



PLANNING & DEVELOPMENT MEMORANDUM
#25-2022

DATE: Aug. 8, 2022

TO: Honorable Mayor Meredith Leighty and City Council Members

THROUGH: Heather Geyer, City Manager 

FROM: Brook Svoboda, Director of Planning & Development 
Becky Smith, Planning Manager
Ashley McFarland, Planner II
Rob Webber, Public Works Operations Manager

SUBJECT: Waste Optimization Study – Next Steps

PURPOSE

To provide an overview of the current efforts to date and the proposed next steps for engaging Council on the Waste Optimization Study.

BACKGROUND

The 2020 Budget identified two planning projects: a recycling study and a composting study. Based on the nature of these two efforts, it was identified there would be economies of scale and efficiencies in analysis by combining the studies into one. In August 2020, the City entered a contract with LBA Associates to conduct a study that would evaluate both objectives collectively.

This project was introduced to City Council on Nov. 16, 2020, when staff presented an overview of solid waste management for Northglenn, included as Attachment 1. The presentation introduced two concepts to be evaluated for the study: Pay As You Throw (PAYT) and subscription service composting. Based on Council's consensus of the presentation, staff moved forward with evaluating a PAYT model for trash collection and a composting subscription service for the study.

The final report was completed in the second quarter of 2021, however, the City Manager requested additional work be done on the recommendations related to next steps and feasibility. Based on feedback received during the re-engagement exercise, staff hopes to have the final report presented to Council in October.

Staff is proposing a Council re-engagement exercise with the consultant to re-engage existing Council members on the project and bring new Council members up to speed. This effort would also serve as a check-in to reevaluate/affirm that the report aligns with Council's current expectations and objectives. The exercise would include one-on-one interviews with Council, followed up with a debrief with staff, and identification of any potential modifications to the report before presenting the final report. Interviews would be scheduled in August/September, allowing for enough time to make any adjustments to the final report.

If Council is supportive of this approach, staff will request additional scope of services from LBA to conduct the interviews.

It is important to note that this report represents a technical analysis of how these concepts would be deployed in Northglenn and the purpose of the report is to determine if there is Council consensus to move this into the next steps for implementation. It is anticipated that an extensive

education and community engagement effort would take place, with regular check-ins with Council prior to formal action on implementation.

BUDGET/TIME IMPLICATIONS

Based on Council consensus, an additional scope of services would be prepared by LBA Associates, with a subsequent amendment to the contract. Costs depend on how Council would like to proceed. The funding for this project is through the Sanitation Fund.

STAFF RECOMMENDATION

Staff is seeking direction from Council on whether to proceed with this re-engagement exercise. If City Council does not want to do the re-engagement as recommended by staff, the final report will be presented to Council as soon as possible in September pending the consultant's availability.

STAFF REFERENCE

If Council members have any questions, please contact Brook Svoboda, Director of Planning & Development, at bsvoboda@northglenn.org or 303.450.8937.


ATTACHMENT


1. Planning & Development Memo #46-2020

**PLANNING & DEVELOPMENT DEPARTMENT MEMORANDUM
#46-2020**

DATE: November 16, 2020

TO: Honorable Mayor Meredith Leighty and City Council Members

THROUGH: Heather Geyer, City Manager 

FROM: Brook Svoboda, Director of Planning and Development 
Ashley McFarland, Planner I
Rob Webber, Operations Manager

SUBJECT: 2020/2021 Waste Optimization Study – Solid Waste Management in Colorado

PURPOSE

To introduce Council to the 2020/2021 Waste Optimization Study and provide background information.

BACKGROUND

The City has contracted with LBA Associates for the 2020/2021 Waste Optimization Study. They will look at current and future citywide residential curbside waste pickup to see what changes could be made to make the service more effective financially and environmentally. The City would also like to explore waste optimization and landfill diversion options that prioritize cost savings and the environment.

