

Background

California is expected to expand residential coverage of food waste collection programs and add 50 to 100 new composting facilities to meet the organic waste disposal goals of 2016 Senate Bill 1383¹. The bill requires California waste management authorities to achieve a 50 percent reduction in organic waste disposal by 2020 and a 75 percent reduction by 2025. To better understand the current role that compostable foodservice packaging (FSP) plays in the successful diversion of food waste in California, the Foodservice Packaging Institute funded two studies in 2017 with a focus on residential collection and processing of these materials.

- The first study, *Residential Food Waste Collection Access in the U.S.*, prepared by the Institute for Local Self-Reliance for BioCycle, surveyed residential access to food waste collection programs across the U.S.. The survey was conducted using a comprehensive questionnaire completed by food waste collection program managers.

It assessed the ability of households to participate to a curbside or a drop-off program offered or supported by local government. It did not include private haulers offering subscription services for food waste collection independent from local government involvement.

The study included individual program information such as program start date and number of households with access to curbside and/or drop-off collection, along with data on types and sizes of curbside containers, collection services providers, types of drop-off programs, drop-off site staffing, material accepted and type of processing facility. Depending on local conditions, programs might include one (city program) or several communities (county or solid waste district programs).
- The second study, *Organics and Foodservice Packaging Composting Infrastructure in the U.S. and Canada*, conducted by Resource Recycling Systems, surveyed compost facilities to learn which foodservice packaging items were accepted and how the materials were processed.

The study included 45 compost facilities operating across California. Initial research was primarily conducted by phone interviews with facility managers and operational staff and was supported by email. The survey included general information on composting technologies used, the quantity and nature of incoming material tonnage such as the quantity of compostable packaging received as a percentage of total incoming material, feedstock acceptance (food waste, yard waste, compostable packaging types), the type of accepted foodservice packaging items and the requirements for compostable products (certifications, standards). Compostable foodservice packaging items included in the processing facility study are shown below:

Material	Foodservice Packaging Items
Paper	Uncoated food soiled paper (napkins, towels), Food soiled paper with conventional coating (cups and take-out containers), Food soiled paper with compostable coating (cups and take-out containers), Molded fiber containers, Corrugated boxes (pizza boxes)
Plastic	Compostable plastic cups, plates, cutlery, bags

¹According to CalRecycle estimates, as stated by Scott Smithline and Ken DaRosa in “California Launches Its Organics Revolution” in BioCycle March/April 2018, Vol. 59, No. 3, p. 22, www.biocycle.net/2018/03/12/california-launches-organics-revolution/ accessed on 7/14/2018.

Findings Specific to California

Residential Access to Food Composting

Residential composting programs in California provide curbside or drop-off collection of food scraps. Key findings of the 2017 study relevant to California include the following:

- **36 food scrap collection programs** were reported by program managers or state organics recycling agencies. These programs are offered to part or all of 97 communities in total.
- A total of 1,740,000 California households, equivalent to **13 percent of the state's population²**, have access to curbside food waste collection programs.
- Nearly **90 percent** of food waste collection programs **accept at least one type of foodservice packaging**.

California Residential Food Waste Programs, by Total Community



² According to U.S Census Bureau

Acceptance of Foodservice Packaging by Composting Facilities

- Over **60 percent** of California composters that accept FSP are **located within 40 miles** of communities accepting FSP. While FPI does not track which specific programs send material to each facility, it is expected that residential programs use nearby facilities when available due to logistical and economic factors.
- Foodservice packaging represents a small part of total material sent to composters that accept the materials, averaging an estimated **2 percent of incoming material** at those sites.
- Of the California composters accepting FSP, 60 percent accept both **paper and compostable plastic** products, while 40 percent accept only FSP items made of paper.

California Composters and Residential Programs Accepting FSP



Conclusions

In total, California's network of compost facilities provides service to more than 5 million of the state's inhabitants. FPI has found compostable packaging to represent a very minor fraction of the total material these facilities receive, and yet opportunities exist for this infrastructure to play a key role in expanding the collection and recovery of food waste and/or compostable packaging. For instance, the Stockton, California food waste collection program does not currently accept FSP, while two compost facilities located within 40 miles of the city do accept all of the compostable packaging types included in the survey. Across California, at least 15 cities³ of over 50,000 residents each, lack residential food waste collection programs, yet are located within 40 miles of a compost facility that accepts food waste and foodservice packaging for processing.

³ Antioch, Bakersfield, Brentwood, Daly City, Delano, Fairfield, Merced, Pittsburg, Richmond, Santa Cruz, Tracy, Turlock, Vacaville, Vallejo, Watsonville.