# Public-Private Partnerships and Light Rail Transit: Background report prepared for presentation at General Issues Committee, City of Hamilton, 17 April 2024

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**Overview**

Public-Private Partnerships (P3s) are often presented as having four main (overlapping) benefits: (1) Funding; (2) Value for Money; (3) Risk Transfer; and (4) Fosters Collaboration. This report will dispute these benefits by highlighting the practical issues and trade-offs of P3s and provide empirical examples of these problems in Light Rail Transit projects across Canada.

## (1) FUNDING

**P3 Model Argument**

Raise private money to pay for capital costs of infrastructure; off balance sheet accounting allows for cash strapped municipalities to 'buy now, pay later'.

**Issues**

- P3 financing almost always has a **higher interest rate** and is usually paid over a longer period than direct municipal borrowing (Loxley, 2012, 2020; Siemiatycki 2023).
- **Ties up municipal funding** for more years on average than publicly financed projects (Loxley, 2020).
- **Prevent municipalities from refinancing debt** because the debt is held in the private sector (Loxley, 2020).
- In addition to their high cost because of premiums on the use of private capital, governments **lost control of project management and their key civic assets over the long-term** (Siemiatycki, 2023).

**Examples**

**Ottawa LRT:**

- In planning for the second stage of the LRT network in Ottawa, the City wanted the existing P3 to assume maintenance responsibility for it. That would require the original lenders' consent because it was a major scope change. In turn, the lenders wanted a large addition of equity in the P3 which would be a cost to the City. To get around this, the City assumed responsibility for the debt to the lenders transferring their investment risk to the public sector (Munro, 2022).
- A 2023 report to councillors confirms the situation has grown worse, with the city now on the hook for 51 per cent of the $4.91-billion funding plan (Skura, 2023).

**Eglinton Crosstown LRT:**

- Taxpayers have already paid an extra $237 million to the consortium (including EllisDon, SNC-Lavalin, Aecon, ACS-Dragados) to settle a previous claim that the private-sector firms were not responsible for the earlier delays (James, 2020).
- New projected cost overruns, totalling $332 million likely allocated to taxpayers (James, 2020).
- Officials suggest that Toronto City Council is considering an "indefinite deferral" of the operation of the Eglinton Crosstown LRT (ECLRT) due to the city's financial challenges (Declerq, 2023).
    - The city will ostensibly lose the capacity to direct or oversee a major piece of the city's transit infrastructure.

## (2) VALUE FOR MONEY

### P3 Model Argument

P3s are warranted by the private sector's superior ability to deliver value for money, through economies of scale, and more efficient and innovative use of labour and materials.

### Issues

- Project costs are often underestimated as they **fail to include transaction costs.**
    - Transaction costs include the costs of negotiating, monitoring, and (sometimes) re-negotiating contracts, both before awarding the contract and after (Vining and Boardman, 2008; Forrer et al, 2010).
        - Transaction costs increase within complex contracting situations high asset specificity, high complexity/uncertainty, and low competitiveness (Vining and Boardman, 2008).
        - Monitoring and reporting of P3s is poor and deficiencies take a long time to get addressed. The average time taken to resolve minor deficiencies was 13 months, more than three times the maximum time allowed, with some still in dispute after three years (Sanger, 2015).
    - **Exiting a P3 contract is very expensive,** with high compensation costs (Loxley, 2020).
    - Can also result in **significant legal costs** if risk have not been property identified in contract negotiation (Skura, 2023).
- **Municipal governments often lack to proper contract or project management skills** to adequately negotiate contracts in their favour (Forrer et al, 2010; Loxley, 2012).
- All major consulting/accounting companies in Canada have a vested interest in promoting P3s and all are members of the CCPPP lobby group (Loxley, 2012)
- **High discount rates** favour P3s, and create the illusion of value for money, by shrinking back-end costs in terms of present value, compared to the public model (Loxley, 2020)
- **Cost-savings are often produced by cutting labour costs** by using non-unionized labour, cutting wages, pensions, and other benefits, or reducing hours or conditions of work (Loxley, 2020; Ohemeng and Grant, 2008).

- P3s may **shift spending** from the community to business centres **elsewhere** in the country **or abroad** (Loxley, 2020).
    - Little of this money trickles down. Construction associations have been critical of P3s because most of their smaller and medium-sized businesses don't benefit much (Sanger, 2015).

