



October 19, 2020 | Town of Vienna, VA

LEAF COLLECTION PROGRAM EVALUATION WORK SESSION WITH THE TOWN COUNCIL

NewGen
Strategies & Solutions


PRESENTATION AGENDA



- Firm and Project Team Introduction



- Project Scope and Approach



- Current Level of Service and Cost



- Alternative Levels of Service and Costs



- Program Benchmarking

NEWGEN STRATEGIES AND SOLUTIONS, LLC

OUR FIRM



10

locations nationwide



48

employees

2012
established

management and economic consulting firm created by consultants who are dedicated to each of our client's missions and recognized as experts in our respective fields of service



NewGen applies our expertise and delivers high impact solutions through our diverse and integrated market perspectives, resulting in effective decision-making and implementation



OUR PEOPLE



27%

hold professional certifications



52%

have advanced degrees

Thoughtful Decision Making for Uncertain Times



NewGen Staff Summit - 2019

42%
female

58%
male

OUR CLIENTS



Water/Wastewater



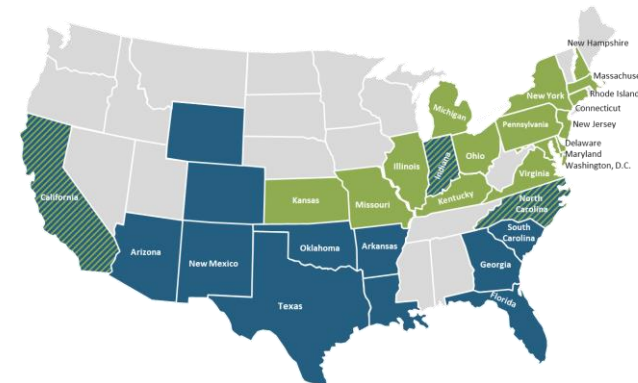
Stormwater



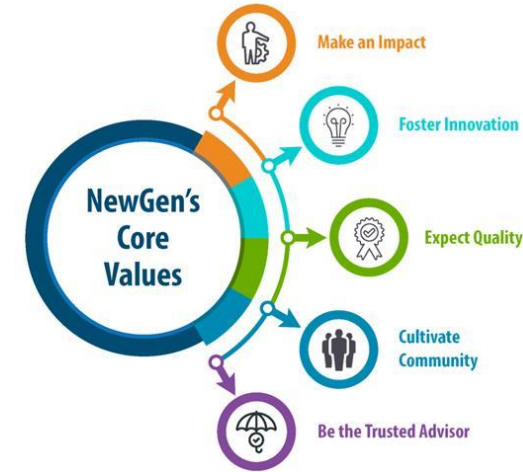
Solid Waste



Electric



OUR VALUES



Our Vision

be a consulting company that makes a difference for our clients, our employees, and in our communities



\$200,000+

since 2015, NewGen has committed to giving 1% of our **gross revenues** to charity each year. We have given over \$200k since the program's inception.

PROJECT TEAM



Dave Yanke

Managing Director – Environmental Practice
Over 25 years of experience

Areas of Expertise:

- Full Solid Waste Cost Accounting and Financial Feasibility
- Cost of Service – Public and Private Operations
- Operations Reviews and Solid Waste Management Plans
- Procurement Assistance

Range of Experience:

- Developed MSW workbooks and environmental enforcement manuals
- Frequent speaker at WasteCon, STAR, and SWANA conferences



Eric Callocchia

Executive Consultant
Over 10 years of experience

Areas of Expertise:

- Utility Cost of Service
- Utility Finance and Management
- Cash Flow Modeling

Range of Experience:

- Cost of Service Studies for 25+ VA utilities
- Contributing author to industry manuals

LEAF COLLECTION PROGRAM EVALUATION SCOPE

- Task 1 – Project Kickoff Meeting / Data Collection
- Task 2 – Regional Benchmarking
- Task 3 – Evaluate Current Leaf Collection Program Costs
- Task 4 – Operational Site Visit and Interviews
- Task 5 – Estimate Alternative Leaf Collection Program Costs
- Task 6 – Report and Presentation

