



City of Arts & Innovation

City Council Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL **DATE: MARCH 19, 2024**

FROM: PUBLIC WORKS DEPARTMENT **WARDS: ALL**

SUBJECT: REVIEW OF SOLID WASTE FUND STATUS

ISSUE:

Receive a report on the financial status of the Solid Waste Fund and confirm support for Solid Waste Rates schedule.

RECOMMENDATIONS:

That the City Council:

1. Receive a report on the financial status of the City's Solid Waste Fund; and
2. Confirm support for Solid Waste Rates Schedule as adopted on September 19, 2023.

LEGISLATIVE HISTORY:

State Regulation

In 2016, the State of California passed Senate Bill (SB) 1383, California's Short-Lived Climate Pollutant Reduction Strategy, which aims to reduce methane and other greenhouse gas (GHG) emissions statewide. To meet this goal, the bill establishes two targets by 2025:

- Reduce organic waste disposal 75% by 2025
- Rescue for people to eat at least 20% of currently disposed surplus food by 2025

CalRecycle oversees SB 1383, however, the implementation is managed by individual jurisdictions. Jurisdictions not in compliance with SB 1383 may be subject to daily fines ranging from \$500 to \$1,000.

On January 1, 2022, SB 1383 requirements went into effect, and jurisdictions became responsible to provide organic waste collection services to all residents and businesses, along with the requirement to recycle organic materials using recycling facilities such as anaerobic digestion facilities that create biofuel and electricity, and composting facilities that make soil amendments. As California collects and recycles organic materials, local governments will be required to use the recycled material and convert them into different products, such as renewable energy, compost, or mulch. The bill has generated a need for a substantial infrastructure investment to

process organics into certain specifications and to reduce contamination. There is an additional need to establish markets for compost and renewable fuels.

Foreign Policy

“National Sword” (China Waste Ban) explained: China has historically been the largest buyer of U.S. recycling (newspapers, cardboard, plastic bottles and aluminum cans). However, Chinese authorities announced a country-wide ban on some grades of paper and plastic at the end of 2017 in response to high levels of “contamination.” The ban formally went into effect on January 1, 2018, which reduced acceptable recycling levels of recovered paper and plastic from 3% to no greater than 0.5% contamination. Contamination occurs when non-recyclable items are mixed in with the good recycling.

China’s ban resulted in impacts to waste sorting operations, including a need to add personnel to sort lines, increase inspections to reduce contamination, implement new education materials, and explore other domestic and international markets. The National Sword policy caused far-reaching and significant shifts in recycling markets and continues to severely impact commodity sales such that revenues no longer offset the costs of processing, transportation, and residual disposal (contaminated recycling or non-recyclable material, i.e., trash).

BACKGROUND:

The City of Riverside Public Works Department is responsible for providing high-quality and comprehensive solid waste (trash and recycling) management services to our residents and businesses with the goal of preserving the health, welfare, and sustainability of our community and to meet State regulatory requirements. Riverside offers a variety of recycling programs and services meeting customer needs and State mandates. However, like many other cities throughout California and the U.S., the City of Riverside’s solid waste system is facing a variety of challenges.

Solid waste collection and street sweeping services for the City’s 63,484 residential accounts and 7,408 commercial accounts are currently provided through a combination of City staff and contracted haulers. City staff provide residential waste collection services for approximately two-thirds of the City’s residential customers (42,323 customers) and street sweeping on more than 800 miles of streets twice monthly to ensure compliance with State regulations. The remaining one-third of residential customers (21,161 customers) are serviced by a private hauler through an Exclusive Franchise that was approved by City Council on June 6, 2023. The City has a Transfer Service Agreement with Agua Mansa Transfer Station/Material Recovery Facility (MRF) to handle all collected trash, recyclable material, and organic recyclable material which includes source-separated food waste. This Transfer Service Agreement requires all haulers to transfer these commodities to the MRF through March 30, 2029.

