10-YEAR CAPITAL PLAN (2019 – 2028)

The 10-Year Capital Plan ("Plan") reflects the capital expenditures that the City is forecasting for that period. The plan identifies the investments that will be required to maintain infrastructure, address environmental issues and deal with growth.

Crucial to the success of any forecasting exercise are the key assumptions used in preparing the Plan.

KEY ASSUMPTIONS

To develop the Plan, information was compiled utilizing the following assumptions:

- The 2019, 2020 and 2021 capital expenditures are based on the draft budgeted expenditures as outlined in this budget document. 2022-2028 numbers are based on the best estimates of required future investments and anticipated funding levels.
- Formula funding and infrastructure funding from the GNWT are expected to remain stable over the ten-year period. Inflationary increases are expected in the formula funding.
- Gas Tax Funding will continue as promised by the federal government and as outlined in the renewed Gas Tax Agreement.
- Any additional infrastructure or stimulus grant funding from other orders of government will be used to supplement the annual core funding levels.
- Development costs for residential and industrial subdivisions are not included in this Plan, as it is assumed that all future development costs will be recovered from land sales.

There are three primary grant sources used for capital funding:

Funding	Source	Description							
Formula Funding	GNWT	The City's population, property assessment values and inflation rate are used calculate the City's community points relative to the total of all communitie points in the Northwest Territories (NWT). The community points are then used determine the annual allocation amount to each community. It is estimated t the City will receive \$7.8 million annually over the course of this Plan.							
Gas Tax Rebate	Federal Government	This long-term indexed funding is determined on a per capita basis. It is assumed that the City will receive \$5.5 million plus inflation annually for the next ten years.							
Community Public Infrastructure Funding (CPI)	GNWT	This territorial funding is calculated using a base-plus approach. The City is allocated 2% of the total funding available – the base. The City's population and current replacement value of its public infrastructure are used to calculate its community points relative to the total of all communities' points in the NWT. The community points are then used to determine the balance of the CPI allocated to each community. It is estimated that the City will receive \$2.2 million annually for the next ten years.							

INFRASTRUCTURE INVESTMENT

Currently, the planned capital expenditures over the next 10 years total \$222.8 million. The City is striving to maintain a sustainable investment in infrastructure; however, due largely to the proposed submarine intake line replacement (\$28 million) and new Aquatic Centre (\$49.8 million), the capital reserve is expected to be in a deficit position in 2025.

In 2020, the City is planning to borrow \$20 million for the submarine intake line and \$34 million for the aquatic centre. If the City does not receive other sources of financing, the significantly rising debt burden could approach 124% of operational revenue by 2020, up from 61% in 2017. However, both the debt and debt servicing are anticipated to be within the legal limits.

													2019 to 2028
10-YEAR CAPITAL INVESTMENT PLAN			2019	TO 2021 Bu	dget								10 Year
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Planned Expenditures (\$000):													
General Government	948	1,077	848	624	579	690	690	690	690	690	690	690	6,881
Others	350	505	320			90	90	90	90	90	90	90	950
IT Reserve	598	572	528	624	579	600	600	600	600	600	600	600	5,931
Public Safety	569	581	405	225		400	400	400	400	400	400	400	3,430
Safety/Safety Equipment	130	125	355	225									580
Firehall	439	456	50										50
Community Services	687	1,115	2,954	30,181	20,197	3,981	2,500	2,504	2,504	800	800	800	67,220
Arenas	160	160											0
RIMP		120											0
Aquatic Centre		75	1,750	28,830	19,220								49,800
Outdoor Recreation Facility						3,393	1,700	1,704	1,704				8,500
Parks/ Trails		420	245	770	410								1,425
Community Services Others	527	340	959	581	567	588	800	800	800	800	800	800	7,495
Public Works	22,831	21,073	11,967	23,341	22,483	14,740	11,240	11,240	11,240	11,240	11,240	11,240	139,971
Water & Sewer Capital Replaement	15,918	13,691	3,840	4,895	3,028		3,500	3,500	3,500	3,500	3,500	3,500	35,763
Other Water & Sewer Projects			3,045	1,350	1,100	700	700	700	700	700	700	700	10,395
Water Treatment Plant													0
Submarine Intake Line				14,000	14,000								28,000
Lifstation Upgrades						300	300	300	300	300	300	300	2,100
Public Transit			50										50
Roads & Sidewalks	3,743	5,005	3,255		2,900	4,500	4,500	4,500	4,500	4,500	4,500	4,500	37,655
Solid Waste Management	775	850	100			440	440	440	440	440	440	440	3,180
Construction of New Cell						4,000							4,000
Community Energy Plan	1,305	400	470	1,770	120	500	500	500	500	500	500	500	5,860
Fleet Management	1,090	1,127	1,207	1,326	1,335	1,300	1,300	1,300	1,300	1,300	1,300	1,300	12,968
Planning and Development	325	100	25		50	750	750	750	750	750	750	750	5,325
Total	25,360	23,946	16,199	54,371	43,309	20,561	15,580	15,584	15,584	13,880	13,880	13,880	222,827
Total Available	26,941	23,268	17,998	81,407	18,090	13,891	13,691	14,402	14,052	14,771	13,941	15,046	217,289
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Surplus(Deficit)	1,581	(678)	1,798	27,033	(25,221)	(6,670)	(1,889)	(1,181)	(1,531)	891	61 247	1,166	
Closing balance	7,093	6,953	8,751	35,784	10,566	3,895	2,007	825	(706)	185	247	1,412	

