

MEMORANDUM

To: Kevin Lugo, City of Reading, Sustainability and Solid Waste Manager
From: Karen Deeter, Steve Deasy, and Phil Bresee, MSW Consultants
Date: May 11, 2020
Subject: **Waste and Recycling Program Benchmarking – City of Reading**

This memorandum summarizes the results of MSW Consultants’ benchmarking analysis, which compares solid waste and recycling programs, services, and outcomes between the City of Reading (City) and six other Pennsylvania communities. For this exercise, MSW Consultants obtained and reviewed solid waste and recyclables service levels, tonnage data, and demographics from the following communities:

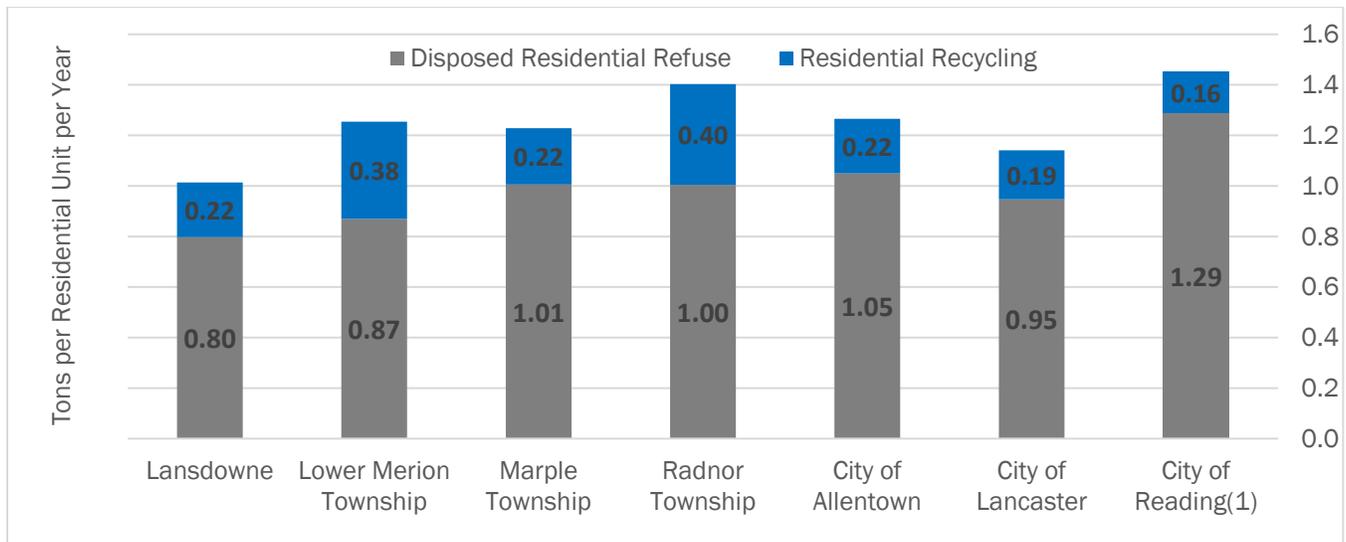
- Lansdowne Borough (Delaware County)
- Lower Merion Township (Montgomery County)
- Marple Township (Delaware County)
- Radnor Township (Delaware County)
- City Allentown (Lehigh County)
- City of Lancaster (Lancaster County)

Due to the variability in leaf and yard waste collection services, and the fact that those services may not be covered in residential solid waste services bills, these quantities are not included in this analysis. This data, as well as other tonnage, service level, and demographic data, are depicted in **Exhibit 1**, which is attached to this memorandum. Refer to **Exhibit 1** to compare demographics and solid waste program details of the benchmark communities.

Performance Metrics Among Benchmarked Cities

Figure 1 below presents per-household generation rates for refuse and recycling for Reading and the benchmark communities. Households include single-family homes and smaller multifamily structures (e.g., 4-unit or less) with access to (and who are typically charged for) curbside collection services.