LEAF PROGRAM BENCHMARKING

Jurisdiction	# of Passes	Program Date Range	FY 2020 Annual Cost	# of Households (rounded)	Residential Delivery?	Direct Charges?	Program Notes
Town of Vienna	Four to Six	October - March	\$114,625*	5,500	Delivery	None	Leaves are collected, ground, and delivered on a first come first serve basis to residents and businesses. Excess is disposed of at no cost to local businesses.
Town of Herndon	Every Other Week (approximately ten)	October - December	Unbudgeted, part of PW	5,200	None	None	Leaves are collected, stored, and brought directly to local businesses at no cost.
City of Fairfax	Four times in April (Tuesdays) and once every two weeks between October and December	October - January	Unbudgeted, part of PW	26,000	None	None	Leaves are collected and brought to Prince William County and a private business. Leaves are stored for a short time if necessary.
City of Falls Church	Four	October - Early January	\$179,000	6,000	Pickup	None	Leaves are collected, mulched, and are available at the Falls Church Recycling Center while supplies last.
Fairfax County	Three	November - January	\$2,383,000	14,503	Pickup	Leaf Levy is \$0.012 per \$100 AV	Leaves are taken to Pine Ridge Park on Woodburn Road, ground into mulch and distributed to various public sites around the county. Free leaf mulch is available for pickup while supplies last.
Town of Leesburg	Once every Five to Seven Business Days (approximately ten)	October - December	Unbudgeted, part of PW	11,000	None	None	Grind at site, contact out mulch hauling to local businesses who take it at no cost.
Arlington County	Two Plus a follow up	November - December	Unbudgeted, part of Dept. of Environmental Services Estimate is \$980,000	33,000	Delivery	Program is included in \$306 annual refuse collection fee. \$75 per load for delivery.	Leaves are ground and stored in several locations then distributed to residents only and within the County (parks).

*Vienna's FY 2020 annual cost includes actual O&M and estimated vehicle replacement costs.

CURRENT LEAF COLLECTION LEVEL OF SERVICE

- Program operates from October 1 through March 31
 - Limitation on use of Beulah Road site defined by Operating Permit
- Town makes four to six passes with leaf loaders (vacuums)

	FY 2018	FY 2019	FY 2020
Total Passes	6	5	4
Volume Collected (Cubic Yards)			
October	217	168	217
November	3,493	3,493	2,730
December	5,292	5,264	4,872
January	399	126	833
Total Collection Volume (CY)	9,401	9,051	8,652
<i>% Change</i>		<i>(3.7%)</i>	<i>(4.4%)</i>

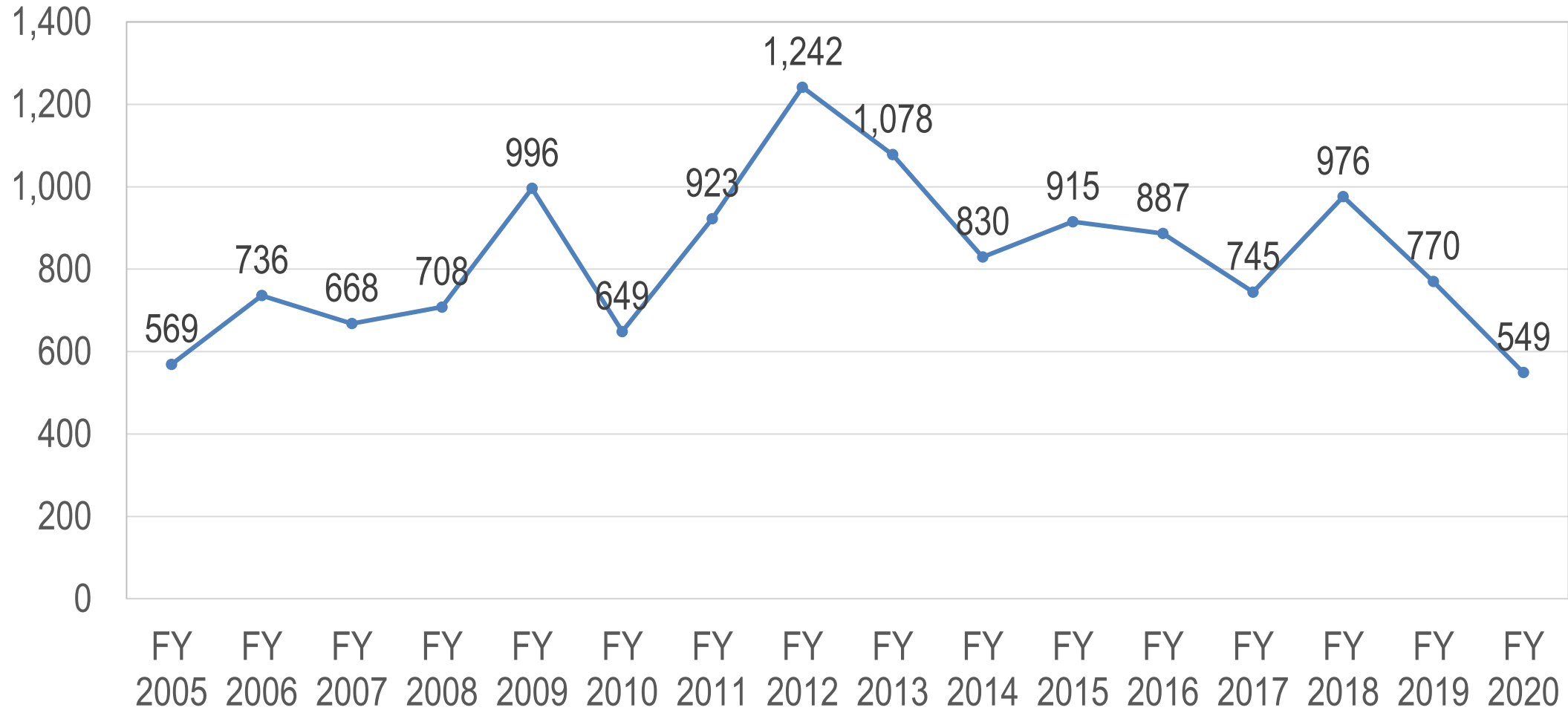
CURRENT LEAF COLLECTION LEVEL OF SERVICE

