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# Durham Region Transit Report

To: Durham Region Transit Executive Committee From: General Manager, Durham Region Transit

Report: #2024-DRT-17 Date: November 6, 2024

# Subject:

Capital Project Budget Re-allocations and 2024 DRT Bus Order

#### Recommendation:

That the Transit Executive Committee recommends:

- a) That in consideration of the requirement to revise the 2024 bus order within the available financing approved in the 2024 budget, that Option 2 – Diesel Buses be approved;
- b) To the Finance and Administration Committee:
  - a. That the project gross costs and financing shown in Section B of Attachment #1 be approved, replacing the previously approved bus stop infrastructure, vehicles, vehicle outfitting, facility, charging infrastructure and other project costs and financing shown in Section A of the Attachment #1;
  - b. That staff be granted authority to request the necessary federal and provincial approvals to re-allocate Investment in Canada Infrastructure Program (ICIP) grant funding among bus stop infrastructure and the administrative building re-build projects, as shown in the Attachment #1, and potentially further re-allocations as necessary, to mitigate risk that federal and provincial ICIP funding is left un-spent and to align ICIP funding with current priorities; and
  - c. That the Commissioner of Finance be authorized to adjust financing for the projects in Section B of Attachment #1 in the unlikely event that the Region's request to reallocate ICIP funding is not approved by the federal or provincial governments.

## Report:

# 2. Purpose

2.1 The purpose of this report is to seek approval of the Transit Executive Committee (TEC) to revise the DRT 2024 bus order and associated equipment, and to recommend that Finance and Administration Committee approve the reallocation of existing approved funding between these projects as well as projects funded through the Investing in Canada Infrastructure Program (ICIP).

# 3. Background

- 3.1 The 2024 budget included the purchase of 34 battery-electric buses (18 growth, 16 replacement) and associated charging equipment and infrastructure. The budget anticipated \$33.7 million in grant funding from the Zero Emission Transit Fund (ZETF) for electric battery buses and the associated equipment and infrastructure. Infrastructure Canada recently advised the Region that Durham would not be receiving funding through the ZETF program.
- 3.2 Without funding from ZETF, DRT is required to reconsider the purchase of buses using existing funding approved in the 2024 budget.
- 3.3 The Region has executed a \$62 million loan agreement with the CIB, that can be leveraged to finance a share of the capital costs associated with purchasing up to 98 battery-electric buses by 2027. As the CIB loan offering includes low interest terms and some opportunity for risk transfer, DRT seeks to leverage, where appropriate, the opportunity to the greatest extent possible under conditions of financial constraints and competing priorities related to service expansion and asset management. Unfortunately, there is a significant upfront capital cost premium for electric buses compared to diesel busses, particularly considering the additional cost of required charging infrastructure and equipment.
- 3.4 The Council adopted DRT Service and Financing Strategy (2023-2032) prioritized the need for the Region to significantly enhance service levels to meet increasing ridership demand and expectations, while transitioning to a fully battery electric transit fleet. Improving access to transit and providing a frequent and reliable transit network is instrumental to advancing other strategic priorities of the Region, including the Economic Development Strategy and Action Plan, Multi-year Accessibility Plan, and Age-Friendly Strategy and Action Plan. Enhancing service levels is integral to economic development and competitiveness on an international level by enabling seamless and timely travel to employment opportunities within the Region, such as the Seaton employment lands, the Courtice Energy Park in Clarington, and other important existing and developing employment centres across the Region.
- The Ministry of Transportation (MTO) ICIP Team informed DRT on September 23, 2024, that there will be an additional offering of the time-limited flexibilities by

Housing, Infrastructure and Communities Canada (HICC), formerly known as Infrastructure Canada (INFC) and the MTO through the Investing in Canada Infrastructure Program (ICIP) Public Transit stream, to maximize the use of ICIP funds. Due to the ongoing volatility in the transit sector and recognizing that costs may shift slightly from original cost estimates, in 2023 HICC and MTO implemented a one-year time-limited authority to allow municipalities to apply for the reallocation of any decommitted funding between existing projects to help ensure projects could continue to be successfully implemented.

- The additional opportunity enables DRT to request funding be decommitted from existing projects and reallocated to another approved or nominated ICIP project. Decommitted funds are funds that become available due to scope reductions, cost savings or cancellations of approved ICIP projects.
- 3.7 The decision on the revised 2024 bus purchase option has three key factors to consider.
  - Financial, specifically the operating costs for the 12 year life of the buses.
  - Operational, specifically the competitiveness of public transit in Durham including ridership growth and improvements to improve access, reliability and frequency across the network.
  - Climate change, specifically green house gas emissions.

