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# The Regional Municipality of Durham Information Report

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From: Commissioner of Planning and Economic Development  
Report: #2021-INFO-47  
Date: April 30, 2021

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**Subject:**

Growth Forecasts and Implications for Infrastructure Planning and Capital Investment

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**Recommendation:**

Receive for information

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**Report:**

**1. Purpose**

- 1.1 On March 2, 2021, Planning staff presented the Envision Durham Proposed Policy Directions including the “Growth Opportunities and Challenges Report” to Planning and Economic Development Committee. The presentation included population and employment growth forecasts to 2051, which are established by the Province through the Growth Plan for the Greater Golden Horseshoe. Staff responded to various questions, including the forecasts, implications for planning for municipal infrastructure, and the potential impact on the Development Charges By-law.
- 1.2 At the meeting, it was noted that most Regions do not achieve their forecasts and Committee requested that staff provide a report explaining how these forecasts translate into infrastructure planning. The purpose of this report is to explain how the Growth Plan forecasts apply to the Regional Official Plan (ROP), future infrastructure planning, and capital investment.

## 2. Background

- 2.1 The Province establishes population and employment forecasts for upper and single-tier official plans through the Growth Plan for the Greater Golden Horseshoe (Growth Plan). Based on a program of detailed analysis and consultation undertaken by Regional staff, Regional Council must allocate shares of the Regional forecasts to the area municipalities through the ROP.
- 2.2 The Region's vision for a sustainable network of infrastructure is integral to achieving the goals within Council's Strategic Plan and supporting population and employment growth in Durham.
- 2.3 The Region's transportation, water supply and sanitary sewerage systems are planned to provide the required capacity to accommodate future population and employment growth in Durham's communities.
- 2.4 The Region mitigates the risk of not achieving its population and employment forecasts through prudent and rigorous financial planning. ROP growth forecasts are used as the basis to develop a framework for growth-related capital infrastructure investment. However, if over time the forecasts are not being achieved, then capital plans and associated investments are adjusted to reflect the projected timing of the forecasted growth.
- 2.5 In order to mitigate potential risks facing the Region from large scale capital projects, a number of key long-standing financial policies with regard to capital financing have been adopted, which guide the Region's long-term financial and business planning processes. These policies include:
  - a. Limiting the use of development charge financing for the current year's capital program to the prior year's development charge reserve fund balances;
  - b. Maintenance and accumulation of reserves and reserve funds to provide upfront financing for the non-growth component of capital projects; and
  - c. Focus on "pay-as-you-go" capital financing and ensure continued financial flexibility through long term planning and the prudent issuance of debentures.
- 2.6 The process for infrastructure planning of growth-related capital projects is consistent with Regional Council's approved financial policies with respect to capital financing, to ensure that "growth pays for growth".

### 3. Previous Reports and Decisions

3.1 The following previous reports/decisions are related to this report:

- a. Durham Region Transportation Master Plan ([2017-COW-268](#))
- b. Final Recommendations Regarding Regional Residential, Commercial, Institutional and Industrial Development Charges ([2018-COW-108](#))
- c. The Region's 2019 Asset Management Plan ([2019-COW-16](#))
- d. Amendment 1 to A Place to Grow: Growth Plan for the Greater Golden Horseshoe (ERO Posting #019-1680) and Land Needs Assessment Methodology for A Place to Grow: Growth Plan for the Greater Golden Horseshoe (ERO Posting #019-1679) ([2020-INFO-83](#))
- e. The Region's 2020 Asset Management Update Report ([2020-COW-24](#))
- f. Monitoring of Growth Trends ([2020-INFO-98](#))
- g. 2021 Business Plans and Budgets and Nine Year Capital Forecasts for the Consolidated Water Supply and Sanitary Sewerage Systems ([2020-F-24](#))
- h. 2021 Regional Business Plans and Budgets and Nine Year Capital Forecasts for Property Tax Supported Services Purposes, including General Purpose, Solid Waste Management and Durham Region Transit ([2021-F-5](#))
- i. Envision Durham – Proposed Policy Directions ([2021-P-7](#))

