



TOWN OF WARRENTON

Department of Community Development

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MEMORANDUM

TO: Brandie Schaeffer, Town Manager

FROM: Frank Cassidy, Community Development Director
Paul Bernard, Assistant Director of Public Works & Public Utilities

DATE September 8th, 2020

SUBJECT: Solid Waste Program

The objective of this memo is to summarize the answers to the questions from Councilman Polster as a follow up to the May 2020 Public Works & Public Utilities Committee meeting as well as provide information for further consideration by Council.

Everyone knows if you want to get your citizens' attention, mess with trash! The staff makes the following recommendations with an understanding these recommendations are intended to be for discussion only at this point.

Recycling

Historically curbside recycling was a source of revenue for the Town, but more recently has become another built-in cost for taxpayers to pick up due to a host of market changes. Nationally, recycling firms are coping with a marketplace that's much more fickle since China effectively shut its doors to imported recyclables in 2018.

National trends are a driving factor in our challenges and were discussed among various municipalities in 2019, with no agreed-upon solution other than waiting for market changes. Also, our recycling program has become outdated and is financially unsustainable. The "blue bag" program is costly on all sides and creates no efficiencies. With COVID-19

considerations, it also encourages the promotion of a "touchpoint" system for recovery and disposal, which is an outdated format.

It does, however, provide exceptional customer service and is valued by our residents.

Another glitch for discussion is over time, too much trash or unwanted or dirty items are getting mixed into the recycling bags. The bottles, cans, plastics, and paper collected from residents consequently has lost so much value that, in some cases, they became virtually worthless. Elimination of the bags is not a single solution; we must also start to work with our residents on both education and compliance; staff will need Council support for strict enforcement.

Existing collection equipment poses challenges for alterations in recycling pick-up; staff is proposing equipment changes as part of the CARES Act to reduce touchpoints while also realizing much-needed upgrades in the system efficiencies.

Staff Recommendation

- Cease supplying free blue bags to residents for direct budget savings of \$12,500.00 per year. The immediate savings does not capture staff time to administer the distribution on the associated cost of storage.
- Phase-out blue bag pick up to eliminate "touchpoints" for COVID-19 safety.
- Provide residents alternatives for recycling:
 - Require recycling materials be deposited in approved containers for pick up; provide direction for citizen drop off at the waste facility, and seasonal recycling events.
- Update ordinances to reflect the new program.

Horticultural Waste

The current procedure requires daily routes to pick up the horticultural debris. A popular offering with outstanding service to the community. Another situation where there is a need for an overall update, as well as education and compliance. To serve the community, items are recovered that do not meet minimum requirements for pick-up.

As the Town has aged over the past couple of decades, this program has grown to a breaking point, where the existing staff is struggling to keep up with demand. Council is aware of more frequent complaints and unmet requests.

To Council's point on staffing implications on touchless recycling/waste efficiencies, those efficiencies could help to better meet demands in the area of horticultural waste. A few hours saved on a trash route could be added directly to horticultural waste and general care for ROW.

Staff Recommendation

- Move to one day a week pick up.
- Update ordinance to provide specific requirements for pick up to include:
 - Placement of material to be picked up.
 - Size, type, and weight of material to be picked up.
 - Strict enforcement of requirements.

Trash Services

The Town provides trash pick-up twice a week. This program has not been examined for effectiveness or efficiencies and operates with basic equipment requiring three to four staff per truck. During the pandemic, we have been keenly aware of the outdated system with "touchpoints" of trash bags vs. containerized trash, which puts our staff in danger of more exposure to disease. To serve our citizens, the team has a fantastic habit of going well above and beyond to provide services. This approach, although useful in providing above and beyond customer service, is lending itself to inefficiencies and excessive work for staff

beyond the requirements and expectations of our ordinances and typical solid waste programs.

Staff Recommendation

This service needs to be reconciled with our adopted policies. More time and analysis is required on this specific program, but preliminary recommendations are included as the CARES Act timelines are looming.

