Finance Department. The Solid Waste Division also provides an annual report to the City Council.

The City tracks its overall performance in major categories with Citizen Satisfaction Survey's¹⁸ once every 2 years. Overall Quality of Trash, Recycling and Yard Waste services was evaluated along with 18 other categories. The City has had an over 80% satisfaction rating in the 2014, 2016 and 2018 surveys.

Data used for projection of waste generation and for ongoing reporting and evaluation of business recycling and disposal is gathered by The Refuse and Recycling Reporting Form included in [Appendix 4.4](#) and the residential tonnage information compiled by the city included in [Appendix 4.5](#).

¹⁷ <http://va-manassas5.civicplus.com/2149/Citizens-Advisory-Committee>

¹⁸ <http://www.manassascity.org/2538/Citizen-Satisfaction-Surveys>

5.11 Central Archive

The City maintains records of all solid waste activities at:

Refuse and Recycling Coordinator

City of Manassas

8500 Public Works Drive

Manassas, VA 20110

These files constitute the operating record of all program activities. Correspondence to and from VDEQ is maintained in these files.

The Central Archive will receive and record information on the amount of solid waste produced in the area including data collected by the City and provided by the City and/or commercial entities.

In addition, the City has developed the Solid Waste Management Plan to serve as a summary of solid waste disposal activities within the City. The plan will be revised when significant changes occur in these activities and the plan once revised will be submitted to the Director of VDEQ or other appropriate persons as designated by VDEQ for review and approval.

6.0 WASTE MANAGEMENT HEIRARCHY

Under 9 VAC 20-130-30, the following policy is set forth:

"It is the policy of the Virginia Waste Management Board to require each region designated pursuant to 9 VAC 20-130-180 through 9 VAC 20-130-220, as well as each city, county and town not part of such a region, to develop comprehensive and integrated Solid Waste Management Plans that, at a minimum, consider and address all components of the following hierarchy:

1. *Source reduction*
2. *Reuse*
3. *Recycling*
4. *Resource recovery (waste to energy)*
5. *Incineration*
6. *Landfilling"*

Section 9 VAC 20-130-150.6, also addresses this requirement by stating:

"The local government or regional Solid Waste Management Plan shall include data and analyses of the following type for each jurisdiction. Each item below shall be in a separate section and labeled as to content:

6. *A description of programs for solid waste reduction, reuse, recycling, resource recovery, incineration, storage, treatment, disposal and litter control."*

The following sections provide the information as available as required by the regulations.

Since the publication of its first Solid Waste Management Plan in 1991, the City of Manassas has endeavored to adhere to state and federal solid waste regulations through active monitoring, management, and good practice.

6.1 Source Reduction

Source reduction is any action than can reduce or eliminate the generation of a waste product at the source. This may involve a new manufacturing process or design which eliminates waste trimmings or waste products normally generated through the production process.

The City of Manassas works to educate, engage, and empower our community to actively participate in source reduction. The City promotes zero-waste events through the Event Planning Guide,¹⁹ information on recycling in the workplace through our website,²⁰ and through ongoing information which encourages behavioral change residents, businesses, and manufacturers within the City.

¹⁹ <http://www.manassascity.org/DocumentCenter/View/24869/zero-waste-guide-2016?bidId=>

²⁰ <http://www.manassascity.org/1704/Business-Recycling>

6.2 Reuse

The City of Manassas works to educate, engage, and empower our community to actively participate in source reduction. The City promotes zero-waste events through the Event Planning Guide,²¹ information on recycling in the workplace through our website,²² and through ongoing information which encourages behavioral change residents, businesses, and manufacturers within the City.

The state's program, Environmental Excellence, has awarded P-4 status to the City of Manassas Maintenance Garage Department, P-3 status to our Water Plant and Electrical Department, and P-2 status to our Airport facility.

Reuse and source reduction techniques are also practiced by the City and its largest businesses including Lockheed Martin, BAE Systems and Micron, which are all classified as P3 companies participating in government programs to reduce refuse and harmful chemical use.

6.3 Recycling

The City of Manassas recognizes that the plastic, metal, paper, glass, textiles, electronics and rubber materials generated through curbside and drop-off recycling are commodities that can be bought and sold in an active, and sometimes volatile, international marketplace, and are subject to the same laws of supply and demand that govern the value of any and all other tradable commodities.

The City supports the businesses behind the bin through understanding the value of recyclables as a commodity, actively reducing recycling contamination, and by following recycling guidelines to make sure that all materials are dry, empty and loose before they go into the bin. This is done through active communication with residents and businesses on the guidelines for recycling, the provision of opportunities to recycle throughout the City, and by providing tours of the American Recycling Center for local decisionmakers – so they develop a better understanding of the value of having this business within our community.

Information on the recycling programs done by the City is in [Appendix 7](#).

6.3.2 Private or Non-profit Sector Programs

The City's working with C2 and Potomac eCycle to recycle electronics. Giving residents more options for electronics recycling. The city works with Safeguard Shredding for Community Shredding Events. The City website²³ has links to partner websites.

²¹ <http://www.manassascity.org/DocumentCenter/View/24869/zero-waste-guide-2016?bidId=>

²² <http://www.manassascity.org/1704/Business-Recycling>

²³ <http://www.manassascity.org/2033/How-to-Recycle-Electronic-Waste>

6.3.3 Market Development

While the Refuse and Recycling program in City of Manassas does not currently play an active role in the development of markets for materials generated through curbside recycling, the City's Purchasing Department adheres to Virginia Code § 15.2-938 and § 2.2-1124 ensuring that the City purchases and disposes of materials with reuse and recycling in mind.

The City recognizes that the plastic, metal, paper, glass, textiles, electronics and rubber materials generated through curbside and drop-off recycling are commodities that can be bought and sold in an active, and sometimes volatile, international marketplace, and are subject to the same laws of supply and demand that govern the value of any and all other tradable commodities.

In January 2018, China imposed a ban on the import of recyclable materials due to the volume of "contamination." This action spawned a recycling crisis that has led to the depreciation of recyclable materials and spiraling costs for disposal and processing.

To ensure sound economic practice and stewardship for our residents, the City developed a new annual calculation for recycling disposal based on the need for accountability and transparency in providing information to the public and City Council. This calculation also tracks trends in the market for curbside recyclable materials.

Example:

Calculation figures are based on the 2016 contract with American Disposal Services for curbside recycling collection:

- A. Base Unit Cost for Disposal: \$0.85 per unit
- B. Annual Average Composite Commodities Index Pricing taken in May (which matches the other source date for annual calculations.) The proposed source for this index is ScrapIndex.com²⁴ and the index is the Curbside Composite Index²⁵. The index tracks Market Price Trends for Municipal Curbside Recycling Programs. Access to this information does not require a subscription and is available to all parties. The current percentage change from 2018 to 2019 is 15.34% therefore the percentage increase would be rounded to 15%.

The calculation would be the A+B or $\$0.85 + 15\% = \0.98
Therefore \$0.98 would be the new disposal cost.

²⁴ <https://www.scrapindex.com/index.html>

²⁵ <https://www.wastepriceindex.com/>

6.4 Resource Recovery and Incineration

Resource recovery, for purposes of this document, refers to direct recovery through Waste to energy, composting or the production of refuse derived fuel (RDF).

At this time, the City of Manassas does not have any plans to utilize any incineration facilities. Prince William Hospital located in the city limits has 2 permits for waste disposal, an Incinerator Permit (PBR295) and a sterilization permit (PBR171).

6.4.1 Yard Waste Composting and/or mulching

American Disposal collects Yard Waste for the City on Mondays. The City provides curbside leaf collection with vacuum trucks from October through January every year the 2019-2020 schedule for collection can be seen in [Appendix 7.3](#). American Disposal sends yard waste to be composted at the Prince William County Balls Ford Road Compost Facility.

6.5 Treatment

Based on the definition included in the Solid Waste Management Regulations, the City does not currently treat municipal solid waste.

6.6 Landfilling

Landfilling is by far the most widely used method for disposal. The EPA estimates that 52.1% of trash created in the US is landfilled. In Virginia waste is a big business. The state is not running out of landfill space because it has large mega landfills that will not reach capacity until after 2043 or beyond. It is the cheapest of all disposal methods, so this is economical for most communities to use.

For the City of Manassas, landfilling is the most economical choice for refuse disposal at this time. Refuse is taken to the Manassas Transfer Station, put in trailers for transport to King George landfill SWP 586 in Fredericksburg Virginia. King George has remaining capacity to 2040.²⁶ In the future as other options become available, they will be assessed by the City. The City is not bound to use the Manassas Transfer Station.

²⁶ 2018 SWIA report

<https://www.deq.virginia.gov/Programs/LandProtectionRevitalization/ReportsPublications/AnnualSolidWasteReports.aspx>

7.0 GOALS AND OBJECTIVES OF PROGRAM

The City has established 7 important goals to act as guidance and steps to be taken to obtain those goals. Milestones have been updated to reflect achievements and new goals for the City and they are to be found in [Appendix 10.1](#).

8.0 IMPLEMENTATION SCHEDULE

The City's Schedule for program actions and implementation are attached in [Appendix 10.2](#).

9.0 FUNDING AND FINANCING

The City operates its solid waste program as an enterprise fund which is funded by user fees. The Financial Year 2019 and Financial Year 2020 year solid waste Fund budget overview can be found in [Appendix 11.1](#) and [Appendix 11.2](#). The City budget as a whole can be found on the City Website.²⁷ Information in Appendix 11 will be updated Annually when the Public Works Department assesses the Solid Waste Program and makes recommendations to City Council for changes in fee structures or services. Refuse contracts are written in 10 year increments in order to keep costs at reasonable rates.

City Council must approve all budgets and expenditures that exceed the budget.

²⁷ <http://va-manassas5.civicplus.com/1958/Budget-Division>

10.0 PUBLIC PARTICIPATION

The City of Manassas advertised for a public hearing on this amendment plan in the Prince William Times on February 18, 2021 and February 24, 2021 on the City of Manassas website for a public meeting to be held on March 22, 2021. No attendees were present at the March 22, 2021 meeting and no comments, written or otherwise, were received by the City. See [Appendix 12](#) for copies of the advertisement, handout made available to the public, and certification of results.

A copy of the plan could be reviewed at the City Public Works Department, the City Hall, and online on the City's website.

The Citizen Advisory Committee shall review and approve of the plan before public hearing and review. The City relied on its staff and engineering consultant to develop the plan that was presented to the Citizen Action Committee, the City Council and the public during an advertised public meeting. No other specific public participation activities were conducted for the plan. However, the plan will become the cornerstone of future public education activities.

11.0 CITY RESOLUTION

On March 22, 2021 the City Council adopted the plan via resolution. Copies of the resolution is included in [Appendix 13](#).

12.0 RECORD KEEPING

The City designated the Refuse and Recycling Coordinator as administrator for trash and recycling services and contract management within the City of Manassas.

The City documents solid waste activities through:

- Daily service records of collections and disposal.
- Annual reports to the City Council indicating how the goals and objectives of the program have been met.
- Periodic updates presented to the City Council as requested.
- Regular submission of the Recycling Rate Report (Form 50-30) to the Virginia Department of Environmental Quality (VDEQ).
- Regular submission of program data to the Northern Virginia Regional Commission Solid Waste Board
- Contracts and service agreements with vendors.
- Citizen Advisory Committee Agenda, Minutes, and Annual Reports

These reports, updates, and VDEQ submissions as well as the background information are kept and will continue to be kept in the central archive (files) of the solid waste program located in the public works department.

The Director of VDEQ receives copies of the appropriate information through the following sources:

- Submission of the Recycling Rate Report (Form 50-30) to VDEQ.
- New permit requests.
- Permit amendments.
- Updates to the Solid Waste Management Plan.

APPENDIX 1

FIGURES

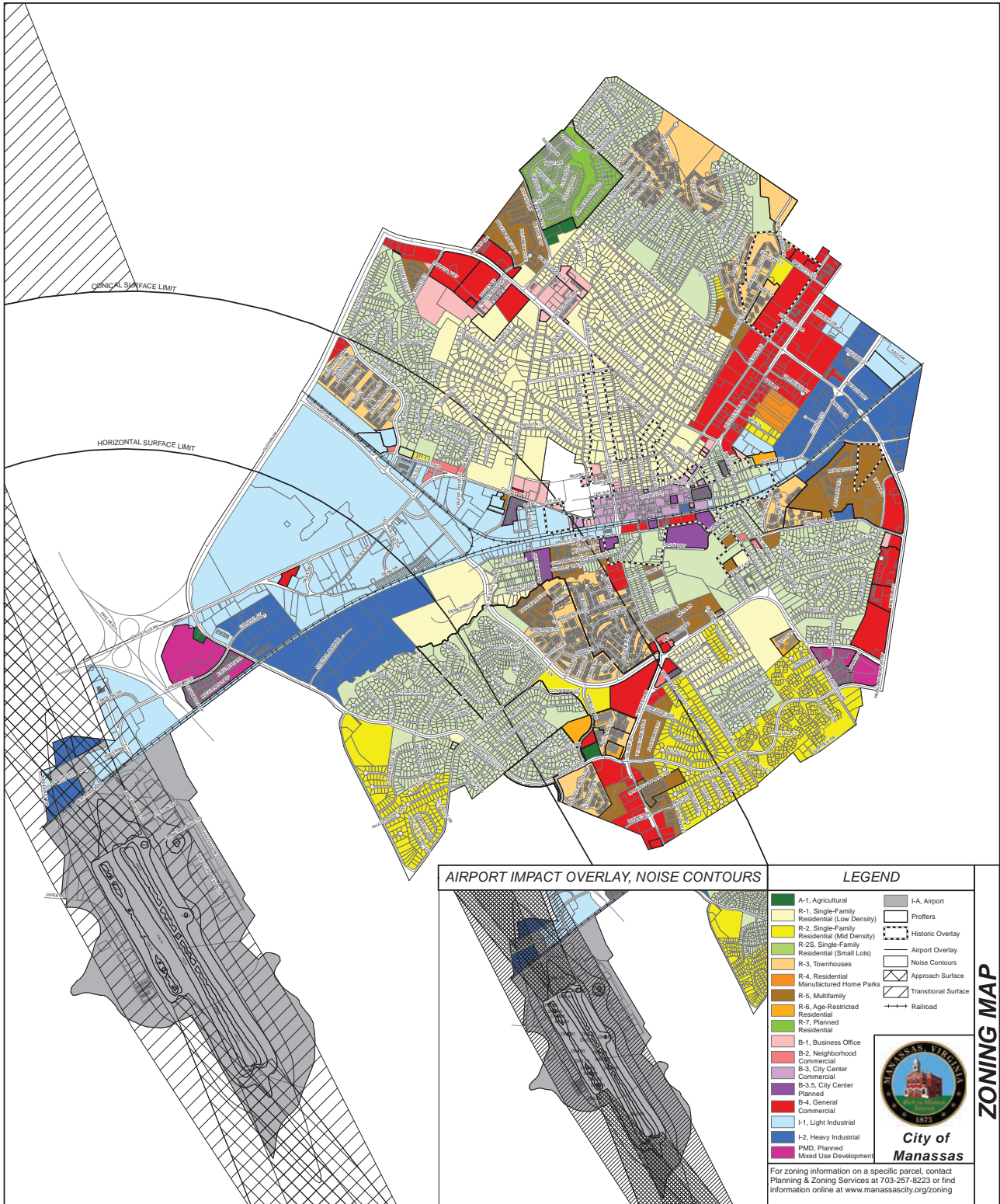
APPENDIX 1.1	AREA MAP
APPENDIX 1.2	WASTE FACILITIES MAP
APPENDIX 1.3	ZONING MAP
APPENDIX 1.4	CITY STREET MAP

APPENDIX 1.1
AREA MAP



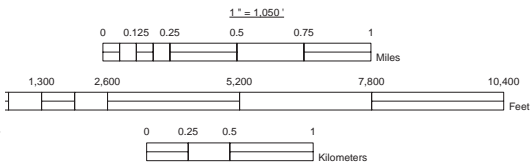
APPENDIX 1.2
WASTE FACILITIES MAP

APPENDIX 1.3
ZONING MAP



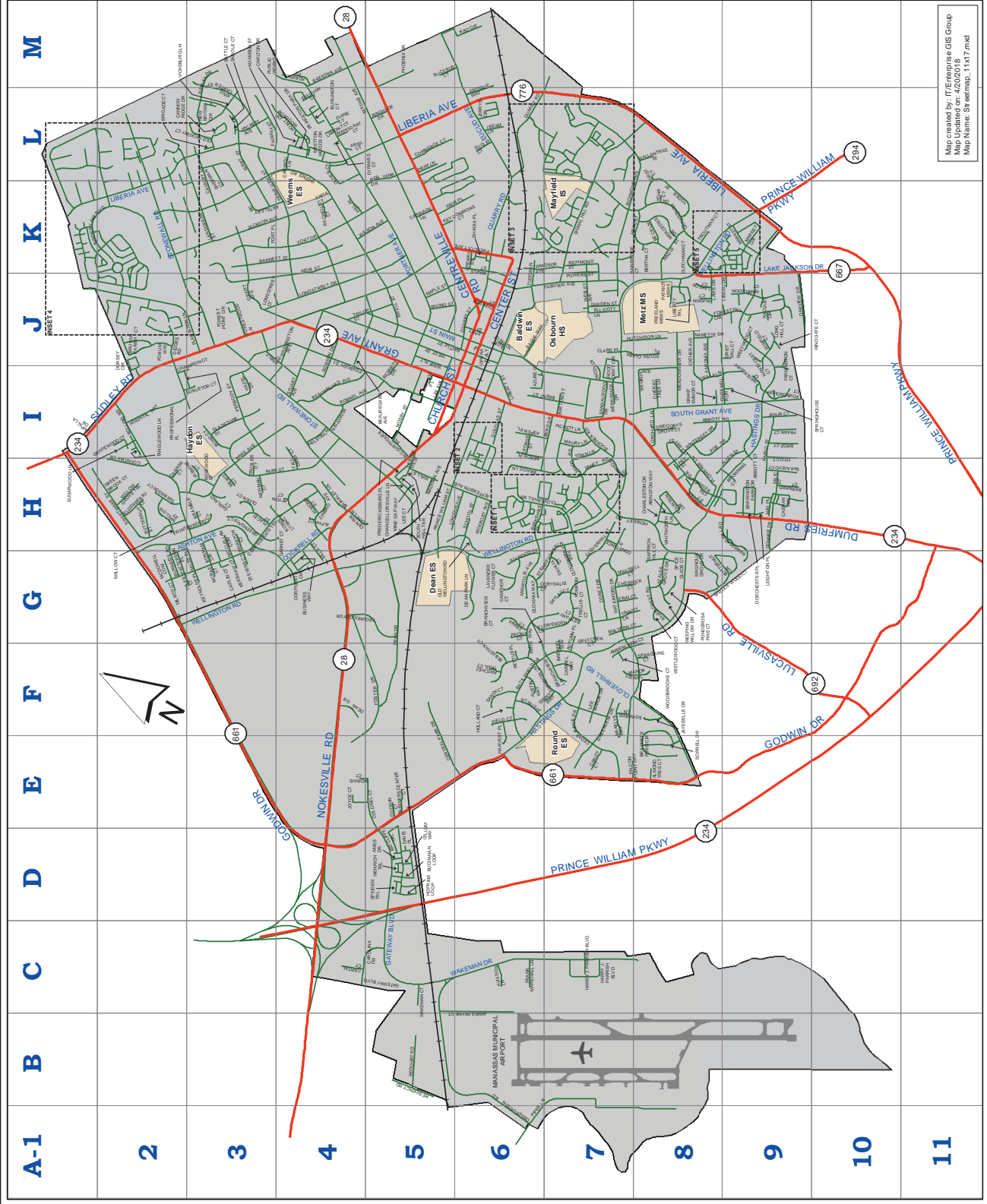
MAP CREATED BY: City of Manassas Planning and Zoning
 MAP UPDATED THROUGH: Dec. 9, 2019
 MAP NAME: Zoning_Map_Official.mxd
 HORIZONTAL DATUM NAD83 STATE PLANE NORTH FEET

DISCLAIMER: This map is intended for reference purposes only. The City of Manassas does not provide any guarantee of the accuracy or completeness of map information. The determination of topography or contours, or any depiction of physical improvements, property lines or boundaries is for general information only and shall not be used for the design, modification, or construction of improvements to real property or for flood plain determination.



ZONING MAP

APPENDIX 1.4
CITY STREET MAP



INSETS



City of Manassas



Map created by: IT/Esri/Esri GIS Group
 Map Created: 4/20/2016
 Map Name: Streetmap_11417.mxd

APPENDIX 2

SOLID WASTE BACKGROUND

APPENDIX 2.1	<u>LIST OF CITY SOLID WASTE FACILITIES</u>
APPENDIX 2.2	<u>US EPA 2017 FACTS AND FIGURES</u>

APPENDIX 2.1
LIST OF CITY SOLID WASTE
FACILITIES

APPENDIX 2.1

Solid Waste Facilities Used By The City

Facility name	Permit	Capacity	Remaining Design life
Waste Management Inc Manassas Transfer Station	PBR 091 SUP #2008-01	650 tons per day	25 years+ Ongoing Operations
King George Landfill and Recycling Center	SWP586	16,795,933.50 tons as of 2018	22 year as of 2018
American Recycling Center			25 years+ Ongoing Operations
Balls Ford Road Compost Facility	PBR030	80,000 tons per year	25 years+ Ongoing Operations

APPENDIX 2.2
EPA 2017 FACT SHEET



Advancing Sustainable Materials Management: 2015 Fact Sheet

Assessing Trends in Material Generation, Recycling,
Composting, Combustion with Energy Recovery and
Landfilling in the United States

July 2018

Introduction

The U.S. Environmental Protection Agency (EPA) has collected and reported data on the generation and disposition of municipal solid waste (MSW) in the United States for more than 30 years. This information is used to measure the success of materials management programs across the country and to characterize the national waste stream. These facts and figures are based on the most recent information, which is from calendar year 2015.

In 2015, in the United States, approximately 262 million tons (U.S. short tons unless specified) of MSW were generated (See Figure 1). Of the MSW generated, approximately 68 million tons of MSW were recycled and 23 million tons of MSW were composted. Together, more than 91 million tons of MSW were recycled and composted, equivalent to a 34.7 percent recycling and composting rate (See Figure 2). In addition, more than 33 million tons of MSW (12.8 percent) were combusted with energy recovery. Finally, more than 137 million tons of MSW (52.5 percent) were landfilled (See Figure 3 and Table 1).

Information about waste generation and disposal is an important foundation for managing materials. Sustainably managing materials requires thinking beyond waste and instead focusing on the life cycle of a product, from the time it is produced, used, reused and ultimately recycled or discarded. This is known as Sustainable Materials Management (SMM). SMM refers to the use and reuse of materials in the most productive and sustainable way across their entire life cycle. SMM conserves resources, reduces waste and minimizes adverse environmental impacts from materials.

This report analyzes MSW trends in generation and management, materials and products, and economic indicators affecting MSW. It also includes a section on the generation of construction and demolition (C&D) debris, which is not a part of MSW, but comprises a significant portion of the non-hazardous solid waste stream.

Figure 1. MSW Generation Rates, 1960 to 2015

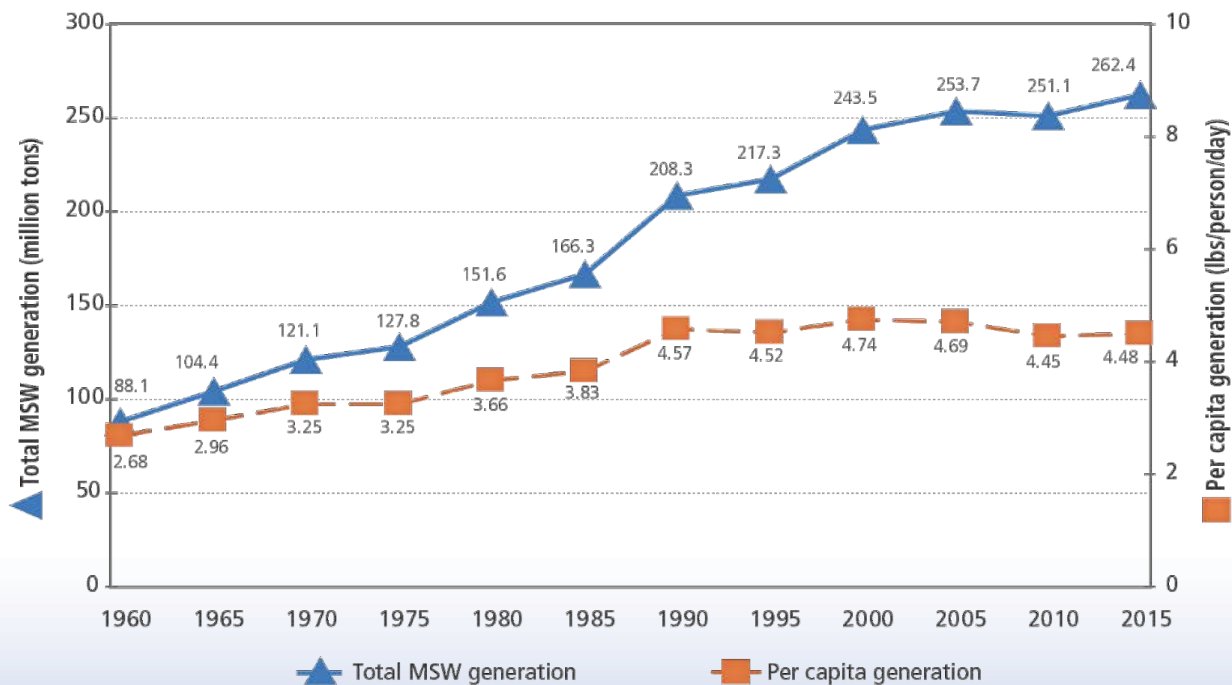


Figure 2. MSW Recycling and Composting Rates, 1960 to 2015

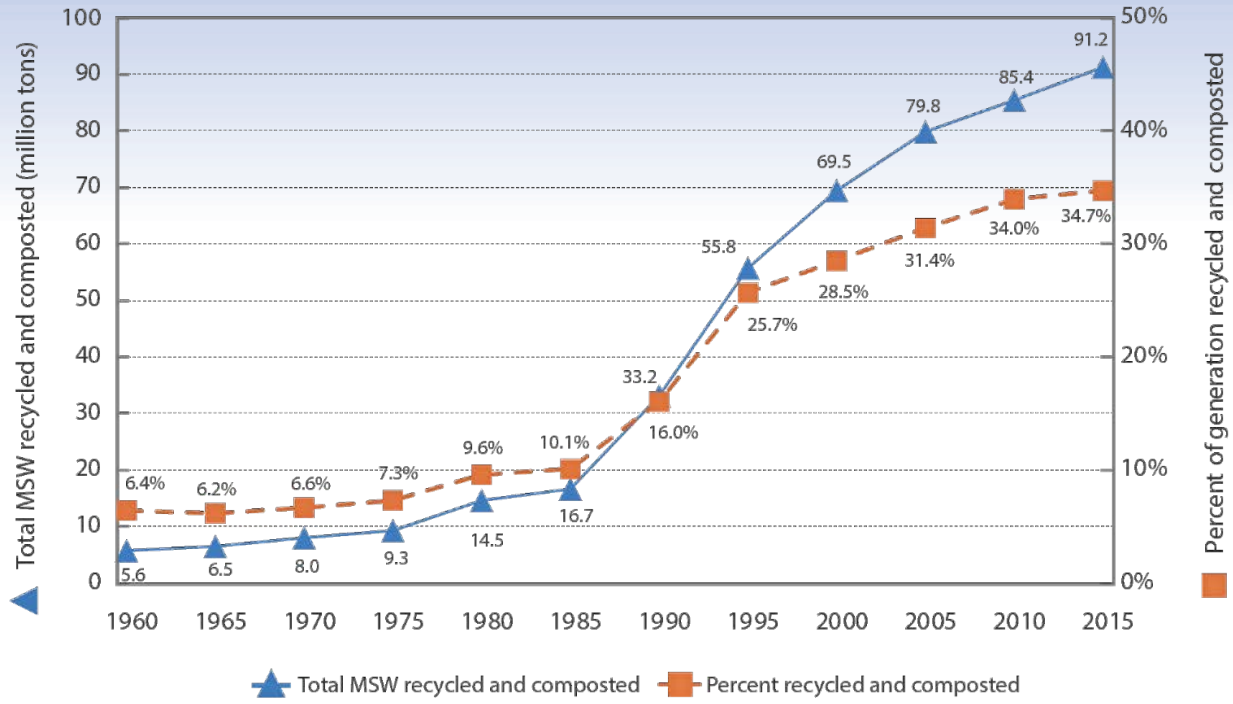


Figure 3. Management of MSW in the United States, 2015

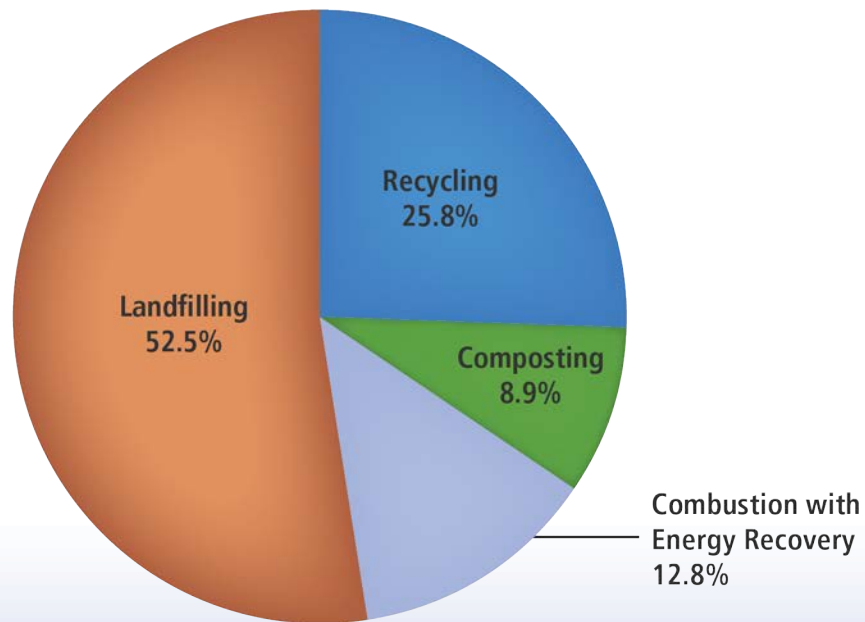


Table 1. Generation, Recycling, Composting, Combustion with Energy Recovery and Landfilling of Materials in MSW, 2015*
(in millions of tons and percent of generation of each material)

Material	Weight Generated	Weight Recycled	Weight Composted	Weight Combusted with Energy Recovery	Weight Landfilled	Recycling as Percent of Generation	Composting as Percent of Generation	Combustion as Percent of Generation	Landfilling as Percent of Generation
Paper and paperboard	68.05	45.32	-	4.45	18.28	66.6%	-	6.5%	26.9%
Glass	11.47	3.03	-	1.47	6.97	26.4%	-	12.8%	60.8%
<i>Metals</i>									
Steel	18.17	6.06	-	2.14	9.97	33.3%	-	11.8%	54.9%
Aluminum	3.61	0.67	-	0.50	2.44	18.5%	-	13.9%	67.6%
Other nonferrous metals†	2.22	1.50	-	0.06	0.66	67.6%	-	2.7%	29.7%
Total metals	24.00	8.23	-	2.70	13.07	34.3%	-	11.2%	54.5%
Plastics	34.50	3.14	-	5.35	26.01	9.1%	-	15.5%	75.4%
Rubber and leather	8.48	1.51	-	2.49	4.48	17.8%	-	29.4%	52.8%
Textiles	16.03	2.45	-	3.05	10.53	15.3%	-	19.0%	65.7%
Wood	16.30	2.66	-	2.58	11.06	16.3%	-	15.8%	67.9%
Other materials	5.16	1.43	-	0.69	3.04	27.7%	-	13.4%	58.9%
Total materials in products	183.99	67.77	-	22.78	93.44	36.8%	-	12.4%	50.8%
<i>Other wastes</i>									
Food, other‡	39.73	-	2.10	7.38	30.25	-	5.3%	18.6%	76.1%
Yard trimmings	34.72	-	21.29	2.63	10.80	-	61.3%	7.6%	31.1%
Miscellaneous inorganic wastes	3.99	-	-	0.78	3.21	-	-	19.5%	80.5%
Total other wastes	78.44	-	23.39	10.79	44.26	-	29.8%	13.8%	56.4%
Total municipal solid waste	262.43	67.77	23.39	33.57	137.70	25.8%	8.9%	12.8%	52.5%

* Includes waste from residential, commercial and institutional sources.

† Includes lead from lead-acid batteries.

‡ Includes collection of other MSW organics for composting.

Details might not add to totals due to rounding.

Negligible = Less than 5,000 tons or 0.05 percent.

A dash in the table means that data are not available.

Trends in Municipal Solid Waste

Our trash, or MSW, is comprised of various items consumers throw away. These items include packaging, food, yard trimmings, furniture, electronics, tires and appliances. MSW does not include industrial, hazardous or C&D waste. Sources of MSW include residential waste (including waste from multi-family housing) and waste from commercial and institutional locations, such as businesses, schools and hospitals.

Over the last few decades, the generation, recycling, composting, combustion with energy recovery and landfilling of MSW have changed substantially. Solid waste generation peaked at 4.74 pounds per person per day in 2000. However, the rate of 4.48 pounds per person per day in 2015 is slightly higher than the 2014 rate, which was 4.45 pounds per person per day (See Figure 1).

The combined recycling and composting rate increased from less than 10 percent of generated MSW in 1980 to 34.7 percent in 2015 (See Figure 2). Without including composting, recycling alone rose from 14.5 million tons (9.6 percent of MSW) in 1980 to 67.8 million tons (25.8 percent) in 2015. Composting was negligible in 1980, and it rose to 23.4 million tons in 2015 (8.9 percent; see Figure 3 and Table 2 for details).

Combustion with energy recovery was less than 2 percent of generation in 1980 (2.8 million tons). In 2015, more than 33.5 million tons (12.8 percent of MSW generated) were combusted with energy recovery (See Table 2).

Since 1990, the total amount of MSW going to landfills dropped by 7.6 million tons, from 145.3 million to 137.7 million tons in 2015 (See Table 2). The net per capita 2015 landfilling rate was 2.3 pounds per day, which was lower than the 3.2 per capita rate in 1990 (See Table 3).

Food

Nationally, the composting of food rose from 1.94 million tons in 2014 (5 percent of food) to 2.10 million tons in 2015 (5.3 percent of food).

Table 2. Generation, Recycling, Composting, Combustion with Energy Recovery and Landfilling of MSW, 1960 to 2015 (in millions of tons)

Activity	1960	1970	1980	1990	2000	2005	2010	2014	2015
Generation	88.1	121.1	151.6	208.3	243.5	253.7	251.1	259.0	262.4
Recycling	5.6	8.0	14.5	29.0	53.0	59.2	65.3	66.6	67.8
Composting*	neg.	neg.	neg.	4.2	16.5	20.6	20.2	23.0	23.4
Combustion with energy recovery†	0.0	0.5	2.8	29.8	33.7	31.7	29.3	33.2	33.5
Landfilling and other disposal‡	82.5	112.6	134.3	145.3	140.3	142.2	136.3	136.2	137.7

* Composting of yard trimmings, food and other MSW organic material. Does not include backyard composting.

† Includes combustion of MSW in mass burn or refuse-derived fuel form, and combustion with energy recovery of source separated materials in MSW (e.g., wood pallets, tire-derived fuel).

‡ Landfilling after recycling, composting and combustion with energy recovery. Includes combustion without energy recovery.

Details might not add to totals due to rounding.
neg. Negligible = less than 5,000 tons or 0.05 percent.

Table 3. Generation, Recycling, Composting, Combustion with Energy Recovery and Landfilling of MSW, 1960 to 2015 (in pounds per person per day)

Activity	1960	1970	1980	1990	2000	2005	2010	2014	2015
Generation	2.7	3.3	3.7	4.6	4.7	4.7	4.4	4.4	4.5
Recycling	0.2	0.2	0.4	0.6	1.0	1.1	1.1	1.1	1.2
Composting*	neg.	neg.	neg.	0.1	0.3	0.4	0.4	0.4	0.4
Combustion with energy recovery†	0.0	neg.	0.1	0.7	0.7	0.6	0.5	0.6	0.6
Landfilling and other disposal‡	2.5	3.1	3.2	3.2	2.7	2.6	2.4	2.3	2.3
Population (In millions)	180.0	204.0	227.3	249.9	281.4	296.4	309.1	318.9	320.9

* Composting of yard trimmings, food, and other MSW organic material. Does not include backyard composting.

† Includes combustion of MSW in mass burn or refuse-derived fuel form, and combustion with energy recovery of source separated materials in MSW (e.g., wood pallets, tire-derived fuel).

‡ Landfilling after recycling, composting, and combustion with energy recovery. Includes combustion without energy recovery.

Details might not add to totals due to rounding.
neg. Negligible = less than 5,000 tons or 0.05 percent.

Analyzing MSW

EPA analyzes MSW by breaking down the data in two ways: by material or by product. Materials are made into products, which are ultimately reprocessed through recycling or composting, or managed by sending them to combustion with energy recovery facilities or landfills. Examples of materials that EPA tracks include paper and paperboard, plastics, metals, glass, rubber, leather, textiles, wood, food and yard trimmings. For a full list of materials, see Table 1.

Products are what people buy and handle, and they are manufactured out of the types of materials listed above. Product categories include containers and packaging, nondurable goods, durable goods, food and yard trimmings. Containers and packaging, such as milk cartons and plastic wrap, are assumed to be in use for a year or less; nondurable goods like newspaper and clothing are assumed to be in use for less than three years; and durable goods, such as furniture, are assumed to be in use for three or more years. Some products, such as appliances, may be made of more than one material. Information about products shows how consumers are using and discarding materials and offers strategies on how to maximize source reduction, recycling and composting of materials.

Materials in MSW

Table 1 and the following figures provide specific information about materials in municipal solid waste. Table 1 shows generation, recycling, composting, combustion with energy recovery and landfilling by material, by weight and percent of generation.

Figure 4 below provides the breakdown of MSW generation by material. Paper and paperboard, and food continued to be the largest components of MSW generated. Paper and paperboard accounted for about 26 percent, while food accounted for 15 percent. Yard trimmings and plastics comprised about 13 percent each. The remaining amount of MSW generated consisted of rubber, leather, and textiles; metals; wood; glass and other materials.

Composting Collection Programs ^{1,2}

- About 3,860 community composting programs were documented in 2015—an increase from 3,227 in 2002.
- Food composting curbside collection programs served 3.8 million households in 2015. About 5.4 million households had access to drop-off food collection programs that year.

Figure 5 provides the breakdown of MSW recycling by material. Paper and paperboard was the largest component of MSW recycling, representing nearly 67 percent. Metals made up 12 percent of MSW recycled.

The remaining amount of MSW recycled consisted of rubber, leather, and textiles; plastics; glass; wood and other materials.

Figure 6 provides the breakdown of MSW composting by material. Yard trimmings made up 91 percent of MSW composted. Food made up the remaining 9 percent of material composted.

Figure 7 provides the breakdown of MSW combustion with energy recovery.

Figure 8 provides the breakdown of MSW landfilling.

Figure 4. Total MSW Generation (by material), 2015
262 Million Tons

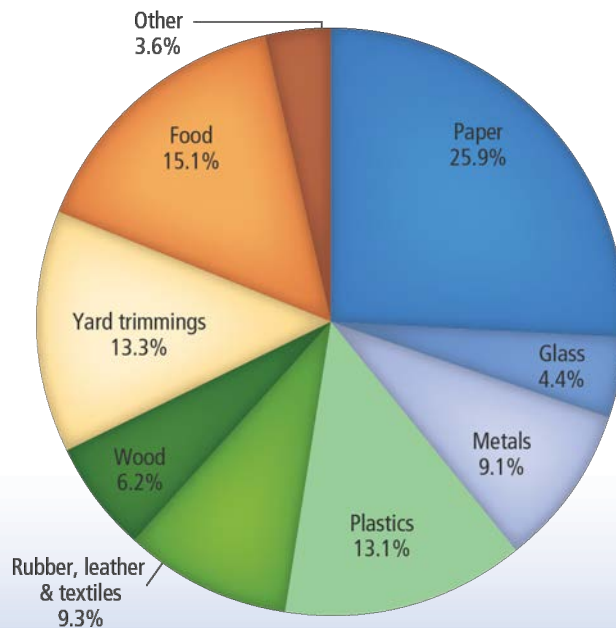


Figure 5. Total MSW Recycling (by material), 2015
68 Million Tons

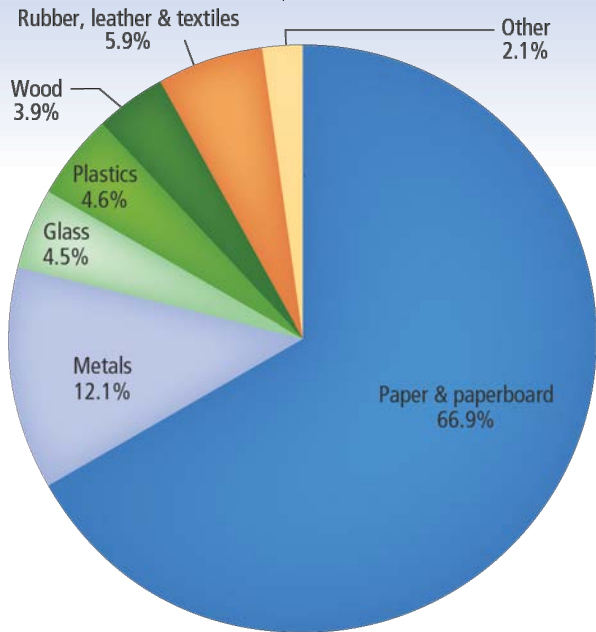


Figure 6. Total MSW Composting (by material), 2015
23 Million Tons

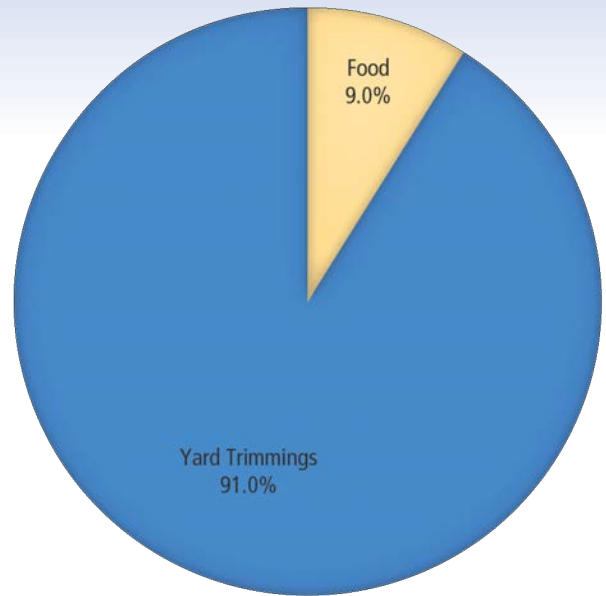


Figure 7. Total MSW Combusted with Energy Recovery (by material), 2015
34 Million Tons

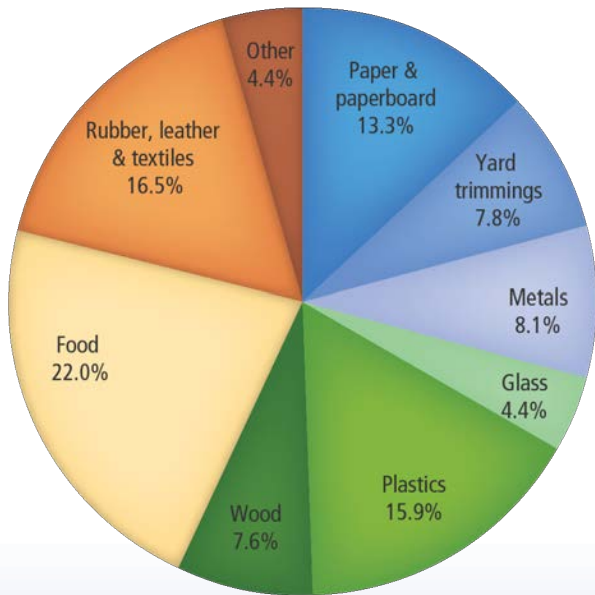
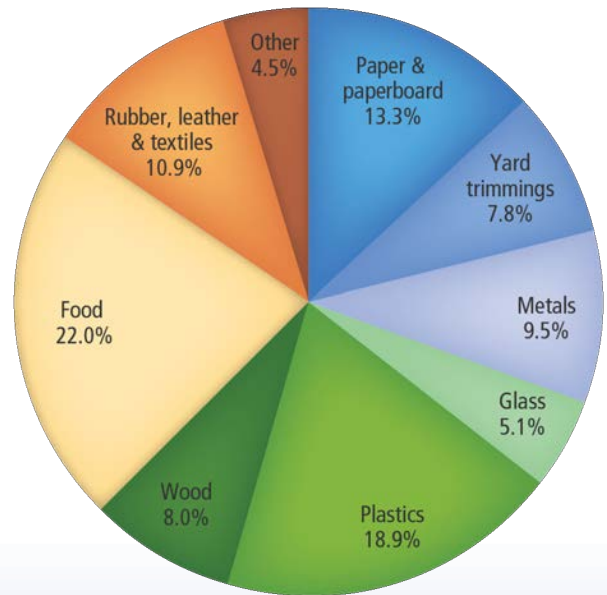


Figure 8. Total MSW Landfilled (by material), 2015
138 Million Tons



Products in MSW

The following information provides the details of the products found in municipal solid waste. Table 4 shows generation, recycling, composting, combustion with energy recovery and landfilling by product category, weight and percent of generation. Figure 9 displays selected products with high recycling and composting rates.

Containers and packaging made up the largest portion of MSW generated at almost 78 million tons (29.7 percent). Nondurable and durable goods were more than 50 million tons each (about 20 percent for each). Food was 39.7 million tons (15.1 percent), yard trimmings were 34.7 million tons (13.2 percent), and other wastes were about four million tons (1.5 percent).

Containers and packaging was the product category with the highest recycling rate with approximately 53 percent of the generated materials recycled. Paper products, steel and aluminum were the most recycled materials by percentage in this category. The recycling of nondurable goods was approximately 31 percent. Paper products such as newspapers/mechanical papers were the most recycled nondurable goods. Newspapers/mechanical papers include newspapers, directories, inserts, as well as some advertisement and direct mail printing. Overall, about 19 percent of durable goods were recycled. With a 99 percent recycling rate, lead-acid batteries continued to be one of the most recycled products.

Yard trimmings was the product category with the highest composting rate at 61.3 percent. Food in MSW was composted at a rate of 5.3 percent.

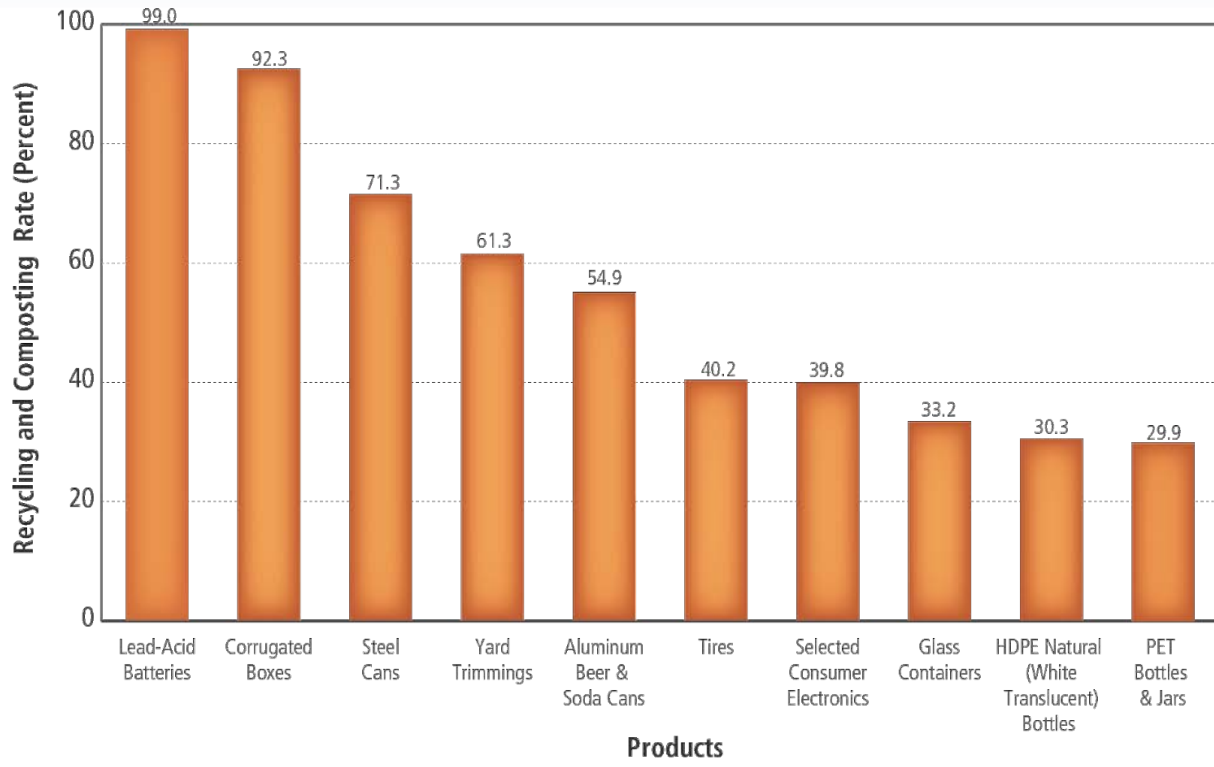
Food was the product category with the highest rate of combustion with energy recovery with a rate of nearly 19 percent. Durable goods were combusted at a rate of nearly 16 percent and nondurables at a rate of nearly 14 percent. Containers and packaging, and yard trimmings were combusted at rates below 10 percent.

Food was the product category with the highest landfill rate at 76 percent. Durable goods followed with a landfill rate of 65 percent. Nondurable goods had the third highest landfill rate at 55 percent. Containers and packaging, and yard trimmings were the product categories with the lowest landfill rates at 38 percent and 31 percent, respectively.

Recycling Rates

Measured by percentage of generation, products with the highest recycling rates in 2015 were lead-acid batteries (99 percent), corrugated boxes (92.3 percent), steel cans (71.3 percent), newspapers/mechanical papers (71.2 percent), major appliances (61.7 percent), aluminum cans (54.9 percent), mixed paper (43.6 percent), tires (40.2 percent) and selected consumer electronics (39.8 percent). The 2015 composting rate for yard trimmings was 61.3 percent (See 2015 data tables).

Figure 9. Selected Products with High Recycling and Composting Rates, 2015*



*Does not include combustion with energy recovery.

Table 4. Generation, Recycling, Composting, Combustion with Energy Recovery and Landfilling of Products in MSW, 2015*
(in millions of tons and percent of generation of each product)

Products	Weight Generated	Weight Recycled	Weight Composted	Weight Combusted with Energy Recovery	Weight Landfilled	Recycling as Percent of Generation	Composting as Percent of Generation	Combustion as Percent of Generation	Landfilling as Percent of Generation
Durable goods									
Steel	15.95	4.44	-	2.02	9.49	27.8%	-	12.7%	59.5%
Aluminum	1.55	-	-	0.22	1.33	-	-	14.2%	85.8%
Other nonferrous metals†	2.22	1.50	-	0.06	0.66	67.6%	-	2.7%	29.7%
Glass	2.35	Negligible	-	0.27	2.08	Negligible	-	11.5%	88.5%
Plastics	12.50	0.83	-	1.49	10.18	6.6%	-	11.9%	81.5%
Rubber and leather	7.35	1.51	-	2.27	3.57	20.5%	-	30.9%	48.6%
Wood	6.48	Negligible	-	1.18	5.30	Negligible	-	18.2%	81.8%
Textiles	3.94	0.54	-	1.06	2.34	13.7%	-	26.9%	59.4%
Other materials	1.81	1.43	-	0.03	0.35	79.0%	-	1.7%	19.3%
Total durable goods	54.15	10.25	-	8.60	35.30	18.9%	-	15.9%	65.2%
Nondurable goods									
Paper and paperboard	28.12	14.12	-	2.74	11.26	50.2%	-	9.8%	40.0%
Plastics	7.32	0.16	-	1.40	5.76	2.2%	-	19.1%	78.7%
Rubber and leather	1.13	Negligible	-	0.22	0.91	Negligible	-	19.5%	80.5%
Textiles	11.77	1.91	-	1.93	7.93	16.2%	-	16.4%	67.4%
Other materials	3.58	Negligible	-	0.70	2.88	Negligible	-	19.6%	80.4%
Total nondurable goods	51.92	16.19	-	6.99	28.74	31.2%	-	13.5%	55.3%

(Continued on next page)

Table 4. Generation, Recycling, Composting, Combustion with Energy Recovery and Landfilling of Products in MSW, 2015*
(in millions of tons and percent of generation of each product)

Products	Weight Generated	Weight Recycled	Weight Composted	Weight Combusted with Energy Recovery	Weight Landfilled	Recycling as Percent of Generation	Composting as Percent of Generation	Combustion as Percent of Generation	Landfilling as Percent of Generation
Containers and packaging									
Steel	2.22	1.62	-	0.12	0.48	73.0%	-	5.4%	21.6%
Aluminum	1.84	0.67	-	0.24	0.93	36.4%	-	13.0%	50.6%
Glass	9.12	3.03	-	1.20	4.89	33.2%	-	13.2%	53.6%
Paper and paperboard	39.92	31.20	-	1.71	7.01	78.2%	-	4.3%	17.5%
Plastics	14.68	2.15	-	2.46	10.07	14.6%	-	16.8%	68.6%
Wood	9.82	2.66	-	1.40	5.76	27.1%	-	14.3%	58.6%
Other materials	0.32	Negligible	-	0.06	0.26	Negligible	-	18.8%	81.2%
Total containers and packaging	77.92	41.33	-	7.19	29.40	53.1%	-	9.2%	37.7%
Other wastes									
Food, other†	39.73	-	2.10	7.38	30.25	-	5.3%	18.6%	76.1%
Yard trimmings	34.72	-	21.29	2.63	10.80	-	61.3%	7.6%	31.1%
Miscellaneous inorganic wastes	3.99	-	-	0.78	3.21	-	-	19.5%	80.5%
Total other wastes	78.44	-	23.39	10.79	44.26	-	29.8%	13.8%	56.4%
Total municipal solid waste	262.43	67.77	23.39	33.57	137.70	25.8%	8.9%	12.8%	52.5%

* Includes waste from residential, commercial and institutional sources.

† Includes lead from lead-acid batteries.

‡ Includes collection of other MSW organics for composting.

Details might not add to totals due to rounding.
Negligible = less than 5,000 tons or 0.05 percent.
A dash in the table means that data are not available.

Economic Indicators

The Benefits of Recycling

How our nation uses materials is fundamental to our economic and environmental future. Global competition for finite resources is expected to continue to increase. A more productive and less impactful use of materials helps our society remain economically competitive, contributes to our prosperity and protects the environment. By using waste materials as valuable raw materials, recycling creates jobs, builds more competitive manufacturing industries and significantly contributes to the U.S. economy.

