



# Cart Tagging Program

---

**Brandi Neal**

**Administration Manager**

**Solid Waste and Recycling Department**

**October 28, 2024**



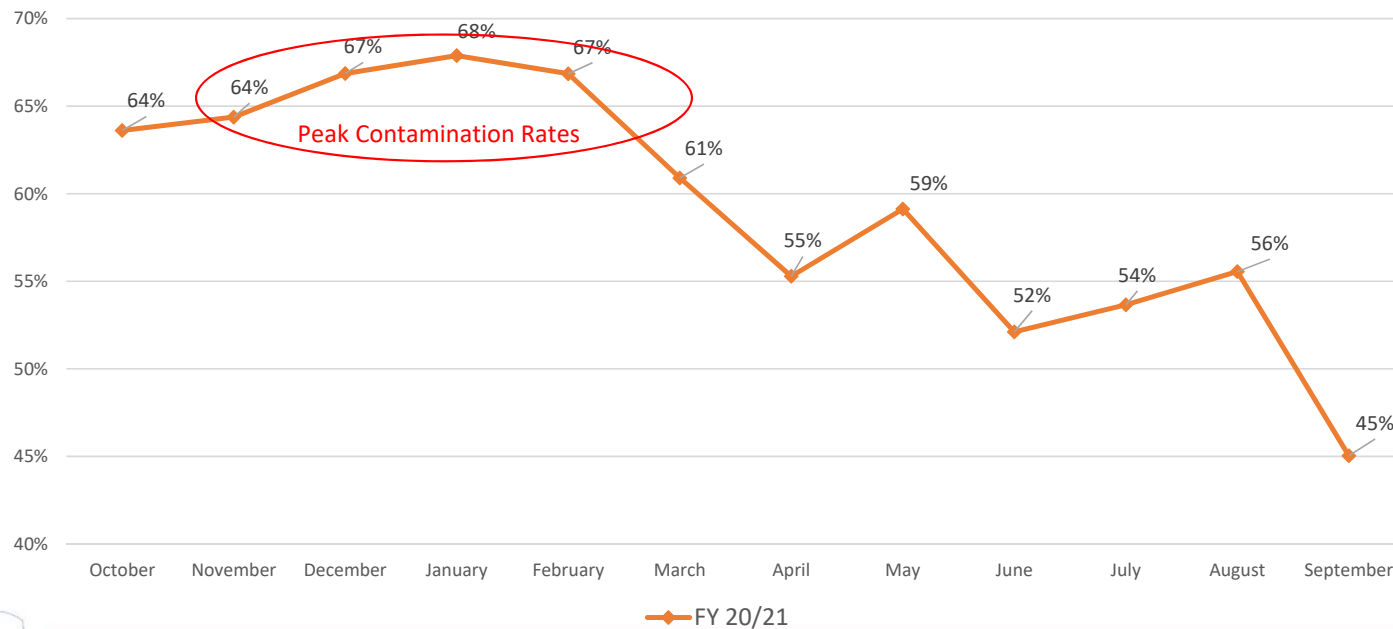
---

# The Problem

- Residential curbside recycling contamination reached a high of 68% in FY 2020/2021
  - Low quality of materials sent to the Materials Recovery Facility (MRF) affected the value of the commodity sold
  - Less revenue to the Solid Waste Enterprise.
  - Potential violation of contract with MRF processor/partner (Pratt)

