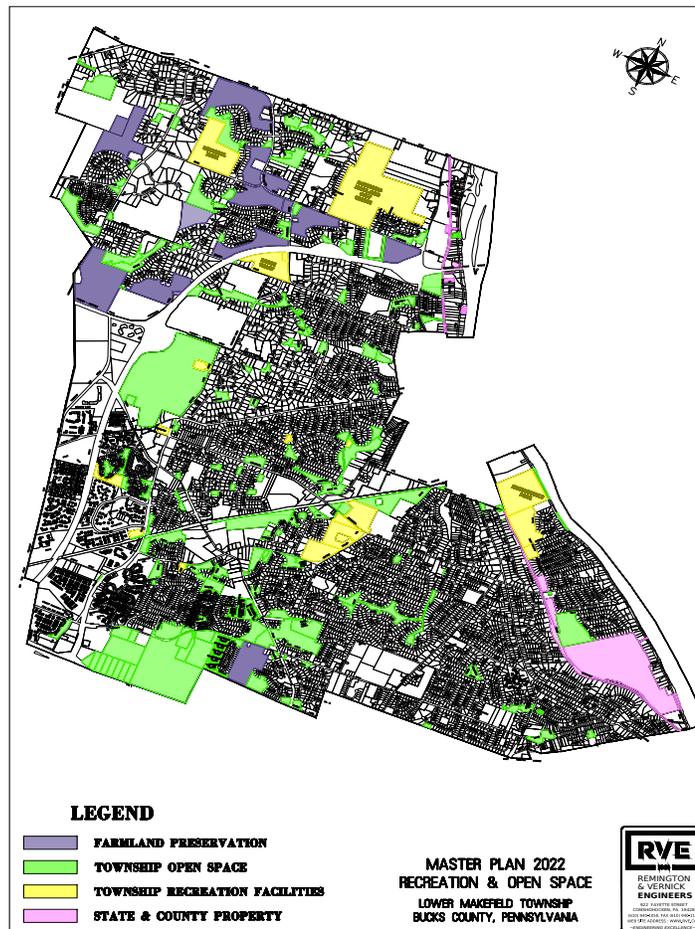


Options for Trash Collection in Lower Makefield Township

(January 2025)



Lower Makefield Township
Environmental Advisory Council

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Section 1. Current Practice in LMT – Homeowner Subscription

Lower Makefield Township (LMT) has always had a homeowner subscription system of residential waste and recycling collection. A homeowner subscription system requires that each individual household contract directly with haulers for waste and recyclables collection services. There are currently three residential waste haulers operating in LMT: McCullough, Casella (formerly Whitetail), and Waste Management.

Table 1 lists costs, pickup frequencies, and other aspects of collection of the three residential waste haulers in LMT.

Table 1. LMT Residential Waste Haulers

Hauler	Annual Cost	Pickups per Week		Yard Waste (composting)	Bulk Waste
		Trash (96 gal. cart)	Recycling (96 gal. cart)		
Waste Management	\$616	1	1	Collected with trash, not composted	Clients schedule pickups or drop-off location
	\$516 ^a	1	1		
	\$963	1 (two carts)	1		
McCullough (also offers 65 gal. carts)	\$408	1	1	Collected w/ trash, not composted	Only scheduled pickups
	\$564	2	1		
Casella (Whitetail)	\$440	1	1	Collected w/ trash, not composted	Only scheduled pickups
	\$560	1 (two carts)	1		

