

MERGED AGENDA SPECIAL COUNCIL MEETING

Monday, May 11, 2020, 12:00 P.M. - 4:00 P.M. Board Room, Service and Resource Centre, 411 Dunsmuir Street, Nanaimo, BC

			Pages				
1.	CALL	L TO ORDER:					
2.	PROCEDURAL MOTION:						
3.	INTR	RODUCTION OF LATE ITEMS					
4.	APPF	ROVAL OF THE AGENDA:					
5.	ADO	PTION OF THE MINUTES:					
	a.	Minutes	5 - 11				
		Minutes of the Regular Council Meeting held in the Shaw Auditorium, Vancouver Island Conference Center, 80 Commercial Street, Nanaim Monday, 2020-APR-27, at 4:30 p.m.					
6.	MAY	OR'S REPORT:					
7.	CON	ISENT ITEMS:					
	a.	Add - Committee Recommendation					
		1. Approval of Special Health and Housing Task Force Meetir Recommendation - 2020-MAY-06	ng 12				
		[Note: A link to the Agenda for the 2020-MAY-06 Special F Housing Task Force Meeting is attached for information.]	lealth and				
		1. Food Security Working Group Update and Rev Food Security Working Group Guidelines	riew of				
		That Council endorse the Food Security Working	na Group				

guidelines.

8.

REPORTS:

a. 2020-2024 Financial Plan Amendment Bylaw

13 - 17

To be introduced by Shelley Legin, General Manager, Corporate Services.

Purpose: To introduce "Financial Plan Amendment Bylaw 2020 No. 7307.01" for first, second and third readings and adoption.

Recommendation:

- 1. That "Financial Plan Amendment Bylaw 2020 No. 7307.01" (To amend the 2020 2024 Financial Plan), pass first reading;
- 2. That "Financial Plan Amendment Bylaw 2020 No. 7307.01" pass second reading;
- That "Financial Plan Amendment Bylaw 2020 No. 7307.01" pass third reading; and
- That "Financial Plan Amendment Bylaw 2020 No. 7307.01" be adopted.

b. 2020 Property Tax Rates Bylaw

18 - 25

To be introduced by Shelley Legin, General Manager, Corporate Services.

Purpose: To introduce "Property Tax Rates Bylaw 2020 No. 7309" for first, second, third readings and adoption.

Recommendation: That:

- 1. "Property Tax Rates Bylaw 2020 No. 7309" (To set the property tax rates for 2020) pass first reading;
- 2. "Property Tax Rates Bylaw 2020 No. 7309" pass second reading;
- 3. "Property Tax Rates Bylaw 2020 No. 7309" pass third reading; and,
- 4. "Property Tax Rates Bylaw 2020 No. 7309" be adopted.

c. Internal Borrowing Resolution

26 - 27

To be introduced by Shelley Legin, General Manager, Corporate Services.

Purpose: To have Council approve an internal borrowing resolution for the portion allocated to growth for Sanitary Sewer project DCC SS19: Millstone Trunk South.

Recommendation: That Council approve additional internal borrowing from the Development Cost Charge (DCC) City Wide Drainage Reserve Fund in the amount of \$672,600 in 2020 to fund the Sanitary Sewer DCC project SS19: Millstone Trunk South, for a 20-year term at an interest rate of 2%. Repayment of the internal borrowing to be from sewer operations.

d. Quarterly Purchasing Report (Single and Sole Source, Purchases in Excess of \$250,000 and Instances of Non-Compliance Purchases)

28 - 33

To be introduced by Shelley Legin, General Manager, Corporate Services.

Purpose: To provide information in compliance with the City's Procurement Policy (03-1200-01) regarding single and sole source purchases, awards in excess of \$250,000 and policy non-compliance.

e. Automated Garbage Trucks - Equipment Financing

34 - 35

To be introduced by Shelley Legin, General Manager, Corporate Services.

Purpose: To introduce a resolution for Council's approval, which is required for staff to make borrowing arrangements with the Municipal Finance Authority (MFA) for an additional automated garbage truck.

Recommendation: That Council approve the borrowing of up to \$406,585 through the Municipal Finance Authority's (MFA) Equipment Financing Program to purchase one (1) additional automated garbage truck in 2020.

f. Green Fleet Strategy

36 - 88

To be introduced by Bill Sims, General Manager, Engineering and Public Works.

Purpose: To present Nanaimo's Green Fleet Strategy to Council for adoption, and advise Council of the City's Green Fleet Rating.

Presentation:

1. Bill Sims, General Manager, Engineering and Public Works.

Recommendation: That Council adopt the City of Nanaimo Green Fleet Strategy 2020.

g. Advocacy Framework

89 - 101

To be introduced by Sheila Gurrie, Director, Legislative Services.

Purpose: To provide Council with an Advocacy Framework document in order to offer Council a tool that can be used to clearly and succinctly outline an advocacy strategy for the topic(s) of their choosing.

h. Add - Potential Capital Projects Discussion

102 - 106

To be introduced by Jake Rudolph, Chief Administrative Officer.

Purpose: The purpose of this report is to provide an opportunity for Council discussion on a potential suite of capital projects for consideration of future potential stimulus programs and advocacy opportunities.

9. BYLAWS:

a. Bylaw Status Sheet (For Information)

107 - 110

10. NOTICE OF MOTION:

11. AGENDA PLANNING:

a. Agenda Planning

111 - 117

To be introduced by Sheila Gurrie, Director, Legislative Services.

Purpose: To provide Council the opportunity to have a round table discussion in order to review and prioritize topics for Special Council Meetings, in future Governance and Priorities Committee Meetings.

12. QUESTION PERIOD:

13. ADJOURNMENT:

MINUTES

REGULAR COUNCIL MEETING SHAW AUDITORIUM, VANCOUVER ISLAND CONFERENCE CENTRE, 80 COMMERCIAL STREET, NANAIMO, BC MONDAY, 2020-APR-27, AT 4:30 P.M.

Present: Mayor L. Krog, Chair

Councillor S. D. Armstrong

Councillor D. Bonner (joined electronically)

Councillor T. Brown Councillor B. Geselbracht Councillor E. Hemmens

Councillor Z. Maartman (joined electronically) Councillor I. W. Thorpe (joined electronically) Councillor J. Turley (joined electronically)

Staff: J. Rudolph, Chief Administrative Officer

D. Lindsay, General Manager, Development Services B. Sims, General Manager, Engineering and Public Works

S. Legin, General Manager, Corporate Services

L. Mercer, Director, Finance (arrived 7:00 p.m., vacated 7:32 p.m.)
J. Holm, Director, Development Approvals (arrived 7:00 p.m.)

B. Corsan, Director, Community DevelopmentL. Bhopalsingh, Manager, Community Planning

F. Farrokhi, Manager, Communications

M. Desrochers, Technical Support Specialist - Network (arrived 7:00 p.m.)
D. Johnstone, Communications and Digital Content Specialist (arrived 7:00 p.m.)

S. Gurrie, Director, Legislative Services

K. Robertson, Deputy City Clerk S. Snelgrove, Recording Secretary

1. CALL THE REGULAR MEETING TO ORDER:

The Regular Council Meeting was called to order at 4:33 p.m.

2. PROCEDURAL MOTION TO PROCEED IN CAMERA:

It was moved and seconded that the meeting be closed to the public in order to deal with agenda items under the *Community Charter:*

Section 90(1) A part of a Council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

- (a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality;
- (c) labour relations or other employee relations;

(n) the consideration of whether a Council meeting should be closed under a provision of this subsection or subsection (2); and,

Section 90(2):

(b) the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party.

The motion carried unanimously.

Council moved "In Camera" at 4:33 p.m. Council moved out of "In Camera" at 6:46 p.m.

Council recessed the Open Meeting 6:46 p.m. Council reconvened the Open Meeting at 7:00 p.m.

Mayor Krog announced the meeting would be held in accordance Ministerial Order No. M083.

3. INTRODUCTION OF LATE ITEMS:

- (a) Agenda Item 8(b) 2020 Property Tax Due Dates Remove the date of 2020-NOV-12 from Option 2, "The advantages of this option:" to read "All property tax payers will be provided with some financial relief by delaying the penalty date to 2020-OCT-01".
- (b) Add Agenda Item 11(a) Correspondence from the Federation of Canadian Municipalities dated 2020-APR-23 re: Protecting Vital Municipal Services.

4. <u>APPROVAL OF THE AGENDA:</u>

It was moved and seconded that the Agenda, as amended, be adopted. The motion carried unanimously.

5. ADOPTION OF THE MINUTES:

It was moved and seconded that the following Minutes be adopted as circulated:

- Minutes of the Special Council Meeting held in the Shaw Auditorium, Vancouver Island Conference Centre, 80 Commercial Street, Nanaimo, BC, on Wednesday, 2020-APR-01, at 12:00 p.m.
- Minutes of the Regular Council Meeting held in the Shaw Auditorium, Vancouver Island Conference Centre, 80 Commercial Street, Nanaimo, BC, on Monday, 2020-APR-06 at 5:00 p.m.

• Minutes of the Special Council Meeting held in the Boardroom, Service and Resource Centre, 411 Dunsmuir Street, Nanaimo, BC on Thursday, 2020-APR-09 at 8:30 a.m.

The motion carried unanimously.

6. MAYOR'S REPORT:

Mayor Krog spoke regarding:

- Staff is working on a solution for Question Period which may involve the electronic submission of questions. More information will follow in the near future.
- Council is continuing to consider the municipal budget of which the bylaw needs to be adopted on 2020-MAY-15. Further discussion on the budget will be held at the 2020-MAY-04 and 2020-MAY-11 Council Meetings.
- No one is unaffected by impact of the pandemic and economic fall out.
- Additional physical distancing is recommended in parks in order to stop the spread of COVID-19. Joggers are recommended to stay 5 metres (16 feet) apart and cyclists to stay 10 metres (33 feet) apart. Park users should allow for single file passing only. These are recommendations and not health orders but are designed to ensure the City maintains a high degree of good citizenship by doing what is best for friends, family and neighbours.
- The doors at City Hall are closed but the City itself is open for business.
- COVID-19 has changed the way business is conducted and most of the business that the public would have done in-person at a City facility can be done online and by phone.
- The "Be Kind to All Kinds" poetry project has launched on Instragram. In partnership
 with the BCSPCA the Youth Poet Laureate, Valina Zanetti, put out a call to youth
 poets, inviting young people to reflect on the BCSPCA's work and humans'
 relationship to animals and nature.
- Councillor Hemmens, who is the City of Nanaimo's representative on the Vancouver Island Regional Library (VIRL) Board, would like to remind everyone that although libraries are closed, they are open for business online. Online registration is offered for anyone who would like to take advantage of VIRL's resources. The library offers 24/7 wifi to help everyone stay connected, an eLibrary for unlimited copies of ebooks and audio books and educational resources.
- Mayor Krog recognized the dreadful news of the shooting out of Nova Scotia. The City flew the flags at half mast in recognition and extends its deepest sympathies to the members of the RCMP.
- Mayor Krog stated that on behalf of Council, he is proud of the efforts residents have made during this time of great stress. We may be apart physically but are not apart emotionally and at the end of the day we will come through this together.

7. REPORTS:

(a) 2020 City Facility Leasing and Rental Relief

Introduced by Shelley Legin, General Manager, Corporate Services.

It was moved and seconded that Council grant temporary relief from lease and rental payment to organizations that occupy City facilities that have been closed and/or have been severely impacted due to the Province of BC Heath Emergency issued as a result of the COVID-19 Pandemic. The motion carried unanimously.

(b) 2020 Property Tax Due Dates

Introduced by Laura Mercer, Director, Finance.

It was moved and seconded that Council:

- keep the property tax due at 2020-JUL-02; and,
- extend the tax penalty due for all property classes to 2020-OCT-01 at 5% and 2020-NOV-12 at 5%, applicable on any outstanding current year tax balances on those dates.

It was moved and seconded that Council amend the motion by changing the tax penalty for 2020-OCT-01 to 1% and 9% for 2020-NOV-12. The motion was <u>defeated.</u>

<u>Opposed</u>: Mayor Krog, Councillors Armstrong, Hemmens, Geselbracht, Maartman, Thorpe, Turley

The vote was taken on the main motion, as follows:

That Council:

- keep the property tax due at 2020-JUL-02; and,
- extend the tax penalty due for all property classes to 2020-OCT-01 at 5% and 2020-NOV-12 at 5%, applicable on any outstanding current year tax balances on those dates.

The motion carried unanimously.

(c) <u>Deputy Subdivision Approving Officer</u>

Introduced by Dale Lindsay, General Manager, Development Services.

It was moved and seconded that Council approve the appointment of Claire Negrin as Deputy Subdivision Approving Officer. The motion carried unanimously.

L. Mercer vacated the Shaw Auditorium at 7:32 p.m.

(d) <u>Covenant Amendment Application No. CA11 – 6340 McRobb Avenue</u>

Introduced by Dale Lindsay, General Manager, Development Services.

It was moved and seconded that:

- 1. Council rescind the following motions made on 2020-MAR-16:
 - a. Council direct Staff to proceed with a Public Hearing for Covenant Amendment Application No. CA11 at 6340 McRobb Avenue; and

- b. Council direct Staff to amend covenants FB226410 and FB287633, should Council support the application following Public Hearing.
- Council direct Staff to proceed without a Public Hearing and proceed with public notification prior to Council's consideration of Covenant Amendment Application No. CA11 at an upcoming Council meeting.
- 3. Council direct Staff to amend covenants FB226410 and FB287633, should Council support the application.

The motion carried unanimously.

(e) <u>Development Variance Permit Application No. DVP400 – 2665 Lynburn Crescent</u>

Introduced by Jeremy Holm, Director, Development Approvals.

Mayor Krog requested that Council hear anyone wishing to speak with respect to DVP No. 400 – 2665 Lynburn Crescent.

No one in attendance wished to speak with respect to DVP400.

It was moved and seconded that Council issue Development Variance Permit No. DVP400 at 2665 Lynburn Crescent with the following variance:

• to reduce the minimum required setback for carport entrance ways facing a street from 6m to 4.46m.

The motion carried unanimously.

(f) Development Variance Permit Application No. DVP401 – 27 Milton Street

Introduced by Jeremy Holm, Director, Development Approvals.

Mayor Krog requested that Council hear anyone wishing to speak with respect to DVP No. 401 – 27 Milton Street.

Anna Biegun advised she was in attendance to answer any questions Council may have.

It was moved and seconded that Council issue Development Variance Permit No. DVP401 at 27 Milton Street with the following variance:

• increase the maximum allowable principal building height for a roof pitch equal to or greater than 4:12 from 9m to 10.22m.

The motion carried unanimously.

(g) Rezoning Application No. RA449 – 5801 Turner Road

Introduced by Dale Lindsay, General Manager, Development Services.

It was moved and seconded that Council defer consideration of Rezoning Application No. RA449 – 5801 Turner Road to the 2020-MAY-04 Council Meeting. The motion carried. *Opposed: Councillors Bonner, Brown, Geselbracht*

(h) 507 Milton Street - Amendment of Project Under the Revitalization Tax Exemption Bylaw

Introduced by Dale Lindsay, General Manager, Development Services.

It was moved and seconded that Council approve the amended Revitalization Tax Exemption Agreement for a proposed 27-unit mixed-use building at 507 Milton Street. The motion carried unanimously.

(i) <u>Economic Development Task Force Update</u>

Introduced by Dale Lindsay, General Manager, Development Services.

8. <u>BYLAWS:</u>

(a) "Zoning Amendment Bylaw 2019 No. 4500.162"

It was moved and seconded that "Zoning Amendment Bylaw 2019 No. 4500.162" (To rezone 847 Bruce Avenue to allow "Cannabis Retail Store" as a site-specific use in the Neighbourhood Centre [CC2] zone) be adopted. The motion carried unanimously.

(b) "Zoning Amendment Bylaw 2020 No. 4500.173"

It was moved and seconded that "Zoning Amendment Bylaw 2020 No. 4500.173" (To remove the definition for 'Drug Addiction Treatment Facility', amend the definition of 'Office Medical/Dental' to exclude Supervised Consumption Sites, and add a definition for Supervised Consumption Sites) be adopted. The motion carried unanimously.

(c) "Revenue Anticipation Borrowing Bylaw 2020 No. 7308"

It was moved and seconded that "Revenue Anticipation Borrowing Bylaw 2020 No. 7308" (To provide for temporary borrowing of funds required to meet the current lawful expenditures of the City of Nanaimo) be adopted. The motion carried unanimously.

9. OTHER BUSINESS:

(a) Correspondence from the Federation of Canadian Municipalities dated 2020-APR-23 re: Protecting Vital Municipal Services.

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2020-APR-27
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10.	ADJOURNMENT:

It was moved and carried unanimously.	seconded at 7:53 p	o.m. that the meetir	ng terminate.	The motion
CHAIR				
CERTIFIED CORRECT:				
CORPORATE OFFICER				

Special Health and Housing Task Force Meeting Agenda 2020-MAY-06:

 $\frac{https://pub-nanaimo.escribemeetings.com/Meeting.aspx?Id=01d0e9c5-c63c-4983-bf3a-bcd244607620\&Agenda=Merged\&lang=English}{}$



Staff Report for Decision

DATE OF MEETING MAY 11, 2020

AUTHORED BY WENDY FULLA, MANAGER, BUSINESS, ASSET AND FINANCIAL

PLANNING

SUBJECT 2020 – 2024 FINANCIAL PLAN AMENDMENT BYLAW

OVERVIEW

Purpose of Report

To introduce "Financial Plan Amendment Bylaw 2020 No. 7307.01" for first, second and third readings and adoption.

Recommendation

- 1. That "Financial Plan Amendment Bylaw 2020 No. 7307.01" (To amend the 2020 2024 Financial Plan), pass first reading;
- 2. That "Financial Plan Amendment Bylaw 2020 No. 7307.01" pass second reading;
- 3. That "Financial Plan Amendment Bylaw 2020 No. 7307.01" pass third reading; and
- 4. That "Financial Plan Amendment Bylaw 2020 No. 7307.01" be adopted.

BACKGROUND

The Provisional 2020 – 2024 Financial Plan Bylaw "Financial Plan Bylaw 2019 No. 7307" was adopted by Council at the 2020-JAN-13 Council Meeting. The Financial Plan reflected decisions made by Council during the budget review process in 2019. A Final 2020 – 2024 Financial Plan Bylaw and a Property Tax Rates Bylaw must be adopted by 2020-MAY-15 to enable the calculation and collection of 2020 property taxes.

At the 2020-APR-20, Special Council meeting Council received an update on the proposed Final 2020 – 2024 Financial Plan. The update highlighted changes since the provisional budget was adopted including updates to estimates and directives from Council. Given the unforeseen impact of the COVID-19 pandemic, staff also provided two alternatives for Council's information.

At the 2020-MAY-04 Council meeting, Staff sought direction from Council for the Final 2020 - 2024 Financial Plan. Council engaged in deliberations, and directed staff to prepare the Final 2020 – 2024 Financial Plan as presented on 2020-APR-20.



DISCUSSION

The Final 2020 – 2024 Financial Plan is informed by policies and plans endorsed by Council including the 2019 – 2022 Strategic Plan, the Official Community Plan (OCP) and the 20 Year Investment Plan and supports 2020 Departmental Business Plans.

Budget highlights include:

- 15 new RCMP members, three per year over a five-year period, 2020 2024.
- Increased funding for Economic Development.
- Continuation of the multi-year project to replace Fire Station #1.
- Completion of the first lit baseball field in Nanaimo at Serauxmen Stadium.
- Construction of the Harewood Youth Park as per the Harewood Centennial Park Improvement Plan.
- Investment of over \$20 million in the next 5 years in cycling and pedestrian amenities.
- Metral Drive Complete Street project this comprehensive project stretches from Mostar Road to Aulds Road and includes infrastructure improvements such as streetlights, sidewalks, cycling facilities as well as utility renewals and upgrades.

Summarized below are the projected property tax increases and the impact to the typical home.

Projected Property Tax Increases

	2020	2021	2022	2023	2024
General Asset Management Reserve	1.0%	1.0%	1.0%	0.0%	0.0%
General Property Tax Increase	3.5%	2.0%	2.4%	1.9%	1.8%
Total Municipal Taxes	4.5%	3.0%	3.4%	1.9%	1.8%

Impact on Typical Home

	2019	2020	\$ Change
Assessment - Average Home	\$518,384	\$527,145	\$8,761
Property Taxes	\$2,110	\$2,205	\$95
Municipal User Fees			
Water Fees	552	594	42
Sewer Fees	135	141	6
Sanitation Fees	170	171	1
Total Municipal Taxes & User Fees	\$2,967	\$3,111	\$144

OPTIONS

1. That "Financial Plan Amendment Bylaw 2020 No. 7307.01" (To amend the 2020 – 2024 Financial Plan), pass first reading;

That "Financial Plan Amendment Bylaw 2020 No. 7307.01", pass second reading;

That "Financial Plan Amendment Bylaw 2020 No. 7307.01", pass third reading; and,

That "Financial Plan Amendment Bylaw 2020 No. 7307.01", be adopted.



- The advantages of this option: Adopting the 2020 2024 Financial Plan Amendment Bylaw authorizes the expenditures in the 2020 budget and calculation of the 2020 property taxes.
- Financial Implications: Enables the calculation and collection of 2020 property taxes. Annual property taxes help fund City services and capital programs.
- 2. That Council table the report and request more information from Staff.
 - The disadvantages of this option: Additional meeting(s) will be required to complete adoption of bylaws by 2020-MAY-15.
 - Financial Implications: The Property Tax Bylaw for the calculation and collection of 2020 Property Taxes cannot be adopted until the 2020 – 2024 Financial Plan Amendment Bylaw is adopted.

