Food Waste and the Transparency Gap

Lincoln Cohn

My investigation into the problem of food waste began with an observation while shopping at my local H Mart grocery store in Brookline. While in the produce section, I noticed an area dedicated to reduced-price produce for imperfect or near-end-of-shelf-life items. It was not a trash bin or a hidden corner, but a clearly labeled display of slightly bruised fruits and vegetables, all marked down at lower prices. Immediately, I recognized the positive environmental impact of choosing to sell items that under normal policy would be thrown away. It got me curious about the broader problem of food waste and led me to dig deeper. First, I wanted to know why this store was choosing to sell items that many others might throw away. I reached out to the local store's email address that was listed on its website to ask about the origins of this program. After multiple emails with no response, I decided to seek out the store manager in person, who kindly took down my email and promised he would get back to me. After a few days I got an email from him providing details about the program. I learned that this program was an autonomous decision made by the store manager and regional manager. They explained that their choice to sell these items rather than discard them was driven by three clear values. First, there was a financial motivation: selling items with minor damage allows the store to recover some costs instead of generating zero revenue. Second, there was a social motivation: during a period of high inflation, discounted produce helps customers save money and encourages them to try new items with minimal risk. Third, there was an environmental motivation: a natural outcome of this program is that less food ends up in the trash. This simple and logical system at H Mart led me to a much larger question. If one store can implement a transparent approach that benefits the business, the customer, and the environment, what would happen if every major retailer did the same? With this question in mind, I decided to examine the broader grocery retail landscape in Boston to see whether other companies demonstrated similar transparency or other unique practices.

Before evaluating individual retailers, I needed to understand the scale of the problem itself. Food waste is not limited to only spoiled items but rather is a massive national crisis with serious financial and environmental consequences. According to data from the USDA and the EPA, the United States wastes between 30% and 40% of its total food supply each year. This results in a financial loss of over $161 billion annually, based on conservative estimates from 2012. More recent projections from the organization ReFED suggest that this figure may now be as high as $338 billion. The environmental costs are equally severe. When food is wasted, all the resources used to produce it are wasted as well. This includes the 9 trillion gallons of water used to grow crops that are never eaten and the energy responsible for emitting 154 million metric tons of CO_2 during food production. Equally concerning is what happens when food waste ends up in landfills. When food is decomposed in landfills it does so without oxygen and produces methane, a harmful greenhouse gas. Food waste accounts for approximately 58% of methane emissions from landfills. The Environmental Protection Agency (EPA) has acknowledged the seriousness of this issue and set a national goal to reduce food waste by 50% by the year 2030. It is clear that meeting this ambitious target will require active participation from grocery retailers. To understand what was happening at the retail level, I launched an investigation into major grocery stores in the Greater Boston area. I selected seven widely used retailers: Market Basket, Star Market, Whole Foods, Costco, Trader Joe's, H Mart, and Shaw's. Rather than solely relying on company websites that frame each company in the best light, I wanted to understand how these companies actually operate. I reviewed their public sustainability statements and found that nearly all of them used strong language emphasizing environmental responsibility. However, statements alone are easy to make and my goal was to find clear data and practices. I decided to create a list of twelve specific questions designed to uncover how each company manages food waste in practice.

Here are the twelve questions I sent to each retailer:

1. Donation Practices: What happens to food that is still safe to eat but unsellable? Do you donate it?
2. Partners: If you do donate food, through what specific partners or programs does this happen?
3. Frequency: Approximately how often do donations occur (daily, weekly, etc.)?
4. Volume: What proportion or volume of surplus food is typically donated versus discarded?

5. Composition: Which categories of food (e.g., produce, bakery, meat, dairy, prepared foods) tend to generate the most waste at your store?
6. Drivers: Are there specific factors that drive the differences in waste between these categories?
7. Eligibility: Which product categories are easiest to donate to, and which are the most difficult?
8. Contracts: Do you have standing arrangements or contracts with food-rescue organizations, shelters, or food banks?
9. Composting: For food that cannot be donated, is it composted? If yes, how is this managed?
10. Measurement: Do you track or report the total volume of food discarded, donated, or composted? If so, how is this data collected?
11. Source Reduction: Are you taking steps to prevent food waste before it occurs (e.g., improved ordering, markdowns, or staff training)?
12. Future Goals: Do you have specific short- or long-term goals to reduce food waste or increase food donations, and what are the target dates?

