



2024-2027

Multi-Year Budget

City of London



Business Case #P-3 - Rapid Transit Implementation

Primary Strategic Area of Focus: Mobility and Transportation

Primary Outcome: Londoners of all identities, abilities and means can move throughout the city safely and efficiently.

Primary Strategy: Build infrastructure that provides safe, integrated, connected, reliable, and efficient transportation choices.

Business Case Type: Additional Investment

Description: Additional Funding for Rapid Transit Implementation.

Service(s): Rapid Transit

Lead: Kelly Scherr, P.Eng., Deputy City Manager, Environment and Infrastructure

Business Case Tax Levy Impact Table (\$ Thousands)

Tax Levy Impact Detail	2024	2025	2026	2027	2024 to 2027 Total
Annual Tax Levy Impact	\$0	\$0	\$1,763	\$3,014	\$4,777
Annual Incremental Tax Levy Impact	\$0	\$0	\$1,763	\$1,252	\$3,014
Estimated Annual Tax Levy Impact %	0.00%	0.00%	0.22%	0.14%	0.09% Average
Estimated Annual Taxpayer Impact \$ ¹	\$0	\$0	\$7.89	\$13.49	\$5.35 Average

Subject to rounding.

1) Calculated based on the average assessed value of \$252 thousand for a residential property (excludes education tax portion and impacts of tax policy).

What is Included in the Base Budget?

Base Budget Table (\$ Thousands)

Rapid Transit	2023	2024 to 2027 Total	2028 to 2033 Total
Total Tax Levy Funded – Operating	\$0	\$0	N/A
Full-Time Equivalents	0	0	N/A
Total Capital ¹	\$279,035	\$20,914	\$0
Downtown Loop	\$34,750	\$177	\$0
East London Link	\$120,669	\$6,609	\$0
Wellington Gateway	\$123,616	\$14,128	\$0

Subject to rounding.

Note:

1. The 2023 column represents the 2023 life-to-date budget of the projects.

Base Budget Summary:

Project Summary:

Three Rapid Transit projects have been approved for funding under the Investing in Canada Infrastructure Program: Downtown Loop, East London Link and to the south, the Wellington Gateway. Once built, the new rapid transit service will be operated by London Transit Commission as part of an integrated public transit system. These projects will implement transit-only lanes above ground, along with new street surfacing, new sidewalks and active transportation infrastructure in some locations, and streetscapes and urban design improvements, while also replacing aging infrastructure underground to accommodate future growth.

Base Budget:

The base budget for the Rapid Transit program funds all elements necessary to deliver the three approved corridors, including:

- Civil road construction;
- Transit elements such as Rapid Transit shelters and additional vehicles;
- Project management and engineering; and
- Land acquisitions needs.

Based on the approved original project cost, 73.3% of the project is funded from the Federal and Provincial governments combined. With respect to the municipal share, the Rapid Transit corridors are identified in the Development Charges Background Study with an average 85.7% growth funded share across the program, with the balance funded from property tax funded sources.;

Project Status:

Construction of London's RT network began in 2021 with Phase 1 of the Downtown Loop on King Street. East London Link construction began in 2022 along with Phase 2 of Downtown Loop and 2023 saw the tender of Downtown Loop Phase 3, East London Link Phase 2 and Wellington Gateway Phase 1. Contracts to be tendered this Fall for 2024 construction include:

- East London Link Phase 3C (Highbury Avenue from Oxford to the rail bridge).
- East London Link Phase 3A (Dundas Street from Egerton to Eleanor).
- Wellington Gateway Clarks Bridge (bridge widening plus road construction to Watson).

Business Case Summary

Project Benefits:

The proposed Rapid Transit (RT) budget increase is driven by a combination of unprecedented inflation, supply chain and labour shortage pressures, a volatile real estate market and maintaining current best practices through detailed design. This budget expansion will enable completion of the East London Link and Wellington Gateway Rapid Transit corridors as well as finishing touches for the Downtown Loop. By allocating additional funds, the City can realize its strategic goal of providing frequent, reliable, higher order transit for Londoners.