# 4. Previous Reports and Decisions

- 4.1 2024-F-3 The 2024 Regional Business Plans and Budget for Property Tax Purposes, including General Purpose, Solid Waste Management and Durham Region Transit
- 4.2 2023-F-5 Transit Service and Financing Strategy (2023-2032)
- 4.3 2022-F-16 E-Mission Zero DRT Fleet Electrification Plan

#### 5. Discussion

#### 2024 Bus Orders

- 5.1 DRT must order buses in 2024 to minimize the operational risks for projected ridership levels and demands for service in September 2026. Annual ridership projections for 2024 are 13.0 million, 13.9 million for 2025, and 15.2 million for 2026.
- While DRT is unable to order the number of buses required to deliver the full planned service strategy, it remains important to maximize the number of buses and capacity to minimize operational risks in September 2026, such as the following.
  - On-going network reliability and on-time performance challenges.

- Reduced capacity influences the ability to expand the transit network, and improve frequency, reliability and span of service of existing routes.
- Maintenance costs to operate an aging fleet.
- Need to optimize the network and prioritize resources to areas of greatest demand.
- The current cost for charging infrastructure and electrical equipment is approximately \$400,000 per bus (not including potential facility modification or utility-related costs); a battery-electric bus costs approximately \$1.634 million, and approximately \$0.977million for a diesel bus.
- It is anticipated that electric vehicles will offer operating savings related to fuel and maintenance costs in future years. These savings will be offset, to some extent, by new costs associated with operating and maintaining charging infrastructure and additional facility space that is necessary to accommodate the larger fleet required under electrification. Operating budget pressures associated with debt financing the battery electric buses and charging equipment, facility modifications, and expansion facilities will further off-set fuel and maintenance savings under electrification.
- 5.5 Regardless of the bus purchase option approved by TEC, DRT will need to inform the CIB about the delay in implementing the fleet transition plan. For 2023 and 2024, DRT has been unable to achieve the objectives of the approved DRT Fleet Electrification Plan and DRT Service and Financing Strategy (2023-2032). Should the report recommendation be approved by TEC, DRT will have ordered just 32 buses (7 battery electric, 25 diesel) compared to the 58 battery electric buses planned over the first two years of the 10 year service strategy.
- There is a potential reputational risk to DRT and the Region for reducing purchases of battery-electric buses. However, in the absence of ZETF funding for the fleet transition plan, DRT can only order buses within the approved Region funding. At a period of unprecedented transit demand and ridership growth, the purchasing decision needs to balance the financial, operational, and climate change pressures.
- 5.7 Staff reviewed three options to maximize the number of 12 metre buses that can be ordered by re-allocating previously approved financing, and in consideration of the three key factors (financial, operational, climate change).
  - c. Option 1: 14 battery electric buses
    - Based on the requirement of 1.25 electric buses to meet the operating capacity of one diesel bus, this option will provide the equivalent operating capacity of 11 diesel buses.
    - Maximizes number of electric buses that can be purchased leveraging the approved funding.

- Maximizes CIB debt financing.
- Presents the greatest opportunity for potential savings associated with fuel and maintenance in future years.
- Provides the least capacity of the three options to meet operational risks in September 2026.
- d. Option 2: 18 diesel buses
  - Implies the greatest greenhouse gas emissions relative to the other options presented.
  - Maximizes the number of buses and bus capacity that can be purchased leveraging the approved funding.
  - Provides the most capacity to meet operational risks in September 2026.
- e. Option 3: 8 battery electric and 8 diesel buses
  - Based on the requirement of 1.25 electric buses to meet the operating capacity of one diesel bus, this option will provide the equivalent operating capacity of approximately 14 diesel buses.
  - Implies greater GHG emissions compared to the all-electric option.
  - Provides the second most capacity to meet operational risks in September 2026.
  - Presents some opportunity for potential savings associated with fuel and maintenance in future years.
- 5.8 The total bus equivalent operating capacity has utilized an industry standard factor of 1.25 electric buses to achieve the same operating capacity as a standard 12-metre diesel bus.
  - c. Option 1: 14 battery electric buses Equivalent to 11 diesel buses
  - d. Option 2: 18 diesel buses Equivalent to 18 diesel buses
  - e. Option 3: 8 battery electric, 8 diesel Equivalent to 14 diesel buses
- The preferred option will be based on the relative priority assigned to the three key factors (financial, operational, climate change). If minimizing operational risks is prioritized, then Option 2 (Diesel buses only) is the preferred option. If climate change and financial factors are prioritized, Option 1 (battery electric buses only) is the preferred option. Meanwhile, option 3 seeks to gain at some of the benefits of both electric and diesel vehicles.
- 5.10 In consideration of the purchase options and key factors impacting this decision, DRT recommends Option 2 Diesel buses, be approved by TEC.
- 5.11 The primary objectives of the Transit Service and Financing Strategy (2023-2032) were to enhance the competitiveness of public transit in the Region through an a 127 per cent increase to revenue service levels, and transition to a battery electric bus fleet. DRT has been unable to purchase the number of vehicles that will be