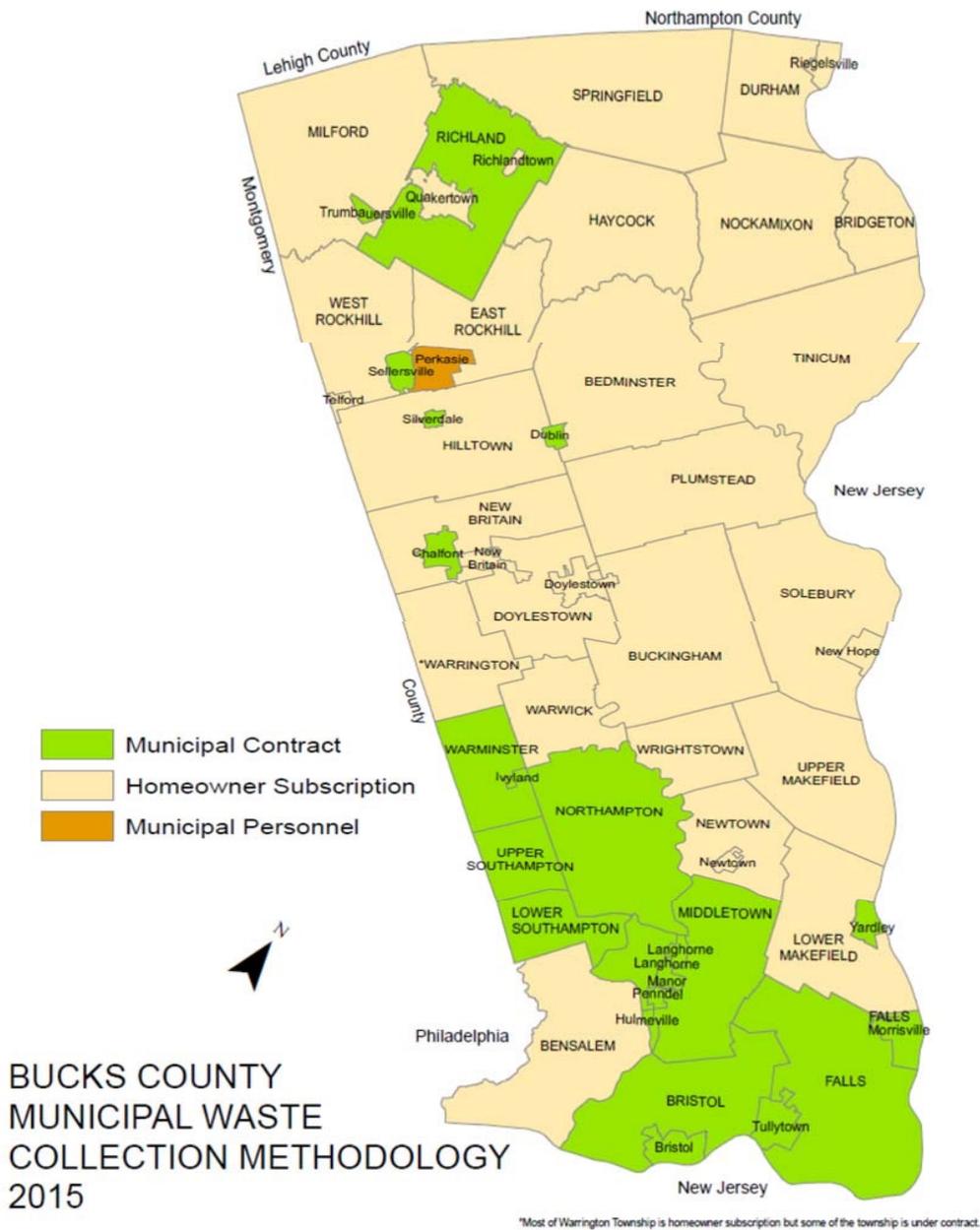
a. Customer agrees to paperless, auto pay

An exception to the individual homeowner subscription system in LMT are the larger apartment and condominium complexes. The homeowner’s association or managers of these housing complexes have negotiated their own contracts with a hauler for trash and recycling collection at their residential units. The cost of the collection is paid by residents in the monthly maintenance fee.

For example, the 380 unit Brookstone Condominium Complex located along Township Line Road has once a week trash and recycling collection with 96 gal. carts by Waste Management. The annual cost per residential unit is \$376 in 2024 and \$402 in 2025.

Section 2. Current Practices in Bucks County

Figure 1 below shows the three types of trash/recycling collection systems currently used in Bucks County: Municipal Contracted, Homeowner Subscription, and Municipal Personnel (from the *Bucks County 2018-2028 Municipal Solid Waste Management Plan*). While the more rural areas of the county tend to use homeowner subscription, most of the more populated municipalities in Lower Bucks County municipal use contracted collection. Only one municipality, Perkasie, operates its own trash/recycling collection program.



