



# Solid Waste Management Expanded Waste Services Update

Land Use, Transportation & Infrastructure

May 14, 2024

# Topics

## Expanded Waste Services Overview

- Diversion Goals
- Implementation

## Outcomes

- Continuous Improvement
- Increased Diversion Rates
- Community Outreach and Engagement
- Affordability Rebate

## Focus Areas

- Compost Rollout
- Missed Collections
- Moving Forward



# Solid Waste Management Service Fundamentals

- **180,000** customers
- Residential hauling: single-family up to 7 units, plus municipals and DPS
  - Commercial is collected by private sector
- Includes other programs like Large Item Pickup and seasonal events
- **~250 employees** across operations and admin
- **512 routes per week** across trash, recycle, compost, LIP



A person wearing a dark Denver Public Works uniform and a cap is walking past a row of recycling bins. The bins are labeled 'CITY AND COUNTY OF DENVER'. In the background, a white truck and a silver car are visible. The scene is outdoors, likely a recycling center or a public works facility.

# Expanded Waste Services and City-wide Diversion Goals

# What is Volume-Based Pricing?

- Denver has historically low diversion rates, yet **75% of Denver's waste** is recyclable or compostable.
- **Incentivize** waste diversion.
- Provide **access** for all residents to recycle and compost.
- Support the City-wide goal of diverting **50%** of all waste from the landfill **by 2027** and **70% by 2032** (Sustainable Resource Management Plan).





# Emphasis on Diversion

- Opportunity for residents to **take action**
- Situate Denver as a **leader**
- Move toward a more **circular economy** and better resource management
  - Put materials back into the production cycle
  - Extend the life of the City's landfill
- Reduce methane and other greenhouse **gas emissions**

## Diversion Goals

Divert **50%** of all waste from the landfill by **2027** and **70%** by **2032**

## Vibrant Denver

Keep the City's streets, parks, and neighborhoods clean



# Implementation

# One Year In...

Expanded Waste Services (Volume-Based Pricing) kicked off in January 2023:

- **Updated operations**
  - Increased frequency to weekly recycling and compost
  - Converted compost service from subscription program
  - Continuous customer service improvement
- **Transitioned support systems**
  - Converted from general fund service for trash and recycling to special revenue fund with tiered pricing
  - Designed and implemented affordability rebate
  - Implemented a billing system for 180,000 households
- **Strengthened community engagement**
  - Increased community engagement
  - Maintained additional diversion programs





# Switch from General to Special Revenue Fund



## Prior to January 2023

- General fund division
- Weekly trash collection
- Bi-weekly recycling collection
- Weekly compost collection - \$9.75/month
- 23% diversion rate in 2022

## Volume-Based Pricing

- Special revenue fund to stand up new and expanding services
- Incentivize waste diversion
- Tiered pricing for trash cart sizes
- Recycling and compost, and additional services included at no additional cost
- Includes Affordability Rebate (General Fund)

# How are we supporting implementation?

## Maintaining stable staffing levels and strong hiring

- Created new CDL Solid Waste Collection Operator position with competitive pay
- Added 45 new positions for expanded routes and support
- Hired a new customer service manager, outreach and diversion manager

