



MORE HOMES BUILT FASTER ACT 2022 — UPDATE ON INFRASTRUCTURE PLANS AND CAPACITY ASSIGNMENT

Presented to
Committee of the Whole

Presented by
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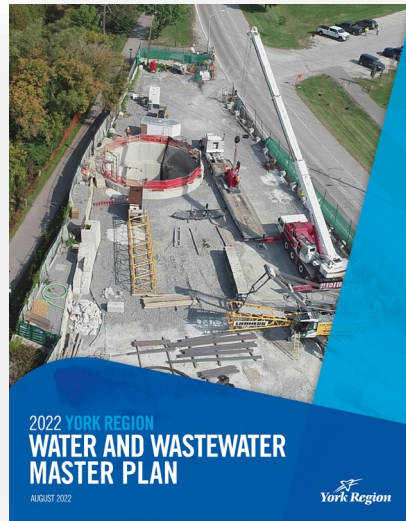
Presented on
November 9, 2023



Presentation Objectives

1. Detail infrastructure and financial impacts of Bill 23, Schedule 10 – *The Supporting Growth and Housing in York and Durham Regions Act, 2022* (change in Upper York direction) and next steps
2. Explain further potential impacts of the Provincial Housing Targets and future direction required from Council through near-term fiscal processes (annual budgets, Development Charge Bylaw update, etc.)
3. Detail the 2023 Capacity Assignment

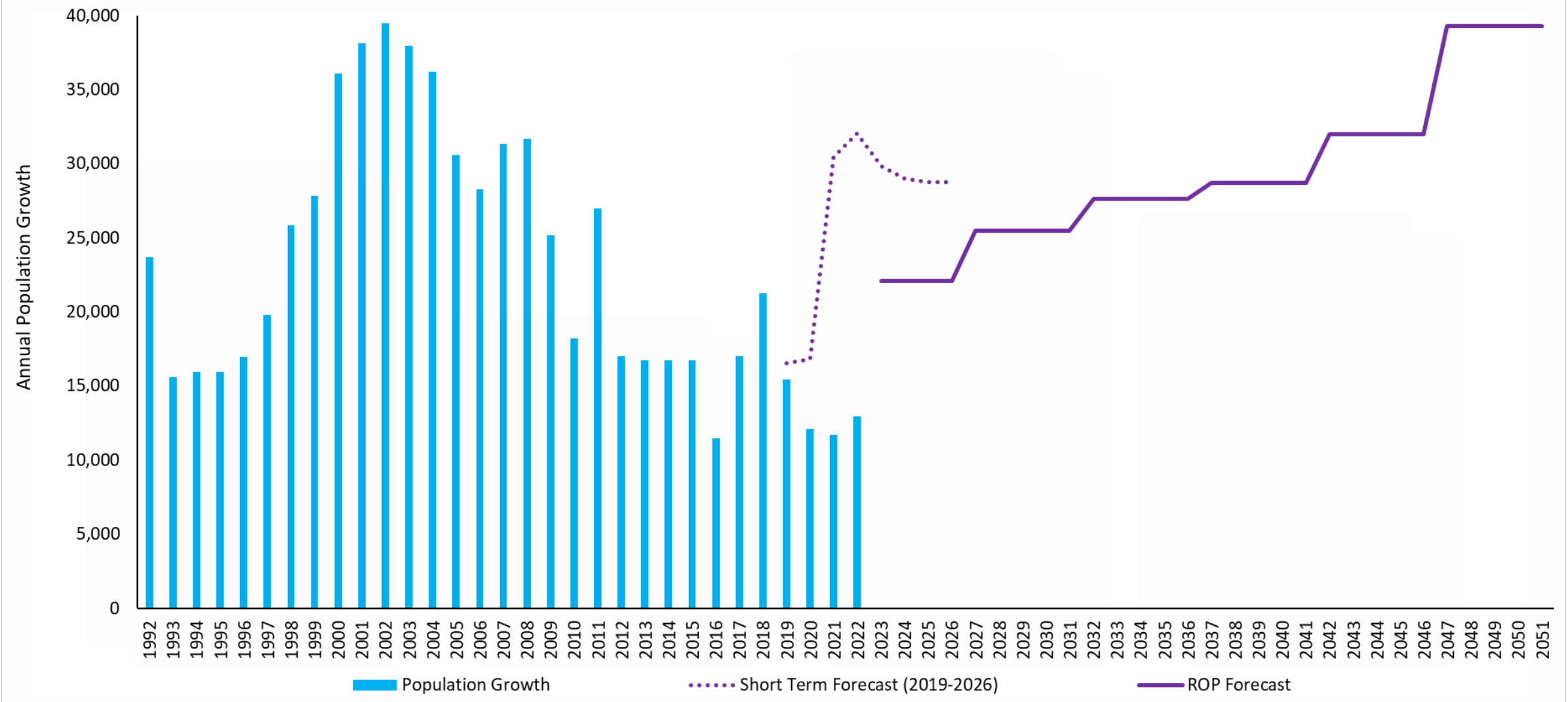
Master Plans Previously Finalized Based on Official Plan Forecasts



Plan	Water and Wastewater	Transportation	Others	Total (\$ Billions)
Master Plan	4.5	8.5	0.7*	13.7
10 Year Capital Plan	1.7	2.2	2.3	6.2

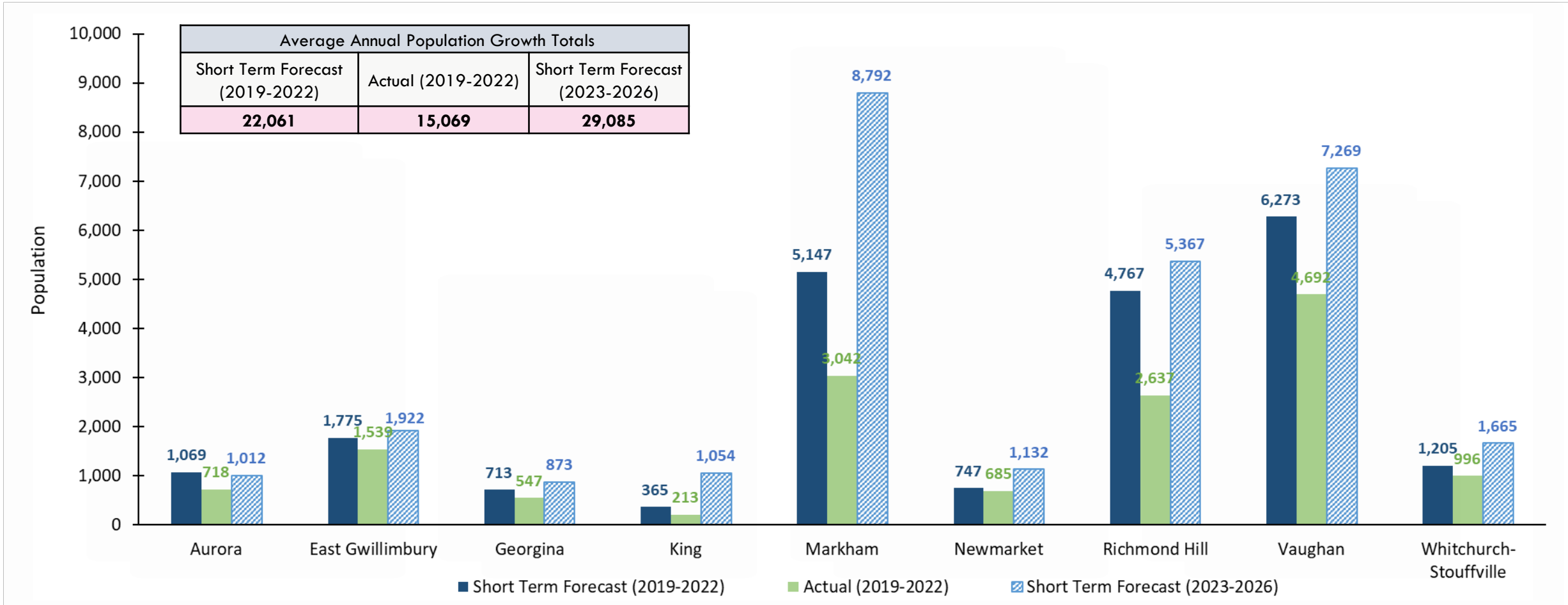
*Includes all Paramedics and Housing in-plan and unfunded costs