SUMMARY POINTS

- The 2020 property tax increase will be 4.5%.
- The "Financial Plan Amendment Bylaw 2020 No. 7307.01" must be adopted by 2020-MAY-15.
- This bylaw will allow staff to calculate and collect 2020 property taxes. Annual property taxes help fund City services and capital programs.

ATTACHMENTS:

"Financial Plan Amendment Bylaw 2020 No. 7307.01"

Submitted by:

Wendy Fulla Manager, Business, Asset and Financial Planning

Concurrence by:

Laura Mercer Director, Finance

Shelley Legin General Manager, Corporate Services

CITY OF NANAIMO

BYLAW NO. 7307.01

A BYLAW TO AMEND THE FINANCIAL PLAN

FOLLO	The Municipal Council of the City of Nanaimo in open med.OWS:	eting assembled, ENACTS AS
1.	Title This Bylaw may be cited as the "Financial Plan Amendme	ent Bvlaw 2020 No. 7307.01".
2.	<u>Amendments</u>	
	"Financial Plan Bylaw 2019 No. 7307" is hereby amended	d as follows:
	(1) Delete Schedule "A" in its entirety and replace with	the attached Schedule "A".
PASSEI PASSEI	ED FIRST READING: ED SECOND READING: ED THIRD READING: TED:	MAYOR
		MAYOR
		CORPORATE OFFICER

Schedule A City of Nanaimo 2020 - 2024 Financial Plan

	2020	2021	2022	2023	2024
Davis					
Revenues:	44C 7EO E 40	404 540 005	400 000 0E7	120 004 105	404 044 700
Revenue from Property Value Taxes	116,759,549	121,542,825	126,963,957	130,694,185	134,314,763
Revenue from Parcel Taxes	42,010	42,430	-	-	-
Revenue from Fees & Charges	51,587,767	53,265,128	56,810,756	58,391,652	59,916,215
Revenue from Other Sources	29,812,247	27,931,177	29,488,854	28,692,717	24,899,892
	198,201,573	202,781,560	213,263,567	217,778,554	219,130,870
Expenses:					
General Operating Expenditures	140,699,288	136,742,771	139,770,529	143,140,787	146,802,959
Sanitary Sewer Operating Expenditures	5,130,704	4,870,132	4,930,906	5,072,859	5,161,743
Waterworks Operating Expenditures	11,679,244	10,279,817	10,486,968	10,676,080	10,782,875
Interest Payment on Municipal Debt	1,796,077	1,764,330	2,139,401	2,359,900	2,441,673
Amortization	26,034,829	26,247,853	26,991,472	28,566,164	28,848,058
Annual Surplus/Deficit	12,861,431	22,876,657	28,944,291	27,962,764	25,093,562
Add back:					
Amortization	26,034,829	26,247,853	26,991,472	28,566,164	28,848,058
Capital Expenditures					
General Capital Expenditures	44,550,063	46,430,462	44,206,646	32,336,832	22,341,246
Sanitary Sewer Capital Expenditures	9,578,626	8,175,450	5,386,700	5,351,800	5,914,807
Waterworks Capital Expenditures	19,464,964	8,841,860	10,785,250	15,580,166	10,608,450
Proceeds from Municipal Borrowing	(4,615,890)	(16,958,863)	(14,411,769)	(3,675,000)	(6,724,800)
Principal Payment on Municipal Debt	4,705,511	4,325,001	5,131,486	5,436,491	5,060,790
Transfers between Funds:					
Transfers to/(from) Accumulated Surplus	(34,787,014)	(1,689,400)	4,837,450	1,498,639	16,741,127
Financial Plan Balance	_	_	_	_	_



Staff Report for Decision

DATE OF MEETING MAY 11, 2020

AUTHORED BY BARBARA D. WARDILL, MANAGER, REVENUE SERVICES

SUBJECT 2020 PROPERTY TAX RATES BYLAW

OVERVIEW

Purpose of Report

To introduce "Property Tax Rates Bylaw 2020 No. 7309" for first, second, third readings and adoption.

Recommendation

That:

- 1. "Property Tax Rates Bylaw 2020 No. 7309" (To set the property tax rates for 2020) pass first reading;
- 2. "Property Tax Rates Bylaw 2020 No. 7309" pass second reading;
- 3. "Property Tax Rates Bylaw 2020 No. 7309" pass third reading; and,
- 4. "Property Tax Rates Bylaw 2020 No. 7309" be adopted.

BACKGROUND

Once the dollar amount for 2020 property tax revenue has been finalized in the 2020 – 2024 Financial Plan, that amount is translated into tax rates per \$1,000 of assessed value for the various classes of property in the City of Nanaimo. The assessment values are determined by the BC Assessment Authority, who provides this information to us on an annual basis.

The 2020 Financial Plan provided a 4.5% increase to the tax dollars to be collected after accounting for new construction.

For 2020, the market value of residential property increased by 1.69%. The larger assessment base results in an overall increase to the tax rates charged in the prior year for the City to collect the total tax dollars approved in the 2020 – 2024 Financial Plan for 2020. The table below illustrates the estimated charge for an average residential property whose assessment value increased by the average 1.69%.



2019 Average Home Value	Municipal Tax Rate*	2019 Municipal Taxes Paid			
\$518,384	4.0697	\$2,109.67			
Home Value Adjusted For 2020 Market Change**	2020 Tax Rate*	2020 Municipal Taxes			
\$527,145	4.1819	\$2,204.47			
* General Municipal & Debt residential tax rate (excludes Library)					

^{**} Market change % provided by BC Assessment Authority

If a residential property's value increases by more than this percentage, the tax increase will be higher than 4.5%. If the property's assessed value changes by less than the 1.69% increase, that property's tax increase will be less than 4.5%.

The tax rate schedule attached to "Property Tax Rates Bylaw No. 7309" also includes tax rates applicable to the amounts requisitioned by the Vancouver Island Regional Library, the Regional District of Nanaimo, and the Nanaimo Regional Hospital District. The City of Nanaimo collects these taxes and remits the amounts to those agencies.

As noted in the Bylaw, the tax due date this year is 2020-JUL-02. A penalty of 5% will be charged on any amounts outstanding after 2020-SEP-30. A second 5% penalty will be applied on amounts outstanding after 2020-NOV-11. The application of a 10% penalty on unpaid taxes is legislated under the *Community Charter*.

OPTIONS

1. That:

- 1. "Property Tax Rates Bylaw 2020 No. 7309" (To set the property tax rates for 2020) pass first reading;
- 2. "Property Tax Rates Bylaw 2020 No. 7309" pass second reading;
- 3. "Property Tax Rates Bylaw 2020 No. 7309" pass third reading; and,
- 4. "Property Tax Rates Bylaw 2020 No. 7309" be adopted.
 - Financial Implications: The City of Nanaimo will collect the property tax amount required to fund 2020.
- 2. Defer consideration of the report and request more information from Staff.
 - Financial Implications: The City of Nanaimo will not collect the property tax amount required to fund 2020 operations. The bylaw must be adopted by 2020-MAY-15.
 Delaying will require additional Council meetings to complete adoption of the bylaw by the deadline.



SUMMARY POINTS

- The 2020 property tax increase is 4.5%.
- The "Property Tax Rates Bylaw 2020 No. 7309" must be adopted by 2020-MAY-15.
- Annual property taxes fund City services, programs and capital programs, as approved in the Financial Plan.

ATTACHMENTS:

"Property Tax Rates Bylaw 2020 No. 7309"

Submitted by:

Barbara D. Wardill Manager, Revenue Services

Concurrence by:

Laura Mercer Director, Finance

Shelley Legin General Manager, Corporate Services

CITY OF NANAIMO

BYLAW NO. 7309

A BYLAW TO FIX THE TAX RATES UPON REAL PROPERTY IN THE CITY OF NANAIMO AND TO PROVIDE FOR THE PAYMENT OF TAXES FOR THE YEAR 2020

WHEREAS the Council shall, pursuant to Section 197 of the *Community Charter*, in each year, adopt a bylaw to impose rates on all taxable land and improvements according to their assessed value to provide the money required for purposes specified in the *Charter*,

WHEREAS the Council may, pursuant to Section 235 of the *Community Charter*, establish an Alternative Municipal Tax Collection Scheme, including penalties to be applied in relation to payments made after a tax due date established by such bylaw;

THEREFORE the Council of the City of Nanaimo, in open meeting assembled, hereby ENACTS AS FOLLOWS:

1. <u>Title</u>

This Bylaw may be cited as the "Property Tax Rates Bylaw 2020 No. 7309".

2. Definitions

"COLLECTOR" means the person duly appointed as such from time to time by

Council, and includes all persons appointed or designated by

the Collector to act on her behalf.

"ALTERNATIVE MUNICIPAL TAX

SCHEME"

means the Scheme for the payment of taxes established under

sections 10, 12, and 13.2 of this bylaw.

3. Tax Rates for General Municipal Purposes

Tax rates for all lawful general purposes, as shown in column 'A' of Schedule 'A' attached hereto and forming a part of this Bylaw, are hereby imposed and levied on taxable land and improvements according to their assessed value as shown upon the Real Property Tax Roll for general municipal purposes for the City of Nanaimo for 2020.

4. Tax Rates for General Debt

Tax rates for the payment of interest and principal on debts incurred by the City for municipal purposes as shown in column 'B' of Schedule 'A' attached hereto and forming a part of this Bylaw, are hereby imposed and levied on all taxable land and improvements according to their assessed value as shown upon the Real Property Tax Roll for general municipal purposes for the City of Nanaimo for 2020.

5. Tax Rates for Library

Tax rates for the payment of the Vancouver Island Regional Library requisition for the Library function as shown in column 'C' of Schedule 'A' attached hereto and forming a part of this Bylaw, are hereby imposed and levied on taxable land and improvements according to their assessed value as shown upon the Real Property Tax Roll for general municipal purposes for the City of Nanaimo for 2020.

6. Specified Area Tax Rates

- 6.1 Tax rates for sewer/wastewater utility purposes including all debts incurred for such function, as shown in column 'D' of Schedule 'A' attached hereto and forming part of this Bylaw, are hereby imposed and levied on taxable land and improvements liable to be specially charged by virtue of being located within the specified area as defined by the Regional District of Nanaimo pursuant to Bylaw No. 1216 and amendments thereto, according to their assessed value as shown upon the Real Property Tax Roll for general municipal purposes for the City of Nanaimo for 2020.
- 6.2 Tax rates for the purposes outlined in Regional District of Nanaimo bylaw, known as "DUKE POINT SEWER LOCAL SERVICE AREA ESTABLISHMENT BYLAW NO. 1004, 1996" and amendments thereto, are hereby imposed and levied on taxable land and improvements liable to be specially charged pursuant to that bylaw as shown in column 'H' of Schedule 'A' attached hereto and forming a part of this Bylaw, according to their assessed value on the basis provided under Section 26 of the *Hospital District Act* and as shown upon the Real Property Tax Roll for the City of Nanaimo for 2020.

7. Tax Rates for Regional Parks Function

Tax rates for the payment of the Regional District of Nanaimo requisition for the Regional Parks Function as shown in column 'E' of Schedule 'A' attached hereto and forming a part of this Bylaw are hereby imposed and levied on taxable land and improvements according to their assessed value as shown upon the Real Property Tax Roll for general municipal purposes for the City of Nanaimo for 2020.

8. Tax Rates for Regional District of Nanaimo

Tax rates for the payment of the Regional District of Nanaimo requisition, excluding tax rates for the Regional Parks Function under Section 6, as shown in column 'F' of Schedule 'A' attached hereto and forming part of this Bylaw, are hereby imposed and levied on taxable land and improvements according to their assessed value on the basis provided under Section 26 of the *Hospital District Act* and as shown upon the Real Property Tax Roll for the City of Nanaimo for 2020.

9. Tax Rates for Nanaimo Regional Hospital District

Tax rates for the payment of the Nanaimo Regional Hospital District requisition, as shown in column 'G' of Schedule 'A' attached hereto and forming part of this Bylaw are hereby imposed and levied on taxable land and improvements according to their assessed value on the basis provided by Section 26 of the *Hospital District Act* and as shown upon the Real Property Tax Roll for the City of Nanaimo for 2020.

10. Alternative Municipal Tax Scheme

- 10.1 Unless section 10.3 applies, the rates and taxes named under this Bylaw are due and shall be paid in accordance with sections 10, 11, and 12 of this Bylaw on or before July 2, 2020.
- 10.2 An owner may elect to pay the rates and taxes named under this Bylaw in accordance with the Alternative Municipal Tax Collections Scheme by providing written notice of that election to the Collector at her office at the City Hall, Nanaimo BC, on or before June 14, 2020.
- 10.3 An owner may elect to pay the rates and taxes named under this Bylaw in accordance with the General Municipal Tax Collection Scheme established under Division 10 of Part 7 of the *Community Charter* by giving written notice of that election to the Collector at her office at the Service and Resource Centre, Nanaimo BC, on or before June 14, 2020.
- 10.4 If an Owner does not make an election under Section 10.2 or 10.3, the Alternative Municipal Collection Scheme applies to the rates and taxes payable to that owner.

11. Rates and Taxes Payable to Collector

The rates and taxes named under this Bylaw shall be levied, raised and collected for the purposes stated, and shall be payable in Canadian funds to the Collector at the Service and Resource Centre, Nanaimo, BC.

12. Penalties

- 12.1 Upon the 1st day of October, 2020, or as soon thereafter as is practicable, the Collector shall add to the unpaid balance of the current year's taxes, in respect of each parcel of land and the improvements as shown upon the Real Property Tax Roll of the City for 2020, five (5) percent of the amount unpaid as of the 30th day of September, 2020.
- 12.2 Upon the 12th day of November, 2020, or as soon thereafter as is practicable, the Collector shall add to the then unpaid balance of the current year's taxes, in respect of each parcel of land and the improvements as shown upon the Real Property Tax Roll of the City for 2020, an additional five (5) percent of the amount unpaid as of the 11th day of November, 2020.

13. Supplementary Tax Rolls

- 13.1 Upon receipt of a Supplementary Tax Roll from B.C. Assessment, the Collector shall levy taxes in accordance with the rates specified in Schedule 'A' of this Bylaw according to the taxable values as shown on the Supplementary Tax Rolls.
- 13.2 For each Supplementary Tax Roll, the Collector shall add penalties to the unpaid amounts as follows:
 - (a) where Supplementary Tax Notices are sent before the 1st day of June, 2020, penalties shall be added as set out in Section 12 of this Bylaw.
 - (b) where Supplementary Tax Notices are sent after the 1st day of June, 2020 and before the 10th day of July, 2020; five (5) percent shall be added on any amount unpaid after ninety (90) days. An additional five (5) percent shall be added on the amount unpaid as of the 12th day of November, 2020.
 - (c) where Supplementary Tax Notices are sent on or after the 10th day of July, 2020, ten (10) percent shall be added on any amount unpaid after ninety (90) days.

PASSED FIRST READING:PASSED SECOND READING:PASSED THIRD READING:ADOPTED:	
	MAYOR
	CORPORATE OFFICER

SCHEDULE 'A'

2020 TAX CALCULATIONS – RATES AND TAXABLE VALUES

	O.I.C. CLASS	DESCRIPTION	GENERAL MUNICIPAL	GENERAL MUNICIPAL DEBT	GENERAL MUNICIPAL LIBRARY	REGIONAL SEWER (B AREA)	REGIONAL DISTRICT PARKS	REGIONAL DISTRICT	REGIONAL DISTRICT HOSPITAL	DUKE POINT SEWER L.S.A.
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Residential	Rate	4.0997	0.0822	0.1806	0.3579	0.0354	0.5047	0.1615	0.8526
2	Utilities	Rate	36.4355	0.7308	1.6050	3.1808	0.3145	1.7662	0.5654	2.9840
3	Supportive Housing	Rate	4.0997	0.0822	0.1806	0.3579	0.0354	0.5047	0.1615	0.8526
4	Major Industry	Rate	12.1556	0.2438	0.5354	1.0612	0.1049	1.7158	0.5493	2.8987
5	Light Industry	Rate	12.1556	0.2438	0.5354	1.0612	0.1049	1.7158	0.5493	2.8987
6	Business / Other	Rate	12.1556	0.2438	0.5354	1.0612	0.1049	1.2364	0.3958	2.0888
7	Managed Forest Land	Rate	17.2405	0.3458	0.7594	1.5051	0.1488	1.5139	0.4846	2.5577
8	Recreation / Non- Profit	Rate	8.3793	0.1681	0.3691	0.7315	0.0723	0.5047	0.1615	0.8526
9	Farm	Rate	0.4699	0.0094	0.0207	0.0410	0.0041	0.5047	0.1615	0.8526



Staff Report for Decision

DATE OF MEETING MAY 11, 2020

AUTHORED BY WENDY FULLA, MANAGER, BUSINESS ASSET & FINANCIAL

PLANNING

SUBJECT INTERNAL BORROWING RESOLUTION

OVERVIEW

Purpose of Report

To have Council approve an internal borrowing resolution for the portion allocated to growth for Sanitary Sewer project DCC SS19: Millstone Trunk South.

Recommendation

That Council approve additional internal borrowing from the Development Cost Charge (DCC) City Wide Drainage Reserve Fund in the amount of \$672,600 in 2020 to fund the Sanitary Sewer DCC project SS19: Millstone Trunk South, for a 20-year term at an interest rate of 2%. Repayment of the internal borrowing to be from sewer operations.

BACKGROUND

Sections 189 (4.1) and (4.2) of the *Community Charter* govern borrowing between capital reserve funds. These subsections allow borrowing between any capital reserves, including those established for DCCs. Section 189 (4.2) of the *Community Charter* provides as follows:

"189 (4.2) If money from one reserve fund is used under subsection (4.1) for the purposes of another reserve fund, the municipality must repay to the first reserve fund, no later than the time when the money is needed for the purposes of that reserve fund,

- (a) the amount used; and,
- (b) an amount equivalent to the interest that would have been earned on the amount used had it remained in the first reserve fund."

The temporary borrowing between reserve funds does not require a bylaw or Ministry approval; however, best practice would be for Council to authorize the borrowing by resolution.

DISCUSSION

Council passed an internal borrowing resolution at the 2019-DEC-16 Council Meeting approving internal borrowing from the Development Cost Charge (DCC) City Wide Drainage Reserve Fund in the amount of \$1,165,265 in 2020 and \$2,088,600 in 2021 to fund the Sanitary Sewer DCC project SS19: Millstone Trunk South, for a 20 year term at an interest rate of 2%. Repayment of the internal borrowing to be from sewer operations.



At the 2020-MAR-18 Finance and Audit Committee meeting staff brought forward a report to modify the 2020 Sewer Project Plan in the 2020 – 2024 Financial Plan. The Finance and Audit Committee approved decreasing the budget for Comox Area Sanitary Project by \$1,140,000, funded from the Sewer Asset Management Reserve Fund, and increasing the budget for DCC SS19: Millstone Trunk South by \$1,140,000, funded from internal borrowing and the Sewer Asset Management Reserve Fund.

Best practice requires an internal borrowing resolution for the additional funding.

OPTIONS

- 1. That Council approve additional internal borrowing from the Development Cost Charge (DCC) City Wide Drainage Reserve Fund in the amount of \$672,600 in 2020 to fund the Sanitary Sewer DCC project SS19: Millstone Trunk South, for a 20-year term at an interest rate of 2%. Repayment of the internal borrowing to be from sewer operations.
 - The advantages of this option: An internal borrowing resolution is considered best practice and supports governance excellence one of Council's strategic themes in their 2019 2022 Strategic Plan)

SUMMARY POINTS

- The City will fund the portion of the project allocated to growth for the Sanitary Sewer DCC SS19: Millstone Truck South project with internal borrowing from the City Wide Drainage DCC Reserve Fund.
- Section 189 (4.1) and (4.2) of the Community Charter allow internal borrowing between capital reserves.
- Full amount of the borrowing must be repaid plus an equivalent to the interest that would have been earned on the monies had it remained in the first reserve fund.

Submitted by:

Wendy Fulla Manager, Business, Asset & Financial Planning

Concurrence by:

Laura Mercer Director, Finance

Shelley Legin General Manager, Corporate Services

Bill Sims General Manager, Engineering & Public Works



Information Report

DATE OF MEETING MAY 11, 2020

AUTHORED BY JANE RUSHTON, MANAGER, PURCHASING AND STORES

SUBJECT QUARTERLY PURCHASING REPORT (SINGLE AND SOLE

SOURCE, PURCHASES IN EXCESS OF \$250,000 AND INSTANCES

OF NON-COMPLIANCE PURCHASES)

OVERVIEW

Purpose of Report:

To provide information in compliance with the City's Procurement Policy (03-1200-01) regarding single and sole source purchases, awards in excess of \$250,000 and policy non-compliance.

DISCUSSION

The City's Procurement Policy (03-1200-01) requires:

- 17 Reporting
- 17.1 On a quarterly basis, Council will be provided with an information report summarizing the following:
 - 17.1.1 Sole source and single source purchases between \$25,000 and \$250,000;
 - 17.1.2 Award of all purchases in excess of \$250,000; and,
 - 17.1.3 Instances of Non-Compliance and action taken in each instance.

This report outlines results of the above processes for information. Further details are summarized in Attachments 1 and 2 to this report.

Sole Source Purchases

"Sole Source Purchase" means a non-competitive acquisition whereby the purchases for goods and or services are directed to one source where there is only one available Vendor or Contractor of that good and or service that meets the needs or requirements of the City. Sole source purchases go through an internal control review process and sign off covering justification, review of decision and costs.

Single Source Purchases

"Single Source Purchase" means a non-competitive acquisition whereby purchases for goods and or services are directed to one source because of standardization, warranty, or other factors, even though other competitive sources may be available.



Page 2

Due to staffing constraints, the City is not able at this time to undertake internal audits or reviews to determine policy compliance deviations. The City's internal controls have been updated to flag non-compliance going forward using current Staff, and if it is determined that the associated risks are significant additional resources will be requested from Council.

