

CITY OF HAMILTON PUBLIC WORKS DEPARTMENT Transit Division and CORPORATE SERVICES DEPARTMENT point Planning Administration and Policy D

Financial Planning, Administration and Policy Division

то:	Mayor and Members General Issues Committee
COMMITTEE DATE:	October 2, 2019
SUBJECT/REPORT NO:	Investing in Canada Infrastructure Program – Public Transit Stream Grant Program (PW19083/FCS18048(a)) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Tanya Detmar (905) 546-2424 Ext. 1855 Craig Webb (905) 546-2424 Ext. 1870
SUBMITTED BY:	Debbie Dalle Vedove Director, Transit Public Works Department
SIGNATURE:	
SUBMITTED BY:	Brian McMullen Director, Financial Planning, Administration and Policy Corporate Services Department
SIGNATURE:	

RECOMMENDATION(S)

- (a) That the projects listed in Appendix "A" to Report PW19083/FCS18048(a), be approved as the City of Hamilton's submission for consideration to Ministry of Transportation Ontario for the requested funding amount of \$374,684,401 for projects with a total project cost of \$510,911,000 in accordance with the terms and conditions associated with the Investing in Canada Infrastructure Program (ICIP), Public Transit Stream;
- (b) That Investing in Canada Infrastructure Program, Public Transit Stream Project Financing Strategy as detailed in Appendix "A" to Report PW19083/FCS18048(a) be approved;

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- (c) That the Mayor and Clerk be authorized to execute all necessary documentation, including Funding Agreements to receive funding under Investing in Canada Infrastructure Program, Public Transit Stream with content satisfactory to the General Manager of Public Works and in a form satisfactory to the City Solicitor;
- (d) That staff be authorized and directed to tender and implement projects contained in Appendix "A" to Report PW19083/FCS18048(a) upon execution of a Transfer Payment Agreement between the City of Hamilton and Her Majesty the Queen in right of Ontario as represented by the Minister of Transportation for the Province of Ontario to Receive Funding Investing in Canada Infrastructure Program, Public Transit Stream;
- (e) That the Director of Transit be authorized to submit future project amendments that may be required to Infrastructure Canada and the Province of Ontario provided that such amendments are acceptable to the General Manager of Public Works and that no amendment shall result in the City's maximum funding share being exceeded;
- (f) That the operating budget and staffing full time equivalent (FTE) impacts related to approved ICIP projects as shown in Appendix "B" to Report PW19083/FCS18048(a), be incorporated in the Tax Supported Operating Budget for the appropriate fiscal year;
- (g) That where required to give effect and authorize the signing of a Transfer Payment Agreement between the City of Hamilton and Her Majesty the Queen in right of Ontario as represented by the Minister of Transportation for the Province of Ontario, to receive funding under Investing in Canada Infrastructure Program, Public Transit Stream, Legal staff be directed to prepare a By-law in the form satisfactory to the City Solicitor for consideration by Council;
- (h) That where required to give effect and authorize the signing of amendments to the Transfer Payment Agreement between the City of Hamilton and Her Majesty the Queen in right of Ontario as represented by the Minister of Transportation for the Province of Ontario, to receive funding under Investing in Canada Infrastructure Program, Public Transit Stream, Legal staff be directed to prepare By-law(s) in the form satisfactory to the City Solicitor for consideration by Council;
- (i) That the General Manager, Finance and Corporate Services, be authorized and directed to enter into and execute any necessary agreements including any agreements with Infrastructure Ontario's Loan Program to secure the capital funding required for capital projects for Investing in Canada Infrastructure Program, Public Transit Stream as attached in Appendix "A" to Report PW19083/FCS18048(a);
- (j) That the General Manager, Finance and Corporate Services, be authorized and directed to enter into and execute any necessary agreements to engage the services of all required persons, agencies and companies to negotiate and confirm the terms and issuance of all necessary debenture issue(s) including, but not

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limited to, external legal counsel, fiscal agents and financial professionals, to secure the capital funding required capital projects for Investing in Canada Infrastructure Program, Public Transit Stream as attached in Appendix "A" to Report PW19083/FCS18048(a);

