



**TO:** Michael C. Van Milligen, City Manager

**FROM:** John Klostermann, Public Works Director **JK**

**SUBJECT:** Solid Waste Automated Curbside Collection System Implementation  
Council Update - Trash

**DATE:** March 7, 2023

## **INTRODUCTION**

The purpose of this memorandum is to provide the Mayor and City Council information on the implementation plan for the automated solid waste conveyance system.

## **DISCUSSION**

On March 29, 2022, the City Council adopted the Fiscal Year 2023 budget which included the implementation of an automated solid waste curbside collection system. This system included automated arms for solid waste vehicles and city-wide use of tipper carts. Implementation includes ordering inventory, distribution of carts, ordinance adjustments, public education, public outreach, and future operational adjustments. We will address each stage of the implementation below.

### Implementation Team

The team on this project includes Public Works Director John Klostermann, Public Information Officer Randy Gehl, Assistant Public Works Director Arielle Swift, Resource Management Supervisor Jake Jansen, Communications Specialist Kelli Buchenau, Communications Assistant Trevor Fannon, Multimedia Specialist Felecia Carner, Video Producer Erich Moeller, GIS Coordinator/Analyst Nikki Rosemeyer, with support from the entire solid waste staff.

### Cart Deployment Status

On the following page, four charts provide an overview of the trash carts delivered by month, container inventory, cart waitlist counts, and the total carts in service.

### *Cart Deliveries by Month*

Month	35 GAL	48 GAL	64 GAL	96 GAL	TOTAL
AUG 2022	503	333	103	11	950
SEP 2022	296	142	94	41	573
OCT 2022	127	111	61	46	345
NOV 2022	144	82	42	19	287
DEC 2022	117	1	68	21	207
JAN 2023	106	2	7	29	144
FEB 2023	153	8	11	43	215
Total	1446	679	386	210	2721

### *Current Cart Inventory*

Category	35 GAL	48 GAL	64 GAL	96 GAL	TOTAL
In Service (1)	2546	2025	3983	1327	9881
In Inventory (2)	8646	35	52	28	8761
Waitlisted	0	221	96	0	317
Total	11192	2281	4131	1355	18959

(1) Until a cart audit is finalized, these numbers cannot be verified due to a lack of or inaccurate cart tracking in previous years.

(2) Carts have come into inventory from stop services and are being held in inventory for replacements or necessary swap-outs

### Cart Audit

To verify and collect missing cart data, on non-snowy days, the street crew assists the curbside collection staff in conducting a cart audit. Teams of two drive through the daily collection zones and used ArcGIS to gather cart data.

Throughout the month of February, the street crew collected just over 10,000 data points. While it will be difficult to obtain an accurate point for each of our 20,000+ customers due to customers not setting out materials and multiplexes, the audit team has already captured cart data on over half of the curbside collection customers.

Assistant Director, Arielle Swift, design an [audit dashboard](#). The dashboard provides management staff with live cart audit progress.

As new data comes in, the Public Works front desk team is verifying what is collected in the field with utility billing information. With the help from ArcGIS coordinator, Nikki Rosemeyer, an application has been designed that combines the data sources together, and it will be converted into an application to be used in the mass deployment of carts.

### Cart Promotion

All January and February utility bill mailings had a cart flyer insert. The main objective of the flyer was to prepare customers for the cart transition and encourage customers to call or submit an online request if they need more capacity than a 35-gallon cart. The more customers we hear from, the less likely we will need to swap out 35-gallon cart for

a larger cart. Since the release of the utility bill insert, there has been a significant increase in cart requests.

A right-sizing your cart video will be released in early March on the City's social media channels. In addition, Facebook ads will be targeted to specific areas where the carts will be delivered first.

During the Spring delivery, other social media posts and videos will follow educating customers about how to properly set out their carts. In addition, each cart delivery will come with an educational handout.

#### 2023 February Cart Order

Throughout the month of February, nine (9) semi-loads of carts arrived at the old bus garage at 2401 Central, totaling 8,000 35-gal carts. These carts will be stored at this location, and will operate as the distribution center for the April deployment.

#### April Delivery Plan

Starting April 3rd, the cart delivery team (including the street crew and sanitation drivers) will start to assemble and deliver carts from 7:00 a.m.- 3:00 p.m. The goal will be to deliver 400 carts a day, which will allow the department to finish the 8,000 deliveries by the end of April.

Using a 26-foot box truck, the carts will be hauled to different neighborhoods, and Public Works trucks will disperse and deliver 35-gal carts to basic service customers who haven't requested a larger cart. Cart deliveries will begin in the Monday collection zone, which are the neighborhoods east of Jackson Street. and North of 17th Street. Once all basic service customers in this collection zone have their carts, the deliveries will shift to the collection zones on Tuesday, and then Wednesday, etc.

#### FY 24 Cart Order

By May of 2023, the hope will be to have the 8,000 35-gallon carts delivered. We anticipate multiple customers to call requesting a larger cart than the 35-gallon option, and we will encourage them to try/use this delivered cart until it can be swapped out with a larger cart that comes into inventory. We will add these requests to the larger cart waitlist and then formulate our FY 24 cart order. The hope is to have the larger carts arrive by July 1st, 2023, so we can move forward with deploying carts to customers who need greater capacity.

#### Automated Trucks

With six trucks used daily to collect the City's refuse, currently, the fleet uses one automatic side-loaders, 2 rear loaders, and 3 semi-automatic side loaders. Two fully automatic trucks are on order and are expected to arrive during the Fall of 2023, they are intended to replace 2 of the 3 semi-automatic side loaders.

With three fully automatic trucks expected to be operational in the coming months, the curbside collection staff is working to restructure routes. During the last week of

February, Resource Management Supervisor, Jake Jansen, and Lead Sanitation Driver, Tony Severson, collected input from all sanitation drivers to review how the team can best implement the automation technology.

#### Ordinance Change

Because not all customers will receive their cart by July 1<sup>st</sup> of 2023, Public Works will recommend an ordinance language change with the FY2024 ordinance budget update to mandate customers to use their cart once it is delivered.

#### **ACTION STEP**

This memorandum is being provided as an update on the implementation plan for an automated solid waste conveyance system and the distribution of solid waste carts to support that system.

CC: Arielle Swift, Assistant Public Works Director  
Jacob Jansen, Resource Management Supervisor  
Randy Gehl, Public Information Officer