Rapid transit implementation directly contributes to achieving London's pledge to create 47,000 dwelling units by 2031. London Plan policies encourage intensification in strategic locations to support growth in a way that is sustainable from a financial, environmental, and social perspective. London's Rapid Transit Corridors allow for intense, mixed-use neighbourhoods and business areas that foster connections to and from transit services, while promoting active forms of mobility. Since the Environmental Assessment completion, the Rapid Transit corridors have seen numerous transit-oriented development applications and proposals.

London's ability to achieve the Master Mobility Plan modal share targets is most directly influenced by land use and transit investment. Rapid transit implementation is an important step in making transit service more reliable and competitive throughout the City.

Building a Rapid Transit system contributes to the Climate Emergency Action Plan through the reduction in Greenhouse Gas (GHG) emissions and improved air quality. GHG emission savings will be realized through a mode shift from automobiles to transit, which is amplified when considering how the emissions intensity of bus-based transit can be as much as half that of a typical passenger car.

Investing in these projects also provides direct benefit in the local economy. Combined, the three Rapid Transit projects are expected to generate 2,709 person-years of employment, representing \$171.3 million in wages, during construction, plus an additional 167 person-years and \$9.2 million in wages of long-term employment.

The Rapid Transit projects will revitalize 15.1 km of road, including 12 Downtown blocks, extending east to Fanshawe College and south to White Oaks Mall. While rebuilding the roads, the project will coordinate necessary underground work, replacing sewers, watermains and utilities and providing growth-ready servicing solutions and connections for some of London's most significant infill

projects to support the City's housing commitments. In addition to improving transit, the projects are focused on making sure London is sustainable in the long term to support our growing population and help preserve the health of the Thames River.

Implementation of London's three approved Rapid Transit projects is leveraging \$167M in Federal and Provincial funding under the Investing in Canada Infrastructure Program (ICIP). While project escalations are not ICIP eligible at this time, these capital projects are growth related and heavily supported by Development Charges (DC) with a combined overall growth share of 85.7 across the three projects. As a result, the tax level impact of this business case totals \$24M with the balance to be funded from the DC Reserve Fund. The 2024-2027 Multi-Year Budget process has reviewed this business case in the context of other DC supported cases to prioritize budget asks and defer select DC projects in order to maintain the health of the DC reserve fund.

Budget Pressures:

Over the last three years, global supply chain interruptions, inflationary pressures and labour shortages have impacted many sectors, and municipal construction is no exception. As well, the construction industry in London and across Ontario is going through a period of considerable change with new standards, legislative requirements, and market conditions. These unprecedented circumstances have affected all aspects of project delivery and construction driving costs beyond the reasonable cost estimate assumptions made at the time of the Environmental Assessment.

- **Inflation:** The 2018 Environmental Assessment (EA) cost estimates included contingency allowances to account for the highly conceptual nature of the designs at that time. Those contingencies are absorbed as the project team answers unknowns through detailed design. The EA also accounted for inflation using a conventional assumption of 2 to 3%; however, the 5 years since the EA has seen the Statistics Canada Non-Residential Construction Price Index increase by over 38.1%. The index increased by 13.5% over 2022 alone. Meanwhile, surging interest rates over the last six months and the resultant ballooning carrying costs of borrowing has added a new element of risk and profit erosion to the great proportion of construction businesses reliant on debt.
- **Supply Chain and Material Escalations:** While some material escalations have kept pace with inflation, supply chain interruptions have further driven up the cost of some materials with price increases observed for items such as steel, copper, aluminum, lumber, paper products, electronics, personal protective equipment, plastics, utilities and fuel. The project has also seen a cost increase in the specialized red lane treatment for dedicated bus lanes. Tender bid prices may also increase due to late or uncertain construction start dates associated with supply chain delays.
- **Bridge Costs:** Bridge construction projects across the region have seen higher than inflation cost escalation due to several factors. The rising cost of raw materials like steel and concrete has driven up expenses. A shortage of skilled workers and increased competition for construction talent has further inflated overall project costs. Additionally, stringent safety and environmental regulations have necessitated additional engineering and construction measures, adding to project complexity and expenses. Clarke's Bridge on Wellington Road has required enhanced construction techniques and habitat compensation to manage sensitive in-water work. Detailed design for the Highbury Avenue Bridge determined that a full deck replacement is required to meet current Canadian Pacific Kansas City (formerly Canadian Pacific Rail) offset requirements and address the long-term lifecycle needs of the bridge.