Rate History from 2008 to 2018

Following the Great Recession, solid waste services rate increases were at or below 2% for 10 years as shown in the following table.

2008-2018 Solid Waste Services Rates

Year	Rate Increase
2008/09	0.00%
2009/10	0.10%
2010/11	1.00%
2011/12	1.00%
2012/13	1.00%
2013/14	1.90%
2014/15	1.10%
2015/16	0.70%
2016/17	2.00%
2017/18	2.00%

Rate History from 2019 - 2023

On December 18, 2018, the City Council approved an increase request for waste processing, and an 18-month solid waste rate plan through June 30, 2020.

Solid Waste Rates for 2018/19 – 2022/23

Year	Rate Increase
2018/19	9.80%
2019/20	3.20%
2020/21	7.70%
2021/22	6.70%
2022/23	4.70%

On January 14, 2020, the R3 Consulting Group, Inc provided the City Council with a comprehensive report on the solid waste and recycling program strategy, and an economic study. This addressed the City's own residential solid waste operation, a review of the commercial contracts, compliance with state-mandated programs, and a preliminary rate analysis to support operations of the required programs.

On September 15, 2020, the City Council approved a five-year rate increase structure for residential and commercial solid waste services for January 1, 2021 to June 30, 2025. These increases could not incorporate the full scale and impacts of SB 1383 as the program's requirements were unknown at the time.

DISCUSSION:

Approval of Five-Year Rate Adjustments

On September 19, 2023, the City Council approved a five-year rate increase structure for residential solid waste services for November 1, 2023 through June 30, 2028. Alongside this approval, the Council directed staff to bring back metrics on the Refuse program, a study of alternate can sizes, a Solid Waste Sharing Households Assist Riverside's Energy (SHARE) financial assistance program, and an annual review before each rate increase. Each of these is discussed in more detail in this report.

The following table provides the approved five-year rate plan to achieve sustainability for the Refuse Fund and end General Fund subsidies.

Solid Waste Rates for 2023/24 – 2027/28

Year	Rate Increase	Dollar Increase
Nov. 2023 – June 2024 [Implemented 11/23]	2.92%	\$0.94/month
July 2024 – June 2025	7.50%	\$2.60/month
July 2025 – June 2026	6.50%	\$2.43/month
July 2026 – June 2027	6.50%	\$2.58/month
July 2027 – June 2028	6.50%	\$2.75/month

The following table provides a breakdown by service of the upper limit of the rates.

Estimated Monthly Residential Rates

Service	Rates & Effective Dates				
	11/1/23	7/1/24	7/1/25	7/1/26	7/1/27
Standard Curbside/Disabled	\$34.72	\$37.32	\$39.75	\$42.33	\$45.08
Mobile Home/Apt	\$19.81	\$21.30	\$22.68	\$24.15	\$25.72
Driveway	\$47.61	\$51.18	\$54.51	\$58.05	\$61.82
Backyard	\$57.13	\$61.41	\$65.40	\$69.65	\$74.18
Condo/Townhouse	\$21.42	\$23.03	\$24.53	\$26.12	\$27.82
Extra Container (Brown – Trash)	\$14.78	\$15.89	\$16.92	\$18.02	\$19.19
Extra Container (Green-Yard waste)	\$6.77	\$7.28	\$7.75	\$8.25	\$8.79
Extra Container (Blue – Recycling)	\$2.69	\$2.89	\$3.08	\$3.28	\$3.49

The new five-year solid waste rate plan that went into effect November 1, 2023 is helping the City mitigate the impacts of challenges being confronted by jurisdictions throughout California and the U.S. such as:

- Inflation causing increased construction/equipment costs
- Continued impacts of China's National Sword policy
- 12% increase of waste throughout the COVID-19 pandemic
- Increased costs associated with the implementation of SB 1383 and the diversion of over 97 million pounds of green waste from landfills (up 8% from 2021)
- Newly implemented mandates and adhering to impactful regulatory compliance.