- (k) That the General Manager, Finance and Corporate Services, be authorized to negotiate and confirm the terms and placement of all debenture issue(s), and / or private placement debenture issue(s), in either a public or private market and / or bank loan agreements and debenture issue(s) and / or variable interest rate bank loan agreements and debenture issue(s), in an amount not to exceed \$83,611,200 Canadian currency for capital projects for Investing in Canada Infrastructure Program, Public Transit Stream as attached in Appendix "A" to Report PW19083/FCS18048(a), which includes \$48,401,200 in Tax Supported municipal debt and \$35,210,000 in Tax Supported Development Charges municipal debt;
- (I) That the Mayor and City Clerk be authorized and directed to enter into and / or execute, on behalf of the City of Hamilton, all agreements and necessary ancillary documents required for Investing in Canada Infrastructure Program, Public Transit Stream as attached in Appendix "A" to Report PW19083/FCS18048(a) including those required to secure and confirm the terms and issuance of any required debenture issue(s), with content acceptable to the General Manager, Finance and Corporate Services, and in a form satisfactory to the City Solicitor;
- (m) That staff be directed to prepare all necessary By-Law(s) to authorize and implement Investing in Canada Infrastructure Program, Public Transit Stream Projects as attached in Appendix "A" to Report PW19083/FCS18048(a) including those By-laws necessary to negotiate, place and secure all required capital funding.

EXECUTIVE SUMMARY

On March 14, 2018, the Government of Canada and the Province of Ontario signed an Integrated Bilateral Agreement (IBA) for \$11.8B in federal funding under the Investing in Canada Infrastructure Program (ICIP). The IBA included \$8.3B of federal and \$7.3B of provincial funding to support public transit projects.

The following table summarizes the maximum transit allocations for Hamilton that will be available until March 31, 2027 for a total transit investment of nearly \$511M.

Federal Allocation	Provincial Allocation	Hamilton Contribution	Total	
40%	33.33%	26.67%	100%	
\$204,382,600	\$170,301,801	\$136,272,099	\$510,956,500	

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Within the City's total allocation, the Federal Government may contribute up to 50% of total eligible costs for rehabilitation projects, reducing the municipal contribution to 16.67%. However, to focus long-term public transit investments on new construction and expansion, a cap for rehabilitation projects has been set at 15% nationally.

On July 22, 2019, the City of Hamilton was advised the application process for funding under the Public Transit Stream of ICIP was open for municipalities inside the Greater Toronto and Hamilton area. The initial application window will be open for a period of 90 days, closing on October 24, 2019.

As first outlined in Report FCS18048 to the General Issues Committee at its meeting on April 18, 2018, the Public Transit Stream of ICIP will provide funding to address the construction, expansion and improvement of public transit infrastructure. Funding can be directed to new construction, rehabilitation or replacement of eligible infrastructure projects. Eligible transit infrastructure projects include rolling stock assets (e.g. buses, subway car, street car, vehicles for transporting persons with disabilities), fixed assets, transit-exclusive infrastructure, and active transportation infrastructure that are directly connected to the public transit system.

Projects must meet one of the following outcomes in order to be eligible for funding:

- Improved capacity of public transit infrastructure
- Improved quality and safety of existing and future transit systems
- Improved access to a public transit system

City staff evaluated a number of proposed transit projects based on the criteria specified in the ICIP (Transit Stream) Program Guide and recommend the projects contained in Report PW19083/FCS18048(a) as Appendix "A" be forwarded for funding approval, specifically:

- New Transit Maintenance & Storage Facility (MSF)
- Replacement Revenue Fleet (2020-2026)
- Expansion Fleet per Ten Year Local Transit Strategy
- > A-Line Priority Bus Corridor
- Birch Avenue Bridge Replacement and associated road works
- Presto Device Refresh
- Computer-Aided Dispatch/Automatic Vehicle Locator (CAD/AVL) Replacement
- Active Transportation Connections

Preliminary estimates indicate that the City's share for the first intake of ICIP is approximately \$136.3M. The funding source for the City's share of the expansion buses, replacement buses and active transportation connections, equal to approximately \$52.65M, will be the Vehicle Replacement Transit reserve (110030) for \$46.722M and the Transit Development Charges (DC) Reserves for \$5.927M for growth

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related project costs. The balance of funding of approximately \$83.61M will be from both tax supported municipal debt in the amount of \$48,401,200 for non-growth related projects and tax supported development charges municipal debt in the amount of \$35,210,000 for growth related projects. The tax supported debt servicing costs or debt charges estimated at \$4.8M will be reflected in the tax operating budgets in the appropriate fiscal year. The development charges debt charges will be reflected in the tax operating budgets in the appropriate fiscal year with the offsetting recovery from DC reserves. The funding sources of the ICIP Capital Projects and related debt charges are reported in Appendix "A" to Report PW19083/FCS18048(a).

