

EXECUTIVE SUMMARY

INTRODUCTION

Arlington County developed this Solid Waste Management Plan (SWMP) in response to the Virginia Waste Management Board's requirement that designated planning units, as well as each city, county, or town in the Commonwealth of Virginia, develop a comprehensive and integrated solid waste management plan that details planned solid waste management activities over a 20-year planning window. Arlington's prior SWMP was adopted by the County Board in June 2004. There are a number of requirements of the SWMP, chief of which is to consider and address all components of the waste management hierarchy, including source reduction, reuse, recycling, resource recovery (waste-to-energy), incineration, and landfilling.

The Commonwealth of Virginia requires SWMPs to be approved by the community's governing body and meet the state mandatory recycling rate of 25 percent. Arlington County met the state's mandatory recycling rate many years ago and reported a 52.4 percent recycling rate for calendar year 2022. Despite the County's success in achieving and maintaining a recycling rate over twice as high as the current mandated rate, the County strives to continue to expand waste diversion programs to further increase the rate. The County has established an ambitious goal of achieving 90 percent waste diversion from landfill and incineration by 2038. This plan not only details the County's programs and policies to maintain the state mandated diversion rate, it includes voluntary program enhancements based on zero waste principles to serve as a roadmap for waste reduction, recycling, and overall solid waste programming activities in Arlington through June 2044.

This SWMP is divided into two major sections:

1. **Virginia Regulatory Requirements** - This section discusses the solid waste planning elements and programs required to meet the State's planning requirements. This includes discussion of the County's existing solid waste management programs, population and waste generation projections, available and planned infrastructure, and the County's plan for maintaining the required minimum recycling rate of 25 percent.
2. **Voluntary Program Enhancements** - This section discusses potential program enhancements that go beyond those required by law. These proposed enhancements are centered on the County's diversion target of 90 percent by 2038. This diversion rate is aspirational and achieving it will require significant behavioral changes on the part of the Arlington Community, as well as state and federal legislative action, which are beyond the control of the Arlington County government. Additionally, as with all government programs, these enhancements will be subject to resource constraints and the decisions of future elected officials.

PLAN DEVELOPMENT

The Virginia Waste Management Board requires that development of the SWMP include engaging stakeholders, including the public, to receive input on key elements of the plan. Development of the SWMP began in February 2022 with the convening of a community-led Solid Waste Committee (SWC). The SWC includes 17 individuals that represent the diverse interests and views of the Arlington County community. The SWC is a sub-committee of the Climate Change, Energy and Environment Commission (C2E2) chaired by a member of C2E2, it is not a formal advisory committee and does not have County Board appointed positions. SWC guided the development of the SWMP.

During the 20 months it took to develop the SWMP, the SWC met 16 times from February 2022 to September 2023. SWC members were provided detailed information on the programs and policies impacting waste management in the County.

The SWC identified a list of 15 zero waste initiatives and four policy programs that County staff and the County's contracted consultant, SCS Engineers, researched to understand the potential impacts on waste diversion, costs, and greenhouse gas emissions reductions. Ultimately, the SWC recommended that all 15 initiatives and the four policy programs be included as part of the County's SWMP for the planning period 2024 to 2044. These initiatives are discussed in detail in **Section 7 – Zero Waste Plan**.

VIRGINIA REGULATORY REQUIREMENTS

The County will continue to comprehensively and sustainably manage waste generated in the County to maintain the State of Virginia's 25 percent minimum recycling requirement. To meet that requirement, the County has identified elective actions that will continue to accomplish the County's three (3) primary goals:

- **Goal A:** Employ a comprehensive solid waste management system that considers the State of Virginia's waste management hierarchy.
- **Goal B:** Ensure that the County continues to implement a strong recycling program and that the County recycling rate, at a minimum, meets the State of Virginia's recycling goals.
- **Goal C:** Carefully evaluate the waste management needs of the County for the next 20 years and identify the actions necessary to meet those needs.

VOLUNTARY PROGRAM ENHANCEMENTS

The County has identified 15 zero waste initiatives and four policy programs that the County may pursue over the SWMP's 20-year planning window to increase waste diversion in pursuit of the established target of 90 percent waste diversion by 2038. The initiatives have been prioritized as short term, medium term, or long-term, depending on impact, ease of implementation, and time required for the development of necessary infrastructure or technology. Each initiative and policy program is considered voluntary and, therefore, implementation is subject to the availability and appropriation of resources through regular County processes.