required to fully deliver the planned services during the early years of the strategy, and it remains crucial at this period of unprecedented ridership growth, to maximize investment into the transit network. The current transit modal share in the Region is estimated at eight percent, well below the modal share required to reduce pressures on the transportation network and reduce green house gas emissions from the transportation sector.

- 5.12 There may be increased operating costs for the diesel buses over the next 12 years, which will need to be managed accordingly through the annual budget process. Climate change is perhaps the most difficult challenge facing society today. As the 2025 budget is being finalized, DRT and the Region continue to advance funding solutions to maximize the number of battery-electric buses in the fleet and maximize the competitiveness of the transit network.
- 5.13 The Transit Service and Financing Strategy (2023-2032) is planned to be revised in 2025 to reflect currently available and projected financing, providing the revised future service growth and transition horizon for a fully battery-electric bus fleet. DRT remain committed to the transition of the fleet to battery electric buses as soon as practical.

## Administrative Building Re-build and Bus Stop Infrastructure

- 5.14 As a result of inflationary pressures, the Class A estimate for the construction of the rebuilding of the administration building at the Oshawa depot, exceeds the current budget by \$870,000, staff are looking to reallocate funding from the bus stop infrastructure project to this high priority project, increasing the budget from \$12,670,800 to \$13,540,800.
- 5.15 The current ICIP funded project for bus stop infrastructure included risk contingency to account for uncertainties in solar and shelter requirements over multiple years in consideration of AODA deadlines and other factors. The original estimates will be lower than forecasted, and the bus stop infrastructure project can be de-scoped, with the decommitted funding reallocated as outlined in this report.

# 6. Financial Implications

- 6.1 Section A of the table included in Attachment #1 presents the 2024 approved quantities, budgets, and financing for the capital projects contemplated within this report. Section B of the table presents the proposed revised quantities, budgets and financing, and Section C highlights the changes between the approved and proposed revised amounts.
- Under the proposed re-allocation strategy, the Region's Investing in Canada Infrastructure Program (ICIP) bus stop infrastructure project is de-scoped, reducing the project budget by \$5,524,667 from \$9,744,000 to \$4,219,333, with the related project financing to be re-allocated towards DRT's Administrative Building Re-Build project, increasing the administration building re-build project

- budget by \$870,000 from \$12,670,800 to \$13,540,800 and displacing \$4,654,667 in provincial gas tax funding that was previously approved for the project, to be reallocated towards vehicles, vehicle outfitting and the 110 Westney Facilities EV Charging Infrastructure projects.
- The proposed recommendation and funding re-allocations enable the purchase of 12 growth diesel buses, and six replacement diesel buses. The related vehicle up-fitting costs (e.g., PRESTO and INIT) are also accommodated.
- 6.4 Furthermore, it is proposed that the Software, Equipment, Tools, and PPE project be cancelled, and the 110 Westney Facilities EV Charging Infrastructure project be reduced in scope with the total project budget to be reduced by \$2,253,564, requiring \$2,300,00 in Regional debt financing, with the remaining amount (\$426,436) to be financed using gas tax revenue re-allocation. It is noted that this project may require additional financing in the future, and related approvals would be sought through the Region's annual Business Planning and Budgets processes.
- 6.5 The proposed revised capital projects shown in Section B of Attachment #1 total \$39,551,047 and are proposed to be financed as follows:
  - \$13,023,506 ICIP Grant funding,
  - \$2,300,000 in Regional Debenture financing,
  - \$7,457,229 in Residential Development Charge revenues,
  - \$ 2,499,018 in Non-Residential Development Charge revenues,
  - \$10,276,294 in Provincial Gas Tax funding,
  - \$3,500,000 in funding from the Region's Capital Impact Reserve Fund, and
  - \$495,000 in General Levy funding.
- 6.6 Importantly, the financing amounts shown above have already been approved through the Region's business plans and budgets and do not represent additional capital financing above already approved amounts.
- 6.7 It is noted that under the proposed revised project financing for these projects, Region debt requirements decrease by \$5,515,000 from \$7,815,000 to \$2,300,000. Furthermore, \$20,230,000 in CIB debt for previously budgeted electric buses is no longer required (see Section C of Attachment #1).
- The Regional debt requirement of \$2,300,000 implies an annual debt servicing requirement of approximately \$298,000 which will represent a pressure in future DRT operating budgets.

