

## Addressing Fundamentals of Solid Waste Handling

### Financial

Ensuring that businesses with accounts with the transfer station are properly invoiced and timely payments are collected.

### Transfer Station Operations

Assessing the incoming waste at the transfer station.

#### TIRES

There has been a significant increase in waste tires especially since the closing of Sears Automotive in 2020 which is impacting the haul out of the City's waste. Working to establish the proper protocols of accepting waste tires with respect to the City's transfer station operating permit. Exploring the possibility of amending the haul out contract to have waste tires processed by a permitted Waste Tire Collector and begin a tire recycling program.

Fiscal Year	Tonnage	Average tons per month
2017	46.5	3.88
2018	48.86	4.07
2019	48.74	4.06
2020	48.44	4.04
2021	88.34	7.36
2022	99.88	8.32
2023	81.50	6.79
2024 (Oct-Dec - Q1)	29.83	9.94

#### CONSTRUCTION & DEMOLITION (C&D) DEBRIS

There has been a significant increase in construction and demolition (C&D) debris that impacts the processing of garbage on the tipping floor. Permit and contracts are being reviewed to determine acceptance procedures. Has the potential to increase recycling tonnages.

#### GENERAL OPERATIONS

The tipping floor is of limited size and the collection point for multiple waste streams. The volume of materials being processed limits the amount of sorting which can occur on the tipping floor. To increase recycling tonnages customers (specifically commercial businesses) need to be required to deposit material in a manner that is "pre-sorted" and able to be quickly added to the correct pile. Yard waste, single stream recyclables and large amounts of cardboard must not be in plastic bags for them to go as recycling. Metals need to be sorted and placed on the outside collection area which has been permitted with FDEP.

## **BULK RESIDENTIAL**

Bulk Residential waste hauling increased significantly in FY 2023 and is trending at a similar average monthly tonnage for FY 2024. The number of residential units has been relatively consistent over the course of time presented below yet the average monthly tonnages continue to increase. The high cost of rental housing causes a high turnover rate of non-transient rental properties which can be seen especially around the end/beginning of each month. Transient properties that are receiving residential unit services can additionally strain services placing unit upgrade items out for free pickup. As costs continue to rise in this economy there could be significant rate increase as contracts are renegotiated.

FY 2017- FY2024 Q1 Summary of bulk residential accepted at the City transfer station

Fiscal Year	Tonnage	Average tons per month
2017	2033.56	169.46
2018	2602.71	216.89
2019	2361.3	196.78
2020	2382.17	198.51
2021	2603.45	216.95
2022	2512.38	209.37
2023	3190.52	265.88
2024 (Oct-Dec - Q1)	838.51	279.50

## **Illegal Dumping**

It is a growing issue that significant piles of debris are placed on the City right of Way without calling and scheduling a pickup. When code investigates and the answer is nobody knows where items originated the City becomes financially responsible for all charges associated with hauling and disposal. Enforcement of the property owner being responsible for the ROW associated with their property is not followed through since it cannot be proven who dumped the items.

## **Recycling**

There are multiple recycling variables that are not accounted for using the data from the City transfer station tracking system. Businesses are not required to use WM exclusively for recycling activities and there are licensed and probably unlicensed contractors in the city that haul or scavenge recyclables. Businesses like Publix, Winn-Dixie, Home Depot and Office Depot/Max all offer recycling services to the public and may handle a significant portion of their own recyclables by self-hauling to their own distribution centers. Some businesses (Hyatt Centric and Ocean Key) are involved with a reusable/recycling program for aluminum water bottles which they provide to guests, again this is all an internal recycling program. Half Shell is reportedly working with the DEP on an oyster shell recycling project, and Waterfront Brewery may be involved with composting their fermentation by-products. Reportedly there are groups working to divert usable food from events, restaurants, retailers etc. from the garbage stream to food banks and shelter facilities. WM and other contractors/private haulers

transport C&D debris some of which can be recycled. Lastly clothing, furniture, toys, household items that are donated to Goodwill, and Salvation Army are also recycling. Information from all these recycling efforts needs to be captured and put into the analysis of recycling in Key West. Until KW is able collect data for all recycling that is occurring within the community the reporting is incomplete. It is going to take staffing to track down and develop a plan to collect data to provide a true analysis of the recycling occurring and the best approach to expand efforts.

Recycling pilot program yielded positive subjective results.

After working with the participating businesses for 6 months Ambassadors observed less contamination in the business collection containers.

Some of the businesses expand recycling efforts without the City's intervention by voluntarily reducing single use plastics, switching to biodegradable products and by changing vendors, when possible, to obtain products in recyclable containers.