# 10-Year Capital Improvement Plan (2014 – 2023)

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 2014, 2015 and 2016 capital expenditures are based on the draft budgeted expenditures as outlined in this budget document.
- 2017 2023 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 beyond its current 2014 expiry date as promised by the federal government.
- Council approval of a \$396,000 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 10<sup>th</sup> 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 will free 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 \$220 million including carryovers. Over the next five years, the planned capital expenditures are about \$117 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 \$6.8 million will be in place by 2023 for unexpected/ unbudgeted emergencies such as major breakdown, early wear and tear and accidents.

| CITY OF YELLOWKNIFE  |        |         |               |         |        |        |        |          |        |        |        | 2014 to 2023 |
|--|--------|---------|---------------|---------|--------|--------|--------|----------|--------|--------|--------|--------------|
| 10-YEAR CAPITAL INVESTMENT PLAN                                  |        | 2014    | - 2016 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  | Total        |
| Planned Expenditures (\$000):                                    |        |         |               |         |        |        |        |          |        |        |        |              |
| General Government   | 2,699  | 1,437   | 1,190         | 970     | 990    | 990    | 990    | 990      | 990    | 990    | 990    | 10,527       |
| Community Energy Plan  | 500    | 500     | 500           | 500     | 500    | 500    | 500    | 500      | 500    | 500    | 500    | 5,000        |
| Other (includes Ec Dev 25K per year and 50K annual copier        | 1,082  | 422     | 305           | 100     | 90     | 90     | 90     | 90       | 90     | 90     | 90     | 1,457        |
| replacement requirements)  |        |         |               |         |        |        |        |          |        |        |        | C            |
| One-Stop Shopping  | 200    | 25      |               |         |        |        |        |          |        |        |        | 25           |
| IT Reserve   | 367    | 490     | 385           | 370     | 400    | 400    | 400    | 400      | 400    | 400    | 400    | 4,045        |
| Automated Vehicle Locator  | 325    |         |               |         |        |        |        |          |        |        |        | (            |
| Communications Infrastructure                                    | 225    |         |               |         |        |        |        |          |        |        |        | (            |
| Public Safety  | 430    | 205     | 250           | 155     | 200    | 379    | 200    | 200      | 200    | 200    | 201    | 2,190        |
| Safety Equipment   | 190    | 55      | 0             | 115     | 200    | 200    | 200    | 200      | 200    | 200    | 201    | 1,571        |
| MED Comms  | 90     |         |               |         |        |        |        |          |        |        |        | (            |
| Master Plan  |        |         | 110           |         |        |        |        |          |        |        |        | 110          |
| Firehall   | 150    | 150     | 140           | 40      |        | 179    |        |          |        |        |        | 509          |
| Community Services   | 2,311  | 1,300   | 1,180         | 1,080   | 7,029  | 750    | 300    | 1,781    | 20     | 588    | 2,079  | 16,107       |
| Arenas   | 415    | 600     | 1,000         | 15      |        |        |        |          |        |        |        | 1,615        |
| RIMP   | 100    | 200     | 100           | 250     |        |        |        |          |        |        | 1,277  | 1,827        |
| Multi-use Sports Field - Con Mine Property                       |        |         |               |         | 6,775  |        |        |          |        |        |        |              |
| City Hall - One-stop shopping                                    | 980    |         |               |         |        |        |        |          |        |        |        | (            |
| City Hall - Boiler Replacement                                   | 40     |         |               |         |        |        |        |          |        |        |        | C            |
| Maintenance Warehouses/Storage                                   |        |         |               |         |        |        |        | 1,689    |        |        |        | 1,689        |
| Community Services Other   | 776    | 500     | 80            | 815     | 254    | 750    | 300    | 92       | 20     | 588    | 802    | 4,201        |
| Public Works   | 22,327 | 18,918  | 17,419        | 14,918  | 16,891 | 13,060 | 11,990 | 30,141   | 12,723 | 11,406 | 11,406 | 158,872      |
| CMP replacement  | 6,800  | 5,710   | 2,820         | 4,610   | 5,750  |        |        |          |        |        |        | 18,890       |
| Other water/sewer projects (Assumes under ground infrastructure) | 0      | 1,160   | 745           | 875     | 1,000  | 6,500  | 6,500  | 6,500    | 6,500  | 6,500  | 6,500  | 42,780       |
| Pumphouse Upgrades   |        |         |               | 1,000   | 1,858  |        |        | 2,422    |        |        |        | 5,280        |
| Water Treatment Plant  | 9,900  | 6,227   | 8,321         | 150     |        |        |        |          |        |        |        | 14,698       |
| Submarine Intake Line  |        |         |               |         |        |        |        | 15,000   |        |        |        | 15,000       |
| Lifstation Upgrades  | 770    |         |               |         | 2,676  |        |        |          |        |        |        | 2,676        |
| Bus Stops  |        |         |               |         |        |        |        | 291      |        |        |        | 291          |
| Roads & Sidewalks  | 2,747  | 3,370   | 3,195         | 3,195   | 3,500  | 5,000  | 3,500  | 3,500    | 3,500  | 3,500  | 3,500  | 35,760       |
| Solid Waste Management   | 1,075  | 1,085   | 1,000         | 750     | 440    | 440    | 440    | 440      | 440    | 440    | 440    | 5,915        |
| Construction of New Cell   |        |         |               | 3,000   |        |        |        |          |        |        |        | 3,000        |
| Fleet Management   | 1,035  | 1,366   | 1,338         | 1,338   | 1,667  | 1,120  | 1,550  | 1,988    | 2,283  | 966    | 966    | 14,582       |
| Planning and Development   | 1,100  | 1,100   | 1,100         | 1,100   | 750    | 750    | 750    | 750      | 750    | 750    | 750    | 8,550        |
| Carry Over   | 6,039  |         |               |         |        |        |        |          |        |        |        | C            |
| Total  | 34,906 | 22,960  | 21,139        | 18,223  | 25,860 | 15,929 | 14,230 | 33,862   | 14,683 | 13,934 | 15,426 | 196,246      |
| Total Available  |        | 15,973  | 16,174        | 16,921  | 24,951 | 20,056 | 20,425 | 21,095   | 17,785 | 17,909 | 18,108 | 189,397      |
| Surplus(Deficit)   |        | (6,987) | (4,965)       | (1,302) | (909)  | 4,127  | 6,195  | (12,767) | 3,102  | 3,975  | 2,682  | (6,849)      |
| Closing Balance  | 13,710 | 6,723   | 1,758         | 456     | (453)  | 3,674  | 9,868  | (2,898)  | 204    | 4,179  | 6,861  | 6,861        |