Section 3. Other Collection Options Available to LMT

A. Township Owned/Operated Trash/Recycling System

Municipally owned and operated trash/recycling programs usually occur in the larger towns and cities. Starting up its own trash/recycling program would be an immense undertaking by the Township.

Trash/recycling collection trucks would need to be purchased, and additional personnel hired to operate the trucks. The cost of one new automated trash truck is approximately \$300,000. On-going maintenance of these vehicles would be needed. Approximately five of these trucks would be needed to service the roughly 9,000 homes and municipal facilities in the township. In addition, significant township personnel resources would be needed to administer the billing and handling resident’s complaints.

B. Township Contracted Trash/Recycling Collection

1. Other Nearby Municipalities with Contracted Collection

A contracted collection system involves the Township contracting with one waste hauler to provide trash/recyclable/yard waste collection services. The contracts normally run 3-5 years. To get an idea of what a municipal contract entails and the services that would be provided, neighboring municipalities with municipal contracted trash/recycling service were surveyed. A summary of the contracts of five nearby municipalities are listed in Table 2.

Table 2. Nearby Municipalities with Contracted Waste Haulers

Township	Hauler	Approx. Pop.	Contract Period	Annual Cost	Pickup per Week	
					Trash	Recycling
Northampton Township	Casella/Whitetail	40,000	2023-2027 ^a	\$575	1	1
Middletown Township	Waste Management	46,000	2020-2024 (Current) ^b	\$401	2	1
			2025-2029 (Future) ^c	\$476	1	1
Morrisville	Republic	9,000	2021-2025 ^d	\$425	2	1
Yardley	Republic	2,700	2024-2026 ^d	\$420	2	1
Bristol Township	Waste Management	56,000	2024-2028 ^c	\$418 ^e	1	1

- a. 25% of Township is manual collection, 75% automated collection. Free carts provided to residents
- b. Manual collection
- c. Fully automated (cart) collection
- d. Mix of semi-automated and manual collection
- e. This value represents the approx. 2024-2028 avg. annual cost, the 2024 cost is \$350.

**Table 2 (continued). Nearby Municipalities
with Contracted Waste Haulers**

Township	Residential Billing	Apt. and Condos Complex	Yard Waste (Composting)	Bulk Items (curbside)
Northampton Township	Included in property tax	Included in contract	April 1 to Dec. 15 - Once a week separate day collection, unlimited, paper bags or trash containers	One bulk item each week with notification
Middletown Township	Included in property tax (current contract)	Owner/ Manager responsible	April to Jan. - Once a week separate day collection, unlimited, paper bags or cans	One bulk item may be placed out per week.
	Included in property tax (future contract)	Some are included in contract	April to Jan. - Once a week separate day collection, unlimited, paper bags or cans	Two bulk items may be placed out per month.
Morrisville	Included in property tax	Owner/ Manager responsible	Leaves/yard waste collected on trash collection days in the fall, paper bags or trash cans	One bulk item may be placed out each week.
Yardley	Boro bills quarterly	Included in contract	Three designated leaf pickups in the fall.	One bulk item may be placed out each week.
Bristol Township	Included in property tax	Owner/ Manager responsible	April to Mid-Dec. - Once a week separate day collection, unlimited amount.	One bulk item may be placed out per month

The contracts of these other municipalities run for 3-5 years, range from \$350 - \$575 per year in cost, and include 1 to 2 trash pickups and 1 recycling pickup per week. The billing is normally done through the municipality's property tax bill. Apartment/condominium complexes are usually responsible for their own trash/recycling collection. Other than Yardley Borough, yard waste is collected for composting once a week and bulk items are picked up either once a week or once a month.

2. Issues to Consider if Adopting a Township Contracted Collection System

Based on the review of these nearby municipalities there are several issues for LMT to consider if it adopts contracted waste collection.

Number of Pick-ups Each Week

Other municipal contracts in the area currently have a mix of once or twice a week trash pick-up. There are two advantages to once-a-week trash pickup; (1) the reduced environmental impact and road congestion from only once a week trash pick-up, (2) the cost of the contract for municipal collection (and therefore to the residents) will be less as compared to twice a week collection.