## Procured additional vendors and infrastructure

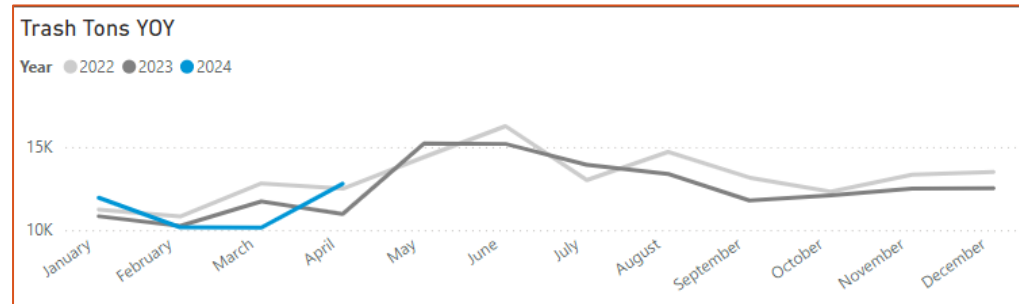
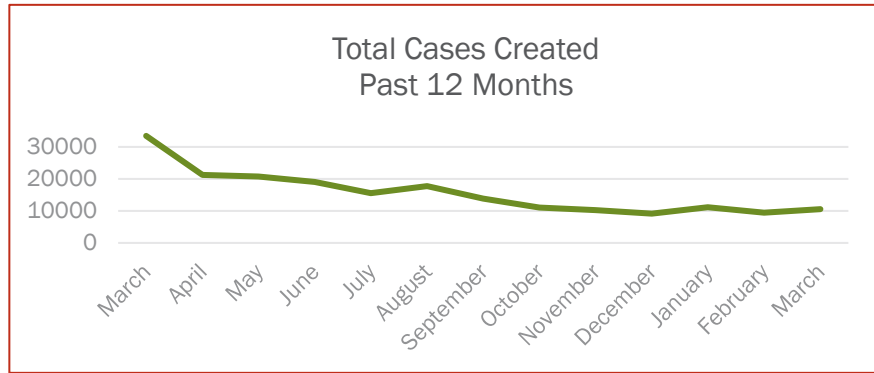
- Purchased and rented additional trucks and hired a contractor to cover 6 routes
- Contracted with a new compost processor
- Integrate a billing system to manage incoming revenue
- Implemented a more efficient routing and data collection software



# Outcomes

# Continuous Improvement

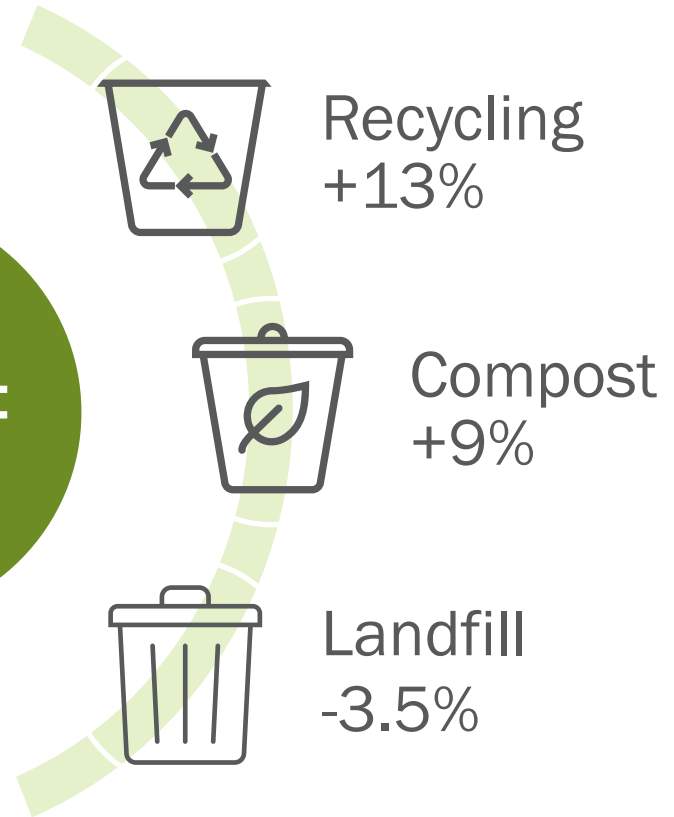
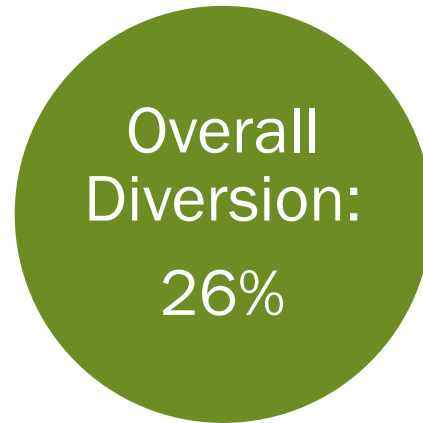
- **95%** average route completion in 2023
- **94%** average route completion so far in 2024
- Missed Collection cases down
- Overall Solid Waste Management cases down



# 3% Increase in Diversion

Diversion is trending in the right direction from 2022 to 2023!

