



Recycle centers are seeing a spike in cardboard recycling following the holidays after a record year for online retailers. The U.S. Postal Service estimates that they delivered ten percent more packages in 2017 with Amazon shipping over five billion items for Prime members. (Photo: Justin Sullivan/Getty Images)

There is no more obvious indicator of the overwhelming success of e-commerce than the boxes piling up on neighborhood doorsteps and curbs. But what's the cost to retailers and society for all that cardboard?

In [an online discussion](#) last week, *RetailWire* BrainTrust panelist [Nikki Baird](#) pointed out the difficulty of figuring out who's responsible for handling e-commerce's cardboard problem.

“Consumers have a stake, retailers have a stake and shipping companies too — and they all represent conflicting forces,” said Baird, who is also a *Forbes* contributor.

The Fibre Box Association contends that, while 90% of corrugated packaging gets recycled, the leftover 10% still adds up.

Part of the reason is the overall confusion over what is recyclable. Consumers also don't effectively break down the corrugated cardboard boxes to optimally fit them onto trucks. Shrink and bubble wrap has to be removed at the recycling facility and can clog machines. And some new sources of packaging, such as ice packs that support meal kits, are challenging to recycle, according to reports.

Despite the inconveniences, some BrainTrust members believe that the onus remains on consumers.

"Shoppers have to understand the price that they pay for the convenience of online shopping is to be vigilant about breaking down those boxes and using them for good," said [Anne Howe](#), principal at Anne Howe Associates.

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"Those among us who order online must be the ones that take charge of this," said [Zel Bianco](#), president of Interactive Edge. "It cannot be the responsibility of the shipper only."

Customers will nevertheless have more cardboard to contend with. The industry is trending toward speedy delivery, making it less likely retailers will have extra days to include more items from an order in a single box.

"We filled big boxes with big packages full of air to protect little potato chips at Frito because consumers hate chip crumbs," wrote [Ben Ball](#), senior vice president at Dechert-Hampe, on RetailWire. "Shippers pack orders similarly (box within a box packed with those obnoxious peanuts or bubble packs) because consumers don't like for the original packaging to be damaged — much less the item. UPS and FedEx hate that because it takes up [space] in the trucks, but they don't like complaints either. So we keep getting lots of cardboard."

"I am very sure that if Amazon, in particular, could save money by cutting back on the cardboard, they would," offered Professor [Gene Detroyer](#). "The issue isn't cardboard and packaging, the issue is the most cost-effective supply chain. And while pieces may seem inefficient, the entire chain is the real measure."

But some forces may be driving Amazon to reevaluate its shipping priorities.

A [Wall Street Journal](#) article last month noted that Amazon.com is working on reducing the use of multiple boxes in orders and shrinking the size of its boxes in part because of environmental concerns, particularly among millennials. Other reasons include reducing shipping costs and the "general nuisance" of cardboard overflowing in garages.

In a 2016 [New York Times](#) article, Don Fullerton, a professor of finance and an expert in economics and the environment at the University of Illinois, said one solution would be to make retailers responsible for taking back the boxes to encourage them to come up with more efficient packaging.

Others have suggested that consumers be the ones to step up on the issue.

In an interview last year with NBC News, Heidi Sanborn of the California Product Stewardship Council said that, while corporations have a responsibility to reduce package waste, consumers need to “be thoughtful and to tell companies, ‘Hey, I don’t want all this waste. I want to buy products that are in reduced packaging, or reusable packaging.’”

Either way, BrainTrust panelist Bob Amster, principal at Retail Technology Group, believes it comes down to dollars and cents.

“If there is a profit motive for the manufacturers and retailers, this drive to corporate environmental responsibility will happen faster,” said Mr. Amster. “Bet on that!”