#### TOWN OF ANNPOLIS ROYAL

Topic: Equipment Replacement Policy	Supersedes: 2015-1, 2016-3
Policy No.: 2017-6 Effective Date: April 18, 2017	Approved by Council Motion No.: 13

### Policy Statement:

#### 1.0 PURPOSE:

The purpose of this Equipment Replacement Policy is to propose a vehicle replacement plan for the Town to follow, and the specific vehicle and equipment needs and requirements of the Town. This policy reflects the vision of the Town of Annapolis Royal to create a multi-year vehicle and equipment replacement plan that will serve as a guide in providing direction to meet needs. This is a living document that will be modified and updated annually to reflect changes in the Town's organizational climate, the changing needs of citizens and changes in the automotive and equipment industry. The Town of Annapolis Royal Department of Public Works is assigned the overall responsibility for managing the Pubic Works' fleet of vehicles and construction/maintenance equipment. The Annapolis Royal Police Department is responsible for the fleet of vehicle and police equipment. These Departments, in conjunction with the Town CAO¹, work to: develop vehicle and equipment specifications; develop vehicle and equipment replacement schedules, acquire vehicles and equipment; and reassign and dispose of vehicles and equipment. The vehicle and equipment maintenance function are assigned solely to the Department of Public Works and to the Annapolis Royal Police Department.

#### 2.0 ORGANIZATIONS AFFECTED:

This policy shall apply to all vehicles and equipment of the Town of Annapolis Royal that is managed by Department of Public Works and the Annapolis Royal Police Department.

#### 3.0 POLICY:

It is the policy of the Town of Annapolis Royal to enforce all guidelines dictated in this policy regarding maintenance, replacement time, and specifications of all vehicles and equipment for departments of Public Works and the Annapolis Royal Police.

#### 4.0 OBJECTIVES:

The primary objectives of the Town is to control the overall cost of operating and maintaining the fleet of vehicles and equipment, to maintain vehicles and equipment in a manner that extends their useful life, to control the growth in size of the fleet, to standardize the composition of the fleet and to accurately budget for maintenance and replacement costs. All new purchases for vehicles and equipment are part of the budget cycle and are coordinated through the CAO for recommendation.

#### 5.0 ACQUISITION:

The goal of the Town's acquisition practices is to obtain the lowest possible price and the highest possible

<sup>&</sup>lt;sup>1</sup> Chief Administrative Officer

quality for vehicles and equipment. All purchases of vehicles and equipment will follow the applicable purchasing codes. Annually before the preparation of the Town Budget, the Public Works Superintendent and the Annapolis Royal Chief of Police will review the equipment replacement schedule and plan for the acquisition of replacement vehicles and equipment. Any request for new equipment that would increase the size of the fleet must be cost justified to the CAO and Town Council.

#### 6.0 MAINTENANCE:

The goal of the Department of Public Works and the Police Departments vehicle and equipment maintenance practices is to keep vehicles and equipment in sound operating condition. Preventative maintenance routines and intervals followed by our staff are based on local driving conditions and manufacturer's recommendations for each type of vehicle or equipment and each type of maintenance service. Maintenance costs represent a significant portion of the total cost to own and operate a vehicle or piece of heavy equipment and tend to increase as a vehicle or equipment ages. Escalating maintenance costs are a key factor in determining when to replace a vehicle. In addition to the added cost of maintenance as a vehicle ages, there is an additional cost to the Town when a vehicle is in the garage receiving maintenance and not available for use. Preventive maintenance is the key to avoiding the repair or replacement of costly major vehicle components such as engines, transmissions and drive trains.

#### 7.0 REPLACEMENT:

As with other aspects of vehicle and equipment management, replacing a vehicle too soon or too late wastes money. The Department of Public Works has developed and will continue to develop accurate replacement standards based on industry guidelines and years of experience in operating and maintaining vehicles and equipment.

The goal is to analyze the costs associated with a vehicle or piece of equipment and identifying the point when, on average, a vehicle is reasonably depreciated but not yet incurring significant maintenance costs. By replacing the vehicle or piece of equipment at this point, the Town can avoid escalating maintenance costs and optimize resale value. The three criteria that are considered when establishing the replacement schedule were mileage, age and use. Any request for replacement equipment must be cost justified to the CAO and Town Council.

