The Regional Municipality of Halton 1151 Bronte Road, Oakville



AGENDA

DEVELOPMENT CHARGES ADVISORY COMMITTEE Friday, October 29, 2021

To be held at 9:30 a.m. Virtual Meeting

CONTACT INFORMATION: Paula Kobli, Senior Advisor – Development, Finance Tel: 905-825-6000 ext. 7184 Toll free: 1-866-4HALTON (1-866-442-5866) TTY: 905-827-9833 E-Mail: Paula.Kobli@halton.ca WE REQUEST YOUR CO-OPERATION IN MAINTAINING THE FOCUS OF COMMITTEE AND COUNCIL MEETINGS. PLEASE ENSURE THAT ALL PAGERS AND CELLULAR TELEPHONES ARE SWITCHED TO A NON-AUDIBLE FUNCTION DURING YOUR ATTENDANCE AT THESE MEETINGS.

THANK YOU FOR YOUR ASSISTANCE.

THE REGIONAL MUNICIPALITY OF HALTON

MEETING NO. 04-21

NAME OF COMMITTEE: DEVELOPMENT CHARGES ADVISORY COMMITTEE

- DATE OF MEETING: Friday, October 29, 2021 9:30 a.m.
- PLACE OF MEETING: Zoom Video Conference Halton Regional Centre 1151 Bronte Road Oakville, Ontario
- MEETING LINK:https://halton.zoom.us/j/96633511334?pwd=YVNESHQ3V(for public viewing)DZMNm9VV0VueG9Vd2x2dz09

<u>AGENDA</u>

DISCLOSURES OF PECUNIARY INTEREST

REGULAR AGENDA

- Confirmation of Minutes of Development Charges Advisory Committee Meeting No. 03-21 held Thursday, October 21, 2021 (Agenda Pages 1 – 48)
- 2. Cost of Growth
- 3. DC Rate Review
- 4. Policy Review
- 5. Discussion

OTHER BUSINESS

ADJOURNMENT

DEVELOPMENT CHARGES ADVISORY COMMITTEE MEETING NO. 04-21 FRIDAY, OCTOBER 29, 2021

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COMMITTEE MEMBERS

Gary Carr, Regional Chair Rob Burton, Mayor, Town of Oakville Mike Cluett, Councillor, Town of Milton Paul Sharman, Councillor, City of Burlington Clark Somerville, Councillor, Town of Halton Hills Lisa Brown, Citizen Representative Carmen Gucciardi, Citizen Representative Herb Lewington, Citizen Representative Ric Robertshaw, Citizen Representative Steven Frankovich, West End Home Builders Association (WEHBA) Gary Gregoris, Building Industry and Land Development Association (BILD) Shane Cooney, Non-residential Development Industry Jason Sheldon, Non-residential Development Industry Ray Chesher, Business/Chamber of Commerce Representative Leisl Dukhedin-Lalla, Business/Chamber of Commerce Representative

STAFF REPRESENTATION

Matthew Buist, Director, Capital Development Financing Paula Kobli, Senior Advisor – Development, Finance Katherine Fleet, Manager, Development Financing Graham Milne, Regional Clerk

DEVELOPMENT CHARGES ADVISORY COMMITTEE

MEETING NO. 03-21

NAME OF MEETING:	DEVELOPMENT CHARGES ADVISORY COMMITTEE
DATE OF MEETING:	Thursday, October 21, 2021 <u>9:30 a.m.</u>
PLACE OF MEETING:	Zoom Video Conference
MEMBERS PRESENT:	Councillor Paul Sharman (Chair) Mayor Rob Burton, Councillor Mike Cluett, Councillor Clark Somerville, Lisa Brown, Ray Chesher, Shane Cooney, Leisl Dukhedin-Lalla, Steven Frankovich, Gary Gregoris, Carmen Gucciardi, Herb Lewington, Ric Robertshaw, Jason Sheldon
GUESTS:	Daryl Abbs, Gary Scandlan (Watson & Associates) Alvaro Almuina (EllSo Consulting) Sandy Naime, Mark Zamojc (GMBluePlan)
REGRETS:	Gary Carr, Regional Chair
STAFF PRESENT:	Matthew Buist, Lee Anne Jones, Paula Kobli, Katherine Fleet, Melissa Green-Battiston, Ann Larkin, Dan Banks, Kate Connell, Graham Milne

The Development Charges Advisory Committee met on the above-noted date via electronic means and advised the following:

DISCLOSURES OF PECUNIARY INTEREST

There being no disclosures of pecuniary interest, the Committee proceeded with the regular order of business.