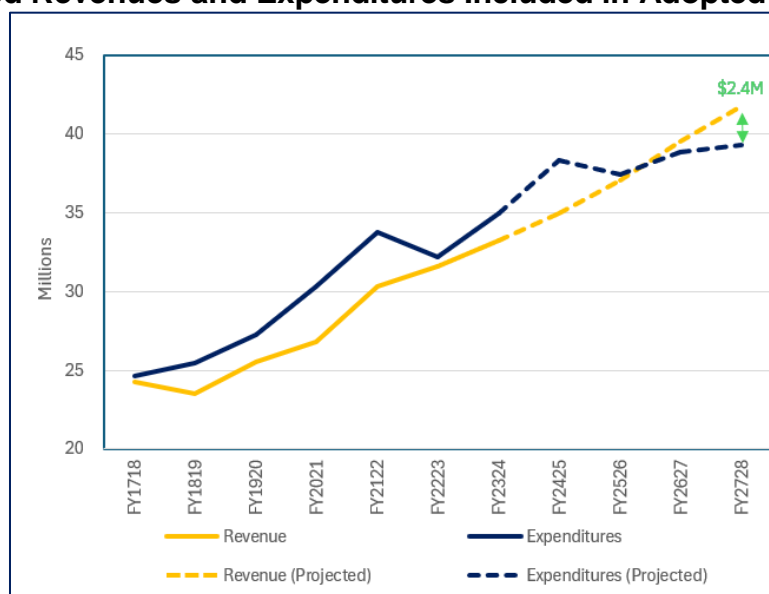
The approved five-year rate plan addresses challenges to solid waste services provided by the City including the rising cost of processing recycling and organics and meeting operational cost increases not covered by CPI (e.g. higher costs of refuse bins, vehicles, maintenance, and repairs). Additionally, the approved rate plan will end the need to use Refuse Fund Reserves to fund operations and will eliminate the need for additional General Fund subsidies, such as the \$2 million subsidy in 2023 for lost revenue, and \$9 million for the purchase of refuse and street sweeping vehicles and equipment.

Current Solid Waste Fund Status

At the time of the September 2023 rate discussion, revenues and expenditures for FY22/23 and FY23/24 were based on projected data. At the time of this report, FY22/23 and Q1 and Q2 of FY23/24 are closed and an updated projection of revenues and expenditures provided in the chart below continues to show that at the end of FY25/26, revenues may come very close to meeting expenditures and then begin to rebuild a reserve balance in the Solid Waste Fund.

The dip in expenditures in FY22/23 is due to reconciliation of budget actuals at fiscal year-end, salary savings from vacant positions, and an adjustment in the timing of projected expenditures to FY24/25 for a Capital Improvement Project for post-Tequesquite Landfill closure remediation activity, for which the Solid Waste Fund is responsible. Public Works staff is currently preparing bid documents for an estimated \$1.5 million project in FY24/25 to replace the flare station that burns off the methane gas that is a byproduct of the landfill and repair damaged wellheads throughout the site.

Projected Revenues and Expenditures Included in Adopted Rate Plan



Although updated projections paint a slightly better picture than was presented at the time of rate schedule approval in September 2023, the updates are based on only a few months of actual

data and the Solid Waste Fund is projected to operate in a deficit for two more fiscal years. There are number of variables that are not known at this time and were not contemplated in the current rate schedule and may impact projections including:

- **Regulatory requirements associated with SB 1383** have resulted in increased expenditures for the City's Solid Waste program with new reporting, outreach, and programmatic requirements. California has made grant funds available to municipalities to help offset the costs of this mandate, but available grant funds fall far below the SB 1383 impacts to the Solid Waste Fund.
- **Consumer Price Index (CPI)** continues to be an unknown variable in costs to the Solid Waste Fund. If Solid Waste continues to experience CPI of 3% or higher, such as 8.59% and 7.33% in 2022 and 2023, respectively, costs associated with the Materials Recovery Facility (MRF) for landfill tipping fees and processing fees may spike again.
- **Market volatility** continues to be a concern and affects costs associated with purchasing vehicles, equipment and materials. A mild recession is forecast for next year, injecting further economic uncertainty into projections.
- Projections will continue to be updated as the City develops its **Zero Emission Vehicles (ZEV) Transition Plan**. Future projects and expenses associated with transitioning the Solid Waste fleet to ZEV are anticipated.
- The current **labor contract** ends in June 2025. Negotiations for the next Memorandum of Understanding with the Refuse Bargaining Unit will begin in early 2025. Projections account for up to a 3% increase for labor costs beyond the end of the current MOU. Negotiated increases above this would be absorbed by Solid Waste Fund reserves.
- In anticipation of expiration of the City's agreement for **Transfer Services with Agua Mansa MRF, LLC** in March 2029, Solid Waste will retain a consultant to lead an estimated 2-year study of solid waste and transfer services in the Riverside area, culminating in a Request for Proposal Process for transfer services. Costs associated with a consultant and future transfer services will be determined through competitive procurement processes.

Beginning working capital in FY2023/24 was approximately \$6 million. The Refuse Fund is currently projected to operate at an estimated deficit of \$1.7 million and by the end of FY2027/28 is projected to have a remaining working capital balance of approximately \$3.5 million. The current rate plan will utilize an estimated \$2.48 million of reserves over the five-year rate schedule.

SOLID WASTE FUND PROJECTIONS			
FY	Revenue	Expenditures (Incl. Encumbrances)	*Revenue/ Expenditures
2023/24	\$33,243,037	\$34,939,204	95%
2024/25	\$34,923,472	\$38,355,951	91%
2025/26	\$37,070,844	\$37,404,018	99%
2026/27	\$39,555,854	\$38,837,141	102%
2027/28	\$41,787,654	\$39,330,220	106%

**Less than 100% equates to operating in deficit*

Within the Public Works Department budget, expenditures for Solid Waste fall into several major categories:

Collection – Costs associated with the physical process of picking up the trash, including Solid

Waste Operators, bin inventory, replacement vehicles, and processing waste at the Agua Mansa Materials Recovery Facility.

Landfill – This category is used for costs associated with post-Tequesquite Landfill closure remediation activity, for which the Solid Waste Fund is responsible.

Private Haulers – This includes payment for waste hauling service to the City's Franchise Residential Services Hauler.

Street Sweeping – Costs associated with removing debris from public streets in neighborhoods and preventing it from entering the storm drain system.

City Administration - City administrative costs cover the operations and labor for work done in support of the entire Solid Waste operation. This includes support for the Public Utilities Department where the billing for Solid Waste is done and where the City Call Center resides. Where not paid by grants, costs associated with SB 1383 compliance and programs are captured here.

Additionally, Public Works is using Solid Waste funds to:

- Fund **five new Solid Waste relief drivers**.
- Address **technology deficiencies and improve Solid Waste operations**.
- Provide resources to comply with **State requirements**.

Additional City Council Direction

1. Solid Waste SHARE Program

On December 19, 2023, the City Council considered and approved a five-year, \$1.1 million financial assistance program for qualifying Solid Waste customers. Public Works worked closely with Public Utilities to implement this program and on February 1, 2024, current and retroactive credits appeared on qualifying customer billing. The following table provides the credit amounts for Solid Waste SHARE customers through FY 27/28.

Date	Proposed Monthly Rate Increase	Cumulative Rate Increase	Proposed Monthly SHARE Credit	Cumulative Cost Increase for SHARE Customers
November 2023	\$0.94	\$0.94	\$1.94	-\$1.00
July 2024	\$2.60	\$3.54	\$3.24	\$0.30
July 2025	\$2.43	\$5.97	\$4.46	\$1.51
July 2026	\$2.58	\$8.55	\$5.75	\$2.80
July 2027	\$2.75	\$11.30	\$7.12	\$4.18

2. Study of Alternate Bin Sizes

On January 11, 2024, staff presented the Mobility & Infrastructure Committee with a progress report on our study of offering optional smaller residential solid waste bins, which is focused on four main areas:

- Ability of the Solid Waste fleet to service smaller bins and whether vehicles modifications

would be required and at what cost.