# Contamination Rates FY 2020/2021

Overall Contamination Rate



---

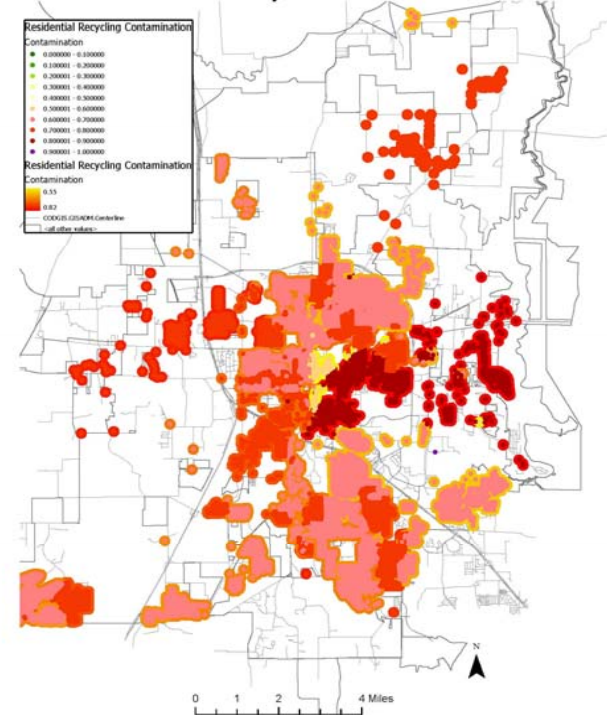
## What is Contamination?

- Non-program Material
  - Metal, plastic film, flexible plastic or Styrofoam
- Soiled Recyclables
- Bagged Recyclables
- Donation items

# Contamination Rates

- Visual of Contamination
  - January 2021 (peak contamination)
- Residential Routes
- All routes at 50% contamination or higher

Residential Recycling Contamination By Route



---

## The Solution

- In July 2021, a cart tagging program was implemented
  - Educated residents on what is accepted in City of Denton's program
  - Reduce contamination in the blue carts.
  - Identify most contaminated items
  - Audit results help drive the outreach program

# Residential Education prior to 2021

- Education and Outreach
  - Social Media
  - Monthly Newsletter (utility bill)
  - HOA Meetings
- At the Curb
  - Operator Non-Collection program began in 2019
  - Operators face challenges to see the inside of the recycling cart

A photograph of a "Non-Collection Notice" form from the City of Denton. The form is orange and white. It lists various reasons for non-collection, such as cart blocked by vehicle, cart less than 4 feet from other objects, bag limit of 5 bags each, trash contamination in recycling cart, cart overflowing, remodeling/construction debris, yard waste, and bulky item collection. Item 4, "Trash contamination in recycling cart", is circled in black. The form also includes contact information for Customer Service and a note about contaminated recycling carts.

City of Denton  
Solid Waste & Recycling  
www.dentonrecycles.com

**Non-Collection Notice**  
 Trash  Recycling

- Cart blocked by vehicle or other objects
- Cart less than 4 feet from other objects
- Bag limit of 5, \$5 each  
Will be billed automatically
- Trash contamination in recycling cart\***  
Please remove non-recyclable items from the blue cart, and it will be emptied on your next collection day. Acceptable recycling items include cardboard, paper, cartons, metal cans, plastic bottles, & jugs, and glass bottles & jars.  
Keep recycling empty, clean, dry, and unbagged.
- Cart overflowing
- Remodeling/construction debris  
The monthly service fee does not include the collection of remodeling, fencing, demolition, or roofing debris. Special collection for these materials can be made with your approval of charges by contacting Customer Service.

**Yard Waste**

- Yard waste needs to be placed in a yard waste cart or kraft bags - No plastic bags will be collected.
- Brush piles more than 4 cubic yards will have additional fees assessed that will automatically be applied to your utility bill.

**Bulky Item Collection**

- Need to Schedule Service  
Bulky item collection can be scheduled for pickup by contacting Customer Service.
- OTHER

Contact Customer Service by filling out the Self-Service form at [www.cityofdenton.com/SWSelfService](http://www.cityofdenton.com/SWSelfService) or by calling (940) 349-8700.

For waste reminders, check out the Engage Denton app.

\*Contaminated recycling carts are photographed for visual verification and reporting purposes.

Produced by  
4/2019 (REVISED)  
CITY OF DENTON  
www.cityofdenton.com

---

# Pilot Cart Tagging Program - July 2021

- Interns employed
- Uses Pratt Recycling Data for route focus
  - Worst first
- Existing infrastructure used to drive and track progress
  - Rubicon - smart routing system
- Start Lifting lids



# Program Overview

- Targeted Highest Contaminated Routes
- Examine exterior of the cart for damage
  - Place a complementary work order for needed repairs
- Replace cart education sticker
- Inspect contents inside



# Inspection Process

- Contamination threshold - 15%
  - Below threshold – <15% - City staff will remove contamination and collect the cart
  - Above threshold – >15% - City staff will tag cart with contamination notice and staff will not collect cart contents
    - Resident can clean cart for collection the following week



**RECYCLING  
CONTAMINATION NOTICE**

**YOUR BLUE CART WAS NOT EMPTIED  
DUE TO EXCESSIVE TRASH  
CONTAMINATION**

Please remove all items that are not recyclable from your blue cart and it will be emptied on your collection day next week.  
If you have questions, call (940) 349-8700.