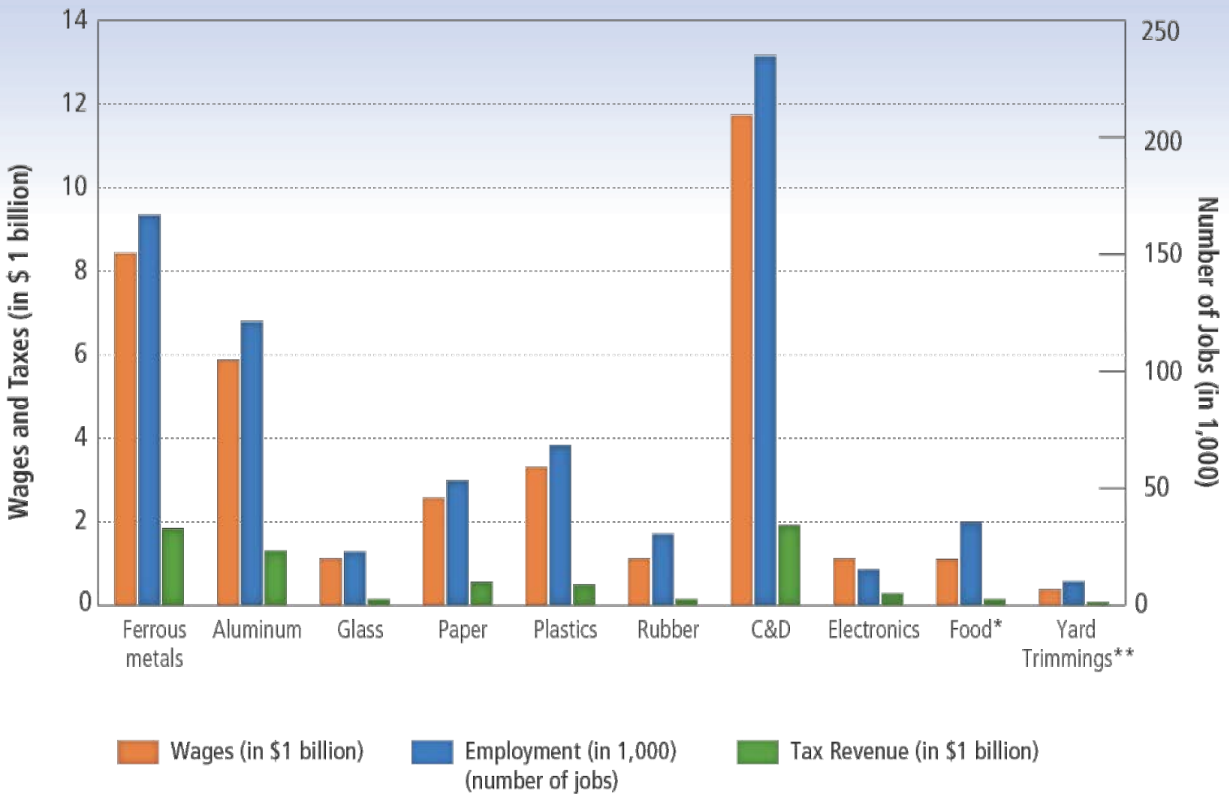
EPA's 2001 Recycling Economic Information (REI) Study evaluated the number of recycling jobs, wages and tax revenue. The Agency updated the study with a 2016 REI Report³ to increase the understanding of the economic implications of material reuse and recycling. The 2016 REI Report included updated information about the number of recycling jobs, wages and tax revenue (See Figure 10). The report showed that the recycling and reuse of materials creates jobs while also generating local and state tax revenues. The data from the most recent year available (2007) showed that in 2007, recycling and reuse activities in the United States accounted for:

- 757,000 jobs;
- \$36.6 billion in wages; and
- \$6.7 billion in tax revenues.

This equates to 1.57 jobs for every 1,000 tons of materials recycled. Construction and demolition debris provided the largest contribution to all three categories (jobs, wages and tax revenue), followed by ferrous metals and nonferrous metals, such as aluminum.

The 2016 REI Report used an updated analytical framework and a new Waste Input-Output methodology, which focused on the life cycle of materials. These refinements offered significant improvements over the original 2001 REI Study by providing a better definition of recycling and addressing double counting. This new methodology assists decision makers and researchers in more accurately estimating the economic benefits of recycling, and it creates a foundation upon which additional studies can be built.

Figure 10. Wages, Taxes and Jobs Attributed to Recycling



*Food category includes animal feed, meal, meat, fat, oils and tallow, as well as community food service
 **Yard Trimmings category includes biodiesel, biogas, compost, mulch and wood chips

Recycled Commodity Values

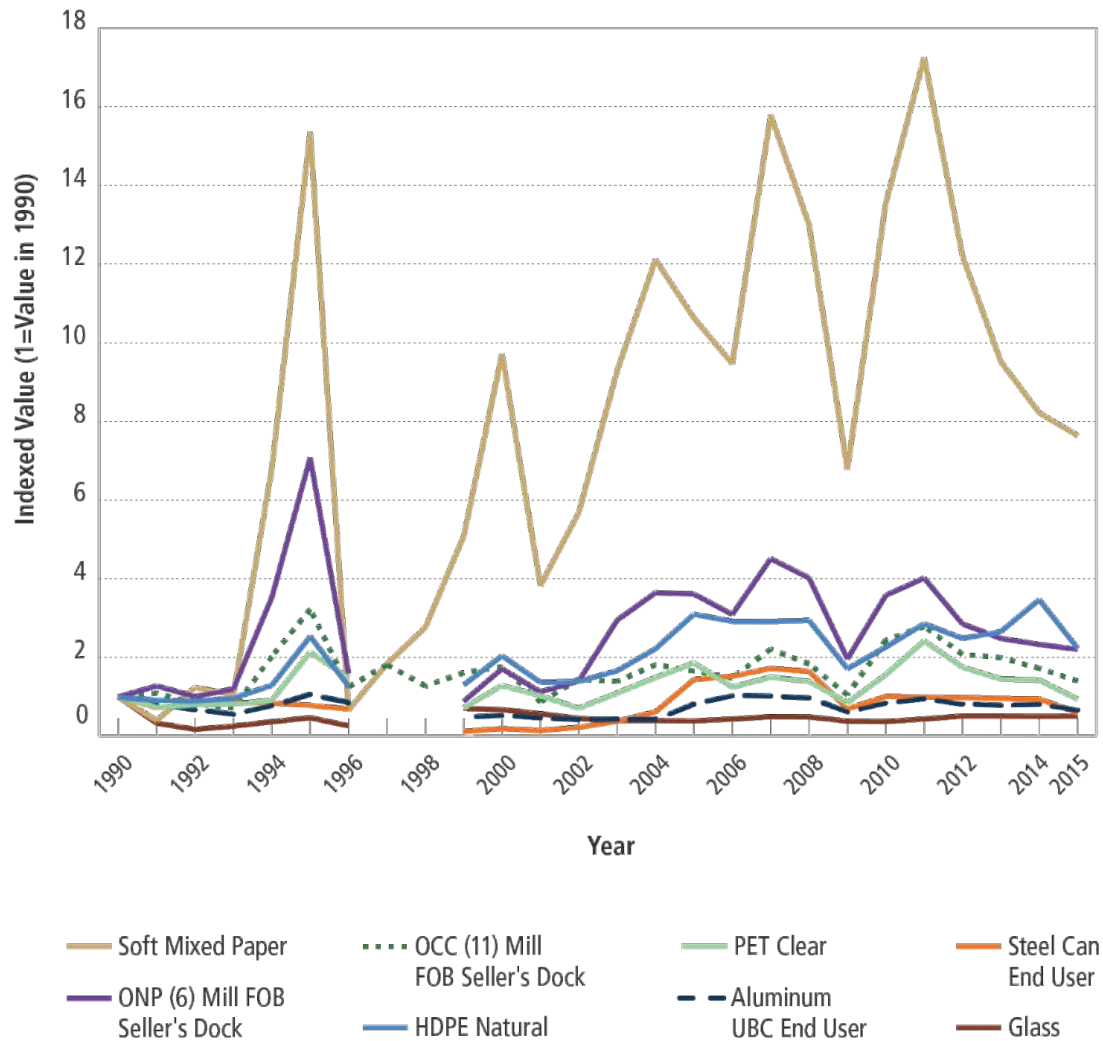
Normalized to 2015, using the Consumer Price Index (CPI) from the Bureau of Labor Statistics to account for inflation, Figure 11 depicts the commodity values for high-density polyethylene (HDPE) natural bottles; polyethylene terephthalate (PET) clear bottles; aluminum used beverage cans (UBC); steel cans; old newspaper (ONP) (grade 6); old corrugated containers (OCC) (grade 11); paper stock (PS) (grade 1) soft mixed paper; and glass containers from 1990 to 2015.

Data were not available for ONP, metals, plastics and glass in 1997 and 1998. For plastics, glass and metals, there was a transition in data sources between 1996 and 1999 and between 2004 and 2005, so some of the change between years could be due to the methodology of the data source for capturing data.

Figure 11 shows the indexed values by year for the recycled commodities. It is indexed to allow commodity values with different metrics, such as dollars per ton, dollars per gross ton and dollars per short ton, to be shown on the same graph and to compare their relative rates of change. The indexed value indicates the change in value of the data since 1990, where one is equal to the value in 1990. For example, if for a given year the indexed value were two, then the commodity value for that year would be two times the 1990 value. In this case, if the 1990 value were 400, then the resulting year's value would be 800.

Figure 11 shows similar trends across all commodities for indexed values. For example, values for plastics and papers spiked in 1995, and values for most commodities dipped in 2009 relative to their values in 1990. Additionally, many commodities, such as plastics and papers, also experienced a price spike in 2000, 2007 and 2011. In contrast, the indexed lines for glass (which represent an average of flint, amber and green glass container values), aluminum and steel cans appear to fluctuate less frequently.

Figure 11. Indexed Recycled Commodity Values by Year



National mean annual commodity values were normalized to constant \$2015 using the Consumer Price Index (CPI) from the Bureau of Labor Statistics to allow meaningful comparisons. 1990 has an indexed value of 1. Soft mixed paper consists of a clean, sorted mixture of various qualities of paper not limited as to type of fiber content. Prohibitive Materials may not exceed 1 percent. There are specific limits on the percent of contaminants allowed in soft mixed paper.

Source: Pulp & Paper Global Fact & Price Book, 2003-2004. Page 128. Paperloop, Inc. 2004.

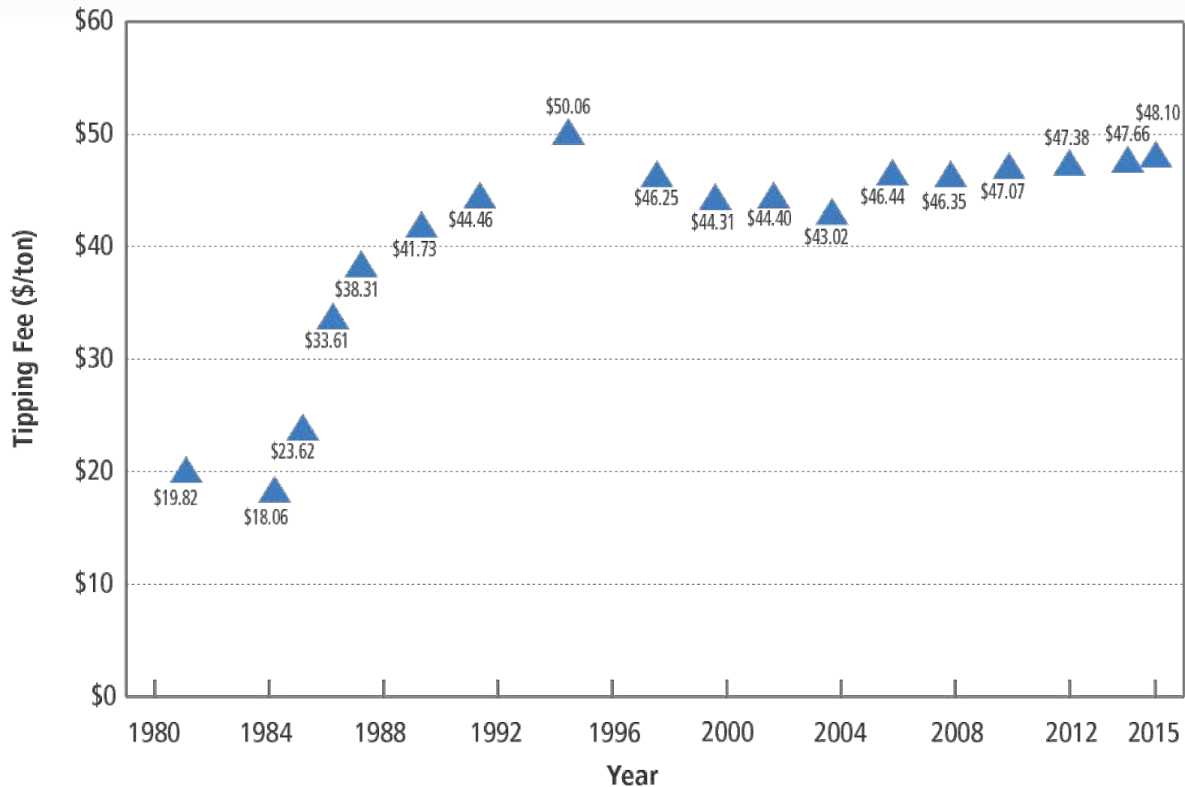
Secondary Materials Pricing and Secondary Fiber Pricing. 2003-2015. Released September 2017. Available at <http://www.recyclingmarkets.net/>. Accessed September 2017.

1970 to 2004 historical data tabulated from weekly or monthly industry publications and averaged annually during the time periods shown. Publications included Waste Age Recycling Times, Waste News, Paper Recycler, Miller Freeman, Inc.

Landfill Tipping Fees

From 1985 to 1995 there was a rapid rise in national landfill tipping fees, followed by a steady decrease from 1995 to 2004. Since 2004, there has been a slow and steady average increase of about one percent per year in landfill tipping fees (See Figure 12). The tipping fees are expressed in constant 2015 dollars.

Figure 12. National Landfill Tipping Fees, 1982-2015 (\$2015 per ton)



National mean annual landfill tipping fees were normalized to constant \$2015 using the Consumer Price Index (CPI) from the Bureau of Labor Statistics to allow meaningful comparisons. This figure shows an average increase from 1985 to 1995 of \$3.20 per year followed by a steady decrease of \$0.78 per year followed by an increase of \$0.46 per year from 2004 to 2015.

Source: National Solid Wastes Management Association (NSWMA) Municipal Solid Waste Landfill Facts. October 2011 (Data from 1985 to 2008). Waste Business Journal. "The Cost to Landfill MSW Continues to Rise Despite Soft Demand." July 11, 2017 (Data for 2010 to 2015).

MSW Generation and Household Spending

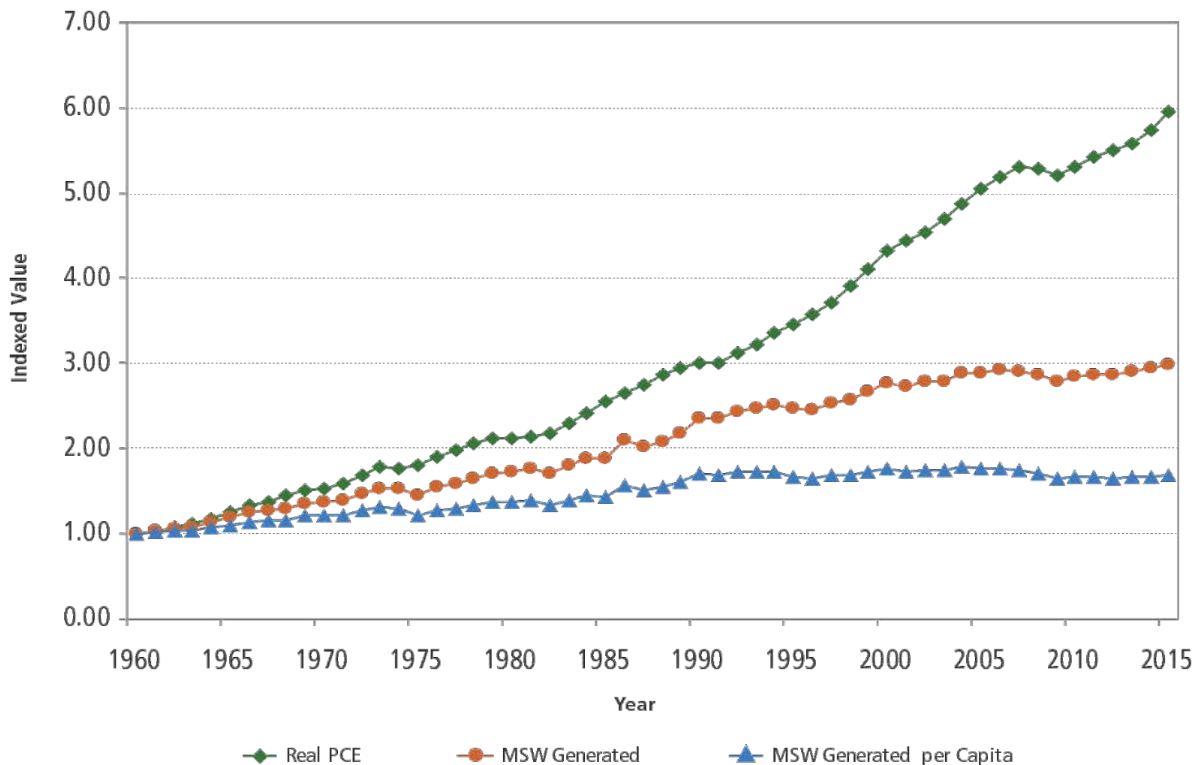
In the U.S., the change in the amount of MSW generated typically mirrors trends in how much money households spent on goods and services. Personal Consumer Expenditures (PCE) measure household spending on goods and services such as food, clothing, vehicles and recreation services. PCE is one of the four components of economic growth, along with government spending, private investments and net exports. As PCE is an indicator of the household consumption of goods and services, which make up nearly 70 percent of the gross domestic product (GDP), PCE has a stronger conceptual tie to MSW generation than the other three GDP components. PCE adjusted for inflation is referred to as real PCE. This metric is more useful in making comparisons over time because it normalizes the value of a dollar by considering how much a dollar could

purchase in the past versus today. Figure 13 explores the relationship between MSW generated and real PCE since 1960.

Figure 13 is an indexed graph showing the relative changes in real PCE, MSW generated and MSW generated per capita over time. It is indexed to allow all three of these metrics to be shown on the same graph and to compare their relative rates of change since 1960. The indexed value indicates the change in the value of the data since 1960. For example, if for a given year the value were three, then the data value for that year would be three times the 1960 value. In this case, if the 1960 value were 200, then the resulting year's value would be 600. The 2015 MSW per capita generation indexed value is 1.7, which means MSW per capita generation has increased by 70 percent since 1960.

Figure 13 shows that real PCE has increased at a faster rate than MSW generation, and the disparity has become even more distinct since the mid-1990s. This metric indicates the amount of MSW generated per dollar spent is falling. In other words, the U.S. economy has been able to enjoy dramatic increases in household spending on consumer goods and services without the societal impact of similarly increasing MSW generation rates. This figure also shows that the MSW generated per capita leveled off in the early-to-mid 2000s.

Figure 13. Indexed MSW Generated and Real PCE over Time (1960-2015)



MSW Methodology

The data summarized in this fact sheet characterizes the MSW stream as a whole by using a materials flow methodology that relies on a mass balance approach. EPA recognizes that there are several approaches to measuring material flows, such as by volume. To be consistent, EPA reports the quantities of materials in tons in the current fact sheet but will continue to explore options for alternative measurement quantifications to describe materials management in the United States.

EPA has consistently used materials flow analysis to allow for the comparison of data over the last three decades. EPA recognizes that this methodology differs from other methodologies that also estimate the generation of MSW and other waste data. EPA will continue to work with stakeholders to identify methodologies and additional publicly available data to improve our national understanding of materials flow in the United States.

Using data gathered from industry associations, businesses and government sources, such as the U.S. Department of Commerce and the U.S. Census Bureau, we estimate the weight in tons of all MSW materials and products generated, recycled, composted, combusted with energy recovery and landfilled. Other sources of data, such as waste characterizations and research reports performed by governments, industry or the press, supplement these data.

Construction and Demolition (C&D) Debris Generation Results

C&D debris is a type of waste that is not included in MSW. Materials included in C&D debris are steel, wood products, drywall and plaster, brick and clay tile, asphalt shingles, concrete and asphalt concrete. These materials are used in buildings, roads and bridges and other structures. The generation estimate represents C&D debris amounts from construction, renovation and demolition activities for buildings, roads and bridges and other structures.

In 2015, 548 million tons of C&D debris were generated. Figure 14 shows the 2015 generation composition for C&D debris. C&D concrete was the largest portion at 70 percent, followed by asphalt concrete at 15 percent. C&D wood products made up 7 percent, and the other products accounted for 8 percent combined. The 2015 generation estimates are presented in more detail in Table 5. As shown in Figure 15, demolition represented over 90 percent of total C&D debris generation. Construction, on the other hand, represented under 10 percent.

Figure 14. C&D Generation Composition by Material (before processing), 2015
548 Million Tons

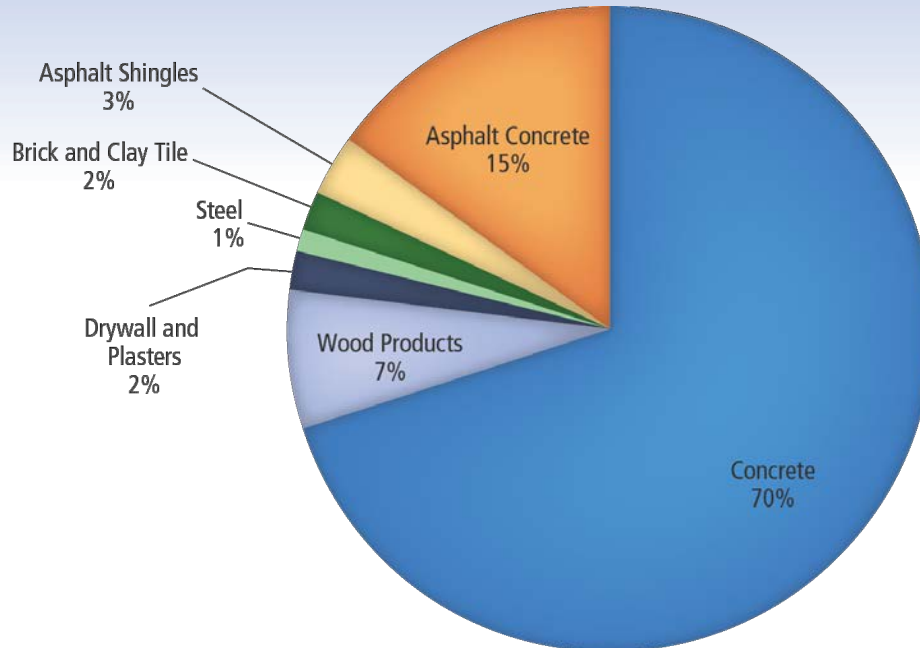


Table 5. C&D Debris Generation by Material and Activity, 2015 (in millions of tons)

	Waste During Construction	Demolition Debris	Total C&D Debris
Concrete	23.1	358.7	381.8
Wood Products ¹	2.8	36.1	38.9
Drywall and Plasters	2.5	10.5	13.0
Steel ²	0.0	4.5	4.5
Brick and Clay Tile	0.3	11.9	12.2
Asphalt Shingles	0.9	12.6	13.5
Asphalt Concrete	0.0	83.9	83.9
Total	29.6	518.2	547.8

¹ Wood consumption in buildings also includes some lumber consumed for the construction of other structures. Data were not available to allocate lumber consumption for non-residential and unspecified uses between buildings and other structures except for railroad ties. Since non-residential buildings such as barns, warehouses and small commercial buildings are assumed to consume a greater amount of lumber than other structures, the amount of lumber for construction remaining after the amount for railroad ties is split out is included in the buildings source category.

² Steel consumption in buildings also includes steel consumed for the construction of roads and bridges. Data were not available to allocate steel consumption across different sources, but buildings are assumed to consume the largest portion of steel for construction.

Figure 15. Contribution of Construction and Demolition Phases to Total 2015 C&D Debris Generation

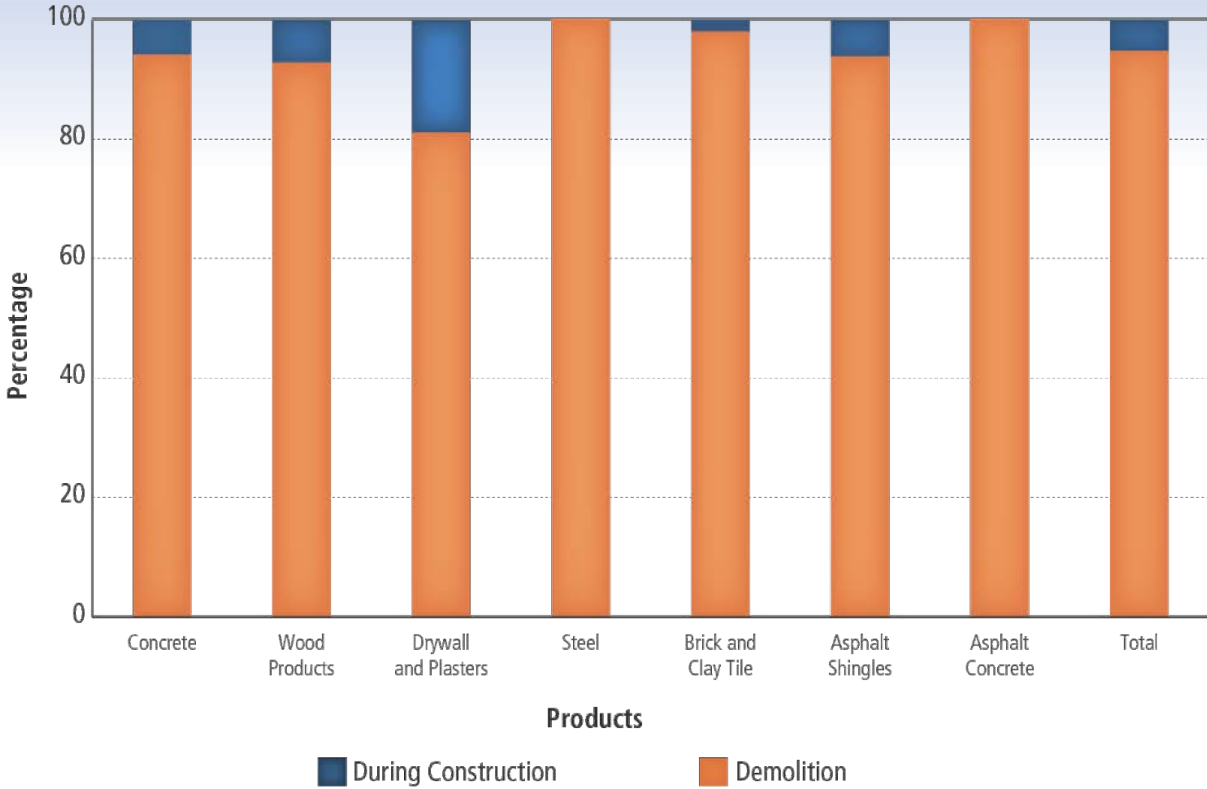


Table 6 displays the amount of C&D debris generation from buildings, roads and bridges and other structures for each material. The “other structures” category includes C&D debris generation estimates from communication, power, transportation, sewer and waste disposal, water supply, conservation and development and the manufacturing infrastructure. In 2015, roads and bridges contributed significantly more to C&D debris generation than buildings and other structures, and concrete made up the largest share of C&D debris generation for all three categories.

Table 6. C&D Debris Generation by Source, 2015 (in millions of tons)

	Buildings	Roads and Bridges	Other
Concrete	88.4	158.4	135.0
Wood Products ¹	37.6	-	1.4
Drywall and Plasters	13.0	-	-
Steel ²	4.5	-	-
Brick and Clay Tile	12.1	-	-
Asphalt Shingles	13.5	-	-
Asphalt Concrete	-	83.9	-
Total	169.1	242.3	136.4

¹ Wood consumption in buildings also includes some lumber consumed for the construction of other structures. Data were not available to allocate lumber consumption for non-residential and unspecified uses between buildings and other structures except for railroad ties. Since non-residential buildings such as barns, warehouses and small commercial buildings are assumed to consume a greater amount of lumber than other structures, the amount of lumber for construction remaining after the amount for railroad ties is split out is included in the buildings source category.

² Steel consumption in buildings also includes steel consumed for the construction of roads and bridges. Data were not available to allocate steel consumption across different sources, but buildings are assumed to consume the largest portion of steel for construction.

A dash in the table means that data are not available.

Thinking Beyond Waste

Measuring and understanding the data on MSW generation, recycling, composting, combustion with energy recovery and landfilling is an important foundation for knowing where these valuable resources are going. It is a starting point to figure out trends and ways to more efficiently use these resources and how to keep them in use. EPA is helping change the way our society views the materials and resources in solid waste by thinking beyond recycling, composting, combustion and landfilling. By going beyond the concept of “Reduce, Reuse, Recycle,” EPA is employing a systemic approach to reduce material use and associated environmental impacts over the entire life cycle of materials through a process called Sustainable Materials Management (SMM). This process starts with the extraction of natural resources and material processing through product design and manufacturing, followed by the product use stage, then collection/processing, and lastly, end-of-life management. By examining how materials are used throughout their life cycle, an SMM approach seeks to use materials in the most productive way with an emphasis on using fewer materials and products, and reducing environmental impacts throughout the life cycle of a material. See <https://www.epa.gov/smm> for more information.

Resources

The 2015 data tables and the summary of the MSW characterization methodology are available on the EPA website, along with information about waste reduction, recycling and sustainable materials management.

Please visit:

<https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling>

<https://www.epa.gov/recycle>

<https://www.epa.gov/smm>

Endnotes

1. Source for 2002 community composting program data: "The State of Garbage In America." Simmons, Phil, Scott M. Kaufman, and Nickolas J. Themelis. *BioCycle* 47, no. 4, p. 26 (2006). Source for 2015 data: Goldstein, N. 2017, "The State of Organics." *BioCycle*, October, p. 5, Table 2. Facilities composting yard trimmings, yard trimmings and food, and mixed organics. Excludes 740 facilities composting manure, biosolids, mixed MSW or not defined.
2. Sources for food composting collection programs: Streeter, V.; Platt B. 2017. Residential Food Waste Collection Access in the U.S. *BioCycle* December. Programs included are programs with startup dates in 2015 or earlier. Programs started in 2016 and 2017 are excluded. Programs with no startup date provided in the source document or identified through internet searches are also excluded.
3. US EPA. 2016. "Recycling Economic Information Report" (2016). <https://www.epa.gov/smm/recycling-economic-information-rei-report>.



United States Environmental Protection Agency
Office of Land and Emergency Management (5306P)
Washington, DC 20460

Official Business
Penalty for Private Use \$300

EPA530-F-18-004

July 2018

APPENDIX 3

DEMOGRAPHICS

APPENDIX 3.1	<u>POPULATION PROJECTIONS</u>
APPENDIX 3.2	<u>NORTHERN VIRGINIA COMMUNITY PROFILE</u>
APPENDIX 3.3	<u>COMMUNITY LEADERSHIP ACADEMY PRESENTATION</u>

APPENDIX 3.1
POPULATION PROJECTION

APPENDIX 3.1

CITY OF MANASSAS POPULATION PROJECTIONS 2020 - 2040 From Weldon Cooper projections¹	
YEAR	POPULATION
2010 (Census)	37,821
2011	38,350
2012	38,879
2013	39,408
2014	39,937
2015	40,466
2016	40,995
2017	41,524
2018	42,053
2019	43,633
2020 (Est.)	45,212
2021	45,607
2022	46,002
2023	46,397
2024	46,792
2025	47,187
2026	47,582
2027	47,977
2028	48,372
2029	48,767
2030 (Est.)	49,162
2031	49,481
2032	49,800
2033	50,119
2034	50,438
2035	50,757
2036	51,076
2037	51,395
2038	51,714
2039	52,033
2040 (Est.)	52,352

¹ <https://demographics.coopercenter.org/virginia-population-projections>

APPENDIX 3.2
NORTHERN VIRGINIA COMMUNITY
PROFILE

COMMUNITY PROFILE

This section of the Plan provides a general overview of the Northern Virginia region. It consists of the following four subsections:

- Geography, Hydrology, and Climate
- Population, Demographics, & Economic Growth
- Transportation
- Housing

Geography, Hydrology, and Climate

The Northern Virginia Planning District (Virginia Planning District #8) is located at the north-east corner of the Commonwealth of Virginia, lies across the Potomac River from the Nation's Capital, Washington, DC and is part of Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA). **Figure 3.1** provides an orientation map for the Northern Virginia Region including all counties, cities and towns within the region as well as the region's neighboring jurisdictions.

Northern Virginia is made up of the counties of Arlington, Fairfax, Loudoun, and Prince William; the independent cities of Alexandria, Falls Church, Fairfax, Manassas, and Manassas Park; the major towns of Dumfries (Prince William County), Herndon and Vienna (Fairfax County), and Leesburg and Purcellville (Loudoun County); and the smaller towns of Clifton (Fairfax County), Hamilton, Hillsboro, Lovettsville, Middleburg, and Round Hill (Loudoun County), and Haymarket, Occoquan, and Quantico (Prince William County). **Figure 3.2** illustrates a base map overview of the Northern Virginia region including all participating county, city and town jurisdictions as well as the identification of interstate highways, major roads, major water bodies and lands outside the authority of participating jurisdictions such as Dulles Airport and U.S. government property.

Northern Virginia is home to numerous U.S. government facilities such as the Pentagon, CIA, and USGS. Historic and cultural resources include George Washington's historic home on the Potomac, Mount Vernon, Arlington National Cemetery, and the Udvar-Hazy Center of the Smithsonian Institution's National Air and Space Museum at Washington-Dulles International Airport.

The Northern Virginia Planning District is divided by three physiographic provinces of Virginia; the Coastal Plain, the Northern Piedmont, and the Blue Ridge (**Figure 3.3**). The Coastal Plain lies roughly east of Interstate Highway-95/395 including the eastern portions of the city of Alexandria, and the counties of Fairfax, and Prince William. The Northern Piedmont province lies roughly between I-95 and US Highway 15 in central Loudoun and western Prince William counties. It is bounded by Blue Ridge Mountains on the west with ridges and foothills and hollows rolling down to the Potomac River in the east. Elevations range from more than 1,950 feet above sea level in the Blue Ridge Mountains in western Loudoun County to sea level in eastern Prince William County on the Potomac River. Total land area is 1,304 square miles.

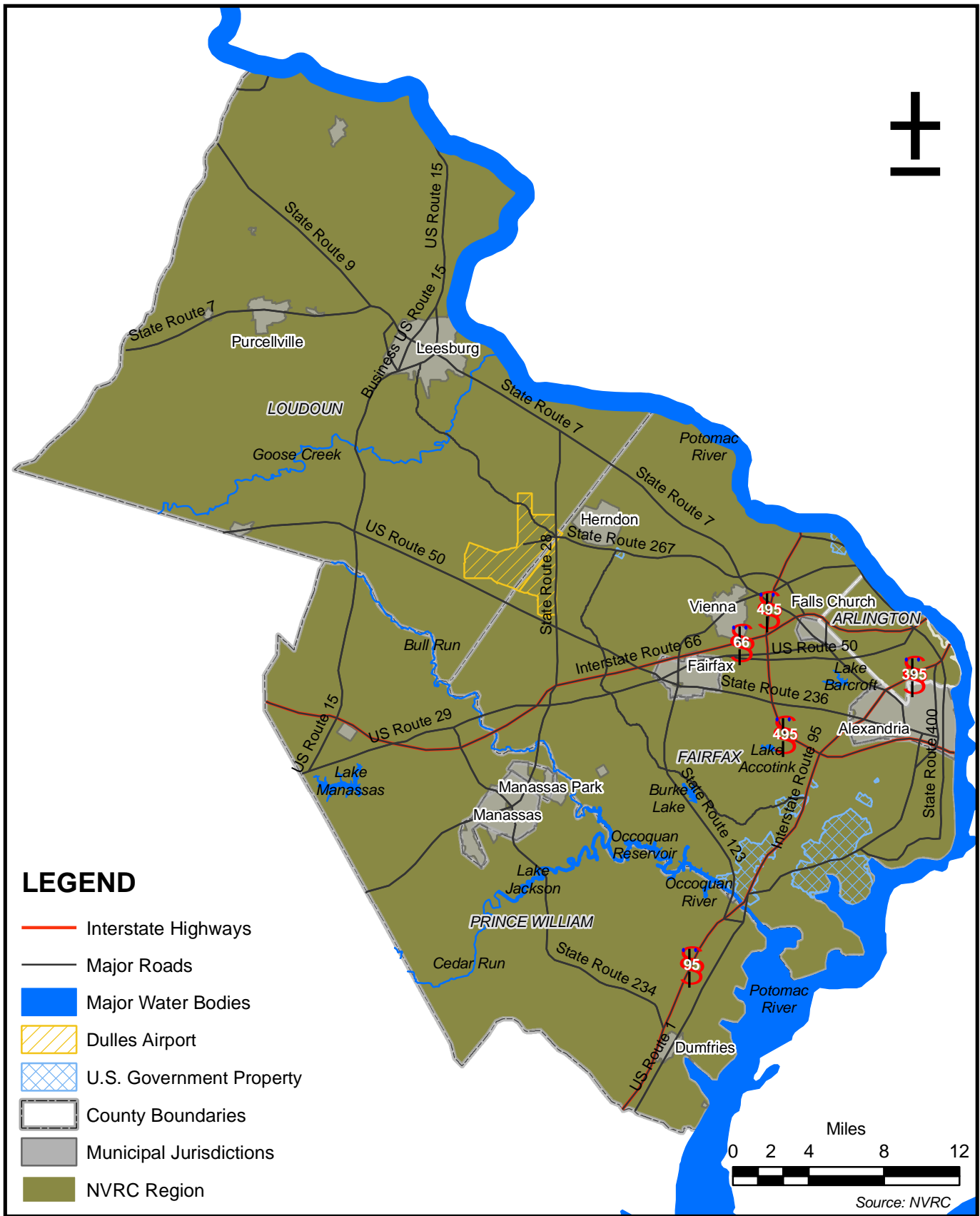
Northern Virginia lies entirely within the Potomac River watershed. After passing Harper's Ferry, WV, the Potomac forms the border between Maryland and Virginia, flowing in a southeasterly direction. The topography of the upper reaches of the basin is characterized by gently sloping hills and valleys. At Great Falls, the stream elevation rapidly descends from over 200 feet to sea level. Eastward of Great Falls, the Basin enters into the Coastal Plain physiographic province.



NORTHERN VIRGINIA REGIONAL HAZARD MITIGATION PLAN

Figure 3.1
Orientation Map





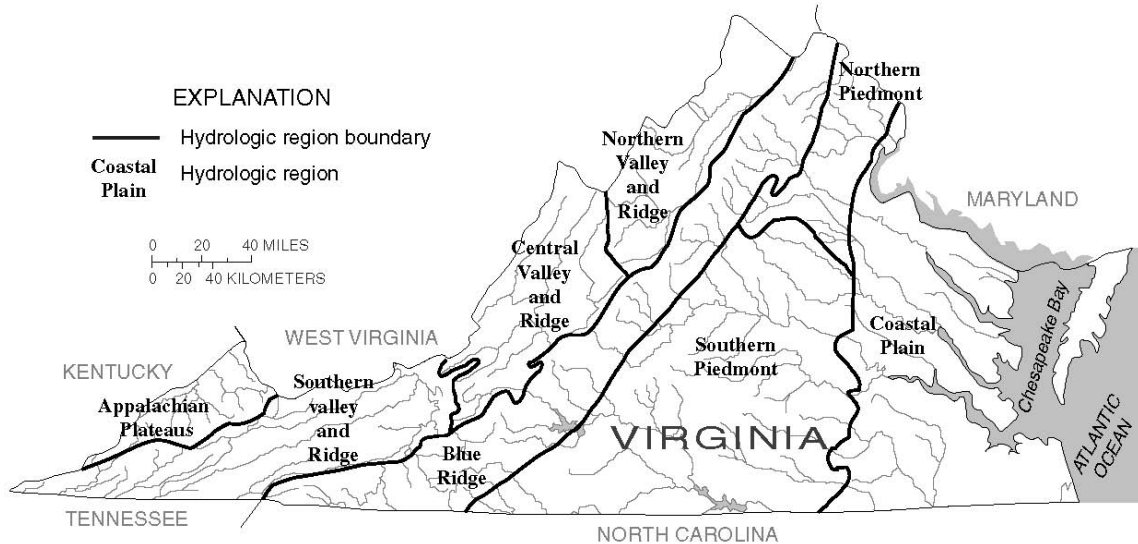
NORTHERN VIRGINIA REGIONAL HAZARD MITIGATION PLAN

Figure 3.2
Northern Virginia Region - Base Map



The area has a moderate climate. Average temperatures are approximately 50 degrees, and range from January lows in the mid-20s to July highs in the high-80s. Annual rainfall averages above 40 inches and is supplemented with approximately 14 inches of snow.

Figure 3.3
Hydrologic Regions of Virginia



Source: U.S. Department of the Interior, U.S. Geological Survey, Fact Sheet 023-01

Population, Demographics, & Economic Growth

A Populous Region that Continues to Grow and Change

Proximity to the nation's capital has been fueling population growth in Northern Virginia for more than 60 years. Since the mid-1930's when large numbers of federal workers brought to Washington, D.C. during the New Deal first began spilling out into adjoining suburbs, people have been moving into Northern Virginia at an accelerated rate. Like a water faucet turned on and left running, the flow of people has remained vigorous and constant for most of the post-war period.

Today, Northern Virginia is home to two million people. As seen in **Table 3.1**, demographers are projecting a half million more residents will be added this decade, — on average, 50,000 newcomers per year, the largest increase in the region's history — and another 275,000 the decade after. By 2020, the population should reach 2.6 million.

**Table 3.1
Projected Population Growth in Northern Virginia, 2004-2020 (in millions)**

Jurisdiction	2004	2010	2020	2004-2020
Alexandria	134.2	143.9	152.6	18.4
Arlington County	193.2	212.2	233.1	39.9
City of Fairfax	23.3	23.9	26.0	2.7
Fairfax County	1,007.4	1,133.0	1,193.4	186.0
Falls Church	11.2	12.3	14.7	3.5
Loudoun County	241.8	318.1	422.9	181.1
Manassas	37.0	38.0	40.2	3.2
Manassas Park	12.4	15.0	16.5	4.1
Prince William County	344.0	415.3	488.2	144.2
Northern Virginia	2,004.5	2,311.7	2,587.6	583.1

Source: Metropolitan Washington Council of Governments, Cooperative Forecasts, Draft Round 7.0

The locus of population growth, inexorably pushing outward, is now sweeping across the broad expanse of the outer rim of the Northern Virginia region. This is where the pressure to absorb new metropolitan growth is most intense, where it will remain concentrated for decades to come. More than 60 percent of the three-quarter million plus newcomers projected from 2000 to 2020 will settle in Prince William and Loudoun Counties.

When the decade of the 1960's began, Northern Virginia was a suburban bedroom community of predominantly white, middle-class families with children, not dissimilar demographically from hundreds of other places. By the end of the century, it had evolved into a complex blend of urban and suburban influences, an intricate demographic composite formed by the economic growth, transformation and prosperity of the Washington metropolitan economy, by a rising tide of immigration, by aging of the baby boom generation and by other powerful agents of social and demographic change.

What are the salient features of Northern Virginia's demographic profile, the characteristics that best define the region and distinguish it from other places in the United States?

Complex Blend of Urban and Suburban

A second salient feature of Northern Virginia's demography is the degree of urbanization etched in locality profiles.

In many ways, American suburbs have become more urban, as traffic congestion, overcrowding, immigrants, and more diverse homes and lifestyles work their way into suburbia. But urban pressures and forms, while present everywhere, have not impacted suburbia equally. The pressures are more intense, as a general rule, in neighborhoods settled by the first wave of post-war suburbanization, as they age and become part of an expanding urban core.

In Northern Virginia, impacts of urbanization can be observed in the contrasting demographic profiles of close-in and outer-fringe localities. The differences can be traced, primarily, to variations in the affordability, age and composition of local housing inventories. As types of housing are unevenly distributed across regional and local landscapes, so too is the flow of different population streams as they seek a home in a location and at a price range suitable to their lifestyle, thereby stamping sections of the region with a distinctive demographic coloration.

Listed below are some of the major demographic differences found in the close-in and outer-ring suburbs of Northern Virginia.

Contrasting Demographic Profiles Close-in and Outer-Ring Suburbs of Northern Virginia

I. Close-in suburbs of Northern Virginia...

(primarily, in Alexandria, Arlington County and some inside-the-beltway Fairfax neighborhoods)

- are communities that have morphed over the past three decades from conventional family-centered suburbs into new-urban enclaves that, demographically, have become similar to what you find today in downtown Manhattan, San Francisco, and other U.S. cities
- have become “first-stop” immigrant gateways
- are approaching minority-majority status
- are distinctive and stand out nationally for their high percentage of non-family households, single-person households, childless households, renters, and multi-unit apartment and hi-rise housing (of 50 or more units)
- have among the smallest percentage of school age children, and among the largest percentage of young adults (20 to 35 year old), found anywhere in the U.S.
- average household sizes also are among the smallest in the country
- have high population turnover, people continually moving in and out, with about half of the population replaced every five years
- exhibit evidence of a widening gap between have and have-nots, a Tale of Two Cities, with large numbers, mainly whites, at the high end of the income ladder; and large numbers, mainly immigrants and minorities, at the low; few in the middle.

II. Outer-ring suburbs of Northern Virginia...

(in Prince William and Loudoun Counties and parts of Fairfax County)

- are communities that are more traditionally suburban in character.
- have lots of families, school-age children, and homeowners who are living in detached single-family houses and townhouses
- have large average household sizes
- have growing foreign-born populations but immigrants with socio-economic backgrounds different from those pouring into the inner core. Outer suburban immigrants, generally, have lived in the U.S. longer, are better educated, are more affluent and are more likely to live in homes they own
- have fewer poor people, less evidence of a have, have-not divide; mainly a Tale of One city, many affluent, well educated homes and people; with depressed pockets and low income people to be sure, but not on the scale found closer-in

More Job Growth Projected

With a gross regional product of nearly \$288 billion dollars, the Greater Washington economy is the fourth largest metro market in the United States, the seventeen largest in the world. A few quick facts underscore the strength, performance and unique structure of its economy, of which Northern Virginia is an important sub-component. Greater Washington ...

COMMUNITY PROFILE

NORTHERN VIRGINIA REGIONAL HAZARD MITIGATION PLAN

- is home to the federal government, the largest purchaser of goods and services in the world. Total value of federal procurement outlays received by businesses in the National Capital region during fiscal year 2004 was 42.2 billion, up from 12.5 billion in 1990.
- leads the nation in job growth over the past twenty years, averaging 52,000 new jobs per year, with job growth over the past five years substantially surpassing numbers achieved by other metropolitan areas in the United States. During this time period, the Washington area generated a total of 305,000 new jobs. The next closest metro was Las Vegas, NV with 150,000 new jobs (about the same number added in Northern Virginia).
- has been significantly outperforming the national economy on most basic indicators of economic activity, (i.e.. GRP growth, job growth, unemployment rates).
- has one of the lowest unemployment rates in the country (3.1% in 2004). Last year, its monthly unemployment rate was the lowest in the nation, among metro areas, for 11 of 12 months
- is the nation's third-largest center of bio-science companies; is home to 5,367 associations, the largest concentration in the nation; and employs more people in technology occupations (76,000) than any other location.
- is a top U.S. tourist destination, serving as host to 18.6 million domestic and international visitors in 2002.
- is home to a growing list of industries and advanced technologies on the vanguard of innovation. Many of the people and companies building the global communications network, for example, are located here, companies such as America ONLINE, UUNET Technologies Inc., PSINet Inc, Lockheed Martin, SPRINT, Comsat, Intelsat, GTE Spacenet and others.

Northern Virginia is a strong sub-regional component of the larger Washington economy, as are suburban Maryland and the District of Columbia. While all of the sub-regional markets are experiencing job growth, Northern Virginia is significantly outpacing the other two. During the 1990's, for each new job added in Suburban Maryland, Northern Virginia gained 2. This decade, the ratio has widened to 2.3 to 1.

Dr. Stephen Fuller, George Mason University, expects 2005 to record strong economic growth, adding more than 80,000 new jobs through out the metropolitan area. This will be followed by a "long-term trend of slower annual growth going forward to the end of the decade". The table below contains employment projections to 2020 developed by the Cooperative Forecasting Program of the Washington Metropolitan Council of Governments (COG).

**Table 3.1
Projected Job Growth in Northern Virginia, 2000-2020**

Jurisdiction	2000	2010	2220	2000-2020
Alexandria	91.4	113.3	132.5	41.1
Arlington County	188.4	217.8	254.4	66.0
City of Fairfax	27.3	31.3	5.3	8.0
Fairfax County	550.3	683.9	784.1	233.8
Falls Church	9.4	11.8	17.8	8.4
Loudoun County	87.0	153.7	212.9	125.9
Manassas	19.9	24.6	26.3	6.4
Manassas Park	2.7	4.5	4.7	2.0
Prince William County	86.8	120.3	156.8	0.0
Northern Virginia	1,063.2	1,361.2	1,624.8	561.6

Source: Metropolitan Washington Council of Governments, Cooperative Forecasts, Draft Round 7.0

Transportation

Northern Virginia and the Washington DC metropolitan area is served by an extensive transportation network. Transportation within the Northern Virginia is primarily dependent upon an network on major highways (VA Rt. 7, I-66, US50, US29/211, I-95/395, and US1) that radiate out from the urban core (Washington, DC, Arlington and Alexandria), one major circumferential highway (I-495/95, the Capital Beltway), and other primary cross-county roads such the Fairfax County Parkway and the Prince William Parkway. The Washington area's Metro primarily serves the inner localities with eleven stations in Arlington County, four stations in the City of Alexandria, and five stations in Fairfax County. The Virginia Railway Express (VRE) commuter rail system serves communities to west cutting through central Fairfax County to the cities of Manassas and Manassas Park and to the south in eastern Prince William County continuing to the City of Fredericksburg. Several bus systems (Metrobus, Alexandria's DASH, Arlington's ART, Falls Church's George, Fairfax County's Connector, Fairfax City's CUE, and Prince William's PRTC/Omniride) provide serve through out the region.

Nevertheless, these transportation systems are being strained by the growing population, housing, and employment patterns. From 1982 to 1997, population increased by 28.3 percent but vehicle miles traveled grew by 81.5 percent, according to the Texas Transportation Institute. Between 1990 and 2000, the length of the average one-way, home-to-work commute increased from 28.2 minutes to 31.7 minutes, and this number has risen further since 2000. Workers are leaving home earlier and coming home later to make up the time that it takes to get where they need to go.

The Texas Transportation Institute 2005 Urban Mobility Report shows the Metropolitan Washington region ranks as follows:

- Number 3 in average hours lost sitting in traffic (69 – 3 hours more than previous year).
- Number 3 in congestion cost per commuter (\$1669 – \$80 more than previous year).
- Number 4 in excess fuel consumed per commuter due to congestion (42 gallons/year – 2 gallons more than previous year).

COMMUNITY PROFILE

NORTHERN VIRGINIA REGIONAL HAZARD MITIGATION PLAN

- Number 5 in total excess gallons of fuel consumed due to congestion (88 million gallons – 4 million more than previous year)#7 Total regional congestion cost (\$2.465 billion/year – \$209 million more than previous year).
- Number 7 in total delay due to congestion (145 million hours/year – 9 million more than previous year). Total Delay due to congestion rank changed from #8 to #7 - worsened.

Transportation systems are key in providing effective emergency response, but can also influence the impact of natural disasters. This can be a particularly crucial issue in Northern Virginia due to the high levels of traffic congestion. In addition to more immediate needs, businesses and employees suffer economic consequences when roads are closed due to natural disasters.

Day to day traffic reports frequently report accidents or simply high volume levels that may bring a particular highway to a standstill. The attack on the Pentagon on September 11, 2001, Hurricane Isabel in 2004, and normal winter storms bring the regional highway system to a stop and taxes the transit system to the limits.

Northern Virginia, the State of Virginia, and the metropolitan area as a whole are actively addressing transportation through significant updates in regional plans, expansion of transit to areas such as Tysons Corner, Reston, and Dulles Airport, and introduction of operational measures such as HOT lanes (charging tolls on high occupancy vehicle lanes) to address congestions. However, under present development scenarios, Northern Virginia will still fall short of finding funding for its transportation needs in the tens of billions of dollars in the next twenty-five years.

Housing

A general market inventory of housing in Northern Virginia shows that there is a continual demand for affordable housing, with low vacancy rates throughout the region. Housing demand is being propelled by the highest high job growth in the United States.

A look at regional housing trends reveals the strengths and challenges of Washington's area's extremely strong economy. In 2003, the region's median housing price was \$286,200 according to the National Association of REALTORS, well above that of Atlanta and Chicago but below that of New York, San Francisco, and Los Angeles, putting the Washington area in the middle of the affordability scale among major metropolitan areas. The real estate and construction industries are strong, and homebuyers are realizing outstanding returns on their investments. But the region's economic growth and job creation trends are taking a toll on housing affordability. According to a George Mason University (GMU) Center for Regional Analysis (CRA) study, the area had a deficit of 43,200 housing units in 2003, a number that is expected to grow to 218,000 by 2025. Demand for housing is outpacing availability and, combined with record low interest rates, is pushing prices up beyond the means of many area residents.

As tracked by COG, the median sales price of housing has increased 59 percent over the past six years, from \$166,548 in 1997 to \$265,047 in 2003. Incomes have not been keeping pace with rising housing prices. Between 1998 and 2003, incomes increased by only 17 percent, compared with a housing sales price increase of 59 percent. The Urban Institute estimates that one-quarter of the region's households are carrying unaffordable housing cost burdens. Housing construction has been pushed to outer-ring suburban jurisdictions, where prices still remain somewhat affordable, but savings are counterbalanced to some extent by the increased cost and time of commutes.

APPENDIX 3.3
COMMUNITY LEADERSHIP
ACADEMY PRESENTATION

Community Leadership Academy

Airport

Engineering

Public Works

Utilities

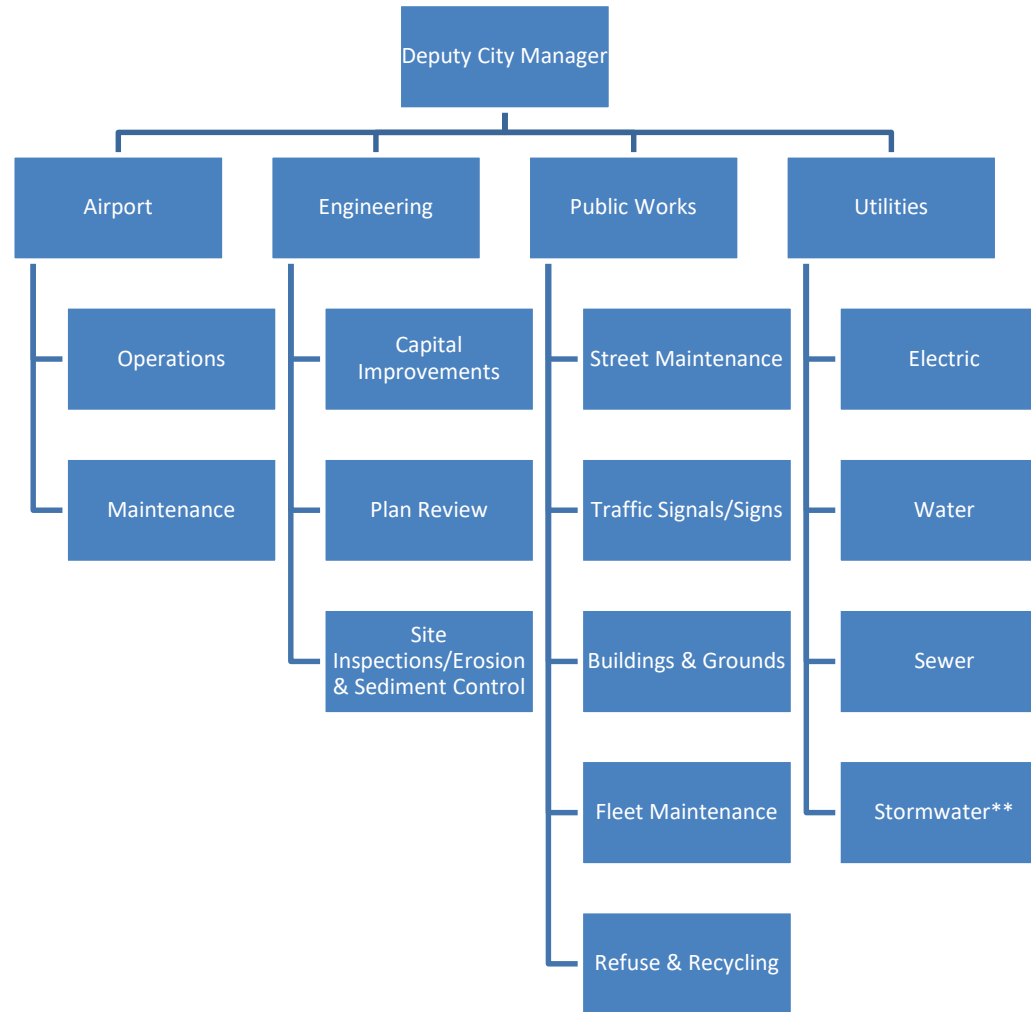
September 27, 2018



Introductions

- Bryan Foster, Deputy City Manager
- Monica Boehringer, Refuse & Recycling Coordinator
- Juan Rivera, Airport Director
- Tony Dawood, Utilities Director

Operational Structure



Refuse and Recycling

Enterprise fund operating within Public Works with an annual budget \$3.5 million.

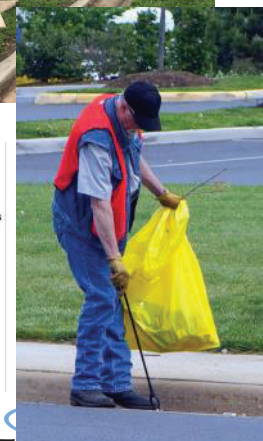
Currently **services 10,281 households** in single family and town home communities within the City of Manassas.

Collections

- Trash
- Recycling
- Yard Waste
- Bulk Waste
- Televisions and Computer Monitors

Drop-offs

- Household Hazardous Waste (HHW)
- Electronic Waste
- Paper Shredding



Refuse and Recycling

Works in partnership to deliver services.



