10-Year Capital Improvement Plan (2016 – 2025)

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 2016, 2017 and 2018 capital expenditures are based on the draft budgeted expenditures as outlined in this budget document.
- 2019 2025 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.
- Gas Tax Funding received from Canada 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.
- 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 5 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 10 years are \$192 million. Over the next five years, the planned capital expenditures are about \$114 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 \$8.9 million will be in place by 2025 for unexpected/ unbudgeted emergencies such as major breakdown, early wear and tear and accidents.

CITY OF YELLOWKNIFE												2016 to 2025
10-YEAR CAPITAL INVESTMENT PLAN		2016 T	O 2018 Bu	dget								10 Year
	2,015	2,016	2,017	2,018	2,019	2,020	2,021	2,022	2,023	2,024	2,025	Total
Planned Expenditures (\$000):												
General Government	596	484	290	401	490	490	490	490	490	490	490	4,605
Others	240				90	90	90	90	90	90	90	630
IT Reserve	356	484	290	401	400	400	400	400	400	400	400	3,975
Public Safety	317	417	447	175	200	200	200	200	200	200	201	2,440
Safety Equipment	127	227	130	150	200	200	200	200	200	200	201	1,908
Storage Facility												0
Master Plan												0
Firehall	190	190	317	25								532
Community Services	1,445	292	980	4,113	1,994	19,786	8,714	588	802	802	1,013	39,083
Arenas	1,220		50	90								140
RIMP	100		230	575		18,000	7,000					25,805
Library/Arts Cultural (net costs)												0
City Hall - One-stop shopping												0
City Hall - Boiler Replacement												0
Maintenance Warehouses/Storage				1,689							211	1,900
Multi-use Sport Field -Con Mine Property				1,694	1,694	1,694	1,694					6,775
Community Services Other	125	292	700	65	300	92	20	588	802	802	802	4,463
Public Works	10,987	13,779	9,922	11,109	11,490	31,941	11,723	14,406	10,906	10,906	10,906	137,088
CMP replacement	2,795	3,500	3,550									7,050
Other water/sewer projects (Assumes under ground infrastructure)	430	280		3,500	3,500	3,500	4,000	4,000	4,500	4,500	4,500	32,280
Pumphouse Upgrades				510	700	2,422	700	700	700	700	700	7,132
Water Treatment Plant	3,026	150										150
Submarine Intake Line					1,000	19,000						20,000
Lifstation Upgrades				300	300	300	300	300	300	300	300	2,400
Bus Stops						291						291
Roads & Sidewalks	2,460	3,075	2,980	4,155	3,500	3,500	3,500	3,500	3,500	3,500	3,500	34,710
Solid Waste Management	850	850	725	425	440	440	440	440	440	440	440	5,080
Construction of New Cell		3,500						4,000				7,500
Community Energy Plan	300	1,335	1,577	1,100	500	500	500	500	500	500	500	7,512
Fleet Management	1,126	1,089	1,090	1,119	1,550	1,988	2,283	966	966	966	966	12,983
Planning and Development	600		2,100	1,400	750	750	750	750	750	750	750	8,750
Total	13,945	14,972	13,739	17,198	14,924	53,167	21,877	16,434	13,148	13,148	13,360	191,966
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Total Available	15,199	15,792	17,684	17,076	19,455	38,998	28,805	15,210	15,292	15,354	15,967	199,634
Surplus(Deficit)	1,254	820	3,945	(122)	4,532	(14,168)	6,928	(1,224)	2,144	2,206	2,607	
Closing balance	1,291	2,111	6,056	5,934	10,466	(3,702)	3,226	2,002	4,146	6,352	8,959	



MAJOR CAPITAL PROJECTS

General Government

Currently the planned expenditures for the IT infrastructures are \$4 million for next ten years.

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 at Fire Hall has been established. This provides 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 3 years the City is planning to spend \$400,000 to implement the wildland fire mitigation emergency measures.