- Cease providing free trash bags to residents as direct budget savings of \$26,000.00 per year. The immediate savings does not capture staff time to administer the distribution on the associated cost of storage.
- Reassess the current routes with the assistance of the County GIS;
- Update current ordinance to clarify better and define commercial vs. residential waste pick up and requirements;
- Semi-automated pick up:
 - Two existing trucks can be equipped with a rear arm. The cost is estimated at \$6,000.00. This does not eliminate any staff but reduces "touchpoint" exposure.
 - Requires purchase of cans for regular waste and one for recycling, supplied to all residents, estimated cost of \$500,000.00.
- Fully Automated trucks:
 - Allows operation by one staff; and altogether eliminates touchpoint.
 - Requires purchase of cans for regular waste and one for recycling, supplied to all residents, estimated cost of \$500,000.00.
 - Cost of one new truck is \$300,000.00

Next Steps: research and compare for more accurate funding costs and any unforeseen challenge.

Conclusion

The underlying discussion on trash, recycling, and horticultural pick-up and disposal for Council is evaluating customer service levels and the associated costs. It is difficult to quantify costs for customer service. Staff considered privatization as a factor, and when compared to contractors and other jurisdictions on a high level, the Town of Warrenton offers a much higher level of customer service. Cost quotes can be provided for reference. Any changes in the process and equipment will require an extensive educational campaign and a phased approach to avoid dissatisfaction.

MEMORANDUM

TO: Brandie Schaeffer, Town Manager

FROM: Paul Bernard, Assistant Director of Public Works & Public Utilities

DATE: September 8th, 2020

SUBJECT: Solid Waste Program: Public Works Committee

Committee Question and Response

1) **Question:** Thirteen years of data were provided to terminate the newspaper recycling program; give the same level of data and analysis for the entire recycling (and refuse program) program to look at each item and any trends that may exist.

Response: The trends from records found at Public Works.

- Newsprint has dropped off significantly, and the demand and price for newsprint dropped off to nothing.
- Solid waste has remained under the 4000-ton limit set by the County with variation and increased slightly of the years, as might be expected.
- Blue bag pick-up has varied but held reasonably stable over the years.
- The five years from 2003 to 2007 showed lower tonnage, but after that it has held reasonably steady. Cardboard tonnage has held steady, but we suspect it will show significant increases with the rising use of Amazon and home deliveries. Cardboard has dropped significantly from a high of \$14,133 (\$82/ton) in 2011, to \$1,876 (\$9.93/ton) in 2019.

CARDBOARD					REFUSE/ Green Bags	
	TONS	TOTAL	REVENUE RANGE			
YEAR	PICKED UP	REVENUE	LOW	HIGH	AVG.	TONS
2019	188.97	\$1,876.48	\$8.75 SEP.	\$21.25 JAN	\$9.93	3708.68
2018	200.66	\$7,460.88	\$17.50 APR.	\$28.75 JAN	\$37.18	3601.73
2017	203.89	\$8,008.29	\$28.75 MAY	\$51.88 MAR.	\$39.28	3635.00
2016	208.54	\$5,957.57	\$25.63 FEB.	\$33.13 SEP.	\$28.57	3654.21
2015	185.45	\$4,716.74	\$25.63 APR.	\$29.38 JULY	\$25.43	3751.36
2014	192.76	\$6,196.36			\$32.15	3759.53
2013	137.41	\$5,047.53			\$36.73	3833.27
2012	148.95	\$7,478.13	\$65 APR	65.00	\$50.21	3765.03
2011	172.00	\$14,133.60			\$82.17	3917.92
2010	154.69					3770.91
2009	176.40					3899.62
2008	176.98	\$10,408.00			\$58.81	4001.02
2007	165.45	\$8,366.13	\$30. JAN	\$65. OCT.	\$50.57	4174.09
2006	162.55					3944.33
2005	168.62					4085.25
2004	196.21					4187.02
2003	207.87					3878.82
					Ave. =	3856.93

NEWSPAPER

	TONS	TOTAL	REVENUE RANGE/ton		AVG.
YEAR	PICKED UP	REVENUE	LOW	HIGH	
2019	39.85	\$0.00	\$0.00	\$0.00	
2018	47.34	\$0.00	\$0.00	\$0.00	
2017	64.48	\$0.00	\$0.00	\$0.00	
2016	67.55	\$0.00	\$0.00	\$0.00	
2015	100.2	\$1,508.97	\$6.60 JULY	\$9.79 JULY	\$15.06
2014	136.38	\$2,213.86	\$16.00 SEP.	\$16.25 DEC	\$16.23
2013	120.50		\$13.12	\$18.12	
2012	104.93	\$1,908.17	\$25 JUNE	65.00	\$18.19
2011	121.81				
2010	117.67		\$29.50	65.00	
2009	139.04				
2008	156.72	\$7,027.10	\$40.00	60.00	\$44.84
2007	148.49	\$5,732.16	\$30. JAN	\$50 MAY	\$38.60
2006	196.44				
2005	202.00		\$38.00	\$45.00	
2004	198.60				
2003	193.87				

- 2) **Question:** Since the recycling/refuse program is tied together, it has been confirmed that we collect commercial trash, which is against the Town Code. Please breakdown where we collect recycling/refuse and report the numbers of collections we perform outside what the town code allows, such as commercial refuse collection. How many shopping centers/commercial centers get trash collection? What is the cost of commercial pick-up from similar facilities?