Didlake



Volume:

- 12,616 tons of trash
- 2,589 tons of recycling
- 1,399 tons of yard waste
- 30 tons HHW
- 24.2 tons electronics
- 12.3 tons shredded paper



Looking Ahead:

- Reduce recycling contamination
- Increase recycling participation in townhomes
- Introduce organics recycling
- Glass recycling partnership with Fairfax County



RecycleRight!

Refuse and Recycling

Reaches over 41,000 residents providing information and activities to ensure residents dispose of their trash and recycling correctly.



Information

- Website
- City Connection Newsletter
- Facebook
- YouTube
- NextDoor
- Posters
- Articles/Press Releases
- Information Flyers
- Magnets
- Presentations

Activities

- Keep Manassas Beautiful
- Litter Audits
- Project Recycle Runway
- Recycling and the Civil War
- America Recycles Day
- RecycleFest
- National Night Out
- Latino Festival
- One Love Festival
- Utilities Day
- Great American Clean-up
- Adopta
- Summer Recycling Camp
- RecycleRight
- Recycled Art Competition
- HOA presentations
- Classroom presentations



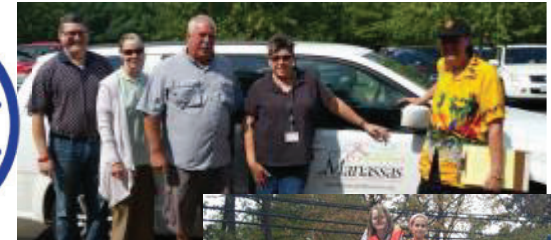
Refuse and Recycling

Relies on resident participation to help us Keep Manassas Beautiful.

The City became an Affiliate of Keep America Beautiful in November 2017.

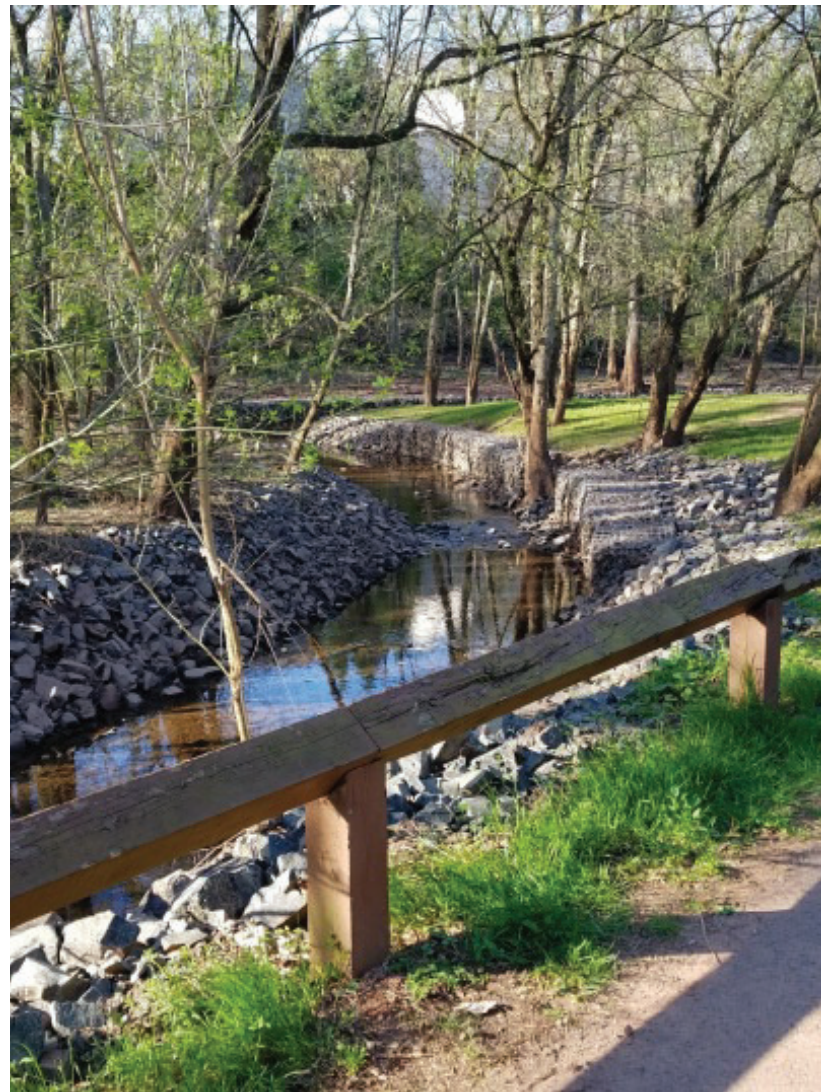
Our first year:

- 2,060 participants
- 1,587 volunteer hours
- 3,120 young people reached
- \$39k value in volunteer time
- 2,805lbs litter collected





HISTORIC Heart Beat MODERN



APPENDIX 4

SOLID WASTE GENERATION

APPENDIX 4.1	HISTORIC WASTE GENERATION
APPENDIX 4.2	PROJECTED WASTE GENERATION
APPENDIX 4.3	WASTE COMPARISON
APPENDIX 4.4	REFUSE AND RECYCLING REPORTING FORM
APPENDIX 4.5	RESIDENTIAL TONNAGE REPORT 2019

APPENDIX 4.1
HISTORIC WASTE GENERATION

APPENDIX 4.1

HISTORICAL WASTE GENERATION

TABLE 4-A				
CITY OF MANASSAS				
HISTORICAL TONNAGES AND PER COLLECTION TONNAGE				
2010 - 2018				
Population from Weldon Cooper projections				
Tonnage and residential user totals from City Records				
YEAR	POPULATION	TOTAL ANNUAL RESIDENTIAL SERVICE USERS	TONNAGE (CURBSIDE ONLY)	PER COLLECTION (Pounds)
2010 (Census)	37,821	118,670	11,013	185.6
2011	38,350	119,187	11,347	190.4
2012	38,879	119,890	11,030	184.0
2013	39,408	120,368	11,724	194.8
2014	39,937	121,303	11,455	188.9
2015	40,466	122,215	11,768	192.6
2016	40,995	122,947	12,113	197.0
2017	41,524	123,287	12,649	205.2
2018	42,053	123,198	12,616	204.8

TABLE 4-B**CITY OF MANASSAS****HISTORICAL TONNAGES AND PER CAPITA GENERATION****2010 - 2016****Population from Weldon Cooper projections****Tonnage from City Records**

YEAR	POP.	TONNAGE (CURBSIDE ONLY)	PER CAPITA (pounds per person per day)	TONNAGE (CURBSIDE AND BUSINESS REFUSE ONLY)	PER CAPITA	TONNAGE (CURBSIDE AND BUSINESS REFUSE + RECYCLING)	PER CAPITA
2010 (Census)	37,821	11,013	1.6	32,582	4.7	59,598	8.6
2011	38,350	11,347	1.6	31,962	4.6	54,586	7.8
2012	38,879	11,030	1.6	26,912	3.8	44,827	6.3
2013	39,408	11,724	1.6	36,160	5.0	58,014	8.1
2014	39,937	11,455	1.6	37,254	5.1	64,581	8.9
2015	40,466	11,768	1.6	30,631	4.1	55,495	7.5
2016	40,995	12,113	1.6	36,575	4.9	66,733	8.9
2017	41,524	12,649	1.7	NA		NA	
2018	42,053	12,616	1.6	NA		NA	

TABLE 4-C				
CITY OF MANASSAS				
HISTORICAL TONNAGES BY MONTH 2016-2018				
Tonnage from Curbside City Records				
	FY2015	FY2016	FY2017	FY2018
Jul	1167	1131	1061	1052
Aug	895	909	1182	1280
Sep	961	1046	1016	1086
Oct	993	963	958	1009
Nov	829	829	1068	1078
Dec	1060	1060	1040	958
Jan	877	818	1004	1034
Feb	732	883	843	868
Mar	1137	1091	1054	996
Apr	1008	976	1025	967
May	1031	1080	1173	1147
Jun	1076	1191	1225	1391
Totals:	11768	11978	12648	12864

TABLE 4-D	
CITY OF MANASSAS	
HISTORICAL TONNAGES	
Tonnage from Curbside City Records	
YEAR	REFUSE (tons)
2003	13,746
2004	15,213
2005	14,677
2006	13,974
2007	12,919
2008	12,284
2009	11,812
2010	11,070
2011	11,423
2012	11,157
2013	11,724
2014	11,367
2015	11,768
2016	11,978
2017	12,648
2018	12,864

APPENDIX 4.2
PROJECTED WASTE GENERATION

APPENDIX 4.2

WASTE GENERATION PROJECTIONS

TABLE 4-E				
CITY OF MANASSAS				
TONNAGE PROJECTIONS: 2010 - 2040				
YEAR	POP.	TONNAGE	POUNDS PER PERSON PER DAY	% INCREASE BY 5 YEAR INCREMENTS
2010 (Census)	37,821	32,582	4.7	
2011	38,350	31,962	4.6	
2012	38,879	26,912	3.8	
2013	39,408	36,160	5.0	
2014	39,937	37,254	5.1	14.3%
2015	40,466	30,631	4.1	
2016	40,995	36,575	4.9	
2017	41,524	34,102	4.5	
2018	42,053	34,536	4.5	
2019	43,633	35,834	4.5	17.0%
2020 (Est.)	45,212	37,130	4.5	
2021	45,607	37,455	4.5	
2022	46,002	37,779	4.5	
2023	46,397	38,104	4.5	
2024	46,792	38,428	4.5	3.5%
2025	47,187	38,752	4.5	
2026	47,582	39,077	4.5	
2027	47,977	39,401	4.5	
2028	48,372	39,726	4.5	
2029	48,767	40,050	4.5	3.3%
2030 (Est.)	49,162	40,374	4.5	
2031	49,481	40,636	4.5	
2032	49,800	40,898	4.5	
2033	50,119	41,160	4.5	
2034	50,438	41,422	4.5	2.6%
2035	50,757	41,684	4.5	
2036	51,076	41,946	4.5	
2037	51,395	42,208	4.5	
2038	51,714	42,470	4.5	
2039	52,033	42,732	4.5	2.5%
2040 (Est.)	52,352	42,994	4.5	

NOTES:

Annual population increase based on Weldon Cooper

Tonnage for 2010 through 2016 based on City recycling reporting records

Pounds/person/day for 2012 to 2016 calculated from curbside + business refuse

Pounds/person/day for 2017 - 2040 based on EPA published value

APPENDIX 4.3
WASTE COMPARISON

APPENDIX 4.3

WASTE GENERATION PROJECTIONS BY CATEGORY

Table 4-F							
Population Projections (from SWMP)		2015	2020	2025	2030	2035	2040
		40,466	45,212	47,187	49,162	50,757	52,352
WASTE CATEGORY (1)(2)	Estimated Pounds/person/day	2015 tons	2020 tons	2025 tons	2030 tons	2035 tons	2040 tons
MSW - Residential (36% of per capita generation)	1.41	10,422	11,644	12,153	12,661	13,072	13,483
MSW - Commercial (58% of per capita generation)	2.27	16,791	18,760	19,579	20,399	21,061	21,723
Vegetative yard waste	0.59	4,357	4,868	5,081	5,294	5,465	5,637
Industrial (5%)	0.20	1,447	1,617	1,688	1,759	1,816	1,873
Sludge	0.01	74	83	86	90	93	96
Subtotal	4.48	33,091	36,972	38,587	40,202	41,506	42,811

WASTE CATEGORY (3)	Estimated Pounds/person/day	2015 tons	2020 tons	2025 tons	2030 tons	2035 tons	2040 tons
Regulated medical waste (RMW)	0.004	30	33	34	36	37	38
Household Hazardous waste (HHW)	0.02	155	173	181	188	195	201
CDD as estimated by EPA	2.80	20,678	23,103	24,113	25,122	25,937	26,752
Construction waste (51% of CDD)	1.42	10,487	11,717	12,229	12,740	13,154	13,567
Demolition waste (47% CDD)	1.32	9,719	10,859	11,333	11,807	12,190	12,573
Landclearing debris (1.7% of CDD)	0.05	352	393	410	427	441	455
Stumps (0.3% of CDD)	0.09	682	762	796	829	856	883
Motor vehicle tires (1 tire per year per person @ 20 pounds per tire)	0.05	405	452	472	492	508	524
Waste Oil (3.56 gallons per vehicle per year @ 7.4 lb/gallon)	0.08	527	564	630	657	685	707
Antifreeze (1.8 gallons per vehicle every 4 years @ 8.4 lb/gallon)	0.01	76	81	90	94	98	101
Batteries (0.05 lb/per/day)	0.05	369	413	431	449	463	478
White goods (0.015)lb/per/day)	0.015	111	124	129	135	139	143
Subtotal	3.01	22,217	24,823	25,908	26,992	27,868	28,743
TOTAL	7.49	55,308.33	61,795.09	64,494.49	67,193.89	69,373.92	71,553.94
Registered Vehicles - 2019	40,000						

NOTES:

1. Waste tonnage for MSW and yard waste taken from EPA, report entitled, Advancing Sustainable Materials Management: 2017 Fact Sheet.
 - MSW was estimated to be 4.51 pounds per person per day which would include 13% yard trimmings. Thus, MSW taken at 3.92 pounds per person per day and yard trimmings at 0.59 pounds per person per day.
 - Residential determined using VADEQ RRR Manassas to estimate that residential waste is approximately 36% of the MSW waste stream.
 - Commercial determined using VADEQ RRR Manassas to estimate that commercial waste is approximately 58% of the MSW waste stream.
 - Industrial determined using VADEQ RRR Manassas to estimate that Industrial waste is approximately 5% of the MSW waste stream.
2. Waste tonnage for sludge was evaluated against estimates reported for other Cities (Bristol, VA and Newport News, VA) Urban tonnages 2.0 and 0.5 pounds per person per day respectively. These have been modified for Amherst based on Form 50-25 records.
3. Special wastes per capita values taken from a number of sources as follows:
 - RMW - Virginia average total tons/population for 2015-2018 from VADEQ Annual Solid Waste Reports
 - HHW - From www.cdphe.state.co.us/hm/hhw/hhw/asp
 - CDD - From EPA, Franklin & Associates, "Characterization of Building Related Construction and Demolition Debris in the United States, June 1998."¹
 - From Florida Center for Solid and Hazardous Waste Management, "Generation and Composition of Construction and Demolition Debris in Florida," Report #03-08, February 27, 2003
 - Tires - VA DEQ Tire program
 - Waste Oil - American Petroleum Institute, Study model.
 - Antifreeze - VA Used Oil program estimate.
 - Batteries -EPA, facts-and-figures-about-materials-waste-and-recycling/durable-goods-product, 2017 Update.²
 - White Goods -from VADEQ Annual Solid Waste Reports average total tons/population for 2015-2018

¹ https://www.epa.gov/sites/production/files/2018-09/documents/construction_and_demolition_debris_generation_in_the_united_states_2015_final.pdf

² <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/durable-goods-product-specific-data#LeadAcidBatteries>

APPENDIX 4.4
REFUSE AND RECYCLING
REPORTING FORM



DEPUTY CITY
MANAGER
Bryan D. Foster

CITY OF MANASSAS
MANASSAS, VA 20110
DEPARTMENT OF PUBLIC WORKS
REFUSE AND RECYCLING

8500 Public Works Drive
Manassas, VA 20110

Telephone: 703/257-8256
Facsimile: 703/330-4429

MAYOR
Harry J. Parrish II

CITY COUNCIL
Ken D. Elston
Ian T. Lovejoy
Mark D. Wolfe
Michelle Davis-Younger
Theresa Coates Ellis
Pamela J. Sebesky

CITY MANAGER
W. Patrick Pate

January 14, 2019

Annual Solid Waste Report Department of Environmental Quality

PLEASE RESPOND BY MARCH 1, 2019

Dear Business Colleague:

The Department of Environmental Quality requires the City of Manassas to submit an annual report describing the amount of solid waste disposed within the City limits, during the preceding calendar year.

The statistical information received is then used to calculate the City's recycling rate and to improve services provided to the community.

Information provided by local businesses and haulers has allowed the City to have a recycling rate of 48 percent. In 2019, we will be reaching for 49 percent and I know that we will be able to achieve that with your help.

Attached is a copy of the City of Manassas **Annual Solid Waste and Recycling Tonnage Report** form for **Calendar Year 2018**.

General Instructions:

1. Fill in your company and contact information
2. Identify your type of business. For retail, hospital, automotive businesses, just write in what type business in the **Other** category.
3. Sign the **Certification** section.
4. List the tonnage of what your business recycles and how you dispose of it in sections **B** through **E**. (Your solid waste hauler will have the details.)
5. You can send your completed form to the City of Manassas the following ways:
 - Mail: City of Manassas, Refuse & Recycling Coordinator
8500 Public Works Drive
Manassas, Virginia 20110
 - Fax: (703) 330-4429
 - E-mail: mboehringer@manassasva.gov

Note for haulers:

1. If you no longer collect solid waste or recyclable materials within the City of Manassas, please indicate this on your form and submit as instructed.
2. If you report collections from routes that cross jurisdictional boundaries, please pro-rate your estimates.

Thank you in advance for your cooperation and support in helping to make the City of Manassas a more environmentally conscious and responsible City.

If you have any questions or require assistance completing this form, please feel free to contact me on 703-257-8256.

Sincerely,

A handwritten signature in black ink that reads "Monica Boehringer". The signature is written in a cursive style with a long horizontal flourish at the end.

Monica Boehringer
Refuse & Recycling Coordinator
City of Manassas



City of Manassas Annual Refuse & Recycling Report Calendar Year 2018

SECTION A – CONTACT INFORMATION

1. Company: _____
2. Contact Person: _____ Title: _____
3. Address: _____
Street/PO Box City State Zip
4. Phone: (____) _____ Fax: (____) _____
5. Email: _____
6. Nature of Business:
 - Paper Collector
 - Electronics Recycling Company
 - Secure Document Destruction
 - Tire Recycling Company
 - Used Oil / Antifreeze / Solvents - Collector
 - Metals Recycler (Ferrous & Non-Ferrous)
 - Battery Recycler
 - Yard Maintenance/Landscaping Company
 - Textile, Shoes, Clothing Recycling Company
 - Commercial / Retail Back-hauler of Cardboard & Other Recyclable Materials
 - Solid Waste – Trash / Recycling Collector
 - Construction and Demolition Collector
 - Bulk Waste & Junk Collector
 - Material Recovery Facility (MRF)
 - Other: _____

CERTIFICATION:

I certify that to the best of my knowledge the information being submitted on this form is true, accurate, and complete. I understand that these records shall be made available for auditing purposes and that there may be penalties for intentionally submitting false information.

Signature: _____ Date: _____

Printed Name: _____ Title: _____

Note: Please complete sections B through E on the following pages.

** Source Codes: R = Residential C = Commercial I = Institutional

SECTION B - Report Tons of Principle Recyclable Materials Collected in 2018				
MATERIALS COLLECTED FOR RECYCLING <i>Report only tonnages collected from City of Manassas</i>	Tons Recycled	Source**	Estimate (Y/N) *	Name of Recycling Processor †
MIXED / SINGLE STREAM RECYCLING				
Single Stream / All in One Recycling				
Bottles & Cans Only (no paper items)				
PAPER				
Mixed Paper				
Cardboard				
Newspapers				
Shredded Paper				
METAL				
Appliances				
Inoperative Motor Vehicles				
Aluminum Cans				
Other Scrap Metal				
PLASTIC				
Plastic Film (shrink wrap, plastic bags, etc.)				
Other Plastics				
GLASS				
Glass (collected source separated)				
ORGANICS				
Yard Waste (grass & leaves)				
Brush				
Tree Stumps				
Scrap Wood (pallets, reels, crates, sawdust, lumber)				
Organic Waste (cooking oil, bone, etc)				
Food Waste				
ELECTRONICS / BATTERIES				
Electronics (computers, TVs, etc.)				
Batteries (non automotive)				
OTHER PRINCIPAL RECYCLED MATERIALS				
Motor Oil				
Anti-Freeze				
Truck Batteries (60 lbs/each)				
Auto/Light Truck Tires (20 lbs/each)				
Truck Tires (105 lbs/each)				
Oil Filters/Uncrushed (see Attachment 1)				
Oil Filters/Crushed (see Attachment 1)				
TOTAL TONS COLLECTED				

* If estimating, please include notes and refer to Conversion Estimator on page 7.

† Refer to Attached page for list of primary local facility names on page 6.

SECTION C - Report tons of other materials not listed in Section B				
	Tons Recycled	Source**	✓ here if Estimate*	Name of Recycling Processor †
OTHER MATERIALS				
Paint				
Textiles (clothing, shoes, leather, etc.)				
Furniture				
Books				
Fluorescent Bulbs				
TOTAL TONS				

SECTION D - Report tonnage of all CDD Materials collected in jurisdiction for 2018			
	Tons Disposed	✓ here if Based on Estimate*	Name of Disposal Facility †
CONSTRUCTION & DEMOLITION DEBRIS			
TOTAL TONS			

SECTION E - Report total tonnage of all Solid Waste Collected in jurisdiction for 2018			
	Tons Disposed	✓ here if Based on Estimate*	Name of Disposal Facility †
SOLID WASTE COLLECTED			
Residential			
Commercial- includes apartments			
Industrial			
TOTAL TONS			

** Source Codes: R = Residential C = Commercial I = Institutional
 * If estimating, please include notes and refer to Conversion Estimator on page 7.
 † Refer to Attached page for list of primary local facility names on page 6.

ADDITIONAL COMMENTS, CLARIFICATIONS

City of Manassas Zip Codes:

There are two zip codes that are used in the City of Manassas: 20110 and 20108.

List of Primary Materials Recovery Facilities (MRF's) for Northern Virginia:

Please reference these facilities when completing your form

Commodity	Hauler	Address	City	Phone
Construction/ Demolition	Hilltop C&D Landfill	7950 Telegraph Rd	Alexandria	703-971-1300
Construction/ Demolition	Potomac Landfill	3730 Greentree Ln	Dumfries	703-690-6040
Construction/ Demolition	Lorton CDD Landfill	1001 Furnace Rd	Lorton	703-633-3006
Construction/ Demolition Materials Recovery Facility	C&D Recovery	12301 Randolph Ridge Ln	Manassas	301-428-0800
Construction/ Demolition Materials Recovery Facility	Alexandria Waste Recovery Facility	625 Burnside Place	Alexandria	703-823-5009
Construction/ Demolition Materials Recovery Facility	Broad Run Recycling	9220 Developers Dr	Manassas	571-292-5333
Commingled Recycling	Con-Serv Industries, Inc (CSI)	PO Box 650490	Sterling	703-444-3181
Single Stream / Commingled Recycling	WM/RA Capitol MRF	6610 Electric Dr	Springfield	703-658-0200
Single Stream / Commingled Recycling	American Disposal Services	10220 Residency Rd	Manassas	703-368-0500
Single Stream / Commingled	WM Merrifield Transfer	2801 Dorr Ave	Fairfax	703-207-9100
Paper/Commingled Recycling	World Recycling Co	5600 Columbia Park Rd	Cheverly	301-386-3010
Paper/Commingled Recycling	SP Recycling	14811 Dumfries Road	Manassas	703-794-9198
Fiber	Gordon Recycling	5902 Farrington Ave	Alexandria	703-370-8884
Restaurant Grease & Oil	Valley Proteins	PO Box 3588	Winchester	540-877-2590
Metal	Davis Industries	9520 Richmond Hwy	Lorton	703-550-7402
Metal	Joseph Smith	2001 Kenilworth Ave	Capital Heights	301-341-1249
Municipal Solid Waste	Fairfax County I-66 Transfer Station	4618 West Ox Rd	Fairfax	703-631-1179
Municipal Solid Waste Transfer	WM Manassas Transfer Station	8305 Quarry Rd	Manassas	703-331-0800
Municipal Solid Waste	Fairfax County I-95 WTE	9850 Furnace Rd	Lorton	703-690-1703
Used Oil	FCC Environmental	Farrington Ave	Alexandria	703-461-2661

Volume to Weight Conversion Estimator:

You can estimate the volume of your recycling or solid waste

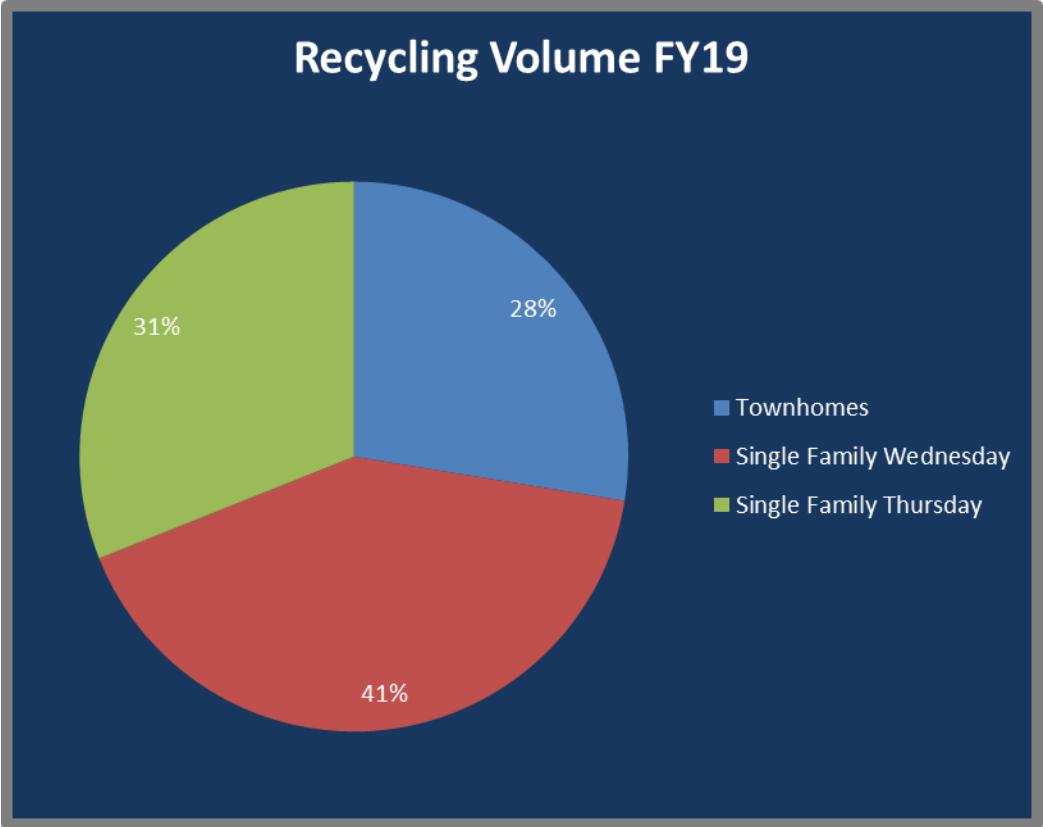
Material	Volume	Weight in Pounds
Metal		
Aluminum Cans, Whole	One cubic yard	50-74
Aluminum Cans, Flattened	One cubic yard	250
Aluminum Cans	One full grocery bag	1.5
Ferrous Cans, Whole	One cubic yard	150
Ferrous Cans, Flattened	One cubic yard	850
Automobile Bodies	One vehicle	2,000
Paper		
Newsprint, Loose	One cubic yard	360-800
Newsprint, Compacted	One cubic yard	720-1,000
Newsprint	12" stack	35
Corrugated Cardboard, Loose	One cubic yard	75-100
Corrugated Cardboard, Baled	One cubic yard	1,000-2,000
Plastic		
PETE, Whole, Loose	One cubic yard	30-40
PETE, Whole, Loose	Gaylord	40-53
PETE, Whole, Baled	30" x 62"	500
Film, Baled	30" x 42" x 48"	1,100
Film, Baled	Semi-Load	44,000
Film, Loose	Standard grocery bag	15
HDPE (Dairy Only), Whole, Loose	One cubic yard	24
HDPE (Dairy Only), Baled	32" x 60"	400-500
HDPE (Mixed), Baled	32" x 60"	900
Mixed PET & Dairy, Whole, Loose	One cubic yard	32
Mixed PET, Dairy & Other Rigid (Whole, Loose)	One cubic yard	38
Mixed Rigid, No Film	One cubic yard	49
Glass		
Glass, Whole Bottles	One cubic yard	600-1,000
Glass, Semi-Crushed	One cubic yard	1,000-1,800
Glass, Crushed (Mechanically)	One cubic yard	800-2,700
Glass, Whole Bottles	One full grocery bag	16
Glass, Uncrushed to Manually Broken	55 gallon drum	125-500
Arboreal		
Leaves, Uncompacted	One cubic yard	200-250
Leaves, Compacted	One cubic yard	300-450
Leaves, Vacuumed	One cubic yard	350
Wood Chips	One cubic yard	500
Grass Clippings	One cubic yard	400-1,500
Other		
Battery (Heavy Equipment)	One	60
Battery (Auto)	One	35.9
Used Motor Oil	One gallon	7.4
Used Oil Filters (Uncrushed)	55 gallon drum	66 Lbs./ Used Oil + 110 Lbs./Ferrous Metal
Used Oil Filters (Crushed)	55 gallon drum	16.5 Lbs./ Used Oil + 368 Lbs./Ferrous Metal
Tire - Passenger Car	One	20
Tire - Truck, Light	One	35
Tire - Semi	One	105
Antifreeze	One gallon	8.42
Food Waste, Solid & Liquid Fats	55 gallon drum	412
Electronics: CRT/CPU/Laptop/TV	(Each) Average weight from NCER	38/26/8/49 respectively

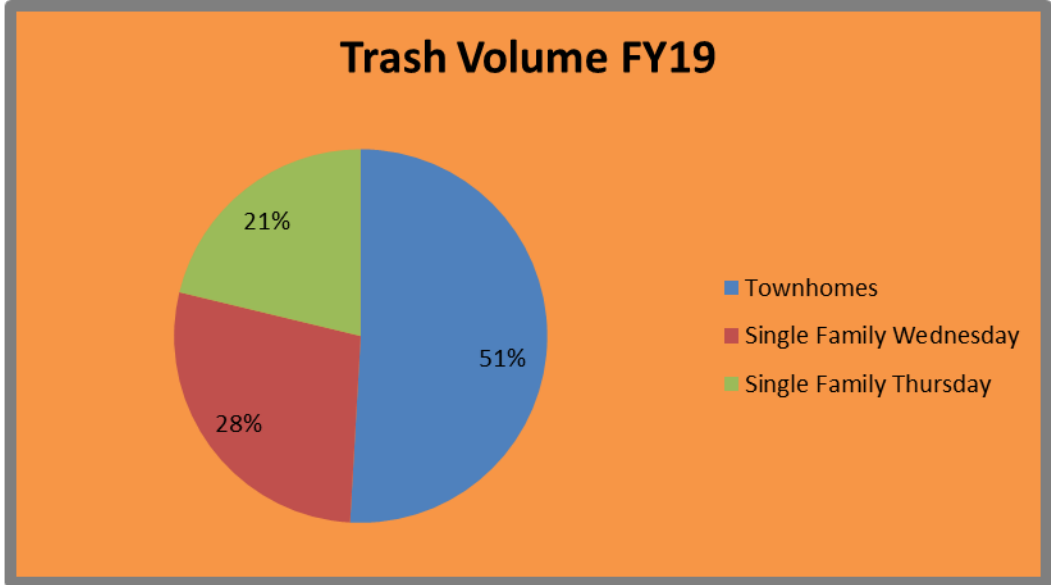
APPENDIX 4.5
RESIDENTIAL TONNAGE
REPORT 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018		2019
Jul	9,869	9,936	10,005	10,010	10,074	10,218	10,274	10,334	10,301	Jul	10,306
Aug	9,857	9,957	9,995	10,031	10,083	10,162	10,229	10,295	10,309	Aug	10,314
Sept	9,849	9,943	9,982	10,041	10,104	10,176	10,240	10,294	10,274	Sept	10,279
Oct	9,913	9,947	9,987	10,036	10,071	10,135	10,247	10,254	10,279	Oct	10,284
Nov	9,856	9,891	9,944	9,998	10,091	10,162	10,232	10,234	10,230	Nov	10,235
Dec	9,867	9,908	9,955	10,042	10,078	10,155	10,233	10,240	10,265	Dec	10,270
Jan	9,917	9,927	9,979	9,988	10,087	10,186	10,230	10,254	10,205	Jan	10,210
Feb	9,874	9,906	9,979	10,028	10,104	10,157	10,220	10,234	10,223	Feb	10,228
Mar	9,920	9,906	9,990	10,034	10,123	10,201	10,242	10,271	10,266	Mar	10,271
Apr	9,930	9,946	10,045	10,029	10,149	10,192	10,258	10,285	10,253	Apr	10,258
May	9,897	9,960	10,006	10,029	10,140	10,223	10,252	10,278	10,267	May	10,272
Jun	9,921	9,960	10,023	10,102	10,199	10,248	10,290	10,314	10,326	Jun	10,331
Total	118,670	119,187	119,890	120,368	121,303	122,215	122,947	123,287	123,198	Total	123,260
Avg	9,889	9,932	9,991	10,031	10,109	10,185	10,246	10,274	10,267	Avg	10,272
		0.4%	0.6%	0.4%	0.8%	0.7%	0.6%	0.3%	-0.1%		0.0%

FY 19	THT	THR	SFT1	SFR1	SFT2	SFR2	YW	Total
Jul	631	71	232	81	238	56	166	1,101
Aug	531	54	358	97	277	76	126	1,166
Sep	518	55	270	77	189	60	105	978
Oct	556	66	351	99	188	58	175	1,096
Nov	540	59	292	87	251	79	182	1,084
Dec	512	50	258	92	213	74	96	983
Jan	446	71	281	96	267	67	35	994
Feb	463	46	256	69	177	57	29	897
Mar	512	48	262	77	181	57	77	956
Apr	600	65	282	66	217	69	245	1,098
May	616	57	402	111	272	74	224	1,291
Jun	576	55	313	94	240	56	194	1,129
Total:	6,502	697	3,558	1,046	2,712	784	1,655	
Avg.:	559	61	303	88	223	63	143	

Trash	Townhomes	Single Family Wednesday	Single Family Thursday					
	6,502	3,558	2,712					
Recycling	Townhomes	Single Family Wednesday	Single Family Thursday					
	697	1,046	784					
	Total							
trash	12,772							
recycling	2,526							
yard waste	1,655							





APPENDIX 5

COLLECTION

APPENDIX 5.1	COLLECTIONS
APPENDIX 5.2	EXAMPLE VIOLATION WARNING
APPENDIX 5.3	AMERICAN DISPOSAL CONTRACT

APPENDIX 5.1
COLLECTIONS

APPENDIX 5.1

COLLECTIONS

The City of Manassas provides contracted curbside services to single family and townhome residents. Commercial properties including multifamily complexes, businesses, restaurants, and shopping centers must procure their own trash/recycling services. Small businesses (excluding restaurants) within the Historic Downtown area are serviced by the City contractor.

The City website provides up-to date information on collection to the City's residents including an interactive map showing collection days.¹

Single Family homes receive a once a week trash and recycle collection plus a yardwaste collection. Townhouses, small businesses within Historic Downtown, and mobile home parks receive twice weekly trash collection, once weekly recycle collection in addition to yardwaste collection.

The city provides three sizes of trash containers and four sizes of recycling containers to service users. Recycling carts were distributed to service users in 2008 and trash carts were introduced in 2014, to reduce the volume of trash bags and loose recycling on the street.

Bulk Items are scheduled for collection by the City contractor on a regular weekly basis. Collections include items with freon, televisions, and computer monitors. It is the contractor's responsibility to safely remove and dispose of freon.

The City also provides residents with another option for disposing of large volumes of trash and yard waste through the Courtesy Truck program. Residents call to schedule delivery of a Street Department truck, which is parked in the driveway or at curbside. Residents fill the truck and the City will take it for disposal. The program costs \$150 and is available from April through September.

City Residents may also use the Manassas Waste Transfer Station, which is owned and operated by Waste Management Incorporated. Residents enter the Manassas Transfer Station, go over the scales, and are directed to tipping floor. Residents are charged \$10.00 for the first 300 pounds, \$15 for 500 pounds, and \$60 a ton for anything over that amount.

¹ <http://www.manassascity.org/2403/Trash-Collection>

The City also provides free Household Hazardous Waste and electronics disposal events are, for City residents, on the first Saturday of the month between March and November. In addition, shredding events are held three times per year, and two widely promoted "RecycleFest" events are held in May and November to encourage wider community participation.

Businesses producing industrial waste are responsible for contracting collection and disposal privately in the City. Materials may be sent to the Manassas Transfer station or exported to other landfill sites. Local businesses, Micron and Lockheed Martin, have obtained P3 status and actively work to reduce Waste.

APPENDIX 5.2
EXAMPLE VIOLATION WARNING



February 18, 2020

Corrective Action Warning:

The City of Manassas received complaints regarding the disposal of trash and recycling in front of the properties located on [REDACTED]. The Department of Public Works would like to remind residents that proper disposal of household trash, recycling, yard waste, and bulk waste must be done in accordance with City of Manassas ordinances.

Trash:

- All household trash must be put in a trash cart.
- Do not put trash in recycling carts.
- **Do not leave trash carts at the curb or in common areas.**
- **Do not use trash and recycling carts to hold parking spaces.**

Recycling:

- Do not put plastic bags in the recycling cart.
- The City recycles cans, plastic, paper, cardboard and glass.
- Do not put diapers, clothing, light bulbs or food in with your recycling.

Yard Waste:

- Yard waste must be put in a paper yard waste bag or private trash can for collection. Do not use City trash or recycling carts.
- Yard waste does not include stumps, whole trees, large branches or clean-up from storm damage.
- Branches must be bundled and tied for collection.

Large Trash Items:

- Large items including furniture, refrigerators, air conditioners and appliances are collected on Tuesdays and Fridays only.
- Residents must call 703-257-8252 to arrange collection of large items.
- Residents must call to schedule collection of televisions and computer monitors for Thursday pickup.

Household Hazardous Waste and Electronic Waste:

- Household Hazardous Waste including pesticides, batteries, paint, cleaning products, motor oil and gasoline must be dropped off on City designated drop off days at the Manassas Transfer Station.

Warning

Property owners will be charged \$250 directly for the removal of large volumes of bulk trash and items left at the curb outside the collection period.

It is the responsibility of the resident to dispose of trash and recycling correctly and to follow the rules for collection as set out by the City of Manassas.

The City will revisit your area within the next few weeks to review and record any additional violations. All violations will be recorded for evidence.

Please call our offices on (703) 257-8256 between 8 a.m. and 4:30 p.m., Monday through Friday if you have any questions or concerns regarding this letter.

Yours sincerely,



Monica Boehringer
Refuse and Recycling Coordinator
CC: Code Enforcement



February 18, 2020

Advertencia de Acción Correctiva:

La ciudad de Manassas recibió quejas sobre la eliminación y el reciclaje de basura frente a las propiedades ubicadas en [REDACTED]. El Departamento de Obras Públicas desea recordar a los residentes que la eliminación adecuada de la basura doméstica, el reciclaje, los desechos del jardín y los desechos a granel deben realizarse de acuerdo con las ordenanzas de la Ciudad de Manassas.

Basura:

- Toda la basura doméstica debe depositarse en un carrito de basura.
- No tire la basura en carros de reciclaje.
- **No deje los carritos de basura en la acera o en áreas comunes.**
- **No use carritos de basura y reciclaje para salvar espacios de estacionamiento.**

Reciclaje:

- No coloque bolsas de plástico en el carrito de reciclaje.
- La ciudad recicla latas, envases de plástico, papel, cartón y vidrio.
- No ponga pañales, ropa, bombillas o alimentos en su reciclaje.

Desechos del Jardín:

- Los desechos del jardín deben depositarse en una bolsa de desechos del jardín o en un bote de basura privado para su recolección. No use los contenedores de basura o reciclaje.
- Los desechos del jardín no incluyen raíces, árboles enteros, o ramas grandes.
- Las ramas deben estar agrupadas y atadas para su recolección.

Artículos de Basura Grandes:

- Los artículos grandes que incluyen muebles, refrigeradores, aires acondicionados y electrodomésticos se recogen solo los martes y viernes.
- Los residentes deben llamar al 703-257-8252 para organizar la colección de artículos grandes.
- Los residentes deben llamar para programar la recolección de televisores y monitores de computadora para la recolección del jueves.

Residuos Domésticos Peligrosos y Residuos Electrónicos:

- Los desechos domésticos peligrosos, incluidos pesticidas, baterías, pintura, productos de limpieza, aceite de motor y gasolina, deben depositarse en los días de entrega designados por la ciudad en la estación de transferencia de Manassas. Por favor llame al (703) 257-8252 para más información.

Advertencia

A los propietarios se les cobrará \$ 250 directamente por la eliminación de grandes volúmenes de basura a granel y artículos que quedan en la acera fuera del período de recolección.

Es responsabilidad del residente desechar la basura y el reciclaje correctamente y seguir las reglas de recolección establecidas por la Ciudad de Manassas.

La Ciudad volverá a visitar su área en las próximas semanas para revisar y registrar cualquier violación adicional. Todas las violaciones serán registradas como evidencia.

Llame a nuestras oficinas al (703) 257-8256 de 8 a.m. a 4:30 p.m., de lunes a viernes, si tiene alguna pregunta o inquietud con respecto a esta carta.

Tuyo sinceramente,



Monica Boehringer
Refuse and Recycling Coordinator
CC: Code Enforcement

APPENDIX 5.3
AMERICAN DISPOSAL CONTRACT

The City of Manassas currently engages American Disposal Services, INC for refuse and recycling collection services

Contract NO: 16P002A

Contract entered into on and as of July 1, 2016

Please contact: Monica Boehringer on mboehringer@manassasva.gov or (703) 257-8256 for further contract information.

APPENDIX 6

DISPOSAL

APPENDIX 6.1

[DISPOSAL](#)

APPENDIX 6.2

[SPECIAL USE PERMIT 2008-01](#)

APPENDIX 6.1

DISPOSAL

APPENDIX 6

DISPOSAL

There are no landfill sites in the City of Manassas

Municipal Solid Waste from the City of Manassas is disposed of at the Manassas Transfer Station, which is owned and operated by Waste Management, Incorporated. It is then transported to their landfill facilities:

Facility	Location	Permit	Capacity	Landfilled in 2018	Expected Remaining Permitted Life (years)
Atlantic Waste Disposal Inc	Waverly	SWP562	45,497,743	1,279,484.87	74
King George Landfill & Recycling Center	King George	SWP586	16,795,933.50	1,699,050.27	22

Prince William Hospital, located within the City limits, has two permits for waste disposal on the premises. Incinerator Permit (PBR295) and sterilization permit (PBR171) are both current for the facility.

The Annual DEQ Solid Waste Reports¹ contain information on the previously referenced disposal facilities.

¹<https://www.deq.virginia.gov/Programs/LandProtectionRevitalization/ReportsPublications/AnnualSolidWasteReports.aspx>

2018 report

<https://www.deq.virginia.gov/Portals/0/DEQ/Land/SolidWaste/SWIA/2019%20Annual%20Solid%20Waste%20Report%20for%20CY2018%20-%20FINAL.pdf?ver=2019-06-20-105457-813>

APPENDIX 6.2
SPECIAL USE PERMIT #2008-01

Waste Management Incorporated currently holds a Special Use Permit (PBR091) with the City of Manassas for the operation of the Manassas Transfer Station.

Please contact: Monica Boehringer on mboehringer@manassasva.gov or (703) 257-8256 for further information.

APPENDIX 7

RECYCLING

APPENDIX 7.1	RECYCLING
APPENDIX 7.2	RECYCLING RATE REPORT 2016
APPENDIX 7.3	LEAF COLLECTION SCHEDULE

APPENDIX 7.1
RECYCLING

APPENDIX 7

RECYCLING

The City of Manassas has been actively involved in recycling for over 30 years. The City provides residents and businesses within Historic Downtown with curbside and drop-off services for recycling including:

Curbside Collection

- Single Stream Recycling
- Yard Waste
- Televisions and Computer Monitors

Drop-offs

- Household Hazardous Waste (HHW)
- Electronic Waste
- Paper Shredding
- Single Stream Recycling (dumpsters)
- Cardboard Recycling (dumpsters)

Recycling is not mandatory in the City; however, residents and businesses are strongly encouraged to participate in the recycling opportunities the City has to offer. Table 7-2 shows how program actions in recycling align with program goals stated in Table 7-1 and found elsewhere in the Report in The Executive Summary, Chapter 10 and Appendix 10.1.

Table 7- 1

Goals	
1.	Maintain Federal and State Laws and Regulations
2.	Meet the needs of its citizens
3.	Programs should be environmentally sound
4.	Programs should be economically sound
5.	Empower citizens to become informed and active participants
6.	Work to enforce the City's Solid Waste Code
7.	Seek new opportunities for improvements and expansion of the trash and recycling program

Table 7- 2

Year	Program Action	Goals Achieved
1989	<ul style="list-style-type: none"> Started curbside recycling program for residents collecting newspaper and glass 	2,3,5,6
1991	<ul style="list-style-type: none"> Added metal and aluminum to curbside recycling collection 	2,3,5,6
2004	<ul style="list-style-type: none"> Introduced year-round yard waste collection Electronic waste and rag drop-off recycling events introduced Distribute new Trash/Recycle brochure 	2,3,5 3,4,5,6 2,5
2005	<ul style="list-style-type: none"> Launch recycling cart pilot program for townhomes and single family homes Expand electronic waste and rag event to include rechargeable batteries Conducted recycling participation survey 	2,3,4,5,6 3,4,5 2,6
2006	<ul style="list-style-type: none"> Evaluated pilot recycling program and implemented roll out in section of City 	2,3,4,5,6
2008	<ul style="list-style-type: none"> Started new Refuse and Recycling Contract with American Disposal Services Single Stream recycling introduced in curbside collection 64 gal. recycling carts rolled out to service users 	1,2,3,4,5,6 2,3,5,6 2,3,4,5,6
2010	<ul style="list-style-type: none"> Extended Refuse and Recycling Contract Distributed new Trash and Recycling Brochure 	1,2,3,4,5,6 2,5,6
2011	<ul style="list-style-type: none"> Expanded year-round yard waste collection to townhome residents Introduced curbside Christmas tree collection 	2,3,5,6 2,3,5,6
2014	<ul style="list-style-type: none"> Introduced special electronic waste collection for HOAs in townhome communities to reduce illegal dumping Amended Solid Waste Code to include recycling violations Expanded recycling events to include 3 shredding days and two larger "RecycleFest" events Distributed new trash and recycling leaflets Updated and expanded refuse and recycling website and reporting options for residents 	1,2,3,4,5,6 1,2,3,4,5,6 2,3,4,5,6 2,3,4,5,6 2,3,4,5,6
2015	<ul style="list-style-type: none"> Introduced commercial refuse and recycling program for businesses in Historic Downtown Manassas Distributed new flyers for refuse and recycling information Introduced recycling blog on website City disposes of single stream recycling in new American Recycling Center Distributed reusable shopping bags and biodegradable yard waste collection bags at recycling and City events. 	1,2,3,4,5,6 2,5,6 2,5,6 2,4 2,3,5
2016	<ul style="list-style-type: none"> City receives Virginia Recycling Association award for Outstanding City/County Recycling Program Started new Refuse and Recycling Contract with American Disposal Services Introduced Recycling Grant 	1,2,3,4,5,6
2017	<ul style="list-style-type: none"> City receives Virginia Recycling Association Excellence award for Recycling Program Recycling and the Civil War exhibit introduced in City Hall City holds first Recycled Art Competition City approves new Solid Waste Code for trash and recycling 	5 5 1,2,3,4,5,6

	<ul style="list-style-type: none"> Conducted survey of businesses and residents in Historic Downtown to determine recycling needs. 	2
2018	<ul style="list-style-type: none"> The Refuse and Recycling program received an 83% approval rating in the Citizen Satisfaction Survey and placed fourth in City services overall. Household Hazardous Waste, electronic waste and shredding Drop Off events generated over 158 tons of recyclable materials from residents. The total volume of recycling collected <u>increased</u> by 1,980 tons over FY17. RecycleFest was the featured event on the national Recycling Today website for America Recycles Day. The outreach and education work of the City of Manassas was featured on the national Recycling Partnership website. Working in partnership with Georgetown South and American Disposal Services, the City held its first Summer Recycling Camp and produced a video on recycling with the children of Georgetown South. The City also produced four videos on plastic bags, electronics, HHW and shredding for residents, which are now available on our website. Keep Manassas Beautiful received a grant to install recycling containers at the E.G. Smith Baseball Complex. Added 2 cardboard only recycling dumpsters for businesses in Historic Downtown. Received grant from VDEQ to undertake a recycling audit of townhome communities. 	2 2,3,6,7 2,3,6,7 5 5 5 2,3,4,6 2,3,4,6,7
2019	<ul style="list-style-type: none"> Keep Manassas Beautiful worked with STEM teachers from City of Manassas Public Schools to develop a program of litter and recycling education that will incorporate local information and activities into the curriculum for young citizens. Distributed reusable shopping bags to local market in Georgetown South community center. Working in partnership with Georgetown South and American Disposal Services, Keep Manassas Beautiful held the second Summer Recycling Camp in Georgetown South. Introduced Keep Manassas Beautiful Holiday Recycling Guide, which was distributed to local businesses and the public. Recycling events receive a record 168 tons of HHW, eWaste and Shredding. 	5 5 2,3,5 3,5 2,3,6,7

Partners in Recycling

The City has formed partnerships with several stakeholders in order to promote recycling and provide education and information to the public. A listing of The City's partners is given in Tables 7-3, 7-4, and 7-5 below.

Table 7- 3

Contracts	
American Disposal Services Incorporated (ADS)	ADS provide curbside recycling collection for residents and recycling dumpsters for public use at designated locations throughout the City. American is also contractually obligated to provide \$5,000 in outreach and education materials and partner with the City in providing \$60,000 in recycling grants to townhome HOAs to promote recycling projects.
C2	C2 provides drop-off collection of electronics at 9 scheduled drop-off events for City residents at the Manassas Transfer Station.
Potomac eCycle	Potomac eCycle provides drop-off collection of electronics for townhome HOAs and City residents.
MXI (Through Special Use Permit with Waste Management)	Through SUP#2008-1, Waste Management provides 9 drop-off collections of HHW for City residents. They contract MXI to undertake this activity

Table 7- 4

Local, Regional, and State Partnerships	
City of Manassas	The Refuse and Recycling program works with other departments including the Police Department, Street Department, Parks, Grounds and Facilities, Code Enforcement, Purchasing and Planning to ensure that everyone is aware of the need to provide recycling in all City locations and to assist in enforcing the City ordinances regarding recycling.
City of Manassas Public Schools	While the City does not provide refuse and recycling services to City of Manassas Public Schools, the Refuse and Recycling department is actively involved in working with teachers and their students to develop programs and information

	aimed at empowering young people to learn more about recycling.
Northern Virginia Regional Commission – Waste Board	The City actively participates on the Waste Board and in discussions to regulate and promote recycling. The City also participates in the Know Toxics training program
Council of Governments – DC Region	The City actively participates in COG meetings and in discussions to regulate and understand recycling markets and issues affecting regional decisions regarding recycling.
Virginia Recycling Association	The City of Manassas actively participates in the Virginia Recycling Association and in advocacy regarding recycling issues at a state level.

Table 7- 5

Community Groups	
Citizen’s Advisory Committee on Solid Waste (CAC)	The CAC is a Council appointed committee of residents who actively participate in providing direction and support to the Refuse and Recycling program.
Keep Manassas Beautiful (KMB)	This Keep America Beautiful Affiliate is comprised of appointed members from Beautification, Solid Waste, and Parks committees. The group provides direction and support for RecycleFest, America Recycles Day, and the Adopta program which encourages public participation in recycling and litter control.
Old Town Business Association (OTBA)	The City works with the OTBA to provide information and service to local businesses through this organization
Historic Manassas Incorporated (HMI)	The City works with the HMI to provide information and service for local events, tourism and the Farmer’s Market.

Table 7-6 below depicts curbside trash and recycle amounts in the city from 2010-2018

Table 7-6 City Recycle Rate

Actual Figures Reported to DEQ

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Curbside Refuse Tons	11,013	11,347	11,030	11,724	11,455	11,768	12,113	12,649	12,616
Curbside Recycle Tons	4,549	5,803	5,123	5,219	4,961	4,728	4,633	4,007	5,987
Business Refuse Tons	21,569	20,615	15,882	24,436	25,799	18,863	24,462	Reporting not required from VDEQ	
Business Recycle Tons	22,467	16,821	12,792	16,635	22,366	20,136	25,525		
Total Business Tons	44,036	37,436	28,674	41,071	48,165	38,999	49,987		
Combined Tons	59,598	54,586	44,827	58,014	64,581	55,495	66,733	16,656	18,603
State Required Recycle Percent	25%	25%	25%	25%	25%	25%	25%	25%	25%
City Recycle Rate	41%	51%	46%	45%	43%	40%	38%	32%	47%

APPENDIX 7.2
RECYCLING RATE REPORT 2016
DEQ FORM 50-30



**Commonwealth of Virginia
Locality Recycling Rate Report
Calendar Year 2016**

DEQ Form 50-30 (Revised December 2016)

Email completed form to:

virginia.butler@deq.virginia.gov

Solid Waste Planning Unit Information (Enter in Rows 4 - 14.)

Solid Waste Planning Unit Manassas (City)
Preparer's Name Monica Boehringer
Preparer's Title Refuse and Recycling Coordinator
Address Line 1 8500 Public Works Drive
Address Line 2 Manassas, VA 20110
Address Line 3
Phone Number 703-257-8256
Email address mboehringer@manassasva.gov
Date

Total Population for SWPU	42,000	Population Density for SWPU	Every 4 years
Mandated Recycling Rate (15% or 25% will auto calculate)	25%	Reporting Frequency	Every 4 years

Enter tons (whole numbers only) in the yellow highlighted boxes for PRMs and MSW Disposed. Totals will auto calculate.

Principal Recyclable Materials (PRM)

PRM Material	Tons recycled
Paper	4,817
Metal	12,694
Plastic	3,557
Glass	31
Commingled	4,105
Yard Waste	2,185
Waste Wood	320
Textiles	0
Waste Tires	507
Used Oil	1,149
Used Oil Filters	38
Used Antifreeze	16
Batteries	99
Electronics	131
Inoperative Motor Vehicles	329
Other - Bulbs and Lamps	5
Other - Grease, Fat and Bone	151

MSW Disposed

Household Waste	21,382
Commercial Waste	13,142
Institutional Waste	87
Other - Industrial	1,963
Total MSW	36,575

Other - Food Waste	24
Total PRM in Tons	30,158

Enter facility information and material in columns A and B. Enter tons (whole numbers only) in the yellow highlighted boxes. Totals will auto calculate.

Credits Recycling Residue		
Facility/Operation	Material	Tons
American Recycling Center	Single Stream	
Broad Run Recycling	Paper, Plastic, Glass, Metals	
ESI - EnviroSolutions	Single Stream	
Emmanuel Tire	Tires	
Lorco Petroleum Services	Motor Oil	
Potomac Metals	Metals	
Potomac Landfill	Single Stream	
Prince William Metals	Metals	
Valley Proteins	Fat, Bone	
Joseph Smith and Sons	Metals, Inoperable Vehicles, Electronics, Batteries	
Davies Industries	Scrap Metal	
IDS	Plastics, Scrap Metal, Wood	
Local Motion Enterprises	Paper	
James T. Waring	Plastics	
Sims Recycling	Electronics	
Veolia	Batteries, Motor Oil, Bulbs, Electronics	
Kibler Farms	Food Waste	
Proco Company	Tires	
Johnson Controls	Batteries, Tires	
Beri Recycling	Batteries	
Stericycle	Batteries, Bulbs	
KC International & KP Duffy	Cardboard, Plastic	
M&C Metal	Metals	
Butler Paper	Paper	
Fairfax - Lorton	Single Stream	
Georgetown Paper	Paper	
Utility Services of America	Metals	
Montgomery Scrap	Metals	
Safety Kleen	Antifreeze, Oil, Oil Filters,	
Lifespan	Electronics	

Cap Asset	Furniture	
Virginia Scrap Corp	Metals	
Trex	Plastic	
Sonoco	Cardboard	
Cellmark	Cardboard	
Liberty Tire	Tires	
MetalPro	Automotive Plastic	
Electronics Recyclers Intl	Electronics	
Tire Recyclers	Tires	
National Paper	Paper	
MidStates Oil	Oil	
Call2Recycle	Phones	
EnviRelations	Food Waste	
Waste Management	Single Stream	
Potomac eCycle	Electronics	
Total		0

Credits Solid Waste Reused

Reuse Method	Material	Tons
Broad Run Recycling	CDD	
C&D Recovery	CDD	
Covanta	Plastic	
Total		0

Credits Non-MSW recycled

Recycling Method	Material	Tons
Fairfax Lorton	Solid Waste	
Covanta	Solid Waste	
Potomac Landfill	Solid Waste	
Broad Run Recycling	CDD	
King George Landfill	Solid Waste	
Prince William	Solid Waste	
Total		0

CREDITS TOTAL 0

Credit for Source Reduction Program (SRP)

SRP does not apply enter "0"

SRP does apply enter "2"

2%

Recycling rates auto calculate.