Regional Official Plan and Short Term Forecasted Population Growth

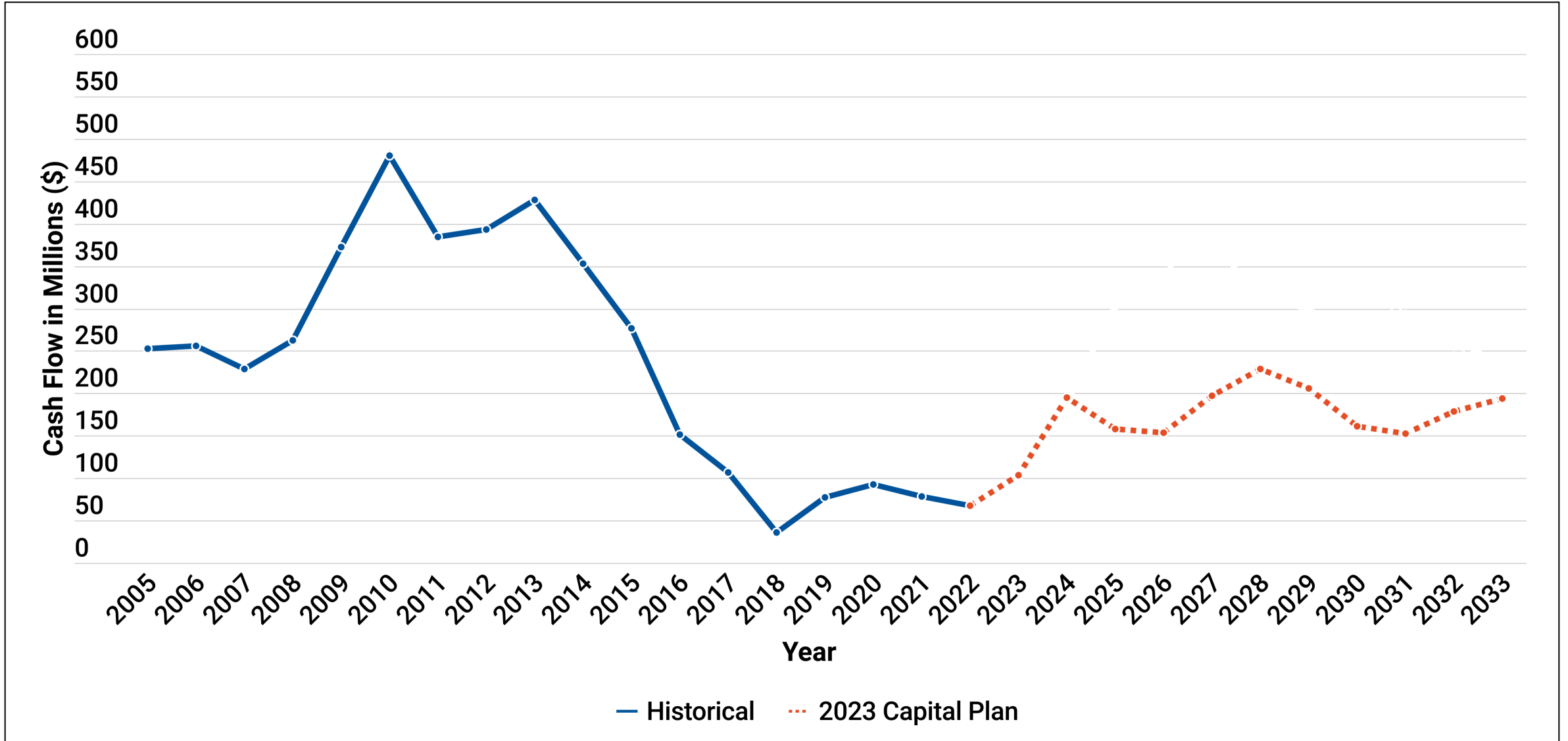


Source: York Region Long Range Planning

Increase in Housing Anticipated



2023 Water Wastewater 10-year Capital Plan

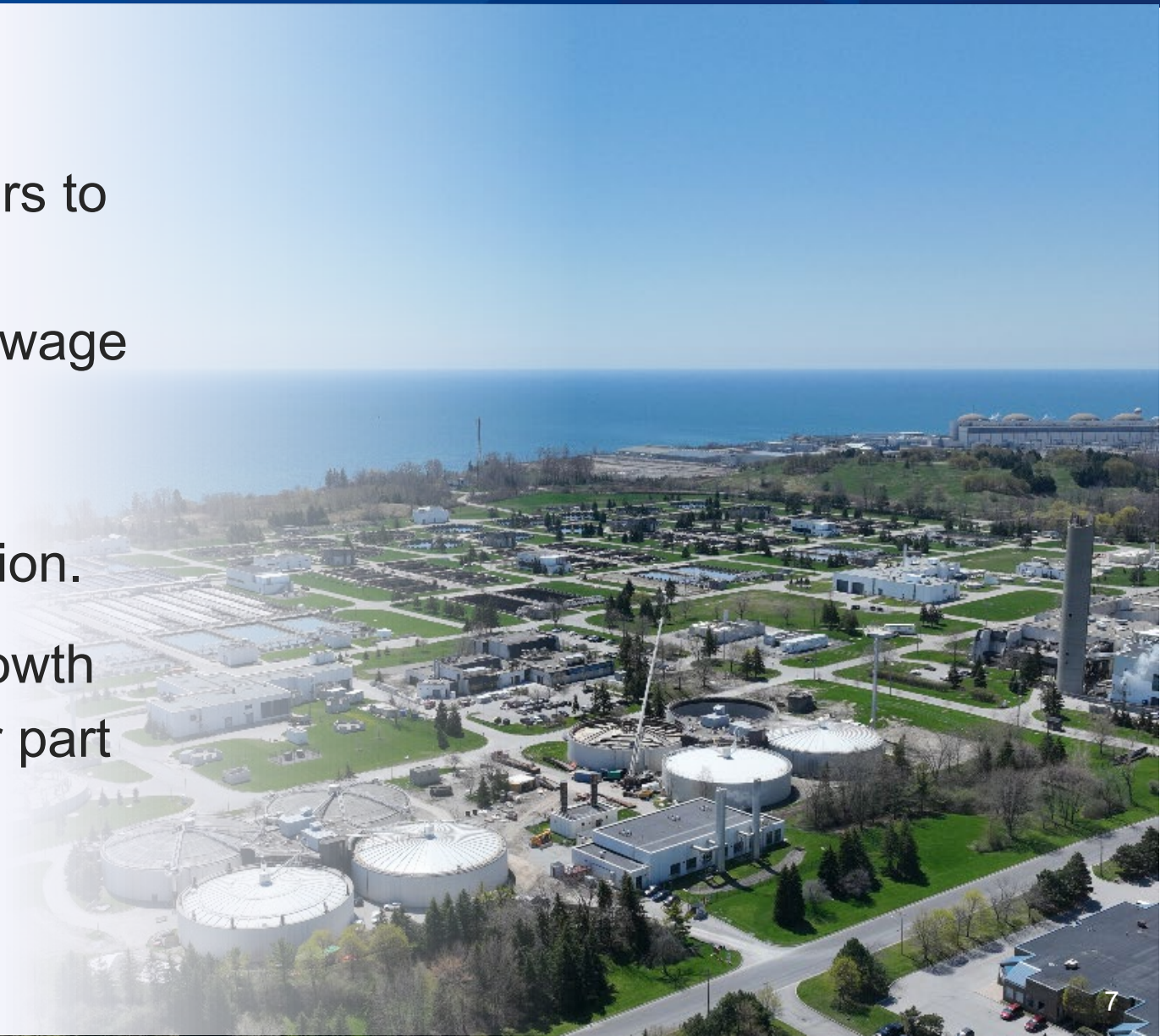


Bill 23, Schedule 10 - Supporting Growth and Housing in York and Durham Regions Act 2022

“[The Act requires] York and Durham Regions to do everything in their powers to enlarge and improve the existing York Durham Sewage System to convey sewage from Aurora, Newmarket and East Gwillimbury to the Duffin Creek Water Pollution Control Plant in Durham Region.

This proposal would accommodate growth and housing development in the upper part of York Region to 2051.”

