



**AGENDA - SHOREWOOD BOARD OF TRUSTEES
6:30 P.M. - Monday, January 25, 2016
Shorewood Village Hall, 3930 North Murray Avenue
Shorewood, Wisconsin 53211**

1. Call to Order
2. Roll Call
3. Discussion on Refuse Collection and Recycling Alternatives for Future Request For Proposals.
4. Adjournment

DATED at Shorewood, Wisconsin this 21st day of January, 2016.

VILLAGE OF SHOREWOOD
Tanya O'Malley, WCMC, Village Clerk/Treasurer

Should you have any questions or comments regarding any items on this agenda,
contact the Manager's Office at 847-2702.

It is possible that members of and possibly a quorum of members of other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information; no action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice.

Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals.

MEMORANDUM

January 21, 2016

To: Trustee Davida Amenta, Chairperson
Public Works Committee



From: Leeann Butschlick, Director of Public Works

Copy: Village Board
Chris Swartz, Village Manager
Joel Kolste, Assistant DPW Director

Re: Collections special meeting

Your special Village Board meeting of January 25 will focus on the provision of collections (refuse, yard waste and recycling) services. The meeting will include a comprehensive presentation by DPW staff.

OVERVIEW OF CURRENT SERVICES

As you know, refuse, yard waste and recycling collection services are provided to approximately 4,000 Shorewood one, two and three-family housing units through a combination of Village provided and contracted services.

Refuse, Yard Waste and Recycling

The chart on the reverse illustrates the details of these services.

Residents with questions or concerns regarding these pickups will call the DPW or Village Hall Customer Service. Issues with refuse or yard waste collections are addressed and corrected by our staff. Recycling concerns or complaints are relayed by our staff to the Waste Management recycling supervisor.

Transfer Station

The transfer station is located within the DPW yard and is jointly owned with the Village of Whitefish Bay. Materials are hauled from the transfer station by Waste Management under the current contract with the Village of Shorewood. The Village of Whitefish Bay pays an annual fee of \$2,500 to Shorewood to cover administration and billing costs associated with the transfer station.

Trucks carrying materials from the two municipalities weigh in at the front office upon entering the yard. The load is dumped in the appropriate compactor and the truck is again weighed upon leaving the yard to determine the net weight. WFB is billed monthly for material disposal costs based upon these weights. The weights are also used to track trailer capacity (each can legally carry only about 55,000 pounds) and verify the totals of the monthly invoices from Waste Management.

	Refuse	Recycling	Yard Waste		
			Bagged	Brush	Leaves
Service provider	Village	Contractor	Village	Village	Village
Dwellings serviced	3 family and under	3 family and under	all	all	all
Type of collection	semi-automated	mix: full automation and manual	mix: semi-automated and manual	manual feed	manual vacuum
Frequency of collection	weekly	bi-weekly	weekly in season	monthly in season	weekly in season
Location of collection	curbside or alley	curbside only	curbside only	curbside only	curbside only
Number of routes	3	6	3	3	5
Containers required	yes	yes	yes	no	no
Containers provided	yes	once	no		
Items outside kart	up to 3 bags §455-2 C(b)	if properly prepared			
Equipment	packer truck (3)		packer truck (3)	truck with box and chipper (1)	truck with leaf body and vacuum (3)
Employee(s)	3		3	1-2	6+
Man hours per week	45		0-27	24-36	240

The transfer station consists of two compactors, one each designated for refuse and yard waste, into which the materials are offloaded from the Shorewood and Whitefish Bay trucks. The materials are compacted into 52 foot trailers which are hauled on an on-call system by Waste Management to either their landfill or composting facility. The driver whose load puts the trailer at capacity is responsible for removing that trailer, attaching a new and cleaning any loose or spilled material. If the DPW office is not staffed (vacations or sick days), the driver is also responsible for calling Waste Management dispatch to request the trailer be picked up and an empty be delivered. It takes approximately 25-30 minutes for a Shorewood driver to change a trailer; WFB trucks are staffed by two employees and their trailer change time is generally 15-20 minutes.

CONSULTANT STUDY

Please recall that RW Management Group presented its final report to the Village Board at its meeting of August 24, 2015. The report (copy attached) analyzed collection operations to determine the efficiency and effectiveness of current practices and evaluate whether it would be more cost effective to contract those services.

A number of options were reviewed and the recommendation was that both refuse and recycling be fully automated. No recommendation was made as to whether the services should be provided in-house or contracted, only that both refuse and recycling should be collected either entirely by the Village or entirely by a private contractor. It was further recommended that the services should be bid with the DPW submitting a proposal.

Staff believes additional discussion is necessary to adequately address a number of the challenges to full automation, particularly issues related to alley collection. These items are summarized in the table below:

Full Automation Issue	Implementation Challenge
Alley vs. curbside service	To operate efficiently, full automation would require curbside collection only; some alley residences would have difficulty moving karts to curb due to building layout and/or front yard geography.
Kart requirement for full automation	Full automation requires the use of a kart for each material collected; could be a significant storage issue for many, especially duplex properties located on alleys.
Placement of karts for fully automated collection	Full automation requires karts be placed with four feet of clearance on all sides; this will be a challenge for many duplexes, particularly those on alleys.
Operational impacts of processing three materials through the two transfer station compactors	Will likely require an employee with the primary duty of transfer station operation; this position not needed currently.
Equipment requirements and other operational issues resulting from fully automating only two of the three collection processes	Will likely require ownership and maintenance of two types of collection vehicles.