REGULAR AGENDA

1. Confirmation of Minutes of Development Charges Advisory Committee Meeting No. 02-21 held Friday, October 8, 2021

The minutes were confirmed without objection.

Minutes of Development Charges Advisory Committee Meeting No. 03-21, Thursday, October 21, 2021

DEVELOPMENT CHARGES ADVISORY COMMITTEE MEETING NO. 03-21 THURSDAY, OCTOBER 21, 2021

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2. Water/Wastewater & Roads Capital Costs and Calculations

Lee Anne Jones, Director, Infrastructure Planning and Policy, gave a presentation on the Water/Wastewater and Transportation Review, 2023 to 2031, and an overview of the gross cost to DC recoverable costs for both. Highlights included the revision of the Georgetown Wastewater Servicing Strategy with the decommissioning of the Georgetown Wastewater Treatment Plant. Matthew Buist, Director, Capital Development Financing, provided an overview of the DC calculations. A copy of this presentation was distributed to members prior to the meeting and is appended to the minutes.

3. Discussion

Chair Sharman requested that the outcomes of any further research arising from questions raised by the Committee be brought back to the next meeting. The Committee indicated interest in continuing to provide feedback but suggested it might not meet the timeline of the DCAC meeting schedule. Matthew Buist indicated that further questions could be submitted to the DC advisory committee email, and provided an outline of further opportunity for feedback throughout the DC process, including past the mandate of the Committee which is scheduled to conclude with the release of the DC Background Study.

OTHER BUSINESS

There was no other business.

ADJOURNMENT

Adjournment: 10:39 a.m.

2022 Development Charges Update

Development Charges Advisory Committee October 21, 2021





Agenda

- 1. Water/Wastewater and Transportation Review (2023 to 2031)
- 2. Gross Cost to DC Recoverable Costs
 - Water/Wastewater
 - Transportation
- 3. DC Calculation



1. Water/Wastewater and Transportation Review (2023 to 2031)





Overview

- DC Technical Reports: Objective and Basis of Analysis and Technical Review
- Water/Wastewater Technical Review
- Transportation Technical Review



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Objective

Update to the 2017 DC, as per FN02-21/PW04-21:

- Development Charges Technical Reports that provide the basis for developing costs and capital implementation plans for transportation and water/wastewater projects to service population and employment growth across Halton Region (2023 2031)
- Halton Region Best Planning Estimates (BPE) to 2031 were used as the basis for growth projections, as approved in 2011 as per Staff Report LPS54-11
 - BPEs to 2051 are being developed for the IGMS/Regional Official Plan Amendment and will be assessed through upcoming Integrated Master Plans and subsequent DC Update



Basis of Analysis



Basis of Technical Review

- Transportation and Water/Wastewater capital programs generally align with the 2017 DC Bylaw Update
- Methodology aligns with 2017 DC Bylaw Update, including design criteria, factors such as project contingencies, and project splits
- Primarily focused on updating project costs (2022\$) to reflect current unit rates and recent construction tenders
- Base year for program is 2023

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Project Costing Approach

Project capital costs were adjusted for the 2022 DC Program using the following approach:

- Where projects have advanced, cost estimates from Municipal Class Environmental Assessment (MCEA) Studies, Peel-led studies, scoping studies or preliminary/detailed design were applied throughout the 2023 to 2031 capital forecast
- The majority of the projects in the 2023-2031 program were costed using the same methodology as was used in the 2017 DC Technical Study
- Unit Costs for Master Plan costed projects only (formerly referred to as Benchmarked projects) were based on recent regional data and construction tenders, and tenders from neighbouring municipalities



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WATER/ WASTEWATER TECHNICAL REVIEW



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Water/Wastewater Technical Review Results

Results of the Technical Review were incorporated into the 2022 DC Technical Report. The main outcomes were:

- Water and wastewater per capita design criteria updated in 2017 DC Technical Report used for 2022 DC Update
- Calibrated hydraulic models used to confirm and validate capital implementation plans
- Potential to revise wastewater flow diversion strategy for Georgetown.
 - o Identified through a separate study.
 - 2022 DC Technical Study outlines the financial/infrastructure requirements of the closure strategy.
 - Overall strategy to be re-confirmed through the next Master Plan.