SUMMARY POINTS

- The City undertook sixteen (16) Single and Sole Source purchases subject to Procurement Policy (03-1200-01) reporting for a total amount of \$515,465.23 including PST for the period ending 2019-DEC-31.
- The City undertook seven (7) purchases in excess of \$250,000 subject to Procurement Policy (03-1200-01) reporting for a total amount of \$6,924,465.81 including PST for the period ending 2019-DEC-31.
- The City undertook two (2) instances of Procurement Policy non-compliance purchases subject to Procurement Policy (03-1200-01) reporting for a total amount of \$215,051.15 for the period ending 2019-DEC-31.
- The City's Procurement Policy requires Staff to provide this information to Council on a quarterly basis.

<u>ATTACHMENTS</u>

Attachment 1 – Sole Source and Single Source Purchases >\$25,000<=\$250,000

Attachment 2 – Purchases Greater than \$250,000 Summary

Attachment 3 – Non-Compliant Summary

Submitted by:

Jane Rushton
Manager, Purchasing and Stores

Concurrence by:

Laura Mercer Director, Finance

Shelley Legin

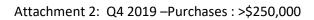
General Manager, Corporate Services



File/ Competition #	Department	Vendor Name	Transaction Description	Amount (Includes PST)	Reason/Comment
2300	Engineering	Bentley Systems Inc	Continuation of the City's Water GEMS, FlowMaster, and Culvert Master software	\$6,663.00	One with which staff have specialized training and/or expertise. Accumulated spend exceeds \$25K
2503	Parks	Carpell Surfaces	NDSS Artificial Turf Repair	\$30,360.56	To ensure compatibility with existing facility and maintain specialized product
2492	Fleet	City of Kelowna	Purchase of two used sanitation trucks	\$70,000.00	Expand the fleet of Sanitation trucks to meet the increasing need
2310	Information Technology	ESRI	Continuation of the City's application wrapper, Goecortex	\$15,755.75	One with which staff have specialized training and/or expertise. Accumulated spend exceeds \$25K
1080	Legislative Services	eSCRIBE	Electronic agendas and meetings bundle for 2020	\$50,870.92	One with which staff have specialized training and/or expertise.
2500	Roads	Herold Engineering Limited	2019 bridge inspections	\$7,250.00	One with which staff have specialized training and/or expertise. Accumulated spend exceeds \$25K
2496	Parks Operations	Herold Engineering Limited	Civil and structural engineering services for Sid Clark Gyro Fields	\$48,775.000	One with which staff have specialized training and/or expertise. Specific to this site.
2375	Engineering Projects	Herold Engineering Limited	Continued Engineering Design and Contract Administration services for the Parkade Membrane renewal for Bastion Street and Harbourfront Parkade	\$17,900.00	One with which staff have specialized training and/or expertise. Accumulated spend exceeds \$25K



2501	Parks Recreation and Culture	Herold Engineering	Harewood Skatepark construction services	\$54,645.00	One with which staff have specialized training and/or expertise.
2535	Engineering	Koers & Associates Engineering Ltd	Inspection services for Haliburton Street project between the City and the RDN	\$60,000.00	One with which staff have specialized training and/or expertise.
2479	Water Resources	Koers & Associates Engineering Ltd	North end water pressure zone investigation	\$30,000.00	One with which staff have specialized training and/or expertise
2003	Engineering and Environmental	Pearce Biological Consulting (PBC)	Continuation of the City's Canada Geese Study	\$10,415.00	One with which staff have specialized training and/or expertise. Accumulated spend exceeds \$25K
2392	Parks and Recreation	Prism Engineering Ltd	Engineering consulting services for the replacement of air handling units at Beban Leisure Pool	\$32,700.00	One with which staff have specialized training and/or expertise.
2527	Purchasing	Prolomar Global Inc.	Procurement Policy Review with Social, Ethical, Environmental inclusion	\$45,000.00	One with which staff have specialized training and/or expertise
2355	Development Services	Rollo & Associates	Review of the City's community amenity contribution policy and practices	\$21,600.00	One with which staff have specialized training and/or expertise.
2309	Information Technology	Safe Software	Continuation of spatial Extract, Transform and Load (ETL) tool for the City's GIS data and data rich applications	\$13,530.00	One with which staff have specialized training and/or expertise. Accumulated spend exceeds \$25K





File/ Competition #	Department	Vendor Name	Transaction Description	Amount (Includes PST)	Comment
2463	Engineering	0848361 BC Ltd DBA Ecklundson Construction Group	Brookwood Pump Station Upgrade	\$288,000.00	One Tender received
2497	Construction	Black & McDonald Ltd	Serauxmen Outfield Lighting Project	\$1,022,662.86	Five Tenders received
2444	Construction	Polycrete Restoration Ltd.	Nanaimo Bastion Street Parkade Traffic Membrane	\$449,054.10	Three compliant Tenders received
2396	Construction	Windley Contracting Ltd.	Hammond Bay Road Widening & Utility Upgrade	\$1,504,952.00	Three Tenders received
2484	Engineering	Copcan Civil Limited	Black Diamond Water Main Replacement	\$2,478,850.01	Eleven Tenders received
2486	Construction	Lafarge Canada Inc. dba Hub City Paving	2019 Road Rehabilitation Package B	\$634,626.84	Two Tenders received
2491	Construction	Knappett Industries (2006) Ltd.	Harewood Skateboard Park	\$546,320.00	Two compliant Tenders received



File/ Competition #	Department	Vendor Name	Transaction Description	Amount (Includes PST)	Reason/Comment
2284	Engineering and Public Works	WSP Canada Inc	Hammond Bay Wall geotechnical expertise	\$120,209.87	Scope of the project grew beyond initial expectations
2490	Engineering	Summit Earthworks	Disposal of contaminated soils from the Wellcox Access Road project	\$94,841.28	Scope of the project grew beyond initial expectations.



Staff Report for Decision

DATE OF MEETING MAY 11, 2020

AUTHORED BY DAN BAILEY, MANAGER, ACCOUNTING SERVICES

SUBJECT AUTOMATED GARBAGE TRUCK – EQUIPMENT FINANCING

OVERVIEW

Purpose of Report

To introduce a resolution for Council's approval, which is required for staff to make borrowing arrangements with the Municipal Finance Authority (MFA) for an additional automated garbage truck.

Recommendation

That Council approve the borrowing of up to \$406,585 through the Municipal Finance Authority's (MFA) Equipment Financing Program to purchase one (1) additional automated garbage truck in 2020.

BACKGROUND

The City completed the final implementation phase of automated solid waste collection in the summer of 2018. This service level change required a significant investment in new equipment including automated garbage trucks. The 2019-2023 Financial Plan included a business case for future expansion due to growth. A new route will be added in 2020 with a second route planned for 2022.

DISCUSSION

The 2020 – 2024 Provisional Financial Plan approved by Council on 2020-JAN-13 includes the addition of a new automated garbage truck in 2020 to eliminate weekly overtime, and allow for future growth.

As there is a lack of funding available in the Equipment Replacement Reserve, short-term borrowing through the MFA is required to complete the purchase of the additional automated garbage truck.

The MFA Equipment Financing Program provides short term borrowing (one to five years) under section 175 of the *Community Charter* and requires a Council resolution for each borrowing. This program offers low interest rates and no fees.



OPTIONS

- 1. That Council approve the borrowing of up to \$406,585 through the Municipal Finance Authority's (MFA) Equipment Financing Program to purchase one (1) additional automated garbage truck in 2020.
 - Financial Implications: Funding for the new garbage truck is included in the 2020 2024 Provisional Financial Plan.
- 2. Council could request further information pertaining to the borrowing.

SUMMARY POINTS

- The 2020 2024 Provisional Financial Plan approved by Council on 2020-JAN-13 includes \$406,585 in borrowing for the addition of an automated garbage truck in 2020.
- Borrowing through MFA's Equipment Financing Program allows for short-term borrowing (1-5 years) with low interest rates and no fees.
- The MFA requires a certified Council resolution prior to fulfilling the borrowing.

Submitted by:

Dan Bailey Manager, Accounting Services

Concurrence by:

Laura Mercer Director, Finance

Shelley Legin General Manager, Corporate Services

Bill Sims

Director, Engineering & Public Works



Staff Report for Decision

DATE OF MEETING MAY 11, 2020

AUTHORED BY BILL SIMS, GENERAL MANAGER, ENGINEERING AND PUBLIC

WORKS

SUBJECT GREEN FLEET STRATEGY

OVERVIEW

Purpose of Report

To present Nanaimo's Green Fleet Strategy to Council for adoption, and advise Council of the City's Green Fleet Rating.

Recommendation

That Council adopt the City of Nanaimo Green Fleet Strategy 2020.

BACKGROUND

Under the theme of Environmental Responsibility in Council's 2019 – 2020 Strategic Plan, Council is taking a leadership role, focusing on our environmental impact and climate change contributions in our decision making.

At the June 26, 2019 Finance and Audit Committee meeting, the Committee heard a report of the City's green fleet initiatives, and recommended Council direct Staff join the E3 Fleet Program and complete the Green Fleet Performance Review.

The E3 ('Energy, Environment, Excellence') Green Fleet Program is an initiative of the Fraser Basin Council. E3 Fleet conducted an extensive review and provided a number of recommendations for improvements to the City's Fleet Program. (See Attached Appendix A – E3 Fleet Review Summary Letter).

In addition, E3 Fleet rated the City's Fleet Program and conferred a Silver Award for the City. This award was presented to Mayor Krog on February 27, 2020. The City of Nanaimo is the first Vancouver Island municipality to be rated.

DISCUSSION

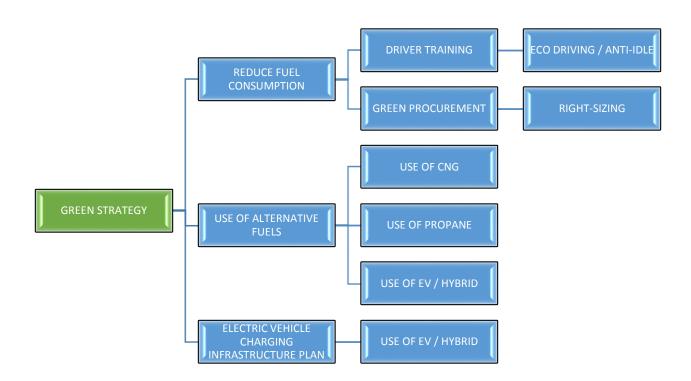
Using the E3 Review, Staff developed the City's Green Fleet Strategy to maintain momentum and continuously improve the fleet over time. (See Attachment B – City of Nanaimo Green Fleet Strategy 2020).



The Green Fleet Strategy has three guiding principles to further improve environmental performance and efficiency.

- 1. Reduce Fuel Consumption
- 2. Increase Use of Alternative Fuels
- 3. Develop an Electric Vehicle Charging Plan

Guiding Principles Chart



Implementing the Green Fleet Strategy will continue to improve the City's performance in greenhouse gas reduction and cost reduction. Staff will progressively work on the recommendations on the E3 Review. Staff anticipate that the next E3 Rating will result in a Gold Award.

OPTIONS

- 1. That Council adopt the City of Nanaimo Green Fleet Strategy 2020.
 - Budget Implications: The ongoing cost of participating in the E3 Program is
 estimated at \$12,000 per year. There are recommendations in the strategy that may
 have future budget implications, which will be brought forward for consideration as
 the strategy unrolls.
 - Strategic Implications: The Green Fleet Strategy supports Council's Strategic Plan, and positions the City as a leader in greening its fleet.



- 2. That Council decline to adopt the Green Fleet Strategy.
 - Strategic Implications: While Staff would endeavour to implement the spirit and intent of the Green Fleet Strategy, there is a risk that without formal direction, implementation would slow.

SUMMARY POINTS

- The City continues to play a leadership role in the community in greening its fleet in a prudent and cost effective way.
- Receiving the E3 Fleet Silver Award a first for Vancouver Island lends credence and prestige to the Green Fleet Initiative.
- The City's Green Fleet Strategy will guide the Fleet's direction in continuous improvement to improve performance, cost and lower greenhouse gases.

ATTACHMENTS:

Attachment A – E3 Fleet Review Summary Letter
Attachment B – City of Nanaimo's Green Fleet Strategy 2020

Submitted by:

Bill Sims General Manager, Engineering and Public Works

Attachment 'A'



November 29 2019

Mr. Jason Evans Fleet Operations Manager The City of Nanaimo 2020 Labieux Rd Nanaimo, BC V9T 6J9

Hello Jason,

Thank you for selecting E3 Fleet Review™ as a tool for improving your fleet's 'green' performance. We appreciate the opportunity to assist you in managing the City of Nanaimo's fleet in an eco-friendly manner.

Overall, our 2018-19 E3 Fleet Review shows a positive trend for your fleet. Fleet GHG intensity has decreased in each of the last four reviews, with the greatest reduction taking place in 2018-19.

E3 is about continuous improvement, and with your fleet's history of successful GHG intensity reduction, we encourage you to consider pursuing your E3 Fleet Green Rating soon, to formally recognize your efforts. I have included a guide to Fleet Rating for your perusal.

Our goal at E3 Fleet is to assist you in achieving further improvements. The attached package includes:

- Key Performance Indicator report that summarizes key operating parameters of your fleet
- Key Recommendations for further action to improve your fleet operations
- Detailed E3 Fleet Review reports
- E3 Fleet Rating Guidelines
- EV Cost/Benefit Tool

Sincerely,

Roger Smith

Managing Director

The E3 Fleet Rating System

Tel: 416 418 9931

rsmith@richmondsustainability.org

Energy Environment Excellence

E3 is a program of:





Key Performance Indicators

E3 Fleet has analyzed 2018 operational data provided for the City of Nanaimo fleet and from your E3 reports, selected 21 indicators that provide a snapshot summary of operating parameters. These Key Performance Indicators (KPIs) reflect operating costs, emissions, service levels and in general, client satisfaction with your fleet. Making improvements to each of these will assist in stabilizing operating and capital budgets and reducing cost "spikes" from year to year.

Note: GHG Intensity is displayed in **green** font for your review.

	Key Performance Indicator (KPI) Note: all values calculated based on fleet input data for review period	2009	2010	2011	2012	2013	2018	Measure
1	Fleet units reviewed	121	119	139	133	124	1441	Vehicles
	Equipment units reviewed				9	8	7	Equip.
2	NPV	n/a	\$2,582,600	\$3,657,535	\$4,296,998	\$4,221,854	\$6,792,162	\$
3	Cost of capital	n/a	\$103,304	\$146,301	\$171,880	\$168,874	\$135,843	\$
4	Fleet average age	8.9	10.1	9.0	8.4	7.3	7.9	Years
5	Total annual distance travelled	1,217,693	1,357,240	1,316,220	1,296,738	1,289,850	1,269,0691	KMs
6	Fleet median fuel efficiency	23.5	21.3	20.5	20.1	19.9	23.7	l/100 km
7	Fleet annual fuel usage	477,543	464,401	480,383	470,767	455,990	633,511	Liters/yr.
8	Fleet GHG intensity (tailpipe)	0.959	0.808	0.894	0.895	0.854	0.6082	kg/km
9	Annual GHG emissions (tailpipe)	1,167	1,096	1,176	1,161	1,101	1,449	Eq. Tonnes CO ₂

-

¹ Includes vehicles not included in previous reviews and end of lifecycle vehicles (see report for details)

² Based on "normalized" fleet dataset as described in the report



	Key Performance Indicator (KPI) Note: all values calculated based on fleet input data for review period	2009	2010	2011	2012	2013	2018	Measure
10	Fleet GHG intensity (lifecycle)	1.328	1.130	1.234	1.230	1.173	1.271	kg/km
11	Annual GHG emissions (lifecycle)	1,617	1,533	1,624	1,595	1,513	2,010	Eq. Tonnes CO ₂
12	Corporate average utilization	11,822	12,567	10,446	10,989	11,517	11,294	KMs
13	Corporate average utilization	984	1,210	1,123	1,047	1,205	1,396	Engine Hours
14	Fleet availability	98.2	n/a	n/a	n/a	n/a	n/a	%
15	Fleet average downtime	4.7	n/a	n/a	n/a	n/a	n/a	Days
16	Annual downtime cost	\$515,332	n/a	n/a	n/a	n/a	n/a	\$
17	Annual fuel cost	\$398,329	\$431,154	\$516,298	\$ 529,067	\$ 505,582	\$584,534	\$
18	Annual repair cost	\$587,620	\$451,475	\$561,153	\$ 645,790	\$ 582,435	\$755,407	\$
19	Annual PM cost (if data was provided)	\$94,823	\$105,952	\$ 98,824	\$ 89,392	\$ 98,841	\$137,723	\$
20	Projected Current Annual Operating Cost (R&M, Fuel, Capital and Downtime)	\$2,014,383	\$1,091,885	\$1,322,576	\$1,436,129	\$1,355,733	\$1,613,507	\$/yr.
21	Maintenance Ratio	0.16	0.23	0.18	0.14	0.17	0.18	PM: Reactive



The City of Nanaimo E3 Fleet Review for 2018-19

Key Recommendations for Action

The following recommendations for further action are based on the E3 team's review and assessment of data supplied, and current Key Performance Indicators (KPI's). Implementing these recommendations will result in a more cost effective, more fuel efficient and lower emission fleet.

Recommended Actions - Fuel Efficiency

Median Fuel Efficiency

For your 2018-19 E3 Fleet Review, input data included kilometers-driven and fuel-used by Sanitation vehicles – data points which were not part of previous reviews. Also included in the dataset were a number of vehicles slated for retirement, for which new, replacement units had been put into service. For this expanded dataset, we calculated your **Median Fuel Efficiency for 2018-19 to be 23.7-I/100 km**.

We feel that Median Fuel Efficiency is one of the most important KPIs for cost and emissions conscious fleet managers to monitor, and take actions to improve upon, on an ongoing basis. This is because Median Fuel Efficiency is directly reflective of your fleet's footprint – it is a measure that encompasses many facets of fleet operations from driver behaviours (i.e., unnecessary idling, harsh driving, unnecessary trips) through to right-sizing of vehicles for their assigned tasks (i.e., getting the job done with smaller, more fuel-efficient vehicles) and the fleet's average age (since older vehicles generally burn more fuel and produce more emissions).

Median Fuel Efficiency indicates your fleet's overall performance and therefore it is a critical success factor to watch closely. Your past E3 Fleet Reviews have shown continuous improvements to your median fuel efficiency from 2009 to 2013. This indicates that your fleet is on a healthy trend, and the strategies you have undertaken to improve your fleet performance are working.

Median Fuel Efficiency is easy to calculate using just two data points (fuel use & kilometers-travelled). Monthly reporting, including current Median Fuel Efficiency and progress toward target, would be best but quarterly reporting would suffice.

E3 recommendations: Our recommended actions are to (1) regularly monitor fleet median fuel efficiency and (2) set a target for ongoing improvement.

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Data 'Normalization' for the City of Nanaimo's 2018 E3 Fleet Review

In our 2018-19 Fleet Review, Nanaimo's fleet size increased by 20 units when compared to the last review in 2013. While average utilization remained at approximately the same level, total kilometres-travelled increased by almost 300,000. Because data for heavy-duty trucks was included in the 2018 fleet review group - these vehicles being high-mileage and heavy fuel consumers - average fuel consumption, measured in litres per 100 km, for the expanded fleet was negatively affected. Data for these units was not part of the last review in 2013 because their performance was then tracked by engine hours, not by kilometres as in the rest of the fleet.

For the purposes of making 'apples to apple' comparisons with fleet reviews from previous years, we 'normalized' the 2018 fleet review data by excluding the Sanitation heavy-duty trucks. We also eliminated data for a number of decommissioned vehicles slated for retirement, since partial-year data for their replacements was included and auto-extrapolated by E3 Fleet Review to depict one-year of operation, which in-effect, double-counted the data.

After the normalization process was completed, a reduction in GHG tailpipe emission 'intensity' (CO₂e kg/km) was evident for the active fleet relative to previous years.

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Options for Improved Fuel Efficiency

The following section provides some technology and operational options for improving on your median fuel efficiency.

Diesel-Powered Vehicles

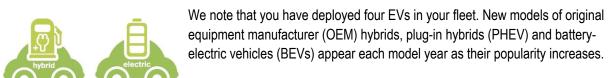
We note that you currently have a number of diesel-powered pickups and vans as well as medium to heavy-duty trucks in your fleet. For the light-duty units (pickups and van), as you are aware, the upfront capital cost can be substantially more for the diesel engine option, but they are up to 20% (or more) fuel-efficient than gasoline-powered vehicles.

Today's diesels produce radically reduced smog-causing emissions than earlier models. The added bonus is powering your diesels with renewable, clean biodiesel as you are now doing. On the downside, standard fossil diesel produces about 22% more greenhouse gas emissions than standard fossil gasoline. So, even though diesels may reduce your fuel usage by 20% or more, they may produce the same level, or more GHG emissions. Because you have opted for B5 biodiesel in your fleet, this reduces the overall GHG impact.

Based on fuel usage and cost reduction a positive business case can often be made for the additional price for diesel engines. Diesel pickups are available and diesel cars are also offered from some auto OEMs, with fuel consumption comparable to hybrids.

E3 recommendation: From an emissions reduction perspective, our recommendation is to carefully assess the cost/benefit and GHG emissions advantages of light and medium-duty diesels case by case before investing in the diesel option.

Hybrids, Plug-in Hybrids and Battery-Electric Vehicles



While pickups and medium to heavy-duty truck EVs are not yet commercially available almost every manufacturer has announced plans for EV options. While the upfront costs may be higher, electric vehicles (EVs) are a solution to rising fuel costs and emissions.