Figure 1 Residential Refuse and Recycling Generation Per HH/Year



(1) Reading waste and recyclables generation and # of units based on a 3-year average (2017, 2018, 2019)

Benchmark Observations

Based on our review of the program metrics from the benchmark communities, MSW Consultants presents the following observations:

- At 1.29 tons per year, Reading generates 37 percent more refuse tons per household than the average of the six benchmark communities (.95 tons or 1,900 lbs. per HH per year).
- At just 0.16 tons (or 320 lbs.) per household, Reading collects 40 percent fewer curbside recyclables compared to the average of the six benchmark communities (.27 tons, or 540 lbs. per HH). On a percentage basis, Reading’s calculated residential diversion rate is 14 percent, which is the lowest among the profiled cities.
- Reading’s overall residential solid waste generation (refuse disposal plus recycling) is 1.45 tons per household per year, a level that is 20 percent higher than the average of the benchmark communities (1.22 tons).
- Reading’s residential households with contract collection services pay \$273 per household per year. This amount is slightly less than the average of \$286 paid by ratepayers among five of the six profiled cities, with Radnor excluded since its per household fee is not known.
- Reading’s high residential refuse generation rates and low recyclables recovery compared to benchmark communities reveal the City’s residential collection performs well below average.
- Reading’s annual per-household assessment of \$273, is slightly lower than the \$286 per household average. However, the level of service is highly variable and impacts unit fees. Allentown and Lancaster trash bill assessments pay for numerous staff and SWEEP officers that provide education, monitoring, and enforcement of the curbside collection program (See **Exhibit 1** footnotes).

Benchmark and System Evaluation Take-aways

Although curbside recyclables collection is mandatory for all households, only 21,000 of Reading’s 27,000 eligible households use City-contracted curbside trash collection service in what is referred to as a “non-exclusive” collection system. All benchmark communities operate “exclusive” residential refuse collection systems where all eligible residential households are required to use one refuse collector. Reading’s non-exclusive collection system allows residents to obtain solid waste collection services through other means, which can include individual subscription or by self-hauling materials and often results in illegal disposal. It is MSW Consultants’ opinion that the City’s non-exclusive residential collection scheme is the single most significant factor that contributes to decreased collection efficiency, elevated collection system costs, inequity of unit fee assessments, and illegal litter and dumping. The non-exclusive Reading households who opt-out of the City’s refuse collection service handle their refuse in the following ways:

- (1) Contracting directly with the City-contracted refuse hauler (Republic Services). Republic Services has approximately 200 “private subscription” accounts within the City, which may be a conflict of interest.
- (2) By contracting directly with another private hauler (not under City contract).
- (3) No collection services are secured for the household. Households without curbside refuse collection dispose of their refuse in these ways:

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- a. Sharing of curbside services, whereby one residential account allows trash from one or more units originating from units without refuse accounts to set waste at their curbside account address.
- b. Use of the mandatory curbside recycling program and recycling containers as a means of disposing of household refuse.
- c. Illegal dumping of refuse in other curbside containers, private dumpsters, and on public or private properties.

Reading's ability to make meaningful improvements in its waste collection system is impaired because the City's non-exclusive residential solid waste system misplaces financial incentives. Private haulers, including the City-contracted hauler, are incentivized to secure curbside refuse collection services, which can include removing customers from the City collection contract at any time. Residents can eliminate a trash bill by opting-out of City services and not subscribing for curbside refuse collection.

For Reading, the non-exclusive scheme reduces revenue potential, creates revenue uncertainty, and prevents the City from establishing equitable refuse rates (unit fees) that spread fixed collection costs across all eligible residential units. For Reading's citizens and contracted customers, it increases the costs for contracted services while guaranteeing that a portion of residents will continue to abuse the system via litter and illegal dumping. In contrast, contracted customers subsidize collection costs that provide value to the entire Reading community. In conclusion, Reading's non-exclusive collection scheme rewards a portion of haulers and residents for engaging in behaviors that are not in the best interest of the City.

