

Reusable, Compostable, and Disposable CAFETERIA TRAY OPTIONS



This resource is intended to provide information to schools interested in single-use disposable tray alternatives. Included are benefits and considerations for three different lunch tray options, as well as best practices for commercial dishwashers.

Please [visit the corresponding webpage](#) for expanded information, additional success stories, and cost savings analyses.

REUSABLE TRAYS

BENEFITS

- Reduce harmful environmental impact related to production and disposal of single-use options
- Demonstrate commitment to environmental stewardship
- Sturdy, high-quality dishware reduces drops and messy spills
- Save money with lower disposal costs and ongoing purchasing needs
- No safety/health concerns with reusable as compared to disposable

CONSIDERATIONS

- May require dishwasher appliance, installation and maintenance
- Up-front cost for purchasing trays and dishwashing equipment
- Electricity and water costs
- Assess labor and training needs
- Purchasing enough trays to cover more than one lunch period
- Need to store and dry trays



REUSABLE TRAYS TIPS & SUCCESS STORIES

- [Reusable Food Serviceware Guide](#) from ReThink Disposable
- [ReThink Disposable Guide to Reuse During COVID](#) from ReThink Disposable
- [Reopening with Reusables](#) by Center for Environmental Health (CEH)
- [MassDEP Reduce, Reuse, Repair Micro-Grants](#)
- [Recycling Dividends Program \(RDP\) funds](#) – contact your [Municipal Recycling Coordinator](#) to learn if your municipality has earned RDP funds, then request that a portion of funds be used for dishwashers and trays

Town of Framingham- MassDEP Case Study:

The town established a [School Organics Diversion and Reusable Tray Program](#) at four elementary schools that **avoided disposal of 16.6 tons of foam trays, plastic utensils, and organic waste annually**. They had no increase in labor costs and the case study includes impacts to water and electricity use.

Durable Dishware Cost Savings:

When [two Minnesota middle schools](#) with durable trays introduced reusable flatware and bowls, **they saved a combined \$3,000 and prevented 3 tons of waste in the first year**. After three years of use, savings from the durable dishware is estimated to exceed \$20,000.

Cost Savings Switching from Disposable to Reusable Trays:

New Bedford School District purchased and installed ten dishwashers at three school locations. They transitioned from disposable single use trays to reusable durable trays in these schools.

The district calculated their baseline cost for disposable trays was \$9,000 per year (270,000 trays per year at \$16 per case of approximately 500 trays).

They purchased 4,000 reusable trays at \$2 per tray for a total investment of approximately \$8,000. It is important to purchase enough trays to cover multiple lunch periods as it may not be feasible to wash and dry trays in between lunch periods.

After only one year of use, the district found that the initial start-up costs of reusable trays were offset by savings on purchase of disposable trays!



EVALUATING DISHWASHER OPTIONS FOR YOUR SCHOOL

- Identify current procedures:** What dishwashing is currently taking place?
- Carefully consider:** Price, quantity, style, space, durability, shipping, funding/grants, training
- Funding:** Look into funding opportunities/grant opportunities to support purchasing costs (e.g. MassDEP [Reduce, Reuse, Repair Micro-grant](#))
- Price:** Compare costs of business as usual to reusables. Use the ReThink Disposable [Foodware Calculator](#)
- Equipment options:** Dishwashers available on state contract ([GRO40: Food Service Supplies and Equipment](#))
- Training:** Educate staff on the new reuse-centric policies and practices. Display signage indicating changes made and options available for students, and staff diversion resources.

LESSONS LEARNED FROM DISHWASHER PROCUREMENT

In 2019, the New Bedford School District received MassDEP Sustainable Materials Recovery Program (SMRP) Municipal Grant funding to assist with the purchase and installation of 10 school dishwasher systems. They tracked direct and indirect costs of the project and provided valuable insight into the process. Here are some key takeaways:

- **Include as much detail as possible in the bid for vendors.** For example, schools should require that the selected vendor conduct a site visit to assess the space, discuss budget, and identify equipment models that will fit space constraints and other specifications. If necessary, the vendor should also remove existing equipment.
- **Planning and scheduling are key to success,** as equipment removal, delivery, installation, and warranty certification require careful coordination of multiple vendors and plumbing and electrical contractors.
- **The cost** of each dishwasher was approximately \$9,500 in 2019, for a total cost of \$100,000. Plumbing and electrical disconnection of old equipment and reconnection of new equipment cost approximately \$25,000.



COMPOSTABLE SINGLE USE TRAYS

BENEFITS

- Trays can be composted instead of thrown away (check school composting guidelines)
- Better alternative to polystyrene (foam) for environment and health
- Dishwasher installation, training, costs etc. not needed
- Similar routine for students and staff



CONSIDERATIONS

- School needs access to a commercial or on-site composting program that can accept this material
- If confused with recyclable materials compostable trays can contaminate recycling
- Typically, more expensive than polystyrene
- May contain harmful chemicals (such as per- and polyfluoroalkyl substances or PFAS)
- Often not backyard compostable

COMPOSTABLE TRAYS TIPS & SUCCESS STORIES

- Choose products that are [third-party certified compostable](#)
- Black Earth Compost lists [companies that offer certified compostable](#) 5 compartment lunch trays
- Compostable options are available through state contract ([GRO40: Food Service Supplies and Equipment](#))
- [Hingham High School GREEN TEAM Case Study](#)- compostable trays are processed on site using New Age Composter bins

COMPOSTABLE TRAYS CHECKLIST

- Confirm that school has access to a curbside or drop-off commercial composting program that accepts this material
- Choose products that are third-party certified compostable
- Communicate with and educate students and staff!
- Post clear signage

Compostable trays should never go in the recycling bin

DISPOSABLE SINGLE USE TRAYS

BENEFITS

- Low upfront costs
- Convenient for schools without dishwasher appliance and less labor intensive for kitchen/ dishwashing staff
- Widely available for purchase



CONSIDERATIONS

- Increase disposal quantity and removal costs and custodial labor
- Lower quality/strength
- Environmental impacts related to production and disposal
- More than 50 MA cities and towns have banned some form of polystyrene as listed on [MA Sierra Club website](#)
- [MA Sierra Club](#) expands further on challenges with polystyrene food containers, trays, packaging

HOW TO REDUCE WASTE FROM SINGLE USE TRAYS

If unable to replace polystyrene trays at your school, here are some strategies to reduce waste and increase efficiencies:

- **Collection and stacking methods** can save space and reduce the number of times trash containers need to be emptied.
- **Look for creative reduction strategies such as implementing a Trayless Tuesday**
In NYC, a [Trayless Tuesday Initiative](#) led to a citywide reduction in use of polystyrene by 20% in 2010, and ultimately led to NYC's decision to eliminate polystyrene from schools citywide!

Contact THE GREEN TEAM for More Information
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