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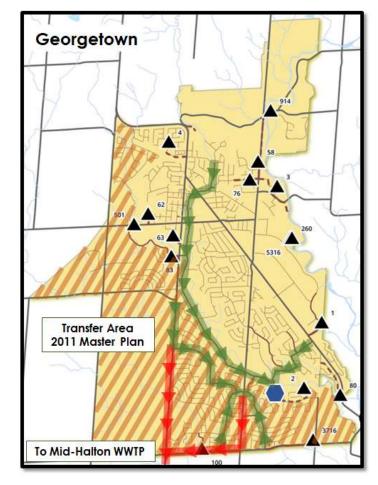
Revised Georgetown Wastewater Servicing Strategy - Decommission Georgetown WWTP

2011 Master Plan Transfer Strategy:

- Partial flow diversion from Georgetown WWTP to Mid-Halton WWTP (Oakville).
- Remaining customers (generally north of Silver Creek) remain serviced by Georgetown WWTP.

Servicing Strategy Revised:

- Divert all Georgetown WWTP flow to Mid-Halton in the 2025 timeframe (concurrent with lake-based transfer of service) to minimize impacts on operation post-transfer:
 - Odour generation at low flows.
 - Loss of redundancy to accommodate storm events.



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Revised Georgetown Wastewater Servicing Strategy - Decommission Georgetown WWTP

 Project scope impacted by the decommissioning of the Georgetown WWTP in the 2023-2031 capital program:

Region IPFS ID	Project Description	Scope Change
6581	1500 mm WWM on 5th Line from Britannia Rd to Lower Base Line (MIL)	Size changed from 1350mm to 1500mm
6582	1500 mm WWM on Lower Base Line from 5th Line to 4th Line (MIL)	Size changed from 1350mm to 1500mm
7528	North WWPS expansion of 2,000 L/s at Mid-Halton WWTP (OAK)	Capacity expansion changed from 1200L/s to 2000 L/s
8034	2350 L/s WWPS at Lower Base Line and 4th Line (MIL)	Capacity changed from 1805L/s to 2350 L/s

- Benefit to Existing (BTE) calculations for impacted infrastructure updated to reflect the revised servicing strategy:
 - Projects listed above.
 - Mid-Halton WWTP expansion (ID8159).
 - Forcemains from the Lower Base Line Pump Station (ID8035).





2023 – 2031 PROGRAM COSTS WATER/WASTEWATER





Water Capital Program (2023 to 2031)

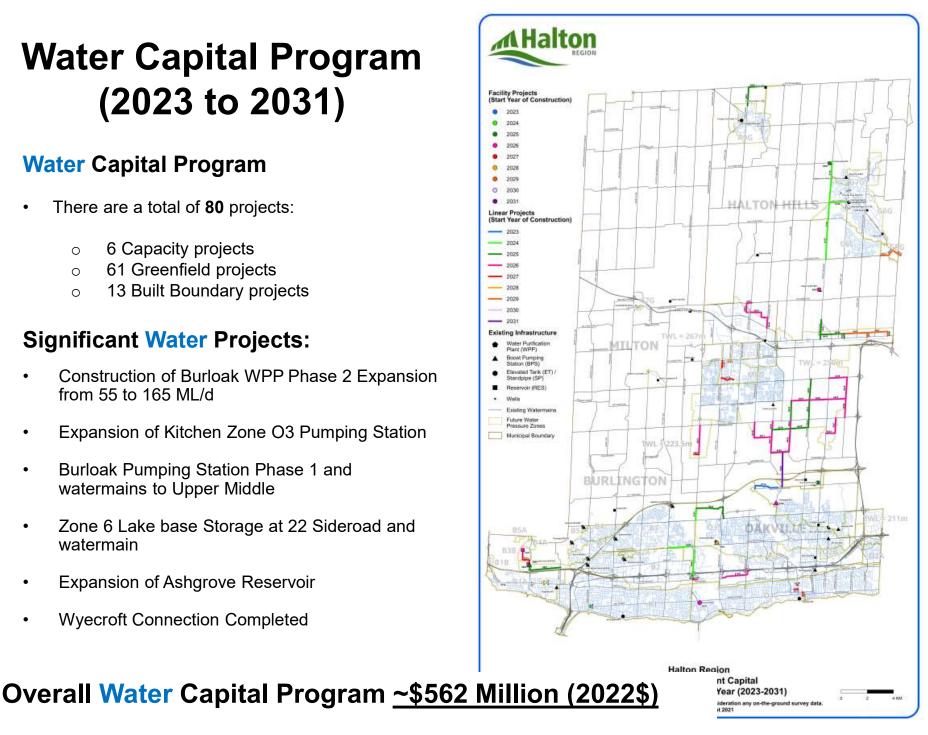
Water Capital Program

- There are a total of 80 projects:
 - 6 Capacity projects 0
 - 61 Greenfield projects 0
 - 13 Built Boundary projects Ο