Staff, to include Ashley McFarland, Planner and Rob Weber, Operations Supervisor will be present at the study session. Laurie Batchelder Adams of LBA Associates will provide a project presentation to include:

- An overview of solid waste management
- Colorado Front Range solid waste characteristics
- Current solid waste management services provided by the City of Northglenn
- Optional waste service methods being researched
- Overview of Pay As You Throw (PAYT) (Examples of PAYT programs in other Colorado municipalities are included as Attachment 2.)
- Decreasing contamination rates
- Issues with single-stream recycling
- Composting
- Additional study considerations
- Public talking points for Council

STAFF RECOMMENDATION

This item is for informational purposes only.

BUDGET/TIME IMPLICATIONS

In the 2020 City budget, \$25,000 was budgeted in the Sanitation Fund for a recycling study, and \$25,000 more was budgeted in the Sanitation Fund for a composting study. Staff decided to combine the studies into one Waste Optimization Study to take a more holistic approach. The contract amount for the 2020 Waste Optimization Study is \$47,800. The funds to pay for the study will be drawn from the Sanitation Fund.

STAFF REFERENCE

If Council members have any questions, they may contact Director of Planning and Development Brook Svoboda at 303.450.8937 or bsvoboda@northglenn.org.

ATTACHMENTS

1. Presentation – Solid Waste Management in Colorado
2. Colorado municipal examples – volume-based policy components



SOLID WASTE MANAGEMENT IN COLORADO



LBA ASSOCIATES

LBA ASSOCIATES, INC
City Council Study
Session
Nov. 16, 2020

PURPOSE

- **Introduce LBA Associates**
 - Project manager Laurie Batchelder Adams
- **Give overview of Solid Waste Management in Colorado and Northglenn**
- **Go over possible options to make waste service in Northglenn more effective financially and environmentally**

SOLID WASTE – WHAT ARE WE TALKING ABOUT?



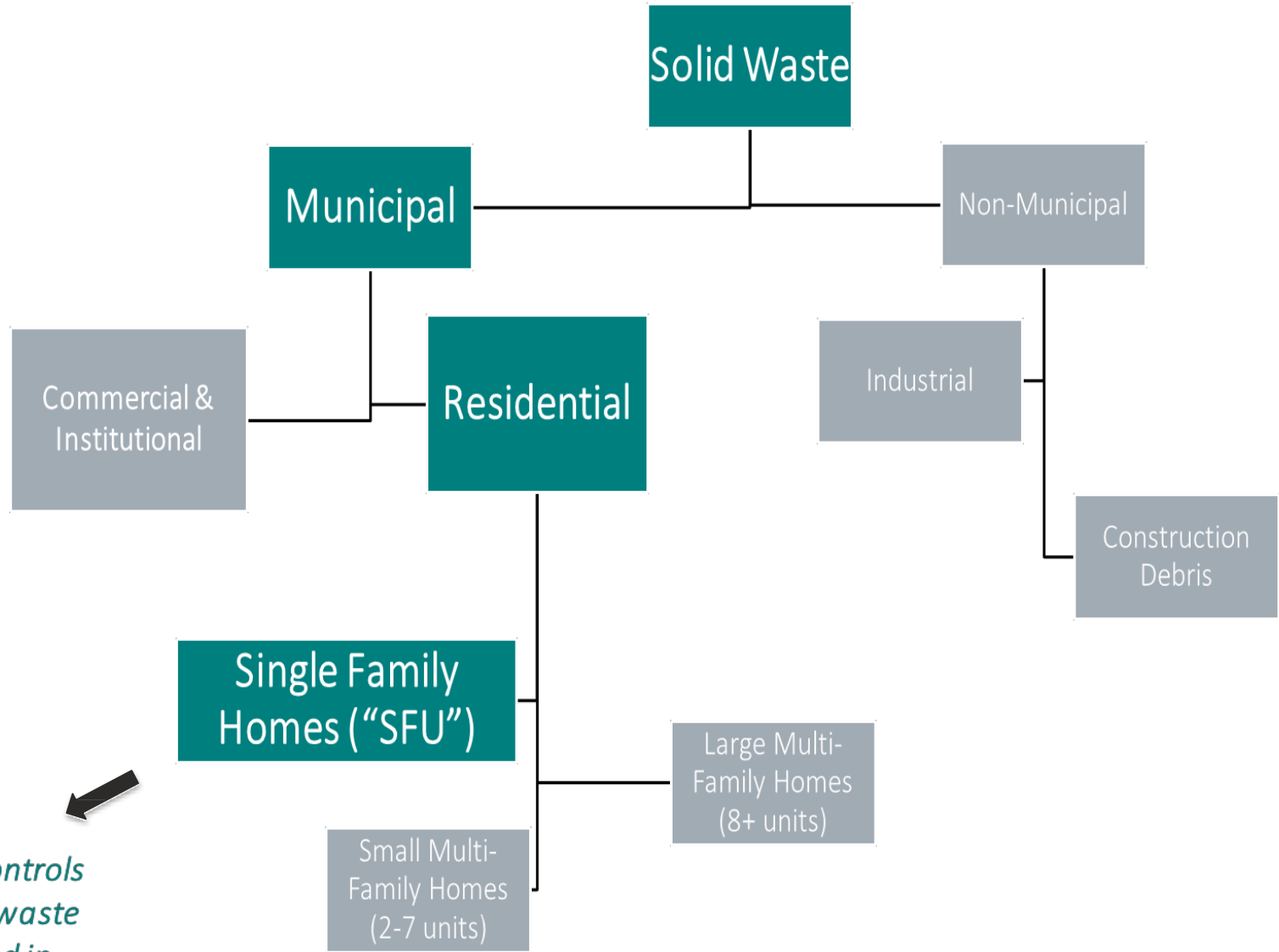
SOLID WASTE IS >>>
THAN RESIDENTIAL
WASTE



