
For Information

DATE: November 6, 2019

REPORT TITLE: **UPDATE ON THE LONG-TERM UTILITY CAPITAL PLAN STRATEGY**

FROM: Andrew Farr, Acting Commissioner of Public Works
Stephen VanOfwegen, Commissioner of Finance and Chief Financial Officer

OBJECTIVE

To provide an update on the proposed Water and Wastewater Capital Plan and the impact of the 2041 planning horizon.

REPORT HIGHLIGHTS

- The proposed 2020 capital budget and associated capital plan will be the first to incorporate infrastructure requirements to service the population and employment growth with the 2041 planning horizon. Previous capital plans have been based on Development Charges and Official Plan forecasts to 2031.
- Staff have incorporated Council approved level of service targets for the community and evidence-based information from its infrastructure condition assessment and asset management programs in the proposed 10-year Capital Plan.
- Staff have worked with local municipalities and partner agencies such as Metrolinx, the Ministry of Transportation and other agencies to coordinate projects to minimize disruption to the community. This resulted in advancement of some projects which have been incorporated into the proposed 10-year Capital Plan.
- The proposed 10-year Capital Plan is \$5.2 billion; \$1.3 billion higher than the previous 10-year Capital Plan.
- To ensure the long-term sustainability of the 10-year Capital Plan, staff considered several key principles and risks, including alignment to current growth trends, service risks to the community, debt capacity, and changes due to Bill 108.
- Through this assessment, staff have deferred some projects outside of the proposed 10-year Capital Plan, however staff will continue the planning and design for these projects, and will be “shovel ready”, if required.
- Staff will report back to Council to adjust the Capital Plan if growth trends or forecast significantly change.

UPDATE ON THE LONG-TERM UTILITY CAPITAL PLAN STRATEGY

DISCUSSION

1. Background

The 10-year Capital Plan for water and wastewater infrastructure is updated on an annual basis. The Capital Plan drives investment in infrastructure to service proposed growth and maintain Council approved levels of service for the community, as well as to maintain infrastructure in “Good” state of repair, as defined by the Region’s Enterprise Asset Management program. The plan is brought forward to Regional Council for approval as part of the annual budgeting process.

The following inputs are incorporated into the proposed 10-year Water and Wastewater Infrastructure Capital Plan:

Water and Wastewater Master Plan

To support the Peel 2041 Regional Official Plan Review, staff have prepared a long-term Water and Wastewater Master Plan. This plan guides water and wastewater infrastructure requirements to meet the projected growth in the Region of Peel. The plan serves as the basis for infrastructure programming and capital budgeting needs and is an input into the Region’s Development Charges By-law Update.

The Water and Wastewater Master Plan is prepared under the Municipal Class Environmental Assessment process and is reviewed and updated every five years. At the June 13, 2019 Regional Council meeting, staff presented a preliminary water and wastewater servicing strategy and associated costs incorporating the new 2041 planning horizon.

2041 Planning Horizon

The proposed 2020 Capital Plan will be the first year to incorporate the recent Water and Wastewater Master Plan work for the 2041 planning horizon. Previous capital plans have been based on Development Charges (DC) Background Study and Official Plan population and employment growth forecasts to 2031. As outlined in the table below, current growth forecasts identify an additional 130,000 people by 2031 and over 500,000 additional people by 2041. Several new infrastructure components need to be included in the 10-year Capital Plan to service these updated population projections. Some are planned to be constructed early in the 10-year Capital Plan such as Expansion of the G.E. Booth Wastewater Treatment Plant and construction of the West Caledon Elevated Tank in order to service growth occurring both now and to 2041. Other projects are planned later in the 10-year capital plan to service forecast growth.