- The Town grinds leaves into mulch and delivers to Vienna residents / businesses at no charge
- Total mulch delivery loads and volume delivered:

	FY 2018	FY 2019	FY 2020
January	517	364	318
February	459	324	231
March	-	82	-
Total Loads Delivered	976	770	549
<i>% Change</i>		<i>(21.1%)</i>	<i>(28.7%)</i>
Total Volume Delivered (CY)	2,927	2,309	1,646
<i>% Change</i>		<i>(21.1%)</i>	<i>(28.7%)</i>

- Post-Grinding volume is about 1/3 of collected volume.
- Delivered mulch is approximately 1/3 of post-grinding volume.

HISTORICAL MULCH DELIVERY ORDERS



EXISTING PROGRAM COST OF SERVICE – OPERATING COSTS

- Personnel – Overtime and associated benefits
- Rolling Stock Maintenance – Vehicle repairs and maintenance during leaf collection season
- Fuel – vehicle fuel during leaf collection season
- Disposal costs – estimated cost of disposal of remaining mulch after all deliveries have been made. This historically has not been a cost incurred by the Town.

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Personnel	\$50,150	\$51,404	\$52,689	\$54,006	\$55,356
Rolling Stock Maintenance	\$23,425	\$24,010	\$24,611	\$25,226	\$25,857
Fuel	\$14,275	\$14,632	\$14,998	\$15,373	\$15,757
Disposal Costs	\$26,775	\$27,444	\$28,130	\$28,834	\$29,555
Total Operating Costs	\$114,625	\$117,490	\$120,428	\$123,438	\$126,524

EXISTING PROGRAM COST OF SERVICE – CAPITAL COSTS

- The Department of Public Works uses two types of vehicles for leaf collection
 - Vehicles 100% dedicated to leaf collection (leaf loaders and grinder)
 - Vehicles partially dedicated to leaf collection (tandem trucks, pickup trucks, skid steer)
 - NewGen allocated 20% of the cost of these vehicles to the leaf collection program.

Rolling Stock Replacement	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Dedicated to Leaf Program	-	37,872	39,454	-	42,618	44,200	-	-	-	-
Multi-Purpose Vehicles (Allocated 20%)	31,758	34,938	36,336	-	45,372	-	39,417	59,664	65,877	7,798
Total Planned Vehicle Replacement	\$31,758	\$72,810	\$75,790	-	\$87,990	\$44,200	\$39,417	\$59,664	\$65,877	\$7,798
Capitalized Replacement Costs	-	\$8,544	\$28,132	\$48,521	\$48,521	\$63,649	\$55,952	\$46,167	\$62,218	\$56,269

- The above table does not include replacing the Town’s 17-year old grinder.