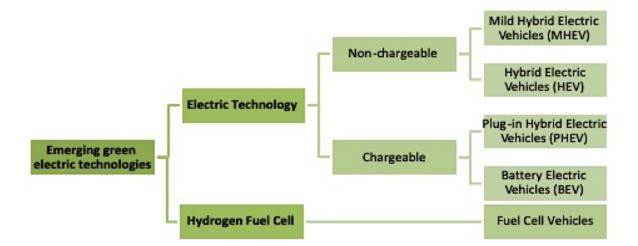
Please see Figure 1 - Electric Vehicle Technologies (overleaf) which displays EV options.

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Figure 1 – Electric Vehicle Technologies



An expanded number of electric vehicle options are regularly emerging which may be excellent choices for Nanaimo. Cars and SUVs are now available, while pickups and medium to heavy-duty trucks will soon be available. It is conceivable that in our lifetimes, the entire fleet could be powered by zero-emission electric vehicles. Globally, some jurisdictions have already legislated the end of the internal combustion engine by 2050, paving the way forward for electric vehicles.

EVs are not necessarily a "silver-bullet" solution, as their additional capital cost must be offset by fuel cost savings in order to be cost-effective. Savvy fleet managers will seek applications within their fleets where the level and type of usage the vehicles will be subject to, will deliver sufficient fuel cost savings to offset their additional cost of capital and after the vehicles are fully depreciated (usually ~5 years), deliver net cost savings until the end of their economic life-cycle (often ~10 years).

EV Cost Benefit Tool

E3 recently developed a new EV/ICE Cost-Benefit Calculator

that helps fleet managers determine the potential savings and emissions reduction for EVs when compared to traditional fossil-fuel vehicles. A copy of this tool is included with your E3 reports package.

Planning for an Electric Vehicle Future...

The average annual kilometers-driven by your fleet is relatively low (typical for all municipal fleets) and so your vehicles daily range requirements are well within the range of today's EVs (for example, the 2020 Chevrolet Bolt has a range of 417 kms on a full charge).

Your vehicles return to base each night, making them ideal for overnight re-charging. Therefore, it is conceivable that, if one day in the future, electric and plug-in hybrid vehicles replaced all current units, they could be driven almost entirely on electric power. The potential fuel savings would be almost \$600k annually (based on your fuel spend in 2018). Of course, this is a very idealistic situation and there would be associated costs such as electricity for re-charging the vehicles, but we present this information to encourage your interest in vehicle electrification.



E3 recommendation: Consider adding more hybrid, plug-in hybrids and battery-electric vehicles to your fleet and ongoing investment in EV charging systems.

Exception Units – High Fuel Consumption

E3 Fleet Review has identified 30 units in your fleet with higher than average fuel consumption for similar vehicles within your fleet. These 30 vehicles burned fuel at a rate at least 50% higher than your fleet average.

Your E3 Sorted Fleet Detail Sheet shows how all units are performing and those that are performing worse than similar vehicles in your fleet. Pinpoint the problem units, find the root cause(s) and take action(s). Consider improvements that could be made ranging from eco-driver training through to technological improvements (such as idling stop/start devices, auxiliary battery systems etc.).

There are several potential causal factors for lower than optimal fuel-efficiency. These may include:

- Vehicle mix and right sizing (are the right sized vehicles being used for the vocational needs?)
- Driver behaviors (are drivers idling vehicles excessively or wasting fuel in other ways?)
- Weather (was the past winter more severe in your area?)
- Mechanical issues (the fleet has aged are there mechanical issues that should be addressed?)

E3 recommendations: Systematic reviews of all exception units in your fleet that are driving up your fuel bill (and emissions) and remedial actions, case-by-case.

Right-Sizing Vehicles

Some fleet managers used to subscribe to the old adage "identity the size of truck you really need for the job — and then buy one bigger". This anachronistic thinking led to fleets with oversized vehicles, poor fuel economy and high emissions. Today, savvy fleet managers know that old approach is wrong. The correct approach is to right-size the fleet vehicles – that is, correctly specify the right sized vehicles for the job at hand, which will lead to optimal fuel efficiency and lower overall operating cost.

Low Emissions Vehicles

Prepare vehicle specifications for competitive bids (RFPs, tenders) to include a weighting for vehicles being offered with the highest fuel-efficiency. The past predicts the future and your E3 "Sorted Fleet Detail Sheet" will show you which of your vehicles have been performing best (and worst) when compared to similar vehicles within your fleet. Using this information, on a go-forward basis, purchase the best performing vehicle models when replacing vehicles in the same class.

E3 recommendation: Purchase high efficiency/low emissions vehicles that meet operational needs e.g. hybrids, plugin hybrids, battery-electric vehicles, compact cars, etc.

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Green Technologies

Green vehicle technologies such as idle shutdown devices, battery backup systems for DC loads and auxiliary cab heaters will deliver fuel-efficiency increases.

E3 recommendation: Invest in green vehicle technologies which have been tested, proven and verified to reduce fuel consumption.

Driver Behaviours - Excess Idling

Most drivers wish to "do the right thing" and simply suggesting that excessive idling is not acceptable is often enough but for some, old habits are hard to break. All drivers would benefit from driver eco-training around the negative effects (i.e., fuel costs, emissions, health impacts) of engine idling. Fuel-efficient driver training can come in many forms, from hiring a training contractor, to setting up an in-house trainer, and even offering online training.

For more information about free of charge "Fleet Smart SmartDriver" fuel efficient driver training programs offered by Natural Resource Canada, go to: http://fleetsmart.nrcan.gc.ca/index.cfm?fuseaction=fleetsmart.smartdriver. You may also want to take advantage of an online 25 minute tutorial provided by NRCan and Stantec, which is currently available for free: www.ecodrivingonline.ca

E3 recommendations: (1) Ongoing vigilance with regard to excessive engine idling and (2) fuel-efficient, eco-driver training.

Recommended Actions - GHG Emissions

Biodiesel and Renewable Diesel

E3 supports your use of B5 biodiesel and we recommend that you continue to use renewable, low carbon fuels that are available and wherever operationally practical.

Biodiesel can be used in higher blends safely and without issues. Biodiesel in higher blends than B5 will reduce your emissions further and contribute positively to our economy with minimal risk and additional cost. We caution that it may be challenging to find a local supplier of higher-blend biodiesel.

Biodiesel is a renewable fuel made from virgin feedstocks and used vegetable oils. Animal fats such as beef tallow and fish oil can also be used to make biodiesel fuel. Biodiesel can be blended in a variety of ratios with conventional fossil diesel to obtain different blends such as B2 (2% biodiesel), B20 (20% biodiesel) or it can be used in higher blends (more than 20% biodiesel) and "neat" which means up to 100% biodiesel (B100).³

³ EPA - https://www3.epa.gov/region9/waste/biodiesel/questions.html



According to the Renewable Fuel Regulation, as of July 1st, 2011 2% of the diesel and heating oil sold in Canada must be renewable. The Greenhouse Gas Reduction (Renewable & Low Carbon Fuel Requirements) Act and the Renewable & Low Carbon Fuel Requirements Regulation were introduced to:

- Reduce British Columbia's reliance on non-renewable fuels
- Help reduce the environmental impact of transportation fuels
- Contribute to a new low-carbon economy

Between 2010 and 2017, the release of over 7.73 million tonnes of greenhouse gas emissions was avoided under the Regulation. These significant reductions were achieved without limiting the various ways in which British Columbians use their vehicles.

Part two of the Act⁴ establishes renewable fuel content requirements for gasoline and diesel sold in British Columbia:

- Fuel suppliers must ensure that they have a minimum renewable fuel content of five percent (5%) for gasoline and four percent (4%) for diesel, on a provincial annual average basis
- Fuel suppliers have the flexibility to vary their blend percentages and can choose where in the province they supply renewable fuel blends, as long as they meet the provincial annual average requirement for renewable fuel content

Part 3 of the Act establishes low carbon fuel requirements for fuels sold in British Columbia:

 Fuel suppliers must progressively decrease the average carbon intensity of their fuels to achieve a 10% reduction in 2020 relative to 2010

Under the Regulation⁵, fuel suppliers choose their own approach for compliance with Part 3 requirements. Fuel suppliers may choose to:

- Supply more low carbon fuels
- Acquire credits through a Part 3 Agreement
- Trade credits with other suppliers

Despite having a higher energy content than conventional diesel, fuel economy is reported to be slightly lower with biodiesel: using 100% biodiesel (B100) results in a 10% lower fuel economy, B20 in a 2% lower mileage.

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⁴ https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/renewable-low-carbon-fuels

⁵ Full details of the Renewable and Low Carbon Fuel Requirements Act, Renewable And Low Carbon Fuel Requirements Regulation, are available for viewing or download:

http://www.bclaws.ca/civix/document/id/complete/statreg/394_2008/search/CIVIX_DOCUMENT_ROOT_STEM:(Renewable%20and%20Low%20Carbon%20Fuel%20Requirements%20Regulation)%20AND%20CIVIX_DOCUMENT_ANCESTORS:statreg?3



The same range of oils and fats that can be used for biodiesel can be fed into a modified hydro-treating unit in a conventional diesel refinery to produce a fuel with very similar properties to diesel, which has been called "hydrogenation-derived renewable diesel" or simply "renewable diesel.

Hydrogenation-derived renewable diesel (HDRD is the product of fats or vegetable oils—alone or blended with petroleum—refined by a hydro treating process. Hydrogenation-Derived Renewable Diesel (HDRD), also known as green diesel or second-generation biodiesel, is produced by refining fats or vegetable oils in a process also known as Fatty Acids to Hydrocarbon Hydro treatment.

Renewable diesel and biodiesel use similar feedstocks but have different processing methods and create chemically different products. HDRD has an identical chemical structure with petroleum-based diesel and is free of ester compounds.

Renewable diesel produced from waste animal fats from rendering has low carbon intensity and is also referred to as "advanced" renewable diesel. In the future, even algae and bacteria could be used as a feedstock.

Renewable diesel (HDRD) is claimed to have advantages over biodiesel:

- It has a better emission profile reduced particulate, hydrocarbons, and carbon dioxide emissions as well as lower sulfur content.
- HDRD production does not produce glycerin as a co-product.
- HDRD has a lower production cost because it uses existing hydro-treatment process equipment in a petroleum refinery.
- Renewable diesel has a better low-temperature operability than biodiesel, thus it can be used in colder climates without gelling or clogging of fuel filters.

Renewable diesel⁶ (also known as Hydro treated Vegetable Oil or HVO) and traditional biodiesel (also known as Fatty Acid Methyl Ester or FAME) are often confused. They are, however, distinctly different products, even though both are made from organic biomasses. The differences can be found, for example, in their production process, cleanliness, and quality.

Premium-quality, HVO-type renewable diesel is made primarily from waste and residues. In the production process, impurities are removed from the raw materials that are then hydro treated at a high temperature. The outcome is a colorless and odorless fuel of an even quality that has an identical chemical composition to fossil diesel. It is also often called an "advanced biofuel" or "second-generation biofuel".

Traditional, first-generation FAME-type biodiesel, on the other hand, is produced by esterifying vegetable oils or fats. The esterification process restricts the use of poor quality or impure raw materials, such as waste and residues. The quality of traditional biodiesel also varies in other respects based on the raw materials used.

Even though both bio-based fuels help replace fossil fuels with renewables and thereby reduce global climate emissions, only renewable diesel can be used in high concentrations and as a standalone product in all diesel

⁶ https://www.neste.com/what-difference-between-renewable-diesel-and-traditional-biodiesel-if-any



engines. The use of renewable diesel in high concentrations recently became even easier in Europe because of a new EN 15940 standard. The U.S has already been using this product in high concentrations because their diesel fuel quality requirements differ from those in Europe. Fuel quality requirements for modern automotive technology and advanced engines are considerably higher. Blended biodiesel is available from a limited number of suppliers in British Columbia and the fuel may be priced competitively⁷ with fossil diesel.

Biodiesel Gelling

Biodiesel is essentially oil therefore it solidifies in cold temperatures (commonly referred to as *gelling*). If the fuel begins to gel, it can clog engine filters and eventually thicken enough to prevent flow from the fuel tank to the engine. The temperature at which crystals begin to form is called *cloud point*. The cloud point varies considerably from one biodiesel source to another. Due to winter climate conditions, the cold flow properties of biodiesel are an important consideration. It must be noted that even petroleum diesel can gel, thus additives are often used during wintertime as a preventative. In the case of biodiesel blends, such additives can aid in reducing the cloud point during winter months.

E3 recommendation: Consider the use of higher blends of biodiesel (B20 seasonally adjusted).

Biodiesel at a Glance

Strengths Weaknesses

- 1. Safe and non-toxic
- Proven, mature technology in North America and Europe
- 3. No conversion costs to vehicles
- 4. Minor costs to convert fuelling infrastructure (tanks and pumps)
- Larger blends (B5 to B100) result in greater emissions reduction
- 6. Warranty approved by most engine manufacturers⁸
- Biodiesel increases lubricity and therefore it is known to extend engine life (note: today's ultralow sulfur diesel suffers from reduced lubricity – biodiesel is commonly used to counteract this issue)
- 8. The GHG reduction potential depends on the source of biodiesel

- Although biodiesel production is abundant, there are a limited number of vendors and distributors
- 2. It may be necessary to purchase higher blends directly from wholesalers
- 3. There are viscosity issues related to the higher-blends (B5 or higher) in cold weather conditions that require special attention
- 4. Possible perception by persons that 'food' production is sacrificed for fuel production
- Potential of higher fuel cost (depending on market conditions) Note: at this time B20-B50 is approximately the same price or less than fossil diesel
- 6. Biodiesel has between 2% and 8% lower energy content than regular diesel⁹

⁷ Dependent on market and other conditions at the time of implementation

⁸ Sources: <u>www.neste.com</u> is a producer of renewable diesel. The company describes itself as the global leader in the renewable diesel market and wants to develop significant business from non-traffic renewable product markets by the end of the decade. <u>http://biodiesel.org/using-biodiesel/oem-information</u>,

⁹ https://www.driveclean.ca.gov/Search_and_Explore/Technologies_and_Fuel_Types/Biodiesel.php



Fuel Ethanol

All gasoline in BC contains a percentage of ethanol. Ethanol is obtained from the fermentation of sugar or converted starch contained in grains and other agricultural or agro-forest feedstock.

Ethanol is presently made principally from corn and wheat. Technologies are being developed to produce ethanol from grasses, wood and algae amongst others. Ethanol fuel is distilled and dehydrated to create a high-octane, water-free alcohol.

The exact emissions reduction potential varies based on the biomass used. E.g. low-blend ethanol from corn produces about 3 to 4 percent fewer greenhouse gas emissions than gasoline. Low-blend (e.g. E10) made from wood or agricultural cellulosic materials would produce 6 to 8 percent fewer emissions compared with gasoline.

Ethanol²⁶ is a renewable fuel because it is produced from biomass. Ethanol also burns more cleanly and completely than gasoline or diesel fuel.

Ethanol reduces greenhouse gas (GHG) emissions because the grain or other biomass used to make the ethanol absorbs carbon dioxide as it grows. Although the conversion of the biomass to ethanol and the burning of the ethanol produce emissions, the net effect can be a large reduction in GHG emissions compared with fossil fuels such as gasoline.

Some vehicles (i.e. flex-fuel, E85 capable vehicles) are specially manufactured to operate on an ethanol blend that contains up to 85 percent ethanol and at least 15 percent gasoline (E85). The 15 percent gasoline is needed to assist in engine starting because pure ethanol is difficult to ignite in cold weather.¹⁰

There are an estimated 17,000,000 flex-fuel, E85 capable vehicles in America and more than 600,000 in Canada. In the U.S, E85 is widely available, however in Canada it is scarce. Many vehicles in Nanaimo's fleet are flex-fuel capable and can use higher blends of ethanol than already in standard gasoline.

E3 recommendation: For further GHG reductions, consider higher blends of ethanol (up to E10 and up to E85 for your flex-fuel enabled vehicles) if practical and if a supply source is available.

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Natural Gas



We note that eight units in the Nanaimo fleet are currently powered by natural gas and we support your use of this low carbon fuel.

Natural gas, a fossil fuel composed of mostly methane, is one of the cleanest burning alternative fuels. It can be used in the form of compressed natural gas (CNG) or liquefied natural gas (LNG) to

fuel cars and trucks. Vehicles that use natural gas in either form are called natural gas vehicles (or NGV). Natural gas is found in abundance in porous rock formations. It is extracted from the ground, processed to remove impurities, and compressed to be stored and transported by pipeline.

NGV can be used as the single fuel for a vehicle, which is referred to as "dedicated CNG" or it can be used in conjunction with another fuel type (usually gasoline or diesel) referred to as "dual-fuel".

CNG at a Glance

Strengths

- 1. Lower fuel cost than gasoline or diesel
- 2. CNG can be used in light, medium and heavy-duty applications
- A CNG-powered vehicle gets approximately the same fuel economy as a conventional gasoline vehicle on a diesel-gallon-equivalent basis
- 4. Reduced GHG emissions by more than 10%, particularly in dedicated CNG units
- 5. Lower CACs compared to other fuels
- 6. Low safety risk
- 7. No range issues for dedicated CNG units
- 8. Piping directly to fuelling sites reduces upstream emissions resulting from delivery

Weaknesses

- Vehicle conversion costs are significant (payback typically in 3-10 years depending on the application and usage)
- 2. In-house CNG fuelling systems carry significant capital costs, (although subsidies may be available)
- 3. Additional electricity costs for CNG refuelers
- Potentially increased fueling time: if slow refuelers are employed, fuelling will take overnight; with fast refuelers, fuelling will take approximately the same time as traditional vehicles

CNG offers many advantages for fleets and although there are upfront capital costs, savings will likely ensue (a thorough business case should be prepared before making the switch to CNG).

A mix of slow (overnight) refuelers that would employ off-peak electricity to power the CNG compressors to refuel the majority of the fleet vehicles, combined with a small number of fast-refuelers would likely be the optimal arrangement; the ultimate arrangement employed by Nanaimo should be determined methodically based on the number and type of vehicles projected to be powered by natural gas.

E3 recommendation: Consider expanding the use of natural gas in the Nanaimo fleet, possibly in light-duty units such as pickup trucks.

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Renewable Natural Gas

Renewable Natural Gas, or biomethane, is a fully renewable energy source. RNG is made from biogas - a gaseous product of the decomposition of organic matter —anything from crop residues and animal manures to municipal organic wastes and food processing by-products.

RNG is essentially biogas that has been processed to purity standards and is thus a pipeline-quality gas that is fully interchangeable with conventional natural gas. Like conventional natural gas, RNG can be used as a transportation fuel in the form of CNG or liquefied natural gas (LNG).

RNG production has become an important priority thanks to its environmental benefits. RNG production is usually based on capturing and purifying the gas from collected organic waste.

RNG at a Glance

Strengths		Weaknesses
1.	Interchangeable with fossil natural gas	 The costs for an anaerobic
2.	Can be used to power natural gas vehicles without further conversion	digester are considerable and depend on the required size
3.	Very low GHG emissions	and capacity
4.	RNG can be produced year-round without intermittency	. ,

Production of Biogas

In general, the feedstocks for biogas systems can be grouped into five broad categories, based on the primary source of the organic material:

- Agricultural organics
- Residential source separated organics (SSO)
- Commercial SSOs
- Landfill gas (LFG)
- Wastewater treatment residuals

Anaerobic digestion is a process during which the waste (from landfills or waste water treatment plants) is converted into methane and carbon dioxide in a digester or holding tank. The gas produced is then cleaned or purified to meet utility pipeline specifications. The digesters can be located at waste water treatment plants, landfills, or at green bin waste facilities.

RNG Emissions Reduction Potential

The use of RNG is a natural progression from the use of fossil-based CNG. While use of natural gas as fuel requires large infrastructure investments, RNG has a very high emissions reduction potential of ~79%. RNG is thus an

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important fuel to consider for use in medium and heavy-duty vehicles. Nevertheless, the technology of producing RNG is still under development and it is expected to become more widespread in the near future.

When RNG is used to fuel natural gas fleet vehicles, lifecycle greenhouse gas emission reductions are significant. Different sources estimate the lifecycle reduction to be between 75% and 90% as compared to diesel.

E3 recommendation: Consider organically derived (renewable natural gas or "RNG"). RNG can be produced from landfill waste organics (see: http://vikingstrategies.ca)

Recommended Actions – Utilization

Overall your utilization rate is 11,294 km/yr. We acknowledge that utilization measured by kilometers-driven is not necessarily a good measure of vehicle productivity for the City of Nanaimo fleet. However, in the absence of more relevant measures, it is worthwhile monitoring as an indicator of fleet productivity.

E3 Fleet Review has identified 27 units within your fleet that have utilization at least 50% less than similar vehicles in your fleet. If vehicles are under-utilized and redundant then they may just be stranded assets and an unnecessary financial drain to your organization.

E3 recommendation: Consider management actions toward reducing the number of low utilization units on an ongoing basis. Reducing then number of low utilization units may free up capital that could be applied to increased fleet modernization. E3 suggests a top-down directive / policy requiring user departments to regularly review their assigned units and reduce their under-utilized vehicles.

Recommended Actions - Preventative Maintenance

High levels of vehicle uptime are a prime indication of success in fleet management. There are only two ways to increase uptime:

- 1) Decrease the age of the fleet by purchasing new vehicles; or,
- 2) Increase the level of preventive maintenance (PM) being completed in order to head off reactive repairs (i.e., breakdowns).

We have calculated your Maintenance Ratio to be 0.18, meaning that for every dollar spent on reactive repairs (unplanned repairs, breakdowns), you spent eighteen cents on preventive maintenance (PM). This measure is a prime indicator of vehicle reliability and a way of determining whether your team's work on carrying out preventive maintenance is sufficient (or excessive).