**Examples**

**Ottawa LRT**

- In Ottawa, a city council decision to cancel a light rail P3 project in 2006 led to a $175 million claim for breach of contract from Siemens, and an eventual settlement of $37 million (Loxley, 2020).
- The Ottawa LRT opened more than a year after the date specified in the contract. Taxpayers ended up responsible for large sums above and beyond the $2.1 billion budget. Even after opening, it was unclear whether the city or the private consortium that built the LRT was responsible for minor matters like ensuring the trains stayed on the rails (McGrath, 2022).
- The use of P3 limited choice of LRT vehicles, as Bombardier and Siemens (2 of three vehicle suppliers that met the requirements of the project) had exclusive agreements with consortia that bid unsuccessfully for the project, so were legally unable to supply vehicles. That left Alstrom, which proposed a new (untested) vehicle with a host of problems, including vehicles that are unreliable in Canadian winters, require constant repairs, contain safety concerns and continual system failures (NUPGE, 2022).
- The Ottawa LRT Report raises concerns that the P3 model led both the city and the Rideau Transit Group (RTG) to prioritize their liabilities, legal rights, and responsibilities instead of ensuring a reliable LRT system (Moscrop, 2023).
- Workers have been seriously injured during Stage 2 construction (Trick, 2022).

**Eglington Crosstown LRT:**

- Metrolinx incurred about $436 million in sunk and additional costs between 2009 and 2018— $125 million for cancelling and delaying two projects, $286 million for costs over and above contract values, and $25 million to manage issues with the company contracted to supply vehicles for the Eglinton Crosstown. (AGO, 2018).
- The budget for the project has increased by $1 billion between 2018-2022, with work still needing to be done (King, 2022).
- In 2022, Crosslinx Transit Solutions has $260 million in unresolved claims against Metrolinx and Infrastructure Ontario (King, 2022).
- Delays: 260 non-conformance and quality control issues identified and that track work did not meet specifications in 2023. At the time, crews were tearing up a platform at the Sloane stop and Eglinton Avenue East after it was discovered that a section of concrete was uneven (Gismondi, 2023).
- There are other hidden costs within projects, including the (so-called) importance of incentives. Metrolinx and Infrastructure Ontario provided multiple $20 million incentives to meet deadlines. On one hand, this scheme could reward a contractor that delivers, but at the same time, it could potentially result in cutting corners (Gismondi, 2023b).

- An auditor general report in 2018 highlighted that Metrolinx had paid an additional $49 million in contract amendment costs after it prematurely entering a contract for the light rail vehicles before the light rail project designs were completed. Metrolinx was then required to scope down the vehicle contract due to other project changes (Emanuelli, 2023).

**Edmonton LRT:**
- Worker injuries at Edmonton's long-delayed $1.8-billion Valley Line Southeast have been piling up at a rate far higher than industry and provincial averages, according to recent data and a report. In 2020, the company recorded 59 disabling injuries, equating to more than one per week (Wilson, 2023).

## (3) RISK TRANSFER

**P3 Model Argument**

An advantage of P3s is the transferring of risk from taxpayers to investors. The private sector is contractually obligated to deliver the project on-time or on-budget or suffer financial consequences, giving them a greater incentive to stick to the schedule and budget.

**Issues**

- P3s have come to be seen less as a genuine partnership and more as a **complex form of contracting that privatizes profits and socializes risk.**
- **Private sector participants are often risk averse** and require high premiums to accept risk (Vining and Boardman, 2008).
    - Research indicates that the higher the revenue uncertainty, the lower the actual transfer of risk to the private sector (Vining and Boardman, 2008).
    - In fact, several major players have left the P3 market due risk transfer aversion (Saddleton, 2020; CBC News, 2022), leaving the government to absorb more risk to foster partnerships.
- The **government remains the residual risk holder**: if a P3 operator fails or backs out due to low profits, all risks revert to the public sector and are often magnified (Loxley, 2020).
    - City administration, council and the public would not accept the project not being completed, and that’s a risk that can’t be transferred (Lambert et al, 2023)
    - The Auditor General of Ontario reported in 2014 that P3 projects have created an estimated $28.5 billion in liabilities and commitments still outstanding to private corporations—a cost Ontarians will have to pay back in the future. Other P3 projects in Ontario would bring total liabilities to over $30 billion owing to P3 consortiums and financiers, the equivalent of $6,000 per household (AGO, 2014).
- **Little is known about risk transfer** because there have been few serious studies on the subject. Risk transfer is hard to evaluate as P3 contracts are subject to cost overruns, reductions in scope, and delays, which main be hidden in contract negotiation (Loxley, 2012, 2020).