- Recycling and Compost are up
- Landfill is down





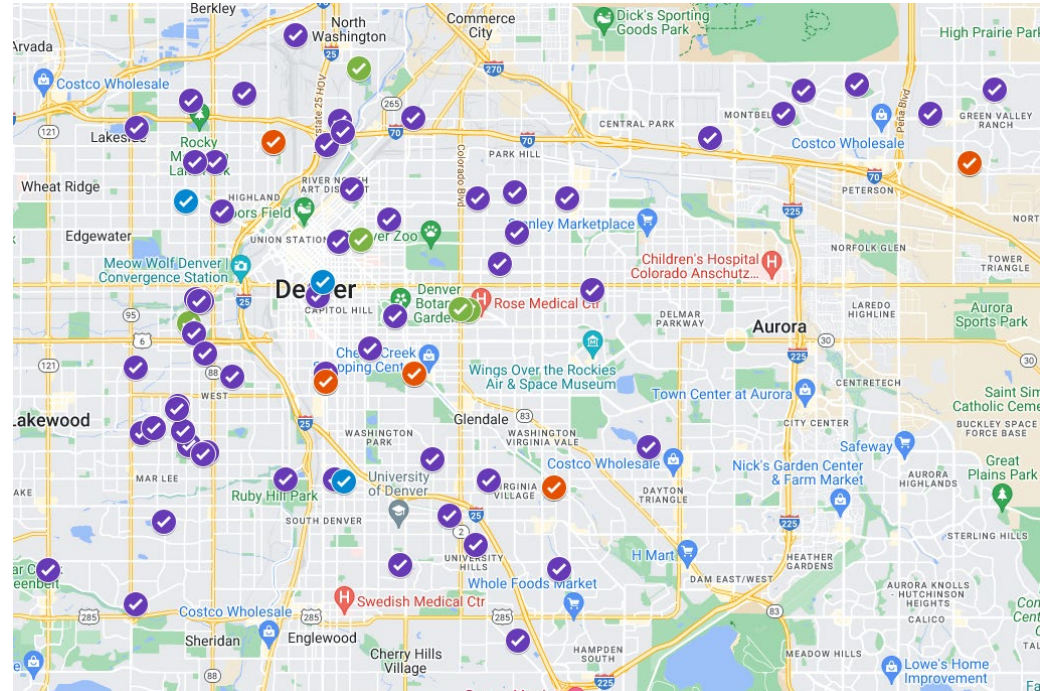
# Community Outreach and Engagement

## Outreach Events (DOTI Staff)

- 54 Events 2023-2024
- 3,000+ Residents Reached

## Community-Based Organizations

- CREA Results (Spanish and door-to-door outreach)
- Denver Urban Gardens (Compost outreach)
- 3,300+ residents reached through CBOs in 2023



# Affordability Rebate Program

- 5,736 rebate participants and growing!
- Covers 50-100% of the bill based on AMI (Area Median Income)
- Partnership with Denver Human Services



## Let Us Cover Your Route

Permítanos cubrir su ruta

**Rebates are available**  
Trash collection service is billed quarterly and is based on the size of your trash cart. Weekly recycling and compost services are included at no extra cost. If you need help, financial assistance is available!

Denver is one of only a few cities in the United States to provide a discount on waste services for low-income household. Eligibility for the instant rebate is based on household income and the number of people in the home.

