

## Foodservice Packaging in Mixed Paper Bales: Audit Results

### Background

The Foodservice Packaging Institute's Paper Recovery Alliance (PRA) and Plastics Recovery Group (PRG) are working to increase the recovery of foodservice packaging by overcoming real and perceived barriers. One of the barriers for paper foodservice packaging was concerns expressed by mills and materials recovery facilities (MRFs) about adding these items to standard commodity bales such as mixed paper. To that end, the PRA had developed “desktop” estimates of the quantities of foodservice packaging that would be present in these bales when communities promoted collection of paper foodservice packaging for recycling. In order to test these estimates against “real world” examples, the PRA decided to conduct audits of mixed paper bales.

### The Study

In order to better understand the amount and type of paper foodservice packaging that is being recovered through the residential curbside recycling system in communities that currently accept paper FSP, a team led by RRS sorted six mixed paper bales from two markets (New York City and Seattle) in October 2014. The sort sought to quantify the following types of paper foodservice packaging items:

- Hot Drink Cups
- Cold Drink Cups
- Takeout Containers
- Paperboard Pizza Box
- Cup Sleeves
- Takeout Bags
- Beverage Carriers
- Egg Boxes

All eight targeted material categories were listed as accepted on the websites of the New York City and Seattle recycling programs as of October 2014.

Sorting the hot and cold cup categories was based on a visual inspection and relied in large part on factors such as brand (e.g. soda vs. coffee), caution statements, etc. The target materials were all weighed and noted. The balance of the bales were mixed paper and other contaminants.

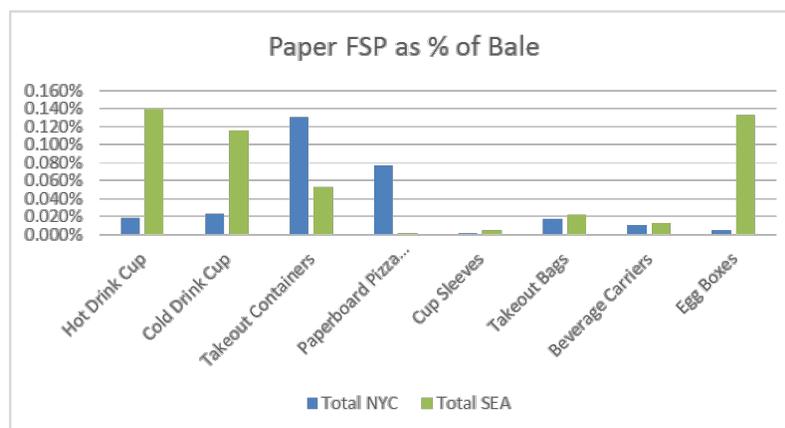


## The Results

In total, foodservice packaging comprised only several pounds (approximately 2.5-10 lbs) out of each bale. On a percentage basis, samples from both cities averaged under 0.5%. The Seattle samples had a higher proportion of foodservice packaging (averaging 0.48%) than New York City (averaging 0.28%). For comparison, PRA’s “desktop” estimates projected that paper foodservice packaging would make up of 3% of a mixed paper bale, given a future foodservice packaging recovery rate of 10%.

The prevalence of paper foodservice packaging item types found in each bale varied substantially between types of packaging, and the relative mix differed significantly by city.

*Paper Foodservice Packaging as a % of Bale Weight (averaged by city)*

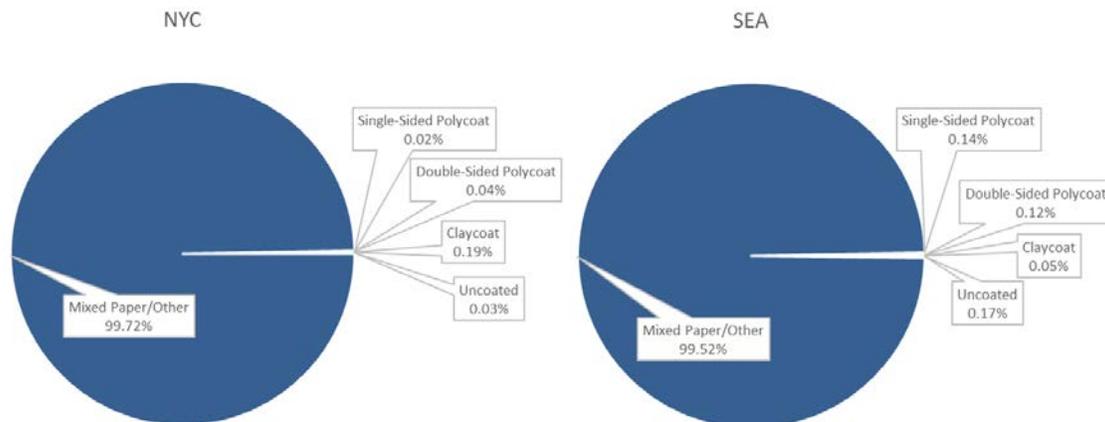


While it is impossible to determine the exact reasons for these differences, some factors contributing to these findings may include:

- different consumption patterns;
- different packaging mix due to local foodservice market shares and regulatory landscapes (polystyrene foam has been banned in Seattle since 2009);
- the availability of composting options in Seattle; and
- different histories of the recycling programs and resident education.

While item type is of interest for resident education and ability to sort at the MRF, the inclusion of coatings (i.e. clay versus single- or double-sided polycoat) will be of greater relevance to end markets.

*Foodservice Packaging by Coating type, as Percentage of Bale*



### Contractor’s Conclusions

Overall, the bale audits found very low levels of foodservice packaging material in mixed paper – foodservice packaging made up an average of 0.48% in Seattle and 0.28% in New York City.

Possible factors contributing to these findings include:

- low recovery rates for foodservice packaging, in general;
- low awareness in New York City that foodservice packaging can be recycled; and
- the composting option for some paper foodservice packaging in Seattle.

FPI would like to thank the City of Seattle, Republic Services, Paper Fibres Corp., and Recycle Ann Arbor for participating in the study.

More information on FPI’s recovery projects may be found at [www.fpi.org/stewardship](http://www.fpi.org/stewardship).