**Only recycling should be placed in your blue recycling cart:**

- Cardboard & Boxes that are clean and flattened.
- Cartons
- Paper
- Plastics that are marked with a recycling symbol and a number 1-7.
- Glass Bottles & Jars that were used for food or drinks.
- Aluminum & Steel Cans

Please make sure all items are empty, clean, and dry before placing them in your blue cart.

**DO NOT put plastic bags or styrofoam in your blue cart.**

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

www.cityofdenton.com ADA/508/2010 TDD: 800.735.2169 Pub: 03/19  
Contents were photographed for visual verification and reporting purposes.

Date: \_\_\_\_\_ Address: \_\_\_\_\_  
Route: \_\_\_\_\_ Driver: \_\_\_\_\_  
Comments: \_\_\_\_\_

\_\_\_\_\_  Picture Taken

# Program Improvements

- Introduce a 3- tag program
  - Notice Tag
  - Oops
  - Recycling Star

NOTICE

WE FOUND SOME CONTAMINANTS IN YOUR CART TODAY. WHILE YOUR CART WILL STILL BE COLLECTED, IT IS IMPORTANT TO REMEMBER TO REMOVE THESE ITEMS FROM YOUR RECYCLING AND PLACE THEM IN THE TRASH.

KEEP THESE ITEMS OUT:

|   |   |  |
|---|---|--|
| <br>STYROFOAM                    | <br>PLASTIC BAGS<br>PLASTIC FILM | <br>SOILED FOOD<br>CONTAINERS |
| <br>SINGLE USE PAPER<br>PRODUCTS | <br>BAGGED<br>RECYCLABLES        | OTHER<br>_____<br>_____  |

RECYCLE ONLY THE FOLLOWING:

|  |  |
|--|--|
| <br>PLASTIC BOTTLES, TUBS & JUGS | <br>CARTONS               |
| <br>ALUMINUM & STEEL CANS       | <br>GLASS BOTTLES & JARS |
| <br>MIXED PAPER                | <br>FLATTENED CARDBOARD |

OOPS!

THE FOLLOWING ITEMS ARE NOT ACCEPTED IN OUR RECYCLING PROGRAM. KEEP THEM OUT OF YOUR RECYCLING. PLEASE PLACE THESE ITEMS IN YOUR TRASH.

|  |   |
|--|---|
| <input type="checkbox"/> PLASTIC BAGS<br>PLASTIC FILM<br> | <input type="checkbox"/> STYROFOAM<br>                 |
| <input type="checkbox"/> SOILED FOOD<br>CONTAINERS<br>    | <input type="checkbox"/> BAGGED<br>RECYCLABLES<br>     |
| <input type="checkbox"/> CLOTHING OR<br>BEDDING<br>     | <input type="checkbox"/> YARD WASTE<br>OR LUMBER<br> |
| <input type="checkbox"/> OTHER<br>_____  | _____   |

## YOU ARE A RECYCLING STAR!



The City of Denton Solid Waste & Recycling wants you to know that your recycling cart looks great!

Keep up the good work!

We appreciate you recycling right.