Significant Water Projects:

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- Construction of Burloak WPP Phase 2 Expansion from 55 to 165 ML/d
- Expansion of Kitchen Zone O3 Pumping Station
- Burloak Pumping Station Phase 1 and watermains to Upper Middle
- Zone 6 Lake base Storage at 22 Sideroad and watermain
- Expansion of Ashgrove Reservoir
- Wyecroft Connection Completed



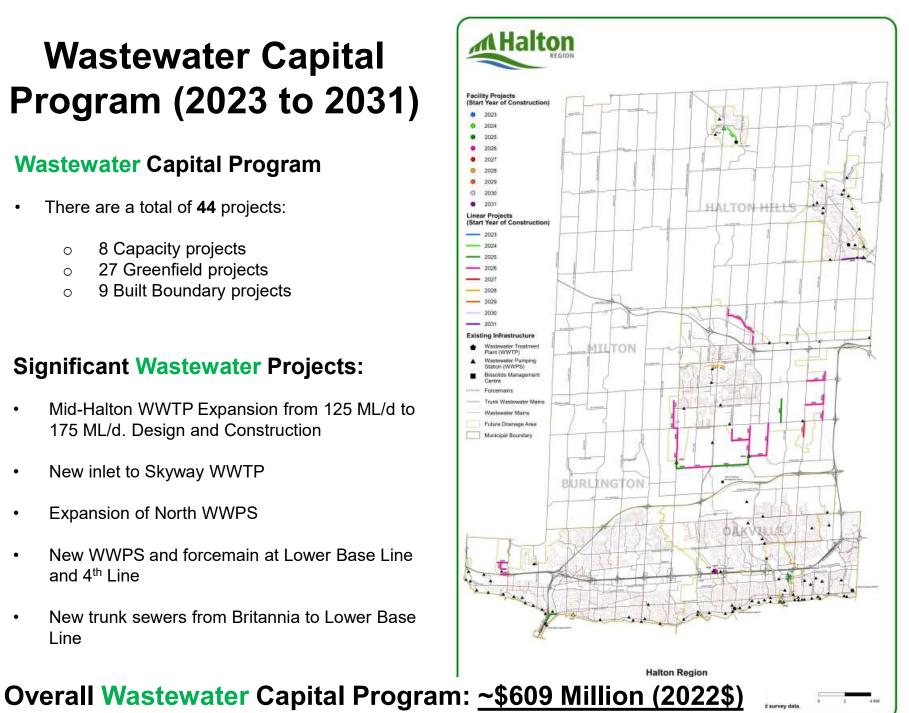
Wastewater Capital **Program (2023 to 2031)**

Wastewater Capital Program

- There are a total of 44 projects: ٠
 - 8 Capacity projects 0
 - 27 Greenfield projects 0
 - 9 Built Boundary projects 0

Significant Wastewater Projects:

- Mid-Halton WWTP Expansion from 125 ML/d to • 175 ML/d. Design and Construction
- New inlet to Skyway WWTP •
- Expansion of North WWPS ٠
- New WWPS and forcemain at Lower Base Line • and 4th Line
- New trunk sewers from Britannia to Lower Base . Line



2023-2031 Cost Comparison

Water/Wastewater Costs 2023 to 2031	Per 2022 Technical Report	Per 2017 Development Charges Background Study	Change		
Total Program Cost (\$millions)	\$1,171	\$620	\$551		
Drivers for Increase:					
Revised Cost Estimate	\$148	To reflect current land acquisition).	unit rates (including		
Municipal Class Environmental Assessment Study/Design	\$52		To reflect the results of Municipal Class Environmental Assessments Studies and Detailed Design.		
Scope Changes	\$128	to accommodate t the Georgetown V Plant. This category also change associated	unit rates and upsizing he decommissioning o Vastewater Treatment o includes the scope d with the /ater Tower (water		
Reprogramming	\$223	previously identifie	l costs for projects ed for 2017 to 2022, moved to this program.		
TOTAL Change	\$551				

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TRANSPORTATION TECHNICAL REVIEW





Transportation Technical Review

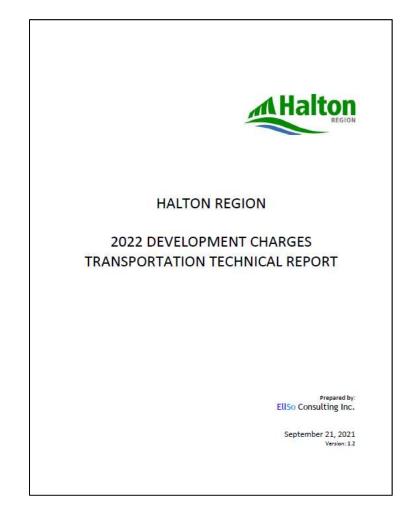
Technical Review of the transportation network and projects per the 2011 TMP was completed by:

- Updating the transportation demand forecasting model with current travel pattern characteristics (2016 TTS & 2016 Census).
- Validating the long-range Transportation Capital Implementation Plan to 2031.
- Updating project costing, including:
 - land unit rates using market-based information which were applied to the historical land use categories set out in the 2012 Development Charge Technical Study;
 - apportioning of the capital costs by Growth/Non-Growth and Residential/Non-Residential shares.



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Review Results

The results of the Technical Review were incorporated into the 2022 Development Charges Transportation Technical Report. The main outcomes were:

- Updated travel forecasting outputs resulted in no change in capital project needs.
- Minor Reprogramming of Transportation Capital Projects.
- Updated Capital Project Costs, including apportioning of the capital costs by Growth/Non-Growth and Residential/Non-Residential shares.
- No increase in Level of Service, Quantity and Quality by 2031.



Transportation Project Reprogramming

2022 Development Charges Transportation Technical Study:

- includes projects from the 2020 Allocation Program that were reprogrammed to post-2022
- reviewed the program and phasing of projects from 2023 to 2031 holistically with a focus on timing and sequential delivery of projects across each corridor

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2023 – 2031 PROGRAM COSTS TRANSPORTATION

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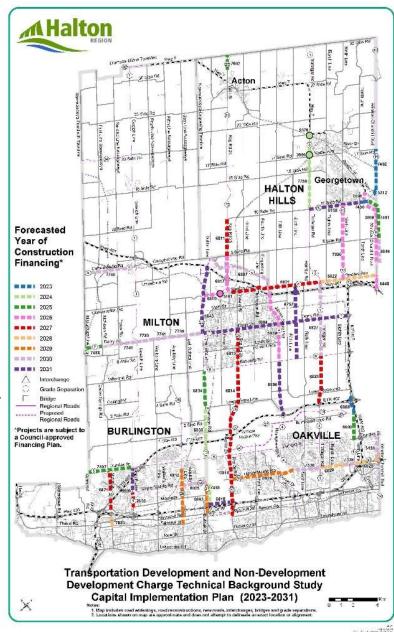
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Transportation Capital Program (2023 to 2031)

Significant Transportation Projects (2023-2031) include:

- "5 1/2 Line" New six lane road from Britannia Road to Steeles Avenue and Interchange at Highway 401
- **Derry Road** Widening from four to six lanes from Tremaine Road to Highway 407
- North Service Road New four lanes from Burloak Drive to Bronte Road
- James Snow Parkway Widening from four to six lanes from Highway 401 to Tremaine Road
- Tremaine Road Widening from four to six lanes from Highway 401 to Derry . Road
- James Snow Parkway New six lane road from Highway 407 to Britannia Road
- Bronte Road Widening from four to six lanes from Speers Road to Highway 407
- Steeles Avenue Widening from four to six lanes from Regional Road 25 to Trafalgar Road
- Trafalgar Road Widening from four to six lanes from Britannia Road to Steeles Avenue
- Appleby Line Widening from four to six lanes from Fairview Street to Taywood Drive
- The Transportation Development and Non-Development Capital Program ~ \$2.44B (2022\$)





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2023-2031 Cost Comparison

Transportation Costs 2023 to 2031	Per 2022 Technical Report	Per 2017 Development Charges Background Study	Change		
Total Program Cost (\$millions)	\$2,441	\$1,267	\$1,174		
Drivers for Increase:					
Revised Cost Estimate	\$508	To reflect current unit rates (including land acquisition).			
Municipal Class Environmental Assessment Study/Design	\$7	To reflect the results of Municipal Clas Environmental Assessments Studies a Detailed Design.			
Peel Region Projects (Winston Churchill Boulevard)	\$16	Updated project costs for Halton's Share of road improvements.			
Reprogramming	\$ 509	previously identified	l costs for projects ed for 2017 to 2022, moved to this program.		
Non-Growth	\$134	_			
TOTAL Change	\$ 1, 1 74				
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3. Gross Cost to DC Recoverable Costs







Gross Cost to DC Recoverable Cost Water and Wastewater (\$000's)

