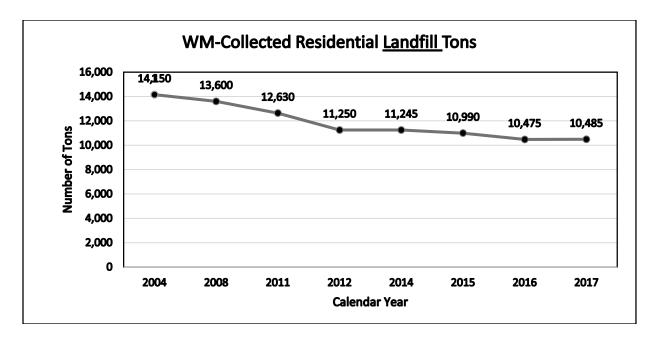
#### **Current Solid Waste Services and Programs: A Snapshot**

The following series of charts provide an at-a-glance, historic snapshot of curbside collection programs. The statistics for year 2004 provide a snapshot of "pre-recession" activity. There is a notable reduction land fill tonnage in the 2008-12 years (recession) During that time, it is presumed that residents generally consume less and delayed costly home remodels.

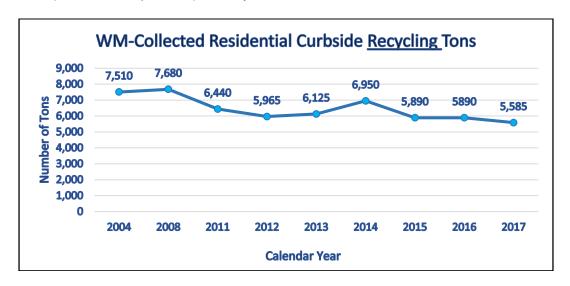
1. City of Manhattan Beach Curbside Collection 3-Cart System: The City's standard residential curbside collection operates with a "3-Cart System" which offers trash, recycling and green waste carts. Rates are based on the size and quantity of trash carts only. There is no additional charge for the blue recycling and green organics carts.

| Type of Residential Cart     | Residential Cart Count |
|------------------------------|------------------------|
| Trash (Gray)                 | 12,000                 |
| 35-gallon                    | • 3,000+               |
| 64-gallon                    | • 8,000+               |
| 95-gallon                    | • 600+                 |
| Recycling (Blue)             | 12,000+                |
| Organics – yard/food (Green) | 12,000+                |

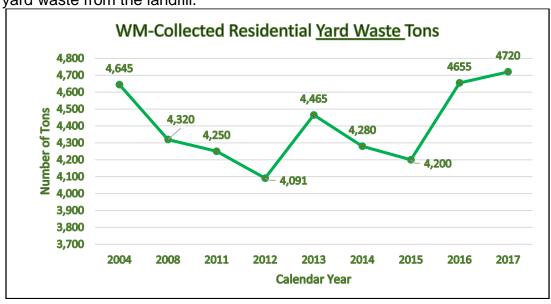
Residents in the Sand Section typically utilize a 35-gallon cart due to spatial constraints. Residential landfill tonnage in the City of Manhattan Beach has been on a steady decline. From 2004 to 2017, there has been a 26% reduction in residential landfill waste collected at the curb.



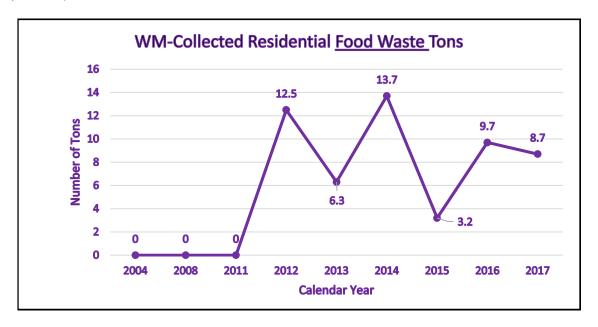
Curbside Residential Recycling Collection: Residential recycling tonnage in the City of Manhattan Beach has experienced variability. In the chart below, there is a clear decline during the recession years (2008-2013). Recently, China imposed its "Green Fence" and "National Sword" initiatives, classifying loads that were previously acceptable as now contaminated. Similar to land fill waste, between 2004 to 2017 the City witnessed a 25% reduction in residential curbside recycling tonnage. Since the inception of the current franchise agreement in 2011, residents have diverted 42,845 tons (85,690,000 pounds) of recyclables from the landfill.