    - Consultants (such as Deloitte) have **refused to disclose their risk** data on the grounds of commercial confidentiality, despite the P3 justified purely based on risk calculations (Loxley, 2012, 2020; NUPGE, 2022).
    - There is **no independent verification of risk transfer assumptions** being made in P3 VfM assessments across the country (Sanger, 2015; AGO, 2014).
        - Agencies such as Infrastructure Ontario rely on the professional judgment and experience of external advisers to make these cost assignments, not on empirical data that supports the valuation of risk (AGO, 2014).
- Failure to transfer project and demand risk can have serious consequences on municipalities, leaving them with **unforeseen deficits and financial burdens,** and can lead to cuts in other services (Loxley, 2020).

**<u>Examples</u>**

**Ottawa LRT:**

- Arrangement sought to allow the city to offload the geotechnical risk associated with the LRT project to RTG, saving taxpayers an estimated $100 million (Steele, 2022).
    - A sinkhole emerged impacting subsequent stages of the project.
    - Soured working relationship between the city and RTG, due to disagreements regarding who was responsible for the sinkhole. Created adversarial relationship as the city's insisted on enforcing its contractual rights (Steele, 2022).
    - RTG sued the city for damages to recover the significant costs incurred and address consequences of the sinkhole (Chianello, 2021).
    - RTG and city filed competing insurance claims (Chianello, 2022).
    - The City's enforcement of its contractual rights contributed to the breakdown in the relationship between parties and may have repercussions on maintaining and operating the Confederation line and result in future P3 projects costing more as the public sector must take on more risk to maintain partnerships (Steele, 2022).

**Eglington Crosstown LRT:**

- In an AFP project, a private-sector consortium is paid a premium to bear most of the risks of project delays and cost overruns. Under the Eglinton Crosstown LRT AFP contract, the responsibility for some risks was not fully transferred to the AFP consortium, and Metrolinx eventually settled the claim against it based on its analysis of the risk allotment in the contract (Emanuelli, 2023).
    - According to the Auditor General, Metrolinx should have only paid $66 million of the $237 million delay claim, since the parties had initially agreed that the AFP consortium would assume the risks for the remainder of those additional costs (Emanuelli, 2023)
- Major traffic delays caused by ongoing construction has devastated businesses in the area – push to provide financial compensation for local businesses and residents due to loss of income and quality of life, pay for traffic wardens at hot spots along Eglinton Avenue and provide free TTC bus rides along Eglinton until project is complete (DeClerq, 2023). That is an additional cost to the public purse.

**Edmonton LRT:**

- During the procurement process in 2019, Edmonton sought a design-build-finance with vehicle supply procurement process. However, the city learned that the market's risk appetite shifted and that the proposed deal was not palatable to market participants, such as including vehicles in the procurement and risk allocation. Edmonton revisited the procurement and removed vehicles from the scope of work and risk-sharing for utilities and pipelines were adjusted (CCPPP, 2021).
- In an August 2023 audit into the P3 process for the Valley Line, Edmonton's city auditor noted that transferring financial risk away from the city "also reduces the amount of control it has over detailed design and construction." (Lambert et al, 2023)

## (4) FOSTERS COLLABORATION

**P3 Model Argument**

P3s promote cooperation and collaboration to address complex public policy problems.

**Issues**

- **Discrepancies in project goals** may lead to considerable issues: profit maximization (private) versus service quality and delivery (public).
- Transparency and accountability issues are increased when more complex relationships are introduced. (Lindquist. 2018; McGuire, 2008).
    - For instance, the **chain of democratic accountability is broken** during outsourcing and P3s. The traditional hierarchal accountability structures (including ministerial responsibility in Canada) are difficult or impossible to use as those delivering the services are not government employees, and therefore they are not answerable to Parliament (Wilks, 2017).
    - P3 accountability relies on designation of expectations and equal benefits, and thus **poor understanding or specification of such goals can lead to long-term problems** (Hodge and Greve, 2007).
    - Promote informational exchange, mutual benefit, communication, shared meanings, understanding, conflict resolution, etc. This requires **effective resources and capacity that may be eroded through austerity cuts and histories of privatization locally** (Loxley, 2012, 2020).
    - all major consulting/accounting companies in Canada have a **vested interest in promoting P3s** and all are members of the CCPPP lobby group (Loxley, 2012; Sanger, 2015).
- **High need for data confidentiality can limit meaningful public accountability and consultation** (Loxley, 2020; NUPGE, 2022).
    - Commercial confidentiality is used to justify redacting the most important information if contracts and other documents are made public (Sanger, 2015).
    - Common practice to withhold information from citizens and prevent public input into decisions about P3s (Loxley, 2020).