The City of Hamilton issues or secures debt instruments (debentures or loans) when the need exists, and market conditions are right to attain funds to finance Capital Projects in accordance with the City's Debt Management Policy and Lease Financing Policy (Report FCS13074).

As required by the Municipal Act, an updated Annual Repayment Limit (ARL) is required prior to authorizing new debt. Since the last ARL update, adjustments have been made to the City of Hamilton's debt including new debt, debt maturity and annual debt payments. The City's adjusted ARL, attached as Appendix "C" to Report PW19083/FCS18048(a), is \$218,866,483 in annual debt charge which corresponds to total debt of \$2,271,759,255. In comparison, the City's Debt Policy limit is \$1,376,882,730. The City's total consolidated municipal and housing corporation outstanding debt as at December 31, 2018 was \$484,891,359 which is far below the two mandated limits. ACTION: Compare last sentence to other reports with debt.

Alternatives for Consideration – See Page 15

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: As reported in Appendix "A" to Report PW19083/FCS18048(a), City of Hamilton's ICIP Public Transit Stream submission includes projects with total gross project costs of \$510.9 M, funding from the Government of Canada at 40% of gross cost or \$204.4M, funding from the Province of Ontario at 33.33% of gross costs or \$170.3M which results in the City share at 26.67% or \$136.3M. The City's share of the costs will be funded from the Vehicle Replacement Reserve (110030) for \$46.722M, Transit DC Reserves (110310 and 110311) for \$5.927M and external debt of \$83.611M, which includes \$48,401,200 in Tax Supported municipal debt and \$35,210,000 in Tax Supported DC municipal debt.

The tax supported capital financing debt servicing costs or debt charges of \$1,853,000 for 2020, \$1,893,000 for 2021, \$943,000 for 2022, \$51,000 for 2023 and \$64,000 for 2024 will be incorporated into the Tax Operating Budget. The contemplated debt financing may be reduced through the consideration of the use of Federal Gas Tax allocations between 2020 and 2026 or other sources of financing. The tax supported DC

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debt servicing costs are recovered from Transit DC Reserves resulting in no impact on the tax operating budget.

The City's total consolidated municipal and housing corporation (CHH) outstanding debt as at December 31, 2018 was \$484,891,359 which is below the statutory limits of \$2,271,759,255 as calculated in the Annual Repayment Limit in Appendix "C" to Report PW19083/FCS18048(a) and City of Hamilton policy debt limit of \$1,376,882,730.

Operating budget and FTE impacts from these capital projects, as reported in Appendix "B" to Report PW19083/FCS18048(a), impact the Tax Supported Operating Budgets from 2020 to 2025.

Staffing: Appendix "B" attached to Report PW19083/FCS18048(a) outlines FTE requirements.

Legal: The City will be required to enter into a transfer payment agreement with the Government of Ontario to receive the Investing in Canada Infrastructure Program, Public Transit Stream grants.

HISTORICAL BACKGROUND

On March 14, 2018 the Honourable Amarjeet Sohi, Minister of Infrastructure and Communities, and the Honourable Bob Chiarelli, Ontario Minister of Infrastructure announced the signing of a bilateral agreement that will provide more than \$11.8B through the Investing in Canada Plan. The Investing in Canada Infrastructure Fund Program (ICIP) is a federal infrastructure program designed to create long-term economic growth, build inclusive, sustainable and resilient communities and support a low-carbon economy.

The Public Transit stream of ICIP is intended to primarily build new urban transit networks and service extensions that will transform the way Canadians move, live and work. Approximately \$8.3B in federal funding will be allocated across Ontario municipalities and Metrolinx.

The following table summarizes the maximum transit allocations for Hamilton that will be available until March 31, 2027 for a total transit investment of nearly \$511M.