DC Growth Forecast to 2031 vs Endorsed 2041 Growth Projections

Municipality	Population			Employment			Housing Units		
	2031 (DC Background Study)	2031 (Endorsed Scenario)	2041 (Endorsed Scenario)	2031 (DC Background Study)	2031 (Endorsed Scenario)	2041 (Endorsed Scenario)	2031 (DC Background Study)	2031 (Endorsed Scenario)	2041 (Endorsed Scenario)
Brampton	727,000	812,000	889,900	314,000	285,300	324,900	214,500	225,900	250,700
Caledon	108,000	116,000	160,200	46,100	50,000	79,800	33,600	36,800	50,400
Mississauga	805,000	842,000	919,900	509,900	534,300	565,000	269,900	278,200	309,700
Peel	1,640,000	1,770,000	1,970,000	870,000	869,600	969,700	518,000	540,900	610,800

Source: DC Background Study Table 3-1 and Table 3-4; Hemson Consulting, Endorsed Growth Scenario, April 2019

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Service Levels and State of Good Repair

Staff have also incorporated Council approved level of service targets and evidence-based information from its infrastructure condition assessment programs in the proposed 10-year Capital Plan.

Partner Projects

Staff have worked closely with local municipalities and partner agencies such as Metrolinx, the Ministry of Transportation, conservation agencies and other municipalities such as York Region to coordinate water and wastewater projects with planned works to minimize disruption to the community. This coordination of works has resulted in advancement of some projects to be incorporated in to the 10-year capital plan. There are benefits in coordinating infrastructure construction to the community as construction impacts are minimized.

Based on growth, the above drivers and updated cost estimates the proposed capital plan is \$5.2 billion. This plan is \$1.3 billion higher than the 2019 approved 10-year Capital Plan.

Staff carefully consider the integration of growth and state of good repair projects as part of the planning and execution of capital projects within the Water & Wastewater Servicing Master Plan. While integrating growth and state of good repair projects provides financial benefits by addressing two needs at one time, staff also focus on the longer term community benefits.

For example, the Lakeshore Sewer project incorporates growth and intensification for Port Credit and the Lakeshore corridor. The project also provides benefit to the existing community through the elimination of sanitary pumping stations along the lake and providing sanitary sewer surcharge relief to mitigate the impacts of inflow and infiltration which is prevalent in this area. The project is evidence of a multi-faceted financial and community benefit approach to capital construction.

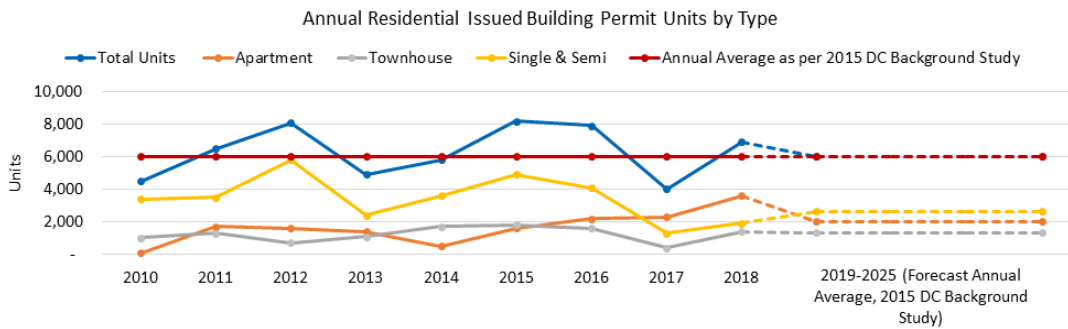
2. Recent Growth Trends

As part of the Region's ongoing Growth Management Program, staff are actively managing land use planning, infrastructure planning and finance decision making around growth. Staff are also monitoring current growth trends with prudent alignment of infrastructure investment, considering the potential for either delayed or accelerated growth.

Although the table above shows that long term growth projections are higher than previous forecasts for the 2031 and 2041 planning horizons, recent short-term trends have seen lower residential growth and lower than forecast non-residential growth has been a longer-term trend, as identified in the tables below:

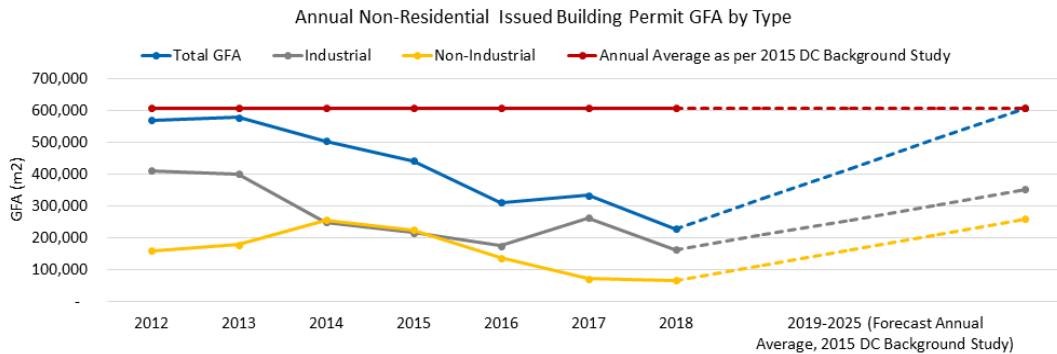
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Actual Residential Unit Growth vs Forecast Growth