## Examples

**Ottawa LRT:**

- Whereas the City traditionally had a hands-on, leading role in projects, given the lesser role it played under this model, the City was left in a position where it had limited insight or control over the OLRT1 project (Moscrop, 2023).
- The private builder was responsible for designing, building, financing, and maintaining the LRT for a set price. In this model, the builder's motivation lies in meeting the contract terms, ensuring the design, construction, and maintenance are done in a way that recoups their investment and maximizes profits (Moscrop, 2023).
- Several of RTG's subcontractors file lawsuits over unpaid work (Blewett, 2019).
- The commissioner said the LRT was rushed into service when it opened in 2019 and "egregious violations" of public trust occurred when the consortium gave completion deadlines that were "entirely unrealistic" and when the City of Ottawa didn't tell the public testing criteria was lowered to allow Rideau Transit Group to pass the final testing (Steele, 2022; NUPGE, 2022).
- The City of Ottawa settled maintenance disputes with RTG, including a commitment by RTG to fix issues over the long-term. But the public will not be able to access terms of the settlement (Porter, 2023).
- While Alstom made the trains for the Ottawa LRT, Thales Canada Inc. created the computerized signalling system that would control the braking, propulsion, doors, track sensors and other movement-related functions. Thales project manager Michael Burns told the commission his company and Alstom were working in silos and not collaboratively (Syed, 2022).

**Eglington LRT:**

- The Auditor General of Ontario discovered that Metrolinx and Infrastructure Ontario were again negotiating with the Eglinton Crosstown consortium for a multi-million-dollar settlement, with no substantial changes in Metrolinx's process to document the validity of allegations [due to poor oversight and accountability of consultants VfM analyses] and evidence to demonstrate the value of the claims made by the consortium and to inform Metrolinx in its negotiations. The fact that this negotiation was occurring was not transparently disclosed to us during our follow-up work but instead came to our attention through other means (AGO, 2018).
- There has been a significant push by councillors demanding for a public inquiry into the Eglinton Crosstown project (CBC News, 2022; Jeffords, 2022).
- Metrolinx received a notice in 2023 indicating that CTS intends to litigate and stop withing with the TTC – this is viewed as an unacceptable delay tactic by CTS, prioritizing legal claims over completing the project (Demarco, 2023).

**Edmonton LRT:**

- Maintenance and operations present one set of challenges (Riebe, 2022):
    - The Valley Line West LRT from downtown to Lewis Farms, now under construction, is a partial P3 where the city owns the vehicles, and the group of companies builds and operates the trains.

    - eventually, when cars from the southeast leg run on the Valley Line West LRT track, there may be problems blending the systems and determining responsibility for maintenance and quality control.
    - You cannot draw a discrete line around this P3 because the cars go off your track and onto somebody else's and now you've lost control.
- The city completed an audit on the Valley Line Southeast LRT project, but it was unable to take a comprehensive look at delays (i.e. cracked concrete piers, faulty cables) many on council were hoping for. The City says it cannot legally audit contractor TransEd for those details, as the city can only look at project oversight (contract transparency and financial interests and liability of the city; Swensrude, 2023; Thompson, 2023).
- While you cannot blame the P3 for the cracks in the structures, people are critical of this P3s because most details of the contracts are private and lack transparency, which have weakened the city's oversight and accountability to the public (Riebe, 2022).

**Tramlink, London UK** (EPSU, 2012):
- Transport for London terminated a P3 contract for light rail services in south London in 2008. This contact was a 99-concession under which the company invested £80 million, and the government invested £125 million.
- The contract was ended after the company refused to cooperate with new ticketing system which would have generated more passengers but no more profit.
- It cost the TfL £100 million to buy out the P3.

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