Base Recycling Rate 45.2% Base Rate
Adjusted Recycling Rate 45.2% Rate with credits

Adjusted Recycling Rate + SRP

47.2% Credits + SRP

Credit Max Allowed Base +5

50.2%

Final Recycle Rate

47.2% Final Recycle Rate

Sources for PRM Data <i>Example: Permit #112, County Landfill</i>	Data gathered through a survey form issued by the City of Manassas.
Other Sources for collected data <i>Example: Walmart/Target</i>	
Comments:	
Additional Contacts:	

APPENDIX 7.3
LEAF COLLECTION

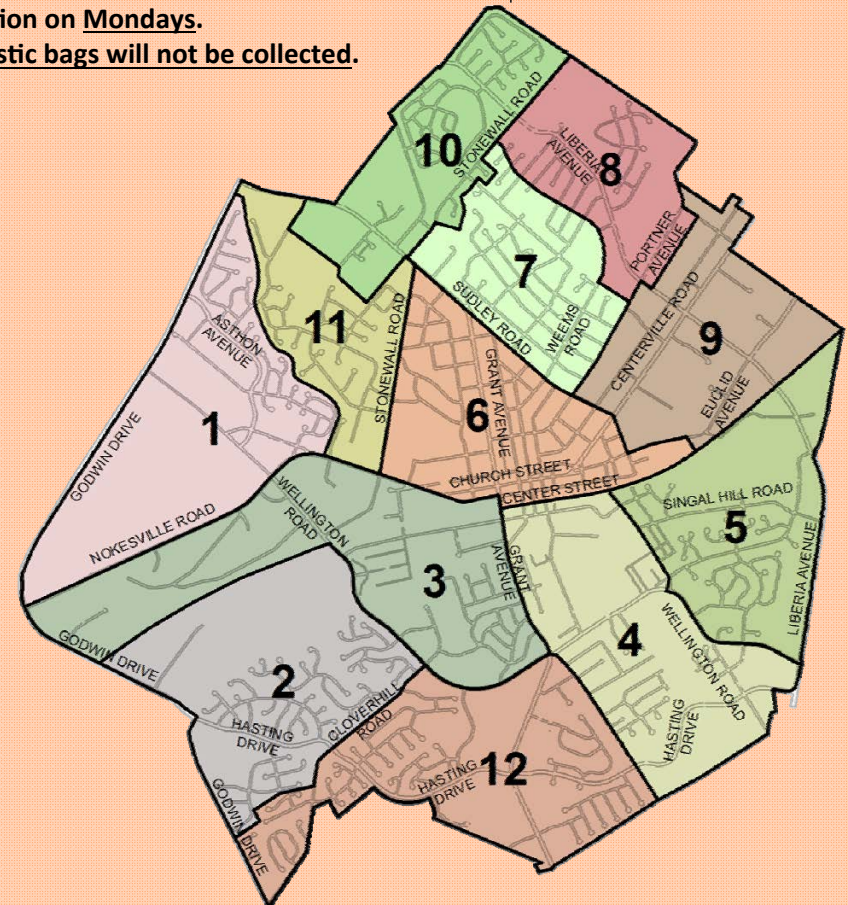


FALL LEAF COLLECTION SCHEDULE 2019-2020

Tips for leaf collection:

1. Make sure you follow the collection schedule for your area. Leaves will only be collected one time during each scheduled collection period. If you have missed your collection, please wait until the next time your street is scheduled.
2. Rake the leaves to the edge of the street or sidewalk the day before the collection period. Do not block traffic lanes or sidewalk. Leaves that are out of reach or on private property will not be collected.
3. Do not rake leaves into or near the storm drains.
4. Do not park your car or allow children to play in the leaves once they are ready for collection.
5. Leaves can also be set out in paper yard waste bags or private containers for yard waste collection on Mondays.
6. Leaves in plastic bags will not be collected.

Section 1	Section 5	Section 9
Oct 28 - Nov 1	Oct 21 - Oct 25	Oct 28 - Nov 1
Nov 18 - Nov 22	Nov 12 - Nov 15	Nov 18 - Nov 22
Dec 16 - Dec 20	Dec 9 - Dec 13	Dec 16 - Dec 20
Jan 13 - Jan 17	Jan 6 - Jan 10	Jan 13 - Jan 17
Section 2	Section 6	Section 10
Oct 28 - Nov 1	Oct 28 - Nov 1	Oct 15 - Oct 18
Nov 18 - Nov 22	Nov 18 - Nov 22	Nov 4 - Nov 8
Dec 16 - Dec 20	Dec 16 - Dec 20	Dec 2 - Dec 6
Jan 13 - Jan 17	Jan 13 - Jan 17	Dec 30 - Jan 3
Section 3	Section 7	Section 11
Oct 21 - Oct 25	Oct 15 - Oct 18	Oct 21 - Oct 25
Nov 12 - Nov 15	Nov 4 - Nov 8	Nov 12 - Nov 15
Dec 9 - Dec 13	Dec 2 - Dec 6	Dec 9 - Dec 13
Jan 6 - Jan 10	Dec 30 - Jan 3	Jan 6 - Jan 10
Section 4	Section 8	Section 12
Oct 15 - Oct 18	Oct 15 - Oct 18	Oct 21 - Oct 25
Nov 4 - Nov 8	Nov 4 - Nov 8	Nov 12 - Nov 15
Dec 2 - Dec 6	Dec 2 - Dec 6	Dec 9 - Dec 13
Dec 30 - Jan 3	Dec 30 - Jan 3	Jan 6 - Jan 10



Notes:

Please be advised that leaves are collected on City streets only.
Leaves on private streets or lanes will not be collected.

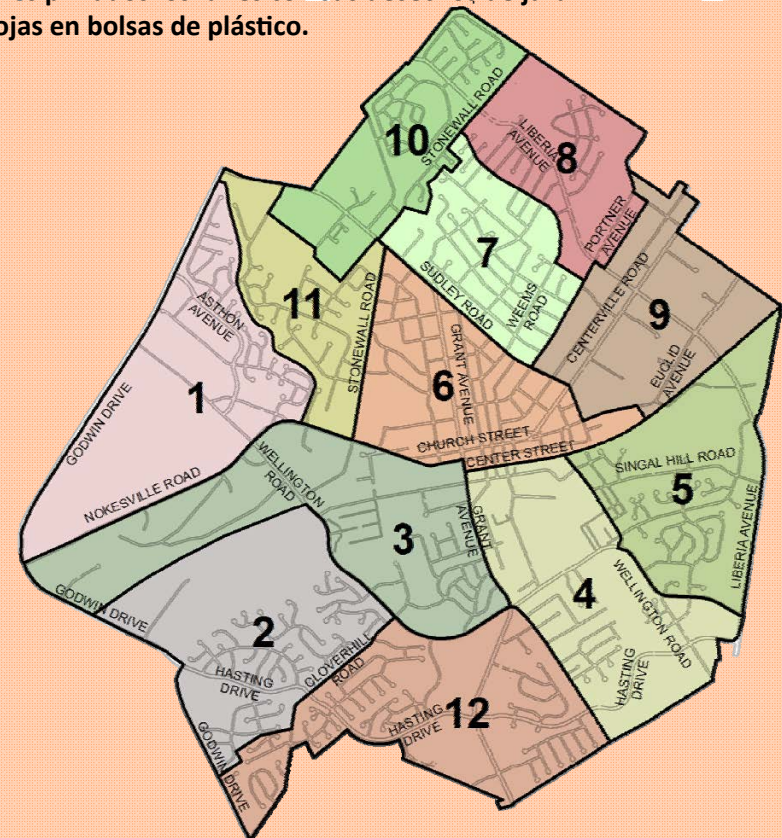


Horario de recolección de Autumn Hojas 2019-2020

5 Consejos Para la Recolección de Hojas:

1. Asegúrese de seguir el programa de recolección para su área. Las hojas solo se recogerán una vez durante cada período de recolección programado. Si se ha perdido una colección, espere hasta la próxima vez que su calle esté programada.
2. Por favor, rastrille las hojas hasta el borde de la acera del día anterior al período de recolección. No bloquee las vías de tráfico o la acera. Las hojas que están fuera del alcance, o en propiedad privada no se recogerán.
3. Prevenir inundaciones en su área al no rastrillar sus hojas en los desagües pluviales.
4. No estacionar su automóvil o permitir que los niños jueguen en las hojas una vez que las hojas hayan sido rastrilladas hacia el bordillo.
5. No olvide que también puede colocar sus hojas en bolsas de basura de jardín de papel o contenedores privados los lunes con sus desechos de jardín.
6. No se recogerán hojas en bolsas de plástico.

Sección 1	Sección 5	Sección 9
Oct 28 – Nov 1	Oct 21 - Oct 25	Oct 28 – Nov 1
Nov 18 - Nov 22	Nov 12 - Nov 15	Nov 18 - Nov 22
Dic 16 - Dic 20	Dic 9 - Dic 13	Dic 16 - Dic 20
Enero 13 - Enero 17	Enero 6 - Enero 10	Enero 13 - Enero 17
Sección 2	Sección 6	Sección 10
Oct 28 – Nov 1	Oct 28 – Nov 1	Oct 15 - Oct 18
Nov 18 - Nov 22	Nov 18 - Nov 22	Nov 4 - Nov 8
Dic 16 - Dic 20	Dic 16 - Dic 20	Dic 2 - Dic 6
Enero 13 - Enero 17	Enero 13 - Enero 17	Dic 30 - Enero 3
Sección 3	Sección 7	Sección 11
Oct 21 - Oct 25	Oct 15 - Oct 18	Oct 21 - Oct 25
Nov 12 - Nov 15	Nov 4 - Nov 8	Nov 12 - Nov 15
Dic 9 - Dic 13	Dic 2 - Dic 6	Dic 9 - Dic 13
Enero 6 - Enero 10	Dic 30 - Enero 3	Enero 6 - Enero 10
Sección 4	Sección 8	Sección 12
Oct 15 - Oct 18	Oct 15 - Oct 18	Oct 21 - Oct 25
Nov 4 - Nov 8	Nov 4 - Nov 8	Nov 12 - Nov 15
Dic 2 - Dic 6	Dic 2 - Dic 6	Dic 9 - Dic 13
Dic 30 - Enero 3	Dic 30 - Enero 3	Enero 6 - Enero 10



Nota:
Tenga en cuenta que las hojas se recogido solo en calles de la ciudad. Las hojas en calles privados no se recogerán.

APPENDIX 8

PUBLIC EDUCATION

APPENDIX 8.1	<u>PUBLIC EDUCATION</u>
APPENDIX 8.2	<u>RECYCLING IN THE CIVIL WAR</u>
APPENDIX 8.3	<u>RECYCLE RUNWAY</u>
APPENDIX 8.4	<u>RECYCLED ART COMPITITION</u>
APPENDIX 8.5	<u>COMPOSTING POSTER</u>
APPENDIX 8.6	<u>PICKUP SCHEDULE MAGNET</u>
APPENDIX 8.7	<u>EXAMPLE INFORMATION SIGN</u>
APPENDIX 8.8	<u>HHW PICKUP SCHEDULE 2020</u>
APPENDIX 8.9	<u>RECYCLE RIGHT CAMPAIGN</u>
APPENDIX 8.10	<u>DOG WASTE POSTER</u>
APPENDIX 8.11	<u>CIGERETTE LITTER PROJECT</u>
APPENDIX 8.12	<u>LITTERING PRESENTATION</u>
APPENDIX 8.13	<u>THE GREAT AMERICAN CLEANUP</u>
APPENDIX 8.14	<u>VRA CERTIFICATION PRESENTATION</u>
APPENDIX 8.15	<u>AMERICA RECYCLES DAY PROCLIMATION</u>
APPENDIX 8.16	<u>RECYCLEFEST</u>
APPENDIX 8.17	<u>SUMMER SHRED POSTER</u>
APPENDIX 8.18	<u>RECYCLING INFOGRAPHIC</u>

APPENDIX 8.1
PUBLIC EDUCATION

APPENDIX 8.1

PUBLIC EDUCATION

The City of Manassas is responsible for adopting policies and procedures that protect and enhance the community. The challenge lies in developing clear and consistent messaging, regarding the importance of good waste reduction and disposal practice.

The City that engages the community and empowers citizens to act consistently and responsibly through the following public outreach and educational tools:

Methods of Outreach and Education include:

Medium	Source	Goals
<p>Print</p> <p>Printed materials provide residents and businesses in Historic Downtown Manassas with accurate guidance and information on program requirements and activities. (material is in English and Spanish)</p> <p>Annual/Bi-annual reporting provides detailed data on program activities and achievements, which fulfill local, regional and state requirements.</p> <p>Articles provide an in-depth look at specific programs, initiatives and activities that are shared with a wider audience, and provide recognition for the good work being done by the community.</p>	<ul style="list-style-type: none"> • City Connection Newsletter • Program brochures and flyers • Posters • Annual/Biannual Reports <ul style="list-style-type: none"> ○ City of Manassas ○ Keep America Beautiful ○ Northern Virginia Regional Commission – Waste Board ○ VDEQ <ul style="list-style-type: none"> ▪ Solid Waste Management Plan ▪ Recycling Survey ▪ Litter Grant ▪ MS4 • Articles in local, regional and national publications. • Warning letters and Notice of Violation 	
<p>Internet/ Social Media</p>	<ul style="list-style-type: none"> • City of Manassas website <ul style="list-style-type: none"> ○ Online reporting misses and cart requests 	

<p>Refuse and Recycling program information, activities, and advisories are available to residents through the City of Manassas website 24/7. (available in 103 languages through Google)</p> <p>Through interactive and reporting applications, residents are also able to report illegal dumping, littering, missed collections, and order carts 24/7. (available in 103 languages through Google)</p>	<ul style="list-style-type: none"> ○ Interactive site for trash and recycling ○ Interactive site for Adopta Program • City of Manassas – Facebook • City of Manassas - Nextdoor • City of Manassas - SeeClickFix 	
<p>Video</p> <p>Videos explaining how recycling works and offering fun way for young residents to engage with refuse, recycling and litter topics can be found through the City of Manassas website. These are available 24/7 and can be shared by visitors to our site.</p>	<ul style="list-style-type: none"> • How-To Videos • Recycling Summer Camp Videos 	
<p>Presentations</p> <p>Presentations that explain the function and programs offered through Refuse and Recycling are available to stakeholders throughout the City.</p>	<ul style="list-style-type: none"> • City of Manassas – City Council • City of Manassas – Citizen Leadership Program • HOAs and Citizen Groups 	
<p>Events</p> <p>Participation in public events throughout the City – and in events specifically created for the Refuse and Recycling program allows residents to meet staff and volunteers. It also provides an opportunity to pick up information and ask questions.</p>	<ul style="list-style-type: none"> • Great American Clean-up • RecycleFest (May and November) • One Love Festival • Big Summer Shred (August) • National Night Out • Public Works and Utilities Day • America Recycles Day • Recycled Art Competition • Recycling and the Civil War Exhibition 	

<p>Grants</p> <p>The City has received grants to help develop and promote recycling and litter programs. The City also offers a grant for HOAs to develop their own outreach and education material in partnership with American Disposal Services.</p>	<ul style="list-style-type: none"> • City of Manassas/American Disposal Recycling Grant for townhome HOAs • VDEQ – Litter Grant • Keep Virginia Beautiful – 30 Grants in 30 Days Grant 	
<p>Awards</p> <p>Promoting the good work being done by the community engenders a form of positive reinforcement and encourages greater involvement in good practice.</p>	<ul style="list-style-type: none"> • Virginia Recycling Association • Keep America Beautiful • Annual Volunteer Recognition Awards 	
<p>Briefings and Meetings</p> <p>Regular updates on trash and recycling issues affecting the community is publicly available to residents.</p>	<ul style="list-style-type: none"> • City of Manassas – City Council • City of Manassas – Citizen’s Advisory Committee on Solid Waste • Keep Manassas Beautiful Advisory Committee • HOA meetings 	
<p>Surveys and Consultations</p> <p>The community is included in the decision making and planning process for the development of programs that are appropriate, affordable and sustainable.</p>	<ul style="list-style-type: none"> • City of Manassas – Comprehensive Plan • City of Manassas – Citizen Satisfaction Survey • Survey – Historic Downtown Businesses • Audit/Consultation – Recycling in townhome communities 	
<p>Signage</p> <p>Posters and signage provides accurate information and direction to residents.</p>	<ul style="list-style-type: none"> • City of Manassas – Electronic Gateway Signage • HHW and Electronics Drop-off signage 	
<p>Telephone</p> <p>The City of Manassas Trashline is available for residents to call or leave messages regarding trash and recycling issues. The Trashline receives an average of 60 calls per weekday.</p>	<ul style="list-style-type: none"> • Trashline (703) 257-8252 	

<p>That's over 15,000 calls per year that are answered providing information and resolution of trash and recycling issues.</p>		
<p>Additional Marketing Tools</p> <p>Raising the profile of the program through marketing tools allows the program to "brand" itself. Greater recognition of ways to get in touch – or simple tools to increase recycling and reduce littering encourage residents to participate in a positive way.</p>	<ul style="list-style-type: none"> • Reusable shopping bags • Magnets • Reusable water bottles • Portable ashtrays • T-shirts/Sweatshirts • Pencils/Pens • Tablecloth 	

Special Programs

Medium	Source	Goals
<p>School-based activity</p> <p>The City, Keep Manassas Beautiful, Manassas City Public Schools, and Keep America Beautiful have created a special school program for STEM students.</p>	<p>Keep Manassas Beautiful School Certification Program</p>	
<p>Partnering with youth groups</p> <p>The City works with the Manassas Boys and Girls Club to deliver an annual program of activity for their members that focuses on educating young people about textile recycling while tapping their natural talents and creativity.</p> <p>The City and Keep Manassas Beautiful work in partnership with Georgetown South to educate their children about litter and recycling every summer. This program is aimed and children between 8 and 10 years old.</p>	<p>Project Recycle Runway</p> <p>GTS Summer Recycling Camp</p>	

APPENDIX 8.2
RECYCLING IN THE CIVIL WAR

RECYCLING FACTS

- The average household throws away 13,000 separate pieces of paper each year. Most is packaging and junk mail.
- Americans use 85,000,000 tons of paper a year; about 680 pounds per person.
- The US generates an average of 25 billion pounds of textiles like clothing, shoes, towels, and bedding every year. Only 15% of that gets donated or recycled.
- Over 70% of the world's population (that's 5.25 billion people) wear second hand clothes!
- We use over 80 billion aluminum soda cans every year.
- Recycling one aluminum can saves enough energy to run a TV for three hours -- or the equivalent of a half a gallon of gasoline.

Sources:

www.recyclingrevolution.com
www.wearonaterecycle.org

THIS EXHIBITION TRAVELS!



PLEASE CALL (703) 257-8256
FOR MORE INFORMATION

KEEP RECYCLING IT'S PART OF OUR HISTORY!

In 2016, the City of Manassas Citizen's Advisory Committee on Solid Waste decided that they wanted to work on a special project that would bring together recycling and the incredible history of our community. They worked together researching the history of recycling during the Civil War.

Committee members spent hours of time poring over hundreds of images and accounts from the battlefield and the many communities (North and South) that sacrificed what little they had in the way of home comforts to support their troops. Their research has uncovered a wealth of information on the way materials like paper, metal and textiles were reused on the battlefield and back at home.

The American Civil War Museum found the research fascinating and published an article acknowledging the hard work of the committee and adding their own contributions to the project.

The City of Manassas would like to thank the Citizen's Advisory Committee on Solid Waste for their wonderful contribution to our community.



KEEP AMERICA BEAUTIFUL AFFILIATE

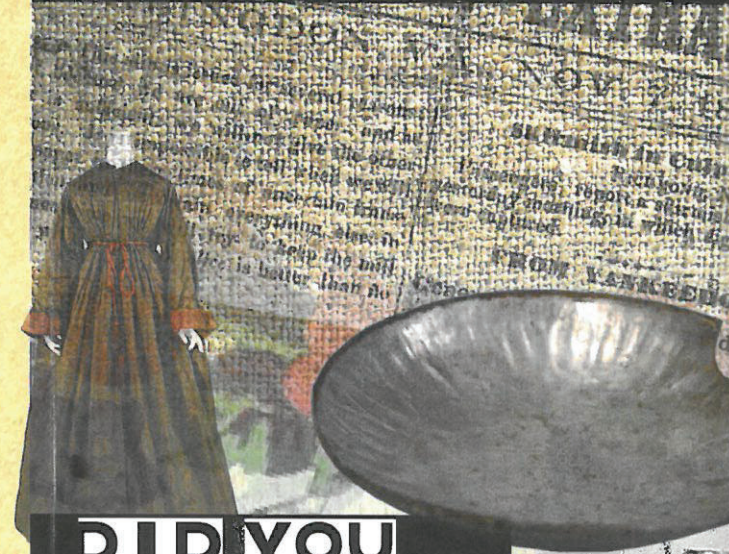
For more information please contact:

City of Manassas
Refuse and Recycling

8500 Public Works Drive | Manassas, VA 20110
P: 703.257.8256 | E: mboehringer@manassasva.gov



RECYCLING AND THE CIVIL WAR



DID YOU KNOW?

Many people think that recycling and reuse of materials like paper, metals and textiles is a modern idea. In fact, recycling and reuse of materials were an important part of military action and the economy during the Civil War. From the battlefield to the home front - everyone pitched in and found new and creative ways to re-purpose what they had to support the War effort.



WHAT HAPPENED?

On April 19, 1861, President Abraham Lincoln issued a Proclamation declaring the blockade of major Southern ports in an effort to prevent goods and services from being traded by the Confederacy.

This action cut off the export of cotton, which the Confederacy depended on for currency. The blockade also reduced imports of food, medicine, artillery, manufactured goods, and luxury items. At first, these shortages were only a minor inconvenience, but as the War stretched from months into years, the inconveniences resulted in hardship and suffering at home and on the battlefield.

PAPER

Writing paper, envelopes, books and wrapping paper were hard to find in the South during the War. When the supply of paper made from wood pulp ran short, paper mills used linen and cotton rags to make paper so that important news and information could still be shared between generals, soldiers, families and businesses.

As the War continued, the supply of paper ran out and the rags were needed for dressing wounds, some as far away as England. They also began using substitutes. Newspapers used "necessary paper," printing on everything from cornhusks to wallpaper to old bags.

Desperate for information, soldiers and civilians sent messages on pages torn out of books, the backs of pictures and the space left on old letters. Envelopes were made from folded letters, previously used envelopes, advertising flyers and from wall paper.

METALS

The timing of the Civil War coincided with the industrial revolution. While the North was well on its way toward a commercial and manufacturing economy, the Southern economy was based on agriculture. This had a direct impact on Confederate army's access to the precious iron, copper, tin and steel that they needed to supply their troops with artillery.

Southerners were called upon to donate any type of old metal to the war effort. Church bells, steeples, gates, pots and pans, farm equipment and scraps were gathered to be recycled or reused.

Even military officers like General P.G.T. Beauregard, asked the people to supply metal that could be cast into cannon. Metal was also needed to build ironclad gunboats that would be used to protect southern coasts and rivers from Union forces during the early years of the War.

Throughout the South, ladies societies were established to raise funds for the building of these boats. The societies also made appeals for donations of scarce metals such as lead, brass, and iron that could be melted down and used to build a boat.

On the battlefields, soldiers gathered spent ammunition and rifles from the fallen to be sold as scrap or reused. Scrap metals were also recycled into bowls, cutlery and cooking utensils to provide some small personal comforts to the soldiers so far from home.

TEXTILES

In the years before the Civil War, the manufacture of cotton was pretty simple. It was grown in the South and then shipped to the textile mills in the North and overseas. Once converted into textiles, the fabric was then sold back to the South for making clothes and products for the home. By 1860, more than 4 million forced laborers worked across the South generating two-thirds of the world's cotton supply.

Following the Union Blockade of 1861, the export of cotton fell by more than 95% and the South faced two challenges: find a way to pay for food and munitions production and rely on their own mills to manufacture textiles.

Blockades on Southern ports prevented importation of fabrics from Europe and American cities to the southern states, causing a shortage of material for clothing, bandages and even making paper.

Southerners were asked to save rags and donate clothing no longer needed so they could be made into bandages for soldiers or sent to the battlefield to be used for mending soldier's uniforms and even making tents.

At home, drapes, sheet and other material items were used to making clothing. Raincoats were made from oil cloth or rubberized piano covers. Even shoes were in short supply. Women and children repaired old shoes with pieces of rags, carpets canvas, felts and pelts from animals. Accessories such as ladies hats, fans and handkerchiefs were also scarce and often made from just about any material available including feathers, woven grass and straw.

RECYCLING AND THE CIVIL WAR

Recycling Facts

The American Revolution was the first time that the word "recycling" was used. It was used to describe the process of reusing paper that had been used in the printing of newspapers and other documents. At the time, paper was made from rags and other natural fibers, and it was very expensive. So, when a newspaper was printed, the paper was often recycled and used again. This was one of the earliest examples of recycling.



1. "The Metal of which Cannons are Made" is a published version of a letter from General James M. Smith to the War Department. In it, he suggests that the metal from old cannons be melted down and used to make new cannons. This was one of the earliest suggestions for recycling metal during the Civil War.



2. The first recycling law in the United States was passed in 1889. It was in the state of Massachusetts and it required that paper be recycled. This was the first time that a law was passed to encourage recycling.

RECYCLING AND THE CIVIL WAR

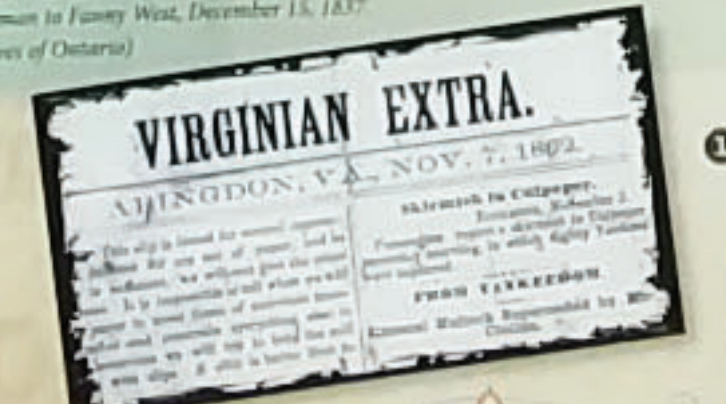


Do one of the great & necessary duties of paper, and of its large part of the articles required in the kitchen to be kept in each room - a thing into which all pieces of paper may be thrown - and afterwards emptied into a receptacle to be preserved for use.

Did You Know?

Many people think that recycling and reuse of materials like paper, metals and textiles is a modern idea. In fact, recycling and reuse of materials were an important part of military action and the economy during the Civil War. From the battlefield to the home front - everyone pitched in and found new and creative ways to re-purpose what they had to support the War effort.

1. Notices were desperately posted, urging citizens to donate. Courtesy: Dayton Daily Empire, March 7, 1864 (Library of Congress)
2. Although paper was hard to produce, making the ink was much easier. The fruit of the "inkberry" or Glabra plant made ink that could be kept for a long time under the right conditions. Other berries used to make ink include blackberries, blueberries, raspberries and strawberries. Courtesy: Annual Civil War Sesquicentennial Commission (Library of Congress)
3. Cross writing was used to preserve paper. The writer would write a letter going in one direction on the page, then retrace the page to fill the empty spaces with more writing. Families writing to soldiers used half a sheet of paper so that the soldier could write home with the other half. Courtesy: Letter from Maria F. Thomas to Erisk W. O'Rourke, November 4, 1864 (Library of Congress) and Mrs. F. L. Bridgman to Lucy Wood, December 18, 1863 (Archives of Ontario)
4. Soldiers from Wisconsin also sent letters to their local newspapers to report on the War and ask for supplies. Courtesy: Wisconsin Soldiers (Wisconsin Historical Society Press)
5. In 1862, Smithsonian Institution Secretary Joseph Henry recognized the importance of conserving paper by sending a memo to employees requesting "that a basket be kept in each room of the building into which all pieces of waste paper may be thrown during the day and afterwards emptied into a common receptacle to be preserved for use." Courtesy: Memo Smithsonian Institution Secretary, Joseph Henry, December 6, 1862 (Library of Congress)



Manassas HISTORIC HEART, MODERN BEAT

This exhibition has been created by the City of Manassas Citizens Advisory Committee on Solid Waste with the gracious help of the Manassas Museum, Library of Congress and the American Civil War Museum.

Marvin L. Gillum City Hall and his Family

A Lifetime of Community Service

In 1950 shortly after Marvin Gillum began service to his birthplace, the town of Manassas boasted a population of only 1,000. At the time of his death in 2010, the City of Manassas had become a vibrant urban center of 36,000 residents and the Gillum family thread was tightly woven within the fabric of the community.

He was an active member of several civic organizations including the Rotary Club, where he served as President, the Optimist Club, the Manassas Lodge and the Kiwanis Club. He also helped found the Greater Manassas Baseball League.

Marvin's volunteer efforts in community education and health were interests that spanned decades. He served on the Manassas School Board for 15 years (1980-1995), including 10 as Chairman. He was a Director with the Manassas Education Foundation. He worked to establish the local hospital and later co-chaired the Prince William Health System's major capital campaign.

His public service was capped by eight years as Mayor (1999-2004). Culture and the arts were enhanced by Marvin's leadership. As Mayor, he helped plan and fund the Hyllon Performing Arts Center on the nearby George Mason University campus and served as a board member for the Manassas Dance Company. He led the effort to place the local Center for the Arts in the historic former Hopkins Candy Factory in Old Town.

The Manassas Historical Commission, American Red Cross, March of Dimes, SERVE: Historic Manassas, Inc. and Habitat for Humanity all benefited from his participation and quiet, effective leadership.

Mayor Gillum worked with the City Council, City staff, close friends and civic leaders to design and build the Loy E. Harris Pavilion, now a popular, attractive venue for community events.

In addition to bricks and mortar and gold-bordered certificates, success is also measured in how community progress is reached. Progress is every bit as important as product. Marvin Gillum led the City with a quiet grace, honor, dignity and civility that made him a true "Virginia Gentleman."

RECYCLING AND THE CIVIL WAR



As it is impossible for the United States to supply the RINGGOLD REGIMENT, now going into Camp at Manassas, an appeal is made to the patriotic citizens of Bucks County TO FURNISH BLANKETS

Each family can at least supply the soldier of the War. This necessary article. IF SENT TO QUARTER MASTER will be properly taken care of. As the men will appreciate it. As the men will appreciate it.

Recycling Facts

When the level of recycling in the US reaches 25% it will create over 4.5 million new jobs and the environmental equivalent of removing 51 million cars from the road.

Recycling from the battlefield to the homefront

You might think that recycling and reuse of materials like textiles, paper and metals is a modern idea. In fact, the recycling and reuse of materials was an important part of military action and the economy during the Civil War.

On April 19, 1861, President Abraham Lincoln issued a Proclamation declaring the blockade of major Southern ports in an effort to prevent goods and services from being traded by the Confederacy.

This action cut off the export of cotton, which the Confederacy depended on for currency. The blockade also reduced imports of food, medicine, artillery, manufactured goods, and luxury items. At first, these shortages were only a minor inconvenience, but as the War stretched from months into years, the inconveniences resulted in hardship and suffering.

From the battlefield to the home front - patriotic Southerners supported the War by reducing the amount of resources they used and by finding new and creative ways to reuse and recycle what little they had.

1. The Rowell Mill, near Vichery Creek in Rowell, Georgia was the site of the largest and most famous mills in the South. "Rowell Cloth" fabric was both known as the material of choice for Confederate military uniforms. The mill was one of the main suppliers of the Confederate forces. It was a major source of revenue for the Confederacy and it became a target for the Union army. Retrieved from Rowell Historical Society.

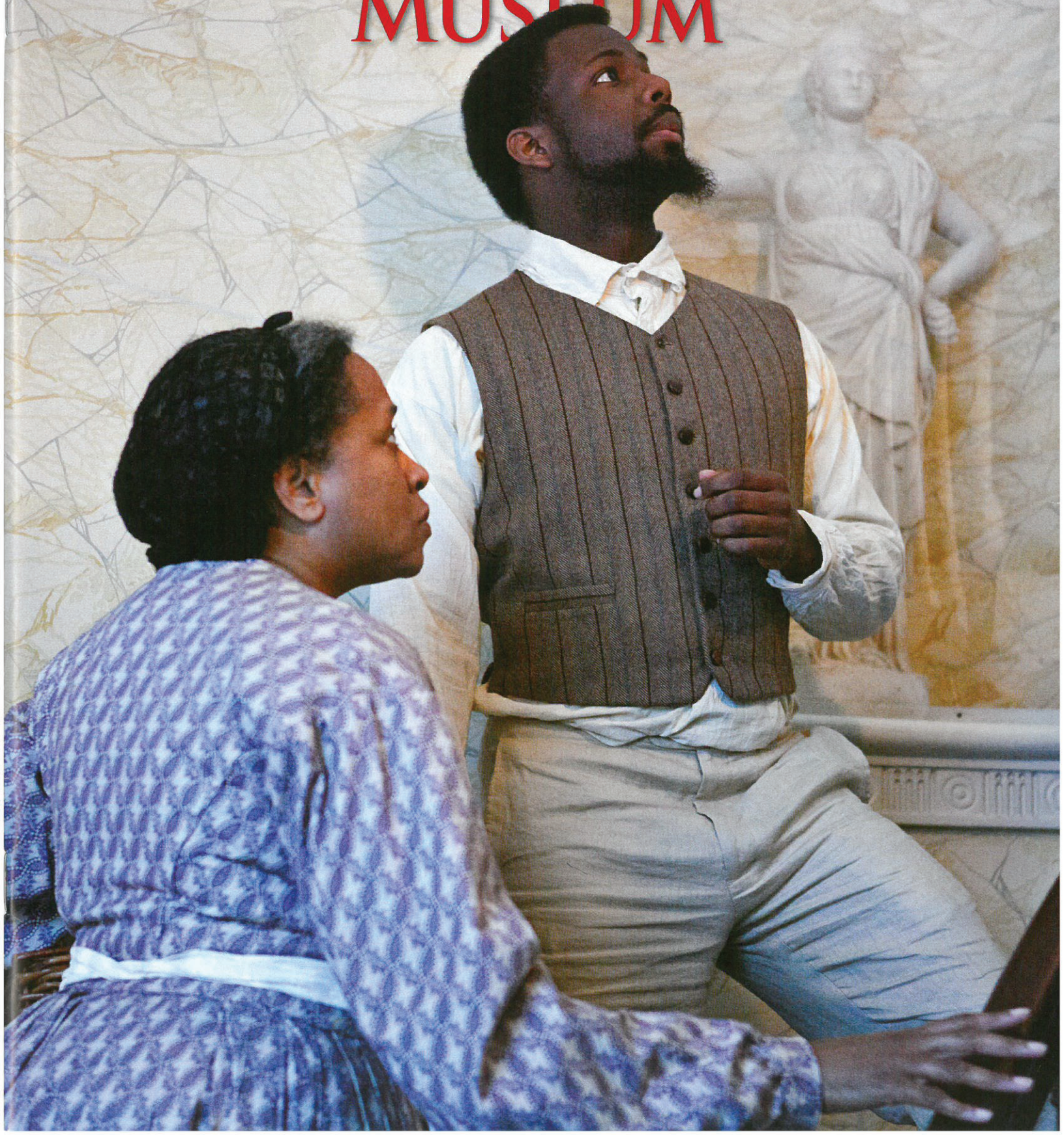
2. Appeals for donations of clothing and blankets to support the Confederate Army were sent out all across the South in an effort to compensate for the shortages of supplies at the battlefield. Retrieved from Memphis Daily Appeal, December 31, 1861; Southern Monthly Chronicle, September 1862; February 9, 1862; and United States Encyclopedia of American History.

Manassas HISTORIC HEART, MODERN BEAT

This exhibition has been created by the City of Manassas Citizens Advisory Committee on Solid Waste with the gracious help of the Manassas Museum, Library of Congress and the American Civil War Museum.

SUMMER 2017 MAGAZINE

THE AMERICAN CIVIL WAR MUSEUM



Reuse – Recycle – Reduce

Civil War Style

The Museum staff is always learning new things about our diverse collections. Typically, this results from re-examining the objects and documents themselves or conducting research in newly available resources.

Sometimes, however, the impetus for learning new things about our collections comes from you – our members and our researchers.

In January the Museum received an email query from Paul Dresler, a retired biologist and volunteer member of the City of Manassas, Virginia, Citizens Advisory Committee on Solid Waste. The committee was working on a “Civil War and Recycling Project” scheduled to be on display in and around Manassas as

part of America Recycles Day this fall. The committee recently had become aware of an 1862 letter from the secretary of the Smithsonian Institution recommending paper recycling to assist the Union war effort. Did the Museum have in its collections anything that demonstrated “the re-use, re-purposing and recycling of materials, especially paper, linen, and metals, by either soldiers or civilians during the Civil War period”?

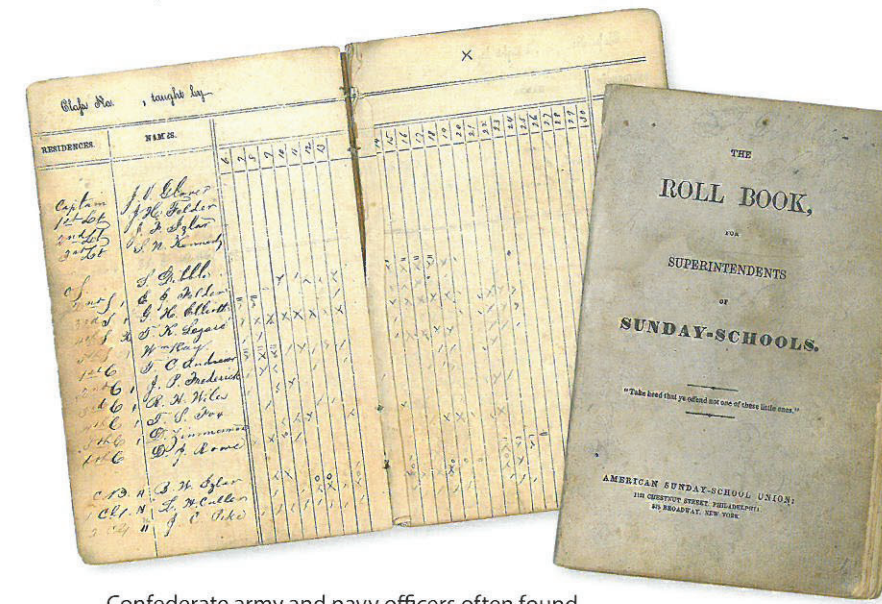
Individual staff members already were aware of examples of recycled materials in the collection. But Mr. Dresler’s query prompted us to look into this more systematically. In the process we identified a wider-than-expected range of objects. Featured on these pages are a few highlights.



A Federal prisoner of war at Florence, South Carolina, made this soldier’s housewife (sewing kit) from a portion of an oil-cloth knapsack and gave it to one of his guards, Henry Yonge, Jr., a private in the 5th Georgia Infantry. According to the donor, Yonge’s widow, he used it throughout the remainder of the war. Yonge himself was captured and imprisoned at Point Lookout, Maryland.



Captain David L. Smoot of the 18th Virginia Heavy Artillery made this gray wool cap from a pair of pantaloons when he was a prisoner at Johnson’s Island, Sandusky, Ohio, in 1865. He wore the cap home to Alexandria, Virginia, after his release from prison.



Confederate army and navy officers often found themselves without proper forms and record books and had to fashion their own. An officer of the Edisto Rifles (Company A, 1st South Carolina Volunteers) used a Sunday school attendance book as a roll book for his company.



All photos by Robert Hancock

The ladies of Columbia, South Carolina, presented to Lt. Gen. Ambrose Powell Hill this pair of fine silver spurs made from melted silver spoons and forks. Bearing animal head decorations and 32-point rowels, the spurs bear the engravings: “To Lieut. General / A. P. Hill” and “H. F. Kraft . Maker”. The other spur is engraved, “from / his Lady friends” and “Columbia. So. Ca.”

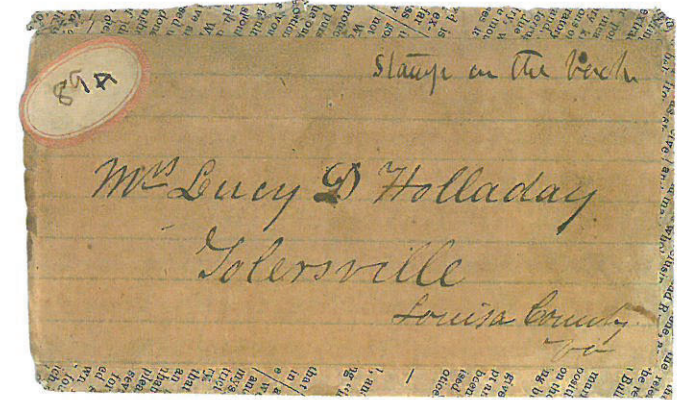




Corporal Randolph Rainey "Skipper" Stiles of the 1st Company Richmond Howitzers made this haversack from a discarded U.S. soldier's waterproof overcoat and gave it to Lt. Daniel S. McCarthy.



A blacksmith made the black iron spoon from a portion of a tire wheel. Private Joseph Tyler Jobson of the 9th Virginia Infantry used it.



Facing a growing paper shortage, southerners fashioned mailing envelopes (which collectors know as "covers") out of wallpaper, old forms, and newspapers.



A soldier identified as "Tom Buck" made this shirt out of a bed spread from an old "Dutchman" (German) while in camp in Pennsylvania. Private Peter S. Hyde of the 12th Virginia Cavalry wore this shirt during the war.



A note in the accession files explains that these spurs "were made of the mouths of exploded Yankee shells (brass bits) by blacksmiths in Ft. Sumter who amused themselves during the siege making two pair of presentation spurs." Major General Jeremy F. Gilmer, chief of the Army's Engineer Bureau (assigned temporarily to Charleston in 1863), received this pair. The other pair went to Gen. P. G. T. Beauregard, commander of the Department of South Carolina and Georgia.

APPENDIX 8.3
RECYCLE RUNWAY

PROJECT RECYCLE RUNWAY

WHO WILL BE THE NEXT RUNWAY STAR?



The City of Manassas and Savers® will be working with Boys and Girls Club members to celebrate America Recycles by creating new fashion with re-used clothing and accessories.

Do you want to design your own fashion and star in our fashion show?

Sign up and join us on September 27, 2017

We'll be meeting on Wednesdays

Fashion Show November 15, 2017

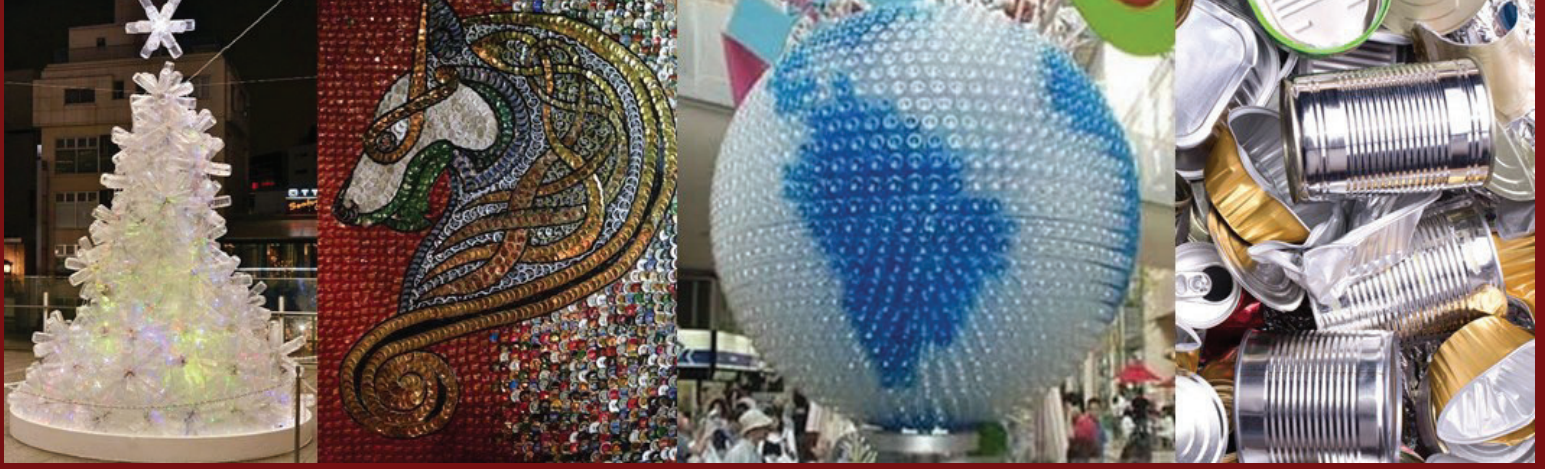


America Recycles Day

NOVEMBER 15

a national initiative of
**KEEP AMERICA
BEAUTIFUL**

APPENDIX 8.4
RECYCLED ART COMPITITION



The City of Manassas, in conjunction with American Disposal Services, Inc. are hosting a Recycled Outdoor Art Competition.



This competition is for 3D artists who can create from recycled or recyclable materials including: cans, plastic containers and paper. The competition is open to all adults and students over 14 years of age in Northern Virginia. Individual and group submissions will be considered.

**Competition is open:
2/1/2017 - 9/15/2017**

**Winner selected:
11/15/2017**

The top pieces will be displayed in Nelson Park in the City of Manassas during the month of November 2017. **The Artist(s) of the winning piece will be awarded a \$1,000 grand prize** from American Disposal Services, Inc.

visit www.manassascity.org/recycledart

APPENDIX 8.5
COMPOSTING POSTER

Anyone Can Compost!

here's how to make your own ...



Layer 4: One inch (1") of good garden soil

Layer 3: Nitrogen rich fresh manure or grass

Layer 2: Six inches (6") of grass clippings, leaves, plant waste, organic kitchen waste

Layer 1: Three inches (3") of twigs for air circulation

10 Tips for Better Compost

1. Gather all grass clippings and green yard waste but be sure to mix with the "brown" materials like leaves and shredded paper to add carbon. You will need both, but if you only add grass clippings your pile will compact and start to stink.
2. Do not compost meats or pet droppings. Stick with food scraps and yard waste only.
3. Avoid all pesticides and/or herbicide treated material.
4. Do not add weeds to your compost pile.
5. Turn your pile as often as you can. Each time you turn it will speed up the process.
6. Keep your compost damp but not wet. As you add material to your pile make sure that each layer is moist as it is added. During the summer your pile will dry out and the composting process will slow down.
7. Stop adding material to a pile that is underway and start a new pile. This will insure you get a chance to use the compost this season.
8. Add compost to your garden a few weeks before you plant. Let the compost have a chance to work into the soil. Try to mix it in and let it sit before you plant.
9. Bugs, worms and most bugs are okay. No need to go crazy trying to keep bugs out of your compost.
10. Since the compost process works best at temperature between 120 and 150 degrees composting in the warmer months is easier to do, if this is your first attempt at composting best to try in the summer.



Facts about Composting

did you know ...

- . The average US. Household generates 650 lbs. of compostable materials each year.
- . Backyard composting reduces organic materials going to landfills, thereby reducing the production of methane gas as harmful greenhouse gas.
- . Compost improves the quality of the soil that you use in your lawn and garden.
- . Compost can enhance plants' ability to respond to challenges from insects and diseases.
- . Composting can reduce home owner trash at the curb by 25 percent to 40 percent.
- . Composting can also save you money on your water bills by retaining soil moisture, reducing the need to water your garden frequently.
- . An acre of soil can hold an additional 16,000 gallons of water for every 1 percent of organic material added.
- . According to the Environmental Protection Agency, Americans generated 33.4 million tons of yard trimmings and 34.7 million tons of food scraps in 2010, which amounts to 27 percent of the total municipal solid waste generated.
- . Egg shells can be crumbled and added to compost for a calcium source. The average American eats 250 eggs per year, or 76.5 billion eggs per year in the U.S., making egg shells a commonly available and valuable component for composting.
- . Composting saves money. Families reduce their garbage collection bills and can save the City of Manassas money on transporting and disposing of waste when organic materials are eliminated from the collection system.

www.manassascity.org/trash



APPENDIX 8.6
PICKUP SCHEDULE MAGNET



Set Out Trash and Recycling - Townhomes

The City collects your trash and recycling:

- Monday: Yard waste ONLY
- Tuesday: Trash and Recycling
- Wednesday: NO COLLECTION
- Thursday: Scheduled TVs and Monitors ONLY
- Friday: Trash only

La Ciudad colecciona su basura y reciclaje:

- Lunes: Solamente basura de la yarda
- Martes: Basura y Reciclaje
- Miercoles: NO COLECCION
- Jueves: Programe SOLO TVs y Monitores
- Viernes: Solamente basura

Violators may be fined up to \$500

- Do not leave your cart at the curb or in common areas outside your collection day.
- All carts must be stored behind house or in an approved enclosure.
- Any carts left out will be removed and residents charged \$50 for replacements.

No seguir estas reglas puede costarle hasta \$500 en multas

- No deje su basurero en la acera o en areas comunes despues del dia de coleccion.
- Todos los basureros deben guardarse detras de la casa o en un lugar cerrado aprobado.
- Cualquier basurero que se deje afuera se recojera y se le cobrara \$50 para reponerlo.

For more information visit or call:

Para mas informacion visite o llame:

www.manassascity.org/trash | (703) 257-8252



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APPENDIX 8.7
EXAMPLE INFORMATION SIGN



Proposed Commercial Collection Plan for Historic Downtown Businesses and Residents

Information Day

Thursday

August 24th

9 a.m. - 12 p.m.

1 p.m. - 4 p.m.

Centerfuse

9071 Center Street



visit www.manassascity.org/trash for more information

APPENDIX 8.8
HHW PICKUP SCHEDULE 2020



2020 Household Hazardous Waste, Electronic Waste and Shredding

March 7

April 4

May 2 + Shredding

June 6

July 11

August 1 + Shredding

September 5

October 3

November 7 + Shredding

All drop off days are held on Saturdays from 8 a.m. – 12 p.m. at the Manassas Transfer Station located at 8305 Quarry Road, Manassas, VA 20110. This is a free service provided for City of Manassas residents in partnership with Waste Management.

www.manassascity.org/trash



APPENDIX 8.9
RECYCLE RIGHT CAMPAIGN



RecycleRight!

Win a Month of Free Trash and Recycling From the City of Manassas!

The City of Manassas is looking for ways to improve trash and recycling in townhome communities. Your community has been chosen to take part in a project that will help us find better ways to help everyone understand the rules for trash and recycling.

Tuesday is your recycling day!
Set your carts out Monday night

We will be checking your recycling every Tuesday. If you set your recycling out right - you will receive a sticker on your cart and a Hooray tag. The best part is - if you keep recycling right - you get another sticker and another chance to win!

Only put these items in your recycling cart.
Make sure that they are clean and dry.



Paper



Plastic Containers



**Cardboard
and Paperboard**



Aluminum Cans



**Using a bin and not a cart? Just
put your address on your bin!**

Winners will be notified by contacting the address where the cart belongs!

For more information: call (703) 257-8252 or visit www.manassacity.org/trash



Know Your Trash and Recycling Rules

VIOLATION NOTICES AND FINES WILL BE ISSUED FOR ANY TRASH AND RECYCLING THAT IS NOT SET OUT RIGHT.



YARD WASTE IS COLLECTED ON MONDAYS ONLY - SET OUT SUNDAY NIGHT

Yard waste must be set out in private containers or paper yard waste bags. Bundle and tie your branches. No loose yard waste or plastic bags will be accepted.

TRASH IS COLLECTED ON TUESDAY AND FRIDAY ONLY - SET OUT MONDAY NIGHT AND THURSDAY NIGHT

Put household trash bags in your City trash cart. Do not put trash bags or raw trash on the street or in common areas. Order an extra trash cart by calling (703) 257-8252.



YOU MUST SCHEDULE COLLECTION FOR LARGE ITEMS

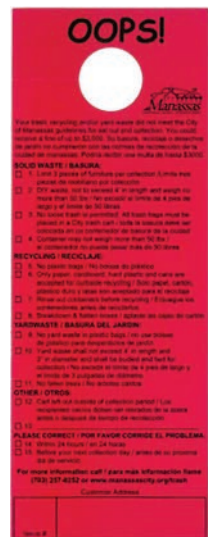
- Televisions
- Computer Monitors
- Fridges, Washers, Dryers and Stoves
- Furniture
- Small amounts of DIY materials

You are allowed 3 items of bulk waste for each collection. Call (703) 257-8252 at least one day ahead to schedule collection.

WARNINGS AND VIOLATIONS WILL BE ISSUED FOR:

- Trash bags on street and not in carts (\$500)
- Carts left at the curb and common areas outside collection days. (confiscation and \$50)
- Unscheduled or excess large items left at curb or in common area (\$500)
- No commercial waste in residential areas. (\$500)
- Trash in your recycling cart (\$50)

UNPAID FINES WILL BE CHARGED AS A LIEN ON THE PROPERTY



For more information: call (703) 257-8252 or visit www.manassascity.org/trash



RecycleRight!

Gane Un Mes de Basura Gratis y Reciclaje De la Ciudad de Manassas!

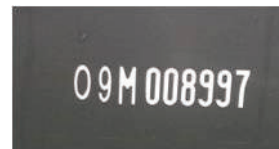
Su comunidad ha sido elegida para participar en un proyecto que nos ayudará a encontrar mejores formas de ayudar a todos a comprender las reglas para la basura y el reciclaje. La ciudad de Manassas está buscando formas de mejorar la basura y el reciclaje en las comunidades de casas de la vecindad.

¡El martes es su día de reciclaje!

Coloque sus contenedores el lunes por la noche

Revisaremos su reciclaje todos los martes. Si su reciclaje está correctamente, recibirá una sticker en su contenedor. La mejor parte es que, si sigues reciclando correctamente, obtienes otro sticker y otra oportunidad de ganar.

Solo coloque estos artículos en su contenedor de reciclaje. Asegúrese de que estén limpios y secos.



Papeles



Plásticos



Cartones y cajas



Latas de Aluminio



¿Usar un contenedor y no un carrito? ¡Solo ponga su dirección en su contenedor!

¡Los ganadores serán notificados poniéndose en contacto con la dirección a la que pertenece el contenedor!

Para mas informacion: llame al 703-257-8252 or visite www.manassacity.org/trash



Conozca Sus Reglas de Basura y Reciclaje

AVISOS DE VIOLACIÓN Y MULTAS SERÁN EMITIDOS PARA CUALQUIER BASURA Y RECICLAJE QUE NO ESTÁ ESTABLECIDO CORRECTAMENTE.



EL DESPERDICIO DE LOS DESECHOS DE JARDIN SE RECOGE LOS LUNES SOLAMENTE – PONGALO EL DOMINGO POR LA NOCHE

Los desechos de jardín deben colocarse en contenedores privados o en bolsas de papel para desechos de jardín. Agrupe y ate sus ramas. No se aceptarán desperdicios de jardín sueltos ni bolsas de plástico.

LA BASURA SE RECOGE EL MARTES Y EL VIERNES SOLAMENTE – PONGALO EL LUNES POR LA NOCHE Y EL JUEVES POR LA NOCHE

Coloque bolsas de basura domésticas en su contenedor de basura de la ciudad. No coloque bolsas de basura o basura en la calle o en áreas comunes. Solicite un contenedor de basura adicional llamando al (703) 257-8252 .



DEBES PROGRAMAR LA COLECCIÓN PARA ARTÍCULOS GRANDES

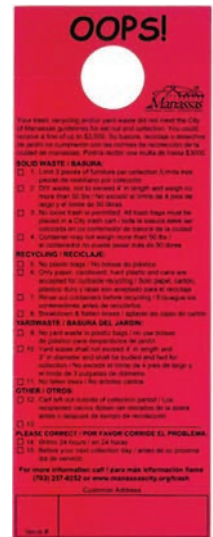
- Televisores
- Monitores de computadora
- Frigoríficos, lavadoras, secadoras y estufas
- Mueble
- Pequeñas cantidades de materiales de DIY

Se le permiten 3 artículos de desechos a granel para cada colección. Llame al (703) 257-8252 al menos un día antes para programar la recolección.

ADVERTENCIAS Y VIOLACIONES SE EMITIRÁN PARA:

- Bolsas de basura en la calle y no en contenedores (\$ 500)
- Los contenedores se que se dejen en la acera y las áreas comunes fuera de los días de recolección (confiscación y \$ 50)
- No basura comercial en areas residenciales. (\$500)
- Artículos grandes no programados o en exceso que se dejen en la acera o en el área común (\$ 500)
- Basura en el contenedor de reciclaje (\$ 50)

LAS MULTAS SIN PAGAR SERÁN COBRADAS COMO UN REEMBOLSO EN LA PROPIEDAD



Para mas informacion: llame al 703-257-8252 or visit www.manassascity.org/trash

OOPS!



Oops! Your recycling bin is full and you need to take it to the City of Manassas Recycling Center for our curbside collection. You have 14 days to take it to the center. If you do not take it to the center within 14 days, the trash will be taken to the landfill. Please do not put anything in your recycling bin that is not on the list of acceptable items. For more information, please call (703) 257-8252 or visit www.manassacity.org/trash.