E3 recommendation: Consider tracking maintenance ratio, in the way we have described, on an ongoing basis as a KPI for managing your fleet.

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Tracking Downtime

It is especially important to track downtime on a per-vehicle basis in order to measure the effects of your PM efforts relative to fleet aging. This is essential information for fleet managers since it directly reflects the effectiveness of fleet management decisions, in particular vehicle age and preventive maintenance activities.

Once a history of downtime and maintenance ratio for all vehicles in your fleet is available over a period of time, determine what level of downtime is acceptable to maintain good service for your internal clients. Discussions with your fleet user groups would reveal the level of uptime that is essential to them to maintain their workflow.

Compare the downtime and maintenance ratio for each vehicle. Trends will emerge that will show which units are less reliable and you will be in a position to complete causal analysis. In some cases, preventive maintenance may need to be 'ramped up' with more intensive PM inspections and/or a higher frequency¹¹, however there may be other reasons such as:

- Is the vehicle too old for front line service?
- Is the driver harsh or abusive?
- Is it the correct vehicle for the job?

E3 recommendation: Consider tracking downtime¹² on a per-vehicle basis.

PM Scheduling

Most fleets conduct scheduled preventive maintenance (PM) inspections (i.e., A and B level inspections) together with an oil & filter change on a pre-determined number of days/weeks/months since the last such event. Many fleets include a second parameter of kilometers driven, and a few base their PM's on elapsed engine hours. To use the example of one "best-in-class" fleet operation, the fleet's vehicles were scheduled for their next PM and oil change on the first to occur of: (1) three months, or (2) 5,000 kilometers, or (3) 300 engine hours.

As described, this degree of scheduling precision requires a robust fleet management software system that is capable of complex PM scheduling. With a higher degree of effort, in-house solutions can also be developed using basic spreadsheet software that would be just as effective. Either way, the payback can result in huge savings for a fleet by fine-tuning its PM intervals.

For fleets that schedule their PM inspections and oil changes based on a single parameter (i.e., the time elapsed since the last event only), it is possible that costly engine oil is being drained and disposed of, *that may have many kilometers of serviceable life remaining*.

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¹¹ E3 has monitored downtime and maintenance ratio for over 150 Canadian fleets. We have concluded that there is no "perfect ratio" of reactive: PM but in almost all situations, a ratio of .50 (i.e., 50 cents spent on PM per \$1. reactive) yields the highest levels of uptime and reduces downtime to a minimum.

¹² Downtime is generally considered to be all time that a vehicle is out of service during prime business hours for unscheduled (reactive) repairs.



E3 recommendation: Use multiple parameters for PM scheduling. These parameters would include (1) the time since the last PM (days/weeks/months) and, (2) either kilometers-driven or engine hours operated.

Engine Oil Sampling

By tracking downtime and maintenance ratio as described in the previous section, fleet management can make an assessment as to the frequency with which specific units need to receive routine PM inspections and oil changes. But there is another consideration that can help reduce waste and reduce cost.

Laboratory oil sampling is inexpensive and it will pinpoint exactly when oil and filter replacements should be done in order to reduce engine wear and extend life. Laboratory oil analysis could mean extending the intervals between oil changes, which would obviously save considerable resources and money. Once sampling has been completed, you can compare the laboratory's oil change frequency recommendation to your own planned intervals for PM inspections (based on maintenance ratio and downtime assessment as previously described) and make well-informed decisions on the optimal maintenance intervals for your fleet.

E3 Recommendation: Consider engine oil sample analysis for your vehicles and equipment..

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Recommended Actions - Capital Budgeting and Vehicle Replacement

In preparing your E3 Data Input Form, you will recall the section prompting you to input data your "Best in Class" (BIC) choices of replacement vehicles for units in your fleet approaching the end of their planned life cycles. Using your inputs¹³, and *based on your current vehicle retention practices* as reported, we have calculated a number of critical cost and environmental impacts to your operation should your replacements plans be realized.

Your capital plan impacts are displayed in the following table. We have determined that your replacement plan would lead to a reduction in fuel usage, fuel cost and GHGs in addition to operating cost reductions.

	City of Nanaimo – Capital Plan Impacts	Capital Plan Impact	Measure
1	Vehicles Due for Replacement (based on current retention cycles)	32	Vehicles
2	Fleet Average Age if all Replacements Made	4.3	Years
3	Capital Budget Required for Replacements	\$1,195,425	\$
4	Estimated Capital Cost Increase (or lease payments)	\$44,202	\$
5	Potential Fuel Cost Savings (increase)	\$34,721	\$/yr.
6	Potential Fuel Usage Reduction (increase)	28,326	Liters
7	Net Cost Reduction (increase) if all Replacements Made	\$115,914	\$/yr.
8	Potential GHG Reduction (increase)	67.0	Eq. Tonnes CO ₂

Aged fleets will almost always have poor reliability and high levels of costly downtime, high repair costs, decreased safety, poor fuel economy and the resultant increased costs of fuel because of old technology vehicles. There are additional benefits of a newer, more fuel-efficient fleet and these include increased vehicle uptime. a lower risk level and quite possibly, improved employee morale.

The outcomes we have calculated (as shown in the above table) are obviously positive. By continuing to invest capital in your fleet, you would reduce fuel usage and emissions. We urge the City of Nanaimo to place emphasis on capital spending priorities and consider renewing/refreshing the fleet each year.

E3 recommendation: Continue to invest capital in renewing your fleet to reap the benefits and head off the negative issues associated with fleet aging.

¹³ If you did not provide your own data for this section, BIC default vehicles built into the E3 Fleet Review tool were used to make the calculations.



Life Cycle Analysis

There are some older vehicles in your fleet including several pickups from 13-20 years of age. In a business context, older vehicles may be exposing City of Nanaimo to unacceptable risks. Metals and other materials used in vehicles, such as those used in frames other critical components and systems all have a pre-determined resistance to bending moment (RBM) and yield strength.

While todays vehicles are built far better than ever before, materials used to build motor vehicles are designed to last for a prescribed number of duty cycles and if exceeded, components will eventually fatigue and break. Rubber and synthetic materials such as those used in braking systems and elsewhere are also subject to deterioration and will in time fail. For vehicles operated beyond their optimal economic life cycles, the cost of repairs may exceed the cost of capital for their replacement. Also, they may be exposing the owner to risk and liability due to unexpected critical component failures.

One of the E3 member tools you will find on at www.e3fleet.com is a basic Life Cycle Calculator. This tool is used to help determine the economic life cycle of your vehicles. If you do not have a clear and factual, data-based guideline for the optimal replacement cycles for your vehicles based on historical cost data, we strongly recommend having E3 complete economic Life Cycle Analysis (LCA) for all City of Nanaimo vehicle types.

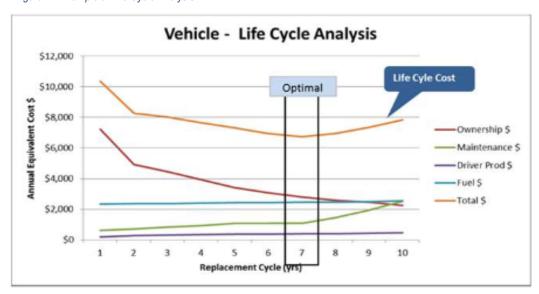


Figure 2 - Example of Life Cycle Analysis

Our E3 analysts specialize in completing LCA for fleets across Canada. Upon your request, our optional, extra cost LCA study/service will help you to prepare long-term capital budget planning that will lead to extracting the most value from each and every vehicle in your fleet.

E3 recommendation: Life Cycle Analysis should be completed and optimal economic replacement cycles for your fleet determined based on analysis of historical cost data.

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Capital Budgeting

A guideline for fleet replacement is to invest capital at the rate of depreciation. For example, if your new vehicles are depreciated over five years, then 20% of your current NPV would be required each year to maintain the average age of your fleet at the desirable level. Important *note: This guideline is only valid if performance indicators such as uptime and fuel-efficiency are satisfactory – if not, then a one-time increased spend would help to bring the fleet's average age and performance up to an acceptable level.*

New Vehicle Specifications

When competitively bidding (RFP, RFQ, tender, etc.) for new vehicles and equipment for the fleet, consider asking bidders to state the fuel economy ratings of their offerings. Some E3 members have opted to purchase the most fuel-efficient vehicles offered to them through an RFP — even though they were not the least expensive. In one fleet, the manager decided that the vehicles, which offered higher fuel economy ratings, would yield the lowest total cost of ownership than vehicles that were less expensive to acquire.

- Another consideration when acquiring new fleet vehicles includes a review of the manufacturers handling of waste stream – i.e., what is the percentage of materials used in manufacture of the vehicle than can be recycled? Most manufacturers today place a degree of emphasis on this matter and have the information readily available for the asking.
- When creating specifications for new vehicles investigate whether environmentally friendly and compliant
 waterborne paint will be used for your vehicles. The federal government has new and more stringent regulations
 regarding Volatile Organic Compounds (VOC) and its important to know about the OEM's handling of this
 legislation. The same applies for repainting of in-service vehicles.

Recommended Actions – Fleet Operations

"Data is King"

'If you can't measure it you can't manage it'. This popular mantra is especially relevant to fleet operations. If you do not currently have an effective way of obtaining fleet data from your vehicles consider GPS based telematics. Although their use can be contentious in some corporate environments, they provide a wide range of advantages for fleet managers that include real-time monitoring of vehicle utilization, performance (in terms of fuel economy and GHG emissions), route planning, operator safety and more.

E3 Fleet Rating System Copyright Richmond Sustainability Initiatives 2019 – All Rights Reserved



Shop Operations

Whether you maintain your vehicles in-house or outsource this activity, here are some eco-friendly procedures to consider:

- Aqueous parts cleaners. Aqueous parts washers are a new generation of water-based small parts cleaning
 equipment that are safe and biodegradable yet have the cleaning power of traditional cleaning solvents.
- **Filter recycling**: Used oil, fuel, coolant and air filter should be recycled. Local service providers may be available for this task.
- Waste Oil: Recycling of used oils and the creation of new products from the recycled oils, includes the recycling
 of motor oil and hydraulic oil. Oil recycling benefits the environment lessens the likelihood of used oil being
 dumped on lands and in waterways. Service providers in your area will pick up waste oils for recycling.
- **Vehicle Washing**: Review your vehicle washing processes to ensure that contaminants are not being released into the ground water, rivers, lakes, streams or the ocean. Give preference to cleaning processes that re-use wash water.
- **Tire recapping**: For large trucks, consider recapping your tires. Quality tire casings can be re-capped, extending their life cycle and saving money. Ensure that all end of cycle scrap tires are disposed of in an environmentally friendly way.
- Synthetic Oils. Most engines today are compatible with synthetic oils. Synthetic oil is used as a substitute for
 lubricants refined from petroleum when operating in extremes of temperature, because, in general, it provides
 superior mechanical and chemical properties to those found in traditional mineral oils. Synthetics typically cost
 more but may extend oil drain intervals, thereby potentially reducing expense and wasting natural resources.

Thank you for participating in the E3 Fleet Review program. I hope our comments and recommendations are helpful and thought provoking to you.

If you have any questions about your E3 Fleet Review please contact me anytime.

Regards,

Roger Smith
The E3 Fleet System
rsmith@fleetchallenge.ca

416 418 9931

Attachment 'B'



CITY OF NANAIMO GREEN FLEET STRATEGY 2020

Jason Evans
City of Nanaimo
2/21/2020



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City of Nanaimo	Fleet Services
Fleet Manager	Jason Evans
Regarding	Green Fleet Strategy
Executive Summary	

Executi

Fleet Administration

The Green Fleet Strategy (GFS) summarizes research and data collected to identify actions undertaken by all departments in order to reduce GHG emissions and improve fuel efficiency of the City's Fleet. The purpose is to reduce GHG emissions and improve fuel efficiency. This can be achieved through operational practices such as, alternative fuel usage, implementation of effective driver training and responsible purchasing of fleet vehicles. To be successful, the strategy must allow departments to operate in the most economical and environmentally responsible fashion, while meeting the needs of the City's operation. The GFS allows the City to make an organized and directed approach to improve efficiency within the City's Fleet by reducing fuel usage, maintenance costs, improving the resiliency of the fleet, and promoting environmentally responsible actions to the community.

In the Province of BC, transportation accounts for over 60 percent of the GHG emissions; therefore, the City has taken action to reduce emissions from the City Fleet, in support of the Climate Action Plan. Fleet services has made significant efforts to "green the fleet" over the last 10 years and has taken steps to reduce GHG emissions. These efforts, combined with corporate policies, have clearly articulated two simple and measurable goals:

Reduce GHG emissions by 33% percent of 2007 levels by 2020.

Name

Reduce GHG emissions by 80% percent of 2007 levels by 2050.

In order to effectively achieve these goals, the GFS has three guiding principles. These principles will help shape the actions, the City's Fleet will pursue to have the most effect on reducing GHG emissions:

- REDUCE FUEL CONSUMPTION Implement policies and training to increase operational efficiencies, reduce idle time, and improve driver behavior, ultimately reducing fuel consumption.
- USE OF ALTERNATIVE FUELS Continuously investigate and implement all cost effective alternative fuel sources where operational needs allow.
- ELECTRIC VEHICLE CHARGING INFRASTRUCTURE PLAN Corporately collaborate with senior management to develop a City of Nanaimo charging infrastructure plan/strategy.

As per any solution to a problem, each guiding principle comes with its own implementation challenges: Departments must cooperate in finding new and innovative methods to deliver services.

- Challenge internal policies that result in additional vehicle miles traveled and invest in communication technology to reduce travel.
- Equipment manufacturers must get new electric vehicles to market (half-ton trucks).
- The City must allocate funds for increased acquisition costs of vehicles and charging infrastructure.
- The cost of implementing green fleet initiatives.
- The lack of knowledge on green fleet programs and their benefits among key stakeholders, and departments "resistance to change" such as Rightsizing.
- Staff "buy in" and training to change culture and driver habits.
- Shortage of staff to meet the demand of a climate emergency



The City has been working hard to be environmentally responsible, but we still have a long way to go. The GFS update provides the necessary actions to overcome these challenges and achieve success. The goal chart below shows as a corporation, with the assistance of Organic Waste Diversion credits, we have reached our target for 2020 and are working towards our target for 2050.

Goal Chart



Introduction

Nanaimo relies on its fleet of vehicles to provide many essential services in the community; however, the City recognizes that fleet vehicles are a major source of air pollutants that contribute to GHG emissions. With growing concerns over climate change, and Council declaring a climate emergency, the City of Nanaimo is taking a leadership role in energy conservation and reduction in GHG emissions. This can be measured in terms of social, economic, and environmental benefits, such as improved energy efficiency, cleaner air that contributes to a better quality of life, and a reduction in health care costs. The GFS promotes affordable, reliable and renewable solutions that are sustainable.

The City of Nanaimo currently operates 466 vehicles and pieces of equipment with the Public Works Operations and 36 Fire Department related units. Fuel and gas represents about .58% of the City's overall Operating Budget, with a cost of \$737,802.33 in 2019, excluding Fire and Emergency Services (Appendix A).

Over the past 10 years, Fleet Services has been dedicated to reducing fuel consumption and fleet vehicle emissions. With the introduction of internal policy, procedures and innovative solutions, fleet has shown great progress. In 2007, Fleet was the largest contributor of all departments for CO_2 emissions, responsible for 2,119 tonnes of CO_2 or 45% of the city's total emissions. In 2018, Fleet was responsible for 1,839 tonnes of CO_2 or 35% of the City's total emissions, a reduction of 10%. This accomplishment is a testament to what we can achieve with dedicated resources and committed leadership.

2007 – 2018 GREEN VENTURES

- Installed automated fuel management system
- Implemented a preventive maintenance system
- Adopted bio-diesel 5 blend
- Adopted a Corporate anti-idling policy
- Developed a Bicycle Share Program
- Implemented a Pool Car Program
- Purchased alternative fuel vehicles
- Converted existing gas vehicles to alternative fuel vehicles

2019-2020 GREEN VENTURES

- Completed an E3 Fleet review
- Increased the use of alternative fuel vehicles in the Fleet (propane & CNG)
- Introduced the City's first, fully electric, bicycle
- Completed multi-year tender for the purchases of fully electric cars
- Increased number of electric vehicle charging stations for Fleet vehicles
- Working with facilities to develop a Corporate EV Charging Station Strategy
- Develop greener servicing intervals to avoid over servicing
- Adopted the use of synthetic oils to increase service intervals
- Implementing the use of bio-diesel blend B20 April to October
- Right-sizing of department vehicles and equipment before purchasing
- Implementing in 2020, Fleet management software upgrade (Assetworks), allowing for increased level of reporting on fuel and equipment usage
- Provide monthly fuel utilization reports to Managers
- E3 Fleet rating
- Completing E3 Fleet rating





KEY FINDINGS

E3 Fleet Review

In 2019, with the support of Council, Fleet Services collaborated with the E3 Fleet Program (supported by the Fraser Basin Council), to conduct a review of the City's Fleet. This review assisted with developing the framework that, if supported, will help the Fleet reduce GHG emissions and lower fuel consumption.

E3 Fleet analyzed the City's 2018 operational Fleet data, selected Key Performance Indicators (KPIs) that provide a snapshot summary of operating parameters. These KPIs reflect operating costs, emissions and service levels. E3 Fleet review has provided recommendations to the City to assist in lowering fuel consumption, operating costs, and GHG emissions, to help us meet our targets.

E3 RECOMMENDATIONS

1. E3 recommendations: Our recommended actions are to (1) regularly monitor fleet median fuel efficiency and (2) set a target for ongoing improvement.

Median Fuel Efficiency indicates the Fleet's overall performance, and therefore, it is a critical success factor to watch closely. Past E3 Fleet Reviews have shown continuous improvements to our median fuel efficiency from 2009 to 2013. This indicates the Fleet is on a healthy trend, and the strategies undertaken to improve our Fleet performance, are working.

Median Fuel Efficiency is calculated using two data points (fuel use & kilometers - travelled). 2018-19 E3 Fleet Review, input data included kilometers-driven and fuel-used by Sanitation vehicles — data points which were not part of previous reviews. For this expanded data set, Median Fuel Efficiency calculated for 2018-19 to be 23.7-I/100 km.

Actions:

Software update: Fleet management software upgrade (Assetworks), for 2020. This update will allow Fleet precise and in-depth reporting, to share with departments and reported to Council, yearly.

Approved in the 2020 budget.

- \$67,350.00 software upgrade
- \$12,000.00 6 tablets



2. E3 recommendation: Consider adding more hybrid, plug-in hybrids and battery-electric vehicles to your fleet and ongoing investment in EV charging systems.

Rapid fleet electrification – build the Electric Vehicle (EV) Charging infrastructure; deploy market ready EVs, and pilot emerging EV technology in medium and heavy-duty vehicles.

Actions:

Work corporately to develop an EV Charging Station Strategy for the City of Nanaimo, to identify the City's needs moving forward. Collaborate with other municipalities; take full advantage of Provincial buyer's groups and grants offered to GHG emission reduction.

In 2020, Fleet issued a multi-year tender for five EV vehicles with the intent to increase EV vehicles every year. Fleet has budgeted for 2020 for the updating of existing charging stations and the addition of four charging ports (Fleet dedicated) in SARC. Charging stations will be purchased using the BC Government CSA for Electric Vehicle Charging Stations

Approved for 2020 budget:

\$178,200 four fully electric Building Inspector cars

• \$40,000.00 fully electric car replacement (gas to electric)

\$20,000.00 updating of existing charging stations and the addition of four charging ports

3. E3 recommendation: For further GHG reductions, consider higher blends of ethanol (up to E10 and up to E85 for your flex-fuel enabled vehicles) if practical and if a supply source is available. Consider the use of higher blends of biodiesel (B20 seasonally adjusted).

E3 supports the use of B5 biodiesel and recommends that we continue to use renewable, low carbon fuels that are available, wherever operationally practical.

Biodiesel can be used in higher blends, without issues. Biodiesel in higher blends than B5 will reduce emissions further, and contribute to the increased use of renewable fuels.

Actions:

During the months of April – October, Fleet is working to introduce the use of B20 diesel fuel and will continue to investigate lower carbon fuels in the future.



4. E3 recommendations: Systematic reviews of all exception units in your fleet that are driving up your fuel bill (and emissions) and remedial actions, case-by-case.

E3 Fleet Review has identified 30 units in our Fleet with higher than average fuel consumption to similar vehicles within our Fleet. These 30 vehicles burned fuel at a rate of at least 50% higher than our Fleet average.

Actions:

Continual use of GPS/AVL to monitor vehicle utilization and excessive idle times. Introduction of a full time Driver Trainer / Green Fleet Advisor to support Staff with monitoring and reporting idle times, driver behavior and utilization of equipment. Develop and implement training, for Staff, such as "Eco Driver Training".

5. E3 recommendations: (1) Ongoing vigilance with regard to excessive engine idling and (2) fuel-efficient, eco-driver training.

The City currently has an anti-idle policy, (Appendix B), but lacks the Staff to enforce this policy. All drivers would benefit from Eco Driver Training which covers the negative effects (i.e., fuel costs, emissions, health impacts) of engine idling. Fuel-efficient driver training and monitoring driver's behaviors, can lower fuel consumption by as much as 10%.

Actions:

Fleet to complete a Business Case for a Full Time Driver Trainer/Green Fleet Advisor. This new position will develop driver training programs, such as Eco-Driver, as well as monitor, and report on driver behaviors.

6. E3 recommendation: Consider management actions toward reducing the number of low utilization units on an ongoing basis. Reducing the number of low utilization units may free up capital that could be applied to increased fleet modernization. E3 suggests a top-down directive / policy requiring user departments to regularly review their assigned units and reduce their under-utilized vehicles.