# Top Contaminated Items

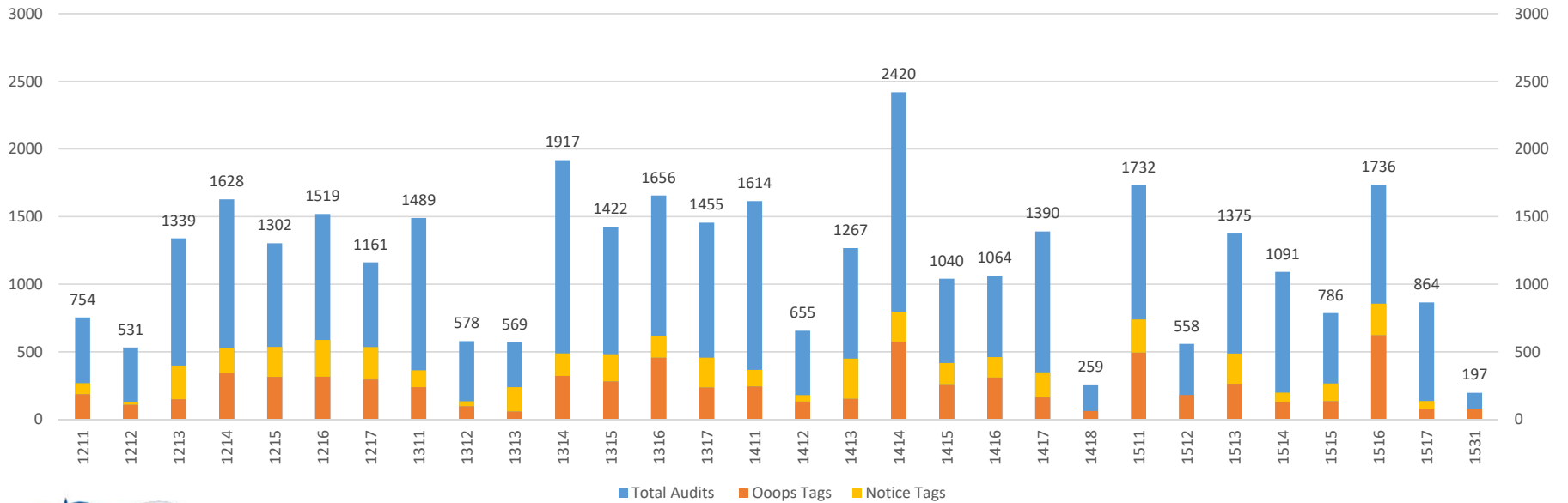
- #1 - Plastic Bags
  - Grocery bags or Bagged Recyclables
- Social Media Campaign Focus
  - Billboards, Truck Wraps and Football Games



# Cart Tagging Metrics

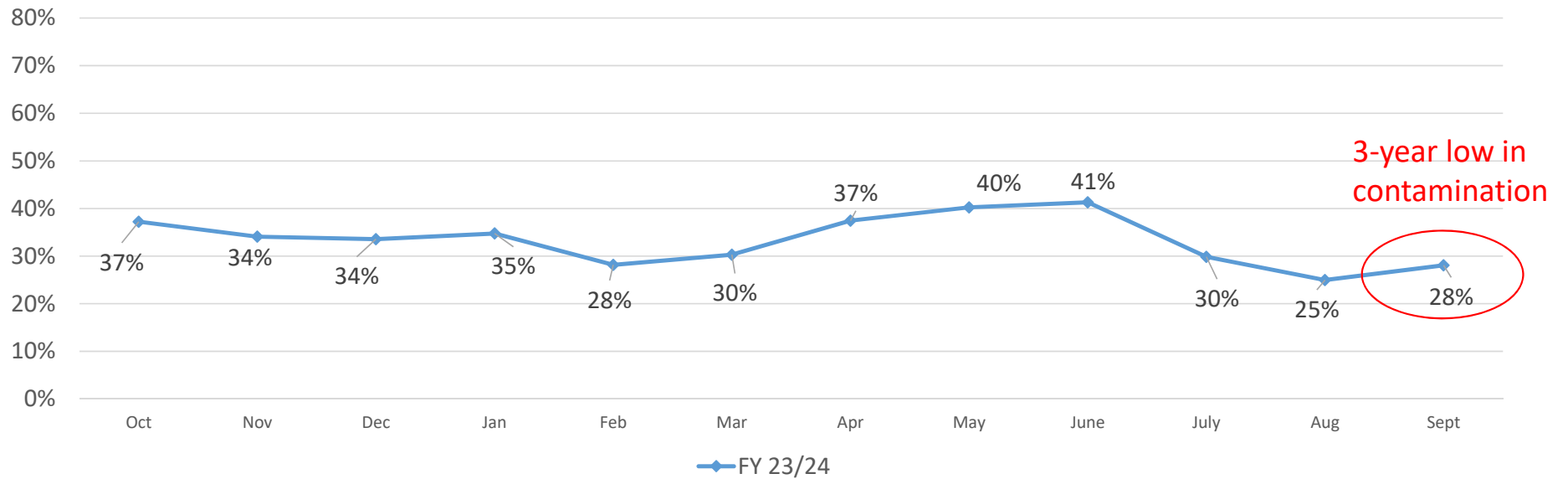
Overall, 33% Contamination Rate  
 35,404 Homes Audited  
 Data Range July 2021 – August 2024

