

Key Challenges & Trends

A few key trends regarding wasted food were noted by many of Virginia's colleges and universities. Despite the variety among the schools and their programs, many identified the same concerns or experienced similar challenges. These key trends are discussed below.

Liability Concerns Pertaining to Food Donations: When discussing the donation of excess food, many institutions mentioned their concerns with the legal liability of food donations. The Bill Emerson Good Samaritan Food Donation Act discusses the protections provided to food donors who donate food in good faith. Many schools were not aware of the legal protections available to food donors, while others knew about them but still had concerns. Some schools said that limited access to food safety training was a barrier that prevented them from expanding food rescue operations. The logistical coordination of food donation requires additional attention from dining hall staff. Others can help to support donations, but some noted that any additional assistance with food donation efforts would need to come from staff members who are certified in food safety standards. Despite federal liability protections for food donors, the associated liability was the most common concern expressed to DEQ.

Plate Waste: Many schools reported that student plate waste was a significant contributor to the total volume of food waste created on campus. One institution reported that students wasted \$32,000 in food within a 30-day period. Another institution that enrolls less than 1,000 students reported that dining halls can see up to 50 pounds of food waste in a single service. Educating students on the impact of their plate waste is an area of interest for many colleges and universities. Reducing portion sizes and utilizing smaller or unique plate shapes can help mitigate some student plate waste. While plate waste can be composted, schools should explore educational opportunities and advanced planning techniques as a way to prevent plate waste and increase student awareness around the issue.

Wasted Food from Campus Events & Programming: College and university campuses often host events and activities, many of which include food service. On a college campus, free food is often a compelling incentive that encourages students to stop by events and activities. Given the "drop by" nature of campus programming, it is often easier for event planners to overestimate how much food they should order. On many colleges and university campuses, tables are often filled with leftover food at the conclusion of events. While these leftovers are edible, high-quality food, food safety guidelines prevent the donation of food that has been on open buffet lines. Encouraging event planners to order less food and make more realistic predictions of attendance at events can help mitigate some of the wasted food. Free food alert systems, whether through formal channels or informal messaging platforms, can also be helpful tools in diverting food waste at events. Event hosts can encourage their attendees to bring reusable containers in case there is leftover food.

Lack of Space and Equipment: Storage and management of excess food require space and equipment that some institutions do not have. Multiple institutions reported to DEQ that lack of space was a key barrier to their ability to store excess food for food rescue operations. Some universities also noted that lack of cooling equipment, such as refrigerators and blast chillers, make it difficult to keep excess food at the food safe temperatures required for food rescue

operations. Dedicated space is often hard to come by on a college or university campus, and cooling equipment often has a high up-front cost. Finding funding sources for equipment and free space was a barrier mentioned by numerous schools. Blast chillers, which are designed to quickly freeze hot food, can be a particularly effective tool for institutions trying to preserve or rescue food.

Staffing Capacity at Smaller Institutions: For smaller institutions, finding staff to coordinate food waste prevention, food rescue, and composting can present a significant challenge. Staff members at smaller institutions are often juggling multiple roles, making it difficult to dedicate significant time to coordinating programs that prevent food waste.

Availability of Composting: For many schools, the volume of food waste produced on campus could only be managed through a partnership with a large-scale composting facility. In Virginia, only a handful of composters have the capacity to process large volumes of food waste. Some institutions cited the lack of availability of compost processing as a barrier to instituting compost programs on campus. Others noted that given their location and the composting options available to them, the environmental impacts of hauling would outweigh the environmental benefit of composting. Longer hauling distances also mean increased costs for those looking to divert their food waste. Of the institutions currently partnering with industrial scale compost facilities, many were hauling their waste significant distances in order to be processed.

Student Engagement & Program Continuity: Students were engaged in food waste prevention, food rescue, and composting programs at nearly every institution that responded to DEQ in both paid and volunteer positions. Many institutions noted the important role that students play in supporting these programs. For instance, most food rescue programs are largely student run. Many also noted the difficulty of maintaining continuity in programs that are entirely run by students. Without support from a full-time staff member, these programs can lose traction from year to year, and institutional knowledge can be lost. Student groups supported by institutional staff are more likely to make smooth transitions while allowing students to feel a sense of ownership, which can be a powerful motivator for student engagement, particularly in the case of peer-to-peer education.

Contamination & Public Compost Collection: When implementing a new compost collection program, many institutions begin their collection in their “back-of-house” operations. This means that organic waste is collected only in food service production areas by trained dining hall staff members. Because compost collection is happening in a more controlled environment, limiting contamination and training staff members is more straightforward. When campus composting programs are expanded to “front-of-house” operations, while the volume collected can significantly increase, so will the likelihood of contamination. When expanding the scope of compost collection, it is important to educate the community on what is and is not accepted in the organic waste stream. Clear signage and community engagement initiatives can be effective ways to inform the campus community about compost collection. Because students cycle in and out of colleges and universities each year, education must be a continuous effort. Limiting the amount of non-compostable items that are present in the campus waste stream is another effective way to reduce contamination in compost collection. By changing procurement standards, institutions can control when and where compostables are used on campus. By only

sourcing certified compostable materials, fewer non-compostable materials will be available to become contaminants.

In addition to the trends outlined above, DEQ received the feedback about how the agency could best support the efforts of colleges, universities, and state agencies. Institutions noted that networking opportunities, communities of practice, and a set of case studies on food waste prevention, food rescue, and composting programs, would all be useful tools as they work to further develop these programs on their campuses. DEQ hosted a series of [educational calls](#) on food waste prevention, food rescue, and composting, and is continuing to plan activities to support these requests.

Best Practices

When engaging in food waste prevention, food rescue, and composting, DEQ identified the following as broadly applicable best practices that should apply to this work:

- Food recovery and composting efforts should be structured to support circularity and locally based solutions, meaning food should be diverted to feed people in the local community, and finished compost should be utilized to rebuild local soil profiles.
- Programs focused on food waste prevention and diversion should be used as educational tools.
- Food waste prevention, food rescue, and composting programs should promote narratives that emphasize the importance of food as a resource.
- Including food waste prevention in institutional planning and goal setting can help ensure that these programs are regularly prioritized and evaluated.