- As referenced in recommendations B and C of this report, provincial and federal approval will be necessary to re-allocate ICIP financing from the bus stop infrastructure project towards the administrative building re-build project. There is risk that such approvals may not be granted and as such, this report recommends that the Commissioner of Finance be authorized to adjust the financing of these projects if necessary. Staff will also consider other re-allocation requests that could potentially mitigate risk that federal and provincial funding is left un-spent and ensure ICIP funding aligns with current priorities.
- 6.10 The Commissioner of Finance has been consulted and concurs with the recommendations of this report.

# 7. Relationship to Strategic Plan

- 7.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
  - c. Environmental Sustainability
    - Goal 1.5 Expand sustainable and active transportation
  - d. Economic Prosperity
    - Goal 3.4 Capitalize on Durham's strengths in key economic sectors to attract high-quality jobs

### 8. Conclusion

- 8.1 A companion report will be presented to the Finance and Administration Committee seeking approval of the updated project budgets and associated financing.
- 8.2 In consideration of the key factors for this decisions (financial, operational, climate change), Option 2 Diesel Buses is recommended. This is a difficult recommendation considering the priorities and importance of each of the key factors, particularly climate change and GHG emission impacts. As a result, for 2025 budget purposes, staff will endeavour to incorporate recommendations to enhance the proposed number of electric buses. There are significant time constraints to submit the order for the 2024 bus purchase to achieve delivery in time for the September 2026 service plan improvements. The advanced timing of the 2025 budget will help to mitigate this timing challenge for the proposed 2025 bus orders. It is also important to maximize the number of new or replacement buses using approved funding, which may include year end operating surplus.
- 8.3 It is further recommended that project gross costs and financing shown in Section B of Attachment #1 be approved, to respond to revised funding, requirements and forecasts replacing the previously approved bus stop infrastructure, vehicles,

vehicle outfitting, facility, charging infrastructure and other project costs and financing shown in Section A of the Attachment #1.

# 9. Attachments

Attachment #1:	Approved and Pro	posed Revised DRT	Capital Projec	ts

Respectfully submitted,

Original signed by

Bill Holmes
General Manager

Recommended for Presentation to Committee

Original signed by

Elaine C. Baxter-Trahair Chief Administrative Officer

# Attachment #1: Approved and Proposed Revised DRT Capital Projects

Section A: Approved DRT Capital Project Quantities, Budgets, and Financing											
	Financing										
Project	Quantity	Approved Budget	ICIP Grant	CIB Debt	Regional Debenture	Residential DCs	Non- Residential DCs	Prov. Gas Tax	Capital Impact Reserve Fund	ZETF Grant	General Levy
Electric Growth Buses	18	30,240,000	-	10,710,000	-	1,492,000	2,918,000	-	-	15,120,000	- '
Electric Replacement Buses	16	26,880,000	-	9,520,000	-	-	-	420,000	3,500,000	13,440,000	-
Diesel Growth Buses	-	-	-	-	-	-	-	-	-	-	- '
Diesel Replacement Buses	-	-	-	-	-	-	-	-	-	-	- '
Additional Fareboxes/Radios	18	378,000	-	-	-	110,000	37,000	-	-	189,000	42,000
Additional INIT	18	720,000	-	-	-	210,000	71,000	-	-	360,000	79,000
Additional PRESTO	18	378,000	-	-	-	110,000	37,000	-	-	189,000	42,000
PRESTO/INIT MACD	16	664,000	-	-	-	-	-	-	-	332,000	332,000
EV Charging Equipment (Heavy)	32	6,400,000	-	-	3,200,000	-	-	-	-	3,200,000	- '
ICIP Bus Stop Infrastructure		9,744,000	7,145,275	-	-	-	-	2,598,725	-	-	- '
ICIP Admin Building Re-Build		12,670,800	5,878,230	-	-	-	-	6,792,570	-	-	- '
110 Westney Facilities EV Charging Infrastructure		4,980,000	-	-	4,615,000	-	-	-	-	365,000	-
Software, Equipment, Tools, PPE,		930,000	-	-	-	-	-	465,000	-	465,000	-
Total		93,984,800	13,023,506	20,230,000	7,815,000	1,922,000	3,063,000	10,276,294	3,500,000	33,660,000	495,000