A local example is Bristol Township. Bristol Township went out for bids for a five-year trash/recycling/yard waste residential collection contract in 2023. The bids for once-a-week trash collection were approximately 30 % – 40 % lower in cost compared to twice a week collection.

Some LMT residents currently have twice a week trash pick-up. A few residents may insist they need pick-up twice a week. Other municipalities have addressed this concern by allowing residents who wish to have a second automated cart serviced each week at an additional cost.

The need for twice a week pick-up would be reduced by having a separate collection of yard waste with increased recycling.

Automated Collection with Carts

In a fully automated collection system, containers (carts) are emptied and returned to their original location by a mechanical lift. The driver never leaves the truck unless there is a problem.

An automated garbage truck offers several advantages over a manual garbage truck. These include:

- Save money and time
- More efficient trash collection
- Fewer operators required
- Greater safety
- Cleaner streets

By greatly increasing the number of homes served per hour, automated trash pick-up with wheeled containers improves collection efficiency, reduces environmental impacts and road congestion. Studies listed in EPA's "*Collection Efficiency Strategies for Success*" show that an automated collections system can service almost 3 times as many homes as a manual system.

A semi-automated system is not quite as advantageous as a fully automated system. In a semi-automated system, the truck crew needs to wheel the carts to the back of the truck where they are lifted and emptied by a hydraulic device.

Almost all LMT residents currently use wheeled containers for their trash and recycling material. A LMT contract for trash/recycling pick-up should specify automated collection with 65 gal. or 96 gal. wheeled carts given the convenience and other advantages. Depending on the hauler contract, residents who will need wheeled carts may need to pay approximately \$60 – \$80 to purchase one.

Billing Residents for Single-Hauler Trash/Recycling Service

As shown in Table 2, most municipalities collect payment from residents through their home's annual municipal property tax. The only exception is Yardley Borough. They send out quarterly bills to the residents for their trash service.

Collection of the money through an annual property tax bill would be similar to the method LMT uses for curbside leaf collection. The advantages of this method would be a higher residential compliance with payments and the avoidance of the increased workload Township employees would experience if they were responsible for the quarterly billing. Yardley Borough personnel stated that residential bill collection can be a problem.

Inclusion of Apartments and Condominiums in Township Contract

In most of the municipalities surveyed the apartment/condominium/neighborhood homeowner associations or owners are responsible their trash/recycling collection in their apartment and condo complexes. Table 2 shows Northampton Township and Yardley Borough are the exceptions. It should also be noted Middletown Township's contract includes trash/recycling/yard waste collection at three of its condo and townhouse complexes.

Currently, most of the neighborhood associations and condo/apartment buildings have their own contracts for trash/recycling collection. A decision may need to be made on whether these areas, if they so desire, could be included in the Township's waste hauling contract.

Collection of Yard (leaf) Waste

Other than the two curbside leaf pickups in the fall, the only current option for LMT residents to get their yard waste composted is to take it to the Township's yard waste recycling facility during one of the ten designated days each year. Given that limitation, it is safe to say that yard and leaf waste is frequently included in the residents' trash and sent to a landfill or incinerator. This is a violation of LMT ordinance 172-38 which has two requirements: (1) leaf waste to be collected separately from municipal waste and (2) no leaf waste shall be placed for collection unless the leaf waste is to be composted.

All nearby municipalities with contracted waste hauling have separate curbside collection of yard and leaf waste. It is taken to a facility for composting (there are composting

facilities in Falls Township). Most contracts have once a week collection from April through Mid-December.

Bulk Trash Collection

Table 2 shows that municipalities with contracted collection offer curbside bulk item pickup either once a week or once a month. Based on the bids received by Bristol Township, specifying once a month bulk pickup instead of once a week will result in a slightly lower contract cost.

C. Zoned Contracted Trash/Recycling Collection

One option for municipal contracting would be to split the township into several zones. The collection contracts for each of these zones would be bid out separately with a limit on the number of zones one bidder could win.

The township would have to ensure that all bid winners could provide equal services. Depending on which billing option is selected, the township may have to average the cost of each zone so everyone pays the same amount for their residential trash collection.