#### 8.0 DEVELOPMENT OF GUIDELINES AND PROCEDURES:

The Public Works Superintendent and the Chief of Police have inventoried existing vehicles and equipment and have also prepared a replacement schedule for all public works and police pieces. The schedule will be updated annually and will be used as the basis for planning for the replacement of vehicles and equipment through the Town budget. The vehicle and equipment replacement schedule will include the following information for each vehicle or unit of capital equipment:

- a. Age in years, also known as life
- b. Usage in hours or kilometers
- c. Useful life (based on commonly used standards for municipal vehicles and equipment)
- d. Cost of maintenance
- e. Overall condition: mechanical, operating, safety, or appearance
- f. Downtime
- g. Availability of replacement parts
- h. Funding

The guidelines for vehicles considered for replacement are based on vehicles meeting predetermined age and/or hour and/or mileage criteria. Additional consideration is given to functionality and overall condition of the vehicle or equipment.

As vehicles reach the threshold miles or age of replacement criteria, a vehicle maintenance evaluation is performed by a Department of Public Works and Police employees. The evaluation form will be provided to the Public Works Superintendent and Chief of Police for further review and consideration. If the evaluation proves the vehicle would be economical to retain for an additional year, the vehicle will be targeted for retention. Depending on the availability of funds, vehicles and equipment will be replaced when they are at the end of their economic life, no longer safe to operate, not reliable enough to perform their intended function, or there is a demonstrated cost savings to the Town of Annapolis Royal.

#### 9.0 VEHICLE CATEGORIES:

For purposes of review the vehicles and equipment of the Town have been listed below. Each type of equipment is described below, along with an outline of why it is essential to the operations of the Town. Replacement cost, useful life range, and actual life usage information, for each item is summarized below in **Figure 1**.

- 9.1 2008 Ford F550 1 Ton This is the Town's main snowplow, dump truck and salt truck. This is also used for maintenance of roads, sidewalks, sewer and water lines.

  SPECS: 4x4, automatic, V-8 Twin Turbo, 11' Dump Box, Power windows & heated mirrors.
- 9.2 2010 GMC ½ ton The Town owns one truck which is used for maintenance of roads, sidewalks, sewer lines, water lines and compost collection, as well as the transportation of equipment, materials and signage.

  SPECS: Basic model with power tailgate.
- 9.3 2012 GMC ½ ton This vehicle is used mostly by the PW superintendent for similar functions as the other ½ ton. Use of this vehicle extends the life of the 1 ton, which is substantially more expensive to replace (\$25K versus \$70K). This truck also serves as a backup for the primary maintenance truck.

  SPECS: Basic model with power tailgate.
- 9.4 2015 Kubota This is the Town's main sidewalk snow blower and it also maintains trails and roads. The front end loader doubles for other Town uses.
   SPECS: 68" wide, 30 Horse Power, Factory Cab, complete with air, narrow turf tires.
- 9.5 2011 B3000 Kubota- This snow blower fits in tighter spots in Town and is used as the backup for the main machine. This has greatly reduced overtime due to two staff members being able to clear sidewalks at the same time. This machines is used as a sidewalk sweeper in summer time. SPECS: 68" wide, 30 Horse Power, Factory Cab complete with air, narrow turf tires.
- 9.6 2004 Backhoe This machine is used for repairing water breaks, shouldering roads, moving snow, sewer breaks, and the like. This also serves as a back-up for the 1 ton for snow clearing. SPECS: 4x4, Turbo, Ext. Hoe, quick attachments.
- 9.7 2016 Ride on Tractor This is used exclusively for mowing town owned lands. This is relatively inexpensive to run instead of the cost of a multi-functional machine. SPECS: Zero turn radius and 60 inch cut.
- 9.8 2009 Chev Impala This is a back-up car which permits ARPD<sup>2</sup> to be able to answer calls when

<sup>&</sup>lt;sup>2</sup> Annapolis Royal Police Department

on call out. The on call member takes this car with them to their house which permits them to respond directly to calls without having to come in to get the marked car. When the marked car is down for repair or out of Town, this vehicle is used to continue daily work. (Previous marked car converted to unmarked car).

SPECS: Police Package, heavy duty suspension, Front or rear wheel drive, cloth front bucket seats, vinyl rear seat, heavy duty battery, etc.