### 4. Planning for Forecasted Growth

#### Growth Plan Forecasts

- 4.1 Durham is required to plan for a minimum of 1,300,000 people and 460,000 jobs by 2051 through its municipal comprehensive review. The Province prescribes the methodology for a Land Needs Assessment (LNA), which is being applied through the Envision Durham Growth Management Study.
- 4.2 The above noted Growth Opportunities and Challenges Report characterized the 2051 Growth Plan forecasts for Durham as aspirational, and that a significant increase in growth rates will be required to achieve the forecast (roughly double historic growth rates).
- 4.3 The LNA will determine whether additional urban area land will be required to accommodate forecasted population and employment growth. If so, potential settlement area boundary expansions will be evaluated. The ROP includes policies to ensure that development occurs in accordance with the principles of sequential development, progressive extension, improvement, rehabilitation and economical

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utilization of the Regional water supply and sanitary sewerage systems, and minimization of financial impacts on the Region.

### **Water Supply and Sanitary Sewerage Servicing Plan**

- 4.4 The Region's servicing plan for water supply and sanitary sewerage is established by long-range servicing requirements of the Urban Areas designated in the ROP. This plan addresses the required long-term improvements, expansions and additions to water supply and sanitary sewerage systems to meet the population and employment forecasts, including the provision of services to Urban Growth Centres, Regional Centres and Corridors, and Employment Areas.
- 4.5 The Region's current servicing plan for water supply and sanitary sewerage for existing urban areas is within the 2018 Region Wide Development Charge Background Study, the 2019 Seaton Area Specific Development Charge Background Study, the 2021 Budget and nine-year capital forecast for the Consolidated Water Supply and Sanitary Sewerage Systems.
- 4.6 Completion of a new Master Servicing Plan is anticipated following Envision Durham. Updated population and employment forecasts will help form the basis for developing servicing models to the 2051 planning horizon.
- 4.7 Once the forecasted population and its geographic distribution is determined, Master Servicing Plans can be developed for sanitary sewerage and water supply services. In addition to determining how to support development to 2051 through servicing, the Master Servicing Plan will also need to stage the construction of the required works to ensure that an adequate supply of serviced land is available. These analyses will form the basis of the sanitary sewerage and water supply components of future DC By-laws.

### **Transportation Master Plan**

- 4.8 The Durham Transportation Master Plan (TMP) is a strategic planning document that defines the policies, programs and infrastructure modifications needed to manage anticipated transportation demands to the year 2031 and beyond to support the development pattern designated in the current ROP.
- 4.9 The estimated costs for the proposed transportation networks between 2018 and 2031 are approximately \$1.25 billion in Regional road infrastructure, \$585 million for transit infrastructure, and \$38 million in Regional cycling infrastructure respectively

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(all costs in 2015 dollars). Costs for projects beyond 2031 were considered in broad terms for the purpose of assessing their feasibility.

- 4.10 The road and transit network expansions that are recommended in the TMP were developed using travel demand forecast modelling that estimated future vehicular and transit passenger volumes based on the existing ROP population and employment forecasts. By modelling various scenarios, in the context of technical criteria, ROP and provincial policies, public and agency input, etc., the recommended TMP road and transit networks were identified. High-level cost estimates were prepared for each recommended project.
- 4.11 The TMP modelling and recommendations provide the basis for planning the funding of growth-related Regional transportation projects through development charges, and the annual Regional Road program capital budget and nine-year capital forecast.
- 4.12 An update to the TMP is anticipated following the completion of Envision Durham. Updated population and employment forecasts will form the basis for a new travel demand forecasting model to the 2051 planning horizon.

### **Development Charge By-laws**

- 4.13 The Development Charge Act, 1997 (DCA) directs that the “anticipated amount, type and location of development, for which development charges can be imposed, must be estimated”. Anticipated development forecasts reflect the growth forecasts as approved in the ROP and assume growth will occur in an orderly manner.
- 4.14 The Region currently has DC By-laws for:
- a. Transit (Region-wide);
  - b. Water Supply, Sanitary Sewerage, Roads, Police, Paramedic and Housing Services (Region-wide); and
  - c. Area Specific DC By-law for water and sewer services for Seaton.
- 4.15 Development Charge Background Studies, statutorily required to be undertaken at least every five years, estimate residential and non-residential development by population, dwelling unit type (e.g. single detached, apartment), employment and floor space by sector (e.g. commercial). As part of the analysis required by the DCA, the capital forecasts provide the eligible growth-related capital costs required to meet the increase in need for services derived from projected anticipated development, for each service area.