I believed these questions were both fair and necessary for any company claiming sustainability regarding food waste. I reached out through corporate websites, regional office emails, and formal media request forms for an interview or statement. The responses I received became one of the most revealing aspects of my project. Out of the seven companies, three did not respond at all. Two others forwarded my inquiries to "specialized teams" that never followed up. For instance, Star Market and Shaw's sent polite responses stating that my questions would be passed along internally. After a week of no response, I made multiple attempts to follow up through email but no further communication occurred. Two companies did respond, but without providing meaningful answers. One representative informed me that the information I was seeking could be found on their company webpage regarding sustainability. After reviewing the page in detail, I found that it lacked the specific data that I had requested, such as donation frequency or waste composition. The best example of food waste reporting came from Costco, which produces annual sustainability reports. While these reports do not address every aspect of food waste, Costco demonstrated a higher level of transparency, and its report-based approach to communicating food waste and diversion practices could serve as a model for other companies that claim sustainability.

This lack of transparency became a central finding of my investigation. While retailers are eager to promote broad sustainability goals, they are much more reluctant to share detailed data that would allow the public to evaluate their progress. Because corporate offices were unresponsive, I pursued a different angle of contacting store employees. I interviewed Sebastian, a Boston University student who currently works part-time at Whole Foods to gain firsthand insight. Sebastian's responses offered both reassurance and concern as he explained that Whole Foods maintains strict policies regarding "shrink," or unsellable items. According to him, the store is very organized, with clearly labeled bins designated for donations and compost. At the same time, he acknowledged that human error and store policy still result in waste. He talked about an incident where overnight stockers accidentally crushed multiple bags of chips while restocking shelves. Once the product was damaged the items became unsellable and were simply thrown away. This demonstrated to me that even with strong policies in place, the policy-strict nature of retail leads to food ending up in the trash. While Sebastian confirmed that donations do occur, he did not have access to data on donation volumes.

When considering these findings as a whole they reveal a fundamental disconnect. On one side, the EPA is calling for a 50% reduction in food waste by 2030. On the other side, the retailers that handle much of the nation's food operate largely behind closed doors. My belief is that the core issue is measurement. If waste is not tracked and reported, it cannot be effectively managed. When a store claims to be sustainable but does not disclose how much food it sends to landfills, there is no way to verify that claim. Good intentions alone are insufficient and meaningful progress requires data. My struggle in obtaining basic answers to twelve questions shows that transparency is not a priority. Under current food retail practices, combined with government food waste data, it is clear that the system cannot be considered sustainable.
This project began with a positive example at H Mart, but it concluded with the realization that the grocery industry as a whole is falling behind. Addressing this problem requires changing the system's current "business as usual" practices on three levels:

- Legislation: State and federal laws should require retailers to report food waste data. Reporting must be mandatory, not voluntary. Companies need to disclose how much food is donated versus discarded.
- Standardization: Clear and consistent measurement standards are necessary so that waste data can be compared across retailers. These measurements should be transparent and communicated through annual reports following the model of Costco's "Annual Sustainability Report."
- Consumer Action: Consumers (if able) should support stores that sell imperfect produce and have strong donation programs. Consumers must demand accountability from their local grocery chains.

Reducing food waste is a triple win that saves money, feeds people (especially vulnerable communities), and protects the planet. But ultimately improvement is impossible without visibility. Food retailers must pull back the curtain, share their data, and work honestly toward the EPA's national goal of reducing food waste. With more research and cooperation from all sides, we can begin to close the transparency gap that enables food waste to persist and make meaningful progress toward a more accountable and sustainable food system.