- Financial impacts associated with implementing smaller bin options, including potential impacts to revenue and rates.
- Case study of what other cities are offering, what their rate structures are, and what lessons have been learned.
- Potential impacts from “contamination” or co-mingling waste from different commodities.

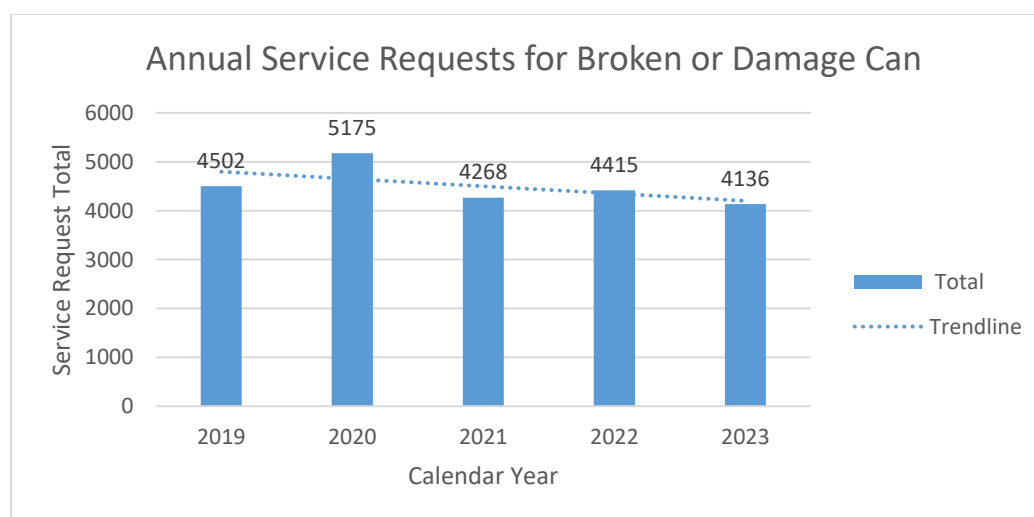
Following discussion, the Committee directed staff to continue work on the study and return to the Committee within six months with another update. Staff is engaging with a consultant to advance study in these areas, particularly the potential financial impacts to Solid Waste, and preparing the next report to bring back to Committee.

3. Refuse Program Metrics

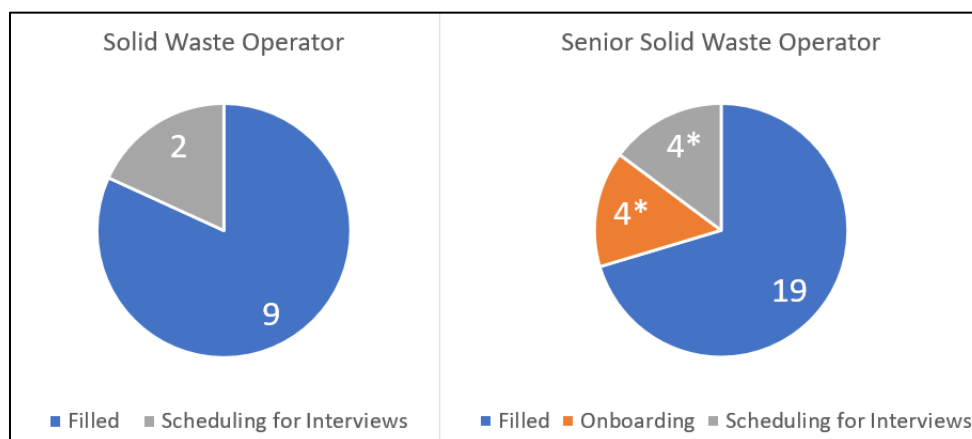
The following metrics are provided to show how the Refuse program is working.