**Who's eligible?**  
Customers may qualify for **50%**, **75%**, or **100%** off their bill. Visit us online to view annual income requirements.

**Apply now!**  
Visit [denvergov.org/expandedcollection](https://denvergov.org/expandedcollection) or scan the QR code for the REBATE application.

**Request a paper application:**  
email: [TrashRebate@denvergov.org](mailto:TrashRebate@denvergov.org)  
or call: 720.944.3350

**Se ofrecen reembolsos**  
El servicio de recolección de basura se factura trimestralmente y depende del tamaño de su carrito. Los servicios semanales de reciclaje y compostaje se incluyen sin costo adicional. Si necesita ayuda, hay asistencia financiera disponible.

Denver es una de las pocas ciudades de Estados Unidos en proporcionar un descuento sobre los servicios de recolección de residuos a los hogares de bajos ingresos. La elegibilidad para los reembolsos instantáneos se basa en los ingresos del grupo familiar y la cantidad de integrantes.

**¿Quién reúne los requisitos?**  
Los clientes pueden tener derecho a un descuento del **50%**, **75%** o **100%** en su factura. Visite nuestro sitio web para ver los requisitos anuales de ingresos.

**¡Envíe su solicitud hoy mismo!**  
Visite [denvergov.org/expandedcollection](https://denvergov.org/expandedcollection) o escanee el código QR para acceder a la solicitud de reembolso.

**Para obtener una solicitud impresa:**  
Envíe un correo electrónico: [TrashRebate@denvergov.org](mailto:TrashRebate@denvergov.org)  
O llame al: 720.944.3350





# Focus Areas

# Compost

## DON'T WASTE the GOOD STUFF!

**FOOD SCRAPS**

**COMPOST**

**YARD DEBRIS**



# Composting 101

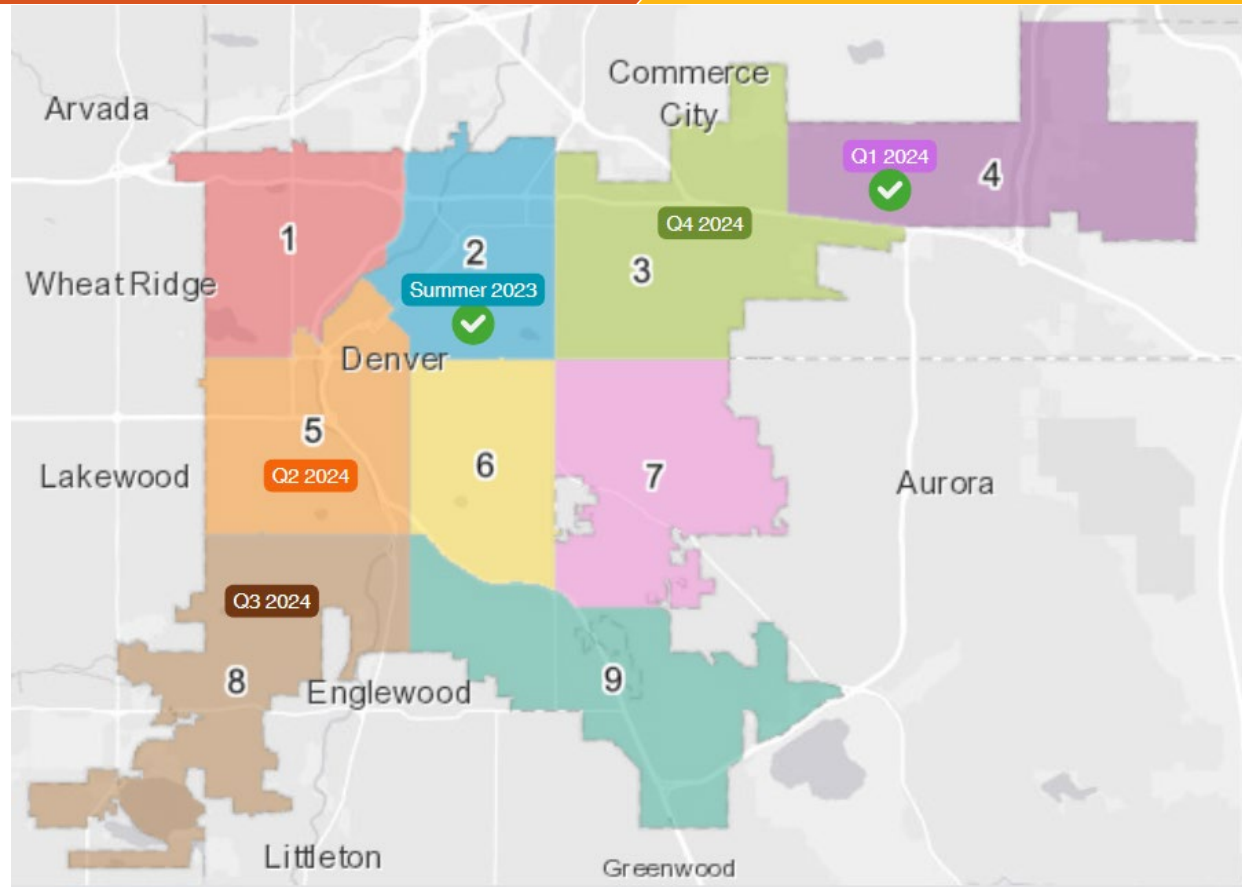
- Composting uses natural processes to breakdown organic materials into usable soil amendment.
- Compost source material is considered contaminated when it includes things like glass, plastic, and other non-biodegradable materials.
- A high level of contamination in a load means that load goes to the landfill instead of the composting facility.