Federal Allocation	Provincial Allocation	Hamilton Contribution	Total	
40%	33.33%	26.67%	100%	
\$204,382,600	\$170,301,801	\$136,272,099	\$510,956,500	

Within the City's total allocation, the Federal Government may contribute up to 50% of total eligible costs for rehabilitation projects, reducing the municipal contribution to

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16.67%. However, to focus long-term public transit investments on new construction and expansion, a cap for rehabilitation projects has been set at 15% nationally.

On July 22, 2019, the City was advised the application process for funding under the Public Transit stream of the ICIP was open for municipalities inside the Greater Toronto and Hamilton area. The initial application window will be open for a period of 90 days, closing on October 24, 2019.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Report PW19083/FCS18048(a) meets the requirements of the City of Hamilton's Debt Policy, whereby Council authority is required to issue debt.

RELEVANT CONSULTATION

Public Works Department – Transit and Engineering Services Divisions provided project proposals for submission consideration under ICIP.

Planning & Economic Development Department – Transportation Planning Division provided project proposals for submission consideration under ICIP.

Corporate Services Department – Legal and Risk Management Services provided legal review of this report.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The Investing in Canada Infrastructure Program provides the opportunity to move forward with critical Transit infrastructure priorities. By virtue of the ICIP cost sharing structure, the City will be able to leverage nearly \$375M in senior government grants with the City funding of approximately \$136.3M on capital projects approximating \$511M to improve the quality, safety, access and capacity of the integrated public transit system over the next seven years.

Projects must meet one of the following outcomes in order to be eligible for funding:

- Improved capacity of public transit infrastructure
- Improved quality and safety of existing and future transit systems
- Improved access to a public transit system

The Program Guide provided by the Province instructs that funding can be directed to new construction, rehabilitation or replacement of eligible infrastructure projects. Eligible transit infrastructure projects include rolling stock assets (e.g. buses, subway car, street car, vehicles for transporting persons with disabilities), fixed assets, transit-exclusive

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infrastructure, and active transportation infrastructure that are directly connected to the public transit system.

Projects must meet the following criteria to be considered eligible:

- > Capital components must be owned by the applicant.
- Projects must be substantially completed by March 31, 2027.
- > Projects should have been informed by the applicant's asset management plan.
- Projects must meet or exceed the requirement of the highest published accessibility standard in Ontario in addition to applicable building codes and relevant municipal by-laws.
- Projects must meet or exceed any applicable energy efficiency standards for buildings outlined in the Pan-Canadian Framework on Clean Growth and Climate Change.
- For joint projects with other eligible applicants, all applicants must also secure the endorsement of their projects by their respective municipal council and provide the Ministry with evidence of such endorsement in the form of municipal by-laws/council resolutions.

A number of additional application requirements may be needed to support projects under \$20M in provincial funding including a climate lens assessment, a gender-based analysis and Aboriginal Consultation. Projects that exceed \$20M must also provide a Business Case.

Projects that exceed \$50M in federal funding will require Federal Treasury Board approval, requiring a Business Case.

Other federal requirements include:

- A climate lens assessment for projects with total eligible costs of \$10M or more and can be completed after federal approval.
- Applicants may report on community benefits for projects with total eligible costs of \$10M or more.
- Applicants may need to submit a streamlined gender-based analysis for projects with total federal funding contributions of \$50M and under \$250M.
- Applicants must submit an Aboriginal consultation (AC) and Environmental Assessment (EA) Smart Form.
- > Applicants must adopt a value for money procurement approach.

The Program Guide indicates that applicants may be given the opportunity to resubmit projects in future intakes should a proposed project be unsuccessful for funding in a previous intake. A schedule of future project intakes has not been identified by the Province.

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The Recommendations in Report PW19083/FCS18048(a) will allow the General Manager, Finance and Corporate Services, to negotiate the terms and issuance of a debenture(s) up to \$83,611,200 over several years to Investing in Canada Infrastructure Program, Public Transit Stream capital projects as attached in Appendix "A" to Report PW19083/FCS18048(a) which includes \$48,401,200 in Tax Supported municipal debt and \$35,210,000 in Tax Supported Development Charges municipal debt. The tax supported debt servicing costs or debt charges estimated at \$4.8M will be reflected in the tax operating budgets in the appropriate fiscal year. The development charges debt charges will be reflected in the tax operating budgets in the appropriate fiscal year with the offsetting recovery from DC reserves. The funding sources of the ICIP Capital Projects and related debt charges are reported in Appendix "A" to Report PW19083/FCS18048(a). Both, the sources of financing and corresponding debt charge amounts will be updated in the annual Tax Capital Budget.

