10-Year Capital Improvement Plan (2015 – 2024)

The 10-Year Capital Improvement Plan ("Plan") reflects the capital expenditures that the City is forecasting for that period. The plan addresses what is believed necessary to maintain infrastructure, address environmental issues and deal with growth. It also documents the progress the City has made in attaining its financial goals, and provides a clear path to a financially sound future.

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 2015, 2016 and 2017 capital expenditures are based on the draft budgeted expenditures as outlined in this budget document.
- 2018 2024 is based on the best estimates of required future "core" funding levels for capital projects. These estimates are based on the use of the City's Asset Management Planning tool developed in 2011. The funding requirements include a 3% per year inflation factor. This tool has actually allowed the City to extend the planning horizon to 25 years.
- 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. The pending review of the GNWT Municipal funding structure is not taken into consideration.
- Gas Tax Funding received from Canada will continue as promised by the federal government and as outlined in the renewed Gas Tax Agreement.
- Council approval of a \$251,000 increase to the transfer to capital from the general fund is assumed in the Plan.
- 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.

- City will follow the Ten-Year Capital Investment Plan which concentrates on core infrastructure requirements. Each year a new 10th year will be added to the plan. Every three years, the plan will be reviewed in detail and every five years the 25-year projections will be expanded.
- In 2013 City borrowed \$23.8 million to finance a new water treatment plant. This has freed up the Gas Tax for other capital projects. Debt servicing costs for this debt are included in the plan.
- The current funding envelope is adequate to address the core infrastructure investment requirements to maintain and replace existing infrastructure and address Council direction on specific capital investment. Investment in new facilities will be the subject of further discussion regarding where funding would come from.

INFRASTRUCTURE INVESTMENT

In order to address outstanding infrastructure issues, the City has completed a long-term asset management plan which will guide the City's investment in its existing infrastructure over the next 25-year period. The asset management plan includes provisions for borrowing where necessary, provisions for the establishment of viable reserve funds to address the need for new or replacement infrastructure and an investment plan for those reserves.

Currently, planned capital expenditures over the next ten years are \$189 million including carryovers. Over the next five years, the planned capital expenditures are about \$90 million and it is projected that the City will be caught up on major backlogs by 2018. A sustainable investment in infrastructure has been established and capital reserve of approximately \$3.3 million will be in place by 2024 for unexpected / unbudgeted emergencies such as major breakdown, early wear and tear and accidents.