Response: Staff's reading of the Town Code is different and request the Town Attorney opine as there is a question of Town Code and the role of the contractual arrangement with the County.

Public Works does not pick up trash for any more massive shopping center or commercial business that is a large waste generator. We do pick up for any business that our regular schedule and limitations will satisfy. Typically, fast food restaurants and the larger shopping centers work through commercial haulers that provide dumpster service. Public Works picks up any curbside bags placed along our residential routes, which includes all the streets within the Town. Along Main Street and the other streets in Old Town, the Collection Crews currently have no way of differentiating residential trash from typical bags set out by smaller offices on published collection days and times. The Town's collection schedule does not provide adequate service for the higher volume waste generators such as restaurants, nor is our current equipment adequate for handling dumpsters.

- 3) **Question:** Provide a comparison of what the Town collects versus what the County collects in terms of its recycling program. Are we in-line with their program or do we limit our collection in Town?

Response: The County accepts all the major forms of recycled material at the Collection Site. This is for private citizens as well as commercial haulers that pay the tipping fee (no fee if it is just clean recycling). Citizens don't pay for dropping off their recycling except for items that have a special handling fee, such as electronics, tires, freon, brush, etc., that typically have environmental impacts. The County accepts any type of metal, cans, glass, plastics, newsprint, mixed paper, corrugated cardboard, textiles, plastic bags, aluminum foil, and brush. They use a dual-stream recycling system wanting the newsprint and cardboard separate and unbound. The County also will accept with a fee: tires, brush, and appliances. The Town currently collects newsprint, blue bags (mixed cans, aluminum, and plastic and glass bottles) and mixed paper, which are transported by the Town to the County facility.

The County accepts our blue bags, but these are more of a nuisance for their separation staff and add to the solid waste stream. We also pick up brush on request. Generally, everything the Town collects is in-line with what the County accepts except that our blue bags, which are primarily for transport purposes, are something the County would prefer we eliminate. The County needs the Town to tag the problem bags (as we do), encourage residents to keep the recycling clean with no food products or containers, and would prefer that the Town stop accepting glass in blue bags. They would prefer glass be kept separate as with cardboard, newsprint, and mixed paper. To do away with blue bags, the Town will need to modify the collection process and equipment handling and keep recycling elements separate.

- 4) **Question:** In your December report, you denoted that "wear and tear on vehicles and staff isn't economical", but failed to provide any supporting analytical data to support your point. Assuming that this wasn't a WAG, please provide the data sets you have in addition to the data for the rest of the refuse and recycling program in addition to the refuse program. We inquired about the cardboard recycling program in December and were just last month told that the program barely breaks even or even loses a bit of money. What is the process for evaluating internal processes within the Public Works Department's because when pressed about why we still take cardboard to Culpeper, you stated, "Because we've always done it that way", which isn't an acceptable answer when the elected officials have to report back to our constituents? We also asked for an evaluation of this program.

Response: At the beginning of the recycling program, the Town found that taking cardboard to a commercial recycling facility was worthwhile. As can be seen from the attached table, in the earlier years, we are missing some data, but the market used to pay between a high of \$82/ton to \$25/ton. Now the market is paying around \$8/ton. Our weekly tonnage is 3.63 tons/week, which will yield the Town just under \$30.00. With a 50 miles round trip, the fuel costs would be between \$12 and \$20. Using government reimbursement rates would yield vehicle costs well in excess. Adding direct labor would bring this to more than \$30.00 per trip. Public works are suggesting we take it to the Fauquier County facility.

- 5) **Question:** We asked for the landfill agreement with the County, which you attached, is this renegotiated each year?