The principal reason to pursue zoned contracted collection is to protect smaller trash hauling companies. The smallest trash hauling company operating in LMT is McCullough Rubbish. It should be noted that McCullough Rubbish also services homes in Bensalem Township, Upper Makefield Township, Newtown Township, Newtown Borough, and Wrightstown Township.

The added complexities of having different contracted waste haulers servicing for different parts of the Township make this option unattractive.

D. Township Negotiated Price for Residential Collection with Each of the Private Haulers

There will be a problem if one or more of the private haulers operating in the Township do not agree to this system. Few of the residential, environmental, and Township benefits discussed in Section 4 would occur.

Section 4. Recommendations

A. Request Bids for a Contracted Collection System

Contracted collection is recommended with the following specifics:

- Once a week trash, recyclables and yard/leaf waste collection,
- Require automated collection of trash and recyclables in the contract.
- Bill the residents for this service with their annual property tax bill.
- Initially, it would be simpler if the LMT contract didn't apply to apartment/condominium homeowner associations with existing trash collection contracts. If in the future they would like to be part of the LMT contract the township can consider including them on a case-by-case basis.
- Monthly curbside collection of bulk waste.

B. Estimated Cost

Based on the bid responses received by Bristol Township (2023), Yardley Borough (2023), and Middletown Township (May 2024), the following companies may respond to LMT's bid request:

- Waste Management,
- Cassella (formerly Whitetail Disposal),
- Mascaro & Sons,
- Republic Services

A rough approximation of the cost to LMT residents can be estimated by looking at the most recent bids submitted to Middletown and Bristol townships. The costs given below reflect the services level recommended above in Section IV.A.

Middletown Township – Bids submitted May 2024 for 2025-2029 contract (12,232 units). Annual cost per housing unit:

Waste Management – **\$476**

JP Mascaro – \$923

Whitetail Disposal (now Cassella) - \$561

Bristol Township – Bids submitted October 2023 for 2024-2028 contract (16,548 units).
Average 5-year annual cost per housing unit:

Waste Management – **\$418**

JP Mascaro – \$755

Whitetail Disposal (now Cassella) - \$447

C. Reasons for the Recommendation

Below is a list of some of the advantages of changing from the current open subscription system to a township contracted system.

Advantages to the Residents

- Stabilization and possible reduction in the cost of residential trash/recycling/leaf waste collection.
- Having one hauler collect recyclables will eliminate inconsistencies between haulers on what can be recycled.
- Ability to manage and assess hauler performance. Also, advocate for additional services to support residential needs, such as universal waste and/or hazardous waste collection events.
- Provides a uniform level of service throughout the township with curbside yard waste and bulk item collections.
- Possible reduction in the \$94 annual leaf collection fee (see Financial Benefits to Township below).

Advantages to the Environment

Having one hauler servicing LMT instead of three different haulers will result in only three trucks travelling on local roads each week (trash, recyclables, yard waste). Currently, Table 1 shows up to seven trucks travel the roads each week (3 trash trucks, 3 recycling trucks, and a second trash collection by McCollough).

The benefits would include:

- Reduced traffic congestion, noise and greater safety on the Township's roads.
- Environmental benefits from reduced fuel use and resulting significant decrease in emissions of air pollutants. Trash trucks are among the most polluting vehicles on residential streets. Nearly 90% of U.S. trash trucks are diesel fueled, which produces an exhaust that includes nitrogen oxides and diesel particulates, and greenhouse gases. The trucks average less than 3 mpg, and their constant

accelerating and decelerating between stops is challenging for exhaust systems that work better at higher speeds.

- Greater amounts of residential yard and leaf waste would be composted with curbside pick-up.

Possible Financial Benefits to the Township

The following lists possible financial benefits to the Township if contracted single-hauler collection system is adopted:

- The following expenses are listed in the Township’s 2025 budget for its trash services provided by Waste Management:

Public Works - \$4,800
Parks and Recreation - \$26,500
Pool – \$8,000

Collection of trash/recyclables at these LMT locations could be added to the new single-hauler contract, thereby saving the township \$39,300 per year.

For an example of these possible services, see Section 19.2 and 19.3 of the 2024 Trash Bid Middletown Township document in Appendix A and Section 1.03 (Description of Bids Requested) of the 2023 Bristol Township Bid Specifications in Appendix B.