The above issues will be detailed during your January 25 presentation.

CONSERVATION COMMITTEE

Attached please find an additional copy of the conservation Committee’s January 14, 2016 letter outlining their proposals for the structure of future collection services. As noted in the letter, DPW staff has been meeting regularly with a representative from the Conservation Committee to discuss this and other issues which relate to the Department.

Please see below for an outline of the collection proposals and preliminary DPW comments:

Conservation Committee Strategy	DPW Comment
Inverted collection schedule	In 2014, the Village's material recovery rate was 32.6% (1,266 tons recycling/3866 tons total material collected). It would be DPW's recommendation that an inverted collection schedule would be feasible when that number approaches 45-50%.
Universal curbside organics collection (combined yard and food waste)	This will require a kart which is a concern noted previously.
Subscription curbside service	If this option includes combined yard waste and food scraps the above kart concern applies. Food scraps only would require a much smaller container with less space concern.
Point collection of kitchen organics for resident drop-off	DPW Recycling Center would be logical location for this collection.

Any of the above strategies could be incorporated into an RFP at the Village Board’s direction.

EVALUATION AND DECISION PROCESS

Staff has determined that it is not feasible at this time to provide refuse, recycling and yard waste services in-house at our current staffing levels if alley service is continued. Village-provided recycling service is contingent upon full automation of both refuse and recycling with universal kart use. While technically possible, this will translate to a significantly lower level of service for residents whose properties are served by alleys. As noted above, staff believes that the use of fully automated equipment in alleys will affect the overall efficiency of refuse collection service to the point that recycling collection and the additional transfer station operational duties with it cannot be absorbed at current staffing levels.

DPW staff has begun the development of a RFP for collection services. Based upon the above, staff is recommending the RFP be structured with two base service options:

1. Contractor-provided collections for refuse, recycling, bagged yard waste and transfer station operation. This effectively eliminates collections from DPW’s scope of services.
2. DPW-provided refuse and yard waste and contractor-provided recycling and transfer station operation. This continues the current structure of operations with refuse (either fully or semi-

automated - to be determined) and yard waste services provided by DPW staff; and recycling and hauling contracted to an outside vendor.

Staff is proposing that the contract be structured with a five year term and a five year renewable option. Unlike the current contract, a percentage rebate of funds from the sale of recyclable materials will not be established, instead bidders will be required to propose a rebate percentage as a part of the overall bid package.

To ensure consistent response from prospective contractors, it is important that that service levels be clearly defined prior to the issuance of the RFP. Staff is requesting direction on these service level parameters at this time.

Below please find a proposed timeline.

March 2016	RPF issued
May 2016	Responses due
May – July 2016	Review and evaluation
August 2016	Village Board decision
September – October 2016	2017 Budget discussions
January – May 2017	Public education (full automation)
June 2017	Implementation (full automation)

SERVICE LEVEL POLICY DETERMINATIONS

As noted previously, a number of key issues drive the collection processes and, in turn, establish the levels at which those services are provided to residents. The three primary components include:

- Alley service – will all or only select materials be collected from the alleys?
- Karts - will karts be required for recycling and/or yard waste/organics collections; how might the determination on alley service impact this?
- Schedule – how frequently will each item be collected?

To accurately compare the cost and service proposals which are ultimately submitted, these items must be determined and clearly defined within the RFP. Staff suggests that much of the discussion at Monday evening’s meeting focus on these components; the considerations of each will be detailed during the meeting presentation.

MEETING

DPW management and collections staff will be present at your meeting Monday evening to present a detailed report of this issue.

VILLAGE OF SHOREWOOD



DEPARTMENT OF PUBLIC WORKS COLLECTIONS REVIEW

FINAL REPORT



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Date: July 20, 2015





VILLAGE OF SHOREWOOD
DEPARTMENT OF PUBLIC WORKS COLLECTIONS REVIEW
CHAPTER 1 – INTRODUCTION

Project Overview

The Village of Shorewood (Village) determined the need to conduct a Department of Public Works Collections Review. The Review will provide recommendations and options for long-range planning of major equipment purchases, staffing and contractual needs. Based upon the proposal submitted by RW Management Group, Inc. (RW) on June 8, 2015, the scope of the project was a review and analysis of DPW data, along with a department operation review to determine if there are efficiencies that can be implemented that will reduce costs to taxpayers while continuing to maintain its current high level of service.

Specifically, the Village requested a collection and operation review of the Department of Public Works to determine:

- If current collection practices are efficient and effective
- If contract services are or would be more cost effective and efficient
- If staff and resources are being utilized effectively in the department
- If during the collections review, other related efficiencies are available
- If the transfer station located in the Shorewood DPW yard is effective and efficient
- If the department is utilizing industry accepted “best practices” throughout the organization

This study was to assist in the identifications of existing capabilities and current needs and prepare recommendations, along with an implementation plan, to provide effective and efficient Public Works services.

Project Work Tasks

To complete the objectives set forth by the Village, RW evaluated the operations of the Department of Public Works. RW met with and gathered the needs and concerns of the Department. RW also met with Village administration to further understand the growth potential of the Village, the relationship between the agencies and needs of the Department.

The following presents an overview of the work tasks completed by RW during the project.

- Developed a project team to oversee and participate in the project.
- Conducted an initial meeting with the project team members to discuss project plans, establish liaison responsibilities and coordinate project schedules.
- Obtained and reviewed documentation provided by the project team.
- Conducted interviews of the Public Works management and supervisors, and rank and file employees in individual and group sessions.