Response: Staff would defer to the Town Attorney on this matter. Our understanding is the agreement from the County Board of Supervisors is a waiver of the solid waste tipping fee that the landfill charges commercial haulers of solid waste. It is tied to a limit of \$200,000 that equates to 4000 tons per year, which is more than our typical annual contribution to the County Landfill. To date, this has not been negotiated but granted based on an estimate that meets the Town's needs and production. Since 2003 until now, our average refuse tonnage is 3859 Tons.

- 6) **Question:** In December, we asked for a cost comparison for outsourcing refuse service versus keeping it in house but have yet to receive any information on this.

Response: A cost comparison would require a reasonably detailed evaluation to adequately compare the level of service our Town residents have come to expect and the service that would be provided by contract and the ability to compare the two. For example, our Solid Waste crews and equipment stand available to accommodate the various public facilities and parks, and special events such as First Fridays, parades, and our 4th of July celebration. Contracts for residential collection from private haulers will be challenging to quantify how these will be accommodated. Staff can proceed with obtaining cost estimates but would need more time and further analysis. A number used in general analysis locally is around \$250.00 a household.

- 7) **Questions:** We asked how many recycling/trash bags were picked up that past several years to also utilize data to gauge the participation in the recycling program and cost-effectiveness.

Response: Only residents can pick up blue bags, and their address is checked upon pick-up. Our records show the following orders for blue bags over the last several years:

FISCAL YEAR	FY20	FY19	FY18	FY17	FY16
AMOUNT	\$11,992.50	\$11,979	\$12,833.08	\$12,400.	\$14,500
UNIT QUANTITY	2,118	2,118	2,000	2,000	2,000

Approximately 2000 citizens pick up the bags per year and participate in the program. A more thorough evaluation will be needed to determine how many Recycle bins would be necessary to initiate a plan that would replace the Blue Bag Program. The cost for a 50 Gallon Recycles Roller Bin is approximately \$98.53. Assuming 2000 to get started, this would be about \$197,000. We would no longer need to pay the \$12,000 for the blue bags, and the bins would last multiple years, assume eight to ten on average. Collections would be limited to solid waste trucks or enclosed/covered dump trucks.

RECYCLE (Blue) BAGS		Other Recycled Items			REVENUE
YEAR	TONS PICKED UP	TONS OFFICE PAPER	TONS BRUSH	TONS METAL	
2019	177.95	0.63	386.6	23.91	\$1,025.20
2018	175.51	0.63	645.5	16.10	\$1,455.66
2017	189.90	0.63	394.45	21.05	\$1,801.00
2016	184.06	0.63	367.65	7.61	\$1,378.56
2015	180.68	3.07	429.49	6.73	\$894.11
2014	198.72	0	17.12	5.93	\$2,009.25
2013	189.67	2.22	538.56	15.36	\$1,563.60
2012	181.63	6.57	670.5	41.07	\$9,549.30
2011	191.82	9.00	271.87	40.90	\$3,217.40
2010	179.18	6.33	185.57	20.24	\$1,901.76
2009	186.37	7.59	266.02	19.29	\$1,015.30
2008	157.16	6.94	213.65	19.16	\$2,976.03
2007	137.09	9.29	193.96	41.94	\$732.00
2006	145.8	8.35	175.39	83.96	
2005	138.92	5.50	291.23	35.39	\$1,780.95
2004	128.97	28.60	313.04	33.60	139.8
2003	134.07	7.45	532.26	19.62	

JULY 2012 MICRO BURST 239.50 TONS OF BRUSH

Recycling stations around Town to supplement the County transfer station on the south end of Town would be another option where separate bins could handle material segregation much like the County does. Suitable sites, security, and cost analysis will need to be conducted to consider this alternative.

- 8) **Question:** What are the efficiencies/opportunities within Public Works that we can take advantage of to allow public works employees to put the "back in the street section to address backlog"? As we spoke about the committee, sometimes these ideas can be found within the employees themselves.

Response: There are better uses of staff time to limit newsprint pick-up to once a month. We could also consider going to a once a week pick-up for solid waste. The pick-up loads will increase, requiring more round trips to the County Solid Waste Facility, so this will need to be evaluated for efficiency.

- 9) **Question:** We have spoken about a refuse fee in the past, cutting refuse service back to once a week, and the lack of efficiency that exists within the current recycling and debris pick-up.

Response: We are available to discuss suggestions or recommendations and to follow the direction of the Town Council.