LESS THAN 50% OF FRONT
RANGE TRASH SHOULD GO
TO LANDFILL



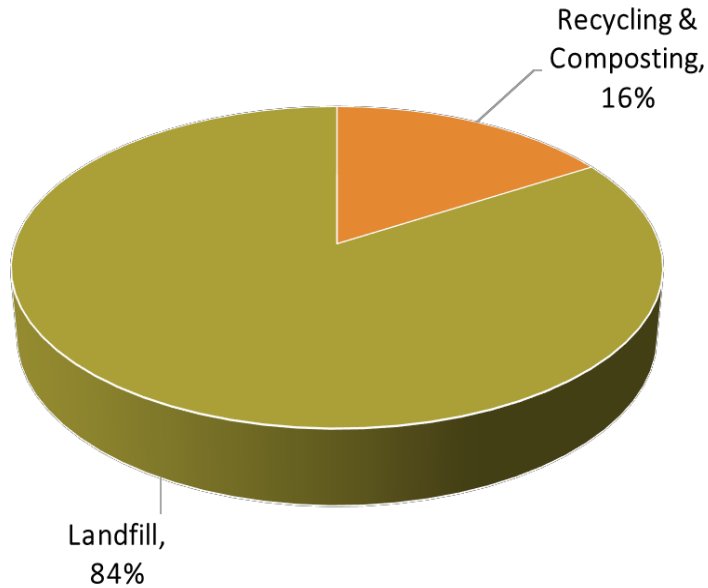
>15% OF RECYCLABLES
CAN BE TRASH



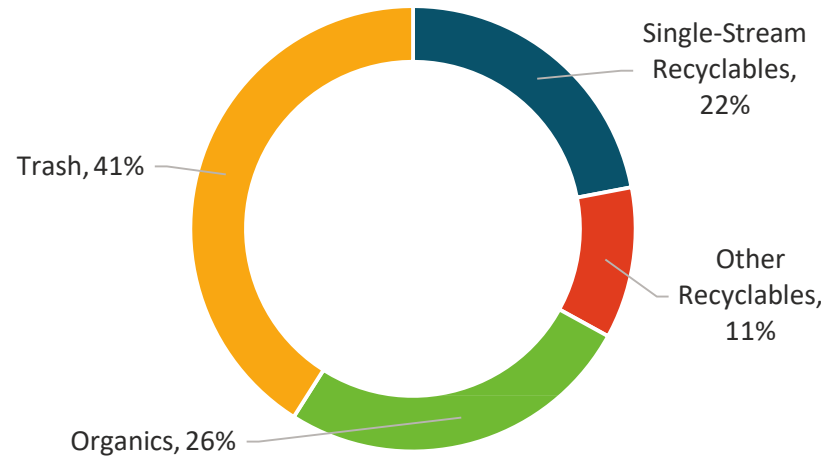
City only controls portion of waste generated in Northglenn

