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About This Toolkit

This toolkit is intended for Fairfax County Zero Waste Champions and any other staff involved in the Zero Waste Program. As a Zero Waste leader in Fairfax County, you will play a key role in furthering the County's efforts to **prevent and reduce waste**, helping to protect our health, environment, and communities.

This toolkit provides resources to help answer your questions and help you fulfill your role as a Zero Waste Champion. Additional learning opportunities will be provided through the Zero Waste program.

Fairfax County Public Schools (FCPS) staff are welcome to use this toolkit. Further information specific to Zero Waste in schools will be provided in the future.

Core Zero Waste Team

You can also contact the Core Zero Waste Team if you have questions or concerns as you begin your work. The core Zero Waste Team is made up of full-time staff from County and FCPS departments. The points of contact are:

- County: Contact Nathalie Owen at <u>Nathalie.Owen@fairfaxcounty.gov</u>
- Schools: Contact Scott Larson at <u>SALarson@fcps.edu</u>



Background on Zero Waste in Fairfax County

As the most populous county in the Washington, D.C. metropolitan area, Fairfax County has a tremendous opportunity and responsibility to rethink the way its operations consume and dispose of materials to reduce environmental impacts.

In April 2019, Fairfax County established the Joint Environmental Task Force (JET) to address climate change and sustainability. In October 2020, the JET set a bold goal for Fairfax County government and schools: **Zero Waste by 2030**. This means minimizing waste production by County government and schools to **close to nothing**. Specifically, the County government aims to:

- Divert 90 percent of solid waste from disposal in the trash.
- Reduce the overall waste generated by 25 percent from 2018 levels.

To help achieve these goals, a Zero Waste Planning Team was formed. It developed the Zero Waste Plan to set direction and recommendations for getting to Zero Waste. The plan identified 24 key strategies, including designating Zero Waste Champions to help inspire and lead action in government departments. The Plan was adopted by the Board of Supervisors in November 2021.



Together, we can help create a more sustainable future.

WHERE WE ARE NOW

As of 2020, only **27 percent** of County government waste is being diverted.¹

Many more materials could be diverted through reduction, reuse, and recycling or composting.

¹This number includes trash and recycling data, as well as other material streams not centrally managed. See Appendix A of the Zero Waste Plan.





Why Zero Waste?

Reducing, reusing, and recycling or composting materials decreases solid waste, prevents litter, and reduces the climate-warming emissions and pollution caused by extracting and processing raw materials and producing goods.

Zero Waste efforts also create opportunities for new, greener business models and innovations around sharing, reusing, and salvaging materials. These innovations support a transition to a more sustainable and resilient <u>circular economy</u> that designs out waste and pollution, keeping products and materials in use for as long as possible instead of continually making and throwing away new products.

To reach the County's **90 percent diversion goal and 25 percent overall reduction goal,** your department will apply actions around the "4 R's."

Environmental Impacts of U.S. Food Waste

According to the <u>U.S. Environmental Protection Agency (EPA)</u>, food waste is the single most common material landfilled or combusted in the United States. Throwing away food wastes valuable resources, impacts the environment, and contributes to climate change. In fact, food waste makes up about 8 percent of humanmade greenhouse gas emissions annually.

The 4 R's



Reach out

Create a culture of sustainability by engaging individuals to pursue Zero Waste through collaboration, education, and outreach.



Reduce

Minimize consumption to only what is necessary. Phase out single-use products and packaging whenever possible.



Reuse

Support a circular economy by purchasing more durable, reusable, repairable, and recyclable materials that are produced sustainably. Adopt closed-loop systems.



Recycle

Once products and packaging can no longer serve their intended purpose, treat materials as valuable resources rather than waste by recycling or composting.



Zero Waste Facts

Waste audits at County facilities and public schools found that **more than half** of materials in the trash were divertible. Learn more about the materials commonly used and managed in your department—and how they can be prevented, diverted, or otherwise managed appropriately.