			Less								
					Post						
	Gross C	Cost	No	n-Growth	Period						Non
Category	2023-20	031		(BTE)	Benefit	Ne	et Growth	R	esidential	Re	esidential
Capacity											
Treatment/Plants	\$ 322,	715	\$	65,054	\$ 24,549	\$	233,112	\$	177,166	\$	55,946
Pumping Stations/Reservoir	75,	507		47,425	-		28,082		21,342		6,740
Major Trunk	32,	137		29,887	-		2,250		1,710		540
Studies	6,	280		-	-		6,280		4,780		1,500
Sub-total	\$ 436,	639	\$	142,366	\$ 24,549	\$	269,724	\$	204,998	\$	64,726
Other Distribut'n & Collect'n	734,	180		44,742	46,888		642,550		469,640		172,910
Total	\$ 1,170,	819	\$	187,108	\$ 71,437	\$	912,274	\$	674,638	\$	237,636





Gross Cost to DC Recoverable Cost Water and Wastewater (\$millions)

	Residential Share									Non-residential Share							
			Distrb'n		Distrb'n				Distrb'n		Distrb'n						
			/C	ollct'n -	/Co	llct'n -					/Co	ollct'n -	/Co	llct'n -			
Service	Ca	apacity	Gre	enfield	Buil	t bndry	-	Total	tal Capacity		Greenfield		Built bndry		Total		
Water	\$	139.8	\$	226.8	\$	7.3	\$	373.9	\$	44.1	\$	83.9	\$	1.5	\$ 129.5		
Wastewater		65.2		213.5		22.1		300.8		20.6		83.0		4.5	108.1		
Total	\$	205.0	\$	440.3	\$	29.4	\$	674.6	\$	64.7	\$	166.9	\$	6.0	\$ 237.6		

*may not add due to rounding



Water/Wastewater Cost Allocations Benefit to Existing

- Principles applied to calculating Benefit to Existing (BTE) are consistent with the 2017 DC.
- BTE considers benefits to existing service areas by growth driven projects. These growth projects may also:
 - Address existing deficiencies in the system;
 - Provide redundancy/security of supply;
 - Provide additional capacity required for existing users;
- Total BTE equal to ~\$187 M (~16% of total cost)





Water/Wastewater Cost Allocations Post Period Benefit

- Principles applied to allocating Post Period Benefit (PPB) are consistent with the 2017 Development Charges Background Study.
- PPB considers:
 - Additional cost to install oversized infrastructure (linear, pumping storage, treatment) that will provide capacity for growth beyond 2031.
- Total PPB equal to ~\$71 M (~6% of total cost)



Water Cost Allocation Res vs. Non-Res Share

	Incremental (Pop/Emp) Growth	Projected Increase in Water Demand (2021 to 2031) (ML/D)	2022 DC Bylaw Update Percentage
Capacity			
Region-Wide			
Residential	129,788	65.3	76%
Non-Residential	48,556	20.8	24%
Total	178,344	86.1	100%
Distribution			
Greenfield			
Residential	85,983	43.3	73%
Non-Residential	38,248	16.4	27%
Total	124,231	59.6	100%
Built Boundary			
Residential	43,805	22.1	83%
Non-Residential	10,308	4.4	17%
Total	54,113	26.5	100%



Wastewater Cost Allocation Res vs. Non-Res Share

	Incremental (Pop/Emp) Growth	Projected Increase in Wastewater Generation (2021 to 2031) (ML/D)	2022 DC Bylaw Update Percentage
Capacity			
Region-Wide			
Residential	129,788	46.7	76%
Non-Residential	48,556	15.1	24%
Total	178,344	61.8	100%
Distribution			
Greenfield			
Residential	85,983	31.0	72%
Non-Residential	38,248	11.9	28%
Total	124,231	42.8	100%
Built Boundary			
Residential	43,805	15.8	83%
Non-Residential	10,308	3.2	17%
Total	54,113	19.0	100%



Transportation Capital Cost (\$ 000's)

		Les	SS:				
Category	Gross Cost 2023 - 2031	Non-Growth (BTE)	Post Planning Period	Net Cost	Res.	Non Res	
Road Reconstruction	\$ 47,140	\$ 41,835	\$-	\$ 5,305	\$ 3,396	\$ 1,909	
Road Widening	1,402,344	162,067	143,910	1,096,367	701,677	394,690	
Reconstruction with Widening	288,312	39,224	7,803	241,285	154,419	86,866	
New Alignment	448,565	7,339	86,293	354,933	227,158	127,775	
Structures/Grade Seperation	74,369	7,250	-	67,119	42,955	24,164	
Studies/Other	180,349	142,320	-	38,029	24,332	13,697	
Total	\$ 2,441,079	\$ 400,035	\$ 238,006	\$ 1,803,038	\$ 1,153,937	\$ 649,101	