The Provincial Government of Ontario establishes an Annual Repayment Limit representing the maximum amount which a municipality can commit to payments for debt obligations. Before authorizing any capital project or class of work or any increase in expenditure for a previously authorized capital project or class of work that would require a long-term debt or financial obligation, the municipal treasurer shall calculate an updated limit.

Since the last Annual Repayment Limit (ARL) update, adjustments have been made to the City of Hamilton's debt including new debt, debt maturity and annual debt payments. The City's adjusted ARL as provided in Appendix "C" to Report PW19083/FCS18048(a) is \$218,866,483 in annual debt charge which corresponds to total debt of \$2,271,759,255. In comparison, the City's Debt Policy limit is \$1,376,882,730. The City's total consolidated municipal and housing corporation outstanding debt as at December 31, 2018 was \$484,891,359 which is far below the two mandated limits.

Based on staff's understanding of the ICIP Program Guide, the following projects are recommended for Hamilton's first submission under ICIP:

Project 1 - Transit Maintenance Storage Facility (MSF)

Public transit services in the City have been improved and expanded over the past 10 years keeping pace with its growth and renewal. As a result, the resources required delivering these services in terms of vehicles and people have also increased.

Currently, all conventional public transit services for Hamilton are operated out of a single facility, the Mountain Transit Centre (MTC) located at 2200 Upper James Street. This facility was constructed in 1983 and designed to accommodate 200 buses. Today, the MTC is 45% over its design capacity and all internal and external space has been maximized. The facility is operating well beyond its design capacity with over 80 buses being stored outdoors, resulting in operational and fleet maintenance challenges.

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The planning and design of a second MSF, to be located on the southwest corner of Birch and Brant streets in the lower city, was approved for funding under the current Public Transit Infrastructure Fund (PTIF) and detailed design is expected to be completed by March 31, 2020. As tender ready documents will also be completed by this date it is critical that construction funding be in place for a seamless transition from design to construction in order to ensure continued transit growth in Hamilton.

Based on 60% design completion, a Class B estimate has been developed by the City's Prime Design Consulting team. The cost estimate amounts are based on quantities measured from drawings where possible, unit rates and assumptions. The costs intend to reflect a fair market value of a likely construction cost and provide budgetary planning requirements for the new MSF facility. The estimated project cost additionally includes specialized items and transit-specific equipment for spaces such as the training areas, control centre, information technology and audio/visual signage etc. The total project budget presented below also accounts for consulting fees for contract administration services during the construction, commissioning and warranty phases of the project.

The estimate allows for 2019 market rates and includes a 3% cost escalation to 2020. A separate 'Design Contingency' allowance in the amount of 12% is included to cover unforeseen items and may be reduced in subsequent estimates as the design progresses. A separate 'Construction Contingency' allowance in the amount of 10% is included to cover unforeseen items during construction. Soft project costs such as permits, engineering design, specialty consultant fees and minor equipment are not included.

At this stage of the project, the expected accuracy of a Class B cost estimate could range from -15% to +25% due to unforeseen conditions and design development to final 100% stage. This is the range of expected variance between the final actual cost and current estimates. Additional premiums arising from poor soil conditions, contaminated material on site, restricted hours of construction, schedule delays, winter conditions, night time work, erratic market conditions, financing, major equipment or prolonged escalation have not been considered.

Summary of the project estimate including contingencies is as follows:

Project Component	Estimated Cost
Consulting Fees	\$ 4,000,000
Capital Construction Costs	\$ 230,000,000
Construction Contingency (10%)	\$ 20,000,000
Project Contingency (2.5%)	\$ 6,000,000
Total:	\$ 260,000,000

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For the purposes of the ICIP submission, and in order to account for the expected accuracy range corrections of a Class B cost estimate, a 10% construction contingency and 2.5% overall project contingency has been added to the Class B cost. The capital construction cost estimate also includes escalation for 1 year (to 2020) at 3% per annum.

The total project cost to be submitted is \$260,000,000.

Operating Costs and FTEs associated with Transit Maintenance and Storage Facility have been outlined in Appendix "B" to Report PW19083/FCS18048(a).