SOLID WASTE / BASURA

- 1. 1-2 pieces of furniture per collection. Furniture items include: chairs, tables, sofas, beds, and mattresses.
- 2. 1-2 pieces of large appliances per collection. Large appliances include: refrigerators, freezers, and washers.
- 3. No more than 10 lbs. No more than 4 inches in length and 4 inches in diameter.
- 4. No more than 10 pieces of clothing per collection. Clothing items include: shirts, pants, and jackets.
- 5. No more than 10 pieces of household items per collection. Household items include: lamps, fans, and small appliances.

RECYCLING / RECICLAJE

- 6. No plastic bags. No more than 10 pieces of cardboard per collection. Cardboard items include: boxes, cartons, and mailboxes.
- 7. No more than 10 pieces of newspapers per collection. Newspaper items include: newspapers, magazines, and junk mail.
- 8. No more than 10 pieces of electronics per collection. Electronics items include: televisions, computers, and printers.

YARDWASTE / BASURA DEL JARDIN

- 9. No more than 10 pieces of yard waste per collection. Yard waste items include: leaves, grass, and twigs.
- 10. No more than 10 pieces of yard waste per collection. Yard waste items include: branches, stumps, and logs.
- 11. No more than 10 pieces of yard waste per collection. Yard waste items include: tires, hoses, and tools.

OTHER / OTROS

- 12. No more than 10 pieces of other items per collection. Other items include: paint cans, oil, and chemicals.
- 13. No more than 10 pieces of other items per collection. Other items include: car parts, appliances, and furniture.

PLEASE CORRECT / POR FAVOR CORRIJE EL PROBLEMA

- 14. No more than 10 pieces of other items per collection. Other items include: car parts, appliances, and furniture.
- 15. No more than 10 pieces of other items per collection. Other items include: car parts, appliances, and furniture.

For more information call / para más información llame (703) 257-8252 or visit www.manassacity.org/trash

Customer Address

Issue #

HOORAY!



Congratulations! Your recycling skills are awesome! Felicidades! ¡Sus habilidades de reciclaje son increíbles!

Recycle Right!

The City of Manassas is working with residents to increase recycling participation and reduce recycling contamination. La ciudad de Manassas está trabajando con los residentes para aumentar la participación de reciclaje y reducir la contaminación.

Your good recycling habits are worth rewarding! ¡Tus buenos hábitos de reciclaje son dignos de gratificación!

We'll keep track of your recycling and your curbside number. If you want to save some cash, you can confirm your contact information. If you want to save some cash - residents with 3 audit tags can enter our monthly drawing to win a free month of trash and recycling service from the City of Manassas!

Llevaremos un registro de su reciclaje y el número de su contenedor. Si puede ganar 3 etiquetas de auditoría para su reciclaje, lo llevamos a cabo por un mes gratis. Si desea ahorrar algo de dinero en efectivo, los residentes con 3 etiquetas de auditoría pueden ingresar a nuestros sorteos mensuales para ganar un mes gratis de recolección de basura y servicio de reciclaje de la ciudad de Manassas!

Keep up the good work! ¡Sigan el buen trabajo!

For more information call / para más información llame (703) 257-8252 or visit www.manassacity.org/trash

Customer Address

Issue #

Please Recycle



CANS **PLASTIC CONTAINERS** **BOXES** **NEWSPAPERS** **CARDBOARD**
MAGAZINES **JUNK MAIL**

- Please do not put these items in your recycling cart or bin:
- PLASTIC BAGS
 - ELECTRONICS
 - CLOTHING
 - LIQUIDS
 - FOOD

For more information on recycling call (703) 257-8258 or visit www.manassacity.org/trash.

Por favor Recicle



LATAS **CONTENEDORES PLÁSTICOS** **CAJAS** **PERIÓDICOS** **CARTÓN**
REVISTAS **CORREO NO DESEADO**

- Por favor no ponga estas cosas en sus contenedores de reciclaje:
- BOLSAS PLÁSTICAS
 - ELECTRONICOS
 - ROPA
 - COMIDA LIQUIDA

Para más información (703) 257-8258 | www.manassacity.org/trash.

RECYCLE RIGHT RECICLA CORRECTO

CITY OF MANASSAS TRASHLINE • 703.257.8252
manassascity.org/trash

PAPER • CARDBOARD
PAPELES • CARTONES Y CAJAS

GLASS & BOTTLES
VIDRIO Y BOTELLAS

PLASTICS
PLÁSTICOS
#1 • #2 • #5

METAL
LATAS

FOLLOW THE 4 PREP STEPS

SIGUE LOS CUATRO PASOS DE PREPARACION

Empty
Vacio

Dry
Seco

Clean
Limpio

Loose
Suelto

NO PLASTIC BAGS
NO BOLSAS DE PLÁSTICO

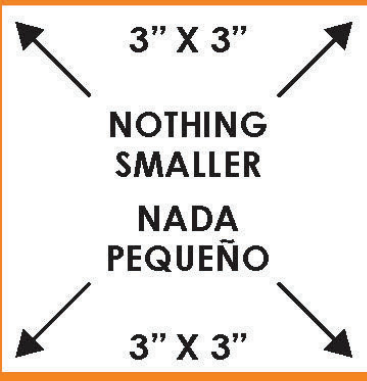
NO DIAPERS
NO PAÑALES

AMERICAN DISPOSAL SERVICES
americandisposal.com

Manassas
HISTORIC HEART. MODERN BEAT.
manassascity.org

RECYCLE RIGHT

RECICLA CORRECTO



**NO PLASTIC BAGS
NO BOLSAS DE PLASTICO!**



**FOLLOW THE 4 PREP STEPS
SIGUE LOS CUATRO PASOS
DE PREPARACION**

**Empty
Vacio**

**Clean
Limpio**

**Dry
Seco**

**Loose
Suelto**

PAPER PAPELES



Colored, Mixed, & Office Paper
Papel De Color, Variado Y De Oficina



Newspaper, Magazines
& Catalogues
Periodico, Revistas



Soft Cover Books
Libros Con Tapa Suave



Junk Mail
Propaganda Del Buzón, Correo
No Deseado

CARDBOARD CARTONES Y CAJAS



Flattened Cardboard Boxes
Cajas De Carton



Paperboard Like Cereal Boxes
Cartón Blando Como Cajas De Cereal



Toilet Paper And Paper Towel Rolls
Rodillos De Papel



Juice, Milk, Soup And Wine Cartons
Cartones De Jugo, Sopa Y Vino

PLASTIC PLASTICOS



All Plastics Labeled #1 & #2 Colored
& Natural (But No Black Plastic)
Todos Los Plásticos Numerados
#1 & #2 De Color Y Transparente
(Plástico Negro No)



Rigid Plastics Like Jugs,
Buckets, Or Toys
Plásticos Rígidos Como Cubetas,
Juegetes, Jarros



Wide Mouth Plastics Labeled #5
Used For Yogurt, Butter, Etc.
Plásticos De Abertura Grande Numerado
#5 Como El Yogur, La Matequilla, Etc.

METAL LATAS DE ALUMINO

[Non-Ferrous Metals]
[Metales No Ferrosos]

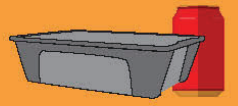


Aerosol Cans
Latas De Aerosol



Tin Cans
Latas De Comida

[Ferrous Metals]
[Metales Ferrosos]



Aluminum Cans, Foils, & Trays
Latas, Papel Y Charolas De Aluminio



APPENDIX 8.10
DOG WASTE POSTER

The Poop Fairy is not real!

Did you know ...

- * Dog waste creates a health hazard for other animals as well as humans.
- * It can contain harmful and contagious bacteria and parasites.
- * Rain and snow can wash dog waste into our stormwater system, contaminating the water we drink, swim and fish in.

Please be a good neighbor - don't forget to scoop the poop!



APPENDIX 8.11
CIGARETTE LITTER PROJECT




 October 1, 2018

**Corrective Action Warning:
Cigarette Litter**

Dear Owner/Manager:

The City of Manassas has received complaints regarding the amount of cigarette litter in front of and around restaurants in Historic Downtown Manassas.

As a local business, you are very important part of our community. Historic Downtown Manassas is a mix of residential and commercial properties. You are an integral part of what makes the City of Manassas one of the most popular places to live, work and visit in our region.

Being "part of where the action is" also means that you are a steward of our community. Working and living side by side requires a bit of coordination and care when it comes to making sure that the areas around your establishment are kept clean and inviting. Unsightly cigarette litter on the sidewalk, in the curb and in plant pots draws complaints from visitors and patrons of our local businesses.

Keep Manassas Beautiful was fortunate to receive a small grant from Keep Virginia Beautiful to help address these issues and provide local businesses with an idea to reduce the amount of cigarette litter on our streets. The "Cigarette Fairy" campaign offers free posters and portable ashtrays to businesses. The campaign has been well-received and demonstrates the commitment of our community in dealing with this issue.





City of Manassas Refuse and Recycling
 8500 Public Works Drive | Manassas, VA | 20110 | Phone 703-257-8252

Cigarette Litter Project Summer 2018



**Poor Cigarette Fairy...
... she just can't keep up!**

Keep Manassas Beautiful!
Ask inside for a free, portable ashtray!

Did you know?

- Cigarette butts are the most common form of litter on our streets.
- It takes almost 10 years for a cigarette filter to break down.
- 77% of people don't think cigarette butts are litter.

For more information, visit:
www.manassascity.org/kmb

*Keep
Manassas
Beautiful*

KEEP AMERICA BEAUTIFUL AFFILIATE





Keep
Manassas




Keep
Manassas

 *Beautiful*

KEEP AMERICA BEAUTIFUL AFFILIATE

Shop like you mean it ...
... Recycle like it matters



 this reusable shopping bag = 700 plastic bags!

Shop like you mean it ...
... Recycle like it matters



 this reusable shopping bag = 700 plastic bags!





Keep
Manassas
Beautiful



KEEP AMERICA BEAUTIFUL AFFILIATE



TWITTER



FACEBOOK



YOUTUBE



INSTAGRAM

2019 30 in 30 Green Grants Reporting

Please note, the best way to submit this form is to use a Chrome browser on a laptop or desktop (rather than mobile device). If you have a ".gov" or ".edu" server, or corporations that have a strict firewall, you might find it easier to submit from your home computer. If you have difficulty submitting this form, please contact Beckey Watson, Director of Development, bwatson@keepvirginiabeautiful.org.

Organization name *

Contact name *

Contact e-mail *

City where project took place? *

ZIP code where project took place? *

Grant category *

- Community Beautification
- Cigarette Litter Prevention (CLPP)
- Litter Prevention
- Recycling

Date project was completed *

Number of volunteers involved *

Number of hours spent completing project

100

Total number of volunteer hours spent completing the project

80

Number of volunteers x number of hours spent on project

Amount of area cleaned up or revitalized (i.e. 2 acre park, 3 miles of river bank)

10 City Blocks

Pounds of trash/litter picked up

60

Number and type of other items cleaned up (i.e. 572 tires, 1592 cigarette butts)

803

Amount and description of recyclable products that you recycled (i.e. 558 plastic bottles, 25 pounds of paper)

47 plastic bottles and 177 plastic cups

Number and type of trees planted

0

Number and type of flowers or shrubs planted

0

Other: other work done (i.e 500 ft of fencing installed, 2 picnic canopies painted)

4 cigarette disposal units

Other: any other metrics or information not listed above

500 disposable ashtrays and 50 butt buckets distributed

Please describe the impact of your project. *

The First Friday events were the big test for our program. Historic Downtown had over 7,000 visitors on one night in September and another 12,000 for First Friday in October followed by the Fall Jubilee the next day.

Audits after the events showed that there were actually fewer cigarette butts than the year before and that everyone really loved the posters and the free ashtrays.

Picture

C:\fakepath\City of Manassas Cigarette Fairy Post

Note: A large size file may result in an error message on your submission. Please send larger files via email to bwatson@keepvirginiabeautiful.org.

Picture

DONATE

Select your contribution level

- Individual \$25
- Give60 Supporter \$60
- Business Sponsor \$150
- Partner \$1,000
- Other Amount

Donate

SPOTLIGHT

[PREVIOUS](#)

[NEXT](#)

UPCOMING EVENTS

[LYNNHAVEN WATERWAY CLEANUP](#)

November 9, 2019 9:00 am - 12:00 pm Virginia Beach, VA

[CARYTOWN CLEAN UP](#)

November 13, 2019 8:15 am - 9:30 am Richmond, Virginia

[CHESAPEAKE RECYCLES DAY](#)

November 16, 2019 9:00 am - 12:00 pm Chesapeake, VA

[SEE MORE EVENTS >>](#)

WATCH OUR VIDEO



SUBSCRIBE TO OUR MAILING LIST

* indicates required

Email Address *

First Name *

Last Name

Company Name *

SUBSCRIBE

THANK YOU

[PREVIOUS](#)

[NEXT](#)

[PREVIOUS](#)

[NEXT](#)

Contact

Mailing Address:

P.O. Box 73503

Richmond, VA 23235

Shipping Address:

2800 N. Parham Rd., Suite 102

Richmond, VA 23294

(804) 562-8283

info@keepvirginiabeautiful.org

Fed ID 54-0831204

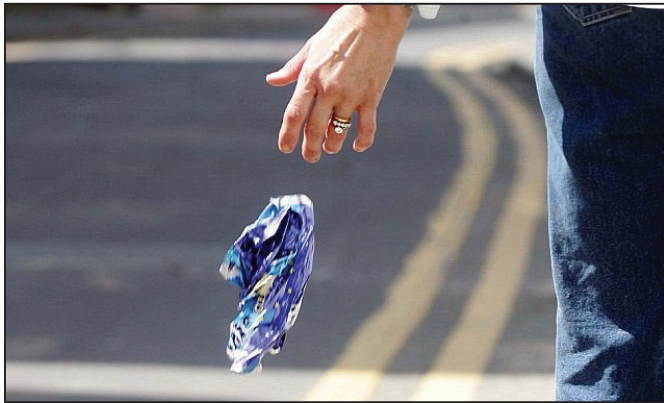
APPENDIX 8.12
LITTERING PRESENTATION



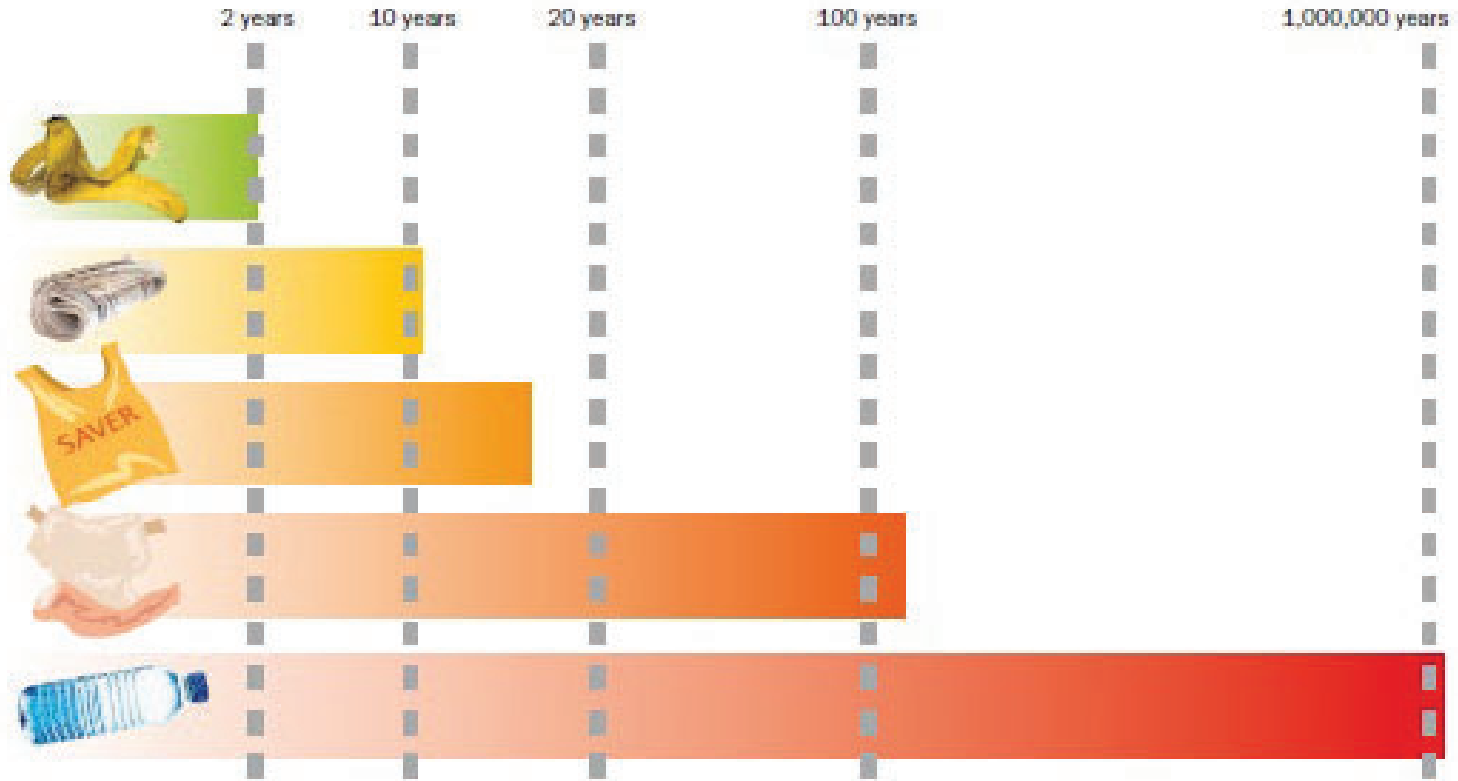
Monica Boehring
Refuse and Recycling Coordinator
City of Manassas

What is litter?

Litter is described as 'trash that is in the wrong place'. It can be anything from a cigarette butt to food, chewing gum, fast food containers or plastic bags.



Why is littering a problem?



Do you know how long it takes for litter to degrade?

Why is littering a problem?

- Cost
- Environment
- It's ugly
- Safety
- Vermin
- Wildlife



Who is responsible for stopping it?

- ALL OF US
- City of Manassas
- Residents
- Businesses



What can we do about litter in our schools?

- Put your trash in the bin or take it home with you.
- Recycle!
- Take part in a litter clean up.
- Make sure that your school has enough trash and recycling bins.
- Do a litter survey in your school to find out what everyone is doing and help them understand what littering is.
- Create a litter action plan for your school.

Where would you rather play?



APPENDIX 8.13
THE GREAT AMERICAN CLEANUP

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The Great American Cleanup in Manassas starts March 21st!

As a Keep America Beautiful Affiliate, Keep Manassas Beautiful is part of the country's largest community cleanup program. This national program engages more than 1.5 million volunteers and participants who take action in their communities every year to create positive change and lasting impact.

As an Adopta Volunteer, your participation will help the City of Manassas start sprucing up for Spring! Last year, volunteers like you shared over 1,000 hours of their time and collected more than 1.5 tons of litter from our parks, streets and public spaces.



What do I have to do?

We'll provide the litter pickers, vests, trash bags and a little gift to show our appreciation - all you need to do is give an hour of your time between March 21 and May 31. Clean up your adopted street, park or public space and report your activity through our [website](#).

[Send us your litter cleanup picture](#), and we'll enter your name in a drawing for a gift certificate to shop in Historic Downtown Manassas.

Send a friend!

[Subscribe](#)[Past Issues](#)[Translate ▼](#)

[friend](#) and we'll send you a Keep Manassas Beautiful baseball cap or reusable shopping bag!

Thank you for being part of something that makes everyone happy. We receive so many positive comments about how much our residents care about the City of Manassas. You are a big part of that!

All the best -

Monica Boehringer
Keep Manassas Beautiful Coordinator

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Our mailing address is:

Keep Manassas Beautiful
8500 Public Works Drive
Manassas, Virginia 20110

(703) 257-8256

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You can [update your preferences](#) or [unsubscribe from this list](#).

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Keep Manassas Beautiful · 8500 Public Works Dr · Manassas, VA 20110-8415 · USA



APPENDIX 8.14
VRA CERTIFICATION
PRESENTATION



The State of Recycling in Virginia

Monica Boehringer

Vice President – Virginia Recycling Association
Refuse and Recycling Coordinator – City of Manassas



It's Infrastructure!



Like the sanitary sewer system, electricity, and water, solid waste management is an essential part of the community infrastructure.





Recycling... more than you think



- Reduces the amount of waste sent to landfills and incinerators
- Conserves natural resources such as timber, water and minerals
- Prevents pollution by reducing the need to collect new raw materials
- Saves energy

... but there's more!



Recycling ... more than you think



- Economic Impact \$1.7 billion
- 8,628 jobs
- \$500 million in wages

- Economic Impact \$55.7 million
- 276 jobs
- \$16.5 million in wages





In Virginia ...



According to the Virginia Department of Environmental Quality, the volume of reported recyclable material was 2.5 million tons.

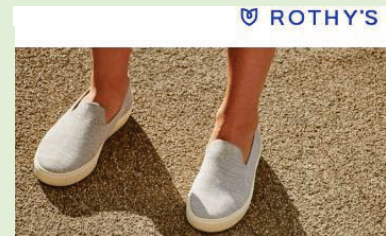
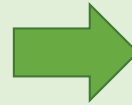




What is Recycling?



Recycling is the process of converting waste materials into new materials and objects.





Recycling is also a Commodity



Recycling is a commodity just like soy beans or wheat, and is traded in the global market.

The value of commodities such as plastic, aluminum and cardboard rise and fall based on demand.





China China China



China has always been the biggest buyer of recycling materials from the United States purchasing, on average, over \$6 billion of materials for use in manufacturing.

In January 2018, China imposed a ban on the import of recyclable materials due to the volume of “contamination.”



25% Trash!



The recycling infrastructure is malfunctioning



- Materials Recovery Facilities (MRFs) are closing.
- The cost of recycling processing and disposal is rising.
- Many jurisdictions are suspending or closing recycling programs.
- Recyclable materials are going to landfills.



A word about landfills



- The collapse of recycling would result in more than 2.5 million tons of recyclable materials going to landfill.
- DEQ reports that there are 51 landfills operating in Virginia.
- In 2017, over 9.5 million tons of municipal solid waste originated in the Commonwealth and more than 3.4 tons originated from other jurisdictions.
- The average remaining life-span for landfills in Virginia is 23 years.





Contamination



People think that deciding what goes into their recycling container is someone else's problem.



What about glass?



- Glass has been one of the most difficult materials to recycle in Virginia.
- Owens Illinois (O-I) uses over 1 billion pounds annually of curbside consumer containers and pre-consumer recycled glass.
- Although O-I has two large facilities in Virginia, in Danville and Toano, they get their glass from Tennessee and Pennsylvania.
- The reason is that there are no beneficiation facilities to clean and sort the glass that Virginia generates.
- The materials that we could be selling to large manufacturers like O-I, instead, a majority of the glass goes straight to landfill.
- Recycling 1,000 tons of glass creates slightly over 8 jobs. (Source: 2011 Container Recycling Institute.)



What can be done?



- Review the Waste Management Act of Virginia (1986)
- Introduce a Recycling Strategy for Virginia.
- Establish a harmonized standard for what is accepted in recycling.
- Provide clear and consistent information to the public.
- Provide economic support and development for the recycling industry.



Questions?



APPENDIX 8.15
AMERICA RECYCLES DAY
PROCLIMATION



Proclamation

Whereas, it is important for our community leaders to understand how recycling impacts our economy and promotes the work being done to educate our community about the importance of recycling; of protecting and preserving our natural resources; and of adopting conscientious habits that will improve our daily lives and bring about a cleaner, safer, and more sustainable environment; and

Whereas, the Institute of Scrap Industries has identified the economic impact of recycling in the City of Manassas as valued at over \$55 million and providing 276 jobs for our community proving that recycling is an important part of who we are; and

Whereas, City of Manassas residents diverted more than 4,000 tons of recyclable materials from the landfill in the last year, avoiding over \$240,000 in disposal fees; and

Whereas, the City of Manassas RecycleFest is celebrating five years of community recycling with residents dropping off a record breaking 168 tons of recyclable electronics, household hazardous waste and shredding. When RecycleFest started in 2014, the average amount collected annually was 60 tons. This program has shown the success of drop-off recycling within our community; and

Whereas, Keep Manassas Beautiful has received the President's Circle Award for the second year as an Affiliate of Keep America Beautiful. Over the past year, more than 600 volunteers have collected over 1.5 tons of litter from our streets and parks. These are our family, friends and neighbors who have given their time to improve and beautify our community.

NOW, THEREFORE, I, Harry J. Parrish II, Mayor of the City of Manassas, Virginia and on behalf of the Manassas City Council hereby recognize Wednesday; November 15, 2019 as

Manassas Recycles Day

in the City of Manassas and encourage all citizens to continue their reducing, reusing and recycling efforts not only on November 15th but also throughout the entire year.

ATTEST:

Harry J. Parrish II MAYOR
On behalf of the City Council
Of Manassas, Virginia

Lee Ann Henderson City Clerk

APPENDIX 8.16

RECYCLEFEST



**City of Manassas Fall RecycleFest November 2
Clothing and Household Items Accepted
to Benefit City of Manassas Animal Adoption Center**

The City of Manassas is **Keeping Manassas Beautiful** with our 5th Fall RecycleFest Saturday November 2 2019, from 8 a.m. to 12 p.m. at the Manassas Transfer Station located at 8305 Quarry Road, in Manassas. *

**CITY OF
MANASSAS
ANIMAL ADOPTION
CENTER**



Savers™ will be on hand to collect gently used clothing, accessories and household goods to help support the by donating part of the proceeds from sales to the City of Manassas Animal Adoption Center.

Drop off your: antifreeze, fertilizers, gasoline, glues, motor oil, paint swimming pool chemicals, cell phones, TVs, computers, scanners, small copiers, game consoles, monitors and personal documents for shredding (4 box limit.)

**Proof of residency is required to enter and no commercial waste will be accepted.*

For more information visit www.manassascity.org/recyclefest or call (703) 257-8256.

Contact:

Monica Boehringer
Refuse and Recycling Coordinator
City of Manassas
Phone: (703) 257-8256
email: mboehringer@manassasva.gov



Ciudad de Manassas Fall RecycleFest 2 de Noviembre Ropa y artículos para el hogar aceptados beneficiará al centro de adopción de animales de la Ciudad de Manassas

La ciudad de Manassas **Mantiene a Manassas Hermosa** con nuestro 5to otoño RecycleFest el sábado 2 de noviembre de 2019, de 8 a.m. a 12 p.m. en la estación de transferencia de Manassas ubicada en 8305 Quarry Road, en Manassas. *

CITY OF MANASSAS ANIMAL ADOPTION CENTER



Savers™ estará a su disposición para recolectar ropa, accesorios y artículos del hogar de uso suave para ayudar a respaldar donando parte de las ganancias de las ventas al Centro de Adopción de Animales de la Ciudad de Manassas.

Traer: anticongelante, fertilizantes, gasolina, pegamentos, aceite de motor, productos químicos para piscinas de pintura, teléfonos celulares, televisores, computadoras, escáneres, copiadoras pequeñas, consolas de juegos, monitores y personal Documentos para destruir (límite de 4 cajas).

* No se aceptarán residuos comerciales.

Para obtener más información, visite www.manassascity.org/recyclefest o llame al (703) 257-8256. Para obtener más información, visite www.manassascity.org/recyclefest o llame al (703) 257-8256.

Contact:

Monica Boehringer
Refuse and Recycling Coordinator
City of Manassas
Phone: (703) 257-8256
email: mboehringer@manassasva.gov

Never Fear ...
RecycleFest!

... is here!



Saturday

November 3 , 2018

8 a.m.—12 p.m.

Manassas Transfer Station

8305 Quarry Road

Manassas, VA 20110



savers™ will be collecting clothing, accessories and housewares with proceeds going to benefit the City of Manassas Animal Adoption Center!

CITY OF
MANASSAS
ANIMAL ADOPTION
CENTER



Antifreeze • Fertilizers • Gasoline • Glues
Motor Oil • Paint • Swimming Pool Chemicals
Cell Phones • TVs Computers • Scanners
Small Copiers • Game Consoles • Monitors
Personal Documents (4 box limit)

* Commercial/Business Waste will not be accepted for collection.



More Information: (703) 257-8252 or www.manassascity.org/trash

Spring RecycleFest



Saturday
May 4, 2019

8 a.m.—12 p.m.



Manassas Transfer Station
8305 Quarry Road
Manassas, VA 20110



Free yard waste bags to the first 500 residents courtesy of Home Depot

Antifreeze • Fertilizers • Gasoline • Glues
Motor Oil • Paint • Swimming Pool Chemicals
Cell Phones • TVs Computers • Scanners
Small Copiers • Game Consoles • Monitors
Personal Documents (4 box limit)

** Commercial/Business Waste will not be accepted for collection.*



More Information: (703) 257-8252 or www.manassascity.org/trash



APPENDIX 8.17
SUMMER SHRED POSTER

BIG SUMMER SHRED

Saturday
July 7, 2018
8 a.m. - 12 p.m.

Manassas Transfer Station
8305 Quarry Road
(off Liberia Avenue)

What can you shred?

- Bank Account Statements
- Correspondence
- Job Applications
- Profit/Loss Statements
- Brokerage Reports
- Credit Card Statements
- Legal Documents
- Cancelled Checks
- Financial Reports
- Medical Records
- Social Security Numbers
- Confidential Letters
- Insurance Policies
- Pay-stubs
- Tax Records
- Contracts
- Invoices and Receipts
- Photographs

**There is a three box maximum for shredding.
Commercial shredding is not accepted due to volume.**

More Information: (703) 257-8252 or www.manassascity.org/trash



APPENDIX 8.18
RECYCLING INFOGRAPHIC



Refuse and Recycling in the City of Manassas



▲ 26% by 2040



Empowering residents to help keep our community clean and beautiful through volunteer activities.

- 1,587 volunteer hours
- \$39,000 value in volunteer time
- 2,805lbs litter collected in FY18



755,050

collections annually

\$3.5 million annual budget

Outreach & Education

- Website
- City Connection Newsletter
- Facebook
- YouTube
- NextDoor
- Posters
- Press Releases
- Information Flyers
- Magnets
- Presentations

Services Provided

Collections:

- Trash
- Recycling
- Yard Waste
- Bulk Waste
- Televisions and Computer Monitors

Drop Offs:

- Household Hazardous Waste
- Electronic Waste
- Paper Shredding



Recycling Contamination

Recycling Re-education is the single most important issue within our community. The City is working with residents to RecycleRight!

48%

Recycling Rate

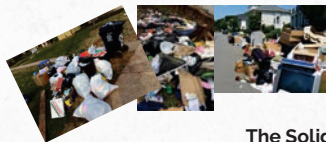
Virginia target rate is 25%



Cardboard* Cans* Plastic Containers* Paper Clean* Dry* Loose

24 yrs

AVG. LANDFILL SPACE LEFT IN VA



Enforcement

City of Manassas Ordinances Chapter 98.1

The Solid Waste Code provides guidance and regulation for solid waste disposal within the City of Manassas. The Code was updated and approved by City Council in November 2017.



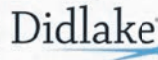
Coming Soon!

- Organics Collection in partnership with FreeState Farms.
- Glass recycling in partnership with Fairfax County.

1:10,281

Staff/Resident Ratio

Working in Partnership



For more information visit: www.manassascity.org/trash

APPENDIX 9

LITTER CONTROL

APPENDIX 9.1	<u>LITTER PREVENTION</u>
APPENDIX 9.2	<u>LITTER PREVENTION PLAN</u>
APPENDIX 9.3	<u>DEBRIS MANAGEMENT PLAN</u>
APPENDIX 9.4	<u>DIDLAKE LITTER COLLECTION CONTRACT</u>
APPENDIX 9.5	<u>KMB BYLAWS AND AFFILIATE SUMMERIES</u>
APPENDIX 9.6	<u>LITTER AUDIT</u>
APPENDIX 9.7	<u>LITTER PREVENTION GRANT</u>
APPENDIX 9.8	<u>KMB ADOPTA YEAR IN REVIEWS</u>

APPENDIX 9.1
LITTER PREVENTION

APPENDIX 9.1

LITTER PREVENTION PROGRAMS

The City of Manassas has a range of programs and activities to handle and remove litter from public spaces including streets, parks, ball fields, streams and historic sites throughout the City.

The strategy used to handle litter is divided into five areas:

- Contracted litter collection
- Debris management for events
- Voluntary engagement and activity
- Outreach and education
- Enforcement

Four documents govern the program providing direction and sustainability:

- Litter Prevention Plan - Appendix 9.2
- Debris Management – Events Plan – Appendix 9.3
- Keep Manassas Beautiful Bylaws – Appendix 9.5
- [Solid Waste Code](#)

Contracted Litter Collection

The City of Manassas has contracted [Didlake](#) to undertake weekly litter collection throughout Historic Downtown Manassas and all of the City's parks. Didlake provides the City with monthly audit reports on collection activity and receives additional information that identifies issues and trash hot spots for further action. Didlake's 2017 City Contract is attached Appendix 9.4

Debris Management for Events

The City of Manassas hosts more than 500 events every year. The events range in size from simple meetings in public spaces to the annual Railway Festival, which draws more than 7,000 each day. The City works with Manassas City Police to ensure that all event

permits are vetted and that organizers provide information on how they will handle litter, trash and recycling generated by their event.

The City also works in partnership with Historic Manassas Incorporated, American Disposal Services, and Olde Town Landscaping to provide dumpsters, containers, and litter collection.

In 2020, the City introduced 10 new [Big Belly](#) solar powered trash and recycling compactor containers to accommodate larger volumes of trash and recycling. They are located in high traffic areas where visitors are likely to litter.

Voluntary Engagement and Activity

[Keep Manassas Beautiful](#) (KMB) is the signature litter program for the City of Manassas. KMB became an [Affiliate of Keep America Beautiful in November, 2017](#). [Keep America Beautiful](#) has been actively involved in engaging the public in raising awareness about litter prevention and engaging the public since 1953.

The Keep Manassas Beautiful program engages and empowers residents, businesses and community groups to undertake litter clean-ups throughout the year. The Adopta Program encourages them to “adopt” a street, stream, park, ball field, or historic site and provides all the materials required to facilitate their activity. Participants in the program are required to follow-up on their activity with a report detailing what they collected and the location. This information is then reported annually to Keep America Beautiful as part of the governance of the program. Information is also shared annually with the public to let them know about program activity and encourage volunteer activity.

In recognition of their activity, volunteers are provided with signs in their adopted locations and an annual Volunteer Recognition Ceremony where their achievements are recognized and shared with the community.

Outreach and Education

Keep Manassas Beautiful promotes litter prevention through materials, activities, and events aimed at engaging the public in a positive and sustainable way.

<p>School Certification Program</p>	<p>In 2019, KMB became the first Keep America Beautiful Affiliate in Virginia to start a school certification program.</p> <p>Keep Manassas Beautiful worked with STEM teachers in Manassas City Public Schools. All STEM teachers received training and certification to deliver litter and recycling education to student through their curriculum.</p> <p>In addition, all schools will participate in activities with students to retain certification.</p>
<p>RecycleFest</p>	<p>Started in 2014, RecycleFest offers residents a way to dispose of their HHW, electronics and documents in one event. KMB members have an active role in planning and delivering RecycleFest. Members help to plan the traffic flow, stuff the gift bags and greet residents as they come in to drop off their recycling.</p> <p>A record 168 tons of HHW, eWaste and Shredding were collected in 2019.</p>
<p>Great American Clean-up</p>	<p>As a Keep America Beautiful Affiliate, Keep Manassas Beautiful is part of the country's largest community cleanup program. This national program engages more than 1.5 million volunteers and participants who take action in their communities every year to create positive change and lasting impact.</p> <p>In 2019. volunteers shared over 1,000 hours of their time and collected more than 1.5 tons of litter from our parks, streets and public spaces.</p> <p>KMB provides the litter pickers, vests, trash bags and a gift to show our appreciation – we ask volunteers to give an hour of their time between March 21 and May 31 for clean-up activities.</p>
<p>Project Recycle Runway</p>	<p>KMB partners with the Martin K. Alloy Boys & Girls Club of Manassas, American Disposal Services and Savers® for a project providing Club members aged 9 – 13 with an interesting and innovative way to learn about textile reuse by engaging them in a meaningful recycling activity... a fashion show.</p> <p>Club members begin by learning about textile recycling and the how the use of old and modified clothing led to street fashion inspiring designers and changing the direction of style around the world.</p> <p>They are then taken to a second-hand clothing store to find materials for their own designs, which will be original adaptations of the clothing and accessories that they find. The hard work will begin when the budding designers and stylists take the next two sessions to develop their own designs for the runway.</p>

	<p>Finally, all of the planning and hard work will come together with a fashion show at the Martin K. Alloy Boys & Girls Club in Manassas, on America Recycles Day. A panel of judges will choose a winning design along with awards for the runners up.</p>
Summer Recycling Camp	<p>Georgetown South is the oldest townhome community in the City of Manassas. The community is working hard to reduce littering and dumping, and to beautify their public areas for residents and their children. Th Summer Camp project works with groups of young residents to teach them about caring for their community through active participation in weekly litter cleanups and beautification projects.</p> <p>One of the most challenging aspects of reducing litter is developing projects that are inclusive of the cultural and language diversity. Georgetown South has a primarily Spanish speaking population. Working with young residents and their families in Spanish helps improve communication and provide information in a meaningful way. Studies on waste reduction and recycling have also indicated that Hispanic and Latino communities are very sensitive to pride and shame. By working with young people to celebrate pride in keeping their community clean, we will be able to develop good habits in a positive and productive way that fits the cultural norm of the community.</p>
Cigarette Fairy	<p>The Litter Fairy Campaign works with business owners in Historic Downtown Manassas to spread the word about cigarette litter by offering free portable ashtrays to visitors. Businesses put up Cigarette Fairy posters and distribute portable ashtrays through shops, restaurants and at events in the Historic Downtown area.</p> <p>Volunteers from the local businesses and restaurants, as well as the Adopta volunteers deliver posters and undertake litter audits, clean-ups and outreach at events to raise awareness about cigarette litter.</p>
Farmer’s Market – shopping bags	
Big Summer Shred	<p>Document shredding is very popular with residents, the cost of shredding can be prohibitive. KMB hosts a free document shredding event in August collecting over 20 tons of paper in just 4 hours.</p>
Holiday Recycling Guide	<p>KMB created a Holiday Guide to provide the public with tips and ideas for reducing waste and recycling over the holidays.</p>
Litter Bags for Cars	<p>KMB has free litter bags for cars available online and at events.</p>
Poop Fairy	<p>The Poop Fairy was introduced to engage and inform the public about dog waste and the danger of dog waste entering the storm drain.</p>

Enforcement

The City works with Manassas City Police and Code Enforcement to hold those who litter accountable for their actions through enforcement of City Ordinances and State Littering laws.

APPENDIX 9.2
LITTER CONTROL AND
PREVENTION PLAN



Five Year Litter Control and Prevention Action Plan:
a Plan for Keeping Manassas Beautiful
Adopted July 12, 2017

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Acknowledgements

This document has been prepared by the City of Manassas in consultation with the Citizen's Advisory Committee on Solid Waste, Beautification Committee and the City's departments of Public Works, Parks and Recreation, Police Department and Property Code Enforcement.

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Executive Summary

Litter Control and Prevention Action Plan

The Problem

The continuing increase of litter and complaints as well as the need to protect and preserve the environment, quality of life, and aesthetic appearance of the City of Manassas has prompted staff to review the current strategy for handling litter control and prevention within the City. It was determined that the City needs to develop a five-year plan of action for addressing current issues of littering and establish clear guidance for reducing litter through community engagement and education.

Desired Results

The desired results of the Litter Control and Prevention Action Plan are:

- Reduce littering; and
- Improve the appearance of the City's public spaces through implementation of a balanced litter management/abatement program.
- Raise awareness of and enforce ordinances for littering and illegal dumping.

Background

According to Keep America Beautiful, effective reductions in litter efforts used by jurisdictions throughout the United States include the following elements:

- Public Education and Awareness (Preventive)
- Litter Control/Removal (Reactive)
- Enforcement (Corrective)

The Litter Control and Prevention Action Plan provides a comprehensive approach to litter control and abatement using the following measures:

- Measure performance;
- Employ physical intervention and mechanical device innovations;
- Emphasize litter policies and enforcement;
- Partner with stakeholders; and
- Increase public awareness.

Within each of these measures is a series of objectives, actions, implementation tasks, and key performance indicators to ensure success.

Achieving city-wide coordination for litter prevention and management is a tremendous challenge. To succeed in this significant endeavor, City staff, residents and organizations must be involved, and a range of budgeted and voluntary resources are required.

The City of Manassas has a long-term commitment to improving the environment, ensuring public health and reducing litter and illegal dumping. Through the implementation of this action plan, the City will work toward developing working relationships on these issues internally with other departments and externally through citizen and community ownership of initiatives.

Action Plan

While the five-year Plan contains many objectives covering a wide range of topics, City staff believe that it would be most efficient to focus the City's initial efforts on the most critical items. These core objectives would be the immediate Action Plan to pursue and implement. As with the full Plan, this is dynamic and should be updated, and expanded as needed.

The highest priorities that have been selected include objectives for each of the three core elements of the plan:

Public Education and Awareness (Preventive):

Develop a public Litter Awareness Campaign that incorporates existing public awareness efforts.

This will include the following actions:

- Launch "Keep Manassas Beautiful," which is affiliated with the national Keep America Beautiful program to raise awareness of the City's commitment to reducing litter, beautifying our City and encouraging citizen empowerment to take control of their environment through positive and productive activities.
- Relaunch the "Adopt a" Campaign which incorporates existing public awareness efforts. The new campaign will draw together locations for litter clean-ups and adoption including: parks, streams, streets, spots, trails and athletic fields.
- Identify other public awareness efforts where litter-specific tasks could be amplified or added, both internal and external to activities including zoning/planning and events.
- Research effectiveness of other litter-related campaigns used by others, nationally, and incorporates best practices.
- Participate in Keep Virginia Beautiful litter awareness campaign.
- Raise awareness of 311-GIS to involve City of Manassas citizens in reporting acts of littering.

Litter Control/Pickup (Reactive):

Maximize the cost effectiveness of physical intervention strategies to include:

- Review and update the current litter collection contract with Didlake to include monitoring and evaluation of litter collection activity.
- Undertake trash regular audits to identify “hot spots” for littering and illegal dumping.
- Work with Parks and Recreation to include litter collection charges in booking fees for venues.
- Work with Street Department to assess and modify street sweeping activity so that “hot spots” are included in the schedule.
- Work with Buildings and Grounds and Manassas City Schools to ensure that litter collection and monitoring is included in their mowing and maintenance activity to ensure public buildings and venues are being cleaned on a regular basis and that incidents of littering and illegal dumping are reported.
- Work with Police Department and Property Code Enforcement to raise awareness of the need to report incidents of illegal dumping and littering for clean-up as part of their standard operating procedure.

Enforcement (Corrective):

Increase enforcement of litter laws within the City of Manassas.

- Determine how other jurisdictions have increased enforcement of litter laws.
- Determine current level of anti-litter enforcement in the City of Manassas.
- Develop strategy with Police Department and Property Code Enforcement to increase enforcement of litter laws.

Measuring Success:

In addition to these core area objectives, in order to implement and measure the success of these key elements, the objectives under “Measure Performance” would also be implemented. They include defining roles, responsibilities, implementation schedules, as well as including litter control and prevention in the operational plan for the Solid Waste Program/Refuse and Recycling.

Several of these key objectives along with others identified in the full Plan are already being pursued and implemented.

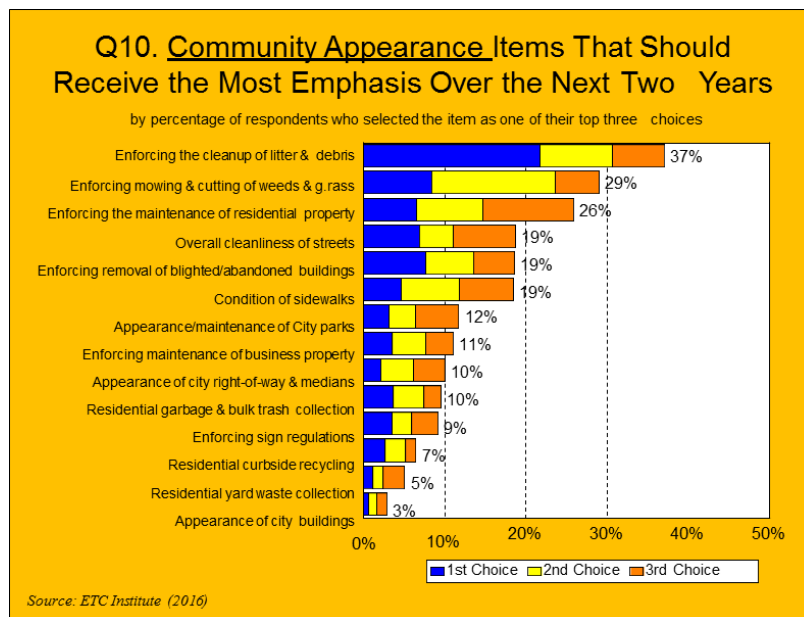
An annual reporting cycle will be undertaken for all program priorities outlined in this strategy. Part of this annual process will be the reporting of measures of success and the results of projects undertaken, with a planned mid-term review after 18 months operation of the strategy. Input from stakeholders will be sought to feed into this process.

Litter Control and Prevention Action Plan

Introduction

Over the years, many groups, organizations, and agencies in the City of Manassas have employed numerous strategies to create and sustain a clean environment in which to live, commute, work, and relax. Despite their best efforts, however, litter continues to present quality of life and environmental issues in our city.

The City of Manassas is not alone in facing litter problems. Research shows that every U.S. state and many countries have implemented programs to address the many factors contributing to litter. The programs share common approaches, including physical clean-ups by government and volunteer organizations, effective enforcement, community involvement, enhanced legislation, and public education programs.



Litter results in significant economic, social, and environmental costs. It is aesthetically displeasing, presents a range of threats to human and ecologic health, and affects the quality of life for the citizens in the City. Litter increases the risk of fire, personal injury, the spread of diseases, pollutes waterways, and threatens wildlife. The impacts are real, the issue is genuine, and litter is increasingly being recognized as an issue of concern with citizens.¹

In an effort to improve the environment by reducing litter in the City of Manassas, the City's Department of Refuse and Recycling (Department) has prepared this Litter Control and Prevention Action Plan (Plan). The Plan identifies numerous strategies to address the litter problem within our city.

Background

The Department has historically spent thousands of dollars each year to remove litter from our streets and public spaces. In the 2017 fiscal year alone, the Department spent approximately \$75,000 in this area. In addition, litter removal by the Adopt a Street participants saved the Department about \$3,000.

If the Department were to stay on that course to deal with litter, it would likely spend an ever increasing amount of resources. To reverse this trend, the Department has drafted a Plan to address the cause as well as the effects of litter.

The timing of the Department's initiative is significant. In late 2016, the recognition that littering and debris are important issues to City residents coincided with the City's application for Keep America Beautiful affiliation. Keep America Beautiful is a national nonprofit organization providing the expertise, programs and resources to help people end littering, improve recycling, and beautify America's communities. As an affiliate of Keep America Beautiful, the City will receive ongoing training and support to develop a coordinated approach to the prevention and management of litter through community and citizen focused activities.

Definition of Litter

For the purposes of this Plan, litter is defined as:

- All trash, cigarette butts, refuse, junk, garbage, and scrap
- Any articles or material deposited within the right of way, intentionally or unintentionally

¹ City of Manassas Citizen Satisfaction Survey. Rep. Manassas: City of Manassas, 2016. Print. During the summer and fall of 2016, ETC Institute administered a community survey for the City of Manassas. The purpose of the survey was to assess satisfaction with the delivery of major City services and to help determine priorities for the community as part of the City's ongoing planning process. The data will also be used to improve existing services and to help determine future needs for the City of Manassas.

- Any article or material abandoned by the owner or the person in possession thereof, not including dust, smoke or other like products emitted or produced during the normal operations of any mining, extractive, primary or manufacturing industry

For the purpose of this Plan, litter is deposited on land or in waterways if it is placed, put, left, dropped, thrown; or, is allowed to fall there or be blown from a moving motorized vehicle or trailer.

These definitions primarily focus on the physical and visual aspects of litter; however, the litter issue is much more inclusive and encompasses a wide possible range of human behaviors and activities. It is therefore necessary to broaden the above definition to combine the physical and behavioral aspects of litter into a model that encompasses the physical, environmental, social, and economic factors associated with litter.

Illegal dumping is a substantial component of the overall litter issue in the City of Manassas. While the term “litter” is often used to refer to acts of a spontaneous or unintentional nature that involve items of a smaller size and quantity, illegal dumping is generally premeditated and includes items of a larger size and quantity.

In order to develop a conceptual model of litter that embraces the totality of the problem, many factors need to be considered.

Litter: Who, What, Where, When, Why, and How

Litter occurs through a complex relationship of factors. These factors give rise to different types of litter and littering patterns, and result in different environmental, economic, and social impacts. In order to be effective, litter abatement strategies should consider the “who, what, where, when, why, and how” of litter.

Who litters?

With respect to litter, there are five definition types of people:

- “Non-litterers” – are environmentally conscious, don’t litter, and usually pick up the litter from others.
- “Inconvenients” – believe that disposing of litter correctly is too hard, too much trouble, or someone else’s problem.
- “Don’t knows” – are simply unaware of a link between the environment and their litter behavior
- “Don’t cares” – usually litter in context, i.e., “It’s okay to litter in urban areas but not in the country.”
- “Anti-establishments” – make a statement with purposeful littering

What are the Primary Sources of Litter?

- Trucks with uncovered or improperly covered loads
- Illegal dumping
- Drivers
- Pedestrians
- Construction or demolition debris
- Household garbage
- Overflowing Commercial dumpsters and trash receptacles

Where does litter occur?

In the City of Manassas, littering locations includes but are not limited to the following:

- Streets and curbs
- Storm drains
- Vehicle stopping locations
- Parks, trails, playgrounds and athletic fields
- High traffic walking paths to/from schools, local convenience and fast food stores
- Community common areas
- Parking lots and laybys
- Wooded areas between communities

Research from Keep America Beautiful² indicates that after transition points, storm drains are the most littered. Cigarette butts, confection, and other litter accumulate in or around storm drains, located primarily in gutters and designed to drain excess rain from paved streets, parking lots, etc.

- 85% of litter at loading docks is from workers loading and unloading goods. Areas behind retail and other businesses are littered predominantly with cigarette butts, but also metals, plastic, and paper.
- People litter both large and small items at recreational areas. The source of most litter at parks, beaches, and open areas where people congregate for leisure activities is pedestrians - 98.5%. Small items, which represent about half the litter, are cigarette butts and confection, while larger litter is most commonly food-related.
- The primary source of litter at active residential and commercial construction sites is workers (69%). They improperly dispose of trash from snacks, meals, smoking, etc. Most construction site litter is smaller items (93%), including cigarette butts, small pieces of paper, plastic, and confection.

² Keep America Beautiful. Sources of Litter Fact Sheet. Keep America Beautiful, 01 Jan. 2010. Web. 15 Mar. 2017. <<https://www.kab.org/home>>. The 2009 National Visible Litter Survey and Litter Cost Study was prepared by MidAtlantic Solid Waste Consultants for Keep America Beautiful, Inc.

- High-traffic locations are a draw for a variety of items littered by shoppers. Strip malls, shopping centers, and convenience stores all attract packaging litter, cigarette butts, and confection.

When does litter happen?

Litter is often directly related to a specific type of activity being undertaken, such as walking to/from school, attending a sporting activity, working at a building site, driving to/from work, eating lunch in the park. Smokers, who may not ordinarily intentionally litter, frequently discard cigarette butts onto the ground from moving vehicles or while walking.

Why does litter happen?

People litter for any number of reasons, they:

- are too lazy to dispose of trash properly;
- are more likely to throw litter on top of litter than drop it in neat surroundings;
- just don't care;
- believe others will pick it up;
- may not be aware they are littering.

How does littering happen?

Littering happens when items are thrown, dropped and flicked as people drive or walk by. According to Keep America Beautiful, virtually all litter—97%--found at transition areas are small items. Confection litter (candy, chocolate, gum, etc.) is the most predominant at 53.7%, and tobacco products second at 29.8%.

The most common items are:

- | | |
|-----------------------------|---------------------------|
| • Cigarette Butts | • Food Remnants |
| • Combo/Mixed Trash | • Food Wrappers |
| • Paper | • Beverage Cans |
| • Beverage Cups | • Food Containers |
| • Napkins/Tissues | • Plastic Bags |
| • Beverage Bottles: Plastic | • Beverage Bottles: Glass |

Litter Control and Prevention Vision

The Litter Control and Prevention Plan is committed to two goals:

- Picking up litter
- Reducing litter at the source

Strategy

This Plan recommends actions in the following strategic measures:

- Measure performance
- Employ physical intervention and mechanical device innovations
- Emphasize litter policies and enforcement
- Partner with stakeholders
- Increase public awareness
- Participate in anti-litter education programs

Within each of these measures a series of objectives, actions, implementation tasks, and key performance indicators are presented. Note that while actions are listed within a specific area, it is not implied that they are exclusive to it. The categorization of actions has been undertaken for strategy, clarity, and ease of understanding. Behavioral change is also important in delivering and establishing community participation. (Appendix A)

Since this is a dynamic plan of action, additional objectives may be added as necessary to reflect the advent of innovations, results of ongoing research and evaluation.

Desired Results

The desired results of the Department's litter control and prevention strategies are to:

- Reduce littering
- Improve the appearance of the environment through implementation of a balanced litter management program, including physical intervention and preventive measures
- Ensure that performance measures are in place to gauge the effectiveness of the Plan's outcomes
- Be responsive to changing program needs
- Increase the public's litter-awareness and level of anti-litter education

1. Measuring Performance

Performance measurement is essential to gauging the effectiveness of the strategies outlined in the Litter Control and Prevention Plan.

1. As part of the City's affiliation with Keep America Beautiful, the City must adhere to the Good Standing requirements (Appendix B), which includes a semi-annual report and an annual report on litter program activities and costs.
2. Refuse and Recycling submits an annual budget and report on departmental costs and activities, which is presented to City Council.

3. As part of the annual Municipal Separate Storm Sewer System (MS4) Permit, education and outreach activity is reported along with litter control and recycling activity.

A number of objectives are identified below to demonstrate accountability for accomplishing the objectives outlined in this Plan to reduce littering and illegal dumping in the City of Manassas.

Measuring Performance			
REF	Action	Implementation Tasks	Key Performance Indicators
Objective 1.1: Define roles, responsibilities, and implementation schedules			
1.1.1	Develop a report detailing the roles, responsibilities, and implementation schedule for stakeholders in the Plan.	a) Work with key stakeholders to ensure a full understanding of roles and responsibilities. b) Develop reasonable time frames for accomplishing objectives outlined in the Plan. c) Communicate responsibilities effectively with internal/external stakeholders.	Report clearly outlines roles and responsibilities; presents achievable implementation schedule.
Objective 1.2: Include Litter Control and Prevention in the City's Solid Waste Management Plan			
1.2.1	Include objectives and performance measurement in relevant areas of the City's Solid Waste Management Plan.	Refuse and Recycling Coordinator to include litter control and prevention in the City's Solid Waste Management Plan.	City's Solid Waste Management Plan illustrates the City's level of commitment to litter control and prevention.
Objective 1.3: Include Litter Control and Prevention in Public Works Operational/Maintenance Plans			
1.3.1	Include performance measures in relevant areas of Public Works departments.	Coordinate with Director of Public Works to ensure that performance measures include litter control and prevention across departments.	Meaningful litter control and prevention - related goals are included in performance objectives for all Public Works Departments
Objective 1.4: Include Litter Control and Prevention in Parks and Recreation Operational/Maintenance Plans			
1.4.1	Include performance measures in relevant areas of Parks and Recreation department.	Coordinate with Parks and Recreation to ensure that performance measures include litter control and prevention.	Meaningful litter control and prevention - related goals are included in performance objectives for Parks and Recreation.
Objective 1.5: Include Litter Control and Prevention in Stormwater Operational/Maintenance Plans			
1.5.1	Include performance measures in relevant areas of Stormwater department.	Coordinate with Stormwater to ensure that performance measures include litter control and prevention.	Meaningful litter control and prevention - related goals are included in performance objectives for Stormwater.

2. Employing Physical Intervention and Mechanical Device Innovations

Physical intervention includes both the use of litter prevention, recycling infrastructure, and the physical clean up or control of littered items. Mechanical innovations include equipment and physical devices either currently available or able to be developed and implemented to enable litter and debris to be more easily and economically collected for disposal.

This strategy proposes a number of physical intervention initiatives to ensure the provision of best practice litter prevention infrastructure (such as waste and recycling bins, anti-litter signage, and litter traps), as well as services to be delivered, throughout the City of Manassas. Areas of particular focus for litter infrastructure include public places, such as parks, recreation areas, historic sites, athletic fields, Historic Downtown Manassas sidewalks, park and ride lots, schools and storm water drainage collection points.

Refuse and Recycling will continue to remove and dispose of trash and recycling; work with the Street Department and Grounds and Maintenance to remove litter and debris from the public right of way maintained; and continue research, develop, and employ innovative methods of improving clean-up efforts in highly littered areas. The Department will maximize its utilization of the Adopt a Program participants and support community-based clean-up activities.