# **MAJOR CAPITAL PROJECTS**

## **General Government**

The communications infrastructure investment will be completed in 2014. This investment has already resulted in improved communications equipment leading to better safety for firefighters and increased efficiency of wireless communications amongst municipal departments. Investment includes a major addition to our city-wide communications capabilities and will allow the City the potential to take advantage of some significant efficiency saving opportunities. Total investment is about \$3.3 million.

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. The CEP has set emission reduction targets of 6% by the community and 20% by the City by 2014 over 2004 levels. The CEP provides a framework on how to reduce the cost of energy uses within both City operations and the community. In 2014 the City will conduct a CEP renewal plan for consideration by Council. City is planning to spend \$5 million over the next ten years on CEP initiatives.

Currently the planned expenditures for the IT infrastructures are \$4.1 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. 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 \$2.2 million.

# **Community Services**

The planned renovations to City Hall will continue in 2014 using funds that were identified in the 2013 budget. It is estimated that approximately \$0.98 million will be required to retrofit this 35-year-old building to meet today's

needs and address the interior design of 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.

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 of 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 \$16.1 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 the Ruth Inch Memorial pool would need to be replaced sometime after 2023. However the City is considering the opportunity to host the Canada Winter Games in 2023 therefore a new pool to meet the requirements of the games will be required by 2021. A new pool will also help meet the growing demand for aquatic leisure activity in the City. Estimates have not been finalized but depending upon the scope of the project, costs could range from \$30 million - \$42 million. There will be partial offsets by investment from the federal and territorial governments of up to \$6 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 \$18.9 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 \$42.8 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 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 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 preliminary work has begun on the site of the 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 is planned to complete by 2015.

Water is provided to the treatment plant via an underwater pipeline, which runs about eight kilometers between Pumphouse No. 1 on 48<sup>th</sup> 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 2016 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 2016 with a portion of the area designated for the City's centralized composting site.

In the next two years City plans to spend \$1.6 million on the centralized composting project. The pilot project was completed in 2011 and an analysis has been conducted to determine the feasibility of city wide composting. 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 planned expenditures over the next ten years are \$4.3 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 2014 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 \$8.6 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 \$6.8 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 2015 – 2017 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 2017.

It is anticipated that the long term debt will increase from \$1.7 million in 2012 to \$22.9 million in 2014. The debt servicing will increase from \$650,000 in 2012 to \$1.5 million from 2016 onwards. They are still well within the legal and policy limit.

## **SUMMARY**

As laid out in the Asset Management Plan, over the 2014 – 2023 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 2017. The Asset Management Plan enables the City to establish a sustainable investment in infrastructure. There will be \$5 million Capital Reserve in place to meet the emergency and unbudgeted items. This reserve cannot be used without Council's approval.

Linear Infrastructure investment and maintenance of existing facilities are to be identified in 10- year Capital Plan. Each year a new 10<sup>th</sup> year will be added to the 10-year plan with the information for that 10<sup>th</sup> 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 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.