9.9 2014 Charger – This is the main Police car which is used daily. This car is used between 10-12 hours per day. This car was purchased in 2013.
 SPECS: Police Package, heavy duty suspension, Front or rear wheel drive, cloth front bucket seats, vinyl rear seat, heavy duty battery, etc.

Figure 1: Summary of Vehicles and Equipment Status Report (as of March 2017)

Vehicle Type	Replacement Cost (in dollars)	Useful Life Range (in years)	Actual Years of Use	Actual KM	Actual Hours
2008 Ford F550 Truck (1 ton)	50,000-70,000	10	9	42700	
2010 GMC (1/2 ton)	20,000-25,000	10	7	70398	
2012 GMC Sierra (1/2 ton)	20,000-25,000	10	5	27527	
2015 Kubota	56,000-60,000	10	1		272
2011 B3000 Kubota	25,000-30,000	10	, 6		430
2004 Backhoe	100,000-115,000	12	13		2424
2016 Ride on Tractor	5,000-7,000	8	1		20
2009 Impala	30,000-45,000	6	8	277000	
2014 Charger	40,000-50,000	6	4 <sup>3</sup>	140113	

<sup>&</sup>lt;sup>3</sup> Charger was purchased in 2013

10.0 REPLACMENT POINT SYSTEM: Figure 2 is a scoring schema used for rating the condition of the various equipment pieces and identifies the need for replacement based on their score. These scores can be found in *Appendix A*.

Appendix  $\vec{B}$  identifies the equipment replacement year and the associated dollar values for annual reserve allocations.

Figure 2: Replacement Point System

Factor	Points	
Age	1 point for each 10% (year of chronological age, based on in-service	
	date) of estimated useful life	
KM/Hours	1 point for each 15,000 kilometer or 750 hours of use	
Type of Service	1 to 5 points are assigned based on the type of service that the vehicle or equipment had during most of its life. The more severe the type of service performed the higher the number assigned. (included snow corrosion)	
Reliability	1 to 5 points are assigned depending on the frequency that a vehicle or equipment piece is in the shop for repair. The more the frequency of shop visits the higher the number.	
Maintenance	1 to 5 points are assigned based on total life maintenance and repair costs (not including repair of accident damage). A 5 is assigned to a vehicle with life repair costs equal or greater to the vehicle's original purchase price and a 1 is given to a vehicle with life repair costs equal to 20% or less of its original purchase cost.	
Condition	This category takes into consideration body condition, rust, interior condition, accident history, anticipated repairs, etc. a scale of 1 to 10 points is used with the higher the number the worse the condition.	
Criticality & ease of replacement	1 to 5 points is allocated to the critical elements of reliance on this equipment and the ease of replacement. If the equipment is absolutely necessary and cannot function otherwise, the score is 5. If the equipment can easily be replaced or rented out the lower the score.	
	Point ranges	
Under 25 points Condition I: Excellent		
26 to 30 points	Condition II: Good	
31 to 35 points	Condition III: Qualifies for replacement	
36 or more points		

Mayor William MacDonald

Chief Administrative Officer Gregory Barr

### Appendix A

Factor	F550 Truck Year: 2008 (1 Ton)	
Age	9/10 = 90% 9	
KM/Hours	2.8	
Type of Service	5	
Reliability	4	
Maintenance	1.15 \$11,4K/\$50K	
Condition	8 Check engine light is now on, needs to go to Belliveau Motors	
Criticality	5	
Total	34.95	
	Point ranges	
Under 25 points	Condition I: Excellent	
26 to 30 points	Condition II: Good	
31 to 35 points	Condition III: Qualifies for replacement	
36 or more points		

Factor	2010 GMC (1/2 ton)	
Age	7/10 = 70% 7	
KM/Hours	4.7	
Type of Service	3	
Reliability	3	
Maintenance	1.3 \$5.3K/\$20K	
Condition	7	
Criticality	3	
Total	29	
	Point ranges	
Under 25 points	Condition I: Excellent	
26 to 30 points	Condition II: Good	
31 to 35 points	Condition III: Qualifies for replacement	
36 or more points		

Factor	2012 GMC Sierra (1/2 ton)	
Age	5/10 =50%	
	5	
KM/Hours	1.8	
Type of Service	2	
Reliability	1	
Maintenance	1	
	\$4.2K/\$22K	
Condition	3	
Criticality	5	
Total	18.80	
	Point ranges	
Under 25 points	Condition I: Excellent	
26 to 30 points	Condition II: Good	
31 to 35 points	Condition III: Qualifies for replacement	
36 or more points	Condition IV: Needs immediate consideration	
L		