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CHAPTER 1 – INTRODUCTION

- Interviews and observations primarily focused on the following:
 - Current operations, staffing and levels of service
 - Workload: volume and activity
 - Operations and service expectations
 - Current and anticipated budget issues
 - Equipment needs and issues
- Prepared for and facilitated a project status meeting to discuss the results of the interviews and on-site observations with the Project Team.
- Evaluated how staff resources are deployed and utilized based on service needs and resident demands.
- Reviewed present Public Works rules, regulations, operating procedures and processes to analyze and develop best practice recommendations.
- Developed a comprehensive detailed review, utilizing the information provided by the documentation received, the interviews and on-site observations. The projected growth and level of service needs were considered during the development of recommendations.
- Facilitated a Recommendations Meeting to present preliminary findings and obtain feedback from the Project Team and Village Administration.
- Refined the findings and recommendations with regard to public works collections and administration and operations based on input from the Village's Project Team.
- Assembled the Collections Review. Performed a detailed quality assurance review of the Review to ensure that the document met the expectations of the Project Team and conformed to RW's standards.
- Prepared, produced and delivered the draft Review to the Project Team for review. Facilitated delivery of the draft report to the Village Project Team.
- Facilitated a Collections Review Meeting with the Project Team approximately one (1) week after initial delivery to answer questions regarding the content of the Review. Made any changes to the Review based on the discussions at the Report Review Meeting. Produced and delivered final document copies to the Project Team.
- Presented the findings and recommendations to the Shorewood Village Board.



**VILLAGE OF SHOREWOOD
DEPARTMENT OF PUBLIC WORKS COLLECTIONS REVIEW
CHAPTER 1 – INTRODUCTION**

Overview of the Current Demographics and Environment

The Village of Shorewood has a population of approximately 13,763 and covers an area of approximately 1.60 square miles. The Village is very urban with a population density of 8,333 per square mile. The Public Works Department currently has 19 members. The Shorewood Department of Public Works (DPW) provides a diverse and varied assortment of services to the community through its collections, forestry, horticulture, electrical, building maintenance, streets and vehicle maintenance divisions. The Shorewood DPW includes the Shorewood Water Works and the Shorewood Sewer Utility. DPW staff also administers contracts for the provision of recycling, lawn maintenance, and construction services to the Village.

Department of Public Works Collections Review

To present the findings and recommendations that resulted from the engagement, RW has prepared this document; The ***Department of Public Works Collections Review (Review)***. The ***Review*** includes RW's specific recommendations related to the Public Works best practices.

The remainder of this report is structured as follows:

- Chapter 2 – Collections Findings and Recommendations: This section lists the findings and presents recommendations on the current and future issues associated with organizational aspects of the DPW. This section is outlined in the following sections:
 - Garbage Collections
 - Recyclables
 - Yard Waste
 - Brush
 - Park and Street Cans
 - Oversized Items
 - Related Waste Issues
- Chapter 3 – Implementation Plan: This chapter contains a phased implementation for the recommendations made in the ***Review***.
- Chapter 4 – Cost Analysis: Expenditures for RW's recommendations are presented, along with anticipated challenges and opportunities related to the recommended approaches.



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CHAPTER 1 – INTRODUCTION

- Chapter 5– Management Summary: A summarized version of the **Review** is presented, highlighting the projects objectives, the recommendations and the challenges and opportunities.



**VILLAGE OF SHOREWOOD
DEPARTMENT OF PUBLIC WORKS COLLECTIONS REVIEW**

CHAPTER 2 – OPERATIONAL RECOMMENDATIONS

Operational Overview and Recommendations

The Shorewood Department of Public Works (DPW) has experienced a high level of service demands coupled with limited or no growth within the department. The Department is to be commended for its commitment to providing a high level of services to residents and seeking new and better ways of providing these services.

The DPW has maintained these service levels with no increase in staffing. Solid waste refuse collection is performed by Village crews utilizing a semi-automated collection process. Recycling has been contracted out and transfer station, shared with Whitefish Bay, is located with the Village of Shorewood. Even with these efforts to control costs while maintaining a high level of service to residents, further opportunities for additional cost savings exist through organizational and operational process changes. The opportunities within the Public Works Department discovered during this analysis are outlined in this chapter and are listed as findings followed by recommendations for changes.

Effectiveness, Efficiency and Performance of Current Operations

RW performed an evaluation of the effectiveness, efficiency and performance of the current operations, and has made the following recommendations for future operations.

Findings

Garbage Collection

Shorewood DPW provides weekly garbage collection service.

90 Gallon carts are provided and each pickup site can put out three additional bags.

The Department also provides alley service pickup for residents

The DPW utilizes 20 yard semi-automatic trucks. They currently have three primary trucks used on the three daily routes and one backup truck. All of the trucks were replaced after a major DPW fire and are all due for replacement.

The garbage collection is split into three routes per day for three days per week. There is one employee per route and they spend an average of five hours to complete their route.

There is a compactor in DPW yard for both solid waste and yard waste. The cost and upkeep of this unit is shared with the Village of Whitefish Bay.



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CHAPTER 2 – OPERATIONAL RECOMMENDATIONS**

Recyclables

Currently recyclables are collected every other week by a private contractor.

There is no alley service for recyclables; residents are required to put their recyclables out at the curb.

Residents must purchase 90 gallon carts or 18 gallon bins.