<https://ero.ontario.ca/notice/019-6192>



Final Project Report Submitted to Province and on Public Review

- Act requires York Region to prepare Project Report for Minister's review and approval. Project Report must describe:
 - **Infrastructure components** and associated costs
 - **Impacts** to environment and how those impacts will be **mitigated**
 - Impacts to **aboriginal or treaty rights** and how those impacts will be mitigated
 - Other **approvals** required before construction and operation
- Project components included in Project Report are **exempt from *Environmental Assessment Act***
- Act mandates that York and Durham Regions consult with:
 - **Indigenous Nations identified by Minister**
 - **Persons who may be interested in the project in opinion of the Regions, including local municipalities**
- Two consultation reports due to Minister with Project Report

Anticipate Minister Approval by end of 2023

1) South YDSS Expansion

- Existing Markham Collector plays a significant role in conveying sanitary flows from the existing network
- It currently has no redundancy and a limited capacity
- Twinning of Markham Collector
- **Timing: 2033-2041**
- **Estimated Cost: \$300 - \$400 million (Costs identified within 2022 Master Plan, however, require advancement)**



2) YDSS Primary System – Primary Trunk Sewer Twinning

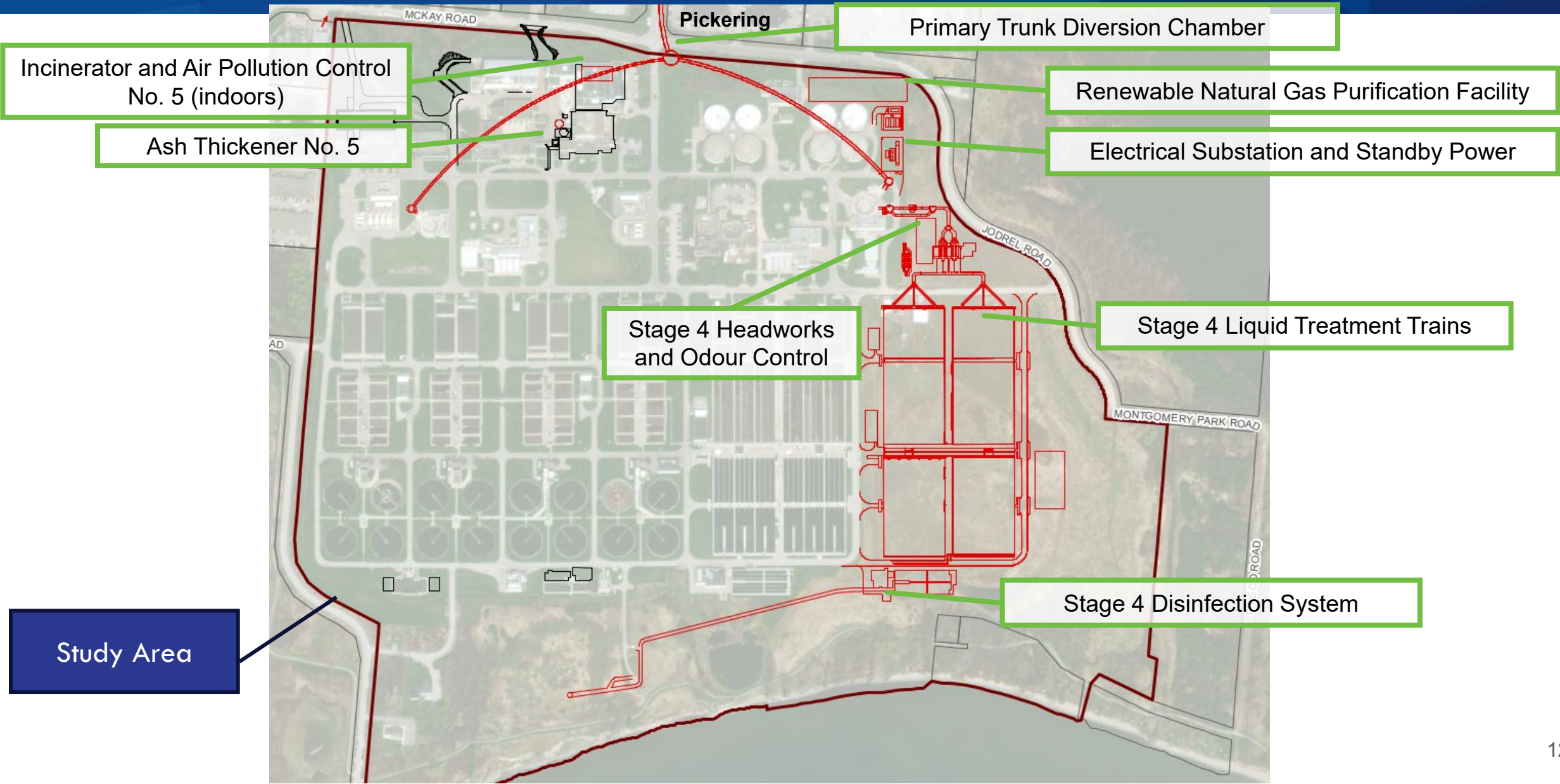
- Existing Primary Trunk is a 5 km segment of YDSS that conveys wastewater flows from both York and Durham Regions to Duffin Creek Plant
- Work involves twinning Primary Trunk Sewer
- This will reduce risk of system failure and provide capacity necessary to convey projected flows generated from forecasted growth, increase resilience and provide system flexibility
- **Timing: 2023-2031**
- **Estimated Cost: \$228 million (Costs identified within 2022 Master Plan and capital plan)**



2) YDSS Primary System - Duffin Creek Plant Expansion

- Duffin Creek Plant is a conventional activated sludge-based wastewater treatment facility in Pickering and treats wastewater from York and Durham Regions
- Additional treatment capacity will be required to accommodate estimated wastewater flows and loads from the growing sewershed population
- Work will include a new liquid treatment train, a new fluidized bed incineration system and a new electrical substation. Standby power will need to be increased
- This work will ensure the facility meets increased capacity demands due to growth
- **Timing: 2026-2036**
- **Estimated Cost: \$774 million (Costs identified within 2022 Master Plan, however, require advancement and currently unfunded in 10-year capital plan)**

2) Duffin Creek Plant Expansion



2) YDSS Primary System - New Duffin Creek Plant Outfall

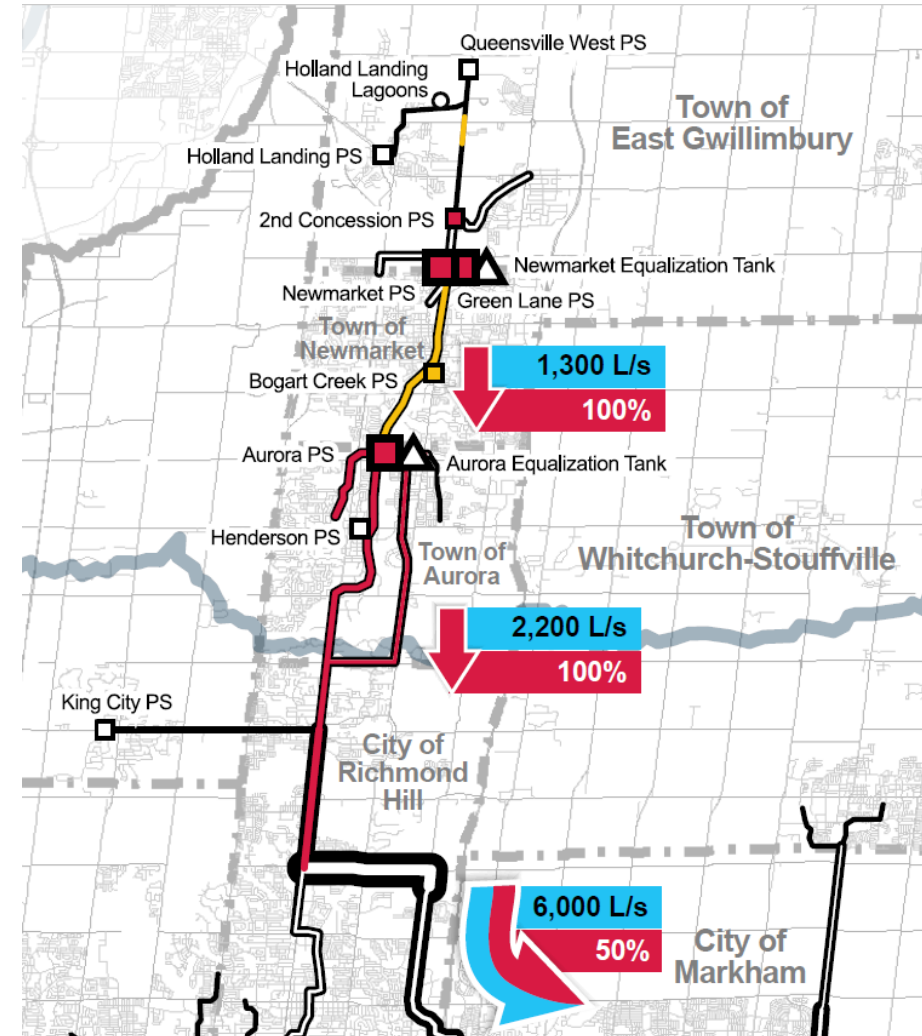
- Construction of a new 3 km outfall from Duffin Creek Plant into Lake Ontario to discharge increased wastewater flow and replace existing 1 km outfall which reaches its end-of-service lifecycle in 2040
- Work will include installing an onshore drop shaft, outfall pipe and a diffuser section
- **Timing: 2025-2038**
- **Estimated Cost: \$430 million (Costs identified within 2022 Master Plan, however, require advancement and currently unfunded in 10-year capital plan)**