Assumptions:

(1) Based on the transfer from General Fund \$1.7 M from 2022 onwards.

(2) Based on 15-year loan of \$20M at 3.16% in 2020 for submarine intake line.

(3) Based on 20-year loan of \$34M at 3.16% in 2020 for new Aquatic Centre with an estimated project cost of \$49.875M.

(4) The net operating cost of \$3.2M of new aquatic centre has not been taken into consideration.

MAJOR CAPITAL PROJECTS

General Government

Currently the planned investment in Information Technology infrastructure totals \$6.9 million over the next ten years. This reflects regular, incremental expenditures to ensure the infrastructure continues to meet the increasing demands being placed on it.

Public Safety

In addition to regular safety equipment upgrades over the next 10 years, the City is also continuing its investment in modernizing the Fire Hall to meet growing needs. In 2015 a stand-alone dispatch centre was established at the Fire Hall to provide a more stable platform from which to manage emergency situations and deal with incoming calls for service. In 2019, the City is planning to conduct a Fire Hall Study to assess the building's capacity relative to current requirements.

The planned expenditures over the next ten years on safety equipment and the Fire Hall total about \$3.4 million.

Community Services

The Ruth Inch Memorial Pool is reaching the end of its lifespan and the City is considering the development of a new Aquatic Centre. In February 2018, Council established the Aquatic Centre Advisory Committee (ACAC) to assist the City in an advisory capacity regarding the development of an Aquatic Centre. Its role was to provide direct input through the community consultation process and to build consensus within the community on the current and future needs of the community relating to the development of an Aquatic Centre. These efforts contributed to the Pre-Design report that reflects what this facility could look like and the features and services it

could provide. This report was presented to Council in October of 2018, and identified an expected price tag of \$49.8 million for the facility. It is recommended that funding be allocated in 2019 to secure the services of an architectural and engineering firm to complete the detailed facility design and develop more specific cost estimates, with a view to allocating additional resources in 2020 for construction,

During the development of the new Aquatic Centre, the Ruth Inch Memorial Pool (RIMP) will remain in full operation. At the conclusion of the construction, aquatic operations at RIMP will cease. This will present a potential opportunity to repurpose the facility into a use other than a pool but one that still serves the needs of the community. The cost for this has yet to be determined and will be based on the final end use of the facility.

The recent Accessibility Audit identified a number of barriers in City facilities, and established a ten-year plan to address them with a total cost of approximately \$5 million. The Implementation Plan accepted by Council recommends a phased approach that resolves the most significant issues first.

Starting in 2022 the City is also planning to build a multi-use outdoor recreation facility on reclaimed land from the Con Mine property. This would be developed in conjunction with a potential new subdivision off of Taylor Road. The estimated cost of the project is \$8.5 million over the four-year period but this will be partially offset by land sales in the new subdivision.

In total the planned expenditures for municipal facilities, including



parks and trails, total \$67.2 million over the next ten years.

In 2019, the Niven Lake Ravine Multi-use trail will be developed, funded by Land Development Fund.

As well, a new library to address the growing need for additional capacity is also projected but not yet funded. The anticipated cost for a new library is still being worked out; however it could potentially be offset by between \$2 million and \$3 million by selling the existing library space.

Public Works

The replacement of deteriorated corrugated metal sewer pipes (CMP) first began in 1984. Under the Asset Management Plan, this project will be completed in 2018. While this will specifically address the CMP; the City is also planning further work to replace other aging underground water and sewer infrastructure. Over the next ten years the City will invest \$35.8 million in this area.

Just as important as the underground infrastructure are the buildings and equipment that form part of the water delivery system that provides residents with excellent quality water. Expansion of the water reservoir was completed in 2008 and the Water Treatment Plant was completed in 2015. This project was partly financed by the borrowing of \$23.8 million.

City water is currently drawn from the Yellowknife River via an underwater pipeline, which runs about eight kilometers between Pumphouse # 2 at the Yellowknife River and Pumphouse # 1 on 48th Street. The pipeline is expected to reach its end of service

life by 2020. If Council decides that the City should continue to draw water from the Yellowknife River, an estimated \$28 million will be required to replace the pipeline, necessitating an external borrowing of \$20 million.