The Department will research and evaluate innovative mechanical devices and equipment to remove litter from the environment more efficiently. Deployment of such devices will maximize our investments, thereby enabling the Department to contribute towards a cleaner environment in the City of Manassas.

Employing physical intervention and mechanical device innovations			
REF	Action	Implementation Tasks	Key Performance Indicators
Objective 2.1: Maximize the cost effectiveness of physical intervention strategies			
2.1.1	Investigate and develop “hot spots” to focus efforts.	Develop by using data from complaints, etc. to focus on problem areas.	Fewer complaints
2.1.2	Implement a focused litter removal plan in specific areas of the city.	a) Develop a plan to increase the frequency of litter removal on specified routes. b) Circulate completed plan to selected departments to develop plans for focused litter removal efforts on highly litter-prone areas. c) Monitor the effectiveness of the focused litter removal over the course of the next	<ul style="list-style-type: none"> • Realistic, achievable plans are developed. • Litter/Debris Citizen Survey score.

Employing physical intervention and mechanical device innovations			
REF	Action	Implementation Tasks	Key Performance Indicators
2.1.3	Working with Department colleagues on sweeping and mowing activities to compliment litter collection schedules.	a) Work with Street Department to keep track of street sweeping. b) Work with Grounds and Maintenance Department to keep track of mowing to coordinate with clean-ups and litter collection.	Litter/Debris Citizen Survey score.
2.1.4	Evaluate current litter collection systems to facilitate removal of litter on roadways.	a) Conduct and compile research to identify innovative strategies and designs that facilitate litter collection, especially along median barriers, and storm drain collection systems. b) Suggest changes in design to incorporate strategies and collection systems into future design specifications.	<ul style="list-style-type: none"> Completed compilation of research. Number of new strategies and designs evaluated on streets.
2.1.5	Evaluate current equipment for litter pick-up and removal.	a) Research and evaluate innovative equipment, other mechanical systems, designs, strategies, etc., designed to increase litter removal efficiency. b) Pilot test potential equipment.	<ul style="list-style-type: none"> Number of litter-related research products reviewed. Number of evaluated mechanical systems, and new equipment.
Objective 2.2: Provide adequate waste management and recycling infrastructure at public facilities			
2.2.1	Provide waste and recycling receptacles as needed, and ensure they are serviced on a regular basis.	a) Review and determine whether every public area within the City has adequate waste and recycling facilities. b) For facilities maintained under contract, district contract managers ensure adequacy of infrastructure and maintenance.	Best management solid waste and recycling infrastructure is available and well maintained at all public facilities within the City. This is measured through annual reporting.
Objective 2.3: Rapid removal of illegal dump sites within the right of way			
2.3.1	Remove homeless encampments and other illegal dumpsites from within the right-of-way as soon as they are identified.	a) Clean up all illegal dump sites and homeless encampments. b) Notify private property owners of illegal dumpsites outside of right-of-way but within view by motorists.	Litter/Debris Level of Service.

Employing physical intervention and mechanical device innovations			
REF	Action	Implementation Tasks	Key Performance Indicators
Objective 2.4: Optimize the "Adopt a ..." Program			
2.4.1	Optimize the "Adopt a" Program performance through improved outreach and volunteer participation.	a) Ensure that the "Adopt a" Program volunteers comply with the frequency requirements of their contracts and notify the City of any issues or items that require further action. b) Follow through to ensure that Adopt a ... Program volunteers properly follow reporting guidelines.	Increase in net amount of trash picked up and locations cleaned by "Adopt a" Program volunteers.
2.4.2	Promote/Expand volunteers participation in the "Adopt a" Program.	a) Compile "Adopt a" Program group and location information in a single database. b) Develop interactive GIS based "Adopt a" Program information.	<ul style="list-style-type: none"> • Increase in number of "Adopt a" Program locations. • Increased frequency of cleanups where needed.

3. Emphasize Litter Policies and Enforcement

Proactive measures need to be supported by enforcement initiatives to help achieve compliance with the requirements of existing local, state and federal codes related to littering.

The aim of enforcement is to discourage all types of littering while encouraging a community culture of positive behavior. This involves accountability, consultation, cooperation, and consistent integrated and coordinated enforcement actions.

Emphasizing Litter Policies and Enforcement			
REF	Action	Implementation Tasks	Key Performance Indicators
Objective 3.1: Increase litter law enforcement on City property			
3.1.1	Determine how other jurisdictions have increased enforcement of litter laws.	a) Research approaches employed successfully elsewhere at the jurisdiction level. b) Create a summary of findings based upon in-depth research and interviews that can be used in recommending strategies for increased enforcement within the City.	Completion of a compilation of anti-litter enforcement strategies.
3.1.2	Determine current level of anti-litter enforcement in the City of Manassas.	Determine the number of litter law citations issued by various jurisdictions within the State. Determine the annual number of citations issued under VA Motor Vehicle Codes pertaining to littering.	Establishment of benchmark levels of enforcement.

Emphasizing Litter Policies and Enforcement			
REF	Action	Implementation Tasks	Key Performance Indicators
3.1.3	Develop strategy with other City departments to increase enforcement of litter laws.	a) Invite the City of Manassas Police Department to participate in Keep Manassas Beautiful. b) Develop a strategy that can be employed to increase enforcement of litter laws by City of Manassas Police Department and Property Code Enforcement.	An agreement on a city-wide strategy to increase enforcement of anti-litter laws.
3.1.4	Circulate policy and information to emphasize anti-litter efforts with external stakeholders.	Draft public information regarding anti-litter enforcement policies for distribution through newsletter, website and HOA information.	Completion of a compilation of information issued by the City.
Objective 3.2: Involve City of Manassas citizens in reporting acts of littering: "311-GIS and Trashline"			
3.2.1	Research and develop a reporting system for citizens to report acts of littering	a) Perform research to compare anti-littering hotlines and other citizen reporting programs in Virginia and elsewhere in the country; summarize findings.	Completed compilation of strategies, funding, perceived success, etc. of litterbug-reporting systems currently in use. 311-GIS and Trashline reports are effectively handled by City departments.

4. Partner with Stakeholders

Litter is a national issue that requires involvement and cooperation between a variety of stakeholders from the community, private, and government sectors. State and local governments provide a leadership role in litter prevention and management. An array of non-government organizations and community groups are involved in litter reduction activities such as education, increased recycling, and physical clean up by volunteer groups.

With such a large group of stakeholders involved in the effort to reduce litter, it is imperative that the City of Manassas develop strong partnerships with local community groups and agencies and residents regarding litter control and prevention in order to achieve a cleaner Manassas.

This Plan reflects the importance the City places on developing and sustaining strong partnerships with the stakeholders of litter control and prevention programs and initiatives.

Partnering with Stakeholders			
REF	Action	Implementation Tasks	Key Performance Indicators
Objective 4.1: Develop community pride through local action			
4.1.1	Coordinate with stakeholders to increase public awareness and education.	a) Identify opportunities to strengthen the partnership between stakeholders and the City. b) Determine how the City can involve communities in litter control and prevention efforts.	Long-term provisions in place to provide support coordinated efforts.
Objective 4.2: Recognize and reward best practice in litter prevention and management in the City of Manassas			
4.2.1	Develop and promote a proposal for recognizing, encouraging and rewarding best practice litter prevention and management initiatives undertaken by the community and the City.	a) Identify current recognition and/or reward programs. b) Coordinate with relevant stakeholders to develop a system for recognizing best practice litter prevention and management initiatives. c) Determine appropriate and meaningful award system.	Development of a value-added recognition system.
Objective 4.3: Engage local businesses and industry in litter prevention and management			
4.3.1	Engage business community and industry in litter prevention.	Develop methods to engage business community and industry in litter prevention.	Increase the number of businesses and industries contributing to litter abatement activities over the current level.

5. Increase Public Awareness

There is an expressed need to increase the public’s awareness of the economic, social, and environmental problems associated with litter. Ongoing, proactive measures, aimed at controlling and preventing litter and achieving long-term positive behavioral change are needed to keep litter on the forefront of citizens’ and visitors’ attention.

In order to maximize the effectiveness of public awareness initiatives the focus needs to be on using various media and visual images to provide clear, consistent, and informative messages. Whenever possible, this effort should be coordinated with other events to maximize the probability of achieving the desired results.

Raising public awareness is closely related to anti-litter outreach and education. For instance, when informing the public about enforcement of litter laws, their awareness is not only increased but they may also be learning to change their behaviors.

Anti-litter outreach and education programs entail social interactions with people through internal meetings with colleagues, reaching out to schools, HOA meetings, Old Town Business Association meetings and regular contact with residents through the City Connection Newsletter, the City website and through individual conversations and letters.

Effective anti-litter education generally focuses on the development of best practice guidelines and training. These efforts involve national information sharing networks as well as grass roots initiatives. The desired results of both initiatives are to achieve a cleaner environment by preventing litter through long-term, positive behavioral change.

Increasing Public Awareness			
REF	Action	Implementation Tasks	Key Performance Indicators
Objective 5.1: Develop a Litter Control and Prevention Public Awareness Campaign that incorporates existing public awareness efforts.			
5.1.1	Identify venues for focusing public efforts (existing and new) to create a comprehensive Litter Control and Prevention campaign.	a) Appoint a public awareness task group. b) Identify other public awareness efforts where litter-specific tasks could be amplified or added, both internally and externally. c) Research effectiveness of other litter-related campaigns used by others, nationally, and incorporate best practices. d) Create a comprehensive Litter Control and Prevention campaign – “Keep Manassas Beautiful.”	<ul style="list-style-type: none"> • Development of a comprehensive campaign for “Keep Manassas Beautiful.” • Roll out of campaign • Survey of public on effectiveness of information and campaign.
5.1.2	Ensure that public awareness efforts investigate additional target audiences to pursue.	a) Identify range of target groups that may be determined by age, geography, or audience (e.g., cigarette smokers, alcoholic beverages, schools, fast food businesses, drivers purchasing fuel). b) Identify “Hot Spot” areas to focus campaign, and expand as needed.	Number of target audiences identified and pursued.
5.1.3	Provide consistent anti-litter messages at City-owned public facilities.	Place posters and stickers on placards, kiosks, recycling bins, trash receptacles, and bus stop enclosures to raise public awareness of visitors and users of rest areas, historic sites, and park and ride lots of the litter laws and issues.	Survey the public’s familiarity with the message as part of the next external survey.

Increasing Public Awareness - continued			
REF	Action	Implementation Tasks	Key Performance Indicators
5.1.4	Partner with the food, beverage, travel, fuel, and convenience store industries to increase public awareness.	Work with major fast food, travel, fuel, and convenience store chains to seek mutually beneficial ways to increase public/customer awareness.	Number of travel/commercial industries, which participate in adding the anti-litter message to their products and advertising.
Objective 5.2: Participate in Keep America Beautiful and Keep Virginia Beautiful litter awareness campaigns			
5.2.1	Link "Keep Manassas Beautiful" with Keep America Beautiful and Keep Virginia Beautiful litter awareness campaigns.	Develop activities linked to state and national program activities and events such as: <ul style="list-style-type: none"> • Great American Clean-up – March 20 • Keep America Beautiful Month – April • Litter Enforcement Month – April • Arbor Day – April 28 • America Recycles Day – November 15 	City participation in national and state run events and activities.
Objective 5.3: Work with other departments to encourage litter education in schools			
5.3.1	Determine the extent of existing school programs designed to educate children about litter and determine their effectiveness.	a) Conduct research to determine the extent of current school programs; summarize findings. b) If effective, practical, and feasible, compile an overview of key litter messages in existing school litter education programs. c) Partner with education organizations and agencies to advocate that the anti-litter message is provided in K-12 schools.	Reduction in littering and dumping incidents/issues on and near school property.

Implementation, Monitoring, and Evaluation

Implementation

This Plan emphasizes a coordinated approach to litter control, prevention and management in the City of Manassas based on a number of important needs. These needs include:

- Establishing priorities
- Long-term planning
- Avoiding duplication
- Coordinating a diverse range of approaches
- The best possible use of resources

Achieving City-wide coordination for a litter control, prevention and management is a tremendous challenge. To succeed in this significant endeavor, many organizations and individuals within the City must be involved and a wide range of resources are required.

The City of Manassas has a long-term commitment to improve the environment by reducing litter in our City. Over the implementation time span of this Plan, the Refuse and Recycling Department will provide leadership to work towards fostering inter department, division, and community ownership of initiatives and identifying the resources to implement them. Refuse and Recycling will have a vital role in building valuable partnerships and in facilitating links to enable organizations, individuals, and communities to contribute to a planned, coordinated, comprehensive approach to litter and related issues.

Monitoring and Evaluation

Many of the actions and implementation tasks specified in the Plan involve long-term processes that may take a number of years to implement.

To that end, Refuse and Recycling has developed details of targets, timelines, roles, and responsibilities. Since this Plan is designed to be dynamic in nature, adjustments will be made, as necessary, to include interactions with statewide stakeholders, new strategies, and employ products of research and innovation.

An annual reporting cycle will be undertaken for all program priorities outlined in this strategy. Part of this annual process will be the reporting of measures of success and the results of projects undertaken, with a planned mid-term review after 18 months operation of the strategy. Input from stakeholders will be asked to add to this process.

Conclusion

The Plan is the first of its kind in the City's long history. It provides a balanced and comprehensive approach to effectively reduce litter in the City of Manassas through many preventive and pro- active measures.

The strategy is designed to measure the City's performance, employ physical intervention and mechanical innovations, emphasize litter-related policies with an aim toward increased enforcement, strengthen partnerships with stakeholders, increase public awareness, and participate in anti-litter education programs. Successfully implementing the objectives developed for these areas of priority will improve our environment.

This Plan constitutes a starting point that is intended to be flexible, evolve, and be improved over time.

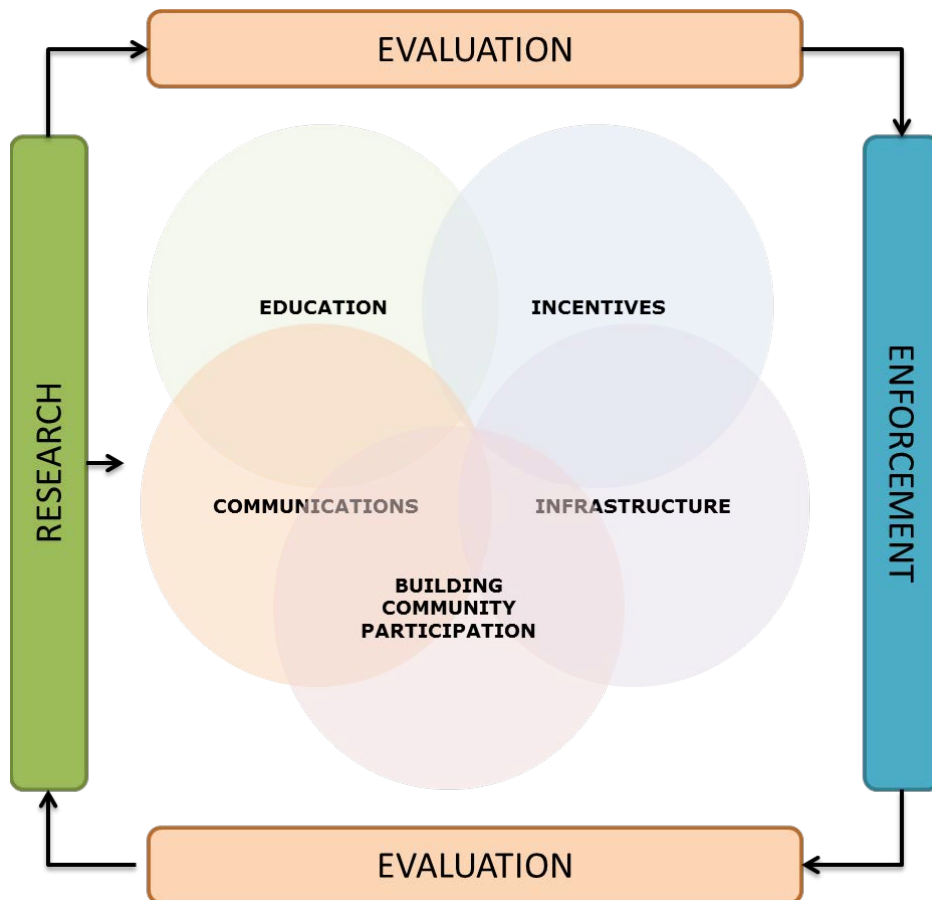
Everyone must contribute to litter prevention. By working together, we can achieve and sustain a clean and healthy environment in which to live and to enjoy.

Appendix A

Behavior Change Model

No single strategy can achieve change in littering behavior, but together they can build community capacity in positive litter and waste behaviors. This strategy uses the approach below as the guiding philosophy for litter control and prevention.

To change behavior, there is a requirement to build community participation, not just communicate a message. Effective behavior change requires approaches and strategies that not only seek to influence personal behavior, but broader communities of influence and social norms.



Appendix B

Keep America Beautiful Good Standing Requirements

1. **A local affiliate of Keep America Beautiful in good standing demonstrates the Keep America Beautiful mission and vision through compliance with the KAB Program Options which are:**

- Litter prevention
- Beautification
- Waste reduction

KAB Mission: *to engage individuals to take greater responsibility for improving their community environments.*

KAB Program Options: *see Page 3*

2. **A local affiliate of Keep America Beautiful, Inc. in good standing has an active Board of Directors or Advisory Council that meets regularly and is responsible for:**

- a. Ensuring the relevance of the organization's mission
- b. Programs and activities that follow mission
- c. Adequate resources are available to fulfill the mission
- d. Legal and ethical integrity and accountability
- e. Employment and support of an executive director/coordinator
- f. Enhance public image and assess Board performance and recruitment

3. **A local affiliate of Keep America Beautiful in good standing submits two reports to the national office annually with notification of completion to their state affiliate (where applicable). The reports are the Semi-Annual Report, and the Annual Report which includes the General Survey, KAB Litter Index, Cost/Benefit Analysis and Program Options.**

Semi-Annual Report: An online survey to determine program needs and trends throughout the network, this report is due March 1 of every year.

Annual Report: Gathering of statistical information about Affiliate programs such as numbers of volunteers, cleanups, education workshops, etc. This report is due August 25th of every year.

4. A local affiliate of Keep America Beautiful in good standing is current with their annual Network Service Fee.

KAB will invoice each affiliate at the beginning of the quarter in which the affiliate was certified. Billing dates are January 15th, April 15th, July 15th and October 15th. Network Service Fees (NSF) are:

Population	Annual Network Service Fee
0 - 7,500	\$ 50
7,501 - 15,000	\$ 100
15,001 - 30,000	\$ 150
30,001 - 50,000	\$ 200
50,001 - 75,000	\$ 250
75,001 - 150,000	\$ 300
150,001 - 500,000	\$ 350
500,000 - 1 million	\$ 400
Over 1 million	\$ 500

NSF are used to offset cost of mailings, materials, newsletters, awards programs, turnkey educational materials and national research.

Questions on invoicing or payments, contact training@kab.org

5. A local affiliate of Keep America Beautiful in good standing attends 6 hours of training on an annual basis that is offered by KAB national or state affiliate. An approved local training opportunity can earn the required credit.

Local affiliates must be sure to report their training on the KAB Annual Report, due August 25.

6. A local affiliate of Keep America Beautiful in good standing has an active executive director/coordinator.

Keep America Beautiful affiliates that meet all good standing requirements are eligible to receive the President's Circle Award at KAB National

Conference. They are recognized at the President's Circle luncheon, with a certificate and on the web site. Additionally, affiliates in good standing are eligible for special projects, grants, and Affiliate Awards.

Litter Prevention	Beautification & Community Improvement	Waste Reduction
<p>___ Great American Cleanup™ – cleanup component</p> <p>___ Waste In Place workshop – Litter lessons</p> <p>___ Cigarette Litter Prevention Program</p> <p>___ Litter prevention presentation</p> <p>___ Litter prevention PSA</p> <p>___ Litter-free event</p> <p>___ Adopt-a-Spot</p> <p>___ Adopt-a-Highway</p> <p>___ Clean Builder/Business/Campus</p> <p>___ Litter Survey</p> <p>___ Litter hotline</p> <p>___ Environmental court</p> <p>___ Litter ordinance improvements</p> <p>___ Enforcement program</p> <p>___ Receptacle placement</p> <p>___ Litter report cards</p> <p>___ Other _____</p>	<p>___ Great American Cleanup™ – beautification component</p> <p>___ Waste In Place workshop – Beautification lessons</p> <p>___ Graffiti Hurts workshop</p> <p>___ Graffiti abatement</p> <p>___ Statewide beautification</p> <p>___ DOTs/wildflower planting</p> <p>___ Strategic partnership (i.e.: Arbor Day)</p> <p>___ Environmental court</p> <p>___ Ordinance improvement assistance</p> <p>___ Enforcement program</p> <p>___ Gateway beautification</p> <p>___ Illegal sign removal</p> <p>___ Use of Take Action poster</p>	<p>___ Great American Cleanup™ – recycling/reuse component</p> <p>___ Waste In Place workshop – MSW lessons</p> <p>___ CleanSweep USA educational materials</p> <p>___ Municipal Solid Waste presentation</p> <p>___ Material exchange</p> <p>___ Composting</p> <p>___ Recycling program or education</p> <p>___ Recyclables collection (i.e.: ph.books/trees)</p> <p>___ Get A Grip video outreach presentation</p> <p>___ Use of 230 Million Tons of Trash poster</p> <p>___ School Recycling</p> <p>___ Waste In the Workplace workshop</p> <p>___ Illegal dump hotline</p> <p>___ Environmental Court</p> <p>___ Ordinance improvement assistance</p> <p>___ Enforcement program</p> <p>___ Other:</p>

APPENDIX 9.3
DEBRIS MANAGEMENT PLAN



Debris Management Plan

Public Events

Streets, Parks and Public Spaces

Monica Boehringer
Refuse and Recycling Coordinator
City of Manassas
September 20, 2019

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Document History			
Version	Date	Editor	Comments
.01	09/20/2019	Monica Boehringer	Draft for internal comments and revisions

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Background

The City of Manassas hosts a wide variety of events throughout the year drawing in visitors from all over Northern Virginia. The City is full of history, charm and beautiful venues that offer a gracious welcome to event organizers planning everything from festivals, fairs, farmers markets, and marathons, to walks and weddings and parades that celebrate our heritage and diversity.

As our popularity increases, so does the need for a Debris Management Plan to ensure that our community remains clean, beautiful and inviting for our visitors and that our residents and City staff are not burdened with unsightly trash and litter following an event.

Purpose

The Debris Management Plan for Public Events: Streets, Parks and Public Spaces provides City staff, event organizers, and partners with organizational structure, guidance, and standardized guidelines for the clearance, removal, and disposal of debris caused by events within the City of Manassas.

The main elements of this plan include:

- Gathering support from stakeholders involved
- Determining who will coordinate and implement the waste/litter collection efforts.
- Evaluating event waste stream composition.
- Designing a system for placing, monitoring, collecting, and disposing of trash and recyclables.
- Educating and/or training staff, vendors, attendees, and participants about trash and recycling disposal and litter.

Benefits of Plan

- Maintaining an aesthetically pleasing setting for events within our community.
- Meeting community expectations.
- Making events marketable to sponsors.
- Instilling positive change in vendors and attendees.
- Diverting recyclable material from the landfill.
- Increasing environmental awareness.
- Reducing landfill hauling costs.
- Keeping Manassas beautiful.

Stakeholders

- **Property Owners:**
Public property, schools, venues, private property owners.
- **Event Organizers:**
Public or private organizations hosting the event and/or donating funds.
- **City staff:**
Manassas City Police, Parks Culture and Recreation, Public Works, Community Development, Communications, and Fire and Rescue.
- **Vendors:**
Concession staff, food vendors.
- **Contractors:**
Cleaning services, equipment rentals.
- **Volunteers:**
Non-profit organizations, activists, involved citizens.
- **Attendees:**
Community members, ranging from those living inside the specific neighborhood or city to those who come from afar to participate in an event.

Objectives

The main objective of the Debris Management Plan is to ensure the venue site remains as litter free as possible during any event and completely free of litter and waste at venue handover.

This is done through:

- Coordinating partnering relationships through communications and pre-planning with City staff and event organizers to raise awareness of debris management responsibilities.

- Establishing the most efficient and cost-effective methods to manage debris removal and disposal for event organizers.
- Ensuring that event organizers are made aware of relevant ordinances regarding debris generated during events and that all agreements regarding debris removal are enforced.
- Expediting debris removal and disposal efforts to mitigate the threat to the health, safety, and welfare of City residents and visitors in the event of an emergency.

Roles and Responsibilities

Event Organizer

The Event Organizer shall have the primary responsibility for ensuring that all solid waste and litter generated by their event is contained and disposed of properly.

Vendors (Concession staff, food vendors)

Vendors are responsible for ensuring that participating vendors, contractors, volunteers, and attendees are made aware of the rules regarding litter and trash disposal. All materials used during event are disposed of in accordance with health and safety standards establish by law and removed off site. They are responsible for ensuring that their area is litter free and trash receptacles (in their vicinity of their stall) are regularly serviced are during the event.

Property Owners:

Property owners are responsible for ensuring that the area in front of their property remains clean and litter free in accordance with City Ordinance Section 98.1-7.

City staff:

City staff including: Manassas City Police, Parks Culture and Recreation, Public Works, Community Development, Communications are responsible for ensuring that the Event Organizer is made aware of their responsibilities through the permitting process.

Relevant City staff may be called in for larger events (and designated City events) to ensure that streets are clean and litter free, and that all trash/recycling receptacles, and dumpsters are serviced.

Contractors

Contractors may be called in to perform litter collection services. In that instance, they are responsible for ensuring that the event area is clean and litter free, and that all materials are disposed of correctly.

Volunteers

Volunteers may be called in to perform litter collection services. In that instance, they are responsible for ensuring that the event area is clean and litter free, and that all materials are disposed of correctly.

Existing Services

Current services for Historic Downtown Manassas, parks and public spaces are based on regular traffic through the area and are not intended for supporting outdoor events in the City.

Litter Collection

The following areas/receptacles are serviced, in the Historic Downtown area on Monday, Wednesday and Friday:

- City Hall
- Harris Pavilion Parking Lots
- Manassas Museum
- Commuter Rail Lots – 4
- West Street
- Church Street
- Center Street
- Train Depot
- West Street
- Prince William Street
- Battle Street
- Main Street
- Candy Factory
- Grant Avenue

Litter collection is a contracted service that covers litter collection in Historic Downtown, and in our parks.

There is currently no regular service for containers on weekends or in junction with events outside of the following:

- Railroad Festival
- July 4th
- Fall Jubilee
- Christmas Parade

Dumpsters

The City currently has a contract with American Disposal Services to provide trash and recycling dumpster service to the Museum and Harris Pavilion.

- Museum - Trash and recycling are serviced on Monday and Thursday
- Harris Pavilion – Trash is serviced on Monday and Wednesday and recycling on Monday and Thursday.
- Stonewall Park has a seasonal dumpster for the Pavilion area

These services are paid for through the 590 Solid Waste budget and are drawn from residential service user fees for trash and recycling. No revenue is received from event organizers or other departments within the City.

Event Type

- Street Fairs and Arts and Crafts Festivals
- Farmers Markets
- Outdoor Festivals
- Flea Markets/Antique Fairs
- Concerts
- Sporting Events (marathons, runs, walks)
- Smaller events and gatherings

City Venues

Location	# Standing Receptacles	Dumpsters
Harris Pavilion		Trash/Cardboard
Manassas Museum Lawn		Trash/Cardboard
Liberia Plantation		N/A
Historic Downtown Streets		N/A
Annaberg Manor		N/A
Stonewall Park – Pavilion		Trash
Byrd Park - Pavilion		
Nelson Park - Gazebo		N/A
Prince William Commuter Lot		

Venue Maps

MAPS NEEDED

Crowd Size Container Calculation

Estimating the crowd size for an event can be a challenge. It depends on the type of event, duration, and venue location. The average person generates approximately 1.5 pounds of trash per event hour.

Hours	Attendees										
	100	200	300	400	500	1000	5000	10000	20000	30000	40000
1	56	113	169	225	281	563	2,813	5,625	11,250	16,875	22,500
2	113	225	338	450	563	1,125	5,625	11,250	22,500	33,750	45,000
3	169	338	506	675	844	1,688	8,438	16,875	33,750	50,625	67,500
4	225	450	675	900	1,125	2,250	11,250	22,500	45,000	67,500	90,000
5	281	563	844	1,125	1,406	2,813	14,063	28,125	56,250	84,375	112,500
6	338	675	1,013	1,350	1,688	3,375	16,875	33,750	67,500	101,250	135,000
7	394	788	1,181	1,575	1,969	3,938	19,688	39,375	78,750	118,125	157,500
8	450	900	1,350	1,800	2,250	4,500	22,500	45,000	90,000	135,000	180,000

Pounds of Trash Generated

Management of Waste Streams

Many events share common waste issues. Placement and monitoring of the appropriate containers set in the right places can reduce waste and litter problems during events.

- Food scraps
- Plastic cups
- Food soiled paper (plates, napkins, cups)
- Beverage containers
- Paper
- Plastic Bags
- Cardboard (vendors)

General Trash and Recycling

Placement

General trash and recycling will be generated from all areas of the venue. **Twin Receptacle** stations will be established throughout the venue, allowing for general trash and recycling to be collected.

It's a fact: people litter more when they are further from trash and recycling bins. Walt Disney set the example for trash can placement when designing Disneyland. Mandating that trash receptacles were no more than 25 feet apart, he kept Disneyland very clean—especially considering the number of guests that visited daily.

When spacing out trash receptacles, strategize the locations as well. Event attendees frequently carry trash near entrances, fast food restaurants, and tables. These types of locations are a great place to start when placing receptacle around event sites.

Monitoring

The Event Organizer will hold the responsibility of regular monitoring all trash and recycling receptacles, within the venue footprint, for the duration of the event to ensure attendees are disposing of waste in the appropriate bins and educate them if they are not.

Disposal

The Event Organizer will hold the responsibility of ensuring that all waste generated from trash and recycling receptacles during event will be transported back to the designated waste disposal area and placed into dumpsters or removal truck.

Removal

The Event Organizer will hold the responsibility of ensuring that all general trash and recycling waste generated from event is completely removed at the conclusion of the event.

Recycling Exceptions

The City of Manassas will restrict recycling collection to plastic bottles, plastic cups and aluminum cans only in public areas.

While the City of Manassas practices single-stream recycling, the risk of contamination at events remains quite high unless there are very tight restrictions and monitoring of recycling locations. In an effort to improve recycling and reduce contamination, the City will allow event organizers to restrict recycling to aluminum cans, plastic cups and plastic bottles only.

Cardboard Recycling (vendors)

All vendors will be required to break down and recycle their cardboard boxes during event.

Liquid Waste, Grease and Oils (vendors)

All food vendors are required to dispose of liquid waste, grease and oils safely and properly, and that all food waste removed offsite. No liquid waste, grease or oils are permitted for disposal in any receptacles or dumpsters within the City.

Zero Waste Events

The City has information available for organizers wishing to hold zero waste events. The restrictions on collection and disposal are much tighter on these events and require a far greater degree of monitoring on behalf of the organizer.

Litter* Control

The Event Organizer will hold the responsibility of ensuring that the venue is monitored for litter during the event, and that all litter generated from event is completely removed at the conclusion of the event, and that the venue is broom swept and ready for the next event.

**Litter - means any man-made material thrown, placed, deposited or caused to be placed, deposited or cast creating a danger to public health, safety, or welfare and/or degrading to the environment. "Litter" is not limited to but includes: paper, cigarette butts, cans, bottles, food wrappers and plastic bags.*

Communication

The Event Organizer will hold the responsibility of ensuring that event attendees are informed of the location of trash and recycling receptacles. This can be done through regular announcements and through clear signage on all trash and recycling receptacles.

Enforcement

I am not aware of any ordinances pertaining to trash and litter for events.

Section 98.1-6 – Littering

(a) No person shall Litter upon or in any street, sidewalk, park, playground, school ground, or other publicly owned, rented or otherwise publicly controlled land or building within the City.

(b) Any person(s) using a City street, sidewalk, park, playground, school ground, or other publicly owned, rented or otherwise publicly controlled land or building for the sale or distribution of circulars, handbills, newspapers or any product that is packaged in immediately disposable wrappers or containers:

(1) Shall provide Receptacles for the Disposal of Refuse, Recycling or other Litter that may be created in the immediate vicinity by such sale or distribution;

(2) Shall request that all such Refuse, Recycling or Litter so created be placed in such Receptacle(s), and;

(3) Shall remove and Dispose of the Refuse, Recycling or Litter in accordance with City regulations.

Section 98.1-7 - Property to be Kept Free of Litter and Refuse

It shall be the duty of every Owner or Occupant of property, whether improved or unimproved, including lots and areas, to keep, or cause to be kept, such property clean and free of Litter and Refuse.

Payments and Charges

The City of Manassas would like to maintain a high standard of cleanliness at all of our venues. By working together with event organizers to assess the type of equipment required for their event. Event organizers will be responsible for the cost of the equipment and removal. All event organizers will be required to submit a Waste Management Plan for their event at the same time as the permit application. The City will review the application and then provide a cost for the equipment and removal of trash and recycling.

Event organizers will also have the option of providing their own monitoring and litter removal through volunteers or requesting the City to provide the service for them. The cost of the monitoring and removal will be included in the equipment charge.

Event organizers will also be responsible for any liquidated damages resulting from failure to meet the requirements of debris management outlined in their contract.

Container Options

Container Capacity in Pounds

Size	20 gal	50 gal	64 gal	96 gal	2 yd	4 yd	8 yd	10 yd	20 yd	30 yd	40 yd
Volume	30	40	50	70	400	800	1,600	5,000	6,000	10,000	12,000



20 gal



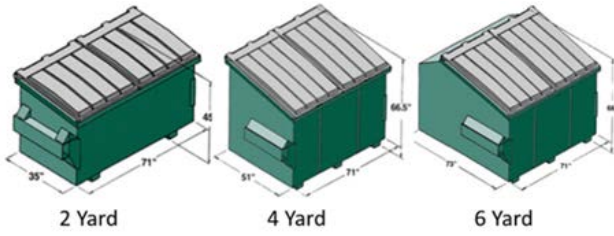
64 gal



50 gal

Container Capacity in Pounds

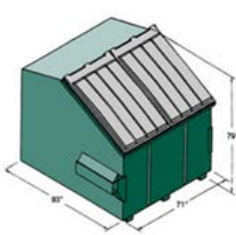
Size	20 gal	50 gal	64 gal	96 gal	2 yd	4 yd	8 yd	10 yd	20 yd	30 yd	40 yd
Volume	30	40	50	70	400	800	1,600	5,000	6,000	10,000	12,000



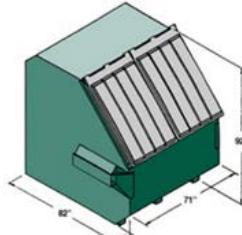
2 Yard

4 Yard

6 Yard



8 Yard



10 Yard

15 Yard —



20 Yard —



30 Yard —



40 Yard —



APPENDIX 9.4
DIDLAKE LITTER COLLECTION
CONTRACT

The City of Manassas currently engages DIDLAKE INCORPERATED for refuse and recycling receptacle collection and litter collection services

Contract entered into on and as of July 1, 2017

Please contact: Monica Boehringer on mboehringer@manassasva.gov or (703) 257-8256 for further contract information.

APPENDIX 9.5
KEEP MANASSAS BEAUTIFUL
BYLAWS AND SUMMARIES



KEEP MANASSAS BEAUTIFUL ADVISORY COMMITTEE BYLAWS

Article I Name

1.1 Name and location

The name of the Committee shall be the **Keep Manassas Beautiful Advisory Committee**, hereafter referred to as the "KMB Advisory Committee." The principal office shall be located at Manassas City Hall, 9027 Center Street, Manassas, Virginia 20110.

Article II Authority

2.1 Authority

On April 24, 2017, the City of Manassas City Council designated (Resolution #R-2017-43) the Citizens Advisory Committee on Solid Waste along with representatives from the Beautification Committee and the Park, Culture & Recreation Committee, to serve as the Advisory Committee to Keep Manassas Beautiful, which shall be an affiliate of Keep America Beautiful.

Article III Mission, Purpose and Goals

3.1 Mission Statement

To educate and engage residents to take responsibility for improving the community and environment of the City of Manassas.

3.2 Purpose

The purpose of the KMB Advisory Committee is to inspire and educate residents of the City of Manassas to take action every day to improve and beautify our community environment through the following actions:

- Foster wider awareness that putting an end to littering and improving beautification and waste reduction is a shared responsibility between residents and the City of Manassas.

- Work in collaboration with community organizations, businesses, homeowners associations and other groups to empower volunteers to take action to help make the City of Manassas safer, cleaner and more aesthetically pleasing.
- Advise Manassas City Council and City staff, as appropriate, on matters regarding litter prevention, beautification and waste reduction as part of Keep Manassas Beautiful.

3.3 Goals

- Increase litter prevention
- Improve the City's beautification
- Increase waste reduction through recycling

Article IV Organization

4.1 Keep Manassas Beautiful Coordinator

The City of Manassas Refuse and Recycling Coordinator shall retain the role of Keep Manassas Beautiful Coordinator and shall:

- Manage daily operations of Keep Manassas Beautiful;
- Draft and manage the budget for Keep Manassas Beautiful;
- Manage outreach and communications for Keep Manassas Beautiful;
- Manage data and prepare and provide reports and other required information for Keep America Beautiful affiliation.
- Serve as the KMB Advisory Committee Secretary. The Secretary shall record votes of the KMB Advisory Committee and keep minutes of all of the meetings and proceedings of the KMB Advisory Committee; serve notice of meetings of the KMB Advisory Committee; keep appropriate current records showing the names and addresses of members of the KMB Advisory Committee; and shall perform other duties as required.

4.2 Voting Members

4.2.1 KMB Advisory Committee Members

KMB Advisory Committee membership shall be drawn from current members of the Citizen's Advisory Committee on Solid Waste, Beautification Committee, and the Parks, Culture & Recreation Committee, as appointed by the City of Manassas City Council.

The KMB Advisory Committee shall be comprised of voting members from:

- Citizen's Advisory Committee on Solid Waste: Four (4) members
- Beautification Committee: Two (2) members
- Parks, Culture & Recreation Committee: Two (2) members

4.2.2 Tenure

The tenure of KMB Advisory Committee members shall be concurrent with their respective existing committee appointments by City Council.

4.2.3 Officers

Officers of the KMB Advisory Committee shall be a Chair and Vice-Chair, who shall at all times be members of the KMB Advisory Committee and such other officers as the KMB Advisory Committee from time to time may create by Resolution.

- **Chair:**

The Chair shall preside over all meetings, exercise general supervision over all affairs of the KMB Advisory Committee, and see that orders and resolutions of the KMB Advisory Committee and directives of the City Council are carried out.

- **Vice-Chair:**

The Vice-Chair shall act in the place and stead of the Chair in the event of the latter's inability or refusal to act, and shall exercise and discharge such other duties as may be required of him/her by the KMB Advisory Committee or City Council.

4.2.4 Elections/Term

The KMB Advisory Committee shall elect the Chair and Vice-Chair and each shall hold office for one (1) year unless he/she shall sooner resign or be removed or otherwise disqualified to serve. Officers are eligible for re-election.

4.2.5 Time for Elections

Election of the Chair and Vice-Chair shall take place at the first meeting of the Committee following the first day of January.

4.2.6 Resignation/Removal

Any officer or member may resign from the Keep Manassas Beautiful Advisory Committee at any time by giving written notice to the Secretary. Such resignation shall take effect on the date of receipt of such notice or at any later time specified therein. The acceptance of such resignation shall not be necessary to make it effective.

Any resignation from a Council-Appointed committee shall result in the simultaneous resignation from the KMB Advisory Committee as per Article 4.2.2.

4.3 Non-voting Members

4.3.1 Ex-Officio Committee Members

The following designated City officials or their designees* shall serve as ex-officio members.

- Refuse and Recycling Coordinator
- Parks, Recreation & Culture Operations and Maintenance Supervisor *
- Buildings and Grounds Manager *
- Stormwater Manager

Ex-officio members shall act as liaisons between the KMB Advisory Committee and their respective departments to facilitate the implementation of policies adopted by the KMB Advisory Committee and City Council.

4.4 General Membership

General Membership of Keep Manassas Beautiful shall be open to any individuals, families, governmental units, clubs, civic organizations, schools, churches, businesses and other groups who support the purposes and goals of Keep Manassas Beautiful.

Article V KMB Advisory Committee Meetings

5.1 KMB Advisory Committee Meetings

All KMB Advisory Committee meetings are open to the public.

5.2 Number of Meetings

The KMB Advisory Committee shall schedule at least six (6) meetings annually. Meetings will be held on the first Monday of January, March, May, July, September and November.

The KMB Advisory Committee may, by majority vote, elect to cancel meetings. Notice of all regular meetings shall be given to each member at least five (5) days prior to the date of such a meeting. The Chair, upon notice to each member, may call special meetings.

5.3 Quorum

A majority of the filled positions of voting members from the KMB Advisory Committee including a member from each participating group (Solid Waste Committee, Parks, Recreation and Culture Committee, and Beautification Committee) shall constitute a quorum for the conduct of business.

5.4 Order of Business

At each meeting of the KMB Advisory Committee, the order of business shall be as follows:

1. Roll Call
2. Approval of Minutes
3. Announcements and Special Reports
4. KMB Coordinator's Report
5. Committee Reports
6. Old Business
7. New Business
8. Adjournment

5.5 Parliamentary Procedure

Meetings shall be conducted in accordance with *Robert's Rules of Order*.

Article VI Fiscal Year and Funding

6.1 Fiscal Year

The fiscal and business year for Keep Manassas Beautiful shall be from July 1 through June 30.

6.2 Funding

Keep Manassas Beautiful shall receive primary operational funding, staffing and support from the City of Manassas through:

- Allocation of funding as identified in City of Manassas budget 590 Solid Waste.
- Provision of the Refuse and Recycling Coordinator as the Program Coordinator and Secretary for Keep Manassas Beautiful.
- In-kind contributions of facilities, equipment, materials and staff resources as appropriate from City departments.
- Donations and in-kind contributions from City residents and businesses appropriate to the mission and vision of Keep Manassas Beautiful.
- Grants appropriate to the mission and vision of Keep Manassas Beautiful.

6.2.1 Oversight of Donations

The KMB Advisory Committee shall review and recommend use of donated funds to the program unless otherwise specified by the donor.

Article VII

Keep America Beautiful Requirements

7.1 Maintain Good Standing

In order to maintain status as an Affiliate Member in Good Standing, Keep Manassas Beautiful must provide the national office of Keep America Beautiful (hereafter referred to as "KAB") with regular reports of activity and updates included in Articles 7.1.1 through 7.1.6.

7.1.1 Mission and Vision

Keep Manassas Beautiful must demonstrate the Keep America Beautiful mission and vision through compliance with the KAB Program Options which are:

- Litter prevention
- Beautification
- Waste reduction

***KAB Mission:** to engage individuals to take greater responsibility for improving their community environments.*

7.1.2 Active Advisory Committee

Keep Manassas Beautiful must demonstrate the KMB Advisory Committee meets regularly and is responsible for:

- Ensuring the relevance of the organization's mission
- Undertaking programs and activities that follow mission
- Ensuring that adequate resources are available to fulfill the mission
- Maintaining legal and ethical integrity and accountability
- Supporting a Keep Manassas Beautiful Program Coordinator
- Enhancing public image and assessing KMB Advisory Committee performance and recruitment

7.1.3 Reporting

Keep Manassas Beautiful must submit two (2) reports to the KAB national office annually with notification of completion to the Virginia state affiliate. The reports are the Semi-Annual Report, and the Annual Report which includes the General Survey, KAB Litter Index, Cost/Benefit Analysis and Program Options. Dates of other reports and events include:

- | | |
|------------------------------|----------------------------|
| • Governance Report | • Affiliate Profile Update |
| • Community Appearance Index | • Recycle-Bowl |
| • Great American Cleanup | • National Planting Day |
| • Education | • America Recycles Day |

7.1.4 Payment of Annual Fees

Keep Manassas Beautiful must remain current with their annual KAB Network Service Fee, which shall be invoiced in or by January 15 of every year.

7.1.5 Training

KMB Advisory Committee members must attend six (6) hours of training on an annual basis that is offered by the KAB national or state affiliate. An approved local training opportunity can earn the required credit.

7.1.6 Program Coordinator

KMB Advisory Committee members must ensure that the City of Manassas has provided an active Keep Manassas Beautiful Coordinator to oversee program activity and administration.

**Article VIII
Amendments**

8.1 Amendments

The KMB Advisory Committee may amend these bylaws at any meeting of the KMB Advisory Committee at which a quorum is present, provided that the proposed amendment is inserted in the notices of such meeting and that the majority of the members present approve.



KEEP AMERICA
BEAUTIFUL

Report Summary

Cost Benefit Section

Benefits

Number of Volunteer Hours:	1,165
Total Value of Volunteer Time:	\$28,763.85
In-Kind Donations:	\$1,500.00
Private/Non-Government Cash Contributions for Event:	\$0.00
Media In-Kind Donations for Event:	\$500.00
Total Recycling Income for Event:	\$0.00
Private Foundation Grants, State/Federal Special Project Grants, KAB Grants	\$9,000.00
Government Cost Avoidance:	\$0.00
Total Benefits:	\$39,763.85

Costs

In-Kind Government Costs:	\$0.00
Total City/County/Gov't Dollars:	\$35,649.00
Total Gov't Grants which directly fund your admin/operating budget:	\$0.00
Total Value of Gov't Employee Hours:	\$1,036.00
Total Costs:	\$36,685.00

Cost/Benefit Ratio: \$1.08

Annual Report Summary

Number of Events	197
Number of Volunteers:	601
Number of Volunteer Hours:	1,165
Number of Participants:	2,973
Number of Public Spaces Cleaned/Improved:	0
Pounds of Litter & Debris Collected:	2,925
Amount of Litter and Debris Recycled:	403
Miles of Rivers, Lakes, Shores, Wetlands, Underwater Cleaned & Improved:	0
Acres of Parks, Public Land, Playgrounds, Trails Cleaned & Improved:	227
Number of New, Maintained, or Improved Gardens, Green Spaces, and Gateways:	0
Number of Trees Planted:	0
Number of Plants, Shrubs, Flowers, and Bulbs Planted:	0

Number of Homes, Community or Commercial Buildings Painted, Renovated, or Built:	0
Number of Graffiti Sites Removed or Abated:	0
Pounds of Single Stream/Commingled:	0
Pounds of Clothing Collected:	1,000
Pounds of Plastic Bags and Film Plastic Collected:	0
Pounds of Beverage Containers Collected:	0
Pounds of Paper and Newspaper Collected:	72,000
Pounds of Electronics Collected:	99,526
Pounds of Hand-Held Devices	0
Pounds of Other Recyclables Collected:	159,000
Number of Educator Workshops Held:	0
Number of Attendees at Educator Workshops:	0
Number of Community Workshops Held:	0
Number of Attendees at Community Workshops:	0
Number of After-School/Daycare Centers Reached:	0
Number of Public/Private Schools Reached:	0
Number of Youth Reached:	20
Number of Youth Educated:	20



KEEP AMERICA
BEAUTIFUL

Report Summary

Cost Benefit Section

Benefits

Number of Volunteer Hours:	1,636
Total Value of Volunteer Time:	\$40,392.84
In-Kind Donations:	\$2,400.00
Private/Non-Government Cash Contributions for Event:	\$0.00
Media In-Kind Donations for Event:	\$0.00
Total Recycling Income for Event:	\$0.00
Private Foundation Grants, State/Federal Special Project Grants, KAB Grants	\$0.00
Government Cost Avoidance:	\$0.00
Total Benefits:	\$42,792.84

Costs

In-Kind Government Costs:	\$100.00
Total City/County/Gov't Dollars:	\$19,752.05
Total Gov't Grants which directly fund your admin/operating budget:	\$16,880.00
Total Value of Gov't Employee Hours:	\$3,182.00
Total Costs:	\$39,914.05

Cost/Benefit Ratio: \$1.07

Annual Report Summary

Number of Events	14
Number of Volunteers:	326
Number of Volunteer Hours:	1,636
Number of Participants:	2,110
Number of Public Spaces Cleaned/Improved:	31
Pounds of Litter & Debris Collected:	2,805
Amount of Litter and Debris Recycled:	50
Miles of Rivers, Lakes, Shores, Wetlands, Underwater Cleaned & Improved:	0
Acres of Parks, Public Land, Playgrounds, Trails Cleaned & Improved:	150
Number of New, Maintained, or Improved Gardens, Green Spaces, and Gateways:	1
Number of Trees Planted:	10
Number of Plants, Shrubs, Flowers, and Bulbs Planted:	55

Number of Homes, Community or Commercial Buildings Painted, Renovated, or Built:	0
Number of Graffiti Sites Removed or Abated:	0
Pounds of Single Stream/Commingled:	50
Pounds of Clothing Collected:	2,000
Pounds of Plastic Bags and Film Plastic Collected:	0
Pounds of Beverage Containers Collected:	18
Pounds of Paper and Newspaper Collected:	24,515
Pounds of Electronics Collected:	48,488
Pounds of Hand-Held Devices	0
Pounds of Other Recyclables Collected:	59,047
Number of Educator Workshops Held:	18
Number of Attendees at Educator Workshops:	30
Number of Community Workshops Held:	0
Number of Attendees at Community Workshops:	0
Number of After-School/Daycare Centers Reached:	1
Number of Public/Private Schools Reached:	6
Number of Youth Reached:	3,120
Number of Youth Educated:	623

APPENDIX 9.6
LITTER PREVENTION AUDIT

Litter Audit Route and Section Maps

		Section 1	Area	Blockfaces	Type
12	1A	Confederate Trail	Cul de Sac to Ashton Avenue	12	Residential
13	1B	Godwin Drive	Wellington Road to Nokesville Road	2	Industrial
23	1C	Nokesville Road	Godwin Drive to Wellington Road	2	Commercial
		Section 2			
21	2A	Dean Park Drive	whole street	8	Recreational
14	2B	Central Park Drive	whole street	8	Industrial
15	2C	Battlefield Drive	Hastings Drive to Hastings Drive	12	Residential
		Section 3			
22	3A	Foster Drive	Technology Drive to Dean Drive	2	Residential
20	3B	Taney Road	Grant Avenue to Grant Avenue	8	Residential
24	3C	Prince William Street	Grant Avenue to Wellington Road	6	Residential
		Section 4			
29	4A	Merrimack Drive	whole street	2	Residential
30	4B	Tudor Lane	whole street	1	School
18	4C	Meadowview Drive	whole street	4	Residential
		Section 5			
31	5A	Tudor Oaks Drive	whole street	6	Residential
32	5B	Oakenshaw Drive	whole street	12	Residential
33	5C	Liberia Avenue	Wellington Road to Centreville Road	12	Commercial
		Section 6			
25	6A	Center Street	Grant Avenue to Zebedee Street	10	Commercial
26	6B	Peabody Street	whole street	14	Residential
28	6C	West Street	Prince William Street to Church Street	6	Commercial

		Section 7			
3	7A	Weems Road	Fort Drive to Traveller Street	2	School
4	7B	Fort Drive	whole street	10	Residential
8	7C	Forestwood Lane	whole street	4	Commercial
		Section 8			
1	8A	Mathis Avenue	Liberia Avenue to Breeden Avenue	6	Commercial
2	8B	Liberia Avenue	Portner Avenue to Stonewall Road	20	Residential
5	8C	Kamlea Drive	whole street	4	Residential
		Section 9			
34	9A	Bucyrus Court	whole street	2	Industrial
36	9B	Commerce Court	whole street	6	Industrial
35	9C	Liberia Avenue	Euclid Avenue to Centreville Road	8	Commercial
		Section 10			
6	10A	Sumner Lake Boulevard	whole street	20	Residential
9	10B	Digges Road	whole street	14	Commercial
7	10C	Braxted Lane	whole street	8	Residential
		Section 11			
11	11A	Sweetbriar Street	whole street	12	Residential
27	11B	Park Street	whole street	14	Residential
10	11C	Country Lane	whole street	4	Residential
		Section 12			
16	12A	Waterford Drive	whole street	24	Residential
17	12B	Magnolia Grove Drive	whole street	4	Residential
19	12C	Karlo Street	whole street	10	Residential

TOTAL BLOCKFACES	299
TOTAL STREETS	36
RESIDENTIAL	57%
COMMERCIAL	22%
INDUSTRIAL	11%
SCHOOLS	5%
PARKS	3%

Measurement tools that you will need

Litter Audit Scoring Sheet

Date: _____

Scorer: _____

Place a "✓" opposite the Block-face letter and under the applicable scoring scale column.

Section: 1

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Section: 2

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Section: 3

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Measurement tools that you will need

Section: 4

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Section: 5

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Section: 6

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Section: 7

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Measurement tools that you will need

Section: 8

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Section: 9

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Section: 10

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Section: 11



Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Measurement tools that you will need

Section: 12

Block	1 Minimal or No Litter	2 Slightly Littered	3 Littered	4 Extremely Littered	Notable Conditions
A					
B					
C					
Section Average					

Litter Scale Descriptions

Score	What does it look like?	
1 "Minimal or No Litter"	<ul style="list-style-type: none">• Hard to see any litter• 1 or 2 small items in a block, or equivalent• Collected quickly by 1 individual• Generally neat and tidy	
2 "Slightly Littered"	<ul style="list-style-type: none">• Small amount of litter• Eye not continually grabbed by litter items	
3 "Littered"	<ul style="list-style-type: none">• Visible litter catches your eye• Organized effort for removal is required with considerable effort to clean up	
4 "Extremely Littered"	<ul style="list-style-type: none">• Continuous amount of litter• First thing noticed• Illegal dump might be observed• Equipment may be required for clean up• Strong impression of a lack of concern about litter	

Measurement tools that you will need

Observations

1. Neighborhood: City of Manassas
2. City, County, State Manassas, Virginia (independent city)
3. Date of scoring _____
4. Total driving and scoring time (in hours): _____
5. Identify litter scorer profiles:
 - a. Number of neighborhood representatives: _____
 - b. Number of business representatives: _____
 - c. Number of paid government representatives: _____
6. Results:

Category	Total Score:	Percentage (optional):
Minimal or no litter		
Slightly littered		
Littered		
Extremely littered:		

At the conclusion of scoring, record your observations using the questions below so that the collected data may be useful in developing your program plan:

Did you notice any trends or patterns?

Brainstorm possible solutions to improve littered areas.

**What impression would a first-time visitor have of your neighborhood?
(Make sure you list the positives and the negatives)**

Litter Index Scoring Sheet

Keep Calvary Park Beautiful

Area _____ Date July, 2020 Scorer _____

Site	Score (circle score)				Notable Conditions
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

Litter Index Scoring Sheet

Keep Canon Branch Park Beautiful

Area _____ Date July 2000 Scorer _____

Site	Score (circle score)				Notable Conditions
1	1	2	3	4	
2	1	2	3	4	Wires in trash too heavy to move
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	Same as above / wires + pipes left on property
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

Litter Index Scoring Sheet

Keep Oakenshaw Park Beautiful

Area _____ Date Jan, 2020 Scorer _____

Site	Score (circle score)				Notable Conditions
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

Litter Index Scoring Sheet

Keep Byrd Park Beautiful

Area _____ Date Jan, 2020 Scorer _____

Site	Score (circle score)				Notable Conditions
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	Neighbors leaving large black bags of trash
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

Litter Index Scoring Sheet

Keep Dean Park Beautiful

Area _____ Date Jan, 2020 Scorer _____

Site	Score (circle score)				Notable Conditions
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

Litter Index Scoring Sheet

Keep Stonewall Park Beautiful

Area _____ Date Jan, 2020 Scorer _____

Site	Score (circle score)				Notable Conditions
	1	2	3	4	
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

Litter Index Scoring Sheet

Keep Delisle Park Beautiful

Area _____ Date Jan, 2020 Scorer _____

Site	Score (circle score)				Notable Conditions
	1	2	3	4	
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

Litter Index Scoring Sheet

Keep Kinsley Park Beautiful

Area _____ Date July, 2012 Scorer _____

Site	Score (circle score)				Notable Conditions
	1	2	3	4	
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

Litter Index Scoring Sheet

Keep Nelson Park Beautiful

Area _____ Date July, 2020 Scorer _____

Site	Score (circle score)				Notable Conditions
	1	2	3	4	
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

Litter Index Scoring Sheet

Keep Winterset Park Beautiful

Area _____ Date July 2020 Scorer _____

Site	Score (circle score)				Notable Conditions
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	

APPENDIX 9.7
LTTER PREVENTION COMPETITIVE
GRANT



VIRGINIA LITTER PREVENTION AND RECYCLING
COMPETITIVE GRANT – FY2019 ACCOUNTING REPORT

Grant Period: July 1, 2018 through June 30, 2019

Deadline: August 1, 2019

FINAL ACCOUNTING REPORT

Name of Locality/Localities: CITY OF MANASSAS

Date: AUGUST 21, 2019

	<u>Amount (\$)</u>
FY2019 DEQ Grant award:	\$ <u>2,500.00</u>
Total Expense against DEQ’s Grant Award:	\$ <u>2,500.00</u>
Funds Remaining:	\$ <u>0.00</u>

Note: All remaining unspent funds from FY2019 will be deducted from future non-competitive grants.

