

SINCE 1968

# Houston Clean City Commission



The Houston Clean City Commission is directed to help bring about a long-term improvement in citizen trash handling habits and shall, each quarter, submit a written report to the Mayor and City Council summarizing the status of the Clean City Program. Through a study completed in 2022, the Commission determined that the regional trash handling habit change which will most greatly impact Houston's ability to effectively compete in a future, more-circular economy is to improve the volume and quality of waste materials flowing directly from waste generators to local facilities engaged in related materials reclamation and to support the development of additional local reclamation capability. With this in mind, each of the Commission's Quarterly reports will focus on how a specific waste type is generated and managed in greater Houston and note opportunities for improvement, if identified. These reports are the current Clean City Program.

**Our Q1 2024 report focuses on residential e-waste (computers, TVs, monitors, servers, touchpads, power strips, cables, mice, hard drives, printers, servers and similar).**

SINCE 1968

Houston Clean City Commission



# Q1 2024 Report

## E-waste



SINCE 1968

# Houston Clean City Commission



## Overview:

- **Although e-waste represents a small fraction of the total waste stream by volume, the inclusion of harmful and/or toxic substances as well as rare and precious metals makes e-waste recycling a topic of both concern and opportunity.**
- **E-waste recycling is logistically and operationally complex.**
- **Some e-waste items, such as computers or cell phones, are burdened with potential data security issues.**
- **Multiple industry certifications intend to provide assurance of responsible e-waste materials handling.**
- **In 2007, the State of Texas passed a law that requires manufacturers of certain electronic products to provide Texas household consumers with free collection, reuse and recycling opportunities for those devices.**

SINCE 1968

# Houston Clean City Commission



## Current Status:

- **Residential e-waste is accepted by the City at Westpark Consumer Recycling Center, the two Environmental Service Centers and monthly at temporary collection events at Kingwood and Clear Lake.,**
- **The technical capacity to process all e-waste domestically exists and industry-leading practice has been demonstrated in Houston. Compucycle, at their 8019 Kempwood Dr. facility, processes electronic scrap down into steel, aluminum, copper, plastic and circuit boards. E-waste received by Compucycle's Houston processing facility is likely to have the geographically shortest overall e-waste-to-resource path in the nation.**
- **Most of the e-waste recycled is commercial, not residential. Residential e-waste is likely the sector with the greatest opportunity for materials management improvement.**

SINCE 1968

# Houston Clean City Commission



## **Recommendation: Additional promotion of third party options**

Dell Connect, offered through Goodwill, and Best Buy's recycling and trade-in program merit promotion through City communication channels because they offer generally free drop-off for many items as well as convenient locations for most residents.

Additionally, the Texas Commission on Environmental Quality (TCEQ) publishes an alphabetical list of links to manufacturer's recycling websites, by brand. The information in these TCEQ websites could be restructured and presented in a more user-friendly manner prior to promotion.

SINCE 1968

# Houston Clean City Commission



## **Recommendation: Additional City-led e-waste collection**

E-waste is an attractive waste stream to target with one-off collection events because citizens tend to save e-waste before making a conscious decision to discard it and, due to data security concerns, e-waste drop-off and collection must be monitored. Kingwood statistics demonstrate that one-day collection events can result in over 10,000 lbs collected and that effective event promotion is key to impact. Implementing a monthly pop-up collection event whose location rotates through Districts not served by the Kingwood, Clear Lake or Westpark sites is recommended with each location/event collaboratively selected and co-promoted by the Solid Waste Management Department and City Council. Ideal sites would have an available forklift and ample parking and/or enough open paved space to set up temporary drive through service. The relative collection and disposal costs from all City-led collection efforts should be tracked for purposes of future program optimization.

SINCE 1968

## Houston Clean City Commission



### **Recommendation: Explore enhanced citizen service for TV disposal**

A significant fraction of residential e-waste landfilled is TVs left out for bulk waste collection. Many private programs charge a fee to take back TVs and/or monitors, particularly larger TVs or monitors, so recycling (vs. discarding) these items can be not only less convenient for citizens but also more expensive. Although many manufacturers offer consumers a free mail-back option, mail-back program utilization is low and lack of citizen awareness is likely not the only barrier to program participation. Exploring whether a 3-1-1 service could be implemented which would position the City to request free shipping labels and/or boxes on behalf of citizens needing to dispose of TVs or monitors is a low-cost and pragmatic way to start to phase out TV and monitor pickup service long-term in the absence of a landfill ban. While neither Texas law nor City ordinance ban TVs, monitors and other e-waste from landfill disposal, such rules have been enacted in many other states.

SINCE 1968

# Houston Clean City Commission



## **Recommendation: Designate a program monitoring / reporting focal point**

The Commission's 2023 Q4 residential yard waste report recommended designating a SWMD point person to be responsible for monitoring and regularly reporting on yard waste program status/progress. This report expands this recommendation to suggest that a designated point person within SWMD be tasked with monitoring and reporting progress towards all Commission recommendations.

Full report: <https://www.houstonbeautiful.org/reports-to-council.html>