Waste Diversion: The Basics

Materials are considered **diverted** if they are managed through reduction, reuse, or recycling/composting. Diversion is important because it:

- Decreases the amount of solid waste produced, reducing the amount of material that ends up combusted for energy, landfilled, or littered.
- Reduces the greenhouse gases emitted from wasteto-energy combustion and decomposition in landfills.
- Minimizes the need for raw materials, reducing the climate-warming emissions and pollution caused by extracting and processing these materials.



Recoverable or Divertable Materials in the MSW Stream (% by Volume)

Data last updated 2021

Source Reduction

Recycling and composting properly are important, but waste prevention (also called "source reduction") is even better. The best ways to prevent waste are through actions like:

- Reducing the materials we purchase and use.
- Purchasing products that can be systematically reused, refilled, resold, or repurposed.
- Purchasing products made from recycled materials.

Diversion Goal #1

Prevent waste (source reduction)

Diversion Goal #2

Reuse would-be waste

Diversion Goal #3:

Recycle or compost what can't be reduced or reused

What Materials Are Divertible?

Employees can reduce, reuse, and recycle many products and packages—from paper and cardboard to containers and cans.

Reduce and Reuse

There are many ways to reduce and reuse—both on an individual and systematic level. See <u>Best</u> Practices for some ideas, but you will likely come up with many more creative approaches!

Recycling

Types of materials can be recycled in school or County recycling bins, including:

- Mixed paper and cardboard
- Aluminum and steel cans



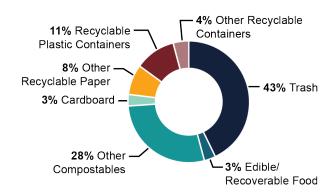
Plastic bottles and containers

Many of these materials end up in the trash, but they can and should be diverted.

Be sure to empty and rinse out containers that have residues such as food or liquid before placing them in a recycling bin. Also be aware that some items, such as plastic grocery bags, can't be placed in your recycling bin, but can be taken to designated drop-off facilities.

Certain materials require special collections or are otherwise handled separately, including:

- Food waste (compost collection or on-site composting is currently available at some locations; systemwide compost collections are forthcoming)
- Other compostable items, such as paper towels
- E-waste (electronic products)
- Scrap metal
- Tires
- "White goods" (large electrical appliances, like dishwashers or dryers)
- Yard waste and brush



Types of materials found in the trash at Fairfax County government facilities and locations

More Information

For County departments, please visit the https://www.fairfaxcounty.gov/publicworks/recycling-trash/residential-materials webpage for a list of materials that can be recycled, or contact recycling@fairfaxcounty.gov.

For schools, see the <u>Get2Green website's recycling page</u> or <u>https://www.fcps.edu/facilitiesmanagement/recycling</u> for more information.

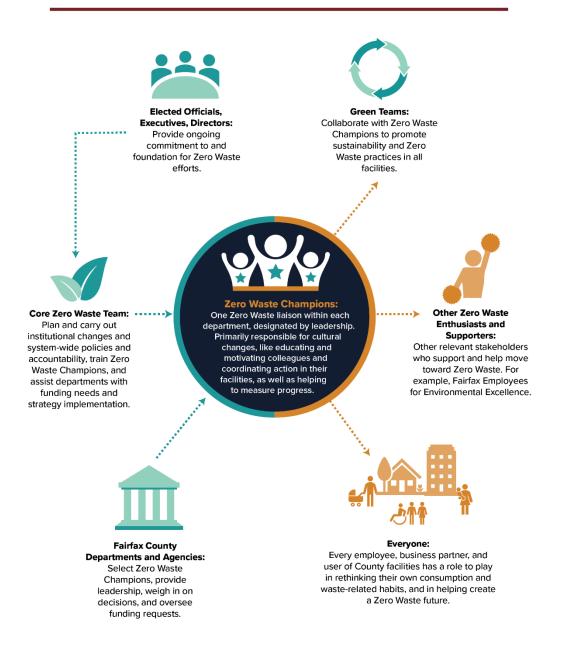
You can also visit Fairfax County's https://www.fairfaxcounty.gov/publicworks/recycling-trash/composting-organic-waste webpage for more information.