CERTIFICATION: *By my signature below, I certify that the information provided on this form is accurate.*

Signature*: _____

Title: CITY MANAGER

Printed Name: WILLIAM PATRICK PATE

Date: _____

**Authorized signature of the County Administrator, City Manager, Town Manager, locality Chief Financial Officer, or the Coordinating Agency’s Executive Officer or Chief Financial Officer is required.*



**VIRGINIA LITTER PREVENTION AND RECYCLING
COMPETITIVE GRANT – FY2019 PERFORMANCE REPORT**

Grant Period: July 1, 2018 through June 30, 2019

Deadline: August 1, 2019

FINAL PERFORMANCE REPORT

Name of Locality/Localities: CITY OF MANASSAS

Date: AUGUST 21, 2019

1. Describe how the project was actually implemented:

The project was scaled back to accommodate the grant received focusing efforts on one townhome community over a period of six months. The City worked with the HOA, property manager and American Disposal Services to provide information and support that engaged residents in a collaborative effort to recycle by asking them to reduce contamination by focusing their efforts on recycling one thing right. The community was actively monitored with regular weekly audits and the City offered incentives including a monthly prize draw where the winner will receive a month of free trash and recycling. The City also actively enforced code regulations for trash and recycling, and issued violation warning letters to tenants and owners. Outreach materials included posters, flyers, letters to residents, stickers for carts, and hang tags for carts showing violations as well as positive messages for recycling correctly.

2. Describe the beneficiaries of the project:

The 359 townhomes in of Point of Woods East (Lakeside) was the main focus for the project. The community was chosen for its size, diversity, and ratio of owners to renters. They have an active HOA and the property manager is in regular contact with the City on a range of issues. So, there is a good relationship with the community and a demonstrated need for outreach regarding trash and recycling issues.

3. Describe the success of the project:

Recycling contamination was evident at the start of the project and residents were initially bothered by the audits – however – the more in person contact we had with residents, the more they understood what they needed to do. The materials were also a huge help in explaining what they needed to do. There were six recycling incentive winners, and that was shared with the HOA and the community. By the end of the project, there was a significant reduction in solid waste issues and recycling contamination.

4. Explain how (if possible) this project can be replicated and its success:

The most important part of the project focused on making sure that plenty of information was available regarding trash and recycling guidelines in Spanish and in English. Posters, flyers, stickers and information in newsletters helped start conversations and made the exchange of information easier with the residents.

Speaking directly with residents in person – made a significant difference in changing behavior. This can be really hard to accomplish if you have a small department and plenty of residents. Scheduling “hot spot” days in the parking area provided an opportunity to take the discussion to their space. It’s easy to ignore printed information or websites if you don’t understand what it’s all about – just having a basic conversation and showing someone what you mean really helps.

PROJECT COST:

Estimated Cost of Project:	\$ <u>2,500</u>
Grant awarded by DEQ:	\$ <u>2,500</u>
Cash from other sources:	\$ <u>0.00</u>
In-kind contributions:	\$ <u>0.00</u>
Total funding for project:	\$ <u>2,500</u>
Total cost of project:	\$ <u>2,500</u>

CERTIFICATION: *By my signature below, I certify that the information provided on this form is accurate.*

Signature*: _____ **Title:** CITY MANAGER

Printed Name: WILLIAM PATRICK PATE **Date:** _____

**Authorized signature of the County Administrator, City Manager, Town Manager, locality Chief Financial Officer, or the Coordinating Agency's Executive Officer or Chief Financial Officer is required.*

APPENDIX 9.8
ADOPTA KMB YEARS IN REVIEW



2017 Year in Review



Hello Adopta Volunteers!

**It's time to celebrate our first year of being
Keep Manassas Beautiful and we have a lot
to celebrate!**

HIGHLIGHTS OF 2017



▲ 63%

1.4
tons

\$1.00

Affiliation

Volunteers

Litter Collected

Cost/Benefit Ratio

Keep America Beautiful established Keep Manassas Beautiful as an Affiliate Member

The new Adopta! Program brought in a whole lot of incredible volunteers!

2,805 pounds of litter was collected through events and regular clean-ups.

We can now calculate the value of a volunteer's time at \$ 24.69 per hour.

In 2017, the new Adopta Program was introduced!



Adopt a Street	45 Groups
Adopt a Park	14 Groups
Adopt a Site	2 Groups
Adopt a Field	2 Groups
Adopt a Hydrant	10 Groups

 **63%**

We have almost doubled our number of volunteer groups in our first year!

Your Activity in Numbers

Number of Volunteer Hours **1,587**

Total Value of Volunteer Time **\$39,183**

In-Kind Donations **\$900**

Total Benefits: **\$40,083**



Program Costs

City Dollars	\$19,752
Grants	\$16,880
Staff Hours	\$3,182
Total Costs:	\$39,914

Cost/Benefit Ratio: \$1.00

Litter Collection Summary

Number of organized collection events	12
Number of volunteers	311
Number of public spaces cleaned or improved	25
Pounds of litter and debris collected	2,805



Goals for 2018/2019

- **Activity Reports**

Reporting your activity increases the value of the program and our ability to receive grants.

- **Great American Clean-up**

We need more volunteers to participate in this national clean-up event that happens March - May.

- **More Adoptions**

We still have streets, parks, sites, fields, streams and hydrants available for adoption.

- **Sponsorship**

Corporate and donations can fund more activities and events to help keep our community clean and beautiful.





THANK YOU!

Visit www.manassascity.org/kmb for more information



2018 Year in Review



Hello Adopta Volunteers!

It's time to celebrate our second year of being Keep Manassas Beautiful and we've been busy!

HIGHLIGHTS OF 2018



Awards

Keep Manassas Beautiful received the President's Circle Award from Keep America Beautiful for the second year!

▲ 84%

Participation

601 people volunteered their time for litter clean-ups and events!

1.5
tons
Litter
Collected

2,925 pounds of litter was collected through events and regular clean-ups.

\$1.08

Cost/Benefit Ratio

We can now calculate the value of a volunteer's time at \$ 24.69 per hour.

The Adopta Program is going strong!



Adopt a Street	87 Groups
Adopt a Park	15 Groups
Adopt a Site	3 Groups
Adopt a Field	3 Groups
Adopt a Hydrant	17 Groups

 84%

More people are participating in litter collection!

Your Activity in Numbers

Number of Volunteer Hours

1,165

Total Value of Volunteer Time

\$28,764



Litter Collection Summary

Number of regular street and organized collection events	197
Number of volunteers	601
Number of public spaces cleaned or improved	125
Pounds of litter and debris collected	2,925



Program Costs

City Dollars	\$35,649
Grants	\$9,000
In Kind Donations	\$2,000
Total Costs:	\$46,649

Cost/Benefit Ratio: \$1.08

Goals for 2019/2020

- Volunteer training sessions
- More group clean-up events
- Adopta celebration
- Sponsorship for events



THANK YOU!

Visit www.manassascity.org/kmb for more information



APPENDIX 10

GOALS

APPENDIX 10.1	<u>GOALS</u>
APPENDIX 10.2	<u>PROGRAM ACTIONS</u>
APPENDIX 10.3	<u>CAC BYLAWS</u>
APPENDIX 10.4	<u>CAC YEAR IN REVIEW</u>

APPENDIX 10.1

GOALS

APPENDIX 10-1

GOALS AND OBJECTIVES

The City of Manassas has developed and adopted this Solid Waste Management Plan with the following goals in mind:

1. Maintain Federal and State Laws and Regulations
 - Following Federal and State regulations regarding solid waste and recycling management updating programs and delivery as required.
2. Meet the needs of its citizens
 - Providing accessible, affordable, convenient and reliable trash and recycling services.
 - Monitoring and maintaining a high standard of efficiency and quality in the delivery of trash and recycling services.
3. Programs should be environmentally sound
 - Working to reduce waste and increase recycling through effective education and outreach.
 - Ensuring that the trash and recycling services provided are sustainable and reduce the negative impact on our environment.
 - Fostering partnerships that will enhance our local economy using environmental improvements that create cleaner safer neighborhoods.
 - Improving the environment in our community by working with area businesses, community leaders and our citizens to create a clean and safe place to live and work.
4. Programs should be economically sound
 - Providing efficient and cost effective contracted curbside trash and recycling collection services to residents.
 - Providing residents with accessible, efficient and cost-effective drop-off services and opportunities for recyclable materials.
5. Empower citizens to become informed and active participants
 - Ensuring citizen participation through appointments to the Citizen's Advisory Committee on Solid Waste.

- Encouraging active volunteer participation in recycling and litter reduction program opportunities through Keep Manassas Beautiful.
- Providing clear and concise information and guidelines for safe trash and recycling disposal.
- Providing opportunities for engagement through events, projects and initiatives.

6. Work to enforce the City's Solid Waste Code

- Ensuring adherence to City ordinances for trash and recycling through active enforcement.
- Monitoring and updating ordinances to ensure compliance with state and federal laws.

7. Seek new opportunities for improvements and expansion of the trash and recycling program

- Actively participating in local, regional and state organizations aimed at monitoring and improving trash and recycling practices.
- Seeking improvements in sustainability and innovation through the contracting and purchasing process.
- Piloting new programs to improve the development and delivery of services to citizens.

This plan supports Chapter 7 of the 2020 Comprehensive Plan which was established to:

CFI 7.5 Update and implement the City's solid waste management plan that prioritizes reduction, reuse, and recycling of solid waste above incineration and disposal in landfills.

CFI 7.5.1 Continue to provide curbside and drop-off recycling services, and implement cost effective improvements. Actively pursue opportunities to expand recycling and composting, where feasible.

CFI 7.5.2 Actively promote and encourage residential, commercial, industrial, and institutional participation in recycling programs.

APPENDIX 10.2
PROGRAM ACTION SCHEDULE

APPENDIX 10.2 IMPLEMENTATION SCHEDULE

Year	Program Action	Goals Achieved
1989	<ul style="list-style-type: none"> Started curbside recycling program for residents collecting newspaper and glass 	2,3,5,6
1991	<ul style="list-style-type: none"> Added metal and aluminum to curbside recycling collection 	2,3,5,6
2004	<ul style="list-style-type: none"> Introduced year-round yard waste collection Electronic waste and rag drop-off recycling events introduced Promote recycling events at City functions Distribute new Trash/Recycle brochure 	2,3,5 3,4,5,6 2,5
2005	<ul style="list-style-type: none"> Launch recycling cart pilot program for townhomes and single family homes Expand electronic waste and rag event to include rechargeable batteries Conducted recycling participation survey Adopt new ordinance to reduce illegal discharge and dumping in storm sewers 	2,3,4,5,6 3,4,5 2,6 2,3,6
2006	<ul style="list-style-type: none"> Evaluated pilot recycling program and implemented roll out in section of City 	2,3,4,5,6
2008	<ul style="list-style-type: none"> Started new Refuse and Recycling Contract with American Disposal Services Single Stream recycling introduced in curbside collection 64g recycling carts rolled out to service users 	1,2,3,4,5,6 2,3,5,6 2,3,4,5,6
2010	<ul style="list-style-type: none"> Review Adopted Solid Waste Management Plan Extended Refuse and Recycling Contract Distributed new Trash and Recycling Brochure 	1 1,2,3,4,5,6 2,5,6
2011	<ul style="list-style-type: none"> Expanded year-round yard waste collection to townhome residents Introduced curbside Christmas tree collection 	2,3,5,6 2,3,5,6
2012	<ul style="list-style-type: none"> Introduced trash assistance option for the elderly and disabled Introduced financial hardship user fee reduction 	2,7
2014	<ul style="list-style-type: none"> Launch trash cart pilot program Introduced special electronic waste collection for HOAs in townhome communities to reduce illegal dumping Amended Solid Waste Code to include recycling violations Expanded recycling events to include 3 shredding days and two larger "RecycleFest" events Distributed new trash and recycling leaflets Updated and expanded refuse and recycling website and reporting options for residents Revitalized Adopt a Street program 	2,3,4,5,6,7 1,2,3,4,5,6 1,2,3,4,5,6 2,3,4,5,6 2,3,4,5,6 2,3,4,5,6
2015	<ul style="list-style-type: none"> Updated Solid Waste Management Plan Introduced commercial refuse and recycling program for businesses in Historic Downtown Manassas Distributed new flyers for refuse and recycling information Introduced recycling blog on website City disposes of single stream recycling in new American Recycling Center 	1 1,2,3,4,5,6 2,5,6 2,5,6 2,4

	<ul style="list-style-type: none"> • Distributed reusable shopping bags and biodegradable yard waste collection bags at recycling and City events. • Introduced Adopt a Stream program 	2,3,5
2016	<ul style="list-style-type: none"> • City receives Virginia Recycling Association award for Outstanding City/County Recycling Program • Started new Refuse and Recycling Contract with American Disposal Services • Introduced Recycling Grant for townhome HOAs 	1,2,3,4,5,6
2017	<ul style="list-style-type: none"> • Keep Manassas Beautiful becomes a Keep America Beautiful Affiliate • New Didlake litter collection contract • City receives Virginia Recycling Association Excellence award for Recycling Program • Recycling and the Civil War exhibit introduced in City Hall • City holds first Recycled Art Competition • City approves new Solid Waste Code for trash and recycling • Conducted survey of businesses and residents in Historic Downtown to determine recycling needs. • Household Hazardous Waste, electronic waste and shredding Drop Off events generated over 143 tons of recyclable materials from residents. • The City has an average miss rate of 0.001% for trash and recycling collection in 2016. • Residential recycling figures for the City rose to 38% from 31% in 2015. 	3,4,6,7 2,3,6 5 5 5 1,2,3,4,5,6 2 2,3,6,7 2 3,6
2018	<ul style="list-style-type: none"> • Introduced curbside collection of televisions and computer monitors • The Refuse and Recycling program received an 83% approval rating in the Citizen Satisfaction Survey and placed fourth in City services overall. • Household Hazardous Waste, electronic waste and shredding Drop Off events generated over 158 tons of recyclable materials from residents. • The total volume of recycling collected <u>increased</u> by 1,980 tons over FY17. • RecycleFest was the featured event on the national Recycling Today website for America Recycles Day. • The outreach and education work of the City of Manassas was featured on the national Recycling Partnership website. • Working in partnership with Georgetown South and American Disposal Services, the City held its first Summer Recycling Camp and produced a video on recycling with the children of Georgetown South. • The City also produced four videos on plastic bags, electronics, HHW and shredding for residents, which are now available on our website. • Keep Manassas Beautiful received a grant to install recycling containers at the E.G. Smith Baseball Complex. • Added 2 cardboard only recycling dumpsters for businesses in Historic Downtown. • Received grant from VDEQ to undertake a recycling audit of townhome communities. • Volunteering in the Adopta program increased by 63%. 	2,3,6,7 2 2,3,6,7 2,3,6,7 5 5 5 2,3,4,6 2,3,4,6,7 2,3,5

	<ul style="list-style-type: none"> • All commercial collections and restaurant collections move to private haulers • The Debris Management Plan for the City of Manassas received approval from FEMA. • Customer Service department begins taking Trashline calls in Spanish and in English 	<p>1,2,3,4,5,6</p> <p>2,5,6,7</p>
2019	<ul style="list-style-type: none"> • Keep Manassas Beautiful worked with STEM teachers from City of Manassas Public Schools to develop a program of litter and recycling education that will incorporate local information and activities into the curriculum for young citizens. • Distributed reusable shopping bags to local market in Georgetown South community center. • Working in partnership with Georgetown South and American Disposal Services, Keep Manassas Beautiful held the second Summer Recycling Camp in Georgetown South. • Introduced Keep Manassas Beautiful Holiday Recycling Guide, which was distributed to local businesses and the public. • Recycling events receive a record 168 tons of HHW, eWaste and Shredding. 	<p>5</p> <p>5</p> <p>2,3,5</p> <p>3,5</p> <p>2,3,6,7</p>
2020	<ul style="list-style-type: none"> • Submit revised Solid Waste Management Plan • Distribute new trash and recycling leaflets • Evaluate Special Use Permit for Manassas Transfer Station • KMB introduces reusable shopping bags to Farmer's Market • Event trash management plan begins • City installs 10 Big Belly containers for trash and recycling in Historic Downtown 	
2025	<ul style="list-style-type: none"> • Update Solid Waste Management Plan • Distribute new trash and recycling leaflets • Review Solid Waste Code • Explore landfill alternatives and waste to energy options for City • Introduce curbside food waste collection for composting • Introduce glass recycling alternative for residents and businesses 	
2030	<ul style="list-style-type: none"> • Update Solid Waste Management Plan • Distribute new trash and recycling leaflets • New refuse and recycling contract for City • New Didlake contract for City • Program improvements 	
2035	<ul style="list-style-type: none"> • Update Solid Waste Management Plan • Distribute new trash and recycling leaflets • Review Solid Waste Code • New Didlake contract for City • Program improvements 	
2040	<ul style="list-style-type: none"> • Update Solid Waste Management Plan • Distribute new trash and recycling leaflets • New trash and recycling contract • Review Solid Waste Code • Program improvements • Explore new technologies for waste disposal and recycling 	

APPENDIX 10.3
CAC BYLAWS

CITIZEN'S ADVISORY COMMITTEE ON SOLID WASTE BYLAWS

ARTICLE I

Name and location

The name of the Committee shall be the Citizen's Advisory Committee on Solid Waste (CAC.) The principal office shall be located at Manassas City Hall, 9027 Center Street, Manassas, Virginia.

ARTICLE II

Authority

The Citizen's Advisory Committee on Solid Waste was established by a resolution and adopted by the City of Manassas City Council on November 28, 1988.

ARTICLE III

Purpose

The purposes of the CAC are as follows:

1. Advise Manassas City Council, as appropriate, on matters regarding solid waste and recycling within the City. This includes but is not limited to refuse and recycling collection, education and community outreach, litter control activity and enforcement.
2. Advise Public Works via the Refuse and Recycling Coordinator.
3. Evaluate and formulate policy recommendations for approval by the City Council. This includes, but is not limited to, strategic planning.
4. Work in cooperation with community organizations, Homeowners Associations and other groups for the general benefit of the residents of Manassas on matter related to Solid Waste and Recycling.

5. Foster wider awareness of the responsibility that residents share with the City of Manassas to ensure that solid waste is handled and disposed of in an environmentally safe, practical and sustainable manner and that positive efforts are made to reduce and recycle waste wherever possible.
6. Consider and comment on other matters of general community interest and concern as requested by the City Council or the Refuse and Recycling Coordinator.

ARTICLE IV

Membership

Section 1. Appointment and Tenure: The Committee shall consist of 10 members. The City Council of the City of Manassas shall appoint nine (9) members, who shall serve at the pleasure of the Council for a term of four (4) years, and one (1) city high school student selected by the Committee, who shall serve a term of one year.

Members may re-apply for membership to the committee following the conclusion of their term, but may serve no more than two (2) consecutive terms. Persons eligible for appointment to the Committee must be residents of the City of Manassas.

The Committee's membership shall have the following City constituent representation:

- One Resident from a Single Family Home
- One Resident from a Townhome
- One Resident from a Multifamily Dwelling
- One Resident who is owns a business within the City
- Five Resident Members
- One Student Representative from a high school within the City

Section 2. Attendance: Should any member fail to attend three consecutive regular meetings of the Committee, or fifty percent of the meetings over a six month period, without adequate excuse for such absences, the Chair, with the concurrence of the majority of the Committee, shall recommend to the City Council that a vacancy be declared and that the vacated position be filled.

Section 3: The Refuse and Recycling Coordinator shall be an *ex officio* member of the Committee. In such capacity, the Refuse and Recycling Coordinator shall act as a liaison between the Committee and Public Works, and facilitate implementation of policies adopted by the Committee and City Council.

Section 4: A Member of the City Council shall act as a liaison to the Committee. The Council Liaison shall be appointed by the Mayor and shall serve in an *ex officio* capacity.

ARTICLE V

Meetings

Section 1. Number: The Committee shall schedule at least ten monthly meetings each year. The Committee may, by majority vote, elect to cancel meetings. Notice of all regular meetings shall be given to each member at least five days prior to the date of such a meeting. The Chair, upon notice to each member, may call special meetings.

Section 2. Quorum: The presence of five voting members of the Committee shall constitute a quorum for the conduct of business.

Section 3. Order of Business: At each meeting of the Committee, the order of business shall be as follows:

1. Roll Call
2. Approval of Minutes
3. Announcements and Special Reports
4. Refuse and Recycling Coordinator's Report
5. Committee Reports
6. Old Business
7. New Business
8. Adjournment

Section 4. Parliamentary Procedure: Meetings of the Committee shall be conducted in accordance with *Robert's Rules of Order*.

Section 5. Committee Secretary: The Refuse and Recycling Coordinator shall serve as Committee Secretary. The Secretary shall record votes of the Committee and keep minutes of all of the meetings and proceedings of the Committee; serve notice of meetings of the Committee; keep appropriate current records showing the names and addresses of members of the Committee; and shall perform other duties as required by the Committee.

ARTICLE VI

Officers

Section 1. Officers: Officers of the Committee shall be a Chair and Vice-Chair, who shall at all times be members of the Committee, and such other officers as the Committee from time to time may create by Resolution.

Section 2. Term: The Committee shall elect officers and each shall hold office for one (1) year unless he/she shall sooner resign or be removed or otherwise disqualified to serve. Officers are eligible for re-election.

Section 3. Time for Elections: Election of officers shall take place at the first meeting of the Committee following the first day of January and annually.

Section 4. Resignation/Removal: Any officer may resign at any time by giving written notice to the Committee and City Council. Such resignation shall take effect on the date of receipt of such notice or at any later time specified therein. The acceptance of such resignation shall not be necessary to make it effective.

Section 5. Vacancies: A vacancy in any office may be filled by appointment through a majority vote of the Committee. The officer appointed to such vacancy shall serve for the remainder of the term of the year.

Section 6. Duties: The duties of the officers are as follows:

- a) Chair: The Chair shall preside over all meetings, exercise general supervision over all affairs of the Committee, and see that orders and resolutions of the Committee and directives of the City Council are carried out.
- b) Vice-Chair: The Vice-Chair shall act in the place and stead of the Chair in the event of the latter's inability or refusal to act, and shall exercise and discharge such other duties as may be required of him/her by the Committee or City Council.

APPENDIX 10.4
CAC 2019 YEAR IN REVIEW

**Citizen's Advisory Committee
on Solid Waste**

~

2019 Highlights

What does the CAC do?

- Advise Council on matters regarding the collection and disposal of trash and recyclables.
- Evaluate trash, recycling and litter control activity within the City of Manassas.
- Explore opportunities for improving refuse and recycling services and community outreach.
- Provide staff with valuable knowledge and insight in developing new and improved way of keeping the City of Manassas clean, safe and beautiful.

CAC Bylaws Updated

CAC bylaws were updated to expand the Committee to ten members and include a constituent representation:

- One Resident from a Single Family Home
- One Resident from a Townhome
- One Resident from a Multifamily Dwelling
- One Resident who owns a business within the City
- Five Resident Members
- One Student Representative from a high school within the City (non-voting member appointed by the committee)

CAC Members Discussed

- Trash and recycling issues in townhome communities.
- The rising cost of recycling disposal and contamination.
- Litter control in Historic Downtown following events.

As City residents, CAC members raise issues of concern and work with City staff to provide suggestions for solutions.

RecycleFest

Spring RecycleFest

Saturday
May 4, 2019
8 a.m.—12 p.m.

Manassas Transfer Station
8305 Quarry Road
Manassas, VA 20110

THE HOME DEPOT

Key Manassas Beautiful

Free yard waste bags to the first 500 residents courtesy of Home Depot

Antifreeze • Fertilizers • Gasoline • Glues
Motor Oil • Paint • Swimming Pool Chemicals
Cell Phones • TVs • Computers • Scanners
Small Copiers • Game Consoles • Monitors
Personal Documents (4 box limit)

** Commercial/Business Waste will not be accepted for collection.*

CMXI **TrueShred** **WM**

More Information: (703) 257-8252 or www.manassacity.org/trash

BIG SUMMER SHRED

Saturday
August 3, 2019
8 a.m. - 12 p.m.

Manassas Transfer Station
8305 Quarry Road
(off Liberia Avenue)

What can you shred?

- Deck Cozard Shredder
- Computer Hardware
- Cell Phones
- Broken TVs
- Broken Copiers
- Game Consoles
- Legal Documents
- Personal Checks
- Medical Records
- 2" Plastic Lids
- Paper Plates
- The Basics
- CDs/DVDs
- Paperweights
- Photographs

There is a time limit to shred. Commercial shredding is not accepted due to odors.

More Information: (703) 257-8252 or www.manassacity.org/trash

Key Manassas Beautiful

Don't be a turkey - recycle right at
RecycleFest!

Antifreeze • Fertilizers • Gasoline • Glues
Motor Oil • Paint • Swimming Pool Chemicals
Cell Phones • TVs • Computers • Scanners
Small Copiers • Game Consoles • Monitors
Personal Documents (4 box limit)

** Commercial/Business Waste will not be accepted for collection.*

Saturday
November 2, 2019
8 a.m.—12 p.m.

Manassas Transfer Station
8305 Quarry Road
Manassas, VA 20110

SPECIAL GUESTS:
City of Manassas Animal Adoption Center
volunteers will be collecting chow and housewares with proceeds going to provide a safe haven for animals in our community.

CMXI **WM**

More Information: (703) 257-8252 or www.manassacity.org/trash

The CAC has an active role in planning and delivering RecycleFest. Our members help to plan the traffic flow, stuff the gift bags and greet residents as they come in to drop off their recycling.

A record 168 tons of HHW, eWaste and Shredding were collected in 2019.

Keep Manassas Beautiful

The City became an Affiliate of Keep America Beautiful in November 2017.

This is what happened in our 2nd year:

- 1,165 volunteer hours
- \$29k value in volunteer time
- 2,925 pounds of litter collected

Had a 84% increase in Adopta volunteers!



Received 2nd President's Circle Award from Keep America Beautiful



Keep Manassas Beautiful

Received 2nd grant to help reduce cigarette litter in Historic Downtown



Held 2nd Recycling Camp in Georgetown South

Keep Manassas Beautiful



Life seems to get a little crazy around the holidays with all the events and family gatherings. While it's understandable, many of us go for convenience at the expense of the environment and sustainability. To help us all be a little more "green" for the holidays, Keep Manassas Beautiful has gathered up a host of simple ways we can be a little more environmentally-friendly without losing our sanity.

Did you know ...
If every American family wrapped just 20 presents in re-used materials, it would save enough paper to cover 45,000 football fields.

If every family reused just two feet of holiday ribbon, the 28,000 miles of ribbon saved could fit a bow around the entire planet.

The 2.40 Billion Christmas cards sent each year in the U.S. could fill a football field 10 states high. If we each use one card less, we'd save 50,000 cubic yards of paper.

Decorate:

- Use natural decoratives around your home. Branches, leaves, and pine cones can be recycled as yard waste.
- Your old Christmas ornaments can become new classics in a glass vase or ceramic bowl.
- Have some fun and make your own ornaments with candy canes, cookies, popcorn, cranberries, and salt dough.

Did you know ...
Americans throw away 25% more trash during the Thanksgiving to New Year's holiday period than any other time of year. The extra waste amounts to 25 million tons of garbage, or about 1 million extra tons per week!

Gifts:

- Ditch the rolls of expensive wrapping paper and avoid glossy or metallic gift wrap. Get crafty instead! Make your gift wrap personal with magazines, newspaper, comics, fabrics, and recipes.
- Use colorful yarn, ribbon, and string with added natural touches like cranberry sticks, candy canes, and holly and pine.
- Put your gift inside a reusable shipping bag! There are some really nice ones around and you can even customize them!

Between Turkey Day and New Year's Day, we Americans throw away an extra 6 to 10 million tons of waste.

Entertain:

- Save money and time by blissing down your menu to a few solid favorites.
- Replace your bottled water with a glass beverage dispenser or pitcher. Add a bit of cucumber, lemon, or berries for color.
- Pick up some decorative reusable containers for no leftovers and give them to your guests as they go.

For more information call (703) 257-3252 or visit www.manassascity.org/trash

We introduced a new Holiday Guide to help everyone reduce, reuse and recycle

Keep Manassas Beautiful

The City became the first Keep America Beautiful Affiliate in Virginia to start a school certification program!



Keep Manassas Beautiful is working with STEM teachers in Manassas City Public Schools to deliver litter and recycling education to student through their curriculum!

Special thanks to Dena Caracciolo of Round Elementary School for all of her help and support!



CAC Members

- Cathy Lemmon
- Tim Conrow
- Rajendrasinh Chudasama
- Tom Osina
- John Richardson
- Ivan Soto
- Naya Conrow
- Kathy Jayne
- Theresa Coates Ellis

KMB Members

- Lynn Forkell
- Cathy Lemmon
- Tim Conrow
- Mark Olsen
- Ann Hempen
- Robyn Williams
- Christina VandenBosche
- Kathy Jayne
- Theresa Coates Ellis



Thank you!

APPENDIX 11

BUDGET

APPENDIX 11.1 [FUNDING AND BUDGET FY 2019](#)

APPENDIX 11.2 [FUNDING AND BUDGET FY 2020](#)

APPENDIX 11.1
FUNDING AND BUDGET
FY 2019

FINANCIAL OVERVIEW

Revenues & Expenditures - Solid Waste Fund

	FY 2017 Actual	FY 2018 Adopted	FY 2018 Amended	FY 2019 Adopted
Revenue:				
Local Sources	3,418,624	3,384,360	3,384,360	3,448,030
State	8,094	8,350	8,350	7,500
Federal Government	-	-	-	-
Subtotal	3,426,718	3,392,710	3,392,710	3,455,530
Other Financing Sources	-	-	-	-
TOTAL REVENUES	3,426,718	3,392,710	3,392,710	3,455,530
Expenditure:				
Personnel Services	111,832	134,530	134,530	145,580
Employee Benefits	43,496	60,310	60,310	67,690
Purchased Services	2,424,058	2,932,950	2,932,950	2,832,730
Internal Services	177,566	180,610	180,922	187,450
Other Services and Charges	5,869	8,380	8,380	11,600
Supplies	3,938	4,000	3,688	8,700
Capital	-	12,000	12,000	70,000
Debt Service, Depreciation, & Other	10,576	-	-	-
Manassas City Public Schools	-	-	-	-
Subtotal	2,777,334	3,332,780	3,332,780	3,323,750
Other Financing Uses	-	18,430	18,430	-
TOTAL EXPENDITURES	2,777,334	3,351,210	3,351,210	3,323,750
Excess (Deficit)	649,384	41,500	41,500	131,780
Estimated Beginning Net Position	51,108	700,492	741,992	783,492
Change in Net Position	649,384	41,500	41,500	131,780
Estimated Ending Net Position	700,492	741,992	783,492	915,272

The contribution of Fund Balance is due to cost savings from contract renegotiation.

FUNCTIONS / ACTIVITIES

The Solid Waste division provides low cost refuse and recycling services with minimum service disruptions, uses standardized solid waste management practices, provides once a week refuse collection for single family homes and twice a week for townhomes, provides recycling and yard waste once a week for all residents, promotes litter prevention, and reports business recycling.

OBJECTIVES

	City Council Priority & Goal	
• Provide efficient, cost effective curbside refuse & mixed recycling collection services	Sustainable Government	SOC-1
• Ensure adequate facilities for the transfer and disposal of solid waste and mixed recycling are available within reasonable proximity to the City (minimize travel/disposal costs and support local businesses)	Sustainable Government	SOC-1
• Reduce costs, reduce recycling contamination, and continue to achieve recycling rates of at least 25% (minimum DEQ requirement) through active education and outreach programs	Sustainable Government	SOC-1

SERVICE EFFORTS AND MEASURES

Measure	FY 2016 Actual	FY 2017 Actual	FY 2018 Budget	FY 2018 Projected	FY 2019 Budget
Efficiency					
Monthly User Fee (Single-Family / Townhome)	\$26.59 / \$27.88	\$26.59 / \$27.88	\$26.59 / \$27.88	\$26.59 / \$27.88	\$26.59 / \$27.88
Outcome (Effectiveness)					
# of trash & recycling misses (average per month / % of on time collections)	57 / 99.9%	70 / 99.9%	50 / 99.9%	70 / 99.9%	60 / 99.9%
Efficiency					
Cost per ton Refuse / Recycling / Yardwaste	\$173.31 / \$68.59 / \$185.45	\$120.48 / \$67.69 / \$100.60	\$124.82 / \$48.50 / \$144.00	\$119.67 / \$66.84 / \$99.23	\$121.00 / \$65.38 / \$97.27
Output					
# of refuse tons curbside / # of recycle tons curbside	12,113 / 4,633	12,649 / 4,007	12,900 / 5,805	13,251 / 4,143	13,300 / 4,250

DIVISION EXPENDITURE OVERVIEW

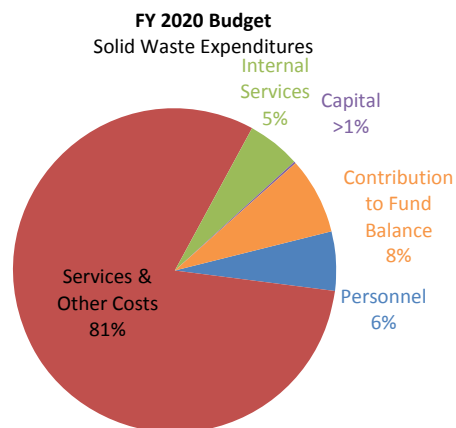
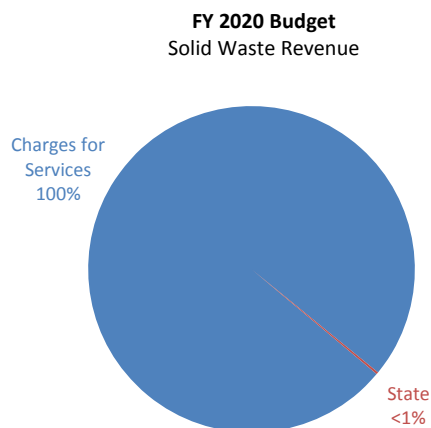
Expenditure Category	FY 2017 Actual	FY 2018 Adopted	FY 2018 Amended	FY 2019 Adopted	Increase (Decrease)
Personnel	111,933	134,530	134,530	145,580	11,050
Employee Benefits	43,495	60,310	60,310	67,690	7,380
Purchased Services	2,424,057	2,932,950	2,932,950	2,832,730	(100,220)
Internal Services	177,566	180,610	180,922	187,450	6,840
Other Charges	5,869	8,380	8,380	11,600	3,220
Supplies	3,938	4,000	3,688	8,700	4,700
Capital	-	12,000	12,000	70,000	58,000
Debt/Other Uses	7,381	400	400	8,000	7,600
Transfers/Contingencies	-	59,530	59,530	123,780	64,250
Expenditure Category Total:	\$ 2,774,239	\$ 3,392,710	\$ 3,392,710	\$ 3,455,530	\$ 62,820

APPENDIX 11.2
FUNDING AND BUDGET
FY 2020

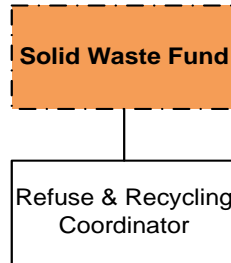
FUND OVERVIEW Solid Waste Fund

Revenue by Source	FY 2018 Actual	FY 2019 Adopted	FY 2019 Amended	FY 2020 Budget	Increase (Decrease)
Local Sources					
Interest & Use of Property	7,139	300	300	2,000	1,700
Charges for Services	3,429,582	3,447,730	3,447,730	3,490,730	43,000
Other Local Revenue	162	-	-	-	-
Source Total:	3,436,883	3,448,030	3,448,030	3,492,730	44,700
State of Virginia					
Categorical Aid	7,893	7,500	7,500	7,500	-
Source Total:	7,893	7,500	7,500	7,500	-
REVENUE TOTAL:	\$ 3,444,776	\$ 3,455,530	\$ 3,455,530	\$ 3,500,230	\$ 44,700

Expenditure by Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Amended	FY 2020 Budget	Increase (Decrease)
Salaries & Benefits	165,630	213,270	213,270	207,000	(6,270)
Purchased Services	2,524,221	2,832,730	2,832,730	2,806,730	(26,000)
Internal Services	181,865	187,450	187,450	186,450	(1,000)
Other Charges	4,548	11,600	11,600	9,700	(1,900)
Supplies	6,159	8,700	8,700	8,700	-
Capital	-	70,000	70,000	7,000	(63,000)
Debt/Other Uses	3,461	8,000	8,000	8,000	-
Transfers/Contingencies	-	123,780	123,780	266,650	142,870
EXPENDITURE TOTAL:	\$ 2,885,884	\$ 3,455,530	\$ 3,455,530	\$ 3,500,230	\$ 44,700



The rates will remain the same - \$26.59 per month for single-family detached and \$27.88 per month for townhouse.



	Adopted FY 2019		Amended FY 2019		Adopted FY 2020		Adopted FY 2020 Over (Under) Adopted FY 2019	
	#	FTE	#	FTE	#	FTE	#	FTE
<i>Solid Waste Fund</i>								
Refuse-Recycling Coordinator	1	1.00	1	1.00	1	1.00	-	-
Division Total	1	1.00	1	1.00	1	1.00	-	-

FUNCTIONS / ACTIVITIES

The Solid Waste division provides low cost refuse and recycling services with minimum service disruptions, uses standardized solid waste management practices, provides once a week refuse collection for single family homes and twice a week for townhomes, provides recycling and yard waste once a week for all residents, promotes litter prevention, and reports business recycling.

OBJECTIVES

City Council Priority & Goal

- Provide efficient, cost effective curbside refuse & mixed recycling collection services Sustainable Government SOC-1
- Ensure adequate facilities for the transfer and disposal of solid waste and mixed recycling are available within reasonable proximity to the City (minimize travel/disposal costs and support local businesses) Sustainable Government SOC-1
- Reduce costs, reduce recycling contamination, and continue to achieve recycling rates of at least 25% (minimum DEQ requirement) through active education and outreach programs Sustainable Government SOC-1

SERVICE EFFORTS AND MEASURES

Measure	FY 2017 Actual	FY 2018 Actual	FY 2019 Budget	FY 2019 Projected	FY 2020 Budget
Efficiency					
Monthly User Fee (Single-Family / Townhome)	\$26.59 / \$27.88	\$26.59 / \$27.88	\$26.59 / \$27.88	\$26.59 / \$27.88	\$26.59 / \$27.88
Outcome (Effectiveness)					
# of trash & recycling misses (average per month / % of on time collections)	70 / 99.9%	70 / 99.9%	60 / 99.9%	70 / 99.9%	70 / 99.9%
Efficiency					
Cost per ton Refuse / Recycling / Yardwaste	\$120.48 / \$67.69 / \$100.60	\$123.00 / \$107.00 / \$97.00	\$121.00 / \$65.38 / \$97.27	\$123.00 / \$126.00 / \$123.00	\$122.00 / \$193.00 / \$123.00
Output					
# of refuse tons curbside / # of recycle tons curbside	12,649 / 4,007	12,616 / 5,987	13,300 / 4,250	12,819 / 6,146	12,883 / 6,177

DIVISION EXPENDITURE OVERVIEW

Expenditure Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Amended	FY 2020 Budget	Increase (Decrease)
Salaries & Benefits	165,630	213,270	213,270	207,000	(6,270)
Purchased Services	2,524,221	2,832,730	2,832,730	2,806,730	(26,000)
Internal Services	181,865	187,450	187,450	186,450	(1,000)
Other Charges	4,548	11,600	11,600	9,700	(1,900)
Supplies	6,159	8,700	8,700	8,700	-
Capital	-	70,000	70,000	7,000	(63,000)
Debt/Other Uses	3,461	8,000	8,000	8,000	-
Transfers/Contingencies	-	123,780	123,780	266,650	142,870
Expenditure Category Total:	\$ 2,885,884	\$ 3,455,530	\$ 3,455,530	\$ 3,500,230	\$ 44,700

APPENDIX 12
PUBLIC PARTICIPATION
DOCUMENTATION

Consultation Responses

The City of Manassas posted a draft version of the updated Solid Waste Management Plan to the City's website for review and comment by the public on March 01, 2020. The website included a form for comments. (Appendix 1)

The website is below:

[https://www.manassascity.org/Public%20Works/Trash%20&%20Recycling/RPT\(Public%20Draft\)%20-%202020%200316%20-Manassas%20SWMP.pdf](https://www.manassascity.org/Public%20Works/Trash%20&%20Recycling/RPT(Public%20Draft)%20-%202020%200316%20-Manassas%20SWMP.pdf)

The consultation was also promoted through the City Connection Newsletter in July, August, and October of 2020. (Appendix 2)

The comment period ended on October 30, 2020. A total of 13 responses were received between March 01, 2020 and October 30, 2020. The following is a compilation of all of the responses received and includes any additional comments received after the deadline.

Curbside Trash and Recycling Service	
Excellent	6
Good	4
Okay	1
Neutral	
Needs Some Improvement	
Service is terrible	
Don't receive curbside service	
Not sure	

Do you have any specific improvements to suggest for the curbside collection services?
Food waste composting. More things Recycled not just the most profitable.
For one or two people, the trash can is way too large. Would be nice to have the option to have a smaller one. Or reverse the cans so the larger one is for recycling, and the smaller one is for trash. Right now, the larger one is for trash.
Because the pickup is done with one person operating a truck with a motorized arm, when trash falls to the street there is no one to pick it up. When it was a team, one person could pick up what fell to the ground to prevent it from blowing down the street or remaining in the road for hours. It is very rare that I see the street sweeper truck visit our neighborhood after curbside pickup. Having the sweeper follow the collection truck route would help ensure that our neighborhoods remain clean and would move my rating from "okay" to "excellent".
Keep using the trucks to pick up the trash and recycling. When you have people do it they let a lot of debris dump on the ground.

Household Hazardous Waste, Electronics, and Shredding Drop-off Events for Residents	
Excellent	6
Good	4
Okay	
Neutral	
Needs Some Improvement	
Events are terrible	
I never attended an event	1
Not sure	
Do you have any specific improvements to suggest for drop-off events?	
A location for mixed paper and glass to be dropped off	
Safe place for city residents to take Household Hazardous Waste when found .	
Would like to be able to bring old gasoline to drop off, and keep my gas can. I sometimes have gas I don't use in my lawn mower, and right now I store it in a larger can. Is that possible today?	
Shredding should me more often, possibly every month?	

Reducing Waste and Improving Recycling	
Make recycling mandatory for residents	7
Make recycling mandatory for multi-family buildings and businesses	6
Introduce drop-off collection points for glass	5
Introduce curbside collection of organic food waste	5

Do you have any specific improvements to suggest for reducing waste and increasing recycling?	
I think the city should pick up kitchen scraps if possible to make compost. No meat scraps of course but all vegetable matter, egg shells, coffee grounds, etc.	
I would like the city to partner with companies that will handle all recyclables not just the most profitable.	
Allow for plastic bag recycling (some grocery stores have drop-off bins).	
Maybe somehow offering incentives for city residents for composting and recycling.	

Options for large quantities of bulk waste or yard waste. Residents currently have 3 options for disposal of large volumes of bulk waste or yard waste. Which options have you used?	
Manassas Transfer Station	3
Courtesy Truck	1
Private Hauler	1

How do you prefer to receive trash and recycling information from the City of Manassas?
--

Online (City of Manassas website)	6
Social Media (Facebook, Nextdoor)	3
City Connection Newsletter	9
Flyers and Brochures	1
Calling the Trashline (703) 257-8252	2
From my HOA or Property Manager	1
The Government Channel on TV	
From a friend/neighbor	1
Other: Emails, texts	

What additional information/communication about trash and recycling services/programs do you think is needed?
More Adopt a Spots
Look for more ways to help residents lower cost service fees if we are asked to do more of the sorting work for the city's recycling programs.
Services are good, thank you for your work! I really appreciate the unsung heroes of trash collection. They work every day to keep our neighborhood safe and clean. Would be good to occasionally spotlight these hard working, valuable staff, and how they keep our neighborhoods safe and clean, in the City Connection or elsewhere.
If new programs are developed then I think distribution of this information should be through social media, online, the city newsletter, and a note in the mail. If it is something that the city really wants to get people on board with then I think making sure that everyone is getting the information is key.
We use Prince William County Landfill. But we have to pay. With what we pay in taxes that should be free to residents. Many residents feel this way.

Do you have any other ideas for how to improve trash and recycling services or suggestions for new programs or services? If so, please describe:
Central drop-off points for recycling any time.
I would like to see an option for plastic bags to be recycled with a home pickup rather than taking them to the grocery store. I also think they're should a way to recycle Styrofoam.
Would be great to have leaf mulch and wood chips to pick up at a city site, or have these items dropped off at the house. Right now, I can occasionally get wood chips dropped off by local tree services. Leaf mulch is a valuable garden amendment, would be great to be able to either pick this up or have it dropped off. I know in Fairfax County, this is available.

I like the idea listed above for glass drop-off collection points and organic food waste pickup for compost.

I think a stand at the farmers market with information for city residents to learn more about reducing waste, recycling, composting would be helpful. Maybe suggesting little events every so often where city residents are encouraged to do/not do certain things that will help with waste reduction (kind of along the lines of events like "lights out for an hour").

I think people want to help the environment but sometimes aren't sure how or maybe think the small steps they take aren't making a difference. I think it's great that the city is evaluating what it can do to help. If the city shows that this is important and makes steps to be better than I think it will help our citizens get on board with doing their part.

I am sorry to say that I failed to read the document or to take the survey for the new solid waste management plan. Since it is a day past the deadline, I am hoping that a few comments/ suggestions may still be permitted. I apologize if anything that I may include in this email is already addressed in the plan.

I was thinking that a regular presentation to the public-school students as well as to the staff would be an ideal way to remind people about what is and is not being collected for recycling as well as the proper disposal of hazardous materials.

I am including staff at the schools since there always seems to be some confusion among members about what they may or may not place in the recycling bins especially since not all staff live in the city limits. Staff who travel from outside of the city limits may have different community regulations about recycling and the disposal of various materials. Now as a teacher in Manassas City Public Schools, I know that the staff do not need or want additional required Professional Development. However, if the city were to ask the schools to include a brief overview of City waste policies annually as well as providing the displays to the schools to post in the buildings, there would be less confusion among staff members.

For the students, a virtual presentation to be shared in conjunction with Recycling Day in November or Earth Day in April would be a wonderful way for students to learn about our city's efforts and the regulations we follow. Perhaps there could be an annual competition in which students create something useful/practical with refuse items found in the home, much like the annual poster contest for Arbor Day. I believe something similar has already been done in some of the individual schools in the past, but I wasn't certain if anything citywide had ever been planned yet.

For the families, I was wondering if there are any short informational videos available to view in English and Spanish about the materials the city recycles and how to properly dispose of various hazardous waste materials. These could be used possibly as Public Service Announcements. They would have to be easy to

locate online; perhaps they could also be shared as links on the school division website as a courtesy for community information.

Overall this is an impressive document and I thank you for all the work that went into it. Clearly Manassas City meets and exceeds the legal requirements of state and nation.

Answers to Your Consultation Comments/Questions

Comments:

"Services are good, thank you for your work! I really appreciate the unsung heroes of trash collection. They work every day to keep our neighborhood safe and clean. Would be good to occasionally spotlight these hard working, valuable staff, and how they keep our neighborhoods safe and clean, in the City Connection or elsewhere."

"Overall this is an impressive document and I thank you for all the work that went into it. Clearly Manassas City meets and exceeds the legal requirements of state and nation."

Questions:

A number of consultation responses from residents asked the same or similar questions. Therefore, answers to consultation responses and questions have been broken down by category to avoid repetition and provide additional information.

Food recycling/ composting

The City of Manassas is currently working with [Compost Crew](#) and [Prince William Food Rescue](#) on curbside collection of organic materials. A [pilot project](#) in the Wellington Community started on February 8, 2021. If successful, the program will be made available to City residents in July of 2021. These will be an opt in program which will allow residents and businesses to work directly with the organizations involved and provide them with the ability to decide which program options are best suited to their needs.

The City of Manassas does not have the capacity or facility to collect, process and deliver compost. Compost Crew will deliver fresh compost to your door as part of their service.

Please visit our [website](#) for more details.

Recycling all materials – not those just for profit

The City of Manassas does not have the facilities or capacity to store or market recyclable materials. The City works with contractors who collect and dispose of solid waste and recyclable materials. Therefore, the City does not profit from the collection or sale of recyclable materials. Recycling contracts include provisions that identify the destination of recyclable materials to ensure legal, ethical, safe disposal and reuse.

The City is actively working to recycle materials with all available partners in our region. The State of Virginia does not have the same legislation or options for

recycling that we see in other states. In many cases, there are a limited number of options for recycling available because there are no facilities in the State of Virginia to collect and process a broader range of recyclable materials.

The one thing that you need to remember is that recycling is also an industry. According to the Institute of Scrap and Recycling Industries, the economic analysis shows that the U.S. scrap recycling industry is a major economic engine powerful enough to create 531,510 jobs and generate \$12.9 billion in tax revenues for governments across the country, all while making the old new again and helping to protect the earth's air, water, and land for future generations. The U.S. scrap recycling industry is particularly important because its operations are so widespread. In fact, the total economic activity generated by scrap recycling in the United States is nearly \$110 billion.

The City should offer a wider range trash and recycling containers



There are currently three sizes of trash and four sizes of recycling containers available to residents. Please visit our [Request/Replace Carts](#) page for more details.

Spills during collections and fully automated trash and recycling trucks

According to the [Bureau of Labor Statistics](#), trash and recycling collection is the fifth most dangerous occupation in the United States. While the [number of jobs](#) within the solid waste industry is growing, the number of applications for those jobs is not. For the past five years, solid waste haulers within our region have faced a steady decline in applications. This has prompted several innovations in solid waste technology. The new, fully-automated collection trucks compensate for the lack of crew members by allowing one person to drive and operate the vehicle.

In addition, the dangers of [COVID-19 infection among solid waste workers](#) still remains high. On any "normal" day, solid waste workers are exposed to a wide variety of potentially noxious and infectious materials in the trash and recycling that they handle. As essential workers, crews are coming into contact with COVID infected materials during manual collection. The best protection is the use of automated or semi-automated collection vehicles to reduce human contact with other crew members and with the materials that they are collecting.

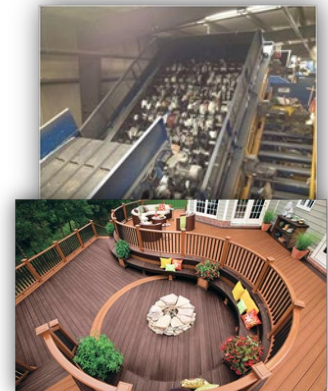
The City is working with our contractor to make sure that truck operators clean any spills with a view toward ensuring their safety and keeping our streets safe and clean. The requirements to clean spills and set carts back where they belong during collection are incorporated into our contract. We are currently working with our contractor to rectify any issues with collection.

The idea to schedule City sweepers to follow after collections is excellent. We will work with the Street Department to see how we can schedule sweepers to work in coordination with collections made by our contractor.

Why aren't plastic bags included in curbside recycling?

Residents often ask why the City of Manassas does not accept plastic carrier bags in recycling. The machinery used to sort our recycling does not take plastic carrier bags and plastic film. Each day the recycling center must shut down the machinery for two hours to remove plastic bags that wrap around the machinery. The operation cost for that activity is \$130 (dollars) per minute.

Fortunately, many of our local grocery stores and schools work with fantastic local company that takes all of the bags and film— keeping thousands of pounds of waste out of landfills— to create beautiful and environmentally responsible outdoor products. In exchange, participants in their recycling program are eligible for community awards.



Why doesn't the City offer incentives for recycling?

The City is actually doing better with recycling than you might think. Over the past ten years, our cumulative recycling rate for residents and businesses has increased from 45% in 2010 to 56% in 2020. We're definitely heading in the right direction.

We've made a lot of changes in the way we recycle:

- Recycling Right vs. Recycling More

For many years, the big message was "Recycle!" without providing the public with information on what to recycle, where and when. That has led to something called "wishcycling" where people put everything that they think can be recycled into their recycling containers. This has led to high volumes of recycling contamination. In fact, it led to an international crisis in 2017 when China refused to take anymore recycling from the United States because 60% of it was trash. By focusing more clearly on what should go into recycling containers, we can all improve our recycling and reduce the cost of disposal.



Improving Education and Communication

The City of Manassas has worked hard to spread the word about recycling to as many groups of our residents and businesses as possible. We now have more tools at our disposal:

- City website
 - City Newsletter
 - School Visits
 - Keep Manassas Beautiful Schools
 - Videos
 - Social Media
 - Flyers
 - Stickers
 - Magnets
 - Postcards
 - Letters
 - Drop-off Days
 - Webinars
 - Reusable Shopping Bags
 - Improved City Ordinances
 - HOA visits
 - Tables at City Events
 - Bi-lingual information for our Spanish speaking residents
- Offering More Options

Recycling isn't just the material that goes into your recycling container.

The City offers:

- Yard waste and annual leaf collection that goes to Balls Ford Road for composting.
- Scheduled Household Hazardous Waste, Electronics, and Document Shredding drop-off days at the Manassas Transfer Station.
- Curbside collection of scheduled televisions, computer monitors and white goods.
- We're introducing curbside food recycling and organics collections.
- We're also working with partners to introduce improved glass recycling.

The Solid Waste Management Plan also provides the City with the option to include new opportunities for recycling for the next 20 years.

Why Aren't There More Adopt a Spot Locations in the City?

There are currently hundreds of locations available. Visit our Keep Manassas Beautiful webpage and you will find an [interactive map](#) that helps you find the perfect location for you. We have parks, athletic fields, streets, sites available for adoption. We're also working with the Stormwater team to include streams.

Why do we have to pay to use the landfills in Prince William County?

In 1975, Manassas was incorporated as an independent city, and as per Virginia law, was separated from Prince William County. The City of Manassas is not part of Prince William County, and your taxes are paid to the State of Virginia and to the City of Manassas.

Trash and recycling services are not paid through your taxes. The program is an enterprise fund that residents paid into directly through their utility bills.

When you visit Prince William County landfills, you are entering another jurisdiction and therefore subject to the charges that they levy for trash disposal.

Why can't we drop off paint any time we like?

The City of Manassas has no capacity or facility to collect and hold Household Hazardous Waste materials. The cost of collecting and disposing paint is very high. One of the most pressing issues within Virginia is the need for a [National Paint Stewardship Program](#) and greater [Extended Producer Responsibility](#). Getting these programs in place would allow retailers like Home Depot, Lowes, and Walmart to collect unused paint in their stores. This is already happening in other states.

The City works with Waste Management to organize scheduled drop-off days for Household Hazardous Waste, electronics and shredding. Waste Management pays for the cost of Household Hazardous Waste collection and disposal through a Special Use Permit that was agreed in 2008. The City pays for the electronics and shredding.

In order to introduce a paint collection program just for City residents to dispose of paint any time they want – we would have to raise the trash and recycling service fee considerably higher to accommodate the collection and transport.

We can't we recycle Styrofoam?

There are two reasons Styrofoam isn't allowed in recycle bins: density and contamination. Polystyrene foam is 95% air so it is not cost-effective to store or ship. It is often contaminated with food or drink, and it is difficult to clean because it is so porous. The Virginia legislature recently passed a bill [HB 1902 Expanded polystyrene food service containers; prohibition, civil penalty](#), that requires certain chain restaurants to stop using such containers by July 1, 2023, and sets the date for compliance by all food vendors as July 1, 2025.

What is the City doing to address litter in our parks and at events?

The City is currently working with Didlake to expand litter and trash collection to include collections along arterial roads within the City, events in Historic Downtown and parks, and an increase in the range and frequency of collections throughout the City including parks and other heavily used areas.

What about dog waste collection?

The collection and enforcement of dog waste is not currently handled by Refuse and Recycling. This area falls under the purview of Parks, Recreation and Culture, the Street Department, and Manassas City Police.

Draft Updated Solid Waste Management Plan 2020

Public Survey

Thank you for taking the time to review the new Solid Waste Management Plan for the City of Manassas, and for providing your comments and suggestions.

Curbside Trash and Recycling Service *

- Excellent
- Good
- Okay
- Neutral
- Needs Some Improvement
- Service is terrible
- Don't receive curbside service
- Not sure

Do you have any specific improvements to suggest for the curbside collection services?

Household Hazardous Waste, Electronics, and Shredding Drop-off Events for Residents *

- Excellent
- Good
- Okay
- Neutral
- Needs some improvement
- Events are terrible
- I never attended an event
- Not sure

Do you have any specific improvements to suggest for drop-off events?

Reducing Waste and Improving Recycling

- Make recycling mandatory for residents
- Make recycling mandatory for multi-family buildings and businesses
- Introduce drop-off collection points for glass
- Introduce curbside collection of organic food waste

Do you have any specific improvements to suggest for reducing waste and increasing recycling?