COLORADO FRONT RANGE SOLID WASTE (2019)

Total Generated Tons



Trash Consumption





CITY SANITATION SERVICE

- Serve 9,400 single family units (66% of all Northglenn residents)
- Regular curbside service at flat \$16/household per month (residents buy carts)
- Recycling – optional (84% participate)
- Trash – mandatory (two service levels)
 - 96% have large carts; nearly 60% have two or three carts

Other Services

“Extra” Curbside Trash (\$10)	Single Family Units (SFU)
Dumpster Days & Free Landfill Days	All Residents
Free Single-Stream Drop, Yard Waste Drop	Any User
Roll-Off Rental (\$257)	Groups and SFUs



CITY SANITATION SERVICE, CONT'D

Metrics

- **Sanitation collected 17,000 tons (2019)**
- **Single Family Unit landfill diversion rate – 12%**
 - Colorado Front Range - 16% (2019)
 - United States - 35% (2017)
- **Disposal & processing tip fees per ton**
 - Landfill - \$14-15
 - Recycling - >\$50
 - (Organics - approx. \$25/ton)
- **2019 Enterprise Fund budget = \$0.8M
(plus labor and equipment maintenance)**



CITY OPTIMIZATION OF RESIDENTIAL SOLID WASTE COLLECTION

- **Evaluate moving from flat-fee to volume-based pricing**
 - Move to 3+ service levels with differential pricing
 - Bundle trash and recycling
 - Modify other collections to provide options but not undermine PAYT
 - Evaluate cart ownership
- **Evaluate how to achieve better recyclable quality/value**

CITY OPTIMIZATION OF RESIDENTIAL SOLID WASTE COLLECTION, CONT'D

- **Analyze new subscription-based curbside compost collection**
 - New voluntary service
 - Consider participation needed for break-even operations at multiple price points
- **Consider improvements and/or consolidation to drop sites**
 - Recyclables
 - Yard and food waste

PAYT

PAY-AS-YOU-THROW

VOLUME-BASED PRICING



CREATES INCENTIVE TO
RECYCLE & COMPOST (7,500
successful US cities – some as much as
50% diversion increase)



CREATES SERVICE EQUITY &
GIVES RESIDENTS TOOL FOR
CONTROLLING COSTS



ADDS COMPLEXITY TO
MUNICIPAL SERVICE &
INCREASES COST WITH MORE
DIVERSION
(landfill tip fees are lower in CO)

WHAT IS PAYT?

Key Decisions

- **Service levels (trash)** (*tiering example on next slide*)
- **Whether to “bundle” trash with recycling (organics) at no extra cost**
- **What other services to include – internal/external to PAYT pricing**
- **Pricing differential – research indicates that factor of at least 1.8 needed to maximize pricing signal**

WHAT IS PAYT?, CONT'D

Trash Cart	Recycling Cart	Pricing
Supersaver Option	Small to medium size	<1X
Option 1 – Small	Small or medium size	1X (i.e. \$10 per household per month)
Option 2 – Medium	Small or medium size	1.5X-2X (i.e. \$15-\$20 per household per month)
Option 3 – Large	Small or medium size	2.25X-3X (i.e. \$22.50 - \$30 per household per month)

PAYT can vary widely – using different-sized carts, multiple number of the same size carts, bags and hybrid systems

