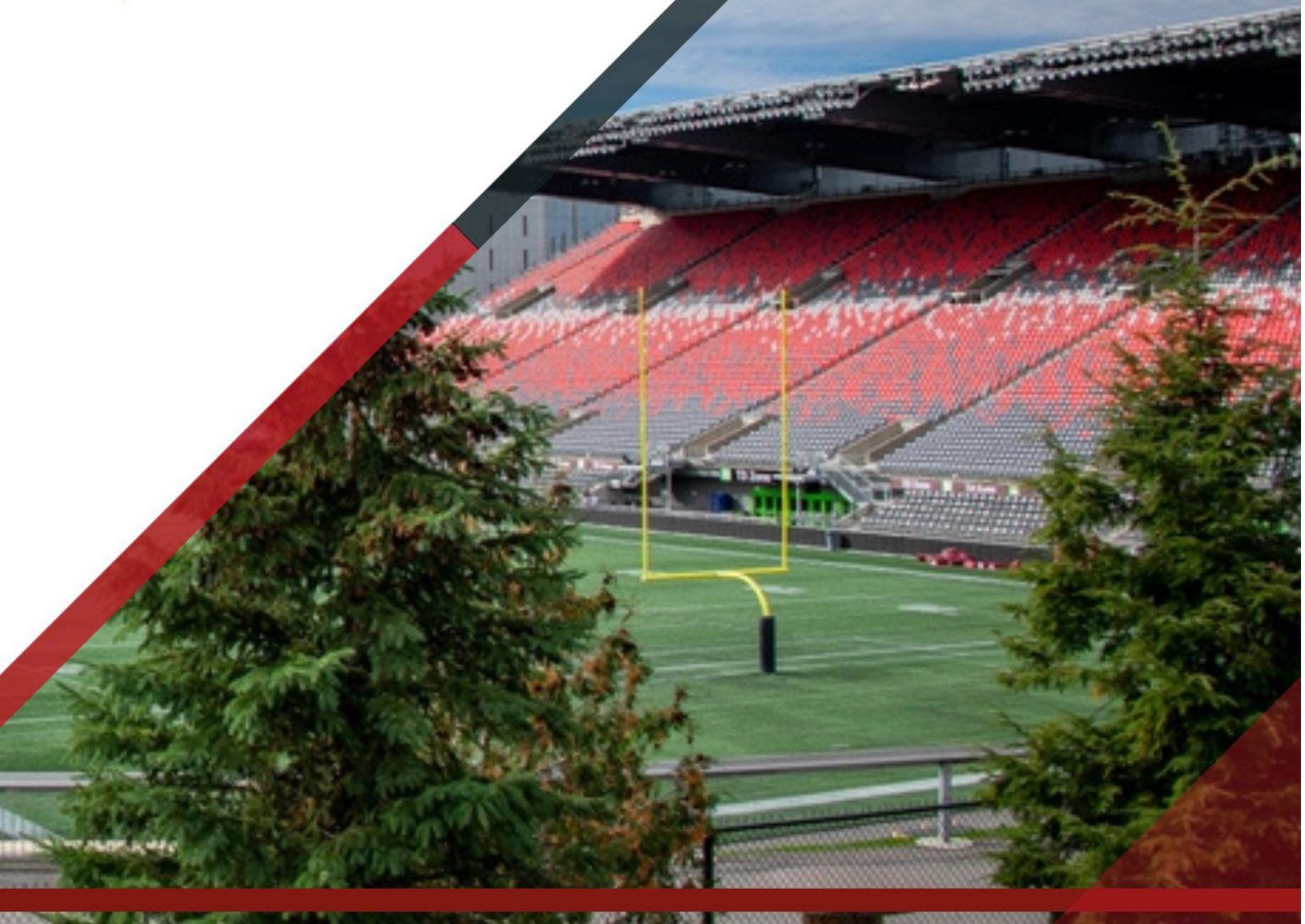




Office of the
Auditor General
City of Ottawa

Agile Audit of the Lansdowne 2.0 Redevelopment

Sprint 1



JUNE 2024

Table of Contents

Message from the Auditor General.....	1
Introduction	3
Background and context.....	3
Audit objective and scope	8
Conclusion	9
Audit findings and recommendations	11
1. Construction Costs	11
2. Quantification of Risks Impacting Waterfall Distributions	22
3. Other Assumptions.....	28
Appendix 1 – About the audit	35
Appendix 2 – Glossary	38

Message from the Auditor General

The *Agile Audit of the Lansdowne 2.0 Redevelopment* was added to our 2022-2023 Audit Work Plan, by way of a motion carried by Council in June 2022 which included the following request for consideration:

“THEREFORE, BE IT RESOLVED THAT that Council requests the Auditor General **consider** undertaking a review of the Lansdowne project, based on risks identified throughout the life of project, commencing once staff have progressed further with their planned approach, utilizing an agile audit approach like the current audit of the Zero Emission Buses Program; and

BE IT FURTHER RESOLVED THAT the Auditor General consider including in her review the following elements:

- **budget/estimated costs** and associated authorities;
- **funding strategies** and associated financial arrangements; and
- project agreement(s), etc.