Source: Municipal Building Permits, Peel Data Centre/Local Municipalities; 2015 DC Background Study Appendix A

Non-Residential Development Activity



Source: Municipal Building Permits, Peel Data Centre; 2015 DC Background Study Appendix A

Municipalities are required by Provincial policy to prepare land use and Official Plan policy based on the Provincial growth forecasts contained in the Provincial Growth Plan. However, municipalities should also monitor actual growth and development trends and plan their infrastructure and financial strategies accordingly. Based on the above growth trends, staff will be recommending a prudent approach to capital planning and execution. This conservative approach considers “Strategic Deferral” - deferring some of the larger financial components of some capital projects until later in the planning horizon.

The life of a capital project involves significant up-front work – planning, environmental assessment, design, approvals, property acquisition to name a few. These components typically consume 50 per cent of the duration of a project, but often consume less than 10% of the total expenditure of a capital project. Advancing the up-front work achieves a “shovel ready” state where the project’s design, approval and permitting process is complete and ready for tendering.

This best reflects prudent alignment of infrastructure investment with growth projections to 2041. Specific risk mitigation measures are also discussed below, considering the potential for either delayed or accelerated growth.

UPDATE ON THE LONG-TERM UTILITY CAPITAL PLAN STRATEGY**3. Risk Considerations and Proposed Mitigation Strategy****Financial**

The updated 10-year Capital Plan for water and wastewater represents a \$1.3 billion increase over the 2019 10-year Capital Plan as it reflects the capital requirements to address growth to the 2041 planning horizon and other drivers as described earlier in the report. As the growth portion is funded by development charges (DC), staff forecast differences in the estimated timing between when the DC revenue will be received and when the capital work will be implemented.

A significant variable that may impact both the timing and amount of DC revenue is the unknown impacts of Bill 108. There is a high probability that additional debt will be required to finance the capital plan to manage the cash flow. Managing cash flow and overall debt in alignment with the Long-Term Financial Planning Strategy will be critical to achieve other key Council outcomes such as increased affordable housing and waste diversion.

In addition, managing the pace at which the infrastructure will be built by aligning it to current growth trends will help to mitigate the impact on debt capacity and the risk that infrastructure will not be utilized.

Infrastructure

Constructing water and wastewater infrastructure to service growth is significant, costly and carries a certain amount of risk. Infrastructure must be sized to suit the long-term needs of the community and provide reliable service in a variety of intense climate conditions. Region capital staff have successfully delivered a significant volume of capital projects to meet the growth needs of the Region.

In order to address risk in growth variability as noted above, staff propose utilizing the strategic deferral process noted above - advancing the environmental assessments, planning and design of several larger capital projects. By advancing these projects towards a “shovel ready” state the risk of servicing challenges is reduced.

As noted previously staff recommend the 2020 budget 10-year Capital Plan include the cost to plan and design some longer range projects, but not specifically to construct these capital works.

Should growth trends trend upwards or downwards, or should additional population and employment be allocated to Peel, the 10-year Capital Plan will continue to be evaluated on an annual basis and the construction budgets of needed infrastructure can be advanced or deferred in the 10-year Capital Plan.

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NEXT STEPS

In order to address growth variability, staff propose implementing a capital plan which manages the pace at which the infrastructure will be built by aligning it to current growth trends. The plan is a prudent approach to infrastructure implementation and capital spending. The plan reduces the potential impact of upcoming regulations made under Bill 108 and the immediate need to extend debt to finance the capital plan. The inclusion of planning and design funding for long-term capital projects to achieve a shovel ready state for several projects will allow the Region to address risks associated with the variability of growth.



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