Overall, Fleet utilization rate is 11,294 km/yr. Utilization measured by kilometers-driven is not necessarily a good measure of vehicle productivity for the City of Nanaimo Fleet. However, in the absence of more relevant measures, it is worthwhile monitoring as an indicator of Fleet productivityE3 Fleet Review has identified 27 units within the Fleet that have utilization of at least 50% less than similar vehicles in the Fleet. If vehicles are under-utilized and redundant, then they maybe an unnecessary financial drain to the organization.

Actions:

Fleet Services and the Departments need to evaluate the vehicles considered take-home vehicles, identify which vehicles to be eliminated and substituted with pool vehicles. Evaluate and eliminate vehicles that travel less than 300kms per month by expanding the use of pool vehicles. Departments will need to forecast third-party rental options to offset vehicle and equipment reduction. Development of a Corporate Policy on vehicle utilization, including a low utilization yearly review with minimum standards on kms driven monthly. Fleet will need to expand our vehicle pool program to eliminate low utilization vehicles.



Page7

7. E3 recommendation: Continue to invest capital in renewing your fleet to reap the benefits and head off the negative issues associated with fleet aging.

Aged fleets will usually have poor reliability, and high levels of costly downtime, high repair costs, decreased safety, poor fuel economy, and resultant increased costs of fuel due to old technology vehicles. There are additional benefits of a newer, more fuel-efficient fleet, and these include increased vehicle uptime, a lower risk level, and quite possibly, improved employee morale.

Actions:

Software update: Fleet management software upgrade (Assetworks), for 2020. This update will allow Fleet to collect data to improve the life cycle analysis, ensuring a more precise forecast for the future. Encouraging departments to not retain older units at end of life.

8. E3 recommendation: Invest in green vehicle technologies, which have been tested, proven and verified to reduce fuel consumption.

Driver Behaviors: Green vehicle technologies, such as idle shutdown devices, battery backup systems for DC loads and auxiliary cab heaters, will deliver fuel-efficiency increases. **Actions:**

All vehicle or equipment purchases are to be equipped at time of purchase with some form of idle shutdown device; this will ensure a reduction in excessive idling. Introduction of a full time Driver Trainer/Green Fleet Advisor could support Staff to monitor and report idle times, driver behavior and utilization of equipment. As well, develop and implement training for Staff such as eco-driver training.

9. E3 recommendation: Consider expanding the use of natural gas in the Nanaimo fleet, possibly in light-duty units such as pickup trucks.

Natural gas, a fossil fuel composed of mostly methane, is one of the cleanest burning alternative fuels. It can be used in the form of compressed natural gas (CNG) or liquefied natural gas (LNG) to fuel cars and trucks. Ten units in the fleet are currently powered by natural gas to support the use of this low carbon fuel.

Actions:

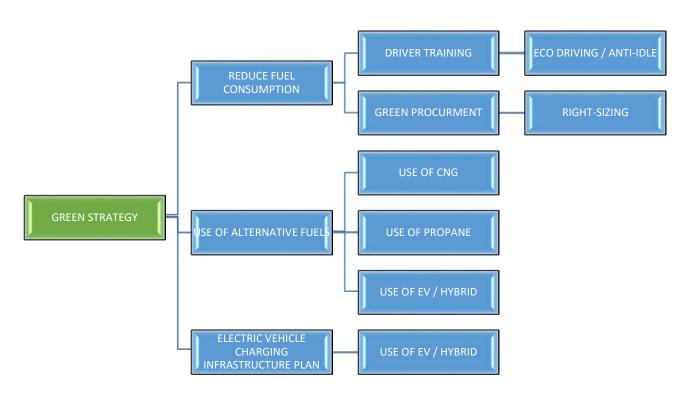
Due to the cost of CNG conversion and the fact, the City has a low yearly kilometer Fleet; the ROI of CNG is not always the first choice. Fleet has adopted propane conversions for lower kilometer vehicles; the installation cost is significantly lower Propane burns cleaner and is typically up to 40% less expensive than Diesel and up to 50% less than Gasoline.

- 2019-2020 Fleet has added two propane powered F150 trucks
- 2019 ordered one CNG powered Sanitation truck
- 2020 devolving specifications to purchase two F550 propane powered trucks



The review and recommendations of E3 Fleet Program have resulted in the development of a framework for the City of Nanaimo, which includes achieving the objective of reductions in GHG emissions by implementing initiatives from three guiding principles: reduce fuel consumption, use of alternative fuels, and the development of an Electric Vehicle Charging Infrastructure Plan.

Guiding principles chart



Guiding principles and framework

 REDUCE FUEL CONSUMPTION - Implement policies and training to increase operational efficiencies, reduce idle time, and improve driver behavior. The introduction of a full time Driver Trainer/Green Fleet Advisor will reduce fuel consumption and GHG emissions.

Driver Trainer - require full time Driver Trainer/Green Fleet Advisor

In 2009, a Driver Trainer Policy was adopted by Council, (Appendix C), to ensure all employees operating City vehicles, mobile equipment and/or auxiliary equipment would be properly qualified and trained for safe operation. This is not a full-time position; the candidate is required to continue working in their present capacity with time allotted to coordinate this function. The incumbent receives \$116/month, in addition to their regular earnings. Over the last decade, the City has increased the level of training and accurate driver training documentation required. As well with council declaring a climate emergency, the expectation, and Staff time that is required to be successful, has greatly increased. The combining **Driver Trainer/Green Fleet Advisor** into a full time position, will ensure a successful future in driver safety, compliance, and GHG reduction. The Fleet Manager is to complete a Business Case for this position in 2020.



Training operators is the single most important part in our road to success. Municipalities and large privately owned fleets have proven this theory many times in the past. Investing in Staff Eco Driver Training, followed with regular reporting has rewarded municipalities with lower fuel cost, GHG reduction, lower number of vehicle accidents and overall changing the culture positively.

• Green Procurement – Right sizing vehicles

Right sizing - A right-sizing study will identify if the Fleet's makeup adequately supports operations as efficiently as possible.

Right sizing occurs at both the Fleet and Department level. At the Fleet level, there should be enough vehicles to provide services at a sufficient and acceptable level, without having an excess of vehicles not often used, but still maintained. At the unit level, right sizing ensures that units are meeting operational requirements, without being oversized. When considering replacement or new purchase of a fleet unit, the Fleet Manager will consult with departments to define operational requirements of the vehicle and recommend appropriate vehicle types and specifications. Fleet to work with Procurement to build a Green Fleet Procurement Policy.

Multi-year contracts to standardize fleet – Use of purchasing methods

The use of Sourcewell and multi-year contracts will allow for fleet standardization, this will greatly reduce the different type of oils and parts in stock. The use of these purchasing methods have shown cost savings in operator training, technician training and Staff hours in document preparation for the tender process. Fleet is to work with Procurement to build a Green Fleet Procurement Policy.

• **USE OF ALTERNATIVE FUELS** - Continuously investigate and implement all cost effective alternative fuel sources where operational need allows.

Increasing the use of CNG, Propane, Electric and Hybrid vehicles. Make all (based on operational needs) fleet vehicle purchases, EV or alternative fuels, using a green vehicle selection process for new or vehicle replacements. Continually work with industry leaders to explore and implement alternative fuel vehicles where operational needs allow.

• **ELECTRIC VEHICLE CHARGING INFRASTRUCTURE PLAN** - Collaborate with Senior Management to develop a City of Nanaimo charging infrastructure plan/strategy.

Working corporately to develop an EV Charging Station Strategy for Nanaimo. Collaborate with other municipalities; take full advantage of provincial buyer's groups and grants offered to GHG emission reduction.

Identified below are Key Performance Indicators (KPI) that provide a snapshot summary of the Fleets operating parameters. These KPIs reflect in our operating costs and levels of GHG emissions produced. If supported, the GFS will show improvements to each of these factors and will assist with the cost and emission reductions while lowering operating and capital budgets. Reported yearly, these KPI's will show the Fleets progress towards targets.

GFS KPIs	Value	Measurement
Fleet Equipment Reviewed	151	Units
Fleet Average Age of Expectancy	7.9	Years
Total Annual Distance Travelled 2019	1,269,069	Kilometers
Fleet Annual Fuel Usage	633,511	Liters/yr.
Annual GHG Emissions	2,010	Tonnes CO2
Corporate Average Utilization	11,294	Kilometers
Fleet Median Fuel Efficiency	23.7	l/100 km

STRATEGY SUMMARY

The goal for the City of Nanaimo is to be recognized as a leader in the community for environmental stewardship; this was proven by declaring a climate emergency in 2019. The GFS, if supported, can be a tool for the City to assist in meeting this goal, while meeting operational needs in the most economical and environmentally responsible manner. Fleet Staff has been working on greening the fleet for many years and have shown measurable results, which have led to cost savings and GHG reduction. During the creation of the Strategy, Fleet has realized particular areas of weakness in policies, training, continuous monitoring and reporting of data.

You can't manage what you don't measure. The Green Fleet Plan has associated performance indicators to measure progress of the GFS; some activities within the strategies present a challenge to make reasonable assumptions of the potential emission reductions until the activities have been implemented. GFS 2020 is the first report of its kind for the City, it will help the City benchmark where we are, and help develop where we go from here. By compiling all initiatives together, and providing a framework to allow best practices, we can achieve our goals to make appropriate decisions for the future. This action has shown that new measures need to be in place by Staff to meet expectations. Yearly revision and updating of the GFS is essential to ensure that Fleet and the City are working towards meeting targets.

Actions 2020



	Strategies & Actions 2020	Targets
REDUCE FUEL CONSUMPTION	Driver Trainer /Green Fleet Advisor business case for this position.	Fleet 2020
	Yearly/Quarterly reporting to departments for the following • Fuel Efficiency (identifying vehicles that operate out of normal MPG efficiency) • Idle times	Fleet 2020
	Driver behavior Utilization	IT / Fleet 2020
	Fleets management software update In progress (budget approved 2020) Develop corporate policy for the following Vehicle utilization	Corporate / lead Fleet 2020
	Vehicle purchasing (rightsizing /alternative fuel) Introduce the use of B20 diesel fuel during the months of April – Oct continuing to investigate lower carbon fuels	Fleet 2020
	Green Procurement Right sizing all replacement or new purchases Multi-year contracts to standardize fleet	Fleet 2020 (Ongoing)
	Complete E3 rating	Fleet 2020
USE OF ALTERNATIVE FUELS	CNG / propane / EV Continuously investigate and implement all cost effective alternative fuel sources where operational need allows. • Multi-year contract for electric vehicle cars (adding 5 in 2020)	Fleet 2020
	 Forecast 10 year replacement plan to switch replacement un it to alternative fuel 	Fleet 2020
ELECTRIC VEHICLE CHARGING INFRASTRUCTURE PLAN	CHARGING INFRASTRUCTURE Collaborate with senior management to develop a City of Nanaimo charging infrastructure plan/strategy.	Corporate / Fleet 2020 Fleet 2020
	 Installation of four charging stations (budget approved 2020) 	FIECT ZUZU

City of Nanaimo (Appendix A) 2019 Fuel and Gas Summary

	2019
Fuel and Gas Expenditure	\$ 820,887.89
Fire's Fuel Costs	83,085.56
Total Fuel/Propane/Natural Gas excluding Fire	\$ 737,802.33
City of Nanaimo's Operating Budget	 2019

\$144,975,229.00 Fire & Emergency Services Operating Budget 17,019,067.00 City of Nanaimo's Operating Budget excluding Fire

\$127,956,162.00

Total Fuel and Gas as a % of Operating Budget excluding Fire & Emergency Services

0.58%



(Appendix B)







Section:	Engineering and Public Works	11
Subsection:	Environmental Management – General	5280
Title:	Anti-Idling Policy	02

POLICY:

This policy applies to all staff operating vehicles and equipment owned, rented or leased by the City of Nanaimo.

REASON FOR POLICY:

To establish guidelines for unnecessary idling of municipal vehicles and equipment. Limiting idling times reduces air pollution and greenhouse gas emissions and contributes to healthier work environments and the efficient use of city resources.

Definitions:

<u>Fuels</u>

<u>Idling</u>	means the operation of a vehicle or equipment while they are not in motion and not being used to
	operate auxiliary equipment that is essential to the operation of the vehicle or equipment.

For the purpose of this policy this includes all vehicles or equipment that run on fossil fuels which

include gasoline, ethanol, diesel, bio-diesel, propane, hydrogen and natural gas.

<u>Vehicles</u> For the purpose of this policy, vehicles or equipment refers to cars, light trucks, vans, heavy trucks,

snow equipment, buses, loaders, backhoes, street sweepers and any other equipment operated by staff

and utilizing fossil fuels.

AUTHORITY TO ACT:

Delegated to Staff.

PROCEDURE:

1. <u>Manufacturer's guidelines (recommendations).</u>

Always follow the manufacturer's guidelines and recommendations for idling unless otherwise advised by fleet services.

2. <u>Gasoline and alternative fuel vehicles.</u>

Idle times up to one (1) minute are allowed for vehicles during their initial shift warm up and at subsequent times when the vehicle is being restarted after a prolonged period of shut down that results in vehicle conditions similar to those prior to initial shift warm up.

3. <u>Diesel fuel vehicles/equipment.</u>



Idle times up to three (3) minutes are allowed for diesel fuel vehicles/equipment during their initial shift warm up and at subsequent times when the vehicle/equipment is being restarted after a prolonged period of shut down that results in vehicle/equipment conditions similar to those prior to initial shift warm up.

4. <u>Operation of equipment in the field.</u>

- a. Gasoline and alternative fuel vehicles.
 No operator shall idle the engine of an unleaded fueled vehicle in excess of one (1) minute, if the vehicle is stopped for a foreseeable period of time.
- b. Diesel fueled vehicles/equipment.
 No operator shall idle the engine of a diesel fuel vehicle in excess of three (3) minutes if the vehicle is stopped for a foreseeable period of time.
 - Diesel fuel vehicles/equipment should only be turned off after enough time has passed to allow the proper circulation and cooling of engine oil, coolant, and turbo chargers, not to exceed three (3) minutes.
- c. When engines must be left running for any reason, the operator must remain with the vehicle.

Exceptions:

This policy does not apply to the following vehicles, equipment or situations. Operators must use their own discretion in certain situations.

- 1. Emergency vehicles and equipment are exempt while engaged in operational activities where engine power is necessary for an associated power need.
- 2. Vehicles may idle for purposes of defogging, defrosting or de-icing windows. Idling must end when the windows have cleared enough for the vehicle to be safe to drive. In addition to using the vehicle defrosters operators must manually clear glass of snow, ice or frost.
- 3. During times of extreme cold, idling periods may be necessary for the well-being of the operator and passengers.
- 4. As part of routine maintenance, this policy does not apply to vehicles being serviced or repaired while running the engine is required.
- A diesel engine while in an active regeneration cycle on its diesel particulate filter (DPF).



age 14

Accountability:

- 1. All employees who operate motorized vehicles / equipment are responsible for ensuring the vehicles / equipment are operated in accordance with this policy.
- 2. Supervisors in each department will be responsible for the adherence and enforcement of the vehicle / equipment idle free policy.

Training:

All City staff are required to participate in the City of Nanaimo's anti-idle awareness training/information sessions.

Date: 2015-OCT-26 Approved by: Committee of the Whole



CITY OF NANAIMO



HUMAN RESOURCES POLICIES

Policy:	Driver Trainer	Number: 4.12.03
Applies To:	All employees	
Authorized by:	Al Kenning	Effective Date: Sept 4, 2012

PURPOSE

The purpose of this policy is to ensure all employees operating City vehicles, mobile equipment and auxiliary equipment are properly qualified and trained to operate this equipment; and to ensure all employees operate City vehicles, mobile equipment and attachments in a safe manner.

POLICY STATEMENT

The City of Nanaimo is committed to the Health and Safety of its employees. The expectation is that all employees will only operate City equipment for which they are trained and qualified to operate.

SCOPE:

This policy applies to all employees who operate vehicles, mobile equipment and auxiliary equipment. This list is inclusive but not exhaustive:

Vehicles	Mobile Equipment	Attachments
Pool cars, trucks and vans	Backhoes, front end loaders	Snow plough blades
Garbage trucks	Forklifts and similar equipment	Grinders, sweepers
Dump trucks	Riding lawnmowers	Bobcat attachments
Pickup trucks	Sidewalk sweeper	PTO equipment

^{*}NOTE: This policy excludes Fire Trucks as Nanaimo Fire Rescue has a separate comprehensive training policy and program.

DRIVER TRAINER DEFINITION

The Driver Trainer is an appointed position which oversees driver training for City staff. The Driver Trainer, in conjunction with department managers, is generally responsible for assessment, certification, training and orientation of City staff for operation of most City equipment as defined in this policy.



RESPONSIBILITIES

Driver Trainer:

- Ride check all new equipment operators for equipment listed in <u>Schedule A</u> prior to operation to assess driving skill and determine if training is required.
- Confirm all drivers have appropriate level of license prior to assignment to any vehicle or equipment.
- Conduct periodic ride checks with operators to evaluate competence in vehicle operation.
- Conduct periodic checks of equipment or reviews pre-trip inspections as required.
- Conduct and/or review training, evaluation, certification and standards for equipment operation as required by departments or by regulation.
- Review new equipment/vehicles to determine if operator training is required.
- Conduct periodic safety training for staff using City pool vehicles.
- Maintain and oversee updating of database of equipment and operators created for the purpose of this
 policy.
- In consultation with appropriate departmental staff and Occupational Health & Safety staff, the Driver Trainer will prepare and maintain a comprehensive list of all equipment that is covered by this policy and assign any recertification standards that will have the same standing as other OH&S City Standards for training and certification.
- Issue "Equipment Operator Permit".

Employees:

- Ensure they are properly certified, licensed and trained for any City equipment they operate.
- Wherever required by Driver Trainer, obtain a City "<u>Equipment Operator Permit</u>" issued by the Driver Trainer and provide this information to supervisor.
- Ensure they have been trained in and are aware of all City safety standards and Safety Program requirements relating to relevant mobile equipment and vehicle operation.
- Ensure they maintain their certification for equipment they are assigned to use.
- Must inform the employer of any change in personal circumstance, physical condition or license restriction(s) that may impact their ability to operate City Equipment.

Managers (or designates):

- Ensure all staff are properly certified and trained to operate any equipment assigned to them.
- Ensure all staff complete required initial worker orientation check prior to operating any vehicle, mobile equipment or attachments, including City pool vehicles.
- Cooperate with and assist the Driver Trainer as required.
- Advise Driver Trainer of any hazards or potential dangers related to equipment use.
- Ensure job descriptions reflect the appropriate licensing requirements.
- Ensure that any worker who has not operated a particular piece of equipment or vehicle for three (3) or
 more years be re-certified by the Driver Trainer before operating that equipment or vehicle. (Exemptions
 to this clause: pool cars, pickup trucks and vans; equipment or vehicles determined by the Driver Trainer)

Human Resources & Organizational Planning Department

- Maintain database of job descriptions containing information provided by managers regarding licensing requirements.
- Provide the Driver Trainer data regarding new employees and staffing lists as it relates to staff needing assistance or direction operating City equipment.



RELATED DOCUMENTS:

City of Nanaimo Human Resources Policy Manual

Section 4 Standards of Conduct

4.12 Use of City Vehicles
4.12.2 Driver Abstracts

PAST REVISIONS

New document.

CITY OF NANAIMO

JOB DESCRIPTION DRAFT

TITLE: Driver Trainer / Green Fleet Adviser

DEPARTMENT: Engineering & Public Works

LEVEL: See below

Updated: 2020

NOTE: This is a full-time position excluded.

TYPICAL DUTIES AND RESPONSIBILITIES

- Design, prepare and conduct training orientations, training courses and workshops to ensure staff receive appropriate training as required to ensure legislative compliance to the National Safety Code Safety Plan Guidelines
- 2. Confirm driver's license for appropriate level for equipment to be operated and maintain a "Corporate" Driver Abstract Log.
- 3. Undertake road tests and certifies employees for operation of City vehicles and equipment.
- 4. Investigate all vehicle and equipment accidents, incidents, and damage claims. Completes reporting on accident findings, makes corrective action recommendations, and implements approved outcomes.
- Conduct periodic evaluations with all operators to determine if any areas of operation may require improvement i.e. identifies areas of needed improvement and/or concern and assists employees to improve through coaching and/or instruction.
- 6. Perform vehicle/equipment safety inspections, pre & post trip enforcement, and conducts audits on a continual basis.
- 7. Maintain a listing of all vehicles and equipment utilized at Public Works and all employees designated to operate vehicles/equipment.
- 8. Maintain log of weight limits and vehicle loading to ensure adherence to maximum limits; informs operators of maximum load limits on equipment.
- 9. Develop and maintain training records
- 10. Conducts annual Air Brake Refresher Course.
- 11. Develop and instruct (hands on) programs such as but not limited to, professional driver training, eco driving and snow & ice control operations
- 12. Conducts refresher courses on equipment / vehicle operation as required; responds to operator requests for training assistance.



- 13. Serve as the "Fleet" department lead on greenhouse gas reductions for all city equipment.
- 14. Oversee electric vehicle charging infrastructure reporting
- 15. Develop policy and procedures consistent with the City of Nanaimo and Green initiatives.
- 16. Oversee key performance indicators and performance reporting.
- 17. Maximize operational efficiency by leveraging the available fleet routing and reporting from GPS/AVL.
- 18. Participates in the Motor Vehicle Incident (MVI) Committee.

MINIMUM TRAINING AND EXPERIENCE REQUIRED

Diploma in Business Administration, Project Management, Environmental Studies or related field **OR** two additional years of relevant experience.

Experience facilitating in adult learning

Experience in the operation of a variety of heavy equipment and conducting pre-trip inspections.

Experience developing procedures and instructions.

Previous driver training experience or equivalent

Experience in the operation of snow removal equipment.