- **Vehicle and Shelter Costs:** The projects account for 14 high-efficiency diesel buses to service the east and south corridors combined. On top of inflationary pressures, the rising cost of high-efficiency diesel buses can be attributed to the incorporation of advanced emission control technologies and stricter environmental standards. Additionally, the integration of hybrid and electric components in some high-efficiency diesel buses contribute to their increased price tag. Many of the distinctive features and amenities of higher order transit stops have also been affected by material escalations. Durable and weather-resistant materials, LED lighting, real-time information displays, and security features have all contributed to an overall increase in construction and installation costs for these structures.
- **Current Design Best Practices:** Compliance with design best practices has resulted in necessary scope expansions to some aspects of the projects beyond what was contemplated in the EA estimates.
 - The extension of roadwork required along non-RT intersection crossroads to appropriately tie in transportation and servicing needs (Wellington and Commissioners, Highbury and Oxford, Highbury and Dundas, Ridout to Fullerton).
 - Increased standards for protected cycling infrastructure.
 - Additional corridor segments requiring buried hydro infrastructure.
 - Needs to cohesively integrate a transit node into the Fanshawe College campus.

The EA road construction cost estimates applied high level assumptions based on \$/km for the various recommended RT corridor cross-sections. The expanded work noted above is necessary to properly complete this project to current best practices.
- **Legislative Changes:** Recent changes to Provincial legislation have added unforeseen costs to capital project delivery. These costs are heightened due to the scale of the Rapid Transit contracts. The On-Site and Excess Soil Regulation (O. Reg. 406/19) now requires soil sampling and testing, as well as documentation, tracking and registration of excess soil leaving construction sites. This has added considerable workload and cost for both Contract Administration and Geotechnical consulting services. In response to Bill 93 Getting Ontario Connected Act and ongoing Province-wide utility locate delays, the City of London has started using a Dedicated Locator model for capital construction contracts. This model come at a higher cost but helps to avoid the even greater cost risk associated with potential construction delays due to late locates.
- **Fair Market Value for Land:** Realty Services has been making incredible progress acquiring the property needs required to keep the project on schedule having successfully acquired land needs to support the 2021 to 2024 construction contracts. All land acquisition costs reflect the current fair market value of properties, partial land needs and easements based on London and St. Thomas Real Estate Board market data, recent sales activity, and internal valuation by Realty Services. Subsequent to the EA land cost projections, the London real estate market has seen a period of unprecedented bidding wars that have caused a rapid upward spike in the value of real estate. These increases can be attributed to a combination of factors, including a period of low-interest rates, the

COVID-19 pandemic shifting preferences towards larger homes with more outdoor space, a limited supply of available homes that intensified competition among buyers, and investors seeking safe havens for their capital in real estate.

Cost Mitigations:

Every effort has been made to find efficiencies through value engineering design alternatives and project approach to achieve budget savings along all three of the Rapid Transit corridors. London is also fortunate to have strong local construction and engineering industries that are equally committed to efficiently delivering these infrastructure projects from both a cost and schedule perspective.