Attachments:

Exhibit 1– Benchmarking Summary

Exhibit 1 - Residential Waste & Recycling Program Benchmark Summary

	Lower Merion						
	Lansdowne	Township	Marple Township	Radnor Township	City of Allentown	City of Lancaster	City of Reading ⁽¹⁾
Population ⁽²⁾	10,600	57,825	23,700	31,501	121,433	59,546	88,423
Units Served	3,933	16,826	8,700	6,980	37,544 ⁽³⁾	18,226	21,035 ⁽⁴⁾
Persons/Square Mile	8,988	2,442	2,331	2,309	6,817	8,103	9,022
Median HH Income	\$52,325	\$121,483	\$78,365	\$106,538	\$38,522	\$40,805	\$28,755
Curbside Refuse Service Format (Provider)	Exclusive (Municipal)	Exclusive (Municipal)	Exclusive (Municipal)	Exclusive (Municipal)	Exclusive (Private-contract)	Exclusive (Private-contract)	Non-exclusive (Private contract, open)
Basic Annual Service Fee	\$294	\$308 ⁽⁵⁾	\$215	no separate fee	\$375 ⁽⁶⁾	\$240 ⁽⁷⁾	\$273.12 ⁽⁸⁾
Residential Threshold	6 units	4 units ⁽⁹⁾	4 units	4 units	25 units	4 units (but allow opt in)	4 units
Refuse Equipment	Rearload (manual)	Rearload (manual)	Rearload (manual)	Rearload (semi-automated)	Rearload	Semi-auto 25-yard rearload (2 tipper) & 10-yard rearload for alleys	Rearload (manual & semi)
Refuse Frequency	1x/week	1x/week	2x/week	1x/week	2x/week	1x/week	1x/week
Recycling Format	Single Stream	Dual Stream	Single Stream	Single Stream	Single Stream	Single Stream	Single Stream
Recycling Frequency	1x/week	Every other Week	1x/week	1x/week	1x/week	1x/week	1x/week
Yard Waste Frequency	2x/month	Weekly w/Trash	Fall leaves (5x's)	1x/week	1x/week	1/x YW (Apr - Oct) 1x/week leaves (Nov - Dec)	Varies seasonally (By appt)
Bulk Item Frequency	2x/month by appointment	By appointment	1x/month by appointment	1x/week by appointment	1x/week	1x/week	1x/week
Bulk/Special Item Rates	\$10/ freon appliance	\$15/3 items \$25/appliance	\$10/item	\$25 - up to five items and 100 lbs ⁽¹⁰⁾	1 item/wk no charge	1 bulk item/wk no charge, additional bulk items \$10 (tag) \$15/appliances (buy tag)	No charges for bulk items, tires (12 tires /yr. max), electronics (1 item/wk) and appliances without freon.
Residential Disposed Refuse	3,135	14,637	8,748	7,012	39,400	17,264	27,073
Curbside Recycling Tons	851	6,472	1,941	2,779	8,110	3,527	4,393
Curbside Leaf and Yard Waste Tons	31	3,106	3,416	3,656	N/A	424	272
Curbside Recycling %	21%	31%	18%	28%	17%	17%	14%
Residential Disposed Refuse Tons/Unit	0.80	0.87	1.01	1.00	1.05	0.95	1.29
Curbside Recycling Tons/Unit	0.22	0.38	0.22	0.40	0.22	0.19	0.16
Leaf and Yard Waste Tons/Unit	0.01	0.18	0.39	0.52	N/A	0.02	0.01
Total Tons/Unit	1.02	1.44	1.62	1.93	1.27	1.16	1.46

(1) The number of Units Served and all tonnages are based on an average of 2017, 2018, and 2019 data.

(2) Demographic Data from U.S. Census Bureau for 2016, 2017, or 2018.

(3) Includes 37,009 residential units and 535 commercial units.

(4) Reading contracts with a private hauler for refuse collection for 21,035 units (80% of units) and contracts recycling collection to 26,755 (all) units. Roughly 6,000 customers opt-out of refuse collection.

(5) \$308 is for one container. Each additional container adds \$61 per year.

(6) The \$375 is included in a tax bill as a separate fee and placed in an enterprise fund that pays for a total of 28 full-time waste and recycling staff including 5 full-time SWEEP officers to monitor/enforce curbside collection.

(7) The \$240 includes revenue recover that pays for 5 full-time SWEEP officers and one SWEEP Manager to monitor/enforce the curbside collection program.

(8) Made up of: \$126.04 for collection of refuse, \$32.16 for collection of recycling, and remaining \$144.92 for administration, disposal, and processing.

(9) Multi-unit residences from five to 50 units may opt-in.

(10) \$ 25 supplemental charge over 100 lbs. \$ 10 supplemental charge for Freon. \$ 5 supplemental charge for propane.