Comprehensive knowledge of Motor Vehicle Act and Regulations, Work Safe BC Regulations and Worker's Compensation Act

Valid class 3 BC driver's license.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

Proven project management skills

Sound understanding of adult learning styles and methods

Ability to communicate effectively (written and verbal) with leaders and decision makers.

Experience working with in budgets for multi-year capital projects.

Proven written and oral presentation skills

Strong computer skills and knowledge of office and fleet management programs



REQUIRED LICENCES, CERTIFICATES AND REGISTRATIONS

A valid Class 3 BC Driver's Licence with air endorsement.





City of Nanaimo Green Fleet Strategy

May 11, 2020

Context for a Green Fleet Strategy

- Transportation accounts for a large majority of GHG
- City is demonstrating leadership by 'greening' its fleet.
- Green Fleet Strategy designed to reduce emissions through improved efficiency, and development of standards
- Supports Council's Strategic Plan
- Dovetails with Energy Conservation and Management Policy

Fleet Review

- In June 2019, Council directed the City join E3* Fleet and participate in a review
- Cost-effective, independent review of fleet performance
- In fall 2019, the City worked with E3 Fleet to conduct a Level I Review (Operational Profile)
- Level I examines KPI's such as fuel use, efficiency, distance, GHG and use.
- Provides recommendations for continuous improvement

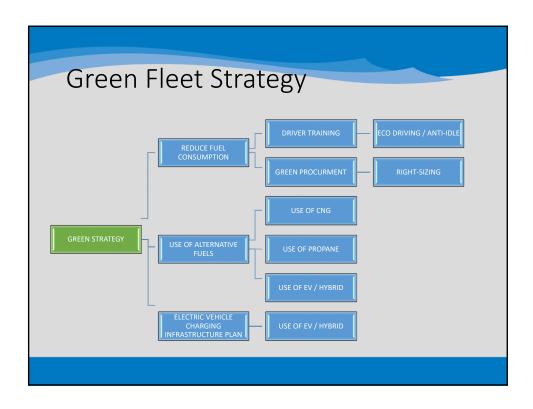
*E3 = "Energy, Environment, Excellence"

Fleet Rating

- Based on the Level 1 review, E3 provides a rating as a means of benchmarking the City's fleet
- E3 Fleet Rating:
 - Gives a target to work towards
 - Promotes lower fuel, emissions and downtime
 - Demonstrates progress towards organizational goals
 - Broadcasts the City's care for its environment



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Previous Initiatives

- Installed automated fuel management system
- Implemented a preventive maintenance system
- Adopted a corporate anti-idling policy in 2007
- Implemented a pool car program in 2008
- Adopted bio-diesel 5 blend in 2009





Previous Initiatives

- Partnering with neighbouring municipalities to share best practices
- Right-sizing vehicles at time of purchase

- Annually evaluating the preventative maintenance program
- Provide fuel consumption reports to departments
- Assessing 10 year purchase of vehicles for potential alternative fuel vehicles
- Currently developing a Corporate Green Fleet Strategy



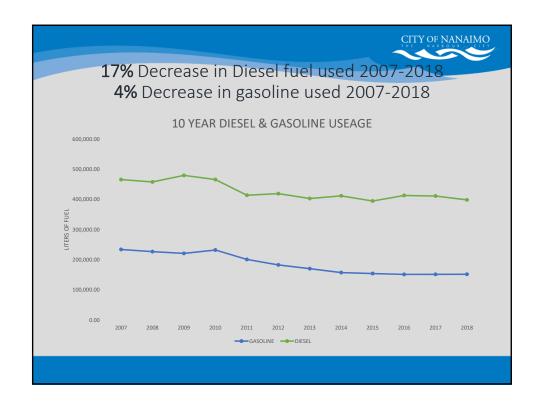
Initiatives to Date

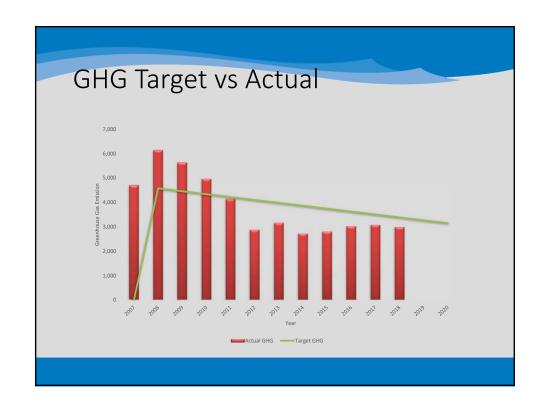
Alternative fuel vehicles

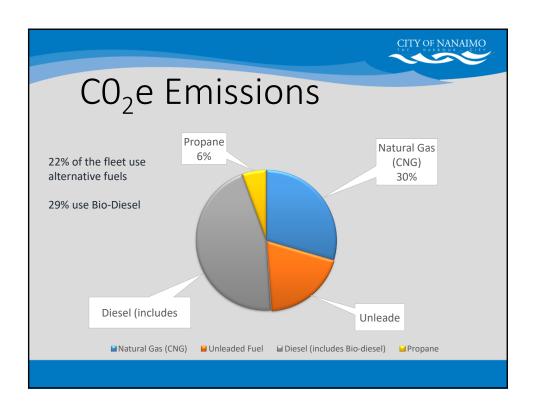
- 4 Hybrid
- 21 Propane / CNG pickup trucks
- 9 CNG garbage truck fleet
- 5 fully electric cars
- 5 fully electric ice resurfacing machines













Information Report

DATE OF MEETING MAY 11, 2020

AUTHORED BY SHEILA GURRIE, DIRECTOR, LEGISLATIVE SERVICES

SUBJECT ADVOCACY FRAMEWORK

OVERVIEW

Purpose of Report:

To provide Council with an Advocacy Framework document in order to offer Council a tool that can be used to clearly and succinctly outline an advocacy strategy for the topic(s) of their choosing.

BACKGROUND

At the 2020-FEB-24 Governance and Priorities Committee meeting, Council workshopped through what an Advocacy Strategy would look like and what their expectations were in the development of a framework to support this strategy. Council had a round table discussion on the projects and initiatives that mattered to them as individual councillors and what advocacy meant to each of them. Background information was provided to Council that included the criteria that should be considered when deciding on a matter that would be advocated for, such as the "what"; "why"; "who"; "how"; and, next steps moving forward. Council discussed how the outcome of what success looks like to them would be a crucial aspect of this framework and future advocacy strategies.

Council determined treatment centres and affordable housing strategies as the topic(s) to work through at their next meeting, as they are linked to one another and support current Council initiatives as well as the community's needs. It was decided that Staff would provide Council with an outline of an advocacy framework to be filled in at this future meeting and Council could determine the appropriate criteria had been identified.

DISCUSSION

Advocacy, when done effectively, can help a council to achieve funding or policy changes from other levels of government in an effort to bring value to the city and community. In order for advocacy to be effective, a cohesive advocacy strategy is important. Council should have a framework that includes clear messaging, including what the project or initiative is; why they are advocating for this project and this includes the benefits to the city and community as a whole; who the spokesperson is for Council on this matter; what stakeholder groups and partners support this project or initiative; what success looks like in this particular endeavour; and, what methods of advocacy would work best to leverage other levels of government to come through. Advocacy can be achieved in a variety of methods: letters, meetings, formal requests, word of mouth, grassroots methods, etc.



Messaging for each project/initiative should be clear and concise. Three key points should be enough to clearly convey the "ask" and can be cited by any member of Council at any time. This messaging should include the "what" and the "why" of the project/initiative and Council should be able to use their position to advocate when opportunities present themselves outside of the regular advocacy means.

When developing criteria for projects/initiatives that Council should advocate for, Council should think of how the project ties back to Council's Strategic Plan. Does the project fit under one of the 4 themes of the plan: Governance Excellence, Environmental Responsibility, Liveability, or Economic Health? Other considerations that would support the advocacy efforts are:

- Is there supporting plans and City documents that support this project/initiative?
- Is there common interests with stakeholders and community partners?
- Is there support from and inclusion with Snuneymuxw First Nation?
- What are the benefits to Nanaimo taxpayers, or the community as a whole?

Traditional advocacy means would include resolutions to AVICC, UBCM, FCM; meetings with ministers; letter writing; partnerships with key stakeholders and the community to unite in a singular ask; or other similar methods. If Council has a clear strategy on a number of topics/issues, when these and other opportunities arise, the message is clear and united. Leveraging your position to other levels of government with the organized and unified message is a more effective way to advocate. A framework, similar to what is being provided today, would be used to structure advocacy strategies for Council moving forward.

CONCLUSION

Advocacy is an important tool for local governments to use to achieve successes that benefit the entire community. These benefits can be in the form of grants, other funding for City capital projects, or projects in the community, policy changes, partnerships, etc. An effective advocacy strategy that the whole of Council is in support of, will increase the chances of being successful when seeking these assistances from other levels of government. Council could use the attached framework as a guide to develop a strategy that is focused and cohesive in order to effectively advocate for treatment centres and further funding for various types of affordable housing Nanaimo as well as other projects and initiatives they choose to move forward with.

SUMMARY POINTS

- At the 2020-FEB-24 Governance and Priorities Committee meeting, Council
 workshopped through what an Advocacy Strategy would look like and what their
 expectations were in the development of a framework to support this strategy.
- Advocacy, when done effectively, can help a council to achieve funding or policy changes from other levels of government in an effort to bring value to the city and community.
- An effective advocacy strategy that the whole of Council is in support of, will increase
 the chances of being successful when seeking these assistances from other levels of
 government.



ATTACHMENTS

ADVOCACY FRAMEWORK DOCUMENT

Submitted by: Concurrence by:

Sheila Gurrie Jake Rudolph Director, Legislative Services CAO

Municipal Government Advocacy Framework City of Nanaimo May 11 2020 Special Council Meeting Presented by: Farnaz Farrokhi, Manager, Communications

What is Advocacy?

There are many definitions of what advocacy is and the types of approaches individuals and organizations can use for their causes and issues.

Effective advocacy approaches for elected officials and municipal staff differ than the tactics that may be used by grassroots advocacy groups and organizations.

This means that while garnering support from the public is an important factor, elected officials and government administrators must be mindful of the political landscape they will/are working and negotiating in, which includes understanding the governments' agendas and ministerial mandates.

For the above mentioned reasons, building relationships with key politicians and their political staff, along with public servants, and other actors such at the Federation of Canadian Municipalities (FCM) and the Union of British Columbia Municipalities (UBCM) is a very important step in the government relations process.

To advocate is to plead or argue in favour or against something such as a cause, policy, or initiative with a specific outcome – changes in policies and initiatives, and receiving grants.

Public Government Advocacy Advocacy Meetings and discussions with Letter/email writing senior levels of campaigns governments Presenting at Federal and/or Provincial Rallies Standing Committees on issues of interest or concern Leveraging relationships with FCM and UBCM, Online Petitions includes being on the Executive

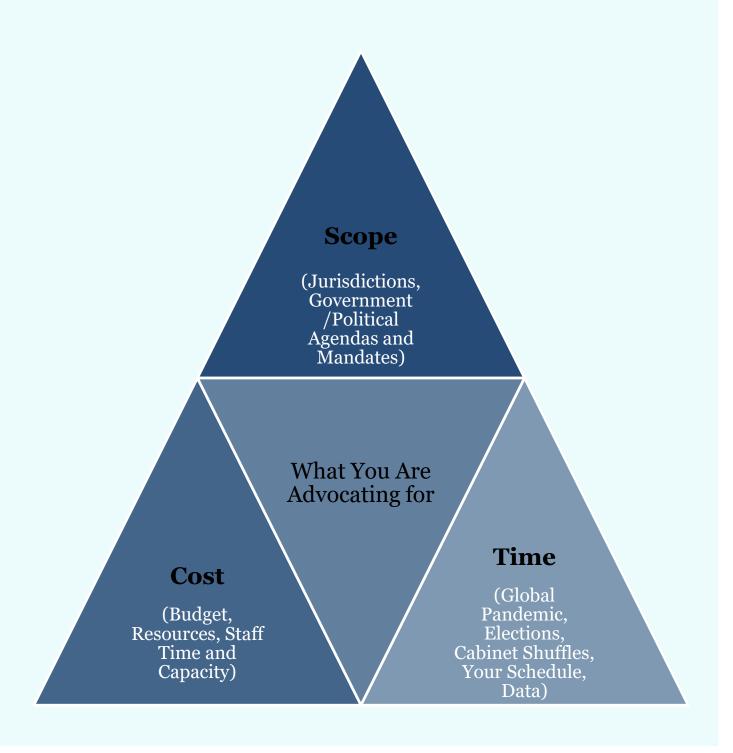
What are you advocating for?

As elected officials, there are a number of questions you must ask yourselves to help you with your advocacy efforts. Below are some questions to consider:

- What do you want to advocate for and why?
- Do you have the data and research to help you understand the issue or initiative to effectively advocate for the City's needs?
- Do you know who in the various levels of government you need to advocate to?
- What are the key messages for each level of government and other stakeholders?
- What does success look like to you?
- Does the City have the appropriate resources, and staff required for the project or initiative, not to mention costs associated with travelling to perhaps Victoria, Ottawa or other places?

And, why?

Strategic Government Advocacy: Addressing the Triple Constraint



Leveraging
Governments
+ Stakeholders
to Support Your
Advocacy Efforts

Leveraging Stakeholders in Advocacy Efforts

Garnering support from other levels of governments and key stakeholders in the community and beyond a municipality's boundary, can help local governments capture the attention of key decisions makers in Victoria and Ottawa. This is because third-party networks can help establish credible and united support for what you are championing, which likely will benefit them as they too are likely asking for similar request of the government.

Advocacy Matter – Economic Impact and Recovery Due to COVID-19	Jurisdiction	Potential Stakeholders	
	Federal*	Mayor's Task Force on Recovery and Resilience	
	The Honourable Melanie Joly, Minister of	City's Economic Development Committee	
	Economic Development and Official Languages	BC Chamber of Commerce / Nanaimo Chamber of	
	The Honourable Mary Ng, Minister of Small Business, Export Promotional and International Trade The Honourable Steven Guilbeault, Minister of	Commerce Business Council of Canada Canadian Federation of Independent Business	
Economic Development	Canadian Heritage	Canadian Sport Tourism Alliance	
	Provincial	Federation of Canadian Municipalities (FCM)	
	The Honourable Michelle Mungall, Minister of Jobs, Economic Development and	InFilm	
	Competitiveness	Retail Council of Canada / Retail Council of BC	
	The Honourable Adrian Dix, Ministry of Health	Telefilm Canada	
	The Honourable Carole James, Minister of Finance	Tourism Industry Association of Canada /Tourism BC / Tourism Nanaimo / Tourism Vancouver Island	
	Doctor Bonnie Henry, BC Provincial Health Officer	Union of BC Municipalities (UBCM)	

^{*}List does not include Parliamentary Secretaries, Policy Advisors in the Prime Minister's Office, or Cabinet Ministers' Directors of Policy and/or Communications Municipal Government Advocacy Framework

Advocacy Matter	Jurisdiction	Potential Stakeholders					
Social Disorder	Federal* The Honourable Ahmed Hussen, Minister of Families, Children and Social Development The Honourable Catherine McKenna, Minister of Infrastructure and Communities The Honourable David Lametti, Minister of Justice and Attorney General of Canada The Honourable Bill Blair, Minister of Public Safety and Emergency Preparedness	 Dr. Alina Turner and Associates, Turner Strategies City of Nanaimo's Health and Housing Task Force (HHTF): Councillors Bonner and Hemmens Snuneymuxw First Nation RCMP (Nanaimo Detachment) Service Canada BC Housing Island Health (Mental Health and Substance Use Services) Partnerships and Strategic Initiatives, Strategic Services Branch, Province of BC Canadian Mental Health Association John Howard Society Nanaimo Chamber of Commerce United Way Central & Northern Vancouver Island Federation of Canadian Municipalities (FCM) Union of BC Municipalities (UBCM) 					
	Provincial						
	The Honourable Selina Robinson, Minister of Mu	nicipal Affairs and Housing					
	The Honourable Adrian Dix, Minister of Health						
	The Honourable Judy Darcy, Minister of Mental						
	The Honourable Shane Simpson, Minister of Soci	ı v					
	The Honourable David Eby, Attorney General of BC						
*List does not include Darlismor	The Honourable Mike Farnworth, Minister of Pul	blic Safety and Solicitor General					

 $[\]hbox{*List does not include Parliamentary Secretaries, Policy Advisors in the Prime Minister's Office, or Cabinet Ministers' Directors of Policy and/or Communications}$

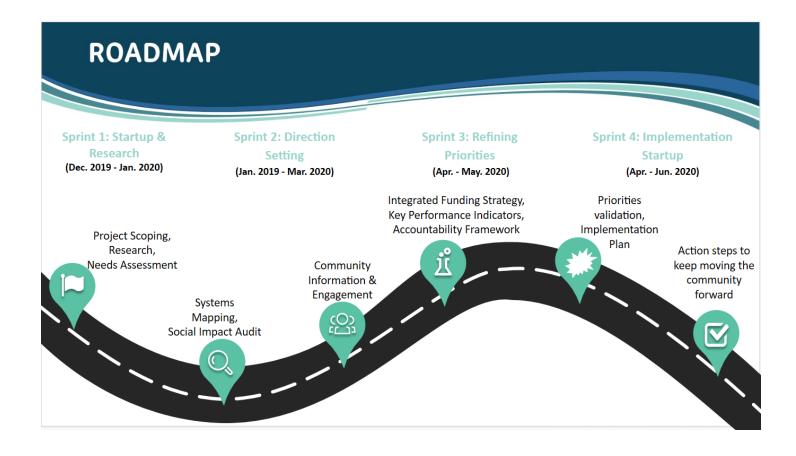
Council's Advocacy Framework

Upcoming Advocacy Opportunity: Social Disorder

Background Information

In January of 2020, the announcement of the partnership between the City of Nanaimo, the Nanaimo Homeless Coalition, United Way Central & Northern Vancouver Island, Turner Strategies and HelpSeeker to support system change initiatives to address current community challenges relating to homelessness was made.

According to the roadmap timeline for Nanaimo's Systems/Asset Mapping and Social Impact Project (see Roadmap below) Council will have valuable data to understand the gaps in the City and the community's needs. Due to the impacts of COVID-19, all Council Committees and Task Forces where temporary put on hold. However, during the April 1, 2020 Special Council Meeting, Council approved the reconvening of the Health and Housing Task Force meetings, in order to assist in facilitating planning for the City's vulnerable populations during the COVID-19 pandemic.



Determining the What(s), Why(s) and Framework

Advocacy Framework	Why(s) + What(s)	Who
What do you want to advocate for?	Does the project/idea/initiative fit under one of Council's 4 strategic themes? Governance Excellence Environmental Responsibility Livability	What are the benefits to Nanaimo Taxpayers, or the community as a whole? Is there common interests with stakeholders and community partners? Is there support from and inclusion with
Do you have the data and research to help you understand the issue or initiative to effectively advocate for the City's needs?	Are there supporting plans and City documents that support this project/initiative?	Snuneymuxw First Nation? If there are supporting documents, was there public engagement? What were the results? If supporting plans need to be created, what is the public engagement plan?
Do you know who in the various levels of government you need to advocate to?	Is this a federal or provincial matter?	Please refer to the Advocacy Matters section for key federal and provincial stakeholders.
What are the key messages for each level of government?	Messaging should be clear and concise, consisting of three key points.	 Federal Government Provincial Government Snuneymuxw First Nation
What are the key messages for each stakeholder, including media?	Messaging should be clear and concise, consisting of three key points.	 National organizations Provincial and regional organizations Local organizations
Who will be the spokesperson with government officials, stakeholders, and media from Council for this matter?	Messaging should be clear and concise, consisting of three key points.	Mayor, Acting Mayor, Chairs of Task Forces, etc. Please note: There are specific statutory duties and responsibilities assigned to the office of the mayor, which includes being the head and chief executive officer (CEO) of the municipality under Section 116 (1) of the Community Charter.
What does success look like to you?	Letter(s) sent to Cabinet Ministers Relationships established with politicians and organizations Funding secured through federal government, province, or FCM	Please refer to the Advocacy Matters section for key federal, provincial, and other stakeholders.



Information Report

DATE OF MEETING MAY 11, 2020

AUTHORED BY JAKE RUDOLPH, CAO

SUBJECT POTENTIAL CAPITAL PROJECT DISCUSSION

OVERVIEW

Purpose of Report:

The purpose of this report is to provide an opportunity for Council discussion on a potential suite of capital projects for consideration of future potential stimulus programs and advocacy opportunities.

BACKGROUND

On March 9, 2020, Staff provided an overview of Nanaimo's facilities and Council began the discussion around potential priorities. With the interruption of the pandemic and subsequent discussion around recovery, there may an opportunity for senior government stimulus. Nanaimo-Ladysmith Member of Parliament Paul Manly requested priorities from Council for potential projects.

DISCUSSION

Staff developed a preliminary list of potential capital projects, to assist Council's discussion around future capital needs, and to start aligning the organization for potential senior government grant programs.

The next step would be for Council to provide Staff further direction to advance a few to a half-dozen projects to further refined scoping documents. A few samples are shown in Attachment B.

It is likely that senior governments will support projects that support climate resilience, build back better and align with current local and senior government plans.

ATTACHMENTS

Attachment A: Nanaimo Ladysmith MP Paul Manly letter to Mayor and Council

Attachment B: Preliminary List of Projects

Attachment C: Sample initial scoping briefs for select projects.

Submitted by:

Jake Rudolph CAO From:

Sent: Tuesday, April 28, 2020 10:28 AM

To: Mayor&Council < <u>Mayor&Council@nanaimo.ca</u>> **Subject:** Covid 19 support and recovery for municipalities

Dear Mayor Krog and Nanaimo City Council

I hope this email finds you, your families and your staff healthy and safe.

