

**TO:** Michael C. Van Milligen, City Manager  
**FROM:** John Klostermann, Public Works Director **JK**  
Anderson Sainci, Resource Management Coordinator & Supervisor  
**SUBJECT:** Automated Side Loader and City-Wide Mandatory Cart Use  
2021 Budget Revised Proposal  
**DATE:** **April 13, 2020**

### **Introduction**

The purpose of this memorandum is to provide information related to the Public Works Department Fiscal Year 2021 Revised Budget proposal for the implementation of automated side loader collection and city-wide mandatory use of trash carts.

### **Discussion**

The FY 2021 Public Works Capital Improvement budget has two capital projects related to the collection of solid waste. One is for the replacement of solid waste collection vehicles (CIP# 670-1533). The second is for the purchase of city provided tipper carts (CIP# 670-2843) for the collection of trash only carts which would be issued city wide. Both have been revised since originally submitted in the fall of 2019.

Annually the department provides a five-year schedule for replacement of the solid waste fleet. This is done through the CIP process by identifying the trucks and years they are replaced. Unrelated to this proposed new cart program, two side loader trucks are scheduled for replacement each year in FY 2021 and FY 2022. Some information to the public has in error attributed the costs of the replacement of existing trucks to the new program and it should not be. The \$40,000 per unit related to the purchase of the arm for the automated side loaders is \$120,000, not including the truck chassis and box which were already scheduled for replacement and need to be replaced even if automated refuse collection is not implemented. The second CIP is for the purchase of 18,000 tipper carts for the collection of trash. This project is being phased-in with a revised request to purchase 7,000 carts in FY 2021(\$280,000), 7,000 carts in FY 2021(\$285,600), and 4,000 carts in FY 2023 (\$166,440).

Using only the increased cost for equipment related to the purchase of the arm for the automated side loaders (\$120,000) and the purchase of the carts over the next three years (\$732,040), the total cost of the project is \$852,040.

In FY 2021 the personnel full time equivalent (FTE) will remain the same at 20.75. The revised proposal also has no fee increase in FY 2021. The original fee increase was eliminated by making the following changes to the proposal.

- Revised Estimate - Cost estimates were revised on actual costs received on trucks purchased in 2019 and revised estimates from our vendors for the automated side arm equipment,
- Revised Estimate Related to Carts - The revision was made based on information on the number of customers and carts currently in the system,
- Funding Change – The current low interest rate environment supports using debt for the purchase of the solid waste automated side loaders instead of cash.
- Revised Fuel Costs – The FY 2021 fuel budgets have been reduced by 20% due to anticipated lower fuel prices.
- Revised Workers Compensation Costs – The FY 2021 workers compensation costs for the solid waste activity have been reduced due to expected city wide savings related to the change in the workers compensation insurance plan and the reduction in employee injuries that will be experienced by switching to automated refuse collection with carts.

A major change to the original proposal in deference to the concerns of the Resiliency Advisory Commission expressed after the March 24, 2020 meeting, is that the cart program will use a 34-gallon cart as the base cart offered to all customers, instead of the original proposal to use a 48 gallon cart as the base rate cart. Customers city-wide will also have the option to subscribe at an increased monthly cost, a 48-gallon, 64-gallon, or 96-gallon cart to meet their individual need. This system strengthens the current “pay as you throw concept” with the ultimate goal to get to zero waste.



The proposed fee structure would include no fee increase for current services. Below is the fee structure proposed as it relates to the cart program.

- Base fee \$15.62 no fee increase
  - Base fee will include one 34-gallon city owned and maintained cart or current 35-gallon customer owned container for residents not provided a cart in the first or second year of the phased-in distribution of carts
- 48-gallon cart available city wide - \$17.22 (new service city wide/new rate)
- 64-gallon cart - \$20.65 no fee increase
- 94- gallon cart - \$29.00 no fee increase
- 48-gallon alley cart program- \$15.62 no fee increase (current cart holders grandfathered in)
- 64-gallon alley cart program - \$16.26 no fee increase (current cart holders grandfathered in)
- 94-gallon alley cart program - \$24.39 no fee increase (current cart holder grandfathered in)

The recommendation also ends the current option for additional 35 gallon containers and oversized containers. Customers will instead be provided carts of their choice at the subscription cart fee. This recommendation is made to protect our workforce from having to reach in and remove bags from over-sized cans and eliminates the need for repetitive lifting of multiple containers at one stop. This change will effect the following customers;