Community Services

Starting in 2018 through 2021 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 4- 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 is \$14.1 million for next ten years. This includes \$8.5 million for new multi-use outdoor facility.

Also anticipated in this 10-year plan, is the design and construction of a new pool. Originally it was estimated that the Ruth Inch Memorial pool would need to be replaced sometime before 2023. It is planned for 2020 and 2021 to coincide with the deadline requirement of New Building Canada Fund. 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 \$20 - \$25 million.

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 City has developed a Community Energy Plan (CEP) designed to support the community in its effort to reduce emissions and ensure City leads by example. Emission reduction targets of 6% by the community and 20% by the City in 2014 over 2004 levels was 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 conducted a CEP renewal plan for consideration by Council. City is planning to spend \$7.5 million over the next ten years on CEP initiatives.

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 2017. 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 \$32.3 million in this area and \$9.5 million in pumphouse and liftstation upgrades.

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 2008 and the water treatment plant was completed in 2015. The total project cost of plant is estimated to be approximately \$32.0 million which includes upgrading of all pipes as well as upgrades at Pump House #1. This project is partly financed by the borrowing of \$23.8 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 its end of useful life by 2020. The City has estimated that \$20 million will be required for the replacement of this underwater pipeline starting in 2019 through 2020. It is anticipated external borrowing of \$20 million will be required to finance this project.

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 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) and MACA Capital Fund to finance the costs of road rehabilitation and over the next ten years the City plans to invest more than \$34.7 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 \$17.7 million and must be maintained to meet the service levels expected by residents. Over the next ten years, City has budgeted \$13 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 \$3.5 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 with an estimated cost of \$4 million.

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 and the second phase in 2015. To date, \$2 million has been invested and over the next three years an additional \$1.6 million will be spent. The planned expenditures over the next ten years are \$5 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 may 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 had embarked upon three projects to enhance the waterfront area to date– revitalization of the government dock, the establishment of a public park at Pilots Monument, and the development of the park on Wiley Road (Hank Koenen Park). This will improve public access to City's waterfront with the latter project being completed by 2016. In addition to the City-owned Orser Park the City recently acquired long-term leases to lands on both sides of the McMeekan Causeway which will provide significant opportunities for enhanced public waterfront access with additional funding support.

The General Plan which was developed largely from the Smart Growth Development Plan incorporated a development phasing strategy to guide growth and infrastructure investment over the next five years including Downtown Revitalization. City has allocated \$3 million by purchasing land on 50th Street and has developed a concept for the 50/50 corner parking lot. The phasing of the redevelopment of this and other areas of the Downtown will be contingent upon future capital funding from the City as well as potential land assembly through the City's Land Development Fund.

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 \$1.7 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 \$8.9 million to be accumulated over the next ten years.

LONG-TERM DEBT

The City decided about seven 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 \$50,000 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 has greatly free up the Gas Tax to accelerate other capital projects allowing the City to complete the CMP program by 2017.

The City is planning to borrow \$20 million to finance the replacement of underwater pipeline and this will free up the capital funding for other capital projects and new pool in 2020.

It is anticipated that the long term debt will decrease from \$22.9 million in 2014 to \$20 million in 2016. However if the City borrows \$20 million for the underwater pipeline, the debt servicing will increase from \$2.1 million in 2018 to \$2.2 million in 2019 and \$4.1M in 2021. Both debt and debt servicing are still within the legal limit and have been including in the Asset Management Plan.

SUMMARY

As laid out in the Asset Management Plan, over the 2016 – 2025 planned capital expenditures of the City will average \$19.1 million a year. 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 10- year Capital Plan. Each year a new 10th year will be added to the 10-year plan with the information for that 10th year coming from the 25-year projections in the Asset Management Plan. A complete review of the 10-year plan will take place every 3 years after an election. The 25-year projections in the Asset Management Plan will be revised every 5 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 involved

10-YEAR FINANCIAL PLAN

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.