# Compost Rollout Order

View this map at  
[Denvergov.org/Compost](https://denvergov.org/Compost) →  
Phased Compost Rollout

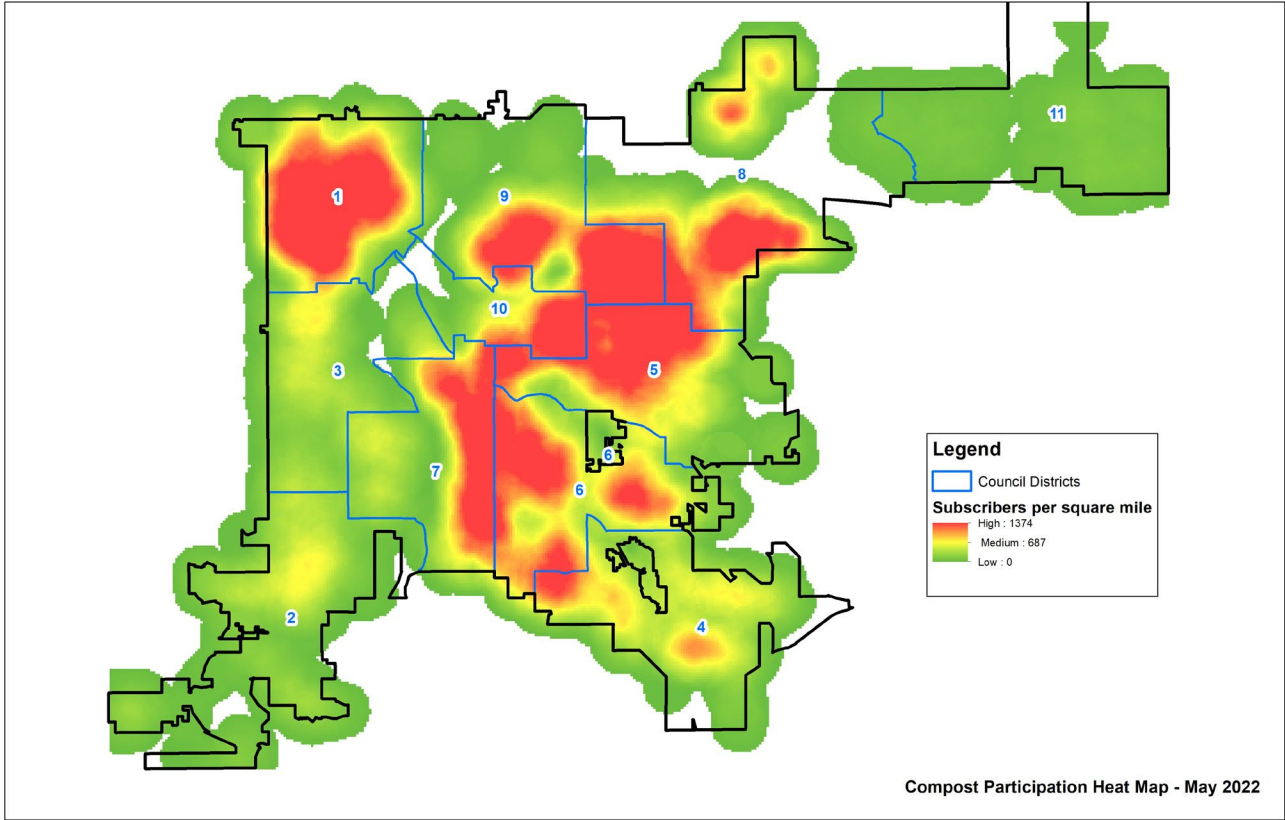


# Compost Rollout Order

- How did we determine the order?
  - Prior to Volume-Based Pricing, SWM operated a subscription-based compost program.
  - 30,000 customers paid for the program and continue to receive service.
  - Pockets of the City have significantly higher rates of compost customers.
- **Solid Waste is prioritizing areas with lower number of existing compost customers and lower diversion rates.**



# Compost Rollout Order



# Two Areas Down...

## Area 2

(City Park, Clayton, Cole, GES, Five Points, N Cap Hill, Skyland, Whittier)

- *Distribution strategy:* Everyone gets a cart
  - 11,600 distributed
  - 15% opted out
- *Outcomes:*
  - 1,500 tons collected
  - Challenges with contamination

## Area 4

(Montbello, Gateway, GVR)

- *Distribution Strategy:* Cart selection
  - 2,200 sign-ups so far
  - Sign up at any time
- *Outcomes:*
  - Very low contamination
  - Direct education
- Ongoing education, auditing, and cart selections in Area 4

## Area 5

(Athmar Park, Auraria, Baker, Barnum, Civic Center, Lincoln Park, Sun Valley, Union Station, Valverde, Villa Park, Westwood, and parts of CBD and West Colfax)

- Preparing for Area 5
- Residents will receive notification in late May with instructions to select their cart
- Carts to roll out in June

# Communications Strategies

- Annual Wastewise Newsletter
- Direct letters/emails to residents in rollout areas with instructions
- Denver Trash & Recycling App alerts

Direct Resident Messaging



- Focused in rollout areas and city-wide
- HOA and RNO outreach

Presentations and Tabling Events



- Paid advertising campaigns
- Press releases
- Social media and Nextdoor posts
- Social content for Council offices and partner organizations

Conventional and Social Media



- Spanish outreach
- Door-to-door outreach in rollout areas
- Compost-specific outreach

Contracted Community-Based Organizations



- Updated collateral and marketing materials, fact sheets and one-pagers
- Council briefings and assistance with community engagement

Outreach and Engagement Materials





# Communications Strategies

Home / Government / Agencies, Departments, and Offices / Recycle, Compost, & Trash / Compost / **Phased Compost Rollout**

## Phased Compost Rollout

The Department of Transportation and Infrastructure will continue phasing in weekly compost service to new customers by Solid Waste Collection (SWC) District – moving next to SWC District 4, which includes **Montbello, Gateway, and Green Valley Ranch.**

As we work together to reduce waste and act on climate changes, we're focusing on continuing education so all residents know what does – and doesn't – go in the new compost cart.