The recyclables are collected with one fully automated truck, although they often have to get out of the truck for loading the 18 gallon bins.

Collection is completed in three days each week over six routes.

Yard Waste

Currently the DPW is providing weekly yard waste service which is made up of three routes per day, three days per week. The garbage collection trucks are used for this service and the loading is done manually.

There is no yard waste alley service.

Residents must put the yard waste in paper sacks or yard waste carts. The sacks create weight and lifting concerns on rainy or snowy days.

Approximately 20% - 30% of the residents on the route put out yard waste weekly.

Yard waste pickup is predominately completed April through November, but this is often stretched out in March and December, depending on weather conditions.

The yard waste in the trucks is dumped in the compacter at the DPW site.

Brush

The Village DPW currently provides monthly service for brush pickup. The routes are collected on Thursdays and there are three routes per month.

Residents must follow prescribed length and diameter restrictions and place the brush at the curb.

Collections are completed with one person and a chipper and dump box. Summer help is often used to assist with this operation. The contents are dumped in the compacter on the DPW site. Some of the better mulch is used on the trails.



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CHAPTER 2 – OPERATIONAL RECOMMENDATIONS

Parks and Street Cans

Currently the Village has litter (refuse and recyclables) cans in retail areas, parks and other public places.

The DPW staff provides Friday collections of refuse containers in a full sweep of the Village. Some of the street cans are picked up on normal route days and some of the cans are handled by summer help at the beach and parks. Recyclable containers are collected by Waste Management.

Oversized Waste Items

The Village DPW provides this service on an on call basis every Thursday. This service must be scheduled.

DPW utilizes a two person truck with a hook lift.

The resident pays a \$50 charge per 15 minutes of pickup time. The fee is doubled if the items are left at the curb and not scheduled. The Village picks up approximately 250 oversized items each year.

Related Issues

The Village DPW work force has been reduced from 22 to 19. This occurred approximately 15 years ago.

There were some concerns that increased automation could be hindered by low hanging branches in the Village.

There has been a regular occurrence of injuries, directly related to collections, with associated workers compensation costs, directly related to refuse and recycling collections.

We were able to determine that the garbage route collections fill the truck on a normal day.

The yard waste daily collections do not fill the truck.

The refuse collection trucks are all in need of replacement, which creates the need for a large capital investment.

We found that there were several alley issues. The alleys have narrow openings, limited to no turning radius, tight corners and low hanging wires. The pavement in many of the alleys is in very poor condition and the heavy weight of the collection trucks adds to the



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CHAPTER 2 – OPERATIONAL RECOMMENDATIONS**

deteriorating pavement conditions. These conditions have an impact on the size and type of collection equipment that can be purchased and utilized for collections.

The yard waste manual lifting process adds to injuries and related workers compensations costs. The carts are better for yard waste service. The bags often are wet and cause lifting issues.

The contract for waste hauling was extended until the end of 2016.

Christmas trees are picked up at the curb and brought to yard for chipping. These trees often have bolts, ornaments and other products with them that present problems with the chipper.

The collection routes are 15 – 25 miles in length.

All DPW personnel are used for snow and ice control operations, including the waste collection personnel.

Privatization may reduce the availability of employees for plowing and other intermittent projects.

Parkway tree limbs and parked cars impact access to carts.

Options Considered

Option 1 – Status Quo

All services would remain the same.

Challenges and Opportunities

- No adjustments would be required of neither the residents nor the Village staff. Other options would require changes for the residents and a comprehensive training program.
- There would be no increase in effectiveness or efficiency.
- Collections related injuries and associated workers compensatory costs would remain constant.

Option 2 –Privatization of Collection Services

This option would be to completely privatize all refuse and recycling operations. This would include the collection of street cans. Yard waste, brush and oversized collection would continue to be provided as with the Status Quo Option.

Challenges and Opportunities



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CHAPTER 2 – OPERATIONAL RECOMMENDATIONS**

- Fewer capital expenditures would be required
- The need for storing a total of four refuse trucks would be reduced freeing space at the DPW facilities
- Maintenance of the solid waste fleet would be eliminated freeing maintenance staff for other duties
- Wear on alley pavements would be reduced
- 48 hours per week of collection labor would be eliminated allowing the reduction of one position

Option 3 – Fully Automated Public Collection for Garbage and Recycling

With this option the Village would provide complete collection of garbage and recycling and eliminate the private contract for recycling collection.

The recommendation would include the use of two total compactor trucks with automated collection arms. We recommend four days of collection with 2 trucks. 1 truck would be used strictly for garbage and the other split between recycling and garbage (5 to 6 hours per day recycling including 1 hour per day for transit to a recovery site and 2 to 3 hours per day for garbage including street cans).

There would be a need to maintain one back-up truck which could initially be from the existing fleet.

RW would recommend eliminating alley collection, which would allow for larger capacity trucks. (If alley service is still desired there are trucks with a special mounting of automated arms which would accommodate alley collection. However efficiency would be reduced) all trucks should have arms with a 12 foot reach capability due to the issues related to parked cars and snow. Any existing 18 gallon recycling bins should be replaced with carts.

With this option, yard waste and brush would be combined into a combined operation to be completed by one person. Brush would be collected with a chipper and dump truck with a brush box. Yard waste would be collected with the backup refuse/recycling truck.

Collection would be provided every other week on the weeks opposite the recycling collection.

Oversized waste collection would be provided as with the Status Quo Option with the exception that collection would be switched from Thursdays to Fridays and not provided during holiday weeks.