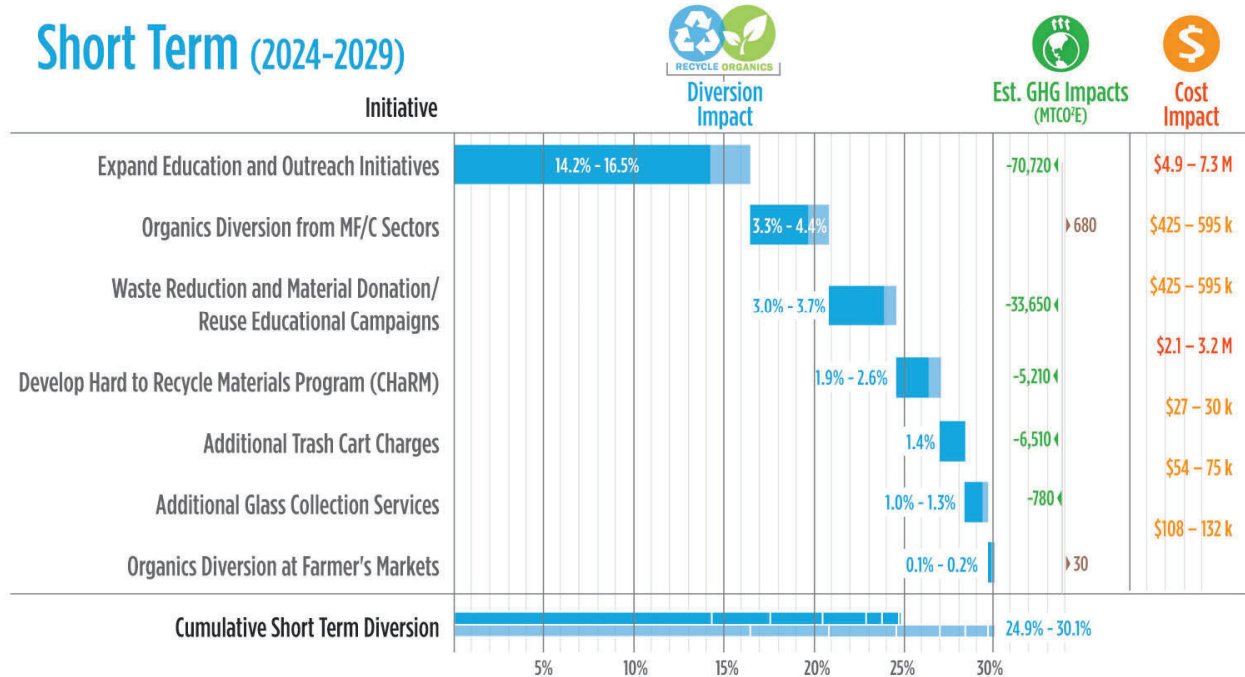
Short Term (2024 – 2029)

- **Expand Education and Outreach Initiative Capacity:** Hire two new staff positions that will create educational materials and organize marketing campaigns that focus on 1) educating residents on existing systems and 2) using those systems appropriately across all waste generating sectors (i.e. single family residential, multi-family residential, commercial etc.). The County estimates this initiative to increase the solid waste diversion rate between 14.2 to 16.5 percent.
- **Waste Reduction and Material Donation/Reuse Education Campaigns:** Educate businesses and residents on waste reduction best practices to reduce waste before materials enter the waste stream and encourage the donation and reuse of goods and materials that still have a useful life instead of disposing the materials. This initiative primarily consists of creating marketing campaigns and materials focused on source reduction and waste minimization

along with material reuse and donations. The County estimates these campaigns to increase diversion between 3.0 to 3.7 percent.

- **Organics Diversion at Farmers Markets:** Collect leftover food and/or non-sellable produce from farmer's markets and divert the material in alignment with the wasted food scale. The County estimates this initiative to increase the solid waste diversion rate between 0.1 to 0.2 percent.
- **Organics Diversion from Multi-Family Residential and Commercial Sectors:** Explore opportunities to expand organics diversion at multi-family residential and commercial properties through participation in pilot and incentive programs. Over the 20-year planning period the County estimates this initiative to increase the solid waste diversion rate between 3.3 to 4.4 percent.
- **Additional Glass Collection Services:** Increase glass collection capacity by adding additional collection points (i.e. purple bins) in the high-density development corridors such as Rosslyn-Ballston, and Richmond Highway. The County estimates this initiative will increase the solid waste diversion rate between 1.0 to 1.3 percent.
- **Increase Charges for Multiple Trash Carts:** Increase monthly fees on the second and subsequent 64-gallon trash cart to disincentivize waste generation. Increased monthly fees are not planned for the initial trash cart or for additional recycling and organics collection carts to incentivize the usage of these disposal alternatives. The County estimates this initiative will increase the solid waste diversion rate 1.4 percent.
- **Develop a Center for Hard to Recycle Materials (CHaRM) Facility:** CHaRM facilities allow jurisdictions to divert materials not easily managed through curbside collection programs. Potential materials to target for diversion as part of this program include mattresses, carpets/rugs, and tires. Establishing a CHaRM facility that encompasses the household hazardous materials (HHM) program allows the County to increase services to residents and divert increasing quantities of materials. The County estimates this initiative will increase the solid waste diversion rate between 1.9 to 2.6 percent.