[Click here](#) to view the Compost Rollout Map.

- Find your Solid Waste Collection District.
- View the compost rollout schedule.

[Click here](#) to prepare for service if you live in SWM District Four.



**CONNECT WITH SOLID WASTE MANAGEMENT!**

Sign up for notifications on the FREE Denver Trash and Recycling App to receive collection reminders and service alerts, view upcoming events, and search items on the Waste Directory so you can know before you throw.

**TO GET STARTED:**  
Scan or visit [Denvergov.org/CartSmart](https://denvergov.org/CartSmart)

# Contamination Audits

As we grow the compost program, we want to ensure we are minimizing contamination. The audits allow us to monitor the compost stream and provide direct education (cart tags).



**SOLID WASTE MANAGEMENT WAS UNABLE TO COMPLETE SERVICE TODAY OR NOTICED THE FOLLOWING CODE VIOLATION.**

EL SERVICIO DE GESTIÓN DE RESIDUOS SÓLIDOS NO PUDO COMPLETAR SUS TAREAS EL DÍA DE HOY O SE DIO CUENTA DE LA SIGUIENTE VIOLACIÓN DEL CÓDIGO.

- Carts must be stored on your property, out of public use and right of way.**

They cannot be stored in the alley or on the curb during non-service days.

Los contenedores deben almacenarse en su propiedad, no deben tener un uso público y no deben impedir el paso. No pueden almacenarse en un callejón o en la acera durante los días sin servicio.

DDMC 48-45 Rules and Regulations III.J  
Learn more | Más información: [denvergov.org/Carts](http://denvergov.org/Carts)

- There are NON-RECYCLABLE items in your recycle cart.**

Please remove these items: \_\_\_\_\_

Hay artículos **NO RECICLABLES** en su contenedor para reciclaje.  
Retire estos artículos: \_\_\_\_\_

DDMC 48-44.5  
Learn more | Más información: [denvergov.org/Recycle](http://denvergov.org/Recycle)

- There are NON-COMPOSTABLE items in your compost cart.**

Please remove these items: \_\_\_\_\_

Hay artículos **NO COMPOSTABLES** en su contenedor para compost.  
Retire estos artículos: \_\_\_\_\_

DDMC 48-44.5  
Learn more | Más información: [denvergov.org/Compost](http://denvergov.org/Compost)

A worker in a Denver Public Works uniform is walking past a row of trash bins. The bins are labeled "CITY AND COUNTY OF DENVER". The worker is wearing a dark hoodie and a cap, both with the Denver Public Works logo. The background shows a residential street with parked cars and a trash truck.

# Missed Collections

# Missed Collections

Our 311 and customer service staff receive calls from customers that are initially characterized as “missed collections”.

Investigation of each call identifies cause and solution of a missed collection, which may be the result of a customer or external action (Route Exception) or a miss by City Staff (Missed Collection).

# Missed Collections vs Route Exceptions

## Missed Collections

- Have Not Serviced
  - Truly missed (our error)
  - Open Routes

## Route Exceptions

- Could Not Service
  - Contaminated Carts
  - Improper Set Out
  - Late Set Out
  - Refill
  - Route Hinderance

# Education for Route Exceptions

- One-off issues resolved by drivers and Customer Service using documentation
- Ongoing service issues handled by Supervisor contact and Inspectors



**SOLID WASTE MANAGEMENT WAS UNABLE TO COMPLETE SERVICE TODAY OR NOTICED THE FOLLOWING CODE VIOLATION.**

EL SERVICIO DE GESTIÓN DE RESIDUOS SÓLIDOS NO PUDO COMPLETAR SUS TAREAS EL DÍA DE HOY O SE DIO CUENTA DE LA SIGUIENTE VIOLACIÓN DEL CÓDIGO.

**Carts must be stored on your property, out of public use and right of way.** Carts cannot be stored in the alley or on the curb during non-service days.