Challenges and Opportunities

- The need for storing the refuse trucks would be reduced from four to three trucks freeing space at the DPW facilities



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CHAPTER 2 – OPERATIONAL RECOMMENDATIONS**

- Wear on alley pavements would be reduced
- With no contractor involved in collection, flexibility in responding to varying needs and complaints would be improved
- Collection staff, with knowledge of the Village street network, would continue to be available for emergency operations such as snow and ice control

Option 4 – Fully Automated Public Collection for Garbage and contracted for Recycling

This option is similar to Option 1 in that the Village would remain responsible for refuse collection and continue to contract for recycling collection. However, contrary to Option 1, the village refuse collection system would become fully automated. Collection could either be completed by one truck with a five day collection or 2 trucks with the current three day system.

All other services would be provided the same as with Option #3.

Challenges and Opportunities

- The need for storing the refuse trucks would be reduced from four to three or two, trucks freeing space at the DPW facilities
- Wear on alley pavements would be reduced
- Collection staff, with knowledge of the Village street network, would continue to be available for emergency operations such as snow and ice control

Recommendations

RW recommends fully automated solid waste and recycling collection:

Providing both refuse and recyclable collection by either Village staff or by contract will provide cost savings through efficiencies not currently available. Since residents are already required to place recyclables at the curb it should not be too difficult to require alley frontage residents to do the same with solid waste. Also, by switching to automated pick-up, the Village should eliminate the practice of allowing additional items to be placed at the curb for pick-up that are not in the carts (except for bulky items). Other municipalities have discovered that only allowing items in carts for pick-up has not created a burden on residents. Finally, the option of using manually collected 18 gallon bins should be eliminated to allow for full automation of collection of recyclables.

RW recommends that both solid waste and recycling be collected either entirely by the Village or entirely by a private contractor. To determine the most cost effective approach, the Village should bid out this work, with the DPW being a bidder. Consideration may also be given to asking the City of Milwaukee to submit a proposal. DPW would need to work with the Village Finance Director to insure that all costs are included in their bid such as:



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CHAPTER 2 – OPERATIONAL RECOMMENDATIONS

- Wages and benefits
- Fuel and maintenance
- Capital costs/Depreciation
- Insurance (vehicle, liability and workers compensation)
- Materials and supplies

In an RFP for recycling collection, the Village should include an option for disposal of recyclables at the new City of Milwaukee Recycling Center. This facility was built jointly by the City of Milwaukee and Waukesha County and has capacity for additional municipalities to participate. This will generate revenue to help off-set the cost of collection.



**VILLAGE OF SHOREWOOD
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CHAPTER 3 – IMPLEMENTATION PLAN**

Implementation Plan by Priority

To properly and successfully implement the recommendations made, certain key components must be considered. Without the implementation of these components, overall services, productivity and cost saving benefits will be tempered and system performance will suffer.

The following implementation plan lists, by priority, those requirements that satisfy the principles of comprehensive delivery of an efficient and effective solid waste, recycling, and yard waste collection system. The plan has been developed considering the benefits that have a high overall return to the residents and the Department. Using this approach, the Village will not only be moving toward maintaining sound collection services, practices and systems, but they will also be minimizing negative impacts to residents. The recommendations listed below, when implemented will greatly improve efficiency and reduce costs to taxpayers. **Adhering to this time schedule is very important to allow for full implementation in 2017.**

Fully Automated Solid Waste and Recycling Collections

2015

July

Receive and review final Department of Public Works Collections Review.

PW to develop and release RFP for one fully automated collection truck, with option to increase the bid with up to two more units.

August

Village Board to receive presentation on Department of Public Works Collections Review.

September

Village Board to make determination on which of the four Collections Review options they would like to implement.

Option 1 – Status Quo

Based on the proposals received pursue the purchase of one fully automated collection truck to be used on non-alley routes.

Prepare and release an RFP for recycling collections starting in 2017.

Option 2 – Privatization of Collection Services.

Prepare RFP for refuse and recycling collections starting in 2017.

Prepare for contract management of all collection services.



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CHAPTER 3 – IMPLEMENTATION PLAN**

Prepare education program for citizens

Option 3 – Fully Automated Public Collection for Solid Waste and Recycling

Prepare RFP for refuse and recycling collections starting in 2017.

DPW to submit a bid for providing solid waste and recycling collections, including the use of the City of Milwaukee Recycling Center.

Prepare education program for citizens.

Option 4 - Fully Automated Public Collection for Garbage and contracted for Recycling.

Prepare RFP for recycling services starting in 2017.

Purchase 2 fully automated collection trucks.

Prepare education program for citizens relating to elimination of alley pickup if that is decided.

October

Receive and evaluate all proposals.

Prepare 2016 budget requests to reflect Board decisions and directions relating to solid waste and recycling for 2017.

November-December

Prepare purchase requests for fully automated collection trucks to present to the Board.

Order approved fully automated collection trucks as approved by Board.

2016

Create and implement transition plan based on the Boards decisions and results of the Solid Waste and Recycling Collections RFP.

Prepare education program for citizens. Begin education program in the last half of 2016.

Establish new routes, transfer station changes and related procedures as needed.

Conduct contract negotiations with private collection agency if needed.



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CHAPTER 3 – IMPLEMENTATION PLAN

2017

Implementation of Board approved plan for fully automated collections of solid waste and recycling services.

Continue public education program.

If the decision is made to contract services, allow for extensive administrative time related to contract management of those services.