3) NORTH YDSS EXPANSION PROGRAM IMPLEMENTATION

System Design and Capacity Bottlenecks

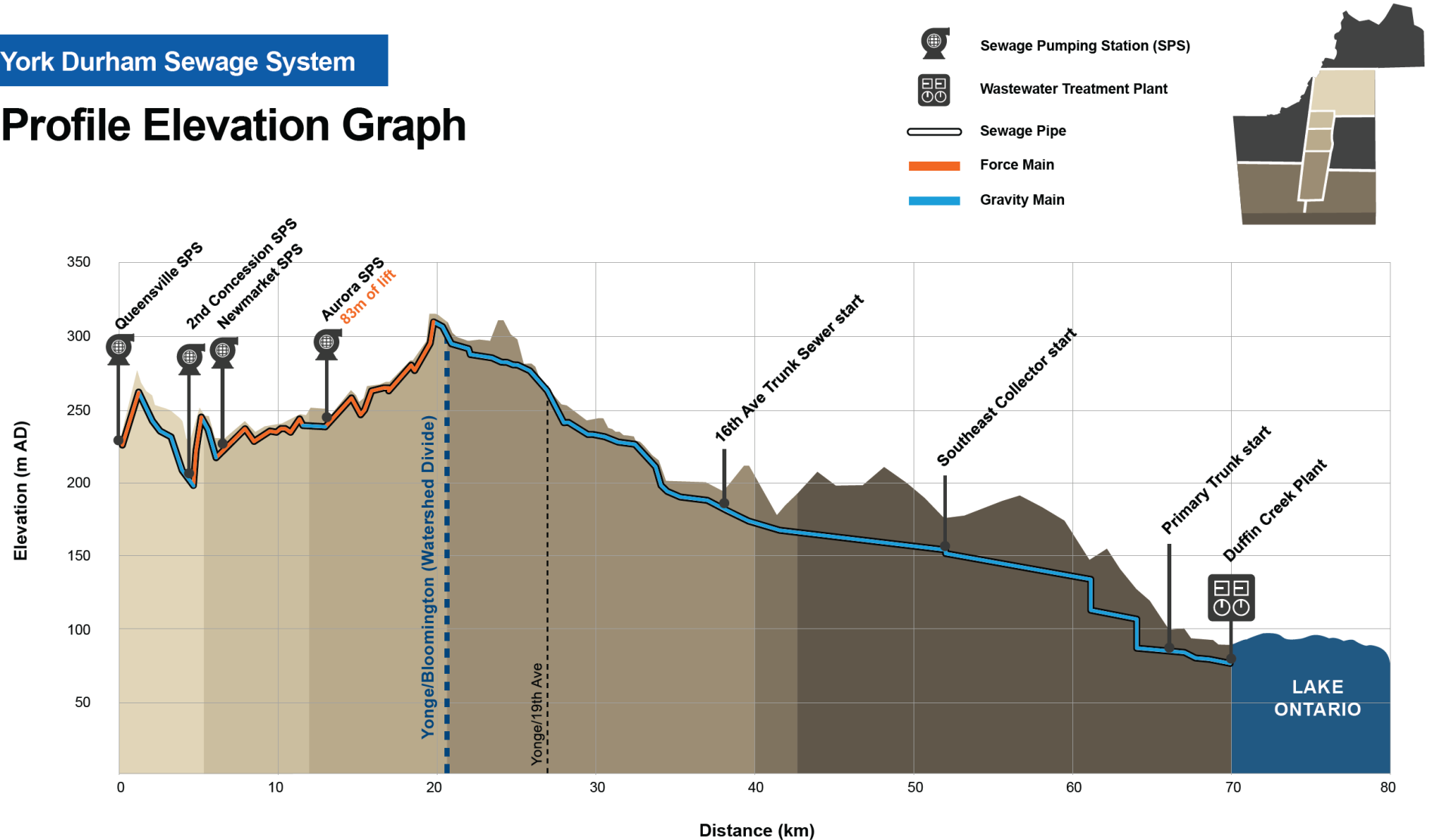
- All 3 municipalities served by North YDSS system
- Aurora Pumping Station receives flow mainly from Newmarket Pumping Station
- Flows limited by pumping capacity and pipe dimensions
- Capacity already assigned to municipalities
- By 2026, pumping capacity at 100% and exceeds Yonge Street Sewer capacity, resulting in surcharging