Project 2 - Replacement Fleet (Revenue)

Each year the Transit Division retires buses that have reached their serviceable age and replace them with new vehicles. Replacement buses are required to ensure existing transit service hours in Hamilton are maintained. The following table of replacement buses is required during the term of ICIP:

	2020	2021	2022	2023	2024	2025	2026	Total
# of buses	18	36	18	19	18	19	18	146
Cost								
(000's)	\$13,528	30,324	17,784	12,688	12,163	12,045	15,545	\$114,077

The total project cost to be submitted is \$114.077M.

Project 3 - Expansion Fleet (Ten Year Local Transit Strategy)

In accordance with expansion and growth plans contemplated in the Ten Year Local Transit Strategy, the following table of expansion fleet has been identified during the term of ICIP.

	2020	2021	2022	2023	2024	2025	Total
Yr of Strategy	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
# of buses	13	14	14	14	15	15	85
Cost (000's)	\$10,400	\$11,424	\$11,653	\$12,735	\$12,990	\$14,132	\$73,334

The total project cost to be submitted is \$73,334,000.

Operating Costs and FTEs associated with Expansion Fleet have been outlined in Appendix "B" to Report PW19083/FCS18048(a).

Project 4 – A-Line Priority Bus Corridor

This project will implement a Priority Bus corridor on the A-Line segment of the BLAST Rapid Transit Network. It will include a combination of infrastructure improvements; transit signal priority and transit stop enhancements which will result in a faster, more reliable and more comfortable transit experience between Hamilton's Waterfront, Downtown Hamilton and Hamilton International Airport. It will be a precursor to the ultimate Bus Rapid Transit (BRT) identified in the Ten Year Local Transit Strategy.

The following table is a summary of preliminary costs:

Project Component	Estimated Cost
Queue Jump Lanes	\$ 5,000,000
Transit Signals	\$ 1,000,000
Shelters and Amenities	\$ 1,000,000
Lower City (James/John) re-configuration	\$ 250,000
Streetscape Elements	\$ 1,000,000
Airport Road Sidewalk	\$ 250,000
Total:	\$ 8,500,000

The total project cost to be submitted is \$8,500,000.

Project 5 - Birch Avenue bridge rehabilitation and associated road works.

The City of Hamilton is preparing for the construction of a new Transit MSF on the southwest corner of Birch Avenue and Brant Street.

The stretch of Birch Avenue between Burlington Street East and Barton Street is currently three lanes and operates one-way southbound and has three grade separated rail bridges (Bridges 330, 331 and 332). In order to accommodate efficient transit operations, the road will be converted to two-way operation.

Bridge 331 has been approved for demolition as it serves an abandoned spur line that bisects the future MSF site and is being removed. Bridge 330 and 332 require rehabilitation.

Bridge 332, located just north of Princess Street, was constructed in 1913 and is at the end of its functional life. The City's Capital Program currently proposes to the rehabilitate the bridge in 2027. The shift to two-way operations provides the opportunity to address two existing issues along the corridor; low clearance at Bridge 332 and drainage issues. Both issues pose safety concerns to road users and may impact transit operations in adverse conditions.

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As Bridge 332 serves the main rail-line for GO train service to Confederation station (currently under construction) and Niagara Falls, it is imperative the structure is rehabilitated to ensure inter-regional rail service is sustained.

An EA is currently underway to evaluate the impacts of low bridge clearance and drainage and is scheduled to be complete in early 2020. Rehabilitation work of Bridge 332 is expected to commence in conjunction with MSF construction and associated road works and two-way conversion on Birch Avenue.

Rehabilitation cost associated with Bridge 332 are estimated at \$26M and are based on actual costs from the Centennial Road bridge reconstruction completed in 2016 which had similar operational and structural considerations. Associated road works to rehabilitate Birch Avenue from Princess Street to Burlington Street are estimated at \$5M for a total project value of \$31M.

The total project cost to be submitted is \$31,000,000.

Project 6 - Presto Device Refresh

The PRESTO smartcard has been in operation in the GTHA since 2010. The smartcard equipment has come to its end of life and requires replacing. The HSR along with other Transit Agencies within in the GTHA have entered into a 10-year agreement with PRESTO (Metrolinx) to deliver and manage a fare payment system. The new equipment and software is expected to be future proof designed and offer improved access to transit by allowing customers additional and simpler options to pay for fares. New functionality will include open payment, account-based ticketing, mobile ticketing and QR code options. PRESTO is moving ahead with the project and is anticipating installing the equipment by 2nd quarter 2020.