Factor	2015 Kubota
Age	1/10 = 10%
	1
KM/Hours	0
Type of Service	1
Reliability	1
Maintenance	1
Condition	1
Criticality	5
Total	10
	Point ranges
Under 25 points Condition I: Excellent	
26 to 30 points	Condition II: Good
31 to 35 points	Condition III: Qualifies for replacement
36 or more points	Condition IV: Needs immediate consideration
L <u>.</u>	

Factor	2011 B3000 Kubota	
Age	6/10=60%	
	6	
KM/Hours	.57	
Type of Service	3	
Reliability	3	
	In shop twice for A/C	
Maintenance	1	
	\$9K/\$25	
Condition	2	
Criticality	4	
Total	19.57	
	Point ranges	
Under 25 points	Condition I: Excellent	
26 to 30 points	Condition II: Good	
31 to 35 points	Condition III: Qualifies for replacement	
36 or more points	S Condition IV: Needs immediate consideration	

Factor	2004 Case Backhoe	
Age	13/12=110%	
	11	
KM/Hours	3	
Type of Service	5	
Reliability	3	
Maintenance	1 \$16.8K/\$90K	
Condition	7	
Criticality	5	
Total	35	
	Point ranges	
Under 25 points	Condition I: Excellent	
26 to 30 points	Condition II: Good	
31 to 35 points	Condition III: Qualifies for replacement	
36 or more point	S Condition IV: Needs immediate consideration	

Factor	2015 Ride on Tractor	
Age	1	
KM/Hours	0	
Type of Service	5	
Reliability	1	
Maintenance	1	
Condition	1	
Criticality	3	
Total	12	
	Point ranges	
<b>Under 25 points</b>	Condition I: Excellent	
26 to 30 points	Condition II: Good	
31 to 35 points	Condition III: Qualifies for replacement	
36 or more points	S Condition IV: Needs immediate consideration	

Factor	2009 Impala (unmarked Police Car)	
Age	8/6=133%	
	13.3	
KM/Hours	18.5	
Type of Service	5	
Reliability	5	
Maintenance	1.25	
	\$10.6/\$42	
Condition	8	
Criticality	2	
Total	53.05	
	Point ranges	
Under 25 points	Condition I: Excellent	
26 to 30 points	Condition II: Good	
31 to 35 points	Condition III: Qualifies for replacement	
36 or more poin	ts Condition IV: Needs immediate consideration	

Factor	2014 Charger (Marked Police Car)	
Age	4/6=80%	
	8	
KM/Hours	9.34	
Type of Service	5	
Reliability	3	
Maintenance	1	
	\$8.1K/\$42	
Condition	4	
Criticality	5	
Total	35.34	
	Point ranges	
Under 25 points	Condition I: Excellent	
26 to 30 points	Condition II: Good	
31 to 35 points	Condition III: Qualifies for replacement	
36 or more poin	ts Condition IV: Needs immediate consideration	

Appendix B

Town of Annapolis Royal Vehicle and Equipment Replacement Year

Equipment	Life/Useful	Dollar Value	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Ride on	1/8	\$7K	\$1	\$1	\$1	\$1	\$1	\$1	\$1
1 ton F550	9/10	\$60K (\$10K trade in)	\$25	\$25*	\$6	\$6	\$6	\$6	\$6
Police Car	8/6 & 4/6	\$60K	\$25*	\$25	\$20	\$20*	\$20	\$20	\$20
Case Backhoe	13/12	\$100K (\$20K trade in)	\$25	\$25	\$25	\$25*	\$8.5	\$8.5	\$8.5
2011 B3000 Kubota	6/10	\$30K (\$10K trade in)	\$6	\$6	\$6	\$6*	\$3	\$3	\$3
2015 Kubota Sierra	2/10	\$35K (\$15K trade in)	\$3.5	\$3.5	\$3.5	\$3.5	\$3.5	\$3.5	\$3.5
2012 GMC (1/2 ton)	7/10 &5/10	\$25K	\$4	\$4	\$4	\$4	\$4*	\$4	\$2.5
		TOTALS	\$89.5K	\$89.5K	\$65.5	\$65.5K	\$46K	\$46K	\$44.5K

<sup>(\*)</sup> Year of Anticipated Replacement