Topographical Challenges Servicing the North

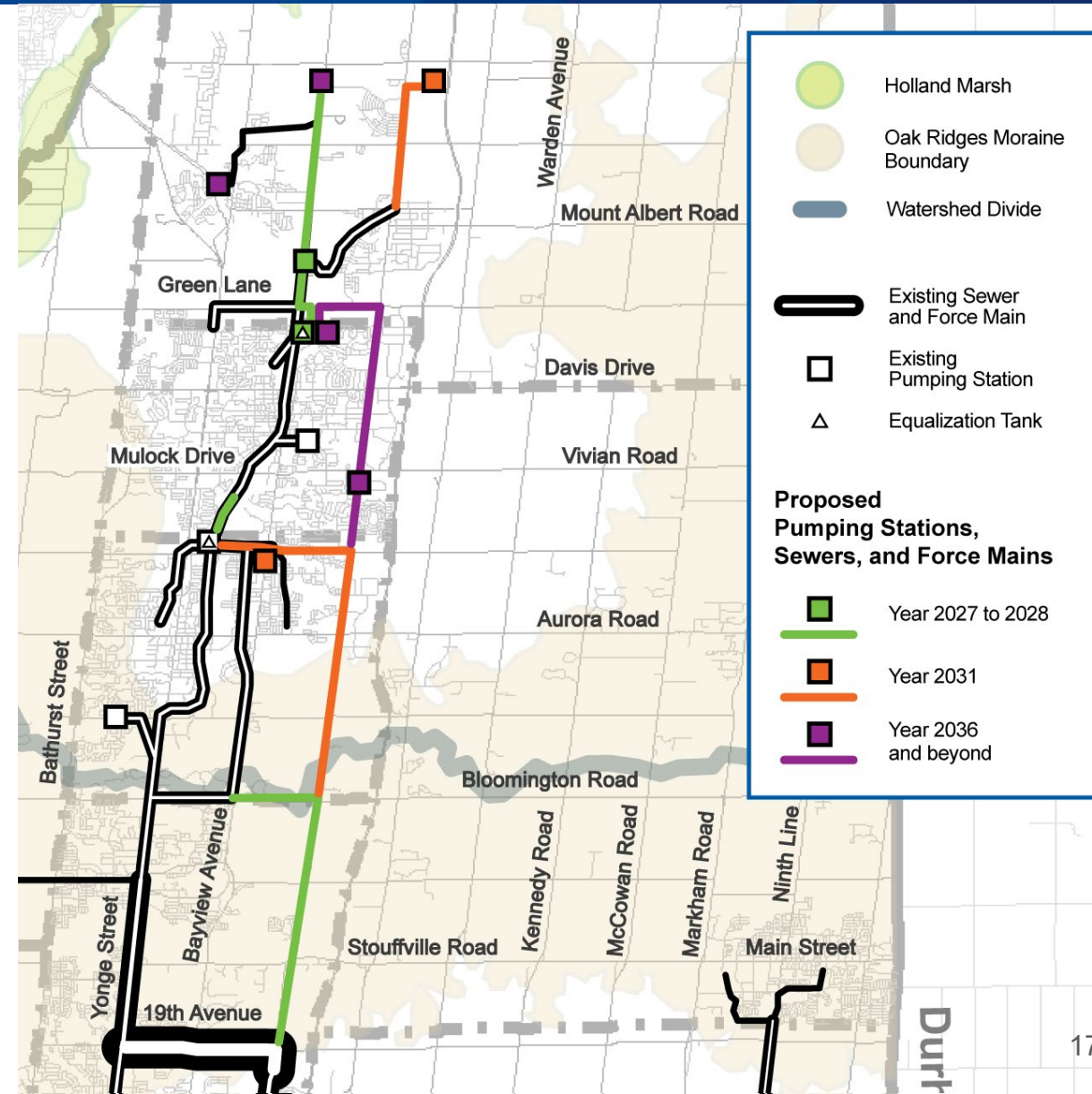
York Durham Sewage System

Profile Elevation Graph



North YDSS Expansion Program Phasing

- Service area anticipated to be out of capacity by end of 2026
- Phase 1 (Completion 2027/2028)
 - Service growth to 2031
 - Estimated costs \$500+ Million
- Phase 2 (Completion 2031)
 - Service growth to 2036
 - Estimated costs \$550 - 650 Million
- Phase 3 (Completion 2036)
 - Service growth for ultimate
 - Estimated costs \$500 - 600 Million

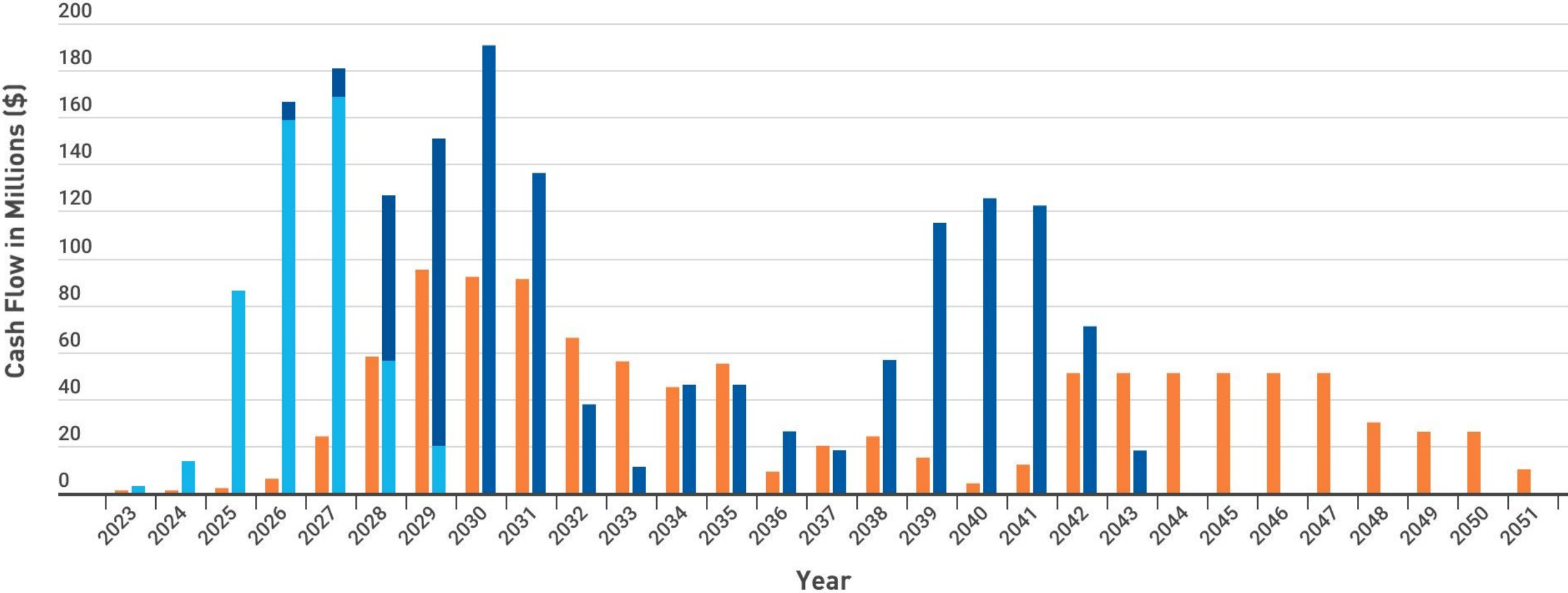


North YDSS Expansion — Potential Funding/Financing Scenario(s)

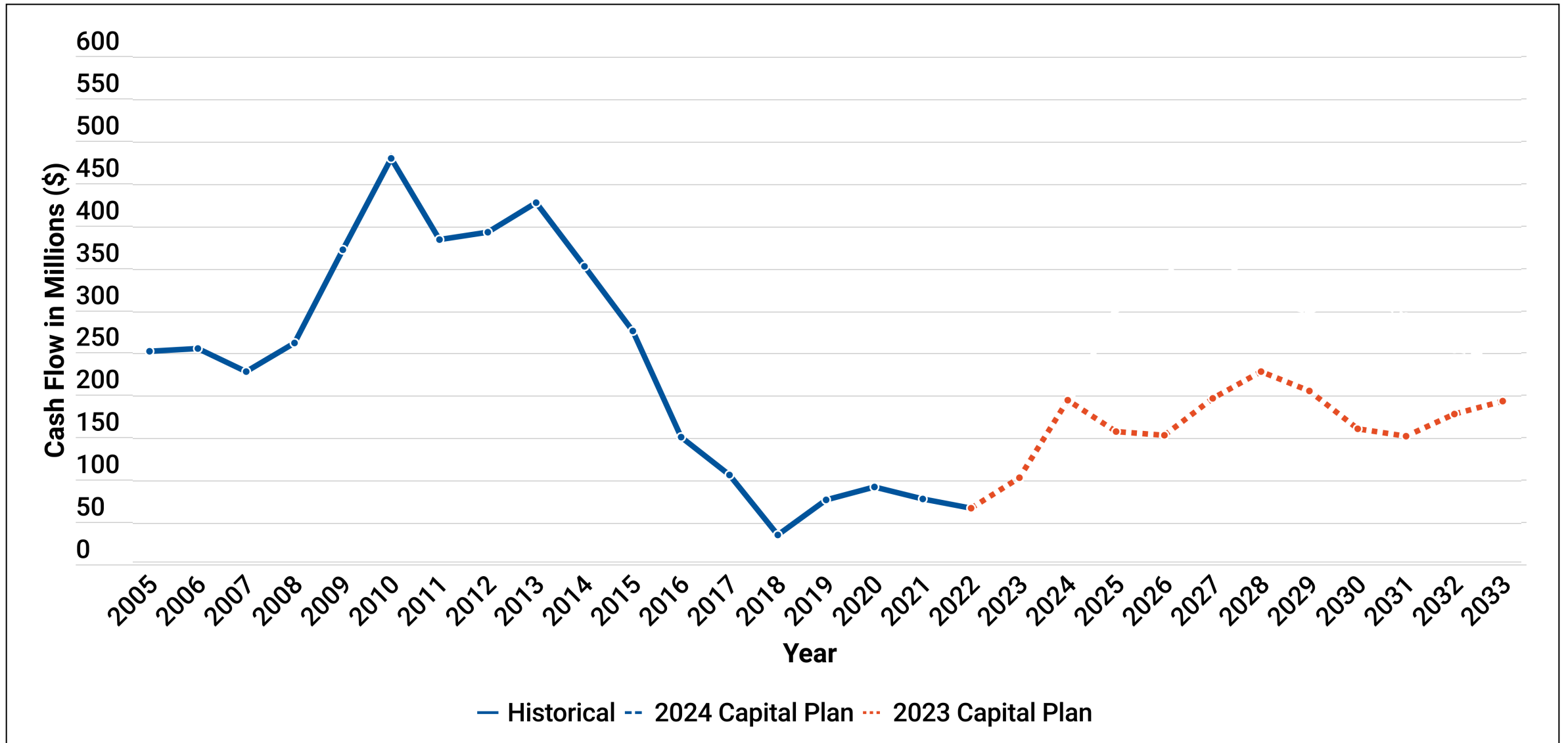
- Former UYSS project:
 - \$550 million project costs in current DC Bylaw
 - \$433 million Capital Spending Authority in 2023 Capital Plan
- North YDSS Phase 1 Expansion Program:
 - Exploring \$515 million CSA in proposed 2024 Capital Plan for Phase 1 (funded from DCs) and assessing if a developer financing agreement needed to accelerate Phase 1
- Considering developer financing agreements for Phases 2 and 3 once funding strategies fully developed or other options
- Pursue further funding opportunities – other levels of Government