It has been a very busy time for me and my team as we help constituents and businesses in our community deal with the COVID-19 crisis. I am in continual contact with various ministers and parliamentary secretaries, as well as on daily technical briefings and weekly committee meetings, all of which are opportunities for me to bring forward issues that constituents, businesses and organizations are dealing with. I have been busy identifying gaps in the relief programs and working with the government to fill those gaps and suggesting solutions for helping Canadians further.

For the past month, I have been advocating for a municipal bail-out to help with the drop in revenue from closed facilities, the loss of user fees and the increase in costs related to the crisis. I am also aware that businesses and home-owners have been requesting deferred property taxes and service fees, and that defaults on these payments will only exacerbate problems for municipalities. Despite the drop in revenues, municipalities are expected to continue to provide a list of essential services for their communities including fire, police, water, sewage and waste management.

The Federation of Canadian Municipalities made a presentation to the Finance Committee last week that received some push-back from the official opposition. I want you to know that the Green Party caucus supports the requests from the FCM. We will continue to advocate strongly for financial help for municipalities.

I am writing to you today to see if there are any specific needs or requests you have for federal government assistance during this crisis to help alleviate financial strain, and for ways that your residents could be better served. I am also checking in to see what needs and opportunities you have identified for the recovery and revitalization of our economy. Some parts of the economy are going to be easier and more practical to revive than others. For example it will be some time before we will see a revival of international tourism in our region.

The indications we have received from the government are that projects that provide safe employment, improve the quality of life for people, and help with the transition to a clean economy, are going to be the priority for stimulus spending for the recovery. If there are shovel-ready projects on your books that help to address the climate crisis, the affordable housing crisis, and create a more resilient and regenerative economy, those are projects that should be promoted to the federal government.

As we work through this crisis and start to think about a post crisis revival please feel free to reach out to me at any time. My staff are answering calls and emails from 9-5 Monday to Friday. The office number is 250-734-6400 and the email address is Paul.Manly@parl.gc.ca.

All the best

Paul Manly



Paul Manly

Member of Parliament for Nanaimo-Ladysmith | Député de Nanaimo-Ladysmith Constituency Office: Suite 103 495 Dunsmuir St. Nanaimo BC V9R 689 | t: 250-734-6400 Hill Office: Room 313, Confederation Bldg. Ottawa, ON K1A 0A6 | t: 613-992-5243 paul.manly@parl.gc.ca

ATTACHMENT B – Preliminary List of Projects

	Su	pports		egic	Partnership	Current Financial Plan?	
Item/Project	Env	Gov	an Liv	Econ	Opportunity		
Future Significant Capital Projects							
Waterfront Walkway Departure Bay	1		1	V		√	
South End Community Centre		1	1	1	√	×	
RCMP Facility		1	1	V	√	×	
Public Works Facility		√	√	√		×	
Future Fire Station		√	V		√	×	
Fire Training Centre		√	✓	✓	✓	×	
Sports and Cultural Investments							
Port Theatre Expansion		√	√	√	√		
Stadium Improvement options (NDSS		√	√	✓	√	×	
community Field or Caledonia)							
Artificial Fields – Harewood Centennial	√		√	√	✓		
Curling Club Renewal		√	✓	✓	✓	X	
Nanaimo Art Gallery Expansion/Improvements			✓	√	✓		
Infrastructure Investment							
Metral Dr Complete Street	√		✓	✓		✓	
Bowen Park Bikeway & Sewer	√		√	✓		✓	
Mid-City Gateway (Boxwood Connector)	√	√	√	✓	✓	✓	
One Port Drive Secondary Access		√	√	✓	√	×	
North End Water Supply Main	1	V	√	V		✓	
Towers Reservoir	1	V	√	V		✓	
Terminal-Nicol Reimangined	1	√	√	√	√		
Accelerate DCC Sewer Projects	√		√	✓	✓	✓	
Facilities Renewal Improvements							
Beban Electrical upgrade		✓	√	✓		✓	
Serauxmen Stadium Improvements							
Port Theatre Window Replacement			√	✓			
Shaw Auditorium / VICC Audio Visual		√		✓		✓	
Neck Point Washrooms	1		√				
Seabold Stairs	1		√			✓	
Pool Water Features Improvements			√			✓	
NIC/NAC Geothermal	V		1	V	√		

Metral Drive Complete Streets

Metral Drive was identified as one of Nanaimo's corridors that carried potential for a complete streets design. From a connectivity perspective, it links two of Nanaimo's mobility hubs and acts as an extension of the E&N trail, one of the backbones of Nanaimo's cycling network. With a school and multiple senior facilities within the area, vulnerable road users are a concern and creating facilities for all ages and abilities is a priority. The proposed project will provide continuous sidewalks and cycle tracks with landscape buffers on both sides of the road. In addition to the transportation upgrades, the project includes the replacement of aging watermain distribution piping and upgrades to the storm sewer system. The project will be completed in two phases, Mostar to Turner Road and Turner Road to Aulds Road, construction starting in 2020 and 2021 respectively.



Supports City of Nanaimo's Transportation Masterplan,

Current status: Phase 1: Tender Ready construction planned for 2020, Phase 2 in design, construction planned for 2021.

Approximate cost: Phase 1: \$6 million, Phase 2 \$7 million

Sport Zone Facility Improvements

The Larry McNabb Sport Zone - that is home to NAC, NIC, NDSS, VIU, NDSS Community Field, Rotary Bowl, Serauxmen Stadium and Serauxmen Fields has a number of improvement opportunities and plans to continue expand and upgrade sport venues and amenities in this area. NDSS Community Field has the potential to serve as the City's medium sized stadium. Serauxmen Baseball stadium has a detailed improvement plan to upgrade this venue. VIU has plans for development of a major indoor sports venue. SD68 has identified NDSS as a priority High school as needing to be rebuilt. Rotary Bowl has potential for improvements to serve expanded track and field events as well as other larger community events.



Supports the development, redevelopment and enhancement of recreational, sports and educational facilities in a strategic location within the City, transportation access to major recreational and cultural hub, opportunities to partner with other agencies.



Current status: Some plans in place and others in the works

Approximate cost \$5 - 60 Million (each venue has its own costs)

<u>4500.055</u>

"Zoning Amendment Bylaw 2014 No. 4500.055" (RA324 – To rezone 4015 and part of 4001 Corunna Avenue from Single Dwelling Residential [R1] to Residential Corridor [COR1] in order to construct an office building).

Passed first and second reading 2014-JAN-13. Public Hearing 2014-FEB-06. Passed third reading 2014-FEB-06. Ministry of Transportation approval 2014-MAR-04.

4500.135

"Zoning Amendment Bylaw 2019 No. 4500.135" (To rezone 2220 Bowen Road to allow Cannabis Retail Store" as a site-specific use in the Community Corridor [COR3] Zone).

Passed first and second reading 2019-MAR-18. Public Hearing held and passed third reading on 2019-APR-04.

4500.139

"Zoning Amendment Bylaw 2019 No. 4500.139" (To rezone 1483 Bowen Road to allow "Cannabis Retail Store" as a site-specific use in the Community Corridor [COR3] Zone).

Passed first and second reading 2019-APR-01. Public Hearing held and passed third reading on 2019-MAY-02.

<u>4500.140</u>

"Zoning Amendment Bylaw 2019 No. 4500.139" (To rezone 510 Fifth Street to allow "Cannabis Retail Store" as a site-specific use in the City Commercial Centre [CC3] Zone).

Passed first and second reading 2019-APR-01. Public Hearing held and passed third reading on 2019-MAY-02.

<u>450</u>0.141

"Zoning Amendment Bylaw 2019 No. 4500.141" (To rezone 25 Front Street to allow "Cannabis Retail Store" as a site-specific use in the Chapel Front [DT5] Zone).

Passed first and second reading 2019-APR-01. Public Hearing held and passed third reading on 2019-MAY-02. Received Ministry of Transportation and Infrastructure approval 2019-OCT-07

4500.145

"Zoning Amendment Bylaw 2019 No. 4500.145" (To rezone 140 Terminal Avenue to allow "Cannabis Retail Store" as a site-specific use in the Terminal Avenue [DT4] zone).

Passed first and second reading 2019-MAY-27. Public Hearing held and passed third reading on 2019-JUN-13. Received Ministry of Transportation and Infrastructure approval on 2019-JUL-09.

4500.146

"Zoning Amendment Bylaw 2019 No. 4500.146" (To rezone 111 Terminal Avenue to allow Cannabis Retail Store as a site-specific use with the Terminal Avenue (DT4) Zone).

Passed first and second reading 2019-JUN-10. Public Hearing held and passed third reading 2019-JUL-04. Received Ministry of Transportation and Infrastructure approval on 2019-JUL-29.

<u>4500.153</u>

"Zoning Amendment Bylaw 2019 No. 4500.153" (RA423 – to rezone 4392 Jingle Pot Road from Single Dwelling Residential [R1] to Mixed Use Corridor [COR2]).

Passed first and second reading 2019-NOV-18. Public Hearing held and passed third reading 2019-DEC-05. Received Ministry of Transportation and Infrastructure approval 2019-DEC-17.

4500.155

"Zoning Amendment Bylaw 2019 No. 4500.155" (To rezone 50 Tenth Street to allow "Cannabis Retail Store" as a site-specific use in the City Commercial Centre [CC3] zone).

Passed first and second reading 2019-JUL-22. Public Hearing held 2019-SEP-19. Passed third reading 2019-OCT-07. Received Ministry of Transportation and Infrastructure approval 2019-OCT-29.

4500.157

"Zoning Amendment Bylaw 2019 No. 4500.157" (To rezone 2379 Browns Lane from Single Dwelling Residential [R1] to Residential Corridor [COR1].

Passed first and second reading 2019-AUG-26. Public Hearing held 2019-SEP-19. Passed third reading 2019-OCT-07. Received Ministry of Transportation and Infrastructure approval 2019-OCT-29.

4500.159

"Zoning Amendment Bylaw 2019 No. 4500.159" (To rezone 150 Esplanade and 155 Fry Street from Community Corridor [COR3] to Mixed Use Corridor [COR2])

Passed first and second reading 2019-OCT-21. Public Hearing held and passed third reading 2019-NOV-07. Requires Public Hearing and Ministry of Transportation and Infrastructure approval prior to adoption.

4500.160

"Zoning Amendment Bylaw 2019 No. 4500.160" (To rezone 115 Chapel Street to allow "Cannabis Retail Store" as a site-specific use in the Core [DT1] zone)

Passed first and second reading 2019-OCT-21. Public Hearing held and passed third reading 2019-NOV-07. Requires Public Hearing and Ministry of Transportation and Infrastructure approval prior to adoption.

<u>4500.1</u>64

"Zoning Amendment Bylaw 2019 No. 4500.164" (To rezone 307 Hillcrest Avenue and 308 and 326 Wakesiah Avenue from Single Dwelling Residential [R1] and Residential Corridor [COR1] to Mixed Use Corridor [COR2] with site-specific student housing use).

Passed first and second reading 2019-NOV-18. Public Hearing held 2019-DEC-05. Passed third reading 2019-DEC-05.

<u>4500.167</u>

"Zoning Amendment Bylaw 2020 No. 4500.167" (To rezone 3841 and 3817 Victoria Avenue and 3896, 3874, 3852, 3848 and 3816 Island Highway North from Single Dwelling Residential [R1] to Community Corridor [COR3]).

Passed first and second reading 2020-FEB-03. Public Hearing held 2020-MAR-05. Third reading passed 2020-MAR-05. Ministry of Transportation and Infrastructure approval received 2020-APR-08.

<u>4500.1</u>71

"Zoning Amendment Bylaw 2020 No. 4500.171" (To rezone 405 Rosehill Street from Single Dwelling Residential [R1] to Low Density Residential [R6]).

Passed first and second reading 2020-FEB-03. Public Hearing held 2020-MAR-05. Passed third reading 2020-MAR-05. Ministry of Transportation and Infrastructure approval received 2020-APR-07.

4500.172

"Zoning Amendment Bylaw 2020 No. 4500.172" (To rezone 200 Hansen Road from Low Density Residential [R6] and Residential Corridor [COR1] to Medium Density Residential [R8]).

Passed first and second reading 2020-JAN-13. Public Hearing held and passed third reading 2020-FEB-13.

<u>4500.174</u>

"Zoning Amendment Bylaw 2020 No. 4500.174" (To rezone 5801 Turner Road to allow "Cannabis Retail Store" as a site-specific use in the CC3 [City Commercial Centre] zone).

Passed first and second reading 2020-MAR-16.

<u>4500.</u>175

"Zoning Amendment Bylaw 2020 No. 4500.175" (To amend Schedule A – Zoning Map with general mapping amendments).

Passed first and second reading and Council waived the Public Hearing 2020-MAY-04.

5000.046

"Traffic and Highways Regulation Amendment Bylaw 2019 No. 5000.046" (To remove the time-limit and payment exemptions for vehicles displaying disabled parking permits in City parkades).

Third reading of bylaw rescinded 2019-SEP-16. Referred to Staff for Review in the Downtown Transportation Mobility Study and consultation with stakeholders.

6500.041

"Official Community Plan Amendment Bylaw 2019 No. 6500.041" (OCP90 – To re-designate 4392 Jingle Pot Road on the Future Lan Use Plan (Map 1) from Neighbourhood to Corridor).

Passed first and second reading 2019-NOV-18. Public Hearing held 2019-DEC-05. Passed third reading 2019-DEC-05.

7183 "Trapping Bylaw 2013 No. 7183" (To regulate, prohibit and impose requirements respecting bodygripping traps or devices for animals and wildlife).

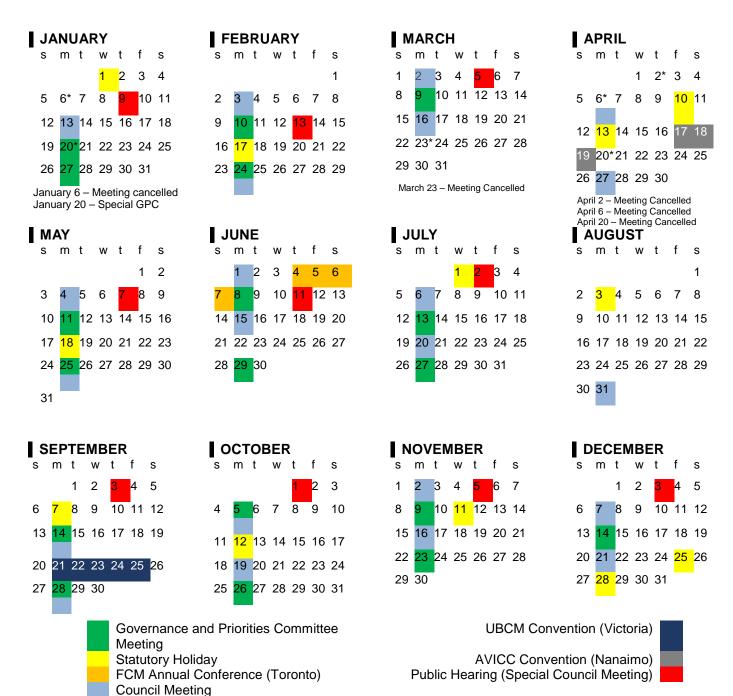
Passed three readings 2013-NOV-18. Requires Ministry of Forests, Lands and Natural Resource Operations approval prior to adoption.

7282

"Port Theatre Borrowing Bylaw 2019 No. 7282" (To authorize the borrowing of up to \$4,500,000 for the construction of the Port Theatre Community Performing Arts Centre).

Passed three readings 2019-JAN-14. Grant approval and Inspector approval required prior to adoption.

	2020 GPC Dates										
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
20	10	9		11	8	13		14	5	9	14
27	24			25	29	27		28	26	23	



Updated: 2020-MAY-06

MEETING DATE	TOPIC	BACKGROUND	FORMAT	OUTCOMES
February 10, 2020	Neighbourhood Associations – Part 1	Identified as a priority topic for the first quarter of 2020 at the GPC meeting held 2020-JAN-20 (session 1 of 2)	 Information report identifying: Background on what currently exists (how many we have, how many members, what locations, etc.) Current policies & information on associations Values currently and values moving forward Engagement with associations re: zoning amendments, etc. How can we leverage our current process to obtain valuable input when re-doing neighbourhood plans and implementing our OCP process. 	Receive information on current state of neighbourhood associations prior to a second GPC on this topic (date TBD)
February 24, 2020	Effective Advocacy Strategies	Identified as a priority topic for the first quarter of 2020 at the GPC meeting held 2020-JAN-20. Also listed as a priority in Council's Strategic Plan	 Expert advice on advocacy strategies Staff report on communications and advocacy to date [Do we have a strategy? Differences in strategies (from Mayor, Council, Committees, Task Forces) and to who and how?] Advocacy for public to relevant agencies or other levels of government Council develop a strategy with or without expert advice Public support of advocacy strategy 	Develop a strategy for implementation

Updated: 2020-MAY-06

February 24, 2020	Coordinated Strategic Policy Review 2020-2021	Requested by council at a GPC (2020-JAN-20) to be brought forward for an update.	- Presentation by staff	Provide Council with the terms of reference for the overall coordinated strategic policy review (2020-2021) process and update on the progress to date.
March 9, 2020	Single Use Checkout Bags	Council motion deferred back to staff to await the outcome of the Victoria bylaw.	- Overview and presentation of 2 bylaws by staff.	Present two bylaw options for information and background.
March 9, 2020	Civic Facilities – conditions, issues, plans and objectives Could include capital projects and finances (borrowing)	Identified as a priority topic for the first quarter of 2020 at the GPC meeting held 2020-JAN-20.	- Background report from Staff on current facilities that are known to be in need of replacing with the top priorities identified	Develop strategies moving forward with these items - Direction on expansion of the RCMP building - Direction on moving forward with a plan to rebuild the Public Works building - Direction on other facilities in need of replacement, rebuilding or expansion
March 9, 2020	Energy and Emissions Management Program	Staff providing update on what the City is doing to support Council's strategic priority of Environmental Responsibility.	- Presentation by staff	Provide an overview of the Corporate Energy and Emissions Program so Council can better understand what steps the City is taking to meet urgent environmental goals.

Updated: 2020-MAY-06

May 11, 2020 Special Council Meeting	Advocacy – Part 2	In response to Council's motion made at the 2020-FEB-24 meeting to have a GPC scheduled to "review specific topics Council wishes to advocate for and why".	Provide advocacy frameworkCouncil roundtable discussion	To provide Council with an Advocacy Framework to facilitate Council discussion regarding advocacy topics.
May 25, 2020 Special Council Meeting	Proposed amendments to the Manual of Engineering Standards and Specifications (MoESS)	Extensive revision to MoESS and high public interest – Staff wanted to provide Council an opportunity to discuss changes in detail.	Presentation by staffCouncil roundtable discussionDelegations	Provide Council with an opportunity to hear from Staff and discuss the proposed revisions to MoESS.
May 25, 2020 Special Council Meeting	Social Procurement	Next steps for Council's review of and details for the Procurement Policy with an increased focus on social, environmental and ethical elements for City purchases that specifically align with the desired outcomes of the Strategic Plan	 Review of first session Presentation by Staff and Consultant Round table discussion Determine a more narrow scope of desired social procurement criteria. 	- Clear direction on updates required to the Procurement Policy with social procurement criteria built in.
(investigating options to engage w/ neighbourhood associations through the use of Get Involved Nanaimo or other form of online communication)	Neighbourhood Associations – Part 2	Identified as a priority topic at the GPC meeting held 2020-JAN-20 (session 2 of 2)	 Invite chairs of some associations to attend and be available for the discussion. Identify what resources are available Presentation on how neighbourhood associations work in the City and what expectations they have of Council (i.e.: how do they want to be engaged?) 	 Formalized process for recognizing neighbourhood associations Create a new policy and criteria for neighbourhood associations moving forward including how they can be officially recognized. Defer any financial implications to Finance and Audit Committee
TBD	Arts & Culture	Brought forward through Council discussion and motion made at the GPC meeting held 2019-OCT-7	 Invite members from the Arts & Culture community to discuss engagement and communication Staff report and presentation outlining the process for issuing grants related to the arts and 	 Discussion Recommendation to Council or possibly defer to other committee (ie – budget implications deferred to Finance and Audit)

Updated: 2020-MAY-06

			providing an update to the Cultural Plan for a Creative Nanaimo - Round Table discussion	
TBD	Women's Participation on City of Nanaimo Task Forces and Childminding Reimbursement for members of City Committees	Identified as a priority topic at the GPC meeting held 2020-FEB-10	-	-
TBD	Transit (PART I) and Crosswalk Safety	Identified as a priority topic at the GPC meeting held 2020-FEB-10	 Tailored City of Nanaimo conversation around transit delivery (City of Nanaimo residents' perspective and impacts to residents and the City). How to encourage transit use from a City perspective. Invite a member of RDN staff speak to Council at the meeting and provide an update of their planning process. Bus stop locations that make sense Conversation around covered bus stops Number of hours that transit operates Crosswalks: report about flashing lights at crosswalks (are they beneficial, etc.) Education and information around increasing pedestrian safety at crosswalks 	 An ask, or assessment, from the City's perspective sent to the RDN after a decision is made at the city level with a recommendation for consideration at the RDN. Outcome: a report that outlines all of the pros and cons of crosswalk lighting and pedestrian safety. Options Costs. Could come as a next step: Professional best practice on what should be at crosswalks and what works best and why, etc.

Updated: 2020-MAY-06

	-Costs around the lighting at crosswalks.	

Updated: 2020-MAY-06

Future GPC Topics

- Capital planning process
- 1 Port Drive
- Sports venues and tourism strategies
- Vancouver Island Regional Library overview
- Election signage

<u>Deferred to Finance and Audit Committee</u>

• Fees and Charges - February 19, 2020

Updated: 2020-MAY-06