Zero Waste Players

The Zero Waste Players

Everyone plays a role in achieving our Zero Waste goals





Understanding Your Role as a County Zero Waste Champion

Your leadership, energy, and enthusiasm are critical to advancing Zero Waste initiatives. As a Zero Waste Champion, you will help teach about proper materials management, ensure Zero Waste efforts are being carried out, and track Zero Waste progress.

Primary Responsibilities

Your main responsibilities are to inspire, plan, support, and track waste prevention and diversion efforts across your department or agency with the help of your

team:

Inspire

- Set up a Green Team to help carry out your efforts (recommended).
- Educate staff and colleagues about how to prevent and reduce waste through your existing communication channels and other resources.

Plan

- Engage in Zero Waste trainings to get the skills you need to succeed.
- Evaluate your facility's needs for bins and signage and other opportunities to reduce, reuse, and recycle.
- Set goals for taking action and revisit annually.
- Assess funding needs and oversee funding requests.

Support

- Carry out Zero Waste campaigns to facilitate action and keep the momentum going.
- Coordinate with facility managers, warehouse managers, and others to implement actions.
- Coordinate with Zero Waste Team and department leadership.
- Keep leadership apprised of progress and challenges.
- Support your Zero Waste community by exchanging ideas and resources with your fellow Zero Waste Champions from throughout the County government.

Track

- Conduct an annual self-assessment of your department's efforts and waste stream.
- Report your results.
- Share results with colleagues.
- Oversee a waste and recycling audit every three years (2024, 2027, and 2030).

SETTING UP A GREEN TEAM

If you work in a large department or one that operates in multiple locations—or have colleagues excited to reduce waste—you should set up a Green Team to maximize your progress toward Zero Waste. A Green Team can take different forms, from a handful of colleagues to a large network of representatives throughout your facilities. But in all cases, the Zero Waste Champion will coordinate the team.

While it is up to each department to determine whether to build a Green Team and how to structure it, here are some recommendations for success:

- Invite all colleagues in your department to join the team. You never know who might want to take action. Coming soon: Sample Invitation Letter.
- Consider including non-merit staff and volunteers (with approval from management).
- Be very clear about team member expectations (time commitment, meeting attendance, responsibilities, etc.).
- If your agency or department is large, consider developing a <u>charter</u> to help guide your Green Team's efforts, establish decision-making processes, and set timelines for actions to be completed.



Optional Activities

- Coordinate your own training for your team members.
- Create a newsletter, bulletin, or email announcement system within your department to share tips and progress.
- Recognize key staff for their efforts with certificates of appreciation.

Questions?

The <u>Core Zero Waste Team</u> is here to help. Please reach out any time to discuss ideas or request technical assistance.



Your Department's Responsibilities for Getting to Zero Waste

To reach the <u>2030 Zero Waste goal</u>, every County department has an important role to play in reducing, reusing, and recycling. Each year, your department will need to set goals for action.

To get started on the path to Zero Waste and set informed goals, your department will need to:

- Understand the composition of your waste and recycling streams
- 2. Benchmark your current practices and environmental impact
- 3. Understand where there are opportunities for improvement
- Set goals for taking action

Understand Your Waste and Recycling Streams

You need data to set informed goals. If you don't have the information already on hand, you'll want to do a <u>self-assessment</u> of your waste and recycling streams. In some cases, you might also obtain data from business partners on certain types of operational waste that they manage. A key objective of conducting this assessment is to see what materials are in your waste stream that could be <u>diverted through reduction</u>, reuse, and recycling. You'll also want to assess which <u>non-recyclable materials</u> are contaminating your recycling stream.

Benchmark Your Current Practices and Environmental Impact

Use the results from your assessment to understand your department's current practices. For example, you might find there is a high percentage of mixed paper in your waste stream that could be diverted or that there are materials, like food waste, in your recycling bins that should not be there.

As a next step, you can also discuss current purchasing, use, reuse, and recycling practices with purchasing staff, facility managers, or others.

Look for Opportunities for Improvement

After reviewing the results of your assessments, you might consider holding a team meeting to share the results and brainstorm potential waste prevention and reduction activities. When analyzing opportunities for improvement, focus on waste prevention first. Are there ways you can eliminate waste at the source? Next, evaluate your recycling practices. Can you recycle or compost more materials? Be sure to consider your purchasing practices as well. Here are some <u>best practices and strategies</u> to consider.