Cash Flow Model – Former Upper York Project vs North YDSS Expansion

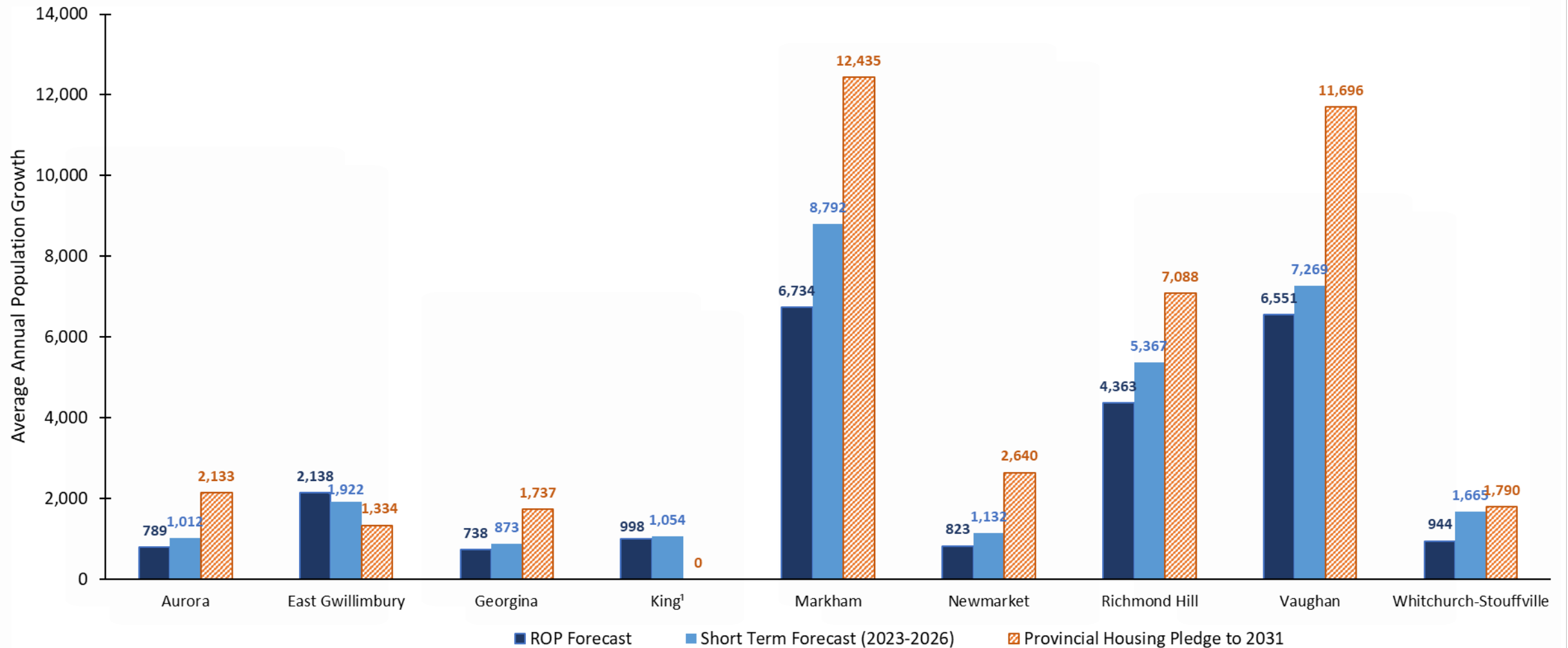
■ North YDSS Expansion (Phase 1) (\$500 M)
 ■ UYSS 2023 Capital Plan (\$1.1 B)
 ■ North YDSS Expansion (Phases 2 and 3) (\$1.3 B)



Financial Implications to Advance

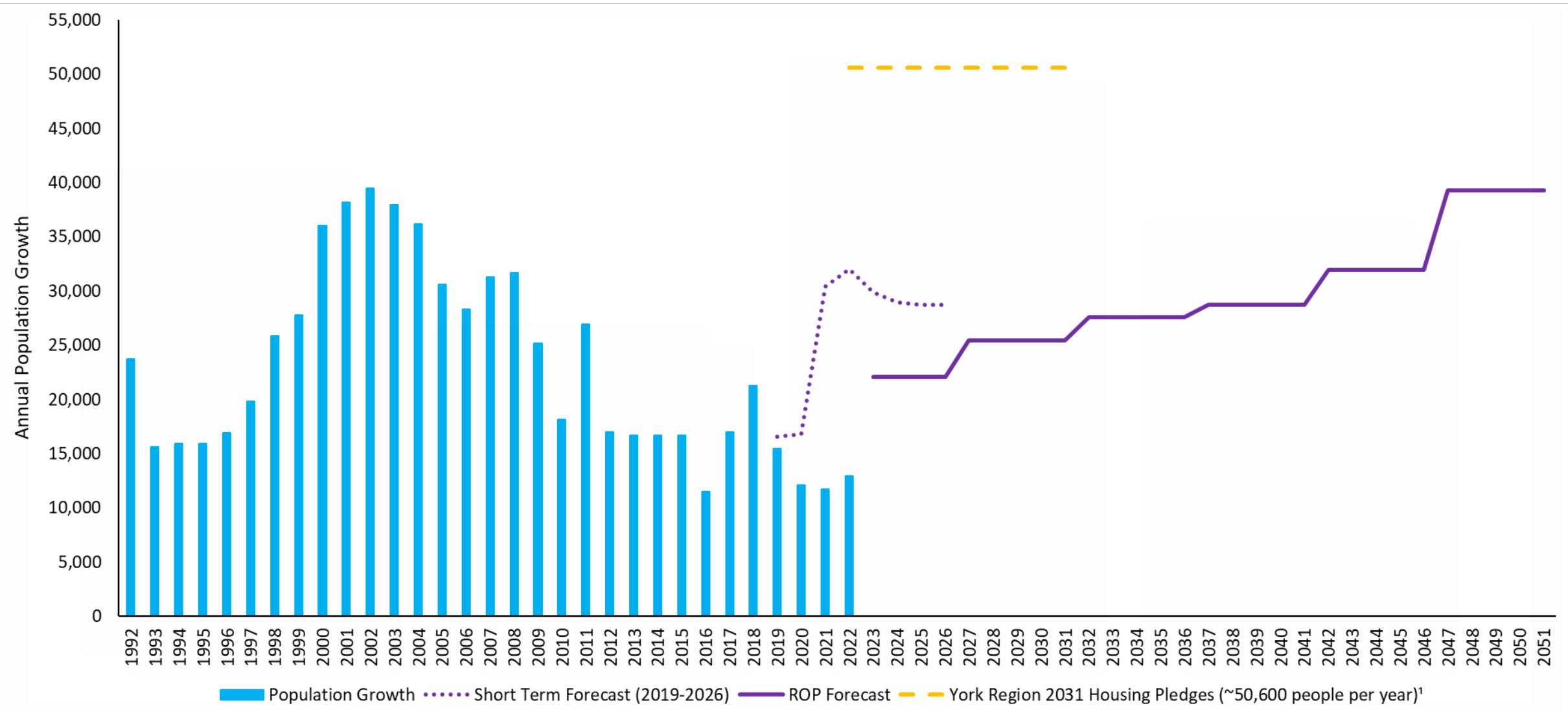


Introduction of Housing Pledges to achieve 150,000 Homes by 2031



Notes: The Province did not assign King Township a housing pledge.