Opportunities and Challenges

As a result of implementing RW's recommendations, the Village Administration, the Department of Public Works and the citizens of the Village should realize and maintain significant tangible benefits, mitigate injuries and related liabilities. The Village, as with most change, will also experience challenges in implementing the changes. The following tangible and intangible opportunities should be realized as a result of implementation of the study recommendations:

Opportunities:

- Improved ability to manage and facilitate citizen concerns and issues
- Improved effectiveness and efficiency of staff and resources
- Reduction of capital costs with the downsizing of collection fleet size
- Reduction of pavement reconstruction needs related to alley access
- Reduction of safety hazards and liability related to backing of large equipment
- Reduction of employee injuries and associated workers compensation costs
- Reduction of storage needs and the creation of space at the DPW facilities. This will also reduce the potential for injuries and safety related concerns at the facilities
- Reduction of damage claims directly associated with alley service.
- Continued utilization of collection staff, with knowledge of the Village street network, to be available for emergency operations such as snow and ice control

Challenges

- Change management is always part of any change in service delivery.



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CHAPTER 3 – IMPLEMENTATION PLAN

- Change in services or perception of service level changes or decrease in service levels.
- Accommodating special needs.
- Contract management, if needed, will be focused on balancing citizen requests with contractor's willingness or lack of, to complete special tasks as needed.



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CHAPTER 4 – COST ANALYSIS

Cost Comparison of Shorewood Solid Waste and Recycling Collection

Comparing costs between municipalities is often challenging due to a number of factors such as:

- The number and design of alleys
- The method of collection (i.e. manual loading vs. automated collection)
- Limitations on data that is readily available among municipalities
- Whether work is performed by municipal crews or contracted out.
- The length of routes

With these limitations in mind, a sample cost analysis was developed. The data is based on budget information from each of the municipalities. It should be noted that the numbers for Shorewood are different from those that were provided from their own internal analysis because the numbers are based on budget, not per hour. This was done so that the information among the municipalities would be comparable.

As the chart on the next page shows, based on a comparison to other municipalities, Shorewood's current per capita and per household cost for solid waste collection is the highest among the comparison communities. Solid waste and recycling collection combined cost is the fourth highest among the comparable municipalities (assuming all costs are included in like manner for each municipality). This suggests opportunities to improve efficiencies.



**VILLAGE OF SHOREWOOD
DEPARTMENT OF PUBLIC WORKS COLLECTIONS REVIEW
CHAPTER 4 – COST ANALYSIS**

Shorewood Refuse Collection Comparative Analysis								
	Brown Deer	Fox Point [^]	Waukesha	So. Milwaukee	Greendale	Shorewood Current Cost	Shorewood Outsourced Cost	Shorewood DPW Fully Automated cost
Refuse								
Exp. Budget	\$ 397,057	\$ 232,221	\$ 2,073,000	\$ 790,142	\$ 333,850	\$ 535,121	\$ 457,600	\$ 379,000
Tons/Year	2,600	1,761	16000			2500		2500
Cost/Ton	\$ 192.74	\$ 131.87	\$ 129.56			\$ 214.05		\$ 151.60
Cost/Capita	\$ 32.92	\$ 35.03	\$ 28.79	\$ 37.39	\$ 23.57	\$ 40.57	\$ 34.69	\$ 28.73
Number of Households	3,800	2,513	20,000	6,650	4,460	4,160	4,160	4,160
Cost/Household	\$ 104.49	\$ 92.41	\$ 103.65	\$ 118.82	\$ 74.85	\$ 128.63	\$ 110.00	\$ 91.11
Recycling								
Exp. Budget	\$ 543,351	\$ 273,490	\$ 2,850,000	\$ 513,364	\$ 277,333	\$ 170,464	\$ 208,000	\$ 180,692
Tons/Year	1,000.00	895	4400					
Cost/Ton	\$ 399.31	\$ 305.71	\$ 647.73					
Cost/Capita	\$ 45.05	\$ 41.25	\$ 39.58	\$ 24.30	\$ 19.58	\$ 12.92	\$ 15.77	\$ 13.70
Number of Households	3,800	2,513	20,000	6,650	4,460	4,160	4,160	4,160
Cost/Household	\$ 142.99	\$ 108.83	\$ 142.50	\$ 77.20	\$ 62.18	\$ 40.98	\$ 50.00	\$ 50.00
Combined per capita cost	\$ 77.98	\$ 76.28	\$ 68.38	\$ 61.69	\$ 43.15	\$ 53.49	\$ 50.46	\$ 42.43
Combined cost/household	\$ 247.48	\$ 201.24	\$ 246.15	\$ 196.02	\$ 137.04	\$ 169.61	\$ 160.00	\$ 141.11
Recycling Revenue								
Recyc. Grant	\$ 40,000	\$ 58,584	\$ 216,000	\$ 87,543	\$ 54,000	\$ 52,819	\$ 52,819	\$ 52,819
Recyc. Sales	\$ 332,560	\$ -	\$ 95,000	\$ 430,742	\$ 163,000	\$ 45,000	\$ 45,000	\$ 45,000
Other	\$ 17,500	\$ 195,522	\$ 25,000	0	\$ 33,000	\$ 14,500	\$ 14,500	\$ 14,500
Total Revenue	\$ 390,060	\$ 254,106	\$ 336,000	\$ 518,285	\$ 250,000	\$ 112,319	\$ 112,319	\$ 112,319
Annual Savings*							\$ 39,985	\$ 145,893

Blue=Collection by private hauler.