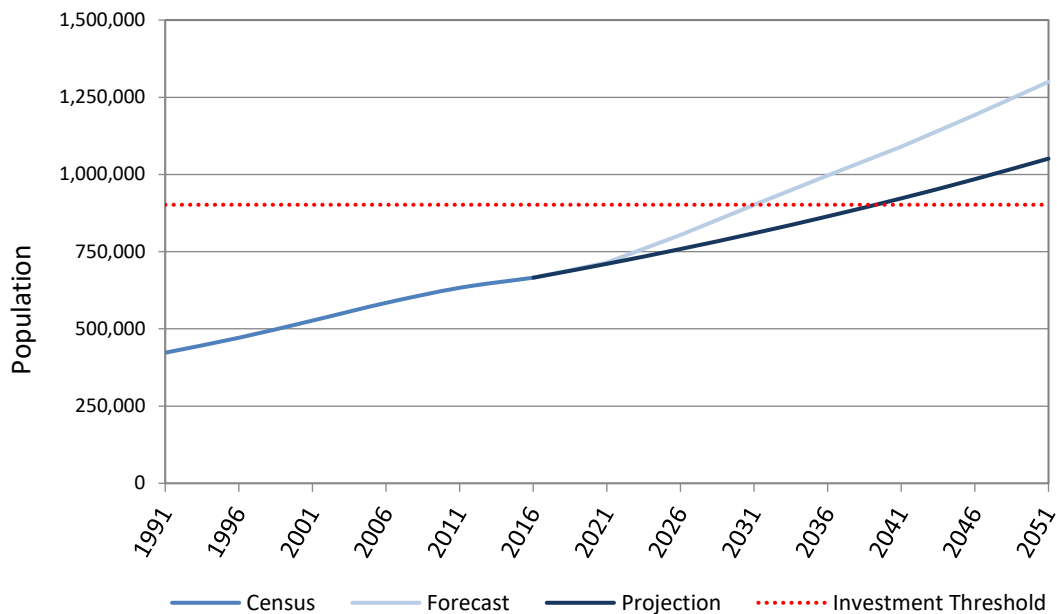
- 4.16 The Region's Development Charge By-laws provide a funding source for growth-related capital investment. The DCA requires that municipalities update their Development Charge By-laws every 5 years, and thereby the assessment of growth-related needs and timing of investments can be adjusted to match anticipated growth.
- 4.17 The Region is in the process of amending its [DC By-laws](#) to conform with recent changes to the DCA that were enacted through the *More Homes, More Choice Act* and the *COVID-19 Economic Recovery Act*. These changes are expected to be enacted by the summer of 2021.
- 4.18 The Region-wide DC By-law for Transit and other municipal services (i.e. roads, water supply, sanitary sewer and other services), are set to expire in 2023 and new By-laws will be passed to continue to collect these DCs. This update may necessitate the use of an interim growth forecast beyond the current ROP's planning horizon of 2031 to inform the 10-year infrastructure forecast for the DC By-laws.
- 4.19 Following the approval of the new ROP by the Province and the subsequent updates to the infrastructure master plans and capital plans, the DC Background Studies and By-laws will need to be updated again to assess the growth-related capital needs, in their entirety, for the forecast period to 2051.

## **5. Infrastructure Forecast and Financing Planning**

- 5.1 The Region mitigates risk by servicing development sequentially as growth occurs. Growth-related infrastructure investment is funded in large part through development charges that have been collected. Development charges represent a significant capital funding source for many services and serve to provide a large portion of funding for designated growth-related projects. The use of DCs to fund growth-related infrastructure minimizes the impact on user rates and property taxes.
- 5.2 The Region does not spend anticipated development charge funding, but rather limits development charge financing for the current year's capital program from the prior year's development charge reserve fund balances. For example, the anticipated development charge reserve fund balances as of December 31, 2020 determined the available financing for the 2021 growth-related transportation, capital programs.
- 5.3 If annual growth does not keep pace with the forecast, some capital projects can be delayed until they are needed. Figure 1 illustrates that if a major infrastructure

investment<sup>1</sup> was planned for 2031 under the growth assumptions of the ROP forecast<sup>2</sup>, it could be deferred until 2039 if the region only grows at the same rate as the last ten years<sup>3</sup>.