- **Delivery of replacement solid waste bins.** Over the past three years, demand has held steady at about 350 requests for replacement bins per month, or about 4,200 per year. COVID-19 pandemic effects to supply chains impacted Public Works’ ability to maintain inventory of replacement solid waste bins for several years, and a sizeable backlog of service requests grew quickly. In late summer 2023, Public Works was able to start rebuilding inventory and picked up the pace to deliver nearly 3,000 replacement bins from October – December 2023, bringing the total bins delivered for the year to 6,900. Approximately 50-100 new bin replacement requests are received each week and Solid Waste currently averages about 250 deliveries per week, with 1,393 open service requests at the end of January 2024, down from 3,009 in early October 2023. In January and February 2024, more than 2,400 replacement bins were delivered. At this rate, Solid Waste expects to be caught up with the backlog of bin delivery service requests by April or May 2024.

The following chart shows broken or damaged can service request annual totals and total trendline for the past five calendar years.



- **Fill vacant positions.** The Public Works Department continues to work with Human Resources to recruit for vacant positions. The following is the status of Solid Waste personnel in February 2024:



*Includes 5 new relief driver positions

Staff noticed more stability in positions following approval of the 5-year rate plan. Staff will continue to work with HR on recruitments and conduct interviews twice per month to fill all vacant positions. The City also has open recruitment with sign-on bonuses for Solid Waste Operators to encourage interested candidates to apply.

- Address technology deficiencies.** In late 2022, staff began a 6-month field demonstration of a software application from Rubicon Global LLC in 10 City refuse trucks to improve customer service, analyze and optimize routes, and provide real-time route information (service provided, missed service due to containers not placed out, contaminated load, etc.). Following the pilot program, Public Works worked with IT to determine compatibility with City systems. In February 2024, City Council approved an agreement with Rubicon Global LLC for software to improve customer service, replace paper processes, provide route optimization, and analyze route data. Staff is currently working with Rubicon to equip the fleet and put the software into service with a target implementation date of April 1, 2024.
- Provide resources to comply with State requirements.** Through the Edible Food Recovery Program, the State of California requires that the City performs capacity planning, identifies and connects with Tier 1 and Tier 2 food generators (e.g. supermarkets, wholesale food vendors, restaurants, Local Education Agencies, health facilities, hotels, etc.) to ensure compliance with State requirements to rescue food that is suitable for consumption that would otherwise end up in the landfill. In November 2023, the City Council approved an agreement with ReCreate, a firm that will work with Solid Waste staff to help facilitate conversation with Tier 1 and Tier 2 generators and connect the generators using the “CareIt” software system to manage the inventory of available food, track food safety elements to prevent spoilage, and serve as the network connecting the generators with the non-profit food service organizations that will distribute the food throughout the community. Through ReCreate and “CareIt” the City satisfies the State of California’s reporting requirements for edible food recovery.

Funding will also be provided from the Solid Waste Fund to partially fund two Environmental Compliance Inspectors to conduct on-site inspections for contaminated/commingled commodities among commercial solid waste accounts.

Additionally, California requires businesses to recycle their organic waste. Staff worked closely with CalRecycle and the City’s Franchise Haulers to bring 3,751 local businesses