ATTACHMENT 1A
SOLID WASTE COLLECTIONS
ANNUAL 2019

DATE	BLUE BAG REFUSE		SPRING / FALL CLEAN UP							COLLECTED IN BLUE BAGS				BLUE BAG TOTALS	TONS LANDFILL	TONS RECYCLE	TONS LANDFILL RECYCLE	
	REFUSE	REFUSE	HOUSE DEBRIS	CLEAN UP METAL	CHIPPED BRUSH	LEAVES	CARD BOARD	NEWS PAPER	OFFICE PAPER	GLASS	ALUMIN.	CANS	PLASTIC					%
January-20	293.44	1.31	0.00	0.00	11.78	5.00	17.55	2.89	0.06	13.82	0.93	1.49	1.12	18.67	294.75	54.64	349.39	16%
February-20	241.30	1.15	0.00	0.00	12.84	0.00	13.85	3.38	0.06	12.11	0.82	1.31	0.98	16.37	242.45	45.35	287.80	16%
March-20	272.74	0.99	0.00	0.86	14.80	0.00	14.14	2.97	0.06	10.47	0.71	1.13	0.85	14.15	273.73	45.99	319.72	14%
April-20	378.94	0.77	0.00	8.53	50.37	0.00	15.35	3.17	0.06	8.18	0.55	0.88	0.66	11.05	379.71	87.76	467.47	19%
May-20	363.65	1.35	0.00	0.00	61.64	0.00	19.58	3.77	0.06	14.29	0.97	1.54	1.16	19.31	365.00	103.01	468.01	22%
June-20	308.99	1.02	0.00	3.68	42.91	0.00	15.85	2.89	0.06	10.74	0.73	1.16	0.87	14.51	310.01	78.88	388.89	20%
July-20	323.64	1.25	0.00	0.07	13.33	42.84	18.29	3.88	0.06	13.19	0.89	1.43	1.07	17.82	324.89	95.04	419.93	23%
August-20	305.06	0.96	0.00	0.00	52.81	0.00	16.15	2.84	0.00	10.10	0.68	1.09	0.82	13.65	306.02	84.49	390.51	22%
September-20	281.44	0.85	0.00	2.71	52.10	0.00	15.29	3.06	0.09	8.99	0.61	0.97	0.73	12.15	282.29	84.55	366.84	23%
October-20	297.04	1.13	20.69	0.00	38.73	0.00	17.40	5.09	0.00	11.93	0.81	1.29	0.97	16.12	318.86	76.21	395.07	19%
November-20	278.03	0.91	0.00	7.99	17.76	68.00	14.82	3.23	0.06	9.64	0.65	1.04	0.78	13.03	278.94	123.98	402.92	31%
December-20	331.25	0.78	0.00	0.07	17.53	51.00	12.23	2.68	0.06	8.23	0.56	0.89	0.67	11.12	332.03	93.84	401.18	23%
TOTAL (tons)	3675.52	12.46	20.69	23.91	386.60	166.84	190.50	39.85	0.63	131.68	8.90	14.24	10.68	177.95	3708.67	973.75	4657.73	21%

(B) Leaves hauled to local farmer to be used as animal bedding.
(C) Cardboard hauled to ERI Inc. in Culpeper, Va.

All other items from the Town are hauled to Fauquier County landfill or recycling center.

Attachment 1B

Recycling

CARDBOARD					REFUSE/ Green Bags	
	TONS	TOTAL	REVENUE RANGE			
YEAR	PICKED UP	REVENUE	LOW	HIGH	AVG.	TONS
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NEWSPAPER

	TONS	TOTAL	REVENUE RANGE/ton		AVG.
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2015	100.2	\$1,508.97	\$6.60 JULY	\$9.79 JULY	\$15.06
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2005	202.00		\$38.00	\$45.00	
2004	198.60				
2003	193.87				

Attachment 1B

Recycling

RECYCLE (Blue) BAGS		Other Recycled Items			
	TONS	TONS	TONS	TONS	REVENUE
YEAR	PICKED UP	OFFICE PAPER	BRUSH	METAL	METAL
2019	177.95	0.63	386.6	23.91	\$1,025.20
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2017	189.90	0.63	394.45	21.05	\$1,801.00
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2015	180.68	3.07	429.49	6.73	\$894.11
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2009	186.37	7.59	266.02	19.29	\$1,015.30
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JULY 2012 MICRO BURST 239.50 TONS OF BRUSH