- Yard and Leaf Waste – PA law¹ requires a yard waste recycling facility must be made available to residents when municipalities have no curbside collection of yard and leaf waste. With curbside yard waste collection, it would be possible to **eliminate operation of the township’s yard waste recycling facility**. The cost of operating this facility in 2025 will be \$80,000 (per Public Works Dept.).
- **Curbside yard and leaf waste collection should lower the volume (and cost) of leaves collected by the township’s fall leaf collection program.** The cost of this program to the township in 2025 will be \$830,000 (per Public Works Dept.). Residents are assessed \$94/year for leaf collection in their property tax bill.

-
1. To comply with PA Act 101, mandated municipalities must at a minimum:
 - Establish a scheduled day, at least once per month, when leaf waste is collected curbside or similar location,
 - OR**
 - Establish a scheduled day, no less than two times per year and preferably in the spring and fall, when leaf waste is collected curbside or similar location from residential AND facilitate a drop-off location or other collection alternative approved by the PADEP that allows persons to drop-off leaf waste for composting at least once per month.

- **Reduced wear and tear on local streets.** Trash trucks can cause significant damage to neighborhood streets due to their heavy weight, frequent stops and starts, sharp turns, and maneuvering in tight spaces, causing more wear and tear on the pavement compared to regular vehicles. Changing to contracted hauling should reduce the trash truck traffic on LMT by at least 50 percent.

The 2025 budget allocated \$2.17 million for repaving 5.9 miles of the 26 miles of Township roads needing repaving. The change to contracted hauling over time should reduce the significant amount of money needed to repave LMT roads.

Below are quotes from three websites documenting the damage to streets caused by trash trucks.

1. https://www.lakewoodtogether.org/ResidentialWaste/news_feed/trash-truck-traffic-impacts

“These trash trucks also cause substantial damage to city streets, both because they are typically much heavier than other delivery vehicles and they make very frequent stops. According to the Colorado Department of Transportation, a local street wears out over 7,000 times faster for each additional trash truck.”

2. <https://www.pressdemocrat.com/article/news/garbage-trucks-weigh-heavily-on-street-budgets/>

“Lumbering through neighborhoods, stopping and starting, turning and backing, they stress the pavement more than 9,300 times as much as an SUV does, according to one study.”

3. <https://www.fcgov.com/recycling/files/analysis-of-trash-collection-vehicle-impacts-to-street-maintenance-noise-safety-and-vehicle-emissions-from-open-market-and-contracted-service-1.pdf>

“Street Maintenance Budgeted Expenses - Under the current open competition system with an average of three and a half (3.5) licensed haulers operating on each residential street, Refuse Vehicles are projected to be responsible for 24.4% of the vehicle impacts (i.e., wear and tear) on those streets, and 10.9% of the vehicle impacts on collector streets.”

Section 5. Next Steps

A LMT bid document will need to be generated under the guidance of the Township's staff and Solicitor. The 2024 Middletown Township bid document in Appendix A and the 2023 Bristol Township bid document in Appendix B could be used as templates.

Once completed, the Board of Supervisors will need to review and approve the bid document. It can then be sent out for the bidding process.

The Township will primarily evaluate submitted bids by the services provided and pricing. We ask that the bid's evaluation also look at its commitment to route optimization (to reduce the miles traveled by trucks on neighborhood streets) and possible plans for use of alternative fuels in their trucks.

In addition, the Township Solicitor will need to determine if modifications to the township's Solid Waste Ordinance Chapter 172 are necessary to allow the Township to contract with one waste hauler for collection of residential trash/recyclables/yard waste. Chapter 172-6 (Collection Services) is the specific section that is relevant to this issue. A review of Middletown Township Ordinance [Chapter 418 – Solid Waste; Recycling] may be helpful. These ordinance changes would need to be approved by the Supervisors.

Appendix A

Middletown Township PA

2024 Trash Bid Document with
Addendum #1

and

Bids Received

Appendix B

Bristol Township PA

2023 Bid Specifications for Residential
Solid Waste and Recycling Collection
and Disposal, Yard Waste Collection and
Composting, and Bulk Item Collection

and

Bids Received