CITY OF YELLOWKNIFE													2015 to 2024
10-YEAR CAPITAL INVESTMENT PLAN			2015 TO	2017 Budget									10 Year
	2,013	2,014	2,015	2,016	2,017	2,018	2,019	2,020	2,021	2,022	2,023	2,024	Total
Planned Expenditures (\$000):													
General Government	1,709	1,155	896	1,070	870	990	990	990	990	990	990	990	9,76
Community Energy Plan	500	410	300	500	500	500	500	500	500	500	500	500	4,80
Others	842	360	240	50	80	90	90	90	90	90	90	90	1,00
IT Reserve	367	385	356	520	290	400	400	400	400	400	400	400	3,96
Public Safety	430	105	317	419	305	379	200	200	200	200	200	200	2,62
Safety Equipment	190	55	197	192	100	200	200	200	200	200	200	200	1,88
Storage Facility	90	50											,
Firehall	150		120	227	205	179							73
Community Services	2,311	1,061	1,445	1,190	1,000	7,525	300	19,781	7,020	588	802	802	40,45
Arenas	415	600	1,220	200									1,42
RIMP	100	200	100	250	100			18,000	7,000				25,45
City Hall - One-stop shopping	980												
City Hall - Boiler Replacement	40												
Maintenance Warehouses/Storage								1,689					1,68
Multi-use Sport Field -Con Mine Property						6,775		,					6,77
Community Services Other	776	261	125	740	900	750	300	92	20	588	802	802	5,11
Public Works	22,327	19,430	15,982	14,889	8,025	13,060	11,990	30,141	12,723	11,406	11,406	11,406	141,02
CMP replacement	6,800	5,710	2,795	4,575	2,980							-	10,35
Other water/sewer projects (Assumes under ground infrastructure)	0	1,160	430	870	790	6,500	6,500	6,500	6,500	6,500	6,500	6,500	47,59
Pumphouse Upgrades				1,000				2,422					3,42
Water Treatment Plant	9,900	6,227	8,321	150									8,47
Submarine Intake Line								15,000					15,00
Lifstation Upgrades	770												
Bus Stops								291					29
Roads & Sidewalks	2,747	3,870	2,460	3,085	2,485	5,000	3,500	3,500	3,500	3,500	3,500	3,500	34,03
Solid Waste Management	1,075	1,085	850	875	725	440	440	440	440	440	440	440	5,53
Construction of New Cell				3,000									3,00
Fleet Management	1,035	1,378	1,126	1,334	1,045	1,120	1,550	1,988	2,283	966	966	966	13,34
Planning and Development	1,100	850	600	1,100	1,400	750	750	750	750	750	750	750	8,35
Carry Over	19,607												
Total	47,484	22,601	19,240	18,668	11,600	22,704	14,230	51,862	21,683	13,934	14,148	14,148	202,21
Total Available		17,924	15,199	17,401	16,921	17,415	18,523	21,009	30,983	18,143	18,380	18,596	210,49
Surplus(Deficit)		(4,677)	(4,041)	(1,267)	5,321	(5,289)	4,293	(30,853)	9,300	4,209	4,232	4,448	8,27
Closing Balance		6,609	2,567	1,300	6,621	1,332	5,625	(25,228)	(15,928)	(11,719)	(7,487)	(3,039)	5,23



MAJOR CAPITAL PROJECTS

General Government

The City has developed a Community Energy Plan (CEP) designed to support the community in its effort to reduce emissions and ensure the City leads by example. Emission reduction targets of 6% by the community and 20% by the City over 2004 levels were met in 2014. The CEP provides a framework on how to reduce the cost of energy uses within both City operations and the community. In 2015 the City will conduct a CEP renewal plan for consideration by Council. The City is planning to spend \$5 million over the next ten years on CEP initiatives.

Currently, planned expenditures for IT infrastructure are \$4.1 million for the next ten years.

Public Safety

In addition to regular safety equipment upgrades over the next ten years, the City is also continuing its investment in modernizing the Fire Hall to meet growing needs. Included in this is the establishment of a dispatch centre that will replace the current system that is operated by pumphouse operators. A stand-alone dispatch centre will provide a more stable platform from which to manage emergency situations and deal with incoming calls for service.

The planned expenditures over the next ten years on safety equipment and Fire Hall are about \$2.4 million. As well, over the next three years the City is planning to spend \$300,000 to develop and begin to implement a Wildland Fire Mitigation Strategy.

Community Services

Renovations to City Hall were completed in 2014. The renovations addressed the interior design of the Council Chamber to reflect a more open, inviting and accessible space with up-to-date technologies to enable the broadcasting of meetings. This will improve accessibility to Council meetings and will improve overall transparency and communications between the City and the public.

The City will also be replacing the existing ice plant in the Yellowknife Community Arena and will take advantage of the modern plant to develop

a heat recovery system that will provide low grade heat to the Arena, Curling rink and Ruth Inch Memorial Pool. This investment of \$1.6 million will take place over two years and includes \$200,000 from the Community Energy Planning funds.

The City is also planning to build a Multi-Use Sports Facility on reclaimed land from the Con Mine property. This would be developed in conjunction with a potential new subdivision off Taylor Road. The estimated cost of the project is \$6.8 million 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 is \$18.0 million for next ten years. This includes \$1.7 million for new maintenance warehouses/storage facility in 2020.