Options for large quantities of bulk waste or yard waste. Residents currently have 3 options for disposal of large volumes of bulk waste or yard waste. Which options have you used?

- Manassas Transfer Station
- Courtesy Truck
- Private Hauler

How do you prefer to receive trash and recycling information from the City of Manassas?

- Online (City of Manassas website)
- Social Media (Facebook, Nextdoor)
- City Connection Newsletter
- Flyers and Brochures
- Calling the Trashline (703) 257-8252
- From my HOA or Property Manager
- The Government Channel on TV
- From a friend/neighbor
-

What additional information/communication about trash and recycling services/programs do you think is needed?

Do you have any other ideas for how to improve trash and recycling services or suggestions for new programs or services? If so, please describe:

Thank you for participating in our consultation.

Please verify that you are human *

I'm not a robot reCAPTCHA
[Privacy](#) - [Terms](#)

Submit



Moving the City Forward on Our Streets

Transportation, congestion and ease of getting around the City of Manassas have consistently been identified as important issues in the citizen satisfaction surveys. The City of Manassas continues to work on multiple projects to improve our transportation network, address congestion and make it easier to drive in and around Manassas.

Traffic Signal Optimization

The City has recently finished a comprehensive upgrade to all of the computer hardware and software that controls and operates the City's 64 traffic signals. Transportation experts were engaged to optimize the signal timings at every intersection to improve traffic flow and better coordinate the traffic signals in order to move traffic more efficiently and reduce travel times.

Centreville Road Turn Lanes

Beginning in late June, the City will lengthen the southbound left turn lanes on Centreville Rd. at the intersection with Liberia Ave. This area experiences some of the largest backups, especially during rush hour. Both turn lanes will be lengthened back to Kincheloe Dr., adding additional turn lane capacity and lessening the potential spillover into the travel lanes. Combined with the signal timing optimization, these improvements will ease congestion and improve traffic flow through the intersection. This work should be completed before the end of the summer.

Route 28/Nokesville Road Widening

For residents who travel Route 28/ Nokesville Rd. south into Prince William County, you may have seen significant construction over the last several years to widen this road to six travel lanes. The City will be widening its portion of Route 28 to six lanes beginning at the intersection of Godwin Dr. to the corporate limits to match up with the work being done by Prince William County. This project adds capacity and, combined with the PWC work, will enable traffic to move through the corridor

more efficiently. In addition, there will be a shared use path that will allow for safe pedestrian and bicycle movement in this corridor.

The City will be installing a traffic signal at the end of the exit ramp off of the northbound lanes of the Prince William Parkway along with other safety improvements to prevent vehicles from crossing over all lanes of traffic on Nokesville Rd. in order to access the left turn lanes at Godwin Dr. The work will increase the capacity of those same left turn lanes to prevent traffic from backing up, which will make travel through this corridor easier.

We expect this project to go out to bid by the end of June 2020 with construction to begin this fall.

Grant Avenue

This project will enhance Grant Ave. between Wellington Rd. and Prince William St. This is a comprehensive streetscape improvement project that includes new water and sewer lines and the undergrounding of the remaining above-ground electric lines along this section of Grant Ave. A major part of this project will be to reduce this section of Grant Ave. from four lanes to two. While this may cause residents to question how this helps traffic, three separate transportation engineering firms have confirmed that this lane reduction will work and traffic will move more smoothly through the corridor.

The City has incorporated citizen feedback from four community meetings on this topic to increase the number of crosswalks in the corridor from one to four, to maintain the existing on-street parking and to have both dedicated turn lanes as well as dedicated transit bus pull offs. There will be a new shared-use path that will connect with existing shared-use paths along Wellington Rd. to increase the safety of both pedestrians and cyclists. Coupled with the construction of the new Public Safety Facility next to the Grant Ave. Shopping Center, these two projects will transform this corridor.

Utility work should begin later in 2020 and the transportation improvements to Grant Ave. should begin in 2021.

Sudley Road Third Lane

This improvement project will create a third travel lane on northbound Sudley Rd. beginning at Grant Ave. to the City limits at Godwin Dr. The City received federal funding for this project (100%) through VDOT's "Smart Scale" program that evaluates projects that help to significantly address congestion.

Once completed, northbound Sudley Road will have three travel lanes, increasing capacity by 50% and providing a seamless transition to the existing three travel lanes in Prince William County. There will also be sidewalk and crosswalk improvements to allow for safer pedestrian movement through the corridor.

Design plans are currently at 60% and we expect final construction plans to be complete and ready for bidding in 2021.

Dean Drive Extension

Currently, Dean Dr. is in two separate sections – one section is off of Wellington Rd. and the other section off of Nokesville Rd. ends in a cul-de-sac. This project will extend the section off of Nokesville Rd. and connect the two separate pieces into one continuous road. This project is currently scheduled to be bid for construction in March 2021.

The goal of all of these projects is to enhance the City's transportation network, improve safety and reliability and help relieve congestion. As part of our recently adopted Comprehensive Plan, the City has developed a Transportation Master Plan that will be the foundation for determining future transportation improvements including new sidewalks, bike paths, and other multi-modal projects in addition to traditional road projects like the ones listed in this article. More information about the Transportation Master Plan as well as each of these individual projects may be found on the City's website www.manassascity.org.

A Message from the City Manager



City Manager
W. Patrick Pate

It is difficult to know where to begin this month. We are still in the midst of the pandemic although we have seen a loosening of some pandemic restrictions due to reductions in positive COVID-19 cases and hospitalizations. Efforts to combat systemic racism are now in the forefront of our civic dialogue and nightly news. The economy is going through a significant economic downturn with many of our neighbors unemployed and businesses struggling to survive. Any of these factors by themselves represent a significant event impacting our communities, and together, they may be foreshadowing significant changes in our future.

Let me start with the pandemic. We are all seeing businesses work to reopen by adopting changes to protect customers from unintentionally spreading the virus. Manassas City Public Schools are looking at state guidelines to try and develop a plan that will provide educational services for the new school year. Large gatherings are still banned and it is still recommended that we wear face coverings and stay six-feet apart from non-family members. While it is tempting to ignore these recommendations in the name of individualism, it is important to temper this desire with the need for social responsibility. Each of us taking individual precautions protects everyone around us, but it takes the cooperation of everyone around us to protect each of us individually.

Following the guidelines is necessary to protect our families.

On the second issue, I am sure that you are as saddened and upset as I am with the actions of individuals who abused their oaths to protect and serve their communities. Racism and intolerance should not be tolerated in any form, and individuals have the constitutional right to express their opinions on these issues. The Manassas City Police Department has demonstrated their commitment to ensuring that peaceful assemblies can be held peacefully; that constitutional rights are recognized and upheld; and that residents and visitors alike understand that they can trust and rely on them to protect and serve everyone equitably. Our Police Department strives to adhere to the highest standards of modern-day policing, including the use of de-escalation techniques and using the least amount of force necessary in every situation. Reviews are also conducted on every use of force action by the Department. We have many dedicated law enforcement officers serving our community with integrity and a commitment to protect the rights of all people without infringing on those same rights. I appreciate the support that they are given daily from all parts of our community.

In the midst of all of these changes, July is also the beginning of a new budget year for the City of Manassas. The economic downturn is impacting the City. Revenues such as meals tax, sales tax and any number of rentals and charges for services have all been lower and will continue to be lower due to the economic downturn. In reaction to these changes, the City has reduced expenditures in the current fiscal year and postponed expenditures planned for the new fiscal year. Fortunately, due to the good economic year we were having prior to the pandemic, conservative financial planning and by reducing expenditures, we do not expect to need any significant reductions of services to the community. You will see some changes in how we deliver services, and in particular, a

shift to having customer interactions electronically and by phone. You will also see new structures designed to promote physical distancing to protect you and City staff alike.

One of the items in the new budget that has been a significant topic of conversation is a new library agreement with Prince William County. This agreement will provide a new branch library in the City at 10104 Dumfries Rd. which is in the Wellington Shopping Center adjacent to Giant Food. This branch, which will open by February 2021, will be in addition to access all current Prince William library facilities and, in fact, all DMV area libraries, if they are more convenient. Enhancement to library services will also be seen in the renovations to Central Library on Centreville Rd., which are nearing completion.

Historic Downtown Manassas Goes Bigbelly

The next time you're in Historic Downtown Manassas, you may notice our new trash and recycling containers. The City has installed the latest technology to reduce litter and provide visitors with a more efficient way to dispose of trash and recycling. Bigbelly units are solar-powered and compact waste to hold five times as much waste as a traditional trash bin. Through smart sensors, the units communicate to a centralized dashboard to alert crews when stations are ready for waste and recycling collection.



Library Services in the City

On June 8, 2020 the Manassas City Council signed an agreement with Prince William County on Library Services. The agreement, signed by the Board of County Supervisors on June 16, provides for a library branch in the City of Manassas located at 10104 Dumfries Road (at the corner of Dumfries and Wellington Road).

This Manassas Branch will be run by the Prince William Library System and be leased by Prince William County. City of Manassas citizens will be able to continue using Prince William County libraries and the new Manassas Branch on Wellington/Dumfries Rd., as will Prince William County residents.

The terms of this agreement between the City of Manassas and Prince William County are for ten years beginning July 1, 2020 through June 30, 2030 with a five-year automatic renewal term after that unless terminated by either party. The City will purchase the furniture and fixtures,



including shelving, for the completion of the build-out of the Manassas Branch with an estimated cost to the City of \$500,000.

“Libraries are an essential way that communities ensure access to materials and free educational resources for all residents,” said City Manager W. Patrick Pate. “Having a branch in the City limits will provide our residents with enhanced opportunities to take advantage of these resources as well

as provide a great space for community activities.”

For library services in the City of Manassas and continuing in the Prince William County System, the City of Manassas will pay \$1.2 million annually with a three percent escalator. The Manassas Branch will be open to the public on or before February 1, 2021.

Inspections still happening, virtually

“Can you please open the electrical panel box?” Building Development Manager Eric Lowe asks a customer during an inspection for an upgraded electrical system. In ordinary times, Eric would be shining a light inside the box in the customer’s basement, but today he’s peering at his phone and asking for a close-up view—all from his office.

When the pandemic made social distancing the new normal, the permit and inspections staff quickly found that virtual inspections could keep building projects on track, and that most inspections could be done quickly and safely from a distance. “Some inspections like those for water heater installations are simple and lend themselves to remote inspections very well,” Lowe explains. Other inspections require a little more effort from homeowners.

“We try to walk the homeowners through some inspections and let them know in advance that they may need a screwdriver to open up a panel, or a tape measure to show us the dimensions of something or to measure a clearance. Sometimes we have to explain where to find connections, bolts; or even what a nosing or a stair tread is,” Lowe says.

When contractors are on a Facetime or Zoom call, the inspections go much more quickly as they know where to find key mechanical parts.

When in-person inspections are necessary for projects like decks, Lowe

asks customers to place their plans outside, and lets them know when he will be there for the inspection. For more complex commercial and residential project inspections that cannot be done virtually, staff maintain social distancing and avoid contact with contractors as much as possible.

Preparation is important for virtual inspections. Permit Technicians Chris Hogan and Eve Aguilera make the initial contact with customers who request an inspection, and if the inspection can be done remotely, they confirm that the customer can use Facetime or Zoom and that they have a good Wi-Fi connection.

“The comments about the virtual inspections have been really good,” Hogan reports.

Construction Plans Examiner Ernie Deihl, who helped implement the virtual system, says the startup has been smooth. He has also heard positive feedback. “All the comments I have received have been positive with the exception of some customers who have not had good internet reception.”

What began as an effort to keep customers and inspectors safe during the pandemic may become a permanent, more convenient option for customers who need inspections.

“As long as there is enough cellular connectivity on the customer’s end, the inspections have been going well. They

work great for smaller jobs,” Deihl says.

“I do believe that most homeowners and contractors performing smaller projects love the option of being able to do a virtual inspection simply for the convenience. I hope that once we go back to standard operation procedures, that we can keep virtual inspections as a tool for doing smaller and less complicated projects.”



Make an Appointment

Walk-Through Wednesdays

If you need to discuss a permit for a project of limited scope, we're now open for appointments at manassascity.org/ds
703-257-8278



The City of Manassas Happenings

Find these events and more at www.visitmanassas.org.

Farmer's Markets on Thursdays and Saturdays are now open. Don't forget your face masks.

Now - Aug., Art Factory (formerly Center for the Arts at the Candy Factory) art and performance classes and camps - www.virginiaartfactory.org

Now - Nov. 15, - Manassas Museum exhibit, **Consider the Source: Interpreting Manassas History on Paper**, virtual tours and open to public when Museum opens - manassasmuseum.org

Tuesdays, 8 a.m., - **Virtual Hands-On History** - facebook.com/cityofmanassasleisure

Wednesdays at Noon, - **Facebook Live Spotlight Talks** - facebook.com/cityofmanassasleisure

Thursdays, now - Sept.10 at 8 a.m. - **United States Navy Band Instruments** from a distance virtual performance; facebook.com/HarrisPavilion

Thursdays, now - Sept. 3 at 5:30 p.m. (weather permitting) - **Historic Downtown Manassas Walking Tours** from the Manassas Museum. manassasechoes.com or call 703-257-8453.

July 7, 7 p.m., - **Virtual Acoustic Tuesday** concert with Daniel Roberts - facebook.com/HarrisPavilion

July 11, 8 a.m. - Noon - **Household Hazardous Waste and Electronics Drop Off Day**, Manassas Transfer Station, 8305 Quarry Road - manassascity.org/trash

July 12, 3 p.m. - **Virtual Sunday Concert with Classic Spotlight** - facebook.com/HarrisPavilion

July 14, 7 p.m. - **Virtual Acoustic Tuesday concert with Scott Kurt** - facebook.com/HarrisPavilion

July 18, 8 p.m., **Virtual Saturday Night Concert with Tim Campbell & the Tropical Attitudes** - facebook.com/HarrisPavilion

July 19, 3 p.m. **Virtual Sunday Concert with Marshall Artz** - facebook.com/HarrisPavilion

July 21, 7 p.m., **Virtual Acoustic Tuesday concert with Jason Masi** - facebook.com/HarrisPavilion

July 26, 3 p.m. **Virtual Sunday Concert with Prince William County Band** - facebook.com/HarrisPavilion

July 28, 7 p.m., **Virtual Acoustic Tuesday concert with Shane Gamble** - facebook.com/HarrisPavilion

July 29, 3 p.m. **Stories of Preservation and Progress** at the Manassas Museum - Reservations required, also broadcast on facebook.com/cityofmanassasleisure; manassasmuseum.org

August 1, **Household Hazardous Waste, Electronics and shredding drop-off day**, Manassas Transfer Station, 8305 Quarry Road - manassascity.org/trash

Rent the Courtesy Truck

Did you know that residents can rent a City truck? The Courtesy Truck is a working Street Department truck that is rented to residents who need to dispose of bigger yard waste or DIY projects. The truck is delivered at the end of the work day (3pm) - residents load the truck - and the crew comes by to pick it up the following morning at the start of the day (7am) to dispose of the contents. For more information on how to rent the Courtesy Truck visit: www.manassascity.org/trash or call (703) 257-8256.

Have Your Say on the future of Trash & Recycling in the City of Manassas

Now is your opportunity to contribute your thoughts and ideas on trash and recycling as goals and objectives are set for the next 20 years.

The Solid Waste Management Plan (SWMP) is a document that helps the City of Manassas develop methods to manage the trash and recycling program. Planning for the future means looking at what has been done so far and thinking about how the community will grow and the new technologies that may be available to help improve recycling and reduce the amount of trash going to landfill.

Please take a moment to review the Draft Solid Waste Management Plan and give your feedback by completing a short online survey. The information that we receive will help us improve trash and recycling services for the City of Manassas.

Visit www.manassascity.org/trash for more information.

Get Social!

Visit the City at www.manassascity.org.

www.facebook.com/cityofmanassas

www.twitter.com/cityofmanassas

www.flickr.com/photos/cityofmanassas

www.instagram.com/cityofmanassas

www.youtube.com/user/manassascityva

To contact the City of Manassas Connection newsletter, email prrince@manassasva.gov

City of Manassas and Manassas Public Schools

City of Manassas Council

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Vice Mayor Pamela J. Sebesky 571-330-5514
Michelle Davis-Younger 571-206-8433
Theresa Coates Ellis 571-247-6729
Ian T. Lovejoy 703-828-7592
Ralph J. Smith 703-303-8530
Mark D. Wolfe 703-257-1702

City of Manassas School Board

Chairman Sanford S. Williams 571-535-6364
Vice Chair Kristen Kiefer 571-606-0285
Scott M. Albrecht 571-606-1129
Tim Demeria 703-895-4856
Suzanne W. Seaberg 703-869-1171
Lisa A. Stevens 571-535-0652
Robyn Williams 571-535-7510

CITY CONNECTION

What's Happening at Annaburg?

As you may have noticed, work has begun on the stabilization of Annaburg Manor on Maple Street. The circa 1892 manor house and property was purchased by the City of Manassas last year to be used as a public park. Recently the City Council determined to use some of the proceeds from the sale of land at the Landing at Cannon Branch to install a new, historically accurate slate roof on the manor house and repair the original cornice and gutter system.

The exterior of the manor house will be cleaned and a variety of painting options are being considered. This will not only stabilize the manor house, preventing further deterioration, but improve the appearance of the house for the community.

The work on Annaburg Manor is expected to last through the fall and is being done by The Durable Restoration Company. This company is highly skilled in preserving and restoring historical buildings and landmarks. Additionally, the Department of Community Development will host an appropriately physically distanced community meeting on the grounds of the manor in the early part of the fall where there will be an opportunity to hear from preservationists working on the project.

If you have questions or would like to be notified about opportunities for learning more about the project, please email Liz Via-Gossman at evia-gossman@manassasva.gov



Safest in Car

Safest from afar

Safest for your head

Safest stopping the spread



2020 CENSUS IN MANASSAS

Don't forget to Count me

EVERYONE COUNTS

Count **everyone** who lives in your house: children, parents, friends, roommates and renters

Your information is protected & confidential
Private information cannot be shared with anyone or any other federal, state, or local agency

Respond by mail, phone, or online.

Learn more at:
www.2020Census.gov

A Message from the City Manager



City Manager
W. Patrick Pate

Last month I celebrated my birthday. It was not a big year ending in a zero or even a five. It was on a Thursday, so it was a workday filled with typical things. There were virtual meetings, phone calls, issues to respond to, concerns to address from Council, citizens and my co-workers. My family gathered for a dinner of things that I love to eat. I am not a particularly sentimental person, but it was a good day like so many birthdays before and hopefully many more to come.

Birthdays allow us to take stock of the year that has passed and prepare for the year to come. We can generally be thankful that we have made it through another year. This is especially true if we are following the old proverb and working towards being more healthy, wealthy and wise.

Health is far too easy to take for granted. Health gives us the ability to have life and a quality of life worth living. Health for me comes in several forms. We often think of physical health and a goal I wrote for myself many years ago was to be able to dance at the weddings of my grandchildren. A lofty goal since I still don't have any grandchildren or even daughters-in-laws. I also include mental and spiritual health in my mind under the term of being healthy. I suspect it goes back to my many years of reciting the scout oath including the phrase, "to keep myself physically strong, mentally awake and morally straight."

Wealth is tougher to determine. It is often equated with possessions or money, but I think it is more complex. I see wealth as more of an abundance of valuable goods or resources that have great value to you. It could be a wealth of knowledge, fortune, or good friends. As was said in speaking about the pursuit of money in an old movie, "You can't take it with you, Mr. Kirby. So, what good is it? As near as I can see, the only thing you can take with you is the love of your friends." Through my life experiences I have seen many individuals without significant material possessions who have a wealth that I can only aspire to emulate.

That leads me to being wise. I see wisdom as the ability to use the collective knowledge, experience, understanding, common sense and insight that a society has developed in the pursuit of choices that are beneficial and productive for society. Being wise is hard work. It is much easier to understand what is good for us (exercise and a good diet for example) than it is to follow through with applying that understanding in our everyday life. It is much easier to tell others what you think they should be doing, as every parent can attest.

So, if you are still reading this you may be wondering where is this going. As I look at the City of Manassas, I see a community with a strong diversity of backgrounds, ethnicities, opinions and ideas. The City is a community that is financially healthy; has a wealth of resources and talented people; and is seeking to use our collective wisdom to move the community forward. As we approach the 150th birthday of the City of Manassas in 2023, will we be able to look at our past and say we have made the progress that we wanted towards being a more healthy, wealthy and wise community?

I hope so, because birthdays are a good time to take stock of where we have been and make plans for the future to come.

Good news in the City

Did you know. . .

That the bathrooms at City parks are now open? It's true. Now, when you are spending a morning or afternoon with the kids at one of our 16 parks you can use the facilities if you need to. Good news!

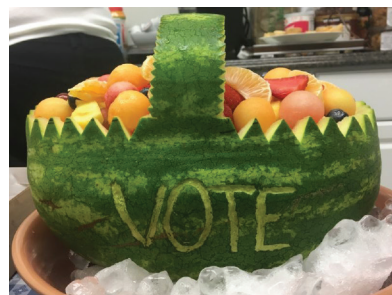
Manassas Library

Great news! In anticipation of our very own branch of the Prince William Public Library System in the City. A "Friends of the Manassas City Library" is forming now in order to support future activities at the branch which will open later this year and be located at the Wellington Shopping Center on Dumfries Road. If you are interested in becoming a general member of the Friends or taking an active role as board members, please contact Connie Gilman at 703-335-5267 or conniewg51@gmail.com. All are welcomed!

Voting

Did you know. . .

With COVID-19 still in our midst and social distancing still a good practice to observe, you can vote absentee for the presidential election. All registered voters who wish to vote in the November general election can request an absentee ballot by visiting www.manassascity.org/vote. Once the ballots are received in the voter registration and elections office, you may appear in person and vote or you may vote from your home. Either way, your vote is counted.



Share the Road

Warm weather brings out more pedestrians, bicyclists, and motorists. The Manassas City Police Department encourages everyone to follow these tips so we can all share the road safely!

Tips for Drivers

- Stop for pedestrians at crosswalks
- Slow down and don't drive distracted
- Yield to bicyclists and pedestrians when turning
- Allow three feet when passing bicyclists
- Don't pass a stopped vehicle
- Always wear your seatbelt!

Tips for Pedestrians

- Plan a route with safe crossings
- Cross in well-lit areas with the best view of traffic
- Dress to be seen, but never assume



drivers see you

- Walk on sidewalks facing traffic
- If there's no sidewalk, walk facing traffic
- Watch for cars backing up, especially in parking lots and driveways

Tips for Bicyclists

- Ride with Traffic
- Stop and look both ways before entering the street
- Use hand signals when turning
- Ride defensively- anticipate actions of drivers and watch for hazards

For more information and safety tips visit <https://tzdva.org>.

Trash & Recycling Notes

Bulk Waste/Large Item Collection

Beginning Aug. 1, 2020 – the City will schedule all bulk waste/large item collections for the Thursday trash and recycling route on Wednesdays. This measure will reduce the volume of bulk waste/ large items left out at the curb outside the collection period, encourage residents to call and schedule their items for collection, and support our contractor now working with a reduced staff due to ongoing issues stemming from outbreaks of COVID-19.

Please call the Trashline at (703) 257-8252 during regular office hours to schedule bulk waste/large item collections.

Rent the Courtesy Truck for your bigger home projects

Did you know that you can rent a City truck? The Courtesy Truck is a working Street Department truck that is rented to residents who need to dispose of their bigger yard waste or DIY projects. The truck is delivered at

the end of the working day (3pm) – you load the truck – and the crew comes by to pick it up the following morning at the start of the day (7am) to dispose of it. For more information on how to rent the Courtesy Truck visit: www.manassascity.org/trash or call (703) 257-8256.

Have Your Say on the future of Trash and Recycling in the City of Manassas

Now is your opportunity to contribute your thoughts and ideas on trash and recycling as we set our goals and objectives for the next 20 years.

The Solid Waste Management Plan

(SWMP) is a document that helps the City develop ways to manage the trash and recycling program. We plan for the future by looking at what we have done so far. We also think about how our community will grow and the new technologies that may be available to help us improve recycling and reduce the amount of trash going to landfill.

Please take a moment to review our Draft Solid Waste Management Plan and then tell us what you think by completing a short online survey. The information that we receive will help us improve trash and recycling services for the City of Manassas.

Visit www.manassascity.org/trash for more information.



The City of Manassas Happenings

Find these events and more at www.visitmanassas.org or www.facebook.com/harris pavilion

Farmer's Markets on Thursdays and Saturdays are now open. Don't forget your face masks.

Now - Nov. 15, - Manassas Museum exhibit, **Consider the Source: Interpreting Manassas History on Paper**, virtual tours and open to public when Museum opens - manassasmuseum.org

Tuesdays, 8 a.m., - **Virtual Hands-On History** - [facebook.com/cityofmanassasleisure](https://www.facebook.com/cityofmanassasleisure)

Wednesdays at Noon, - **Facebook Live Spotlight Talks** - [facebook.com/cityofmanassasleisure](https://www.facebook.com/cityofmanassasleisure)

Thursdays, now - Sept. 10 at 8 a.m. - **United States Navy Band Instruments** from a distance virtual performance; [facebook.com/HarrisPavilion](https://www.facebook.com/HarrisPavilion)

Thursdays, now - Sept. 3 at 5:30 p.m. (weather permitting) - **Historic Downtown Manassas Walking Tours** from the Manassas Museum. manassasechoes.com or call 703-257-8453

Aug. 4 at 7 p.m. - Virtual Acoustic Tuesday featuring **Tender Polman**

Aug. 11 at 7 p.m. - Virtual Acoustic Tuesday featuring **Ashleigh Chevalier**

Aug. 15 at 8 p.m. - Virtual Saturday Night Concert featuring **Justified**



Aug. 16 at 3 p.m. - Virtual Sunday Concert - **Washington Balalaika Society**

Aug. 18 at 7 p.m. - Virtual Acoustic Tuesday featuring **Timmie Metz**

Aug. 23 at 3 p.m. - Virtual Sunday Concert with the **Prince William Community Band**

Aug. 25 at 7 p.m. - Virtual Acoustic Tuesday featuring **Shane Hines**

Sept. 1 at 7 p.m. - Virtual Acoustic Tuesday featuring **Shane Gamble**

Sept. 5, 8 a.m. to noon - **Household Hazardous Waste and eWaste drop off day** at the Manassas Transfer Station, 8305 Quarry Road

Sept. 8 at 7 p.m. - Virtual Acoustic Tuesday featuring **Jason Masi**

Sept. 15 at 7 p.m. - Virtual Acoustic Tuesday featuring **Jason Teach**

Sept. 21 at 7 p.m. - **Town Hall Meeting** (if conditions allow) @ Manassas Regional Airport, 10600 Harry Parrish Blvd.

Sept. 22 at 7 p.m. - Virtual Acoustic Tuesday featuring **James Shaffer**

Sept. 29 at 7 p.m. - Virtual Acoustic Tuesday featuring **Joe Downer**

Oct. 3, 8 a.m. to noon - **Household Hazardous Waste and eWaste drop off day** at the Manassas Transfer Station, 8305 Quarry Road

Oct. 6 at 7 p.m. - Virtual Acoustic Tuesday featuring **Shane Gamble**

City of Manassas and Manassas Public Schools	
City of Manassas Council	City of Manassas School Board
Mayor Harry J. Parrish II 703-257-8213	Chairman Sanford S. Williams 571-535-6364
Vice Mayor Pamela J. Sebesky 571-330-5514	Vice Chair Kristen Kiefer 571-606-0285
Michelle Davis-Younger 571-206-8433	Scott M. Albrecht 571-606-1129
Theresa Coates Ellis 571-247-6729	Tim Demeria 703-895-4856
Ian T. Lovejoy 703-828-7592	Suzanne W. Seaberg 703-869-1171
Ralph J. Smith 703-303-8530	Lisa A. Stevens 571-535-0652
Mark D. Wolfe 703-257-1702	Robyn Williams 571-535-7510

Get Social!
 Visit the City at www.manassascity.org.

www.facebook.com/cityofmanassas

www.twitter.com/cityofmanassas

www.flickr.com/photos/cityofmanassas

www.instagram.com/cityofmanassas

www.youtube.com/user/manassascityva

To contact the City of Manassas Connection newsletter, email prrince@manassasva.gov

CITY CONNECTION

Need Help Getting Back to Work? Or Getting More skills?

If you need help getting back to work or acquiring skills to get a job that will bring you and your family better pay, this program might be the solution. Northern Virginia Community College (NOVA) is partnering with the City of Manassas, Prince William County, Virginia Career Works and the SkillSource Group to ensure that community members affected by COVID-19 are able to get back to work by receiving FREE education and workforce support services. The City of Manassas and Prince William County's leadership forged this strategic partnership with a combined \$1,900,000 in funding from the CARES Act to launch the **ELEVATE** program to provide free resources for displaced workers. This also supports businesses by teaching new skills to the workforce.

There is no cost to the participant and the services include:

- job training
- paid work experience
- career coaching
- financial coaching
- online job fairs
- virtual training
- transportation
- uniforms (if needed)
- work tools

This unique partnership offers participants a complete range of services from obtaining free education and certification, to support services such as transportation and stipends, and ends with job placement services, and in some programs, guaranteed interviews with a local employer. These educational programs can be completed in a short few weeks, so interested participants need to act now to receive the full benefit of ELEVATE's workforce program. Applications need to be in by Nov. 6, 2020.

The earlier a participant can go through the application process, the more resources may be available. Funds for the program will continue until exhausted.

Examples of available training include:

- IT and computer skills, to include Certified Ethical Hacker (CEH); CompTIA A+
- Healthcare and dental, to include Certified Pharmacy Technician; Certified Clinical Medical Assistant (CCMA); Nurse Aide Preparation (CNA); Certified Billing & Coding Specialist (CBCS)
- Administrative Assistant Training: Intensive Program
- Commercial Driver's License (CDL A)
- American culture and language Institute (ESL) to include Intensive Reading & Writing; Intensive Speaking & Listening; Part-Time Career Readiness; Part-Time ESL; Support ESL Grammar Review

Program participants will also have access to interview preparation and job placement assistance after the completion of their training. This wraparound workforce program enhances the opportunity for participant success with support from start to finish. From the first step of applying for funding through completion of the ELEVATE program, this workforce grant program is designed to be accessible, streamlined and results-driven.

The next step is to apply. For more information or to apply, contact Ziyoda Crew at 571-536-1979 or CARESjobs@vcwnorthern.com or visit www.vcwnorthern.com.



Meet our New Fire & Rescue Chief

Garrett comes to the City with more than 32 years of experience in public safety. He has experience managing a combined fire and rescue system, like the City's, with both paid and volunteer staff. Garrett served as Fire Chief in Winchester, Virginia and before that worked in Fairfax County, Virginia where he served as Deputy Fire Chief. In his tenure at Fairfax, he served as Deputy Chief for Support Services, Operations Shift Deputy and Emergency Medical Services at differing times. In 2009, he was awarded the Fairfax County Fire and Rescue Department Firefighter of the Year. He has received Chief Fire Officer and Chief Emergency Medical Services Officer designations thru the Center for Public Safety Excellence.



A Message from the City Manager



City Manager
W. Patrick Pate

The last six months have been a challenge for the community and for City employees who have continued to provide all City services, mostly in person with public interaction. Public safety, transportation services, utility delivery, social services and conducting public business have all continued during the pandemic. In order to do this, most City employees have experienced significant changes to their job responsibilities, conditions and work schedules. Despite the challenges, they have continued to adjust to the changes and deliver necessary public services to the community without reducing services for our residents. It is a testament to their core values of teamwork and respect.

Each year in the fall the City recognizes City employees who have received letters and notes of thanks and appreciation from residents and colleagues. These notes show their commitment to public service and willingness to go above and beyond their typical day-to-day responsibilities to serve the community. A committee of staff members, that has been recognized in prior years, reviews each letter and selects individuals to receive recognition based on the core values exhibited in performing these acts of sacrificial public service. Over 100 nominations were reviewed by the committee this year.

Staff members from Public Works – Streets, Water and Sewer Utilities and Electric Utilities were all selected for the

“City Beat” Award. These individuals were all nominated by community members in recognition of efforts like helping provide food security for individuals in our community, many of whom are suffering due to the pandemic and loss of jobs; working through storms and after hours to make sure that individuals would not have to suffer without power; and providing outstanding customer service to determine what was causing a homeowner problem, and then making sure that the actual problem was fixed right the first time. Individuals recognized this year for this award are: Danny Ridgeway, Mark Carter, Chris Frazier, Tommy Queen, Jason Roberts, Allison Rock, Robert Conners, Fred Brown, Tim Hogan, Shawn Dunford, Bill Gormours, Matt Holloway, Keith Keen, Michael Kirby and Cheri Seeba.

The highest recognition is called the “Above & Beyond” Award. This year two individuals were recognized for their outstanding teamwork in working mostly behind the scenes to make sure that City services were delivered and issues addressed during the pandemic.

The first staff member recognized with this award is Amelia Gagnon who is the City Emergency Management Coordinator working in the Fire and Rescue Department. Amelia works full-time helping other departments and the City as a whole plan and prepare for all types of emergencies. When a “State of Emergency due to COVID-19” was declared in the City, Amelia became the go to person for all manner of departmental needs related to the pandemic. She worked with regional bodies to keep our efforts coordinated and made sure that we knew where PPE (personal protective equipment) could be obtained and stored. If you have been to one of the free community testing sites for COVID-19, Amelia was the person in the background making sure that the testing event took place. She has worked tirelessly to make sure the community and the organization could respond as seamlessly as possible to the pandemic.

Jerry Burke is the acting Purchasing Manager working in the Finance Department. Despite being short-staffed in Purchasing, Jerry has been in overdrive working to make sure that supplies and contracts necessary to deal with the pandemic were put in place. He had to do this not only within the typical strict state and local procurement policies and laws, but also within a whole new set of federal guidelines that were being sent out and revised often on a weekly basis. He made sure we had all of the necessary items to provide a safe environment for staff members when delivering services to the community and to prepare City facilities to operate within new guidelines. Jerry had an unprecedented five different written nominations along with untold numbers of verbal thanks for his work.

It is working with these types of dedicated City employees that makes the City operate so well. I want to thank each of them, and in particular the award nominees, for all of the hard work and dedication to public service that they have shown during this challenging year. City Council has expressed, on behalf of the community, appreciation to staff for all of the efforts they have taken to maintain high levels of service for our residents. I am extremely proud of the way they have risen and continue to rise to the challenges we are facing this year.

Remember to continue to follow best practices so we can all stay safe and healthy,

W. Patrick Pate



There's an Election This Year

Soon City of Manassas voters will be voting not only for president, but for U.S. Senate, U.S. House of Representatives and local elections as well. Local elections include the mayoral race, council members and school board members. There are also two proposed Constitutional Amendments on the ballot.

To find out who is on the ballot and become familiar with the proposed Constitutional Amendments before you vote, visit www.manassascity.org/vote. Information about voting in this election is on the City's website.

However, this year, with the global pandemic still looming, voters may decide that voting absentee is the best choice for health and safety reasons. Effective July 1, 2020 qualified voters may vote in person or by mail beginning up to 45 days before the election. To apply for an absentee ballot, visit vote.elections.virginia.gov.

For this election and only for City of Manassas voters, a new DROPBOX

has been installed behind the General Registrar's Office at 9025 Center Street where it is monitored 24 hours a day, 7 days a week by surveillance cameras and emptied several times a day by the Registrar. If voters wish to drop off their absentee ballot in this box before the election or on election day, they should feel secure in the knowledge that each vote is being counted. On election day, there will be drop boxes at each precinct for voters' convenience.

The following is a list of voting dates to remember:

- Oct. 13, Last day to register to vote
- Oct. 23, Last day to request a vote by mail ballot
- Oct. 24 & Oct. 31, Saturday hours at City of Manassas Voter Registration Office, 9 a.m. to 5 p.m. for early voting
- Oct. 31, Last day to vote early in-person
- Nov. 3, Presidential Election, polls open 6 a.m. to 7 p.m.
- Mail-in ballots must be received

by noon on Nov. 6 and must be postmarked by Nov. 3.

www.manassascity.org/vote



Trash & Recycling Note

City of Manassas Trash and Recycling Takes the Lead

The City of Manassas has a seat at the table when it comes to planning the future of trash and recycling in Virginia. Trash and Recycling Coordinator Monica Boehringer is now President of the Virginia Recycling Association and Chair of the Northern Virginia Regional Commission on Solid Waste. Congratulations Monica!

Fall Leaf Collection

Get your leaves ready! The City's annual curbside leaf collection program will begin the week of Oct. 26. Visit the City's website www.manassascity.org to see when your leaves will be collected. Below are some helpful reminders to get leaf collection off to a good start:

- Make sure to rake leaves to the curb and not the street.
- Make sure to keep storm drains

open. Don't rake leaves near or in storm drains.

- Park cars away from the leaves once they are ready for pickup and please do not let children play in them once they are set out at the curb.
- Leaves in plastic bags will not be collected.

Trash and Recycling Online Consultation Closes Oct. 30

The City is looking for input on trash and recycling as we set our goals and objectives for the next 20 years. The Solid Waste Management Plan (SWMP) is a document that helps the City develop ways to manage the trash and recycling program. The City plans for the future by looking at what has been done so far. Thought is also put into how the community will grow and the new technologies that may be available to help the City improve recycling and reduce the amount of trash going to

landfill. Please take a moment to review the Draft Solid Waste Management Plan and then complete a short online survey. The information that is received will help improve trash and recycling services for the City of Manassas. Visit www.manassascity.org/trash for more information.

Trash & Recycling welcomes a new team member

The City's Trash and Recycling Department has always been a busy place. As our community grows and changes – so does the need for a hand to keep everything running smoothly. Please welcome Jill Spall as she joins the team as a part-time staff member.

If you have a question about trash or recycling - or would like to become a Keep Manassas Beautiful volunteer, contact Jill at (703) 257-8342.

The City of Manassas Happenings

Find these events and more in the City of Manassas, Virginia. Look forward to more events in the future.



Farmer's Markets on Thursdays and Saturdays are now open. Don't forget your face masks.



Now - Nov. 15 - Manassas Museum exhibit, **Consider the Source: Interpreting Manassas History on Paper**, open to public when Museum opens – manassasmuseum.org



Wednesdays at Noon - **Spotlight on History Virtual Talks** - Tune into facebook.com/cityofmanassasleisure for an interesting look at local history.



Oct. 3, 8 a.m. to noon - **Household Hazardous Waste and eWaste drop off day** at the Manassas Transfer Station, 8305 Quarry Road



Oct. 6 at 7 p.m. - Virtual Acoustic Tuesday featuring **Shane Gamble**



Oct. 16 & 23 at 6:30 and 7:30 p.m. - **Cemetery Tours** - \$5 (weather permitting) – Explore the Manassas City Cemetery with the Manassas Museum. Reservations and masks are required, tour size is limited, and social distancing guidelines will be followed; reserve at manassasechoes.com or call 703-257-8453.



Oct. 24 from 1 to 5 p.m. at the Harris Pavilion - **Artists Inventory Sale** - Nearly 20 local and regional artists (socially distanced) will sell original artwork in time for the holiday season



Oct. 24 from 7 - 9 p.m. - **Spirits of Liberia Tour** @ Liberia House - \$12 adults/\$6 those under 12 - Visitors often ask if Liberia House is haunted. Judge for yourself during this drop-in program that includes short, family-friendly historical

talks, activities, and self-guided tours of the house! Reservations and masks are required, tour size is limited; and social distancing guidelines will be followed; reserve at manassasechoes.com or call 703-257-8453.



Oct. 28, Nov. 18 & Dec. 30 at 3 p.m. **Stories of Preservation and Progress** @ the Manassas Museum Reservations and masks are required, tour size is limited; and social distancing guidelines will be followed; reserve at manassasechoes.com or call 703-257-8453. Also watch on facebook.com/cityofmanassasleisure



Oct. 30 & Nov. 20 - **Culture & Diversity Drive-In Film Festival**, Free, reservations are required; reserve at manassasechoes.com or call 703-257-8453.



Dec. 5 at 2 p.m. - **Liberia Front Porch Talk** - Join Joe McGill, founder of the Slave Dwelling Project and History and Culture Coordinator at Magnolia Plantation and Gardens in Charleston, S.C., for a talk honoring the 80 enslaved who once lived and worked at Liberia House. Reservations and masks are required, tour size is limited, and social distancing guidelines will be followed; reserve at manassasechoes.com or call 703-257-8453. Also watch on facebook.com/cityofmanassasleisure



Manassas Ballet Streaming Performances - enjoy classic ballet performances from the comfort of your home while maintaining social distance guidelines. These shows are either available now or coming soon to https://manassasballet.org

Les Sylphides & More!
Don Quixote
Frankenstein



Do you enjoy bike rides?

Bull Run Bicycles hosts a bike ride on Tuesday evenings around the City from spring through fall. Check them out at <https://www.facebook.com/Bull-Run-Bicycles-118797004810266>

Sign up to Get Notified

The City's new website is up and running; however, this is a totally new website with a new website vendor. Therefore, if you would like to sign up to receive the newsletter, press releases, the budget, pond concerns or receive any other of a multitude of City information to your inbox, even if you had previously registered, you will need to sign up again. This is a security precaution with the new vendor so that your information is kept secure on our new website.

Sign up today at www.manassascity.org. Scroll down to Get Notified on any page and enter your email address. You can select from email or text or both. Get Notified today and stay informed!

Get Social!

Visit the City at www.manassascity.org.

www.facebook.com/cityofmanassas

www.twitter.com/cityofmanassas

www.flickr.com/photos/cityofmanassas

www.instagram.com/cityofmanassas

www.youtube.com/user/manassascityva

To contact the City of Manassas Connection newsletter, email prrince@manassasva.gov

City of Manassas and Manassas Public Schools

City of Manassas Council

Mayor Harry J. Parrish II 703-257-8213
Vice Mayor
Pamela J. Sebesky 571-330-5514
Michelle Davis-Younger 571-206-8433
Theresa Coates Ellis 571-247-6729
Ian T. Lovejoy 703-828-7592
Ralph J. Smith 703-303-8530
Mark D. Wolfe 703-257-1702

City of Manassas School Board

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Scott M. Albrecht 571-606-1129
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Suzanne W. Seaberg 703-869-1171
Lisa A. Stevens 571-535-0652
Robyn Williams 571-535-7510




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<i>Cost of Ad</i>	<i>Payments</i>	<i>Total Due</i>
144.12	0.00	144.12
<i>Class:</i> LGS LEGALS		<i>SubClass:</i> 490 LEGAL NOTICES
<i>Description:</i> March 22		
GVTC and PWTC Class		Feb 18
Web Ads Class		Feb 24

AD MAKEUP NOTES



LEGAL NOTICE

Pursuant to the requirements of 9VAC20-130-130.B of the Virginia Solid Waste Planning Regulations, the Manassas City Council will hold a public hearing on the revised twenty-year Solid Waste Management Plan on Monday, March 22, 2021, at 5:30 p.m. Due to the ongoing pandemic and declaration of emergency, this City Council meeting may be held through real time electronic means, without City Council assembled at one location. Instructions on public participation in an electronic or virtual meeting will be published at least seven days in advance of the meeting, or may be obtained by contacting the City Clerk's Office at 703-257-8211 or emailing lhenderson@manassasva.org on or after March 15. If the meeting is held in person, the public is invited to attend and offer comment on the proposed Plan in the Council Chambers at 9027 Center Street in the City of Manassas. The last Solid Waste Management Plan was passed by City Council on June 28, 2004.

The revised plan includes, but is not limited to, changes in demographic data, improvements in solid waste technology, the introduction of a Debris Management Plan for the City, Keep Manassas Beautiful, and inclusion of the updated Solid Waste Code.

A PDF copy of the draft Solid Waste Management is available on the City of Manassas website: www.manassasva.gov/trash and a hard copy will be on file in the City Clerk's Office between the hours of 8:30 A. M. and 4:30 P. M., Monday through Friday, for public viewing.

Legal Notices

Legal Notices



LEGAL NOTICE

Pursuant to the requirements of 9VAC20-130-130.B of the Virginia Solid Waste Planning Regulations, the Manassas City Council will hold a public hearing on the revised twenty-year Solid Waste Management Plan on Monday, March 22, 2021, at 5:30 p.m. Due to the ongoing pandemic and declaration of emergency, this City Council meeting may be held through real time electronic means, without City Council assembled at one location. Instructions on public participation in an electronic or virtual meeting will be published at least seven days in advance of the meeting, or may be obtained by contacting the City Clerk's Office at 703-257-8211 or emailing lhenderson@manassasva.org on or after March 15. If the meeting is held in person, the public is invited to attend and offer comment on the proposed Plan in the Council Chambers at 9027 Center Street in the City of Manassas. The last Solid Waste Management Plan was passed by City Council on June 28, 2004.

The revised plan includes, but is not limited to, changes in demographic data, improvements in solid waste technology, the introduction of a Debris Management Plan for the City, Keep Manassas Beautiful, and inclusion of the updated Solid Waste Code.

A PDF copy of the draft Solid Waste Management is available on the City of Manassas website: www.manassasva.gov/trash and a hard copy will be on file in the City Clerk's Office between the hours of 8:30 A. M. and 4:30 P. M., Monday through Friday, for public viewing.

Bids & Proposals



The City of Manassas Engineering Department and Prince William County Department of Public Works hereby gives notice of the City's intent to revise the flood hazard information, generally located along Observation Road in the vicinity of the Manassas Regional Airport. The flood hazard revisions are being proposed as part of Conditional Letter of Map Revision (CLOMR) Case No. 20-03-1427R for a proposed project along Broad Run impacting the City of Manassas and Prince William County. The Manassas Regional Airport is proposing to relocate Observation Road as part of an effort to increase accessibility and developmental area on the west side of the airport. Once the project has been completed, a Letter of Map Revision (LOMR) request should be submitted that will, in part, revise the following flood hazards along Broad Run.

1. Base Flood Elevations (BFEs) will decrease along Broad Run within the City of Manassas and Prince William County.
 2. The SFHA will increase and decrease along Broad Run within the City of Manassas and not be revised within Prince William County.
 3. No changes to the floodway boundary will occur within the City of Manassas or Prince William County.

Maps and detailed analysis of the proposed flood hazard revisions can be reviewed at the City of Manassas Engineering Department at 8500 Public Works Drive, Manassas, Virginia 20110 or the Prince William County Department of Public Works at 5 County Complex Court, Suite 170, Woodbridge, Virginia 22192. If you have any questions or concerns about the proposed project or its effect on your property, you may contact the City Engineering Director at 703-257-8251 from 9:00 a.m. to 4:00 p.m. Monday through Friday between 2/18/2021-2/26/2021 or the County Floodplain Administrator at 703-792-7078 from 9:00 a.m. to 4:00 p.m. Monday through Friday between 2/18/2021-2/26/2021.



**PRINCE WILLIAM COUNTY
BOARD OF COUNTY SUPERVISORS
ONE COUNTY COMPLEX COURT
PRINCE WILLIAM, VIRGINIA 22192**

**March 2, 2021
Public Hearings**

2:00 p.m.

To consider proposed budget amendments for Fiscal Year 2021 not to exceed \$46,000,000, including the items listed below and any additional items deemed appropriate:

1. Authorize the Execution of Agreement with the Town of Dumfries for Administration of Route 1 (Fraleley Boulevard) Widening Project; Authorize Execution of a Standard Project Agreement with the Northern Virginia Transportation Authority for Funding of Route 1 (Fraleley Boulevard) Widening Project (Northern Virginia Transportation Authority Project #2015-359-80491); and Budget and Appropriate \$4,020,492.33 with Fiscal Year 2015 HB 2313 70% Revenues for Design of Route 1 (Fraleley Boulevard) Widening Project. **Potomac Magisterial District** – Transportation
2. Transfer, Budget, and Appropriate \$2,200,000 to the Challenger Court Access Road Project from the Innovation Enterprise Fund, the Dedication of Land for Public Street Purposes, the Granting of Utility Easements across County Property for Prince William County Service Authority, Northern Virginia Electric Company (NOVEC), Comcast, and the Granting of Ingres-Egress Easement. **Brentsville Magisterial District** – Transportation
3. Transfer, Budget, and Appropriate \$39,124,565.05 to the School Board Operating Fund from the Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act and the Elementary and Secondary School Emergency Relief (ESSER) II Fund Allocated from the Commonwealth of Virginia – Prince William County Public Schools
4. Transfer, Budget, and Appropriate \$461,350 to the School Board Operating Fund from the Coronavirus Aid, Relief, and Economic Security (CARES) Act, the Elementary and Secondary School Emergency Relief (ESSER) Fund, and the Governor's Emergency Education Relief (GEER) State Set-aside Funding from the Commonwealth of Virginia – Prince William County Public Schools

For additional information, contact Andrea P. Madden, Clerk to the Board, at (703) 792-6600. A copy of all staff reports, proposed resolutions and ordinances, and other documentation will be available for review by the public in the office of the Clerk of the Board at One County Complex Court, Prince William, Virginia, 22192. In addition, all meeting materials will be posted online when the agenda is published. pwcv.gov/government/bocs/Pages/Meeting-Room.aspx.

The meeting agenda and link to watch the Board meeting is available on the County's website at <https://www.pwcv.gov/government/bocs/Pages/Meeting-Room.aspx>.

Members of the public may appear at the Board of County Supervisors' Chamber in the McCoart Building, One County Complex Court, Prince William, Virginia, at the designated time to express their views. Members of the public may also speak remotely by registering through the County's website at <https://pwcv.gov/granicusideas.com/> by 5:00 p.m. the day before the meeting.

ACCESSIBILITY TO PERSONS WITH DISABILITIES: The hearings are being held at a public facility believed to be accessible to persons with disabilities. Any persons with questions on the accessibility of the facility should contact Andrea P. Madden, Clerk to the Board, at One County Complex Court, Prince William, Virginia, or by telephone at (703) 792-6600 or TDD (703) 792-6295. Persons needing translation or

interpreter services for the deaf must notify the Clerk to the Board no later than 12:00 p.m. on Thursday, February 25, 2021.
 Run Date: 2/18/2021

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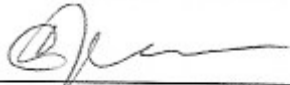


**AFFIDAVIT OF PUBLISHER
PURSUANT TO SECTION 8.01-415
OF THE 1950 CODE OF VIRGINIA
AD AMENDED**

I Catherine Nelson, being duly sworn deposes and says that the attached order of publication was published in the Prince William Times, a newspaper published in the County of Prince William, State of Virginia, on

2-18-21, _____, _____, _____, _____,

and that deponent is the Publisher of said newspaper



**Catherine Nelson
Publisher
State of Virginia
County of Prince William**

COMMONWEALTH of VIRGINIA
IN THE COUNTY OF PRINCE WILLIAM, to-wit:

on 3-4, 2021

Catherine Nelson

who is known to me and whose name as Publisher of the Prince William Times in the County Prince William, State of Virginia, is signed to the foregoing affidavit, personally appeared before me, a Notary Public in and for the jurisdiction aforesaid, to affirm that the foregoing affidavit was sworn & subscribed to in front of me and executed the same by proper authority.



**Notary Public
Notary Registration No. 7274066
My commission expires: October 31, 2021**



Jean E. Cobert
NOTARY PUBLIC
Commonwealth of Virginia
Reg. #7274066
My Commission Expires
October 31, 2021

APPENDIX 13
RESOLUTION OF ADOPTION

MOTION: WOLFE

**March 22, 2021
Regular Meeting
Res. No. R-2021-44**

SECOND: ELLIS


RE: A RESOLUTION APPROVING A REVISED SOLID WASTE MANAGEMENT PLAN FOR THE CITY OF MANASSAS

WHEREAS, Virginia Code Section 9 VAC 20-130-10 et. seq. requires every locality in the Commonwealth to have a Solid Waste Management Plan that is updated every five years; and

WHEREAS, the City has prepared a revised Solid Waste Management plan in accordance with the regulations, including seeking public participation and review by the Citizen's Advisory Committee on Solid Waste; and

WHEREAS, City Council has conducted the required public hearing to receive citizen comment on the revised plan;

NOW, THEREFORE, BE IT RESOLVED that the City Council of Manassas hereby approves and directs the City Manager to submit this plan to the Commonwealth as required by the regulations.


Michelle Davis-Younger Mayor
On behalf of the City Council
of Manassas, Virginia

ATTEST:


Lee Ann Henderson City Clerk

Votes:

Ayes: Ellis, Farajollahi, Osina, Sebesky, Smith, Wolfe

Nays: None

Absent from Vote: None

Absent from Meeting: None



City of Manassas, Virginia
City Council Meeting

AGENDA

**City Council Regular Meeting
Council Chambers
9027 Center Street
Manassas, VA 20110
Monday, March 22, 2021**

Call to Order - 5:30 p.m.

Roll Call

Invocation and Pledge of Allegiance

Community and Staff Presentations

**School Board Presentation
(Suzanne Seaberg, Vice Chair)**

**Freedom Museum Presentation
(Kevin Rychlik, Freedom Museum)**

Council Time

Mayor Time

Staff Reports

1. Consent Agenda

All matters listed under the consent agenda are considered to be routine by the City Council and will be enacted by one motion. There will be no separate discussion of these items. If discussion is desired, that item will be removed from the consent agenda and considered separately.

SUGGESTED MOTION: "I move that the Consent Agenda be approved and the readings of the ordinances be dispensed."

SUGGESTED MOTION #2: "I move that Items # and # be removed from the Consent Agenda and be added as Items # and #, respectively, and that the remaining Consent Agenda items be approved as it now appears and the readings of the ordinances be dispensed."

1.1 Approval of Minutes: Regular City Council Meeting of March 8, 2021, City Council Budget Work Sessions of March 9 and 10, 2021.

(Staff: Lee Ann Henderson, City Clerk)

[3-8-2021 Minutes](#)

[3-9-2021 Minutes](#)

[3-10-2021 Minutes](#)

1.2 Proclamation - Irish Heritage Month

(Vince Fitzpatrick, St. Patrick's Day Parade Committee)

[Proclamation - Irish History Month 2021](#)

1.3 Proclamation - Walking Week

(Timothy Miner - Walk Virginia)

[Proclamation - Walking Week 2021](#)

1.4 Consideration of Revisions to Policy P-2016-01 Financial Policies

(Staff: Diane Bergeron, Finance Director)

[Agenda Statement - Financial Policy Revisions](#)

[Backup: Financial Policies P-2016-01](#)

2. Public Hearings

2.1 Solid Waste Management Plan

(Staff: Monica Boehringer, Refuse and Recycling Coordinator)

[Agenda Statement - Solid Waste Management Plan Public Hearing](#)

[SWMP Briefing Note](#)

[Solid Waste Management Plan Presentation](#)

2.2 Franchise Award - 10500 and 10502 Wakeman Drive, Manassas Regional Airport
(Staff: Juan Rivera, Airport Director)

[Agenda Statement - Franchise Award - 10500 and 10502 Wakeman Drive, Manassas Regional Airport](#)

3. **Ordinances and Resolutions**

3.1 **Ordinance #O-2021-14: Award of Franchise to Chantilly Holdings, LLC for 10500 and 10502 Wakeman Drive, Manassas, VA at the Manassas Regional Airport (First Reading)**

(Staff: Juan Rivera, Airport Director)

[Agenda Statement - Ordinance #O-2021-14: Award of Franchise to Chantilly Holdings, LLC for 10500 and 10502 Wakeman Drive, Manassas, VA at the Manassas Regional Airport](#)

[Ordinance #O-2021-14: Award of Franchise to Chantilly Holdings, LLC Parcel Map](#)

3.2 **Ordinance #O-2021-15 - An Uncodified Ordinance Granting a Franchise to AMCS Networking Services, LLC, DBA AMCS, LLC, for the Purpose of Installing, Operating, and Maintaining Telecommunications Conduits, Facilities, and Equipment in the Public Rights-of-Way within the Corporate Limits of the City of Manassas, Virginia (First Reading)**

(Staff: Bryan Foster, Deputy City Manager)

[Agenda Statement - Franchise Ordinance AMCS LLC for fiber in ROW 3-22-2021 O-2021-15 - AMCS Franchise](#)

[Franchise Area Map](#)

3.3 **Resolution #R-2021-44: Solid Waste Management Plan**

(Staff: Monica Boehringer, Waste and Recycling Manager)

[Agenda Statement - Resolution R-2021-44 - Solid Waste Management Plan Adoption](#)

[R-2021-44 Solid Waste Management Plan](#)

4. **Public Comment - 7:30 p.m.**

For health reasons, at this time the Public Comment portion of the agenda is set aside for those who wish to address the Council and is limited to three minutes per speaker. In order to accommodate all those who wish to address Council, speakers must sign up in advance. Speakers are encouraged to use the telephone to address Council from the safety of a remote location or submit their comments via email or U.S. Postal service. To sign up to speak, contact the City Clerk's office. Requests must be received by 4 p.m. on the date of the meeting.

5. **Authorize a Closed Meeting**

5.1 **Authorize a Closed Meeting**

[Agenda Statement - Authorize a Closed Meeting - March 22 2021](#)

6. **Certify the Closed Meeting**

6.1 Certify the Closed Meeting
[Agenda Statement - Certify a Closed Meeting](#)

Adjournment