Curbside Residential Yard Waste Collection: The City first began curbside yard waste collection in 2002. Changes in yard waste volume (up and down) may be due to lawn/landscaping conversions to drought tolerant plants, new larger parcel construction, and/or changes in gardening practices. Since the inception of the current franchise agreement, residents have diverted 30,661 tons (61,322,000 pounds) of yard waste from the landfill.

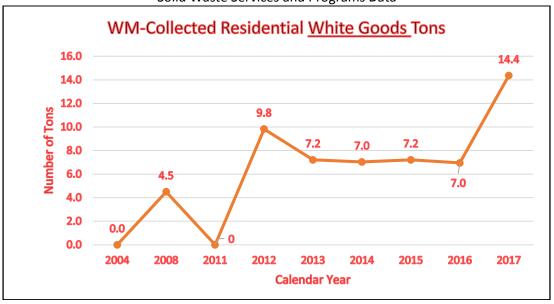


2. Curbside Residential Food Waste Recycling: The City first began a pilot curbside food waste recycling program in July 2012. The pilot program explored both a composting program and an industrial use program. The citywide industrial use program was approved by City Council in 2015 began in September 2015. The program requires residents to bag their food waste to keep it separate from the yard waste but place it in the green cart. The bags and food are converted to an Engineered Bio-slurry, which is placed in an anaerobic digester and converted to energy. Since the pilot program began in 2012, the residents have diverted 54.1 tons (108,200 pounds) of food waste from the landfill.



3. Curbside Bulky Item & White Goods Pickups: Items that are too large for the trash are collected at the curb by appointment. This program allows three visits to each resident's home with a limit of three items per visit (total nine items per year). Examples include furniture, white goods such as appliances, large athletic equipment, and even large (bundled) quantities of yard waste such as branches up to 1 cubic yard. Since 2011, the specific number of items collected has ranged from 900 – 2,600 in a calendar year. The tons shown below represent the "white goods" which are primarily large electrical goods such as stoves, refrigerators, washing machines, dishwashers, barbeques, water heaters, etc. In that same time, residents have diverted 52.58 tons (105,160 pounds!) of white goods from the landfill.

Attachment 1
Solid Waste Services and Programs Data



4. Annual Community Document Shredding Event: An annual shredding event, sponsored by the City's hauler, was established in the current franchise agreement. The first event was held in 2012, and the shredding truck filled up within the first two hours. Since then, Waste Management has been providing both an on-site shredding truck and an off-site shredding container to transport documents for secure shredding at its facility. Due to its popularity, the new franchise agreement will require two shredding events per year sponsored by the hauler. Shredded paper is best suited for bulk recycling such as what occurs at these events. Since the events began in 2011, residents have recycled 36.37 tons (72,740 pounds) of paper.



5. At Your Door "At Home" Household Hazardous Waste Collection: At Your Door provides hazardous waste collection by appointment for resident or multi-family dwelling properties. Residents can schedule an unlimited number of appointments. There is no additional cost for this service because it is included as part of a resident's base services. This service is highly lauded for its convenience, ease of instruction, and reliability of technician to arrive as scheduled. The program was a sought-after service prior to 2011, and the City Council chose to include it in the current franchise agreement. Residents wanted a hazardous waste disposal/recycling solution with the convenience of a pickup service that was available during the week days. Since the at-home programs inception in 2011, the residents have safely and properly recycled 50.5 tons (101,000 pounds) of hazardous waste materials from their homes.



6. Curbside Residential Electronic Waste Collection: Waste Management, as part of its "bulky item program," collects electronic waste from the curb on collection day (with an appointment). There is no additional fee for the service. Items include televisions, computers, fax machines, keyboards, etc. During the current franchise agreement, residents have diverted from the landfill and recycled 85.1 tons (170,200 pounds) of electronic waste from the curb on their regular collection day.

Attachment 1
Solid Waste Services and Programs Data