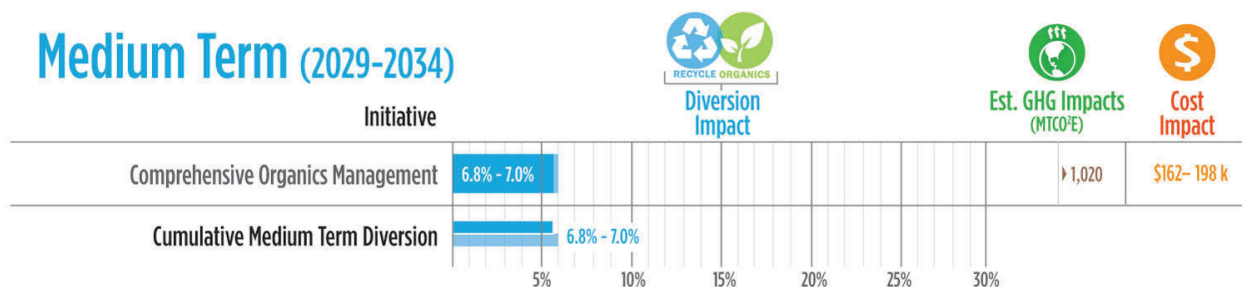
Short Term (2024-2029)



Medium Term (2029-2034)

Comprehensive Organics Management: This initiative requires the separation and diversion of organic materials generated from the multi-family residential, commercial, and institutional sectors. Comprehensive organics management represents the initiative with the second largest impact on the solid waste diversion rate, which is estimated to be between 6.8 to 7.0 percent. This initiative includes hiring a full-time compliance inspector and multi-media campaigns to promote the program. Significant expansion of organics recovery requires additional regional processing and management capacity to meet the demand of this initiative.

Medium Term (2029-2034)