- **Value Engineering:** There has been significant value engineering work completed on the design of these projects to reduce property impacts, enable construction schedules, and improve overall operations. Efforts to optimize the Wellington Gateway design along the S-curve and near Bradley Avenue have reduced the width of land needs and anticipated servicing needs to support development along the corridor. The Dundas Street portion of the East London Link shifted dedicated bus lanes from centre-running to curbside maintaining frequent and reliable operations while significantly reducing land needs and impacts on adjacent properties' operations. The number of properties impacted by land acquisition needs has been reduced by 40% as a result of design refinements and the parcels still required are now considerably smaller. These value engineering efforts have resulting in considerable budget pressure offsets for the project however it has placed additional strain on the project design budgets. The project team is continuing their efforts to find savings through design refinements while still delivering first-class, multi-modal corridors.
- **Utility Coordination:** The project has realized savings through careful coordination for utility relocations. The EA conservatively assumed the relocation of all utilities located within the dedicated transit lanes. Working with utility partners, the team assessed operation and maintenance requirements and frequencies and, in many cases, determined that utility infrastructure could be managed in place through specific Traffic Control Plans and performing maintenance activities outside peak hours. This approach realized the greatest savings in the core for the Downtown Loop project.
- **Tendering Early:** Each year, the rapid transit tenders have intentionally closed before year end. Not only is this essential to starting these large projects as early in the construction season as possible, earlier tendering and timely contract awards yield significant efficiencies and cost savings by creating a more competitive bidding environment.

Operating Costs:

The operational budget forecasts included in this business case represent incremental costs to maintain built rapid transit infrastructure over the next Multi-Year Budget plus RT operations for the East London Link route starting in August 2027. Wellington Gateway operations are expected to start in August of 2028. Built rapid transit infrastructure includes new lane kilometres due to widening, RT shelters and amenities, and landscaping. Much of this infrastructure will provide immediate benefit for existing conventional transit service prior to RT route operations beginning.

Corridor	Cost Component	2024	2025	2026	2027	2024-2027
Downtown Loop	Line Maintenance and Platform Costs	\$190	\$389	\$396	\$404	\$1,379
East London Link	Labour Expenses	\$0	\$0	\$0	\$1,447	\$1,447
	Vehicle Maintenance Costs	\$0	\$0	\$0	\$829	\$829
	Energy Costs	\$0	\$0	\$0	\$412	\$412
	Line Maintenance and Platform Costs	\$309	\$926	\$1,407	\$1,628	\$4,270
Total East London Link		\$309	\$926	\$1,407	\$4,316	\$6,958
Wellington Gateway	Line Maintenance and Platform Costs	\$126	\$258	\$1,079	\$1,423	\$2,887
Total All Corridors		\$626	\$1,573	\$2,883	\$6,143	\$11,225

Summary:

The Rapid Transit Program has advanced a considerable amount of work and investment to deliver the 2021 to 2024 construction schedule as planned and progress detailed design for the balance of the project phases to tender ready. This project remains critical to achieving the City's growth, climate and mobility goals and is a major economic driver for the community.

This business case reflects the true value of properly and efficiently delivering this project in the current economy and represents good value to the City. By investing an additional \$24 million in tax supported funding, this business case further leverages investments from the Federal and Provincial governments and Development Charges to deliver an updated overall community investment of \$475 million to deliver this once in a generation project for London.

Financial and Staffing Impacts

Operating Budget Table (\$ Thousands)	2024	2025	2026	2027	2024 to 2027 Total
Expenditure – Operational Costs	\$626	\$1,573	\$2,883	\$6,143	\$11,225
Expenditure – Debt Servicing	\$0	\$0	\$1,763	\$3,014	\$4,777
Revenue: Grants	-\$0	-\$0	-\$0	-\$0	-\$0
Revenue: User Fees ¹	-\$0	-\$0	-\$0	-\$63	-\$63
Revenue: Savings from Existing Budget	-\$0	-\$0	-\$0	-\$0	-\$0
Revenue: Other (Assessment Growth) ²	-\$626	-\$1,573	-\$2,883	-\$6,080	-\$11,161
Net Tax Levy	\$0	\$0	\$1,763	\$3,014	\$4,777

Subject to rounding.

Note:

1. User fees represent fare revenue from incremental ridership growth associated with rapid transit operations.

2. Assessment growth funding will be pursued to cover incremental rapid transit operating expenditures in excess of user fee revenues.