Historically, a majority of the road rehabilitation program was financed by long-term borrowing (debentures). In 2005, however, the City decided to reduce its reliance on long-term borrowing. As a result, the timely rehabilitation of existing roads and sidewalks was deferred. The City will use Formula Funding (GNWT) and Community Public Infrastructure Funding to finance the costs of road rehabilitation and over the next ten years the City plans to invest more than \$37.7 million in this effort. Some road rehabilitation is also accomplished at the same time as the CMP replacement program using funds from that program.

The mobile equipment fleet has a replacement value of \$16.4 million and must be properly maintained to meet the service levels expected by residents. Over the next ten years, the City has budgeted \$13 million for fleet replacement.

Solid Waste Management

Landfill Expansion – The current cell of the landfill will be at capacity in the near future. In 2017 the City moved the majority of its operations to a new cell which cost \$3.7 million to construct. Reclamation of the existing landfill will be ongoing until 2025 with a portion of the area designated for the City's centralized composting site. Another new cell is planned for 2022, at an estimated cost of \$4 million.

Over the next two years the City will continue implementation of

the Strategic Waste Management Plan developed in 2018. This plan will help the City work towards the recommended goal of reducing waste generation from the current estimate of between 1,200 and 2,000 kilograms per capita to 500 kilograms per capita by 2030.

The planned expenditures over the next ten years are \$3.4 million for maintaining the Solid Waste Facility and replacement of equipment.

Council has adopted a Community Energy Plan (CEP) to support the community in its efforts to reduce emissions and to ensure that the City leads by example. It provides a framework for reducing the cost of energy use within both City operations and the community. The City completed the five milestones of original Plan and in 2017 updated the Plan for an additional 10-year period. The updated plan sets out ambitious targets on both the Corporate and Community side with respect to GHG emission reductions and renewable energy use. The City is planning to spend \$5.7 million over the next ten years on CEP initiatives.

Planning and Development

The Community Plan renewal is anticipated to be completed in 2019. The Plan sets out the City's community planning goals, polices, regulations, growth assumptions and ways to accommodate and spur the type growth stakeholders desire. It will establish long term land use goals for the community and form the basis for future land acquisition from the Territorial Government. Alongside the Community Plan renewal is the continued implementation of the Planning & Development Operational Review Recommendations which will bring forward changes to the land pricing system, land disposal process as well as additional changes to the business

practices within the building inspections function at the City of Yellowknife. The focus on downtown revitalization will impact changes to the Development Incentive By-law, with proposed amendments in 2019.

The planned expenditures in this area over the next ten years total \$5.3 million. Any additional resources obtained from other orders of government for related projects will be used to augment this spending.



FINANCING CAPITAL PROJECTS

The City uses GNWT formula funding, government grants, property taxes, water and sewer fees, and solid waste fees and levies to fund capital projects and reserve funds. Currently, part of the property tax revenue is used for debt servicing costs. Existing budget policies direct that a minimum of 10% of property tax revenue be used to finance capital projects or debt servicing. The City's Asset Management Plan has identified that a transfer of \$1.7 million per year is required to support a sustainable capital investment strategy, in addition to the funding received from other orders of government.

Presently the City has several reserve funds. One of them is the Major Community Facility Reserve (MCFR). The MCFR is used to fund major capital projects such as City Hall, Library renovations and potentially the new Aquatic Centre. In 2020, the City is planning to use \$3.12 million from MCFR to fund the aquatic centre. Any replacement or addition of such facilities will require additional funding from other orders of government and will be subject to detailed public consultation prior to committing funds. In addition, there should be a Capital Reserve in place to meet demand arising from emergency and/or unbudgeted events. The reserve will be about \$1.4 million to be accumulated over the next ten years.

LONG-TERM DEBT

In 2013 the City borrowed \$23.9 million, repayable over 15 years, to finance the Water Treatment Plant. This enabled it to dedicate the Gas Tax funding to accelerate other capital projects and to complete the CMP program by 2018.

The City is planning to borrow \$20 million to finance the replacement

of the submarine intake line and another \$34 million will be required if Council and the public decide to build a new Aquatic Centre.

It is anticipated that the City's long-term debt will decrease from \$18.5 million in 2017 to \$16.9 million by the end of 2018. However, if the City borrows \$20 million for the underwater pipeline and \$34 million for the proposed Aquatic Centre, its annual debt servicing cost will climb from \$2.1 million in 2019, \$3.8 million in 2020, and \$6.1 million in 2021.

If the City does not receive other sources of financing, the debt burden could approach 124% of operational revenue by 2020, up from 61% in 2017. The City, however, has been trying to secure other sources of funding to reduce our debt burden and will continue to do so.

SUMMARY

Over the next ten years, the City's planned annual capital expenditures will average \$22.3 million.

10-YEAR CAPITAL PLAN

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