The total project cost to be submitted is \$5,000,000.

Project 7 – CAD/AVL Replacement

Current onboard hardware that connects buses with our CAD/AVL operating system is nearing the end of its life expectancy. The City needs to replace mobile data terminals, stop announcement hardware (AODA-compliant customer infrastructure), and the relevant IT infrastructure for network operations, control centres, garages and dispatching rooms.

The total project cost to be submitted is \$9,000,000.

Operating Costs and FTE associated with CAD/AVL Replacement has been outlined in Appendix "B" to Report PW19083/FCS18048(a).

Project 8 - Active Transportation Connections

Provision of safe and connected walking and cycling connections to transit stops and hubs is key to making transit a choice for more people. The 2018 Cycling Master Plan defines a future network for 2031 that consists of some 970 kilometres of existing and planned cycling facilities, of which approximately 30% remains uncompleted. At the same time, there are many transit stops that are not well connected by sidewalks. This project is focused on accelerating the implementation of walking and cycling connections to transit.

The following are included the Cycling Master Plan, but currently unfunded:

Project Component	Estimated Cost
Expand Bike Share to Mountain	\$ 500,000
Multi-use Path Mountain Brow	\$1,200,000
(Connection to A-Line)	
Longwood Road Cycle Track extension	\$ 200,000
Multi-use Path Hwy 5 Dundas (Hwy 6 to	\$ 800,000
Hamilton Street)	
Trail connection - McQuesten Bridge to	\$ 3,500,000
Limeridge Transit Terminal	
End of trip bike facilities at mobility hubs	\$ 600,000
Bay Street bike lane concrete separators	\$ 200,000
Sidewalk connections to transit stops	\$ 3,000,000
Total	\$10,000,000

The total project cost to be submitted is \$10,000,000.

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The following table summarizes the overall costs associated with ICIP projects and the breakdown of funding shares being recommended for Project Approval.

Project		Total Cost	Federal (40%)	Provincial (33.33%)	Municipal (26.67%)
1.	MSF	\$260,000,000	\$104,000,000	\$ 86,658,000	\$ 69,342,000
2.	Replacement Fleet	\$114,077,000	\$ 45,630,800	\$ 38,021,900	\$ 30,424,300
3.	Expansion Fleet (10 Yr. Plan)	\$ 73,334,000	\$ 29,333,600	\$ 24,442,200	\$ 19,558,200
4.	A-Line Priority Bus Corridor	\$ 8,500,000	\$ 3,400,000	\$ 2,833,000	\$ 2,267,000
5.	Birch Avenue Bridge/Road	\$ 31,000,000	\$ 12,400,000	\$ 10,332,300	\$ 8,267,700
6.	Presto Device Refresh	\$ 5,000,000	\$ 2,000,000	\$ 1,666,500	\$ 1,333,500
7.	CAD/AVL replacement	\$ 9,000,000	\$ 3,600,000	\$ 2,999,700	\$ 2,400,300
8.	Active Transportation Connections	\$ 10,000,000	\$4,000,000	\$3,333,000	\$ 2,667,000
	Total:	\$510,911,000	\$204,364,400	\$170,286,600	\$136,260,000

Note: Anomalies due to rounding.

ALTERNATIVES FOR CONSIDERATION

Council can defer project applications under ICIP Public Transit Stream to a future intake. The impact of this alternative is the City will lose the opportunity to implement the Ten Year Local Transit Strategy until the next intake. Further, there is a risk associated with this alternative as the next intake date is unknown and the City's ability to attain substantial completion could be severely impacted if subsequent intakes occur late in the funding program.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Economic Prosperity and Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

Our People and Performance

Hamiltonians have a high level of trust and confidence in their City government.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" to Report PW19083/FCS18048(a): City of Hamilton ICIP Project Submission and Financing Strategy

Appendix "B" to Report PW19083/FCS18048(a): Operating Costs

Appendix "C" to Report PW19083/FCS18048(a): City of Hamilton Treasurer's Updated 2019 Annual Repayment Limit