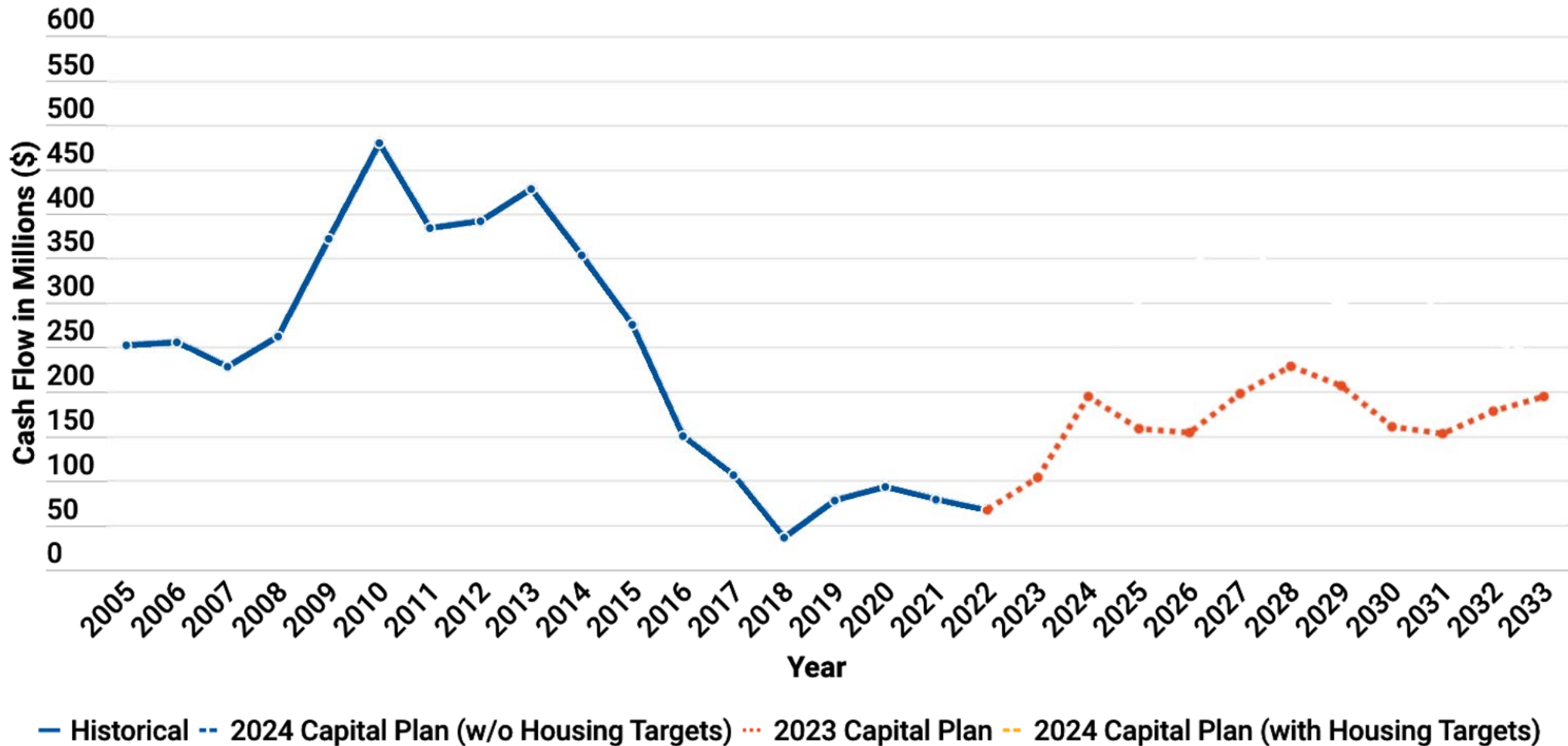
More Homes Built Faster Act 2022 Changes Regional Official Plan Forecasted Population Growth



Source: Province of Ontario, York Region Long Range Planning

Notes: 1 Includes King Township's ROP Forecast

Financial Implications to advance



Legislative Changes and New Targets Require New Infrastructure Plans

- Accelerated growth targets require advanced/new infrastructure from existing Master Plans
- Infrastructure plans need to be reviewed to accommodate new directions from Province
- Changes to strike a balance between affordability, infrastructure timing and growth
- **Work with Council over 2024/2025 budgets and Development Charge Bylaw update to establish updates infrastructure plans**
- **Seek Provincial Funding Support**



GEORGINA



Development
Community

Region, local municipalities, province and development community to develop feasible infrastructure plans and affordable funding programs

Immediate commencement of North YDSS Expansion Phase 1 projects required to meet Minister's timelines

- Through a letter on March 28, 2023, the Minister requested an aggressive implementation timeline with certain infrastructure components to be in service as early as the end of 2026
- Delivery of seven or more critical infrastructure projects on this accelerated schedule underscores the need to rely on experienced partners for engineering services of the North YDSS Expansion Phase 1
- The aggressive timeline for delivery of the York Region Sewage Works Project could not be foreseen by the Region and cannot accommodate the time required to competitively procure the urgent consulting services required for immediate commencement of North YDSS Expansion Phase 1
- Continued engineering services from GHD will enable fast tracking design and project execution while minimizing any lost cost and time related to securing a new service provider.

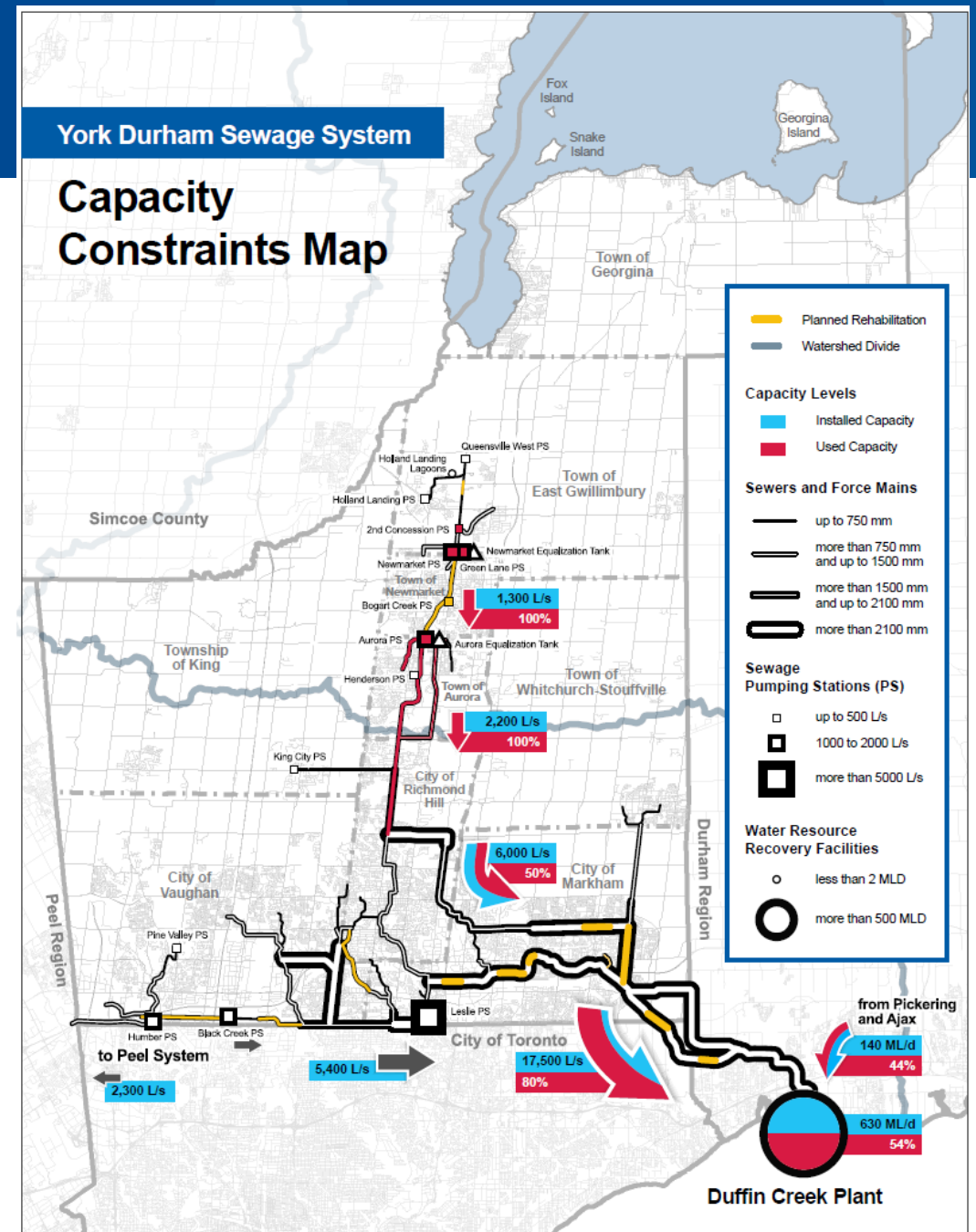
Recommendations To Expedite Engineering Contract for North YDSS Expansion Phase 1