Capital Budget Table (\$ Thousands)	2024	2025	2026	2027	2024 to 2027 Total	2028 to 2033 Total
Expenditure	\$115,189	\$58,967	\$0	\$0	\$174,156	\$0
Capital Levy	-\$0	-\$0	-\$0	-\$0	-\$0	-\$0
Debenture	-\$13,947	-\$9,903	-\$0	-\$0	-\$23,850	-\$0
Reserve Fund	-\$0	-\$0	-\$0	-\$0	-\$0	-\$0
Other (Remaining PTS) ¹	-\$1,390	-\$0	-\$0	-\$0	-\$1,390	-\$0
Non-Tax Supported ²	-\$99,852	-\$49,064	-\$0	-\$0	-\$148,916	-\$0

Subject to rounding.

Note:

1. Remaining Public Transit Stream (PTS) funding after an adjustment related to the extension of the Public Transit Infrastructure Fund, as reported to Civic Works Committee, March 2, 2021 – Public Transit Infrastructure Fund (PTIF): Approval of Amending Agreement.
2. The non-tax supported financing for this business case is funded via Development Charges (DC) revenue.

Staffing Summary - Changes	2024	2025	2026	2027
# of Full-Time Employees Impacted	0	0	0	13
# of Full-Time Equivalents Impacted	0.0	0.0	0.0	13.33
Cost of Full-Time Equivalents (\$ Thousands)	\$0	\$0	\$0	\$2,276

Subject to rounding.

Environmental, Socio-economic Equity and Governance (ESG) Considerations

Environmental, Socio-economic Equity and Governance Relevance Profile for this Business Case:

Environmental	Socio-economic Equity	Governance
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Environmental:

This business case will result in a reduction of greenhouse gas emissions and improve air quality in the community through a mode shift from automobiles to transit. Ongoing project-related GHG emissions resulting from the East London Link and Wellington Gateway projects will result in an annual reduction of approximately 400 tonnes of carbon dioxide equivalent/year (tCO₂e) and 1,000 tCO₂e/year respectively when compared to the baseline 'No-Build' scenario. The Downtown Loop project is expected to have a neutral to positive impact on GHG emissions and to lead to additional economic and social benefits. This business case is also expected to improve or increase community adaptation and resilience by making transit service more reliable and competitive throughout the City.

Socio-economic Equity:

Rapid Transit systems bring significant socio-economic and equity benefits to communities. They enhance accessibility, connecting people to job opportunities, education, and essential services. Rapid transit service also reduces congestion and pollution, improving overall urban environmental quality and public health. By providing an efficient and affordable mode of transportation, rapid transit contributes to reducing income inequality and increasing social inclusion by ensuring that people from various socio-economic backgrounds have access to reliable transit options.

Governance:

Choosing to not approve the case for this government-funded Rapid Transit Project mid-way through construction poses financial, social and economic risks, which can have lasting and detrimental effects on the community and its infrastructure. There would be substantial sunk costs, including design, land acquisition, and partial construction expenses. Taxpayers may have to bear these costs without receiving the intended benefits of the completed transit system. Not completing this transit project would leave a gap in a City's transportation network and, without improved mobility and reduced congestion, London would face continued transportation challenges affecting the daily lives of residents and hindering economic development. Plus, cancelling this project midway could stifle growth potential, impacting job creation, property values, and overall economic vitality. These projects also support major residential intensification projects along the corridors by advancing the repair and upsizing of underground servicing and utilities. Coordinating necessary underground servicing needs with rapid transit construction is the most efficient way to deliver these lifecycle and growth improvements and help drive transit-oriented development.

Additional Details

Link to the City of London's Website Downtown Loop Page <https://london.ca/projects/downtown-loop>

Link to the City of London's Website Wellington Gateway Page <https://london.ca/projects/wellington-gateway>

Link to the City of London's Website East London Link Page <https://london.ca/projects/east-london-link>