Set Goals

Now that you have ideas for action, you are ready to set your goals.

WHAT MATERIALS CAN BE DIVERTED?

The County and FCPS already divert many materials, including aluminum and steel cans, plastic bottles, mixed paper, cardboard, food waste, e-waste, scrap metal, tires, white goods (large electrical appliances like dishwashers and dryers), and yard waste and brush.

But audits have found that much more of the material found in County and FCPS trash can be diverted, including compostables like paper and food waste and recyclable paper and plastic containers.



Best Practices

Within your work area, there are dozens of ways that you and your colleagues, visitors from the community, and business partners can reduce waste.

Below are recommended best practices to help you set goals and implement Zero Waste at your location(s). Trying other ideas is strongly encouraged, and you will have opportunities to swap ideas with fellow Zero Waste Champions from other departments!

Assist With Central Zero Waste Strategies

Some strategies, like installing air hand dryers in restrooms and establishing systemwide standardized bins and compost collections, will be planned centrally by the Core Zero Waste Team. However, Champions may still have a role to play in ensuring their smooth implementation. Check out this table to see who will be involved in the 24 central strategies.

Conduct a Mini Waste Audit

The more you get to know your waste, the better you can divert it. Look in your trash and recycling bins. Do you see anything that shouldn't be there, like recyclable, compostable, or reusable items in the trash?

Also, watch for other types of waste in your trash and recycling bins that are managed outside of the collection system, like e-waste, construction and demolition debris, and shredded paper.

See the Pick Your Own Adventure guide to help you conduct a mini waste audit.

Consider Opportunities for Systematic Waste Prevention

The best way to reduce waste is to prevent it in the first place. Making changes at the system level can make waste prevention an automatic part of people's day. Can you replace a paper-based business process with a digital system? Can you transition from single-serve coffee (like K-cups) to a drip coffee maker with reusable mugs? Can you phase out single-use plastic water bottles or plastic bags? If your department manages food operations, could you donate untouched food to a local food bank?

Repurpose on Purpose

Your old office supplies, furniture, and appliances might be treasure, not trash, to someone else! The Department of Procurement and Material Management's (DPMM's) <u>surplus property programs</u> offer opportunities for you to repurpose items you no longer need.

Some items can be repurposed within your office, too. Partially used paper could be saved in a designated "scrap paper" box for reuse. Maybe last week's yogurt tubs or deli containers could be cleaned and repurposed to store snacks or small items.

HAVE EQUIPMENT YOU NO LONGER NEED?

Items like furniture, office supplies, scrap metal, and electronics are in high demand. The County can often reuse, sell, or donate equipment you no longer need.

Check out <u>Surplus Tools</u> (<u>sharepoint.com</u>) (employee access only). In many cases, DPMM will pick up your equipment. In some instances, you may need to schedule a pickup directly with a contractor.



Purchase Sustainably

Think before you spend! When possible, purchase less—in other words, buy only what you need. Durable, long-lasting products are a smart buy, too. The longer you can use (or reuse) items, the longer you keep them out of the waste stream. If you're buying items in large quantities, buy them in bulk. You'll save money and packaging. When possible, consider sharing, renting, or buying used products.

Dig Into Composting

While composting food waste and other compostable materials (like paper towels) will eventually become mandatory for all County facilities, there may be opportunities to get ahead and start composting now! County employees, contact the Core Zero Waste Team if interested in being among the first County facilities to compost. Many schools in FCPS choose to have small-scale composting or worm bins on site. Composting is a great educational tool and supports school gardens. Learn more about composting in FCPS on Get2Green's composting page.

ARE PLASTICS REALLY THE PROBLEM?

We love to hate single-use plastics, and rightfully so. They can cause big problems for the environment. Yet are the alternatives better? Unfortunately, many alternatives, such as the bioplastics found in compostable foodware, can have a bigger impact on the environment because they may cause more pollution in the production process. Your best bet: find ways to buy less, and use durable and reusable products whenever possible!

Learn more here: Think Before You Buy: Compostable Foodware.