Orange=DPW collects refuses; Private hauler collects recycling

*Note: savings may be great than \$39,985 since the budget numbers taken from the Shorewood budget do not appear to include amortization, fuel or maintenance costs.

If Shorewood outsourced both solid waste and recycling, the Village would save approximately \$40,000 per year and avoid the capital cost of purchasing new equipment. If the Village had a fully automated system utilizing its own crews, it could save approximately \$145,000 per year, but would have to purchase and maintain its own equipment and collect all disposables in two days instead of three.

However, in order to accurately compare the cost of keeping the operation in-house vs. contracting out, it is recommended that the Village bid the work and allow DPW to also submit a bid, making sure that DPW includes all related collection costs in its bid.



**VILLAGE OF SHOREWOOD
DEPARTMENT OF PUBLIC WORKS COLLECTIONS REVIEW
CHAPTER 5 – MANAGEMENT SUMMARY**

Project Objectives

The Village of Shorewood (Village) determined the need to conduct a Department of Public Works Collections Review. The Review will provide recommendations and options for long-range planning of major equipment purchases, staffing and contractual needs. Based upon the proposal submitted by RW Management Group, Inc. (RW) on June 8, 2015, the scope of the project was a review and analysis of DPW data, along with a department operation review to determine if there are efficiencies that can be implemented that will reduce costs to taxpayers while continuing to maintain its current high level of service.

Specifically, the Village requested a collection and operation review of the Department of Public Works to determine:

- If current collection practices are efficient and effective
- If contract services are or would be more cost effective and efficient
- If staff and resources are being utilized effectively in the department
- If during the collections review, other related efficiencies are available
- If the transfer station located in the Shorewood DPW yard is effective and efficient
- If the department is utilizing industry accepted “best practices” throughout the organization

This study was to assist in the identifications of existing capabilities and current needs and prepare recommendations, along with an implementation plan, to provide effective and efficient Public Works services.

Operational Recommendations

There are recommendations relating to the current collection operations, efficient utilization of DPW resources, future growth projections, current and future major equipment needs, and personnel and staffing needs. These recommendations relate to potential changes to create a more efficient and effective Department of Public Works.

RW recommends fully automated solid waste and recycling collection:

Providing both refuse and recyclable collection by either Village staff or by contract will provide cost savings through efficiencies not currently available. Since residents are already required to place recyclables at the curb it should not be too difficult to require alley frontage residents to do the same with solid waste. Also, by switching to automated pick-up, the Village should eliminate the practice of allowing additional items to be placed at the curb for pick-up that are not in the carts (except for bulky items). Other municipalities have discovered that only allowing items in carts for pick-up has not created a burden on residents. Finally, the option of using manually collected 18 gallon bins should be eliminated to allow for full automation of collection of recyclables.

RW recommends that both solid waste and recycling be collected either entirely by the Village or entirely by a private contractor. To determine the most cost effective approach, the Village



VILLAGE OF SHOREWOOD
DEPARTMENT OF PUBLIC WORKS COLLECTIONS REVIEW

CHAPTER 5 – MANAGEMENT SUMMARY

should bid out this work, with the DPW being a bidder. Consideration may also be given to asking the City of Milwaukee to submit a proposal. DPW would need to work with the Village Finance Director to insure that all costs are included in their bid such as:

- Wages and benefits
- Fuel and maintenance
- Capital costs/Depreciation
- Insurance (vehicle, liability and workers compensation)
- Materials and supplies

In an RFP for recycling collection, the Village should include an option for disposal of recyclables at the new City of Milwaukee Recycling Center. This facility was built jointly by the City of Milwaukee and Waukesha County and has capacity for additional municipalities to participate. This will generate revenue to help off-set the cost of collection.

Opportunities and Challenges

As a result of implementing RW's recommendations, the Village Administration, the Department of Public Works and the citizens of the Village should realize and maintain significant tangible benefits, mitigate injuries and related liabilities. The Village, as with most change, will also experience challenges in implementing the changes. The following tangible and intangible opportunities should be realized as a result of implementation of the study recommendations:

Opportunities:

- Improved ability to manage and facilitate citizen concerns and issues
- Improved effectiveness and efficiency of staff and resources
- Reduction of capital costs with the downsizing of collection fleet size
- Reduction of pavement reconstruction needs related to alley access
- Reduction of safety hazards and liability related to backing of large equipment
- Reduction of employee injuries and associated workers compensation costs
- Reduction of storage needs and the creation of space at the DPW facilities. This will also reduce the potential for injuries and safety related concerns at the facilities
- Reduction of damage claims directly associated with alley service.
- Continued utilization of collection staff, with knowledge of the Village street network, to be available for emergency operations such as snow and ice control



**VILLAGE OF SHOREWOOD
DEPARTMENT OF PUBLIC WORKS COLLECTIONS REVIEW**

CHAPTER 5 – MANAGEMENT SUMMARY

Challenges

- Change management is always part of any change in service delivery.
- Change in services or perception of service level changes or decrease in service levels.
- Accommodating special needs.
- Contract management, if needed, will be focused on balancing citizen requests with contractor's willingness or lack of, to complete special tasks as needed.