1. Council authorize the Commissioner of Public Works to negotiate and if negotiations are successful, execute a direct purchase agreement with GHD Limited for program management, engineering design and construction support services for the North YDSS Expansion Phase 1 at an estimated value not to exceed \$84.5 million, exclusive of taxes, as outlined in this report, on business terms satisfactory to the Commissioner of Public Works and on legal terms acceptable to the Regional Solicitor.
2. Council authorize the Commissioner of Public Works to negotiate and if negotiations are successful, execute a direct purchase agreement with Revay and Associates Limited for project planning and performance monitoring services related to the North YDSS Expansion Phase 1 at an estimated value not to exceed \$3.0 million, exclusive of taxes, as outlined in this report, on business terms satisfactory to the Commissioner of Public Works and on legal terms acceptable to the Regional Solicitor.

2023 CAPACITY ASSIGNMENT

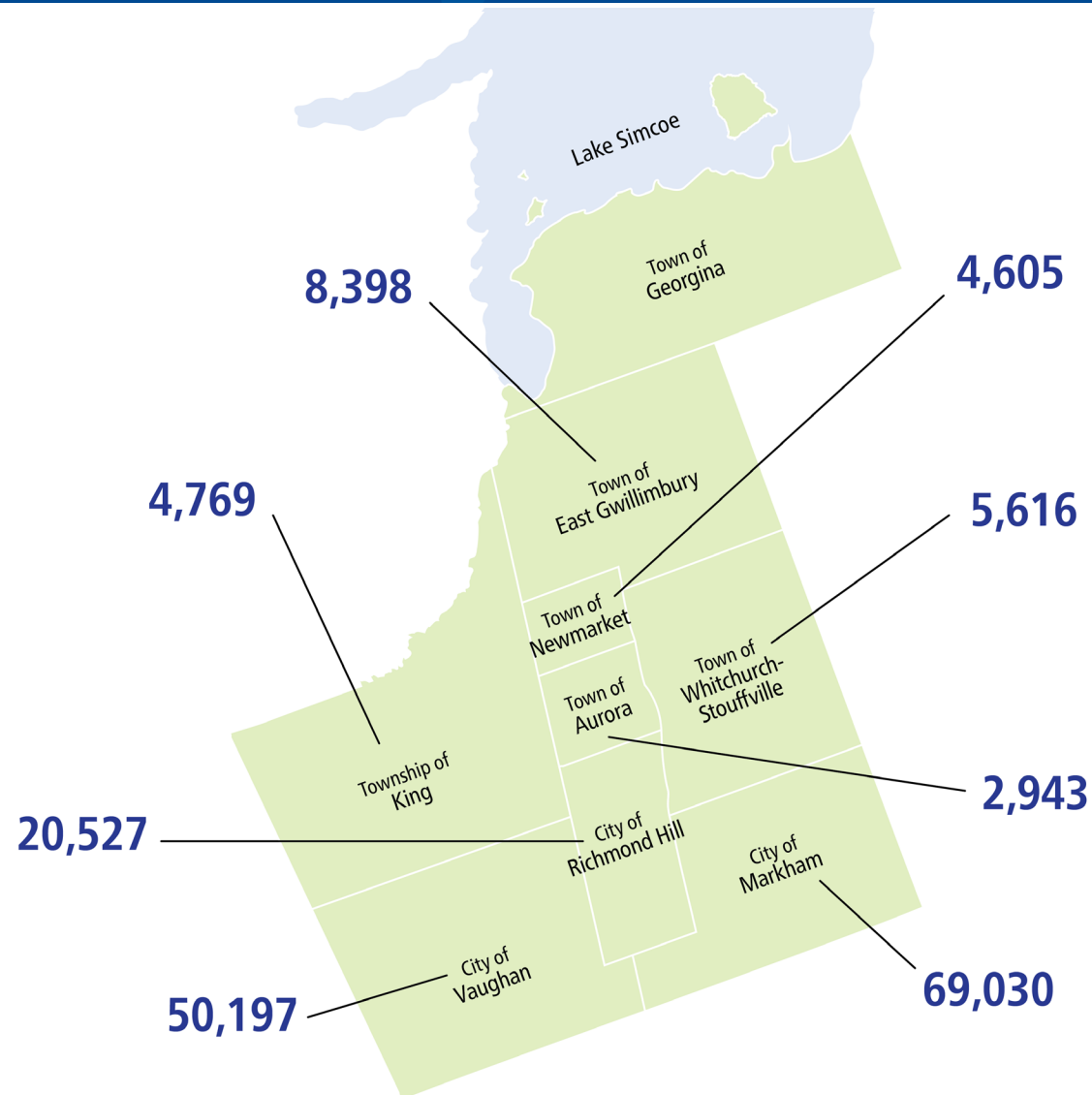
Why Do We Phase Capacity?

- Municipalities grow at different rates
- Allows equitable approach across shared YDSS infrastructure
- Ensures services in place for new residents and businesses
- Considers timing of new infrastructure subject to funding and regulatory approvals
- Provides flexibility to accommodate a dynamic and changing environment



Based on 2026 population forecast.

YDSS Capacity Available to Meet Housing Targets



Total YDSS

- Total Committed/Reserved to Development Lands
April 2023

166,085 persons

Proposed 2023 YDSS Capacity Assignment

Municipality	Number of Persons				Estimated Years of Provincial target growth
	Total Unregistered Capacity Available 2022 (Dec)	Housing Target Annual Growth Rate Estimates (2023-2031)	Proposed New Capacity Assignment	Total Assigned Capacity	
Aurora	7,156	2,628	2,071	9,227	4
East Gwillimbury	10,860	1,210	1,333	12,193	10
Georgina	7,339	1,858	-	7,339	4
King	6,427		-	6,427	-
Markham	43,847	15,563	17,584	61,431	4
Newmarket	5,751	3,796	7,767	13,516	4
Richmond Hill	36,004	9,220	10,734	46,738	5
Vaughan	37,715	14,350	43,375	81,090	6
Whitchurch-Stouffville	5,779	1,981	5,876	11,655	6
TOTAL	160,878	50,606	88,740	249,618	

Ensuring at least 4 years of assignment for each municipality at the new Housing Target rate with another capacity assignment in two years

Preliminary Year-end 2022 Capacity for Standalone Facilities

Facility expansions address growth pressures in communities served by standalone systems

Standalone Facility	Number of Persons			
	Approved Capacity	Total Unregistered Capacity Available (Dec 2022)	Committed / Reserved Capacity	Available Capacity
East Gwillimbury				
Holland Landing	4,300	-	-	-
Mount Albert	7,350	1,567	490	1,077
Georgina				
Keswick	49,000	11,746	5,771	5,976
Sutton	7,500	1,214	859	355
King Township				
Nobleton	6,750	151	2,343	-
Schomberg	3,444	509	158	351
Vaughan				
Kleinburg	7,505	2,726	315	2,410
TOTAL	85,849	17,913		10,169

Summary of Capacity to Support Housing Targets



Accommodating Growth in a Complex System Through Frequent Monitoring and Multi-Year Capacity Assignments

Continual monitoring and capacity assessment to support changing landscape

- Increased changes in population forecasts due to provincial direction
- Adapt to evolving development needs in each municipality
- Align assignment with changing infrastructure planning and implementation timing
- Improved decision making with more frequent data collection



Report Recommendations from Item H.2.2 – 2023 Capacity Assignment

1. Council authorize new assignment of water and wastewater servicing capacity of 88,740 persons to local municipalities to support forecasted development towards Provincial housing pledges with a commitment for another capacity assignment in 2025
2. The Regional Clerk circulate this report to the local municipalities and the Ministry of the Environment, Conservation and Parks and the Ministry of Municipal Affairs and Housing.

THANK YOU

LM Registration Forecast vs. STF