PAYT – NOT A SILVER BULLET



Considerations

- **Public doesn't want change – can address with “opt outs”**
- **Household costs may be less for small families/big recyclers but more for others - can address with:**
 - “Extra” trash pickups
 - Continued dumpster and landfill days, yard waste drop (may restrict use and/or attach fees)
- **City costs**
 - Initial implementation generally low except for cart inventory and deployment
 - Ongoing cost of single-stream recycling will fluctuate
 - Recycling and compost tip fees higher than landfill

SINGLE-STREAM RECYCLING – SALVATION & CURSE



MORE CONVENIENT FOR
RESIDENTS & CHEAPER
TO COLLECT THAN
MULTIPLE STREAMS



MORE CONTAMINATION
& HIGHER PROCESSING
COST THAN MULTIPLE
STREAMS



CAN REDUCE
CONTAMINATION AT
DROP SITES WITH
STAFFING AND/OR
MULTIPLE STREAMS



SINGLE-STREAM ISSUES

Be Careful What You Wish For . . .

- **Only one container and no separation increases convenience BUT spurs “wish-cycling”**
- **Global markets can have dramatic local impacts**
 - As international processors limit contamination prices have risen (revenues have disappeared)
 - As domestic processors emerge price stabilization is expected but not to previous levels when recyclers earned \$\$\$



SINGLE-STREAM ISSUES, CONT'D

Northglenn Options

- **Limit recyclables accepted – quality over quantity**
 - Northglenn's contamination = 15%
 - Reduces landfill diversion from 12% to about 10%
- **Modify what/how materials are accepted at drop sites**
 - Require all materials to be sorted - OR -
 - Continue status quo with:
 - Staff oversight
 - Collection of source-separated cardboard
 - (Addition of organics)
- **Negotiate more favorable recyclables processing contract**

SUBSCRIPTION-BASED COMPOST SERVICE



VOLUNTARY SERVICE
APPEALS TO RESIDENTS



IF PARTICIPATION GOES
UP, COSTS GO DOWN



DROP SITES CAN
SUPPLEMENT CURBSIDE

COMPOST PROS & CONS

Pros

- **Voluntary option – will appeal to Single Family Units with space for another cart and willingness for additional service**
 - May be able to reduce trash service level (and monthly cost)
- **Could accept food waste and yard debris**
 - Organics are 24% of Front Range trash and represent biggest potential for future landfill diversion

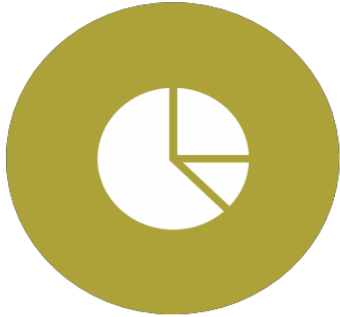


COMPOST PROS & CONS, CONT'D

Considerations

- **Extra service means extra collection vehicle and route**
 - Add'l fossil fuel use / greenhouse gases / road impacts (may be off-set by reduced trash collection)
- **Closest processing facility is Keenesburg (40 miles)**
 - New Boulder County facility in works (20 miles)
- **Minimum # of subscribers will be necessary to maintain cost-neutral operations for City**

WHAT NORTHGLENN MAY CONSIDER ONCE RESIDENTIAL SERVICES ARE OPTIMIZED



POLICY/PROGRAMS FOR
NON-RESIDENTIAL



CHANGES IN
RECYCLABLES &
ORGANICS MARKETS



LATEST TRENDS IN
COLORADO



PUBLIC TALKING POINTS

1. Northglenn residents believe landfill diversion is important – but we currently recycle less than the rest of the Front Range and about 1/3 of the rest of the U.S.
2. Almost every home has largest trash service available but may not need it on regular basis (providing “as-needed” collections can address overflows).
3. Improvement to the current system will give residents options to downsize their regular service and monthly costs (like any other utility). Flexibility in selecting and changing services will allow households to find what works for them.

PUBLIC TALKING POINTS, CONT'D

4. The ability to downsize may decrease monthly costs – the opposite may be true for households that generate large trash quantities and/or don't choose to recycle.

5. A new voluntary composting option that collects curbside food and yard waste will provide another option for households to control both trash generation and monthly costs.