Also anticipated in this 10-year plan, but not yet funded, is the design and construction of a new pool. Originally it was estimated that Ruth Inch Memorial pool would need to be replaced sometime before 2023. A new pool is required to meet the growing demand for aquatic leisure activity in the City. Estimates have not been finalized but, based on the cost of recently completed new pool facilities in northern communities, and depending upon the scope of the project, costs could range from \$30 million - \$40 million. There are also options being considered for an expansion of the existing Ruth Inch Memorial Pool which could result in lower costs. Again, depending on the scope of the project, the estimate of costs ranges from \$17 - \$22 million. One factor that could influence when and where this new facility is built is whether or not the City decides to host the 2023 Canada Winter Games. If this opportunity is accepted, then the pool would need to be ready by 2021. There is also the potential that the City would be able to partially offset these costs using investments from the federal and territorial governments of up to million as well as funding from corporate sponsors that are attracted to the games.

As well a new library to address growing need for additional capacity is also projected but not yet funded. The projected cost for a new library is still being worked out. However, the cost will be offset by between \$2 million and \$3 million from the sale of the existing library space.

Public Works

The replacement of deteriorated corrugated metal pipes (CMP) first began in 1984. Anticipated to be a 25-year program, there remains a significant amount of investment left to complete the project. Under the Asset Management Plan, the City will invest \$10.3 million in this project which will be complete by 2018. While this will specifically address the CMP the City is also planning the subsequent work to replace other aging underground water and sewer infrastructure. Over the next ten years the City will invest \$47.6 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 water quality. Expansion of the water reservoir was completed in 2009. The City has begun work to replace the City's water treatment plant and upgrade Pumphouse #1. The access road to the site was completed in 2012. The final design of the plant is complete, a contract was awarded in October 2013 and the bulk of the work has been completed on this project. The total project cost, including work already completed, is estimated to be approximately \$30.0 million which includes upgrading of all pipes. This project is partly financed by the borrowing of \$23.9 million and will be completed by 2015 with a final investment of \$8.3 million.

Water is provided to the treatment plant via an underwater pipeline, which runs about eight kilometers between Pumphouse No. 1 on 48th Street and Pumphouse No. 2 at the Yellowknife River. It is expected to reach is end of useful life by 2020. The City has estimated that \$15 million will be required for the replacement of this underwater pipeline in 2020.

Historically, a majority of the road rehabilitation program has been financed by long-term borrowing (debentures). In 2005, however, the City decided to reduce its reliance on long-term borrowing. For most of the past 8 years, the road rehabilitation funding was also used to build new roads and sidewalks in new subdivisions. As a result, the timely rehabilitation of existing roads and sidewalks has been deferred. The current level of investment has not been insufficient, and as a result there is an immediate need to invest \$14.9 million in our existing road system just to address those roads that are in immediate need of

reconstruction or overlay. This will be accomplished over the next five years. In order to maintain all of our roads in proper condition, the City will use formula funding (GNWT) to finance the costs of road rehabilitation and over the next ten years the City plans to invest more than \$35.8 million. 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 \$13.4 million and must be maintained to meet the service levels expected by residents. Over the next ten years, City has budgeted \$14.6 million for the replacement of fleet.

Solid Waste Management

Landfill Expansion – The current cell of the landfill will be at capacity in the near future. By 2017 the City will move the majority of its operations to a new cell which will cost \$3.0 million to install. Reclamation of the existing facility will be completed in 2017 with a portion of the area designated for the City's centralized composting site.

Over the next 3 years the City will continue its investment on the centralized composting project. . Composting will divert waste from the Solid Waste Facility, reduce greenhouse gas emissions associated with production of methane in the landfill and produce a finished product which is marketable in Yellowknife and usable for many City projects including cover material for the landfill closure. The first phase of the project was rolled out in 2014 with one neighbourhood participating. To date, \$1.2 million has been invested and over the next three years an additional \$2.2 million will be spent

The planned expenditures over the next ten years are \$3.6 million for maintaining the Solid Waste Facility and replacement of equipment.