Transportation Cost Allocations Benefit to Existing

- Principles applied to calculating Benefit to Existing (BTE) are consistent with the 2012 & 2017 DC Study
- Benefit to Existing in road widening with reconstruction considers:
 - Residual value in existing roads, as determined under PSAB (Road widening/reconstruction)
 - Safety benefit at railway grade separations
 - Enhanced service by new intersection signals and studies
- Total BTE amounts to \$400M (16% of gross cost)



Transportation Cost Allocations Benefit to Existing (\$ Millions) Continued

Road Wide	ening					
ID	6804					
Descriptio	n Derry Road - Widening from 4 to 6 lanes from T	remaine R	oad to Highwa	ay 407		
Constructi	on Year 2031					
Project Co	st (\$M)					\$ 132.21
BTE Calcul	ation:					
	BTE of Resurfacing on Existing Lanes					
(1)	Project Length (km)		12.2			
(2)	Mill & Pave Benchmark - \$M/km	\$	1.40			
(3)	Resurfacing Cost (1)x(2)			\$	17.08	
(4)	Net Book Value of Asset	\$	68.32			
(5)	Residual Value in Construction Year	\$	34.16			
(6)	BTE % - (1)-(5)/(4)				50%	
(7)	Existing Pavement Value and Deduction (3)x(6)			\$	8.54	
	BTE of Other Component					
(8)	Intersection & Existing Signal Modifications	\$	8.52			
(9)	Intersection & Existing Signal Modifications - BTE %		50%			
(10)	BTE (8)x (9)			\$	4.26	
(11)	Off Road Active Transportation	\$	3.39			
(12)	Active Transportation - BTE%		10%			
(13)	BTE (11)x(12)			\$	0.34	
	Total BTE (7)+(10)+(13)					\$ 13.14
	BTE % Over Total Project Cost					 10%



Transportation Cost Allocations Post Period Benefit

- Allocation method of Post Period remains unchanged from the 2008 / 2012 / 2017 DC Studies
- Post Period Benefit considers:
 - Capacity that will benefit growth beyond 2031
 - Volume over Capacity ratio to determine the excess capacity created by road improvements in the last five years of planning horizon (2026 -2031)
- Total Post Period Benefit cost amounts to \$238M (10% of gross cost)



Post-Planning Period Capacity

- Transportation Example Calculation:
 - Project "A": road widening starting 2029
 - From model runs for 2031:
 - road link v/c = 0.75

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- v/c on the associated screenline = 0.85
- Road is operating better than Screenline
- Therefore have excess capacity at road level
- The deduction applied to Project "A" per Equation 12 in report is 12%:



Transportation Cost Allocations Res vs. Non-Res Share

		BPE		Demand		
Category	2021 2031 (pop, empl) (pop, empl)		2021-2031 Growth (pop, empl)	Trips	%	
Residential	624,094	752,53	128,443	74,423	64	
Non Residential	327,683	390,000	49,430	43,229	36	
Total:				117,652	100	



Retail/ Non-Retail Trip Rate

(1)	(2)	(3)	(4)	(5)	(6)						
Category	Rate ¹	Transit/ Pass- By Trip Reduction	Net Rate (Auto)	Category Weight ²	Trip Gen. X GFA Weight						
			(100%-3) x (2)		(4x5)						
Retail											
Retail Trade (eg. Shopping Centre)	4.50	10%	4.05	48%	1.93						
Finance & Insurance (eg. Bank and Financial Office)	3.48	13%	3.03	11%	0.35						
Entertainment/Recreation (eg. Cinemas, fitness, recreation)	6.40	0%	6.40	7%	0.45						
Food Services (eg. Restaurant, fast food)	19.53	54%	8.94	22%	1.99						
Other Services (eg. auto care/personal services)	4.06	4%	3.88	12%	0.45						
Total Retail					5.17						
Non-Retail											
Industrial (eg. Light, Warehouse, Manufacturing)	0.90	0%	0.89	91%	0.82						
Institutional (eg. Schools, Community centres, hospitals, place of worship)	3.26	21%	2.58	1%	0.03						
Office (eg. general office, medical office)	2.05	16%	1.73	7%	0.13						
Accommodation (eg. hotel/motel)	0.76	0%	0.76	0%	0.00						
Total Non-Retail					0.98						