Los contenedores deben almacenarse en su propiedad, no deben tener un uso público y no deben impedir el paso. No pueden almacenarse en un callejón o en la acera durante los días sin servicio.

**DNMC 48-45 Rules and Regulations IIIJ**  
Learn more | Más información: [Denvergov.org/Carts](#)

**There are NON-RECYCLABLE items in your recycle cart.** Please remove these items:

Hay artículos **NO RECICLABLES** en su contenedor para reciclaje.  
Retire estos artículos:

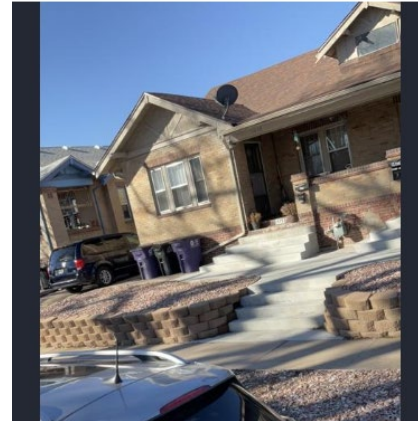
**DNMC 48-44.5**  
Learn more | Más información: [Denvergov.org/Recycle](#)

**There are NON-COMPOSTABLE items in your compost cart.** Please remove these items:

Hay artículos **NO COMPOSTABLES** en su contenedor para compost.  
Retire estos artículos:

**DNMC 48-44.5**  
Learn more | Más información: [Denvergov.org/Compost](#)

▲ Not Out Timestamp 02/20/2024 09:32 AM



▲ Contaminated / Unacceptable Timestamp 02/20/2024 08:41 AM

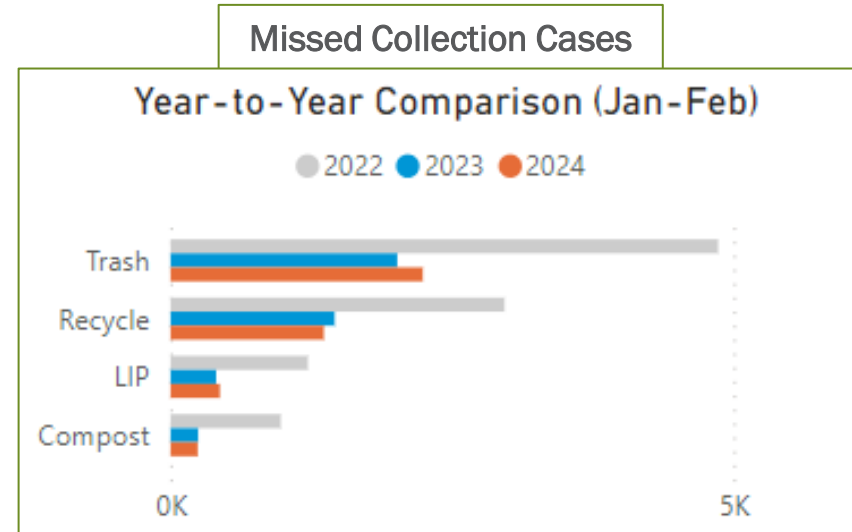




# Missed Collections

Trending down due to:

- **Operations**
  - Continuous driver training
  - Use of routing software to document and solve problems
- **Resident awareness and education**
  - Service alerts through Denver Trash and Recycling app notifications
- **Resources**
  - Higher and more consistent staffing levels
  - Rented trucks and hauling contractor
  - 3<sup>rd</sup> party transfer stations for route efficiency



# Looking Forward

Solid Waste has been continuously improving and is always striving to be an industry leader.



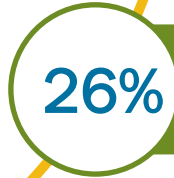
Maintain high route completion rates and customer service



Rolling out compost City-wide



En route to APWA Accreditation and Strategic Plan



Continue improving diversion trends

# Thank you!