BE IT FURTHER RESOLVED THAT the Auditor General report back in the new term of Council with any recommendations.”

Our Office accepted this request due to the importance of Lansdowne 2.0 to members of Council and the residents of the City and the inherent risks associated with a project of this magnitude. We carried out our work with the objective of providing assurance that key components and underlying assumptions of the Lansdowne revitalization financial proposal (i.e., **budget and funding strategy**) and due diligence represent reasonable and sound financial estimates. As with all of our audits, we established criteria, which were communicated to management at the onset of the audit, which represent our baseline expectations.

It is important to remember, in order for the Office of the Auditor General (OAG) to remain independent, we must be separate from all management activities and therefore, we can only evaluate analyses, estimates, decisions, and recommendations made by management. **We cannot create the analysis or make decisions.** This limits us in terms of what we can examine and when we can do so.

Furthermore, it should be noted that our report does not draw any conclusion as to the importance or priority given to the Lansdowne 2.0 Revitalization Project or make



suggestions as to the future direction of this project. Such suggestions would be outside of the mandate of Auditor General. Sprint 1 of our audit aims to provide recommendations and to support informed decisions on the specific elements of Council's request.

The team responsible for this audit was comprised of BDO Canada LLP (external consultant) and Mary Anne Patrice Malenab (Auditor), under the supervision of Joanne Gorenstein, Deputy Auditor General and my direction. My colleagues and I would like to thank those individuals who contributed to this project, and particularly, those who provided insights and comments as part of this audit.

Sincerely,



Nathalie Gougeon, CPA, CA, CIA, CRMA, B. Comm.
Auditor General

Introduction

On June 8, 2022, City Council approved a motion requesting that the Auditor General consider undertaking a review of the Lansdowne Redevelopment Plan (Lansdowne 2.0). The Auditor General accepted this request and commenced an [agile audit](#) of Lansdowne 2.0 once the concept plan, as outlined in the Lansdowne Partnership Plan – Authorization to Proceed to the Next Steps in the Redevelopment Report ([ACS2023-PRE-GEN-0009](#)) (the Report), received Council approval on November 9, 2023.

As a note, upon receiving Council approval, a number of amendments to the concept plan were accepted. The information presented in this audit report relates only to what was presented to Council in the November 9, 2023 Report, and not the subsequent amendments.

Background and context

Partnership Agreement

The City of Ottawa (City) and Ottawa Sports and Entertainment Group (OSEG) formed a public-private partnership (Partnership) in October 2012 to revitalize Lansdowne Park. The Partnership Agreement was based on a [closed financial system](#) that captures the [equity contributions](#) of both partners, capital costs and cashflows and defines equity contributions from the City and OSEG to be used solely for the purposes of the total project. Net cashflows from this closed financial system were to be distributed to the City and OSEG based on a “[waterfall](#)” of priorities as set out in the Partnership Agreement. The primary benefit of this Partnership Agreement for the City was not having to contribute money for asset lifecycle maintenance or operating deficits for the stadium, parking, retail or sports teams throughout the Partnership Agreement’s 40-year duration.

The Partnership oversaw the renewal and revitalization of Lansdowne Park with new south stadium stands, new mixed-use retail, reimagined public realm spaces and subterranean parking. Management has outlined that these changes not only attracted more sports and entertainment visitors, but added foot traffic through the addition of residential, shopping, entertainment and parking space offerings.

We understand that despite the success in attracting more visitors, the financial estimates of this Partnership Agreement did not materialize as projected. As of March 2022, OSEG has had to contribute \$160 million to the Partnership, which is \$100 million more than initially projected in 2012. As represented by the City, in its current form, the Partnership

Agreement is not sustainable for OSEG and there are no expected returns from the waterfall to be paid to the City for the term of the Partnership Agreement.

Additionally, management has indicated that the 56-year-old City-owned facilities are functionally obsolete (specifically the North Side Stands and Civic Centre) and it is believed they will not serve the needs of the Partnership over its remaining life. As the facilities continue to degrade and not meet the needs of event promoters, this will further impact the value of these assets and the financial sustainability of the Partnership.