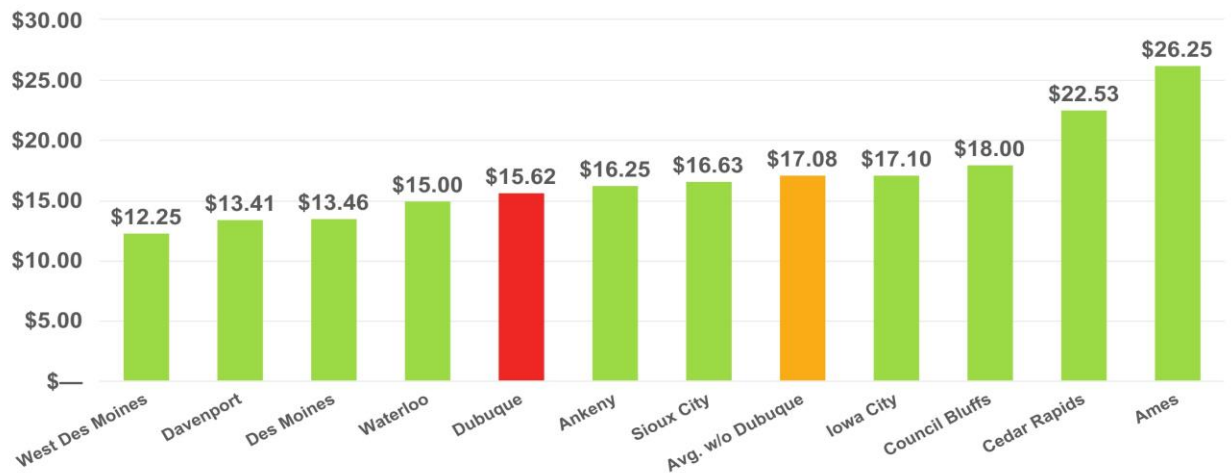
- Additional 35 gallon container option - 242 customers
- Oversize container option – 616 customers
- Additional Oversize container option – 20 customers

The new system will provide a new special collection service for the frail and disabled residents who may not be able to handle the 34-gallon cart. Exceptions will also be made for residents where the use of a cart creates a hardship due to terrain.

Customers will still be able to buy stickers for \$1.50 to be able to put out extra trash when that need arises, and the large item collection service is still available at an extra cost on an individual request.

A General Fund subsidy of approximately \$48,800 will be funded from the General Fund to cover the cost related to the 50% fee reduction for low income qualified residents. While this discount has always been available, but was funded by other refuse collection customers instead of the General Fund, which is inconsistent with good practice. This policy change is an appropriate way to fund City subsidized programs and is already in place for the stormwater fee.

Dubuque would have the 5<sup>th</sup> lowest rate amongst the 11 cities in Iowa with a population over 50,000. The highest city, Ames, would have a rate (\$26.25) that is 68% higher than Dubuque's rate. Dubuque's proposed base rate of \$15.62 for solid waste services is \$1.46 (9.3%) below the average rate (\$17.08) of the eleven largest Iowa cities.



An impact analysis completed by East Central Intergovernmental Association (ECIA) predicts about 260 new residential units will be built each year over the next ten (10) years directly related to the completion of the Southwest Arterial project. Due to the extension of City infrastructure into this area many of these homes will be built in the City and will require solid waste services. The implementation of automated side loaders where possible throughout the city will provide a safe work environment for our employees and allow the department to plan for future growth related to the Southwest Arterial and other areas delaying the need to add staff.

The collection of refuse and recycling materials is consistently ranked in the top ten of most dangerous jobs in the country based on Bureau of Labor statistics. This is due in part to the time the workers spend each day driving or riding on the truck, in all weather conditions, which increases the risk of transportation related accidents. Fortunately, in the forty-four years that I have been in the department we have never had a fatal injury related to the collection of solid waste. However, Public Works Department statistics show that over the last three years (2017-19) 46.3% of the forty-one (41) department wide City of Dubuque OSHA reportable injuries were related to the collection of solid waste. During that same time period, the total lost workdays related to injuries to solid waste crew members for the City of Dubuque were 43 and the related medical cost was \$36,842. While most injuries require a short recovery time other injuries are considered permanent and worker's compensation settlements are made for an injury occurring on the job. **Between 2006 and 2017, the top ten department employee claims related to the collection of solid waste were settled at a total cost of \$1,287,710.**

**More importantly, these employees lost 1,725 workdays away from work.** This not only caused hardship and stress for these employees, but placed additional workloads on the remaining city staff.

The following reasons are being provided to support the revised project.

- Reduce Worker Compensation Claims- The top 10 City of Dubuque injuries for solid waste collection employees between 2006 and 2017 equaled \$1,287,710.
- Reduce Lost Workdays - The top 10 worker's compensation claims for solid waste collection employees between 2006 and 2017 had 1,725 lost workdays from injuries.
- Reduce Employee Concerns - While the pandemic has highlighted employee concerns about touching the trash, there has always been an employee concerns about being exposed to bed bugs and fleas.
- Resiliency Advisory Commission Concerns – The revised proposal addresses the Commission's concern related to cart size. The modifications enhances our efforts to get to zero waste and strengthens the "pay as you throw concept" where the more refuse you put out the more you pay.
- Rate Increase – The revised proposal eliminates the rate increase.
- Discounted Rate - Low income residents will continue to qualify for a 50% discount on their monthly rate. Discounts will now be subsidized by the General Fund in the same way currently being done with stormwater fees.
- Option Out - There will be customer exceptions made in the community where this will not be implemented because of terrain. Also, exceptions will be made for the frail and disabled who would struggle with a cart.
- Environmental - The cart system will help to keep neighborhoods clean.
- Customer Convenience - The city will own and maintain the carts.
- Future Growth – The automated side loaders will create the ability to absorb some future growth without adding employees and equipment.
- Existing Work Force - This recommendation will preserve existing city jobs and will not privatize the system.

### **Action Step**

This has been provided as informational only, for the review of the revised Public Works Department FY 2021 solid waste budget proposal.