



North Carolina

CASE STUDY ON COMPOST HAULERS

North Carolina is home to a growing number of composting facilities that not only save food products from a trip to the landfill but also create compost products that enrich and support healthy soil and agriculture. An essential support system for these composting sites is a network of compost haulers (also know as food scrap collection services) who supply the essential connection between consumers and the composting sites.

The compost hauling industry is relatively new in North Carolina. In several cases, these businesses started as a small bicycle collection program that has grown into an operation with a significant book of clients and a number of paid employees. Much of this growth is attributable to the environmental commitment of the founders and employees of these companies. Our state would benefit from the development of new hauling businesses and composting facilities in both rural and urban areas, and these new businesses would be welcomed by the existing companies as important adjuncts to the process of eliminating waste and enhancing/improving soil for gardening and farming.

This case study summarizes operational information obtained from interviews with five prominent and active compost haulers in different parts of the state in order to:

- ◆ Develop an understanding of best practices.
- ◆ Help similar businesses start up in parts of the state not currently served by compost haulers or composting facilities.



HAULER OVERVIEW

The table below provides an overview of the operational scope and service provided by the five compost haulers interviewed. Companies participating are geographically diverse, from Asheville to Wilmington, and have a number of different methods for delivery and use of the compost they collect. Several companies take all of their compostables to facilities operated by others, including publicly and privately operated compost facilities and an anaerobic digester facility. Other compost haulers own or plan to acquire their own facilities for composting all or part of their compost. Some haulers sell compostable packaging and serviceware as an additional service and revenue source, and two companies have “giveback” programs allowing customers to get finished compost back for their own use. As Table 1 shows, a wide variety of vehicles are used in the collection process with different methods used for loading bins and buckets onto the trucks.

Table 1: Summary of Operations

| Compost Hauler | Area | Compost Facility Destination | Vehicles / Loading | Extra Services |
|------------------------|---------------------------------|---|---|---|
| Compost Now | Research Triangle; Asheville | Brooks Composting; Danny’s Dumpster | 26 sprinter vans, 7 box trucks (26’) in NC | Compostable serviceware; clients eligible for finished compost |
| Compost AVL | Buncombe County; Haywood County | Danny’s Dumpster | 2 pick up trucks; Other trucks contracted out as needed; Loaded by hand | 3 part cleaning process for client containers |
| ScrapDaddy | Charlotte | Earth Farms | 1 pick up truck (6’ bed); Loaded by hand | Clients eligible for finished compost |
| Wilmington Compost Co. | Wilmington | ~65% to their farm; Overflow 35% to New Hanover County Compost Facility | Box truck; Pick up truck; Sprinter van; Loaded by hand | Compostable packaging distribution service |
| Crown Town Compost | Charlotte (I-485 loop) | Anaerobic Digester; plans for future on-farm composting operation | Ford F350; Isuzu FTR; Loaded with hoist | Clients eligible for finished compost (~10 cubic feet returned to clients every year) |

ROUTING

Tracking collections and deliveries as well as routes are an important part of the hauling business. One of the haulers uses an in-house customized application to run its business, and others use commercial applications to track their work. Apps used for routing include [Optimoroute](#), [RouteXL](#), and [Routific](#). The route app that may be most specific to compost hauling is [StopSuite](#). This report did not review any of these apps as to effectiveness or cost, but all haulers indicated that use and collection of data was an important part of understanding and improving business operations.



MARKETING

Marketing ideas were discussed in all interviews. The clear consensus was that targeting neighborhoods in order to achieve high market density as to collections was paramount. Most compost haulers indicated that community involvement was the best way to increase their customer base. Facebook and Instagram were offered and low- or no-cost ways to advertise and generate new clients.

BUSINESS DEVELOPMENT

The best new ideas to support business growth included finding land for a compost facility to reduce reliance on 3rd party composters, diversifying revenue streams through the sale of compost related products such as serveware and compostable packaging, and finding dedicated employees who believe in the mission of composting and will work hard to achieve those goals. Although an expensive item that may be beyond the scope of most haulers, the purchase of a tip truck was mentioned as a way to increase collections and facilitate handling.