LEAF GRINDING ALTERNATIVES

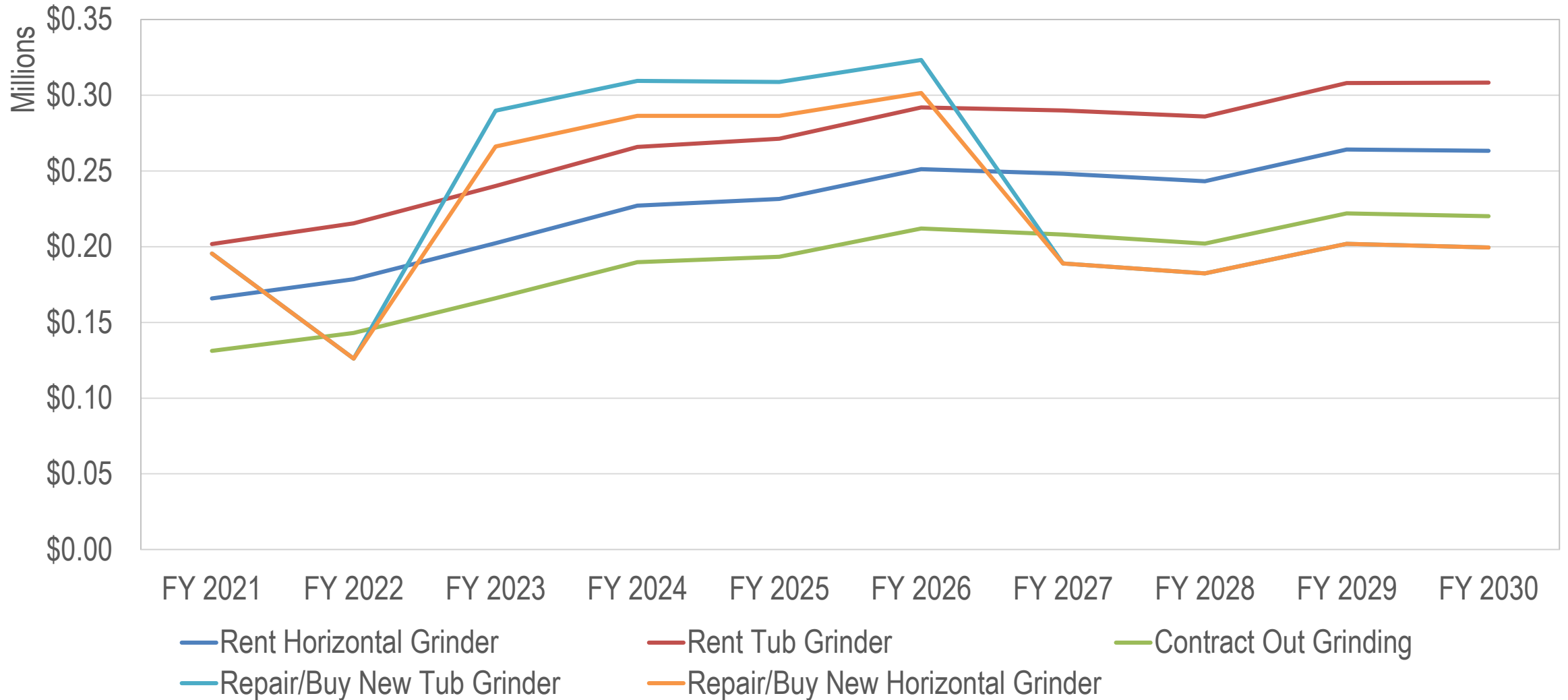
- The Town's tub grinder is currently out of service and in need of repairs.
- The Town has several grinder options:

Grinder Option	Cost	Timing
Repair Tub Grinder*	\$80,891	FY 2021
Rent Horizontal Grinder	\$60,000	Annually
Rent Tub Grinder	\$96,000	Annually
Contract Out Grinding	\$35,408	Annually
Repair/Buy New Tub Grinder	\$504,741	FY 2022
Repair/Buy New Horizontal Grinder	\$420,201	FY 2022

*Repair includes a 20% increase in repair estimate provided to the Town to account for unknown repairs that can only be identified after grinder disassembly.

- Contracting out grinding assumes that the Town grind 100% of collected leaves.

CURRENT PROGRAM COST PROJECTIONS



ALTERNATIVE PROGRAMS CONSIDERED

- Continuing current operation with additional disposal costs
- Prior to 10/1, two alternative programs were proposed that eliminated the grinding and delivery services:
 - Direct Haul – Collect leaves and haul them directly for disposal
 - Short Haul – Collect leaves, consolidate loads onto a larger vehicle, and then haul directly for disposal
- The two alternatives depended on the Town's ability to dispose of unprocessed leaves at no cost, which will no longer be an option post November 2020.
- Therefore, the only alternative developed in detail was the elimination of the leaf collection program.

COST ESTIMATE OF LEAF PROGRAM ELIMINATION

- Without Town leaf collection, residents must either:
 - Hire a landscaping company to collect and dispose of their leaves
 - Collect and bag leaves and leave them for the Town’s general yard waste collection
 - Compost a portion of leaves on their property and bag the rest as yard waste
- Includes the purchase of an additional trash truck to handle increased yard waste volume and additional disposal costs for unprocessed leaves.

No Leaf Collection Program	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Elimination of Leaf Collection Program O&M	(\$114,625)	(\$117,490)	(\$120,428)	(\$123,438)	(\$126,524)
Additional Trash Truck Purchase (\$225k, capitalized)	\$ -	\$63,000	\$61,313	\$59,625	\$57,938
Additional Vehicle Maintenance (5.0% of truck value)	\$11,250	\$11,531	\$11,820	\$12,115	\$12,418
Additional Fuel (estimate based on current costs)	\$2,000	\$2,050	\$2,101	\$2,154	\$2,208
Additional Disposal Cost	\$45,423	\$46,559	\$47,723	\$48,916	\$50,138
Net Impact on Town Costs	(\$55,952)	\$5,649	\$2,528	(\$629)	(\$3,823)