In December 2020, at the direction of City Council, a working group composed of City and OSEG representatives began considering options to enhance Lansdowne's operations and the Partnership Plan. The objective was to ensure the sustainability and long-term financial viability of this Partnership.

In July 2021, a revised Partnership Agreement framework and Redevelopment Plan was agreed to by City Council. Staff were directed to present detailed plans and cost estimates for the revitalization of Lansdowne Park, including a funding strategy. Since then, City and OSEG representatives have developed financial projections and [proformas](#), performed due diligence, and developed cost estimates for the project.

In May 2022, the original OSEG proposal was received by the City. This proposal presented a business case to demolish the existing North Side Stands and arena complex to build a new Event Centre (arena) and North Side Stands, new retail [podium](#) and residential units (3 residential towers). The residential towers (through the sale or lease of [air rights](#) and [property tax uplift](#)) would provide a significant source of funding for this proposal (Lansdowne 2.0).

Current State

Since May 2022, at the direction of Council, one of the key activities undertaken by management was additional financial due diligence on the proposal. The City hired a third-party consultant (Ernst & Young or "EY") for financial analysis of OSEG's financing projections and the City's 2022 funding strategy.

In addition to other planning activities, management undertook a series of public consultations on the initial proposal. As a result of these engagements, the primary concerns that emerged were around financial risk, residential density, loss of green space, parking, traffic and transportation, cycling and pedestrian infrastructure, lack of public realm (e.g., washrooms, public art, less shade), as well as a lack of local vendors.

Based on the feedback received, the Lansdowne 2.0 redevelopment proposal was revised to reduce the number of proposed residential towers from 3 to 2, thus a reduction in the number of residential units and number of residential parking spaces. The size of the retail podium was decreased as well. Also revised was an increase in the public realm space as well as the number of event centre parking spaces. Additional key changes currently being considered are to extend the life of the Partnership Agreement to 2066 and significantly change the “waterfall” system such that distributions enable repayment of both OSEG and the City of their equity contribution¹, at the same time.



The estimated cost to the City for the construction of this project is \$419.1 million as outlined in the proposal presented to Council in November 2023. The source of funding for this proposal, from the City, has been proposed to be a mix of the sale or lease of air rights, [debentures premiums](#)², capital budget, expected provincial and federal funding and debt repayment (via tax uplifts, surcharges, rent, return of equity).

Based on the estimates established by management, \$312.7 million of new debt will be required to finance the construction of the North Side Stands and Event Centre at an annual debt repayment amount of \$16.4 million. While management expects equity distributions from the waterfall (assuming the changes to the Partnership Agreement as outlined above), it has been recognized that the return on investment may only come later in the life of the Partnership Agreement, whereas the annual debt repayment will be required once the debt is issued (assumed to be 2030 as per management’s proposal). Within the proposal put forward by management in November 2023, an assumption has been made for an annual increase to the City-wide [debt servicing](#)³ budget of \$1.3 million (commencing in 2024) until 2036, to build up a reserve for debt servicing over the life of the debt (assumed to be 40 years). According to management, this would ensure debt

¹ Based on the redevelopment scenario, the ratio of contributed equity is expected to be 53% for the City and 47% for OSEG.

² This represents \$33 million available to the City as a result of re-issuance of the original Lansdowne 1.0 debenture.

³ Debt servicing refers to the total cash required to pay back all debt obligations, representing principal and interest.

repayment obligations are being met, should the other sources of revenue not become available.

In November 2023, City Council approved to proceed to the next stage of planning for Lansdowne 2.0.

Financial Due Diligence

As part of the report submitted by management in November 2023, a financial due diligence was undertaken by EY on the Lansdowne redevelopment proposal developed by OSEG. The intent was to “provide an independent review of the key economic and financial elements of OSEG’s 52-year proforma, assess the feasibility of the redevelopment concept, identify areas of financial risk and propose alternative structures to minimize overall risk to the City”⁴. A summary report of EY’s results was submitted as an appendix to management’s report to Council and a more detailed report was made available to Councillors.

Within the due diligence report, EY outlined the results of their analysis on key assumptions associated with the waterfall proforma projections and specific elements of the City’s direct revenues/costs. For many elements, this included an “EY [Optimistic Case](#)” and an “EY [Realistic Case](#)”. Additionally, for specific categories of revenue/cost projections, EY provided a [sensitivity analysis](#) to demonstrate the impact on the waterfall distributions under different assumptions. As a result of their analysis, specific adjustments were made to OSEG’s assumptions