Figure 1  
Growth Forecast and Projection to 2051



- 5.4 The long-term capital planning process is reviewed annually, and provides analysis of key transportation, transit, facility, water supply and sanitary sewerage servicing needs, costs as well as related recommended financing strategies that balance infrastructure expansion and replacement or rehabilitation requirements.
- 5.5 Regional Planning staff prepare short-term development forecasts annually that are used for the purpose of producing capital forecast programs. The short-term growth forecasts for new residential units, and estimates of the timing and anticipated annual housing occupancy across the Region are based on housing production estimates provided by the area municipalities. Construction of new non-residential floorspace is estimated based on an analysis of past trends.

1 The red dashed line in Figure 1 represents the threshold for population that would require a major capital investment. In this example, a hypothetical investment is planned for 2031 when the population reaches 902,000. If a lower growth rate is achieved, the investment can be deferred until 2039.

2 Forecast by Watson & Associates, as reported in Growth Opportunities and Challenges Report, appended to Envision Durham Proposed Policy Directions (2021-P-7).

3 Projected growth based on average annual growth between 2006 and 2016. Census population calculated with undercount.

- 5.6 Regional staff also monitor actual development activity with regard to the capital program. Projects are re-examined and prioritized based on location, rates of future growth, and financial resources anticipated at that time, which are incorporated annually in the property tax supported, water supply and sanitary sewerage business plans and budgets.
- 5.7 The capital forecast program is based on servicing forecasted growth, addressing ongoing renewal, replacement and repair needs of existing infrastructure based on an asset management approach, and ensuring continued compliance with regulatory requirements.
- 5.8 The nine-year capital forecast includes a robust long-term financing plan that is reviewed and updated annually utilizing:
- a. Growth projections to forecast future development charge receipts and revenues available to finance growth-related capital projects in the forecast program;
  - b. Reserve funds (e.g. water supply and sanitary sewerage rate stabilization and asset management reserve funds) to finance the major capital projects and those projects required for asset management reasons, without creating large swings in the amount of property taxes and user rates required to support the Region's capital plan;
  - c. Debenture financing where feasible for large infrastructure projects;
  - d. Gradual and smooth annual increases in user rate revenues that are financially sustainable and affordable; and
  - e. Financial planning policies as approved in the Region's Long-Term Financing Planning Framework.
- 5.9 The utilization of reserve funds is considered an integral component of the Region's long-term financial planning process with recommended draws presented to Regional Council through the annual business plan and budget process.
- 5.10 Achieving the forecasted growth-related capital program and smoothing out the pressures on user rate revenues as best as possible also requires the issuance of debenture financing for large growth-related capital projects, where there is an anticipated shortfall in development charge receipts. Where debenture financing is required for major projects over the forecast, future debt servicing commitments are funded from future residential and commercial development charges.



5.11 The risk to the Region with proceeding with large expansion projects that require debenture financing is that future development charge receipts are committed to pay future ongoing debt servicing costs. For example, if the Region experiences a significant housing market downturn, and receives less development charge receipts and revenues than forecasted, there could be reduced development charge funding available for future expansion projects.

## **6. Relationship to Strategic Plan**

6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- Goal 5 Service Excellence – to provide exceptional value to Durham taxpayers through responsive, effective and fiscally sustainable services delivery, and in particular, Priority 5.1 – Optimize resources and partnerships to deliver exceptional quality services and value.

## **7. Conclusion**

7.1 The Province establishes population and employment forecasts for single and upper-tier municipalities in the Greater Golden Horseshoe through Schedule 3 of the Growth Plan. The Region must apply these forecasts as the basis for planning through its municipal comprehensive review.

7.2 The Region mitigates financial risk for infrastructure investment if the population and employment forecasts set by the Province are not achieved through prudent and rigorous financial planning. The ROP growth forecasts are used as the basis to develop a framework for growth-related infrastructure investment; however, short-term capital planning is influenced by trends in building activity and local knowledge of development timing.

7.3 By responsibly managing its financial assets, the Region seeks to optimize resources to deliver critical infrastructure and servicing for current and future needs.

7.4 This report has been prepared in consultation with Finance, Works and Corporate Services – Legal Services.

Respectfully submitted,

Original signed by

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Brian Bridgeman, MCIP, RPP  
Commissioner of Planning and  
Economic Development