May not add due to rounding

¹ Derived from Institute of Transportatoin Engineers Trip Generation Manual

²Weighting derived from Halton Region Employment Survey



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Retail/ Non-Retail Splits

	(1)	(2)	(3)	(4)
		PM Peak Trip	PM Peak Trips	
Category	Sq. Ft	Rates	(1) x (2)	% Trips
Retail	6,281,583	5.17	32,461,889	27%
Non-Retail	88,834,161	0.96	85,590,726	73%
Total	95,115,744		118,052,615	100%



3. DC Calculation



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W/WW Calculation Inputs (\$000's)

Costs	Residential	Non- Residential	Comments
Reserve Fund Balance	\$ (0)		Projected 2021 year-end balances
Unfunded Capital Costs	75,304	93,492	Remaining expenditures in the 2012 and 2020 Allocation program
2012 Allocation Front End Payment	(31,685)		Front end payment for from remaining expenditures in 2012 Allocation program
Internal Debt	-	287,469	Regional Interim Financing to be recovered up to 2021
External Debt Charges	83,476	38,739	Outstanding debt charge for projects proceeded or approved up to 2021 (e.g. Sinking fund for employment land servicing, Skyway WWTP)
DC Credits	-	5,237	Remaining DC credits relating to S. 14 of the DC Act and developer up-front financing provided under CS- 52-03.
Oversizing - Historic	10,736	6,001	Oversizing costs carried from previous DC Studies
Net Growth Cost	674,638	237,636	
Interest/Inflation	(948)	24,127	Assumed 2.0% inflation, 3.0% interest
Total	\$ 811,520	\$ 692,700	



W/WW DC's

Summary of Calculation Results - Per SDE

		As of Ap	ril 1,	2021		New Cal	cula	ted	Difference				
Service	Gr	eenfield	Built Boundary		Gı	Greenfield		Built Boundary		Greenfield		Built Boundary	
Water	\$	8,689	\$	3,144	\$	12,276	\$	4,503	\$	3,587	\$	1,360	
Wastewater		10,276		4,535		17,261		5,718		6,985		1,182	
Total	\$	18,965	\$	7,679	\$	29,537	\$	10,221	\$	10,571	\$	2,542	

*may not add due to rounding

Summary of Calculation Results - Per Sq. Ft

		As of Apı	ril 1,	2021	New Calculated				Difference			
Service	Greenfield		Built Boundary		Greenfield		Built Boundary		Greenfield		Built Boundary	
Water	\$	3.166	\$	1.229	\$	3.897	\$	1.340	\$	0.731	\$	0.111
Wastewater		4.060		2.004		5.245		2.053		1.185		0.049
Total	\$	7.226	\$	3.233	\$	9.142	\$	3.393	\$	1.916	\$	0.160

*may not add due to rounding



Roads Calculation Inputs (\$000's)

		Non-	
Costs	Residential	Residential	Comments
Reserve Fund Balance	\$ (9)	\$0	Projected 2021 year-end balances
Unfunded Capital Costs	84,647	47,436	Remaining expenditures in the 2020 Allocation program
Internal Debt	-	327,970	Regional Interim Financing to be recovered up to 2021
DC Credits	-	145	Remaining DC credits relating to S. 14 of the DC Act.
Oversizing - Historic	2,374	1,726	Oversizing costs carried from previous DC Studies
Net Growth Cost	1,153,937	649,101	
Interest/Inflation	(6,690)	25,554	Assumed 2.0% inflation, 3.0% interest
Total	\$ 1,234,260	<mark>\$ 1,051,931</mark>	





Roads DC's

Summary of Calculation Results - Per SDE

Service	As of April 1, 2021	New Calculated	Difference
Roads	<mark>\$ 19,284</mark>	\$ 30,366	11,081

*may not add due to rounding

Summary of Calculation Results - Per Sq. Ft

	As of April 1, 2021					New Cal	ated	Difference				
Service	Non	-Retail	Reta	il	Non	-Retail		Retail	Nor	n-Retail		Retail
Roads	\$	5.978	\$ 30.	279	\$	8.585	\$	46.049	\$	2.607	\$	15.770

*may not add due to rounding



Retail/ Non-Retail Splits

	(1)	(2)	(3)	(4)	(5)	(6)
Category	Sq. Ft	PM Peak Trip Rates	PM Peak Trips (1) x (2)	% Trips	Revenue (Uninflated) (Total Revenues x (4))	\$DC (5) / (1)
Retail	6,281,583	5.17	32,461,889	27%	\$ 289,258,056	\$ 46.05
Non-Retail	88,834,161	0.96	85,590,726	73%	762,673,010	<mark>\$ 8.59</mark>
Total	95,115,744		118,052,615	100%	\$ 1,051,931,066	



Thank you Questions?





