

# Optimizing Your System With Once A Week Collection

There are countless municipalities and solid waste agencies continuing to provide the second weekly pickup of household refuse. Reducing the second weekly pickup of refuse is a way of minimizing collection expenses in these tight economic times.

■ By Marc J. Rogoff and Earl Gloster

Solid waste collection is increasingly becoming an industry where managers must sharpen their pencils and provide cost-efficient services. Not unlike other municipal waste collection agencies, Clearwater has implemented automation as a means to reduce labor costs for its residential customers, while at the same time keeping levels of service the same. However, when faced with an impending deficit, the City evaluated potential efficiencies during a cost of service study. This article briefly provides an overview of lessons learned during this study and implementation.

### Transition to Once Per Week Collection

The advent of automated collection combined with expanding recycling programs nationwide has provided the opportunity for jurisdictions to begin considering converting from the historic twice weekly collection to once weekly service. The larger containers have proved to provide adequate refuse storage volumes. Field reviews in many jurisdictions have shown that many homes do not put their garbage cart out both days, or if they do, it is often less than half full.

Twice weekly collection has been the historical norm in most southern states to help minimize the availability of food and harborage for rats and flies. Based on early field review by the U.S. Public Health Service, flies lay eggs that hatch and grow to full adult flies within seven days. Because of this, twice a week collection was implemented in many southern states to intercept the life production cycle of the fly (Hickman, 2000).

Modern technology such as enclosed automated carts, however, has minimized these public health issues with solid waste collection. Combined with recycling and green waste curbside collection programs, national surveys indicate the 90-gallon enclosed, rolling cart is adequate for the average home of four people. Each container will hold the equivalent of three normal trashcans. Further, the extra container provided for one-a-week recycling oftentimes reduces the need for the second day pickup. Therefore, residents now have adequate capacity for solid waste collection to occur once per week.

As automated collection continues to expand, it is quickly becoming the collection method of choice across the country as well as in Florida. SCS Engineers conducted a statewide survey of solid waste collection in 2009, as part of a solid waste automation assessment study for the City of Lakeland. The results showed a marked transition from manual to automated collection as well as once-a-week collection frequency in some of the largest 35 municipalities. This survey reported that nearly 60 percent of the top 35 cities in Florida, at the time of the survey, used automated collection, of which 67 percent were municipally operated

programs. Of the 35 cities surveyed, nearly one-third reported once weekly residential collection.

A subsequent survey by another Florida consulting firm in 2013 reported that 53 percent of Florida's residents receive automated collection service and nearly four million of residents in Florida currently receive once-a-week collection service. Briefly, both surveys showed an increasing trend towards solid waste automation and once-a-week collection service. The cities of Clearwater, Dunedin, Lakeland, Key West, Safety Harbor and Sarasota are among others that have already started a successful once-a-week garbage collection.

### Clearwater Overview

Clearwater is a city located in Pinellas County, FL, northwest of Tampa and St. Petersburg. To the west of Clearwater lies the Gulf of Mexico and to the southeast lies Tampa Bay. As of the 2010 census, the city had a population of 107,685. It is the county seat of Pinellas County. Clearwater is the smallest of the three principal cities in the Tampa-St. Petersburg-Clearwater metropolitan area, most commonly referred to as the Tampa Bay Area.

City crews provide both residential and commercial collection, as well as curbside collection of single-stream recyclables services within its municipal boundaries. The City also processes these recyclables for delivery to markets. **Figure 1** shows the City's current collection of curbside recyclables.

### City's Transition to Once Per Week

In 2013, the City introduced its single-stream recycling program. Prior to introduction of the curbside recycling program, the City found that 75 percent of residents used twice weekly refuse collection. After program implementation, the City found that only 45 percent of its residential customers placed their cart out twice weekly. As a result, the amount of material being recycled in the City increased from 160 to 440 tons of recyclables per month. This meant that residents were filling their trash barrels less and are using their recycling containers more, resulting in less trash that needed to be collected (and in turn, more recycling to be picked up).

A six-month pilot program was initiated in 2015 to identify possible program savings and how the program would be rolled out to its residents. A rate study conducted at that time suggested possible operational savings in the range of \$400,000, which could enable the City to defer a solid waste rate increase. The good results shown during the pilot program encouraged the City decision-makers to move ahead



Figure 1: City of Clearwater residential collection program. Photo courtesy of the City of Clearwater, FL, 2017.

with once a week collection. In January 2016, the City initiated the switch to once a week collection with the approval of the City Council.

The latest statistical data from the City of Clearwater as of February 2017 shows that they collected 1,977 tons of solid waste versus February 2016 when 2,515 tons were collected. That is a 21 percent decrease in solid waste generation, producing annual savings of \$107,000 in tipping fees at the County's refuse-to-energy facility. In addition, they collected 523 tons of single-stream recycling in February 2017 versus 519 tons collected the previous year, a 1 percent increase in recyclables collected. Operational savings for the City achieved the projected \$400,000 savings as forecasted in the rate study.

There are countless municipalities and solid waste agencies continuing to provide the second weekly pickup of household refuse. Based on Clearwater's results, and other collection studies completed by SCS Engineers, it appears that reducing the second weekly pickup of refuse is a way of minimizing collection expenses in these tight economic times. Further, the substitution of curbside recycling for this second pickup helps encourage residents to recycle. | **WA**

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