FORMALLY ADOPTED BY COMMITTEE VOICE VOTE ON **JANUARY 7, 2016.**

PLEASE CIRCULATE AMONG ALL VILLAGE TRUSTEES.

cc: Leeann Butschlick (Department of Public Works), Chris Swartz (Village Manager), Tyler Burkart (Assistant Village Manager)

January 14, 2016

Village of Shorewood Trustees
3930 N. Murray Ave.
Shorewood, WI 53211

Dear Trustees:

In February 2015, the Conservation Committee submitted a letter to the Board of Trustees outlining several options to consider as the waste hauling contract bidding process moved forward and as the request for proposals (RFP) was drafted. The purpose of this letter is to follow up on our interest in that process and narrow down our proposals, after a year of independent research, Village staff input, committee deliberation, and regular contact with the Department of Public Works.

Background

The Village Board voted to adopt the [Shorewood Sustainability Plan](#) on June 18, 2012. It specified **three principal goals** that pertain to municipal solid waste collection:

- Evaluate/consider a municipal composting program.
- Consider a residential recycling awards program for residents who recycle most of their disposals.
- Explore pay-as-you throw garbage program.

Interpreted broadly, these concerns amount to 1) *pursuing resource recovery*, 2) *incentivizing recycling*, and 3) *putting a price on landfill refuse*.

The Village's own vision, as memorialized in the [2025 Vision Plan](#), is that "In 2025, Shorewood will be: A vibrant urban community with . . . a commitment to sustainability." The Plan identified several goals and strategies for productive change in both Village services and the community, including "Promote Environmental Protection Activity in the Village and Village Residents."

Many communities have found that some of the best ways to accomplish goals similar to those above and save municipal dollars are pay-as-you-throw (PAYT) strategies – either pulling trash removal off the services funded with property tax dollars or by instituting volume pricing (charging different rates for different cart sizes). The [EPA estimates](#) that on average, "communities with pay-as-you-throw see waste reductions of 14 to 27 percent." Our

conversations about PAYT have encountered administrative and logistical concerns from Village staff and DPW, and the Committee is not recommending PAYT at this time.

Committee Recommendation

Given that even conservative estimates indicate that 12–25 percent of household waste is comprised of compostable organics ([in Wisconsin](#), it is 23.2 percent), and absent the financial incentive that comes with more aggressive pay-as-you-throw schemes, the Conservation Committee recommends a tandem initiative of modified collection and source separation of organics. These practices can achieve the desired goals of reduced landfill intake and a smaller carbon footprint in Shorewood. Organic waste rotting in a landfill produces methane, a greenhouse gas more than 21 percent more potent than carbon dioxide.

Specifically, the Committee proposes the following linked strategies:

1. **Inverted collection schedule:** Modify the collection schedule to reward the behaviors the Sustainability Plan wants to encourage. Trash is picked up biweekly, with recycling and/or organics collection offered weekly. This encourages waste reduction, boosts recycling rates, and incentivizes organics recovery. (Portland, OR; Seattle, Toronto, Hennepin County, MN)

In conjunction with one of the following organics diversion mechanisms – which offset the reduced frequency of trash collection – residents will begin to see the benefits of waste reduction through source separation.

2. **Implement an organics recovery program.** Initiate a Village-wide program that encourages source separation and organics collection. Three options here:
 - a. *Universal curbside cart service* that combines yard waste and kitchen organics collection (Seattle, Toronto, San Francisco). Could be serviced by DPW or private hauler (Waste Management compost facility in Menomonee Falls is already permitted for food scraps.)
 - b. *Subscription curbside service* contracted with private hauler. Costs could be borne by Village subsidy or channeled as direct fees to participating households. The latter course may limit appeal, absent a concomitant trash-reduction financial incentive such as volume pricing. (Oak Park, IL, has successfully implemented a curbside program whose subscription costs are offset by savings on tagged yard bag fees.)
 - c. *Point-collection of kitchen organics* for resident drop-off. Contract with a private hauler (e.g. Sanimax) to service 1 or 2 dumpster sites where residents can self-drop kitchen scraps. (Brown County is doing this right now.) This is a fairly inexpensive way to pilot organics recovery, but appeal is limited to people willing to self-haul. Businesses would also be encouraged to participate to experiment with waste reduction and savings on hauling costs.

Although the Committee still believes that a more proactive trash reduction policy is the best way to reduce landfill inflows, change household consumption habits, and incentivize both recycling behavior and organics recovery, the best option at the moment may be **to introduce a**

new service, while inverting the collection schedule to offset the added costs and logistics. In lieu of a Village-wide program, a robust pilot program or phase-in option, perhaps starting with one enthusiastic block and then expanding it to other areas, is also possible. In all cases, the Conservation Committee could partner with the Department of Public Works to engage the community, host educational sessions, disseminate materials, and answer questions about the program.

The expiring waste hauling contract presents an unmatched opportunity to implement proven techniques to do something impactful, efficient, and consistent with existing policies and plans.. The Conservation Committee is committed to helping the Village become the first community in Southeast Wisconsin to undertake a truly progressive solid waste policy. As always, we hope to remain apprised of the RFP process as it evolves. If we can be of any assistance in clarifying or explaining Committee suggestions and positions, please let us know.

Sincerely,

THE SHOREWOOD CONSERVATION COMMITTEE

Josh Liberatore, Chairman
(email: liberatissimo@yahoo.com)

Chase Kelm
Carolyn Morse
Roland Schroeder
Henry Tomaszewicz

Sue Murphy Yerkes
Maria Terres-Sandgren
Linda Beck
Donna Pollock
Kimberly Forbeck
Molly Burghardt and Izzie Tasse
Linda Frank