Cart Tags by Route



# Results August 2024

Overall Contamination Rate

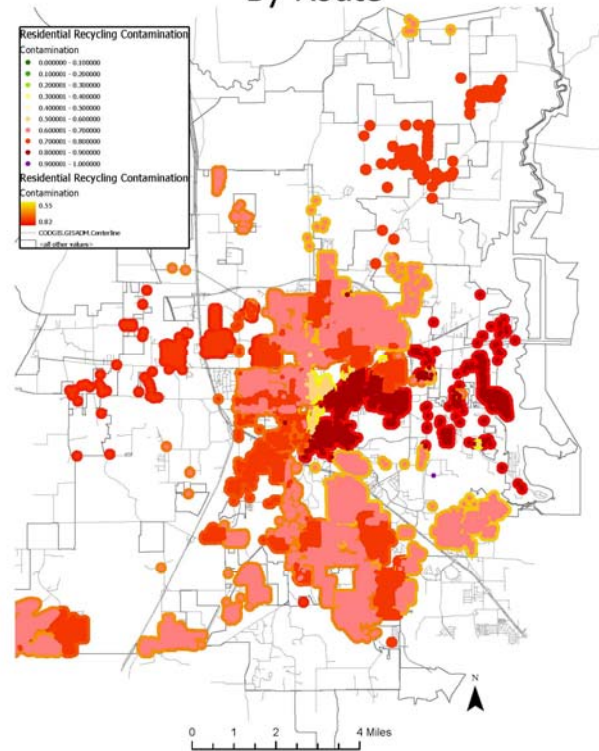




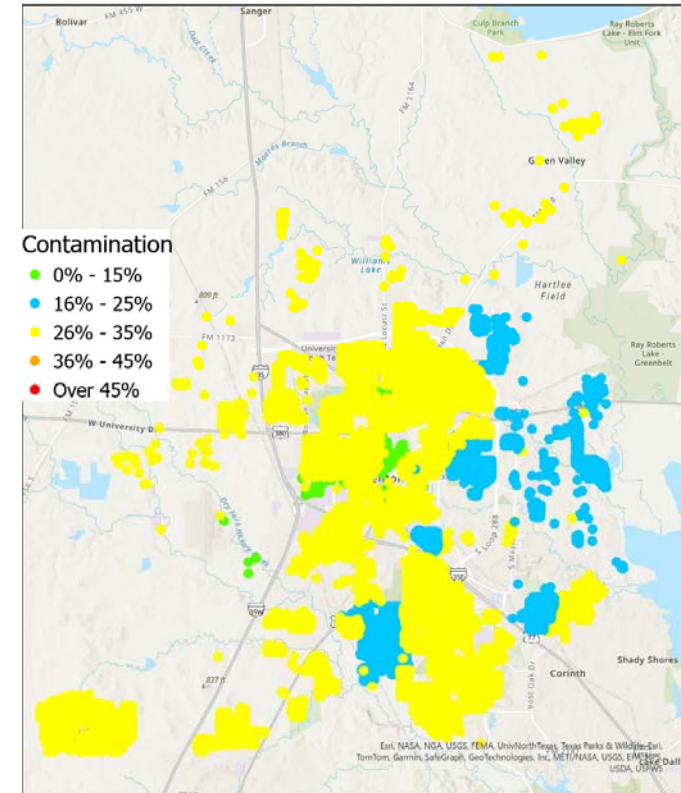
# Results

- 68% in January 2021
- 28% in August 2024

### Residential Recycling Contamination By Route



### August 2024



---

# Questions?