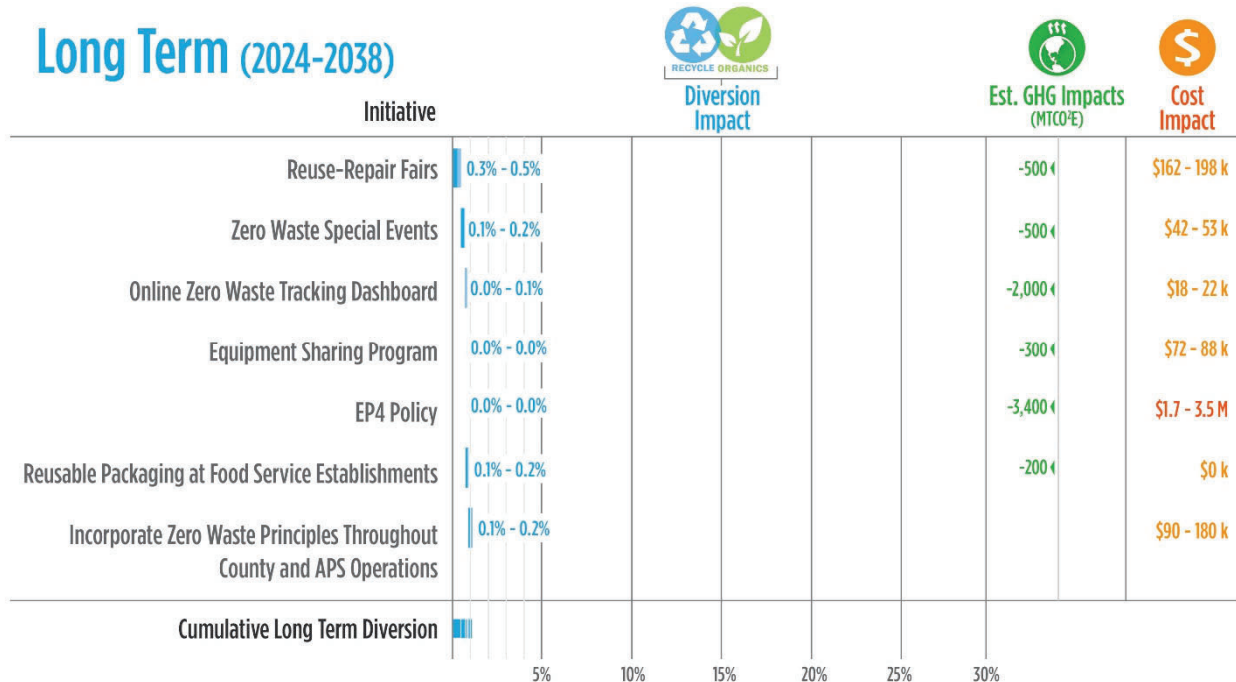


Long Term (2024-2038)

The initiatives identified below may be implemented as resources and funding allow at any time during the planning period.

- **Reuse-Repair Fairs:** Encourage and host repair/reuse fairs where residents can bring items for repair to prolong the useful life of the item and prevent it from entering the waste stream. This initiative will be supported by the Education Specialist staff and will increase the County's diversion rate between 0.3 to 0.5 percent.
- **Zero Waste Special Events:** County sponsored and public events that are required to go through the County's special events permitting process will need to incorporate zero waste principles into the event's operations. Encourage the use of reusables or compostables to maximize waste reduction and increase recycling/food waste recovery. It is estimated that this initiative will increase diversion by an additional 0.1 to 0.2 percent.
- **Online Zero Waste Tracking Dashboard:** Create a zero-waste dashboard to provide County residents up-to-date tracking on how the County is performing on the zero-waste goals through various performance metrics. Providing residents' insight into performance is anticipated to have up to 0.1 percent impact on the diversion rate.
- **Equipment Sharing Program:** Expand the existing tool sharing programs offered by County Libraries to include power tools and lawn tools. This program prioritizes tools that are battery powered or electric. It is not expected to include the usage and sharing of gas-powered tools. This initiative has minimal impact on the diversion rate.
- **Environmentally Preferable Practices and Purchasing Policy:** In 2014, Arlington County developed the Environmentally Preferable Practices & Purchasing Work Plan (EP4) to serve as a dynamic administrative guide for County staff to document and encourage greener purchasing practices. Efforts will focus on re-engaging with and expanding the EP4 policy. This initiative requires the hiring of one additional staff member in the Department of Management and Finance.
- **Reusable Packaging at Food Service Establishments:** This strategy supports programs and policies that facilitate the use of washable and reusable takeout containers at food service establishments. There will be minimal impact to the diversion rate through this initiative.
- **Incorporate Zero Waste Principles in County and Arlington Public School (APS) Operations:** Explore opportunities to incorporate zero waste principles into County and APS infrastructure and operations. This may include deconstruction of County facilities to facilitate material reuse and recycling at end-of-life, installation of water bottle refilling stations, composting programs at community gardens, and systems to capture and reuse rainwater.

Long Term (2024-2038)



Policy Programs

The following initiatives represent areas where the County lacks direct control over implementation and requires actions at the state and/or federal levels. Advocacy of these policy initiatives will begin upon adoption of the SWMP and continue throughout the planning period or until applicable policies are enacted.

- Support Bottle Bill Legislation:** Support bottle bill legislation at the state or federal levels to increase the diversion of glass. There are no added costs associated with pursuing this initiative and it will be supported with existing staff. If bottle bill legislation is passed, the County may see an increase of 3.2 to 3.7 percent on the diversion rate.
- Support Extended Producer Responsibility Legislation:** Support extended producer responsibility (EPR) for materials that are hard to manage including batteries, paint, mattresses, carpets/rugs, tires, etc. Extended Producer Responsibility shifts the financial burden of end-of-life disposal for hard to manage materials back to the producer and away from individuals or municipalities. There are no added costs associated with pursuing this initiative. EPR legislation has the potential to increase the County's diversion rate by 0.7 to 0.9 percent.
- State Level Circular Economy Initiatives:** Advocate for state-level circular economy initiatives. A circular economy is a model of production and consumption which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible and only disposing of a product or material when it can no longer be used. If adopted, these initiatives have the potential to increase the diversion rate by 0.1 to 0.3 percent.
- Other Major Waste Diversion Legislative Initiatives:** This serves as a catchall for emerging and potential waste diversion initiatives and technologies as they develop through the life of

this plan. There are no anticipated costs other than existing staff support. The nature of this category makes it near impossible to calculate possible impacts to the diversion rate.