QUESTIONS?

VOLUME-BASED POLICY COMPONENTS - COLORADO MUNICIPAL EXAMPLES

MUNICIPALITIES	RESIDENTIAL DEFINITION	MULTI-FAMILY DEFINITION	TRASH CONTAINERS (base unit definition)	RECYCLING		RESIDENTIAL VOLUME PRICING DIFFERENTIAL	PRICING OPTIONS / CUSTOMER PRICING (where available)	RESIDENTIAL DIVERSION RATE
				Residential	Multi-Family			
Aspen (open)	Individual containers (incl HOAs)	Shared containers	Base unit = 32 gal	Service included in trash price	Service included in trash price	100% price increase from base unit price		20% (MSW)
Boulder (open)	Single-family units	Residences of 2 or more units	Base unit = 32 gal	Service for unlimited recycling, 32-gal <u>organics</u> , 3 bundles of <u>branches</u> included in trash price	Service equal to minimum 1/2 of trash service included in trash price	100% price increase from base unit price	Hybrid: fixed monthly fee capped at 100% of base unit price	53%
Fort Collins (open)	Individual containers (incl HOAs)	Shared containers	Base unit = 32 gal	Service for between 18 & two 96 gallon service included in trash price	Service equal to minimum 1/3 of trash service	100% price increase from base unit price	Hybrid: fixed monthly fee capped at 75% of base unit Service surcharges capped at 25% of base unit price	30%
Vail (open)	Individual containers (incl HOAs)	Shared containers	Base unit = 32 gal Service options must include 32, 64 & 96 gal	Service for at least 64 gal included in trash price	Service equal to minimum 1/3 of trash service	80% price increase from base unit price		24% (MSW)
Edgewater (contract)	Residences up to 7 units	Residences of 8 or more units	Base unit = 32 gal Service options must include 32, 64 & 96 gal	Service for at least 96 gal included in trash price (EOW)	No requirements	No pricing differential specified		
Golden (contract)	Residences up to 7 units (incl HOAs)	Residences of 8 or more units	Base unit = 32 gal	Service for at least 64 gallon service included and seasonal <u>yard waste</u> at extra fee	Voluntary	100% price increase from base unit price	Hybrid: fixed monthly fee capped at 35% of base unit	34%
Lafayette (contract)	Residences up to 7 units	Residences of 8 or more units (incl HOAs with 8 or more units)	Base unit = 32 gal Service options must include 32, 64 & 96 gal	Recycling included for \$1 and <u>organics</u> at extra fee based on container size	No requirements (HOAs may voluntarily participate)	100% price increase from base unit price	Trash64 + recycling64 + organics64 = \$27.54/household-month (incl <u>\$0.50 admin fee</u> to city)	38%
Louisville (contract)	Single-family homes not in an HOA	Residences of 2 or more units (incl HOAs with 2 or more units)	Base unit = 32 gal Service options must include 32, 64 & 96 gal	Recycling included and <u>organics</u> at extra fee based on container size	No requirements	100% price increase from base unit price		48%
New Castle (contract)	Single-family homes		Base unit = 32 gal Service options must include 32, 64 & 96 gal	Recycling included and <u>organics</u>	No requirements	Stepwise pricing differential <12%	Trash64 + recycling18 = \$15.36	15%
Rifle (contract)	Residences up to 7 units	Must subscribe to some service	64 & 96 gal	Recycling included	No requirements	Flat pricing	trash64/96 + recycling 18 = \$15.50	24%
Silt (contract)	Residences up to 7 units	Residences of 8 or more units (incl HOAs)	96-gal	Recycling included	No requirements	Flat pricing	trash96 + recycle18 = \$19.28	18%
Telluride (contract)	Residences up to 2 units	Residences of 3 or more units	Base unit = 32 gal Service options must include 32, 64 & 96 gal	Service for 18 gallon service included in trash price	No requirements	Stepwise pricing differential <20%	Trash64 + recycling18 = \$28.02/household-month (recycling only = \$17.08)	