Recycle Right

First, make it easy for people to recycle. Place recycling bins centrally throughout facilities, as well as near both small and large trash cans (so that the trash doesn't ever feel like "the only option"). Consider removing individual trash bins at cubicles or placing easily accessible recycling bins throughout an office space so that employees are not throwing everything in the trash out of habit.

Second, help people keep contaminants out of your recycling bins. Contaminants include food residues, loose shredded paper, and other materials. <u>Signage</u> can help guide people on what should go in (and stay out of) the recycling bin. See <u>Recycle or Trash?</u> for more information.

Make Your Events Zero Waste

If you are hosting an event, show your Zero Waste leadership. Limit or eliminate "free swag" by vendors. Rent or buy reusable foodware and keep individually packaged foods to a minimum. Encourage attendees to bring their own beverage container. Be sure to set up central bins for composting and recycling, along with clear signage. See many more tips for events on the Zero Waste Event Checklist.

Educate Others

Knowledge is (waste-reducing) power! At County facilities, present information on your facility's waste profile and Zero Waste opportunities. Share the results of your <u>mini waste audit</u> and talk about <u>key Zero Waste facts</u>, like how to reduce waste, where to compost, or what does and doesn't go in the recycling bin.

Encourage Employee Engagement on Sustainability

Everyone has a role to play in going Zero Waste. Encouraging others is a great way to kickstart Zero Waste habits and crowdsource ideas that excite your team. Try soliciting ideas and opinions from employees about Zero Waste opportunities (you could use a paperless guestionnaire, like Google Forms,



or a roundtable discussion). See what types of materials your employees have noticed they could reduce or reuse and encourage them to submit questions or suggestions anytime.

You can also hold your own fun, facility-wide challenges to energize your staff. For example, have a "Zero Waste Lunch Week" and challenge employees to bring a Zero Waste lunch all week long! At the end, everyone can trade their successful Zero Waste lunch ideas to use in the future.

Be Creative!

We highly encourage Champions to identify and try other Zero Waste ideas, especially when the ideas address materials found frequently in your waste stream. For instance, you could start a reusable item "gifting" program at your facility. Have staff request and share items they need with each other, like containers, paper, cardboard boxes, old office supplies, or anything else with reuse potential.















Get Support

The <u>Core Zero Waste Team</u> is here to help you with training, obtaining funding, strategic planning, identifying resources, connecting you with other Champions taking on similar projects, and more!



Reporting Results

It's important to assess your progress and share your results so the County can track overall success.

More details will be provided soon.



Resources

Here you will find a variety of resources to help you plan, communicate, and educate in your role as a Zero Waste Champion.

Planning Resources

- Sample Green Team invitation letter coming soon
- Sample charter
- E-Waste (County)
- Surplus Property Program (County)

Shareable Resources

Download and use these resources digitally, such as on social media, via email, and as bookmarked references.

These resources are coming soon.

Printable Resources

You can print this signage and use it to indicate how and where to properly dispose of waste.

- Compost guide poster 11x17 (County)
- Recycling guide poster 11x17 (County)
- Trash guide poster 11x17 (County)
- FCPS signage



Frequently Asked Questions: Champions

What is Zero Waste?

Zero Waste is a philosophy, commitment, and design principle to minimize waste by adopting a holistic and climate-conscious approach to the flow of materials through society. The concept is about managing materials across their entire lifecycle, with a focus on making changes in "upstream" waste reduction rather than "downstream" waste management. Fairfax County has set a goal for Fairfax County government and schools to get to **Zero Waste by 2030.** This means minimizing waste production by county government and schools to **close to nothing**. Specifically, the County government aims to:

- Divert **90 percent** of solid waste from disposal in the trash.
- Reduce the overall waste generated by 25 percent from 2018 levels.

Is Zero Waste possible?

Yes, but achieving Zero Waste is no small task. It requires the participation of every employee and user of government facilities, as well as County leadership and business partners. Working toward Zero Waste includes four key strategies: Reach Out, Reduce, Reuse and Recycle.

What is the Fairfax County Zero Waste Plan?