Section B: Proposed Revised Project Quantities, Budgets and Financing											
Project	Quantity	Proposed Budget	ICIP Grant	CIB Debt	Regional Debenture	Residential DCs	Financing  Non- Residential  DCs	Prov. Gas Tax	Capital Impact Reserve Fund	ZETF Grant	General Levy
Electric Growth Buses	0	-	-	-	-	-	-	-	-	-	-
Electric Replacement Buses	0	-	-	-	-	-	-	-	-	-	-
Diesel Growth Buses	12	11,728,824	-	-	-	6,755,580	2,263,886	2,709,358	-	-	-
Diesel Replacement Buses	6	5,864,412	-	-	-	-	-	2,364,412	3,500,000	-	-
Additional Fareboxes/Radios	12	415,800	-	-	-	242,607	81,301	-	-	-	91,892
Additional INIT	12	519,120	-	-	-	302,891	101,503	-	-	-	114,726
Additional PRESTO	12	267,624	-	-	-	156,151	52,328	-	-	-	59,145
PRESTO/INIT MACD	6	268,698	-	-	-	-	-	39,460	-	-	229,238
EV Charging Equipment (Heavy)	0	-	-	-	-	-	-	-	-	-	-
ICIP Bus Stop Infrastructure		4,219,333	3,094,037	-	-	-	-	1,125,296	-	-	-
ICIP Admin Building Re-Build		13,540,800	9,929,469	-	-	-	-	3,611,331	-	-	-
110 Westney Facilities EV Charging Infrastructure		2,726,436	-	-	2,300,000	-	-	426,436	-	-	-
Software, Equipment, Tools, PPE,		-	-	-	-	-	-	-	-	-	-
Total		39,551,047	13,023,506	-	2,300,000	7,457,229	2,499,018	10,276,294	3,500,000	-	495,000

Section C: Changes in Project Quantities, Budgets and Financing Resulting From Proposed Revisions (i.e., Section B - Section A)													
			Financing										
Project	Quantity	Proposed  / Budget  Change	ICIP Grant	CIB Debt	Regional Debenture	Residential DCs	Non- Residential DCs	Prov. Gas Tax	Capital Impact Reserve Fund	ZETF Grant	General Levy		
Electric Growth Buses	-18	- 30,240,000	-	- 10,710,000	-	- 1,492,000	- 2,918,000	-	-	- 15,120,000	-		
Electric Replacement Buses	-16	- 26,880,000	-	- 9,520,000	-	-	-	- 420,000	- 3,500,000	- 13,440,000	-		
Diesel Growth Buses	12	11,728,824	-	-	-	6,755,580	2,263,886	2,709,358	-	-	-		
Diesel Replacement Buses	6	5,864,412	-	-	-	-	-	2,364,412	3,500,000	-	- '		
Additional Fareboxes/Radios	-6	37,800	-	-	-	132,607	44,301	-	-	- 189,000	49,892		
Additional INIT	-6	- 200,880	-	-	-	92,891	30,503	-	-	- 360,000	35,726		
Additional PRESTO	-6	- 110,376	-	-	-	46,151	15,328	-	-	- 189,000	17,145		
PRESTO/INIT MACD	-10	- 395,302	-	-	-	-	-	39,460	-	- 332,000 -	- 102,762		
EV Charging Equipment (Heavy)	-32	- 6,400,000	-	-	- 3,200,000	-	-	-	-	- 3,200,000	-		
ICIP Bus Stop Infrastructure		- 5,524,667	- 4,051,238	-	-	-	-	- 1,473,429	-	-	- '		
ICIP Admin Building Re-Build		870,000	4,051,238	-	-	-	-	- 3,181,238	-	-	-		
110 Westney Facilities EV Charging Infrastructure		- 2,253,564	-	-	- 2,315,000	-	-	426,436	-	- 365,000	-		
Software, Equipment, Tools, PPE,		- 930,000	-	-	-	-	-	- 465,000	-	- 465,000	-		
Total		- 54,433,753	-	-20,230,000	- 5,515,000	5,535,229	- 563,982	-	-	- 33,660,000 -	- 0		

Note: The proposed revised project financing plan requires \$5,535,229 in Residential Development Charge Revenues sourced from surpluses of other previously approved projects.