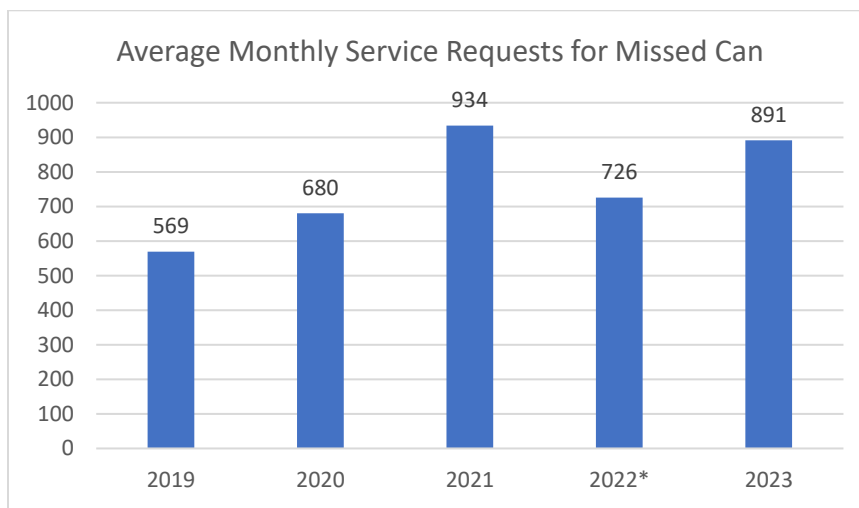
to a compliance rate of 99.18% by the State's deadline of December 2023.

On January 16, 2024, the City Council authorized submittal of a Supplemental Jurisdiction Application to CalRecycle whereby the City of Riverside will join the City of Corona's CRV (California Redemption Value) beverage container recycling pilot program with mobile recycling service provided to the Riverside community by Recycle From Home. Through the two-year pilot program, Recycle From Home will offer a convenient way for the community to recycle, resulting in diversion of CRV recyclables from the landfill and helping to advance the City's sustainability efforts. The anticipated launch of this new service is May 2024.

- **Reduce Service Delays.** Solid Waste continues to contend with delayed service due to truck shortages, vacant positions, and occasionally due to new drivers who are learning routes. In 2023, the average number of routes not serviced on the scheduled day was 6, for an average daily delayed service rate of 21%.

Solid Waste is being as responsive as possible to all calls for service and the supervisors are actively monitoring and adjusting routes to minimize service delays. Route imbalance partially contributes to delayed service as some service days have longer routes than others; with planned technology enhancements, the Public Works Department will be able to gather data to aid decision-making regarding adjusting routes/service days and reduce some delayed service. As new trucks are received, they will be put into service as quickly as possible so that we can reduce delayed service. Solid Waste is closing the gap on vacant positions and has hired one relief driver to date. Continued efforts in hiring will further improve service. Automated route management through implementation of software is expected to reduce the amount of time it takes for new drivers to learn and properly navigate their full routes.

Solid Waste staff will continue to work overtime on Wednesdays and weekends to complete delayed routes until new trucks arrive later this year. The following chart depicts the average monthly number of service requests received for missed cans for the past five calendar years.



**Burrtec provided route coverage from May – December 2022*

- **Replace aging vehicles.** In July 2021, Public Works collaborated with the General Services Fleet Division to purchase three new automated side-loading refuse trucks that

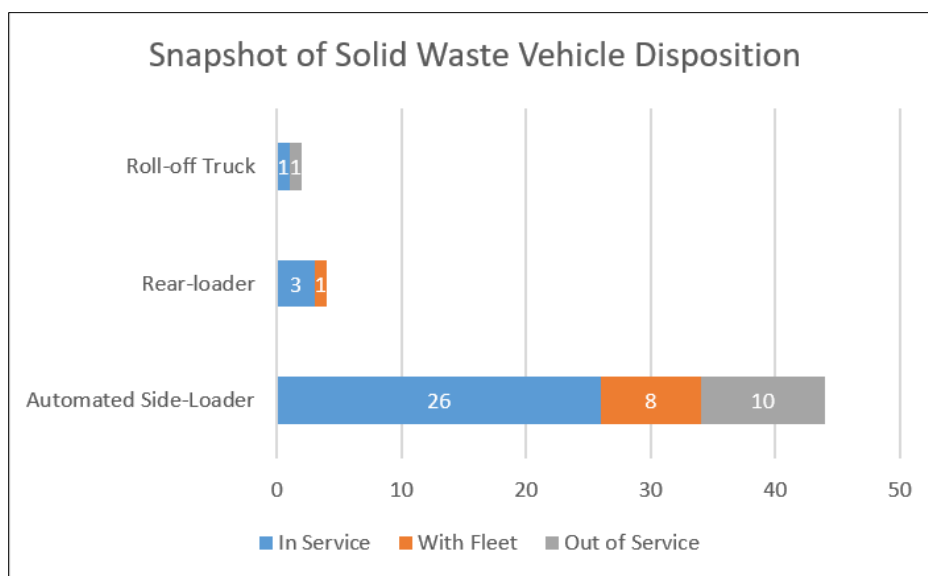
were received and put into service in late 2022.