GROWING PAINS

State and local zoning and regulations were reported as often out of date and not specifically applicable to the relatively new business of compost hauling and composting. The US Composting Council developed a [Model Zoning Template](#) and guidance document that can help local government staff and elected officials make informed decisions for their jurisdiction related to composting. Truck acquisition costs and maintenance expenses were also frequently cited as a limitation on growth and business expansion. To help overcome this challenge, DEACS offers funding to haulers for equipment through competitive grants. Learn more at usethefood.nc.gov.

CONTAMINATION

Contamination was discussed with all the haulers interviewed, and most indicated it was at most a minor problem. The most common contaminants were plastic bags (including dog poop bags probably placed in the bins by passersby), compostable cups stacked together (which need to be separated in order to compost effectively) and look-alike non-compostable plastics (for example, cups and plates that are recyclable but not compostable). The low level of contamination was attributed to motivated customers trying to compost responsibly, but many haulers also mentioned that the educational materials they provided were another reason for clean compost. The highest levels of contamination occurred at post-consumer events where the customer base was not as motivated or educated on compost standards. Solutions suggested by haulers to address contaminants included magnets to exclude metal cutlery, visual inspection of smaller containers (3.5-5 gallon), and clear and visible educational signage and graphics at event collection sites.

COLLECTION METHODS

Table 2 reflects the systems used for collection of residential and commercial compost from customers as well as the frequency of collection and buckets/bins employed. Typically, residential pickups are weekly or every two weeks, and commercial customers receive pickups as needed, in some cases up to six days a week. Most haulers provide liners and clean bins at the time of pickup, eliminating significant work and cleaning on the part of their customers.

Table 2: Collection Overview

| Compost Hauler | Residential Container Size | Residential Frequency of Collection | Commercial Container Size | Commercial Frequency of Collection |
|------------------------|----------------------------|--|----------------------------------|------------------------------------|
| Compost Now | 4 gallon | Weekly or every other week | 32 gallon, 64 gallon, or rolloff | Frequency is negotiated |
| Compost AVL | 4 gallon | Every other week | 4 gallon, multiples as needed | Frequency is negotiated |
| ScrapDaddy | 3.5 or 5 gallon | Weekly or every other week | 13 gallon, 55 gallon, 95 gallon | Weekly |
| Wilmington Compost Co. | 5 gallon | 1 x per week | 64 gallon | 1 to 3 times per week |
| CrownTown Compost | 3.5 or 24 gallon | Every other week; Weekly for apartments | 65 gallon | 1 to 4 times per week |

INNOVATION

New ideas for moving this business model forward include:

- ◆ Find commercial and governmental resources that may provide favorable rent for startups and business development assistance. The NC Department of Environmental Quality's [Recycling and Materials Management Section](#) provides technical assistance on business development and grant opportunities for recycling businesses and local governments.
- ◆ Work with brick-and-mortar stores that sell products that are related to farming and gardening to create compost dropoff sites for their customers.
- ◆ Develop a method for cleaning collection bins and buckets on site to eliminate carrying space-consuming clean containers.

WORDS OF WISDOM

Advice provided by seasoned and experienced compost haulers to each other and to new startups:

- ◆ Be stubborn, keep going, don't be afraid to try new things (most common recommendation).
- ◆ Collaborate with others in the industry; most folks in the industry are willing to help.
- ◆ Connect with out of state companies in the industry who operate in a similar economy for ideas.
- ◆ Have fun and continue this work because of your commitment to the compost process.

THANK YOU TO THE FOLLOWING HAULERS FOR DEDICATING TIME TO CONDUCT AN INTERVIEW:



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For more information, see www.wastereductionpartners.org and the NC Department of Environmental Quality's [Use the Food NC](#) campaign.



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