Planning and Development

In 2012 City Council adopted the Yellowknife Harbour Plan and the General Plan. Both plans have a series of recommendations which include initiatives that will attract interest from federal funding agencies. The potential projects include harbour park improvements, trail and boardwalk system and capital area public parks nodes. The City has embarked upon



two projects to enhance the waterfront area – revitalization of the government dock and the establishment of a public park at Pilots Monument. These projects started in 2013 and will be completed in 2015 with funding support from the federal government.

The General Plan incorporated a development phasing strategy to guide growth and infrastructure investment over the next five years. The City is working in consultation with key stakeholders on a comprehensive revitalization plan for downtown based on the needs of the community and best practices from across Canada.

Administration has had preliminary engagement with various private sectors and public interests on these various initiatives and is confident that partnership can be arranged to leverage additional resources. The planned City expenditures over the next ten year are \$8.8 million. Any additional resources obtained from other orders of government for related projects will be used to augment this spending.

FINANCING CAPITAL PROJECTS

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 \$1.6 million per year will support a sustainable capital investment strategy along with the funding received from other orders of government.

Presently the City has two major reserve funds. They are the Major Community Facility Reserve (MCFR) and the Mobile Equipment Reserve (MER). The MCFR is used to fund major capital projects such as the City Hall and Library renovations. It is our plan to keep MCFR at about \$2.5 million. 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. The MER is used to fund the replacement of the City's fleet of vehicles. In addition, there will be a Capital Reserve in place to meet the emergency/ unbudgeted events. The reserve will be about \$3.4 million to be accumulated over the next ten years.

Financing for the new library and pool will be determined over the next 6 to 18 months and will be informed by public consultation, discussions with other orders of government and deliberations during the 2016 – 2018 budget development process.

LONG-TERM DEBT

The City decided about six years ago to reduce its reliance on long-term borrowing to fund core capital spending obligations, such as road rehabilitation. As a result, the City had reduced its long-term debt significantly. It is estimated the outstanding long-debt would be less than \$100,000 by 2022 if this policy continued.

As stated before, however, this reduced reliance on debt is now having an adverse effect on addressing core capital requirements and the portion of the infrastructure deficit related to the linear assets is growing rather than shrinking.

Under the Asset Management Plan, the City has borrowed \$23.9 million in 2013, repayable over 15 years, to finance a new water treatment plant. This will greatly free up the Gas Tax to accelerate other capital projects allowing the City to complete the CMP program by 2018.

It is anticipated that the long term debt will increase from \$1.7 million in 2012 to \$22.9 million in 2015. The debt servicing has increased from \$650,000 in 2012 to \$1.5 million from 2015 onwards. They are still well within the legal and policy limit.

SUMMARY

As laid out in the Asset Management Plan, over the period of 2015 – 2024, planned capital expenditures of the City will average \$18.9 million. The City will be caught up on major backlog of linear asset deficiencies by 2018. The Asset Management Plan enables the City to establish a sustainable investment in infrastructure.

Linear Infrastructure investment and maintenance of existing facilities are to be identified in the 10-Year Capital Plan. Each year a new $10^{\rm th}$ year will be added to the 10-year plan with the information for that $10^{\rm th}$ year coming from the 25-year projections in the Asset Management

Plan. A complete review of the 10-year plan will take place every three years after an election. The 25-year projections in the Asset Management Plan will be revised every five years as new information becomes available. The planned expenditures in the 10-Year Capital plan will be subject to public review by the City's Committees and by Council.

However, replacement of existing facilities and acquisition of new facilities will be subject to a different process. Requests for replacement of existing facilities or acquisition of new facilities will be based on Council priorities. These will be reviewed on an annual basis and there will be a detailed community consultation undertaken before final budgetary commitments are made. The City will rely on specific grants from other orders of government for these types of capital investments, or will be required to seek voter approval for any borrowing that would be required to fund these types of investments.