In July 2023, Public Works worked with Fleet to purchase 20 new vehicles for Solid Waste which represents an investment of \$8.7 million in the Refuse fleet as detailed below:

- 1 CNG Flatbed Truck – anticipated delivery in 2nd Quarter CY2024
- 2 CNG Roll-Off Trucks – anticipated delivery in 2nd Quarter CY2024
- 5 CNG Street Sweepers – anticipated delivery in 3rd Quarter CY2024
- 2 CNG Rear-Loading Refuse Trucks – anticipated delivery in 3rd Quarter CY2024
- 10 CNG Automated Side-Loading Refuse Trucks – anticipated delivery in 4th Quarter CY2024

Staff is working with Fleet to prepare upcoming orders of additional trucks that will be brought before the City Council for consideration. Solid Waste's most critical need currently is automated side-loading refuse trucks and staff engage with the manufacturer at least monthly for delivery updates. Long lead times are lingering impacts of the COVID-19 pandemic on the global supply chain.

The following tables provide an overview of the Solid Waste vehicle fleet. On an average day, there are 5-10 vehicles with Fleet for maintenance/repair. Each vehicle out for repair may result in a missed route, for an average of 5-10 missed routes on a given day. The normal lifespan for a Refuse truck is 9-10 years, and Solid Waste is running vehicles much longer with a number of 18-year-old vehicles still in service.



The rate schedule approved by City Council in September 2023 was intended to address challenges faced by Solid Waste by stabilizing the Fund and providing resources to improve service. Solid Waste staff is working diligently to provide service to the community and is actively carrying out City Council's directives to fill vacant positions, purchase new Refuse trucks, implement new technology, and comply with State requirements.

STRATEGIC PLAN ALIGNMENT:

This item contributes to **Strategic Priority 4 – Environmental Stewardship** and **Goal 4.4 –**

Implement measures and educate the community to responsibly manage goods, products, and services throughout their life cycle to achieve waste reduction outcomes, and **Strategic Priority 5 – High Performing Government** and **Goal 5.4** – Achieve and maintain financial health by addressing gaps between revenues and expenditures and aligning resources with strategic priorities to yield the greatest impact.

This project aligns with each of the five Cross-Cutting Threads as follows:

1. **Community Trust** – Riverside is transparent and makes decisions based on sound policy and timely and reliable information. Activities and actions by the City serve the public interest and result in greater public good.
2. **Equity** – Riverside is committed to equitable distribution of services to ensure every member of the community has equal access to share in the benefits of community progress.
3. **Fiscal Responsibility** – The approved rate schedule will minimize revenue losses to the Refuse fund and allow for critical investment in service and fleet maintenance.
4. **Innovation** – Solid Waste is implementing innovative technologies to improve driver safety and vehicle management and provide more efficient services to the community.
5. **Sustainability & Resiliency** – Solid Waste is working to meet compliance requirements for state-mandated programs with sustainability objectives, such as SB 1383.

FISCAL IMPACT:

There is no fiscal impact associated with the recommendations in this report.

Prepared by:	Lee Withers, Deputy Public Works Director
Approved by:	Gilbert Hernandez, Public Works Director
Certified as to availability of funds:	Kristie Thomas, Finance Director/Assistant Chief Financial Officer
Approved by:	Kris Martinez, Assistant City Manager
Approved as to form:	Phaedra A. Norton, City Attorney

Attachments:

1. Detailed Solid Waste Fleet Disposition
2. Presentation