The <u>plan</u> is a guide for Fairfax County's municipal operations to transition to a future without waste. It provides direction, recommendations, priorities, and milestones for achieving Zero Waste. It is intended to be a living document that will be revised and updated as the County makes progress.

What is the Core Zero Waste Team?

The <u>Core Zero Waste Team</u> is made up of full-time staff from County and FCPS departments. The Team plans and carries out system-wide policies, trains Zero Waste Champions, and assists departments with planning and strategy implementation.

What is the role of the Zero Waste Champion?

The Champion's role is to inspire, plan, support, and track. You will set and revisit waste diversion goals annually, do a self-assessment every three years, and provide other critical support to your department.

What role do employees whose jobs don't involve managing waste play in getting to Zero Waste?

Every employee uses products and creates some waste. Therefore, everyone has a role to play in helping the County achieve Zero Waste. Preventing and reducing waste makes our facilities, parks, workplaces, and communities cleaner and healthier. It can also save us money, reduce pollution and climate-warming emissions, and provide many more benefits.

How do I motivate staff and others?

We all know change doesn't happen overnight—and that changing behaviors can be difficult. That's why as you get started, it will be important to communicate the "why" behind the County's Zero Waste goal and the <u>benefits of preventing and reducing waste</u>. Also, it's easy for people to start off with good intentions and enthusiasm but lose momentum along the way. As a Champion, you will receive training and other resources to help keep us all moving ahead on the Zero Waste journey.

What materials are commonly put in recycling bins that should not be?

County audits have found many materials are put in our recycling bins that could be diverted. These materials commonly include edible or recoverable food; other compostable items, like unrecoverable food waste or low-grade paper; and cardboard and other recyclable paper.



Who do I contact for assistance? Most of your questions can likely be answered by the contents of this toolkit. You'll also want to work closely with your leadership team on your plans, activities, and funding support. You can also contact the Core Zero Waste Team if you have questions about your responsibilities or need technical assistance.



Glossary

Audit: A method for analyzing the types and amounts of waste an organization generates. Waste audits can help facilities determine the effectiveness of their current diversion strategies and identify opportunities for improvement.

Circular Economy: An <u>economic model</u> that designs out waste and pollution, keeping products and materials in use for as long as possible instead of continually making and throwing away new products.

Compostables: Material from plant or animal sources that can decompose into a nutrient-rich, dirt-like material (compost) that can be used to improve soil. Common compostables include fruits and vegetables, eggshells, uncoated paper plates and packaging, napkins and paper towels, and grass clippings and leaves.

Diversion: Minimizing the amount of material in the trash by reducing raw materials, reusing materials before throwing them away, recycling properly, and composting.

Downstream: Activities that occur after a product is used (e.g., thrown away, recycled).

e-Waste: <u>Electronic waste</u>, or electronic products at the end of their use, including computers and peripherals (e.g., printers, scanners, ZIP drives, keyboards), phones, cameras, televisions, fax machines, portable gaming devices, video equipment, and audio equipment.

Recycling: The process of collecting and processing materials that would otherwise be thrown away as trash and turning them into new products.

Repurpose: To use an item for a different purpose than its original intended use.

Reusable: A product or packaging that is designed to be reused several times for the same purpose after use and whose reuse is made possible by adequate logistics.

Reuse: To use several times for the same purpose.

Source Reduction: The practice of preventing waste by reducing the volume of materials generated (i.e., reducing waste "at its source"). This can include buying fewer products, buying products with less packaging, or replacing disposable products with reusable options.

Trash: Discarded material that is *not* recycled or composted. In <u>Fairfax County</u>, trash is sent to waste-to-energy facilities.

Upstream: Activities that occur in the production of a product before it reaches a consumer (e.g., extracting raw materials, manufacturing, transporting a product).

Waste: Material that is discarded. Waste can include materials that can (and, in many cases, should!) be reduced at the source, reused, recycled, or composted.

Waste to Energy: Power plant facilities where waste is used as fuel to produce energy.

Zero Waste: Decreasing waste to close to nothing by systematically reducing, reusing, and recycling. Getting to zero waste requires adopting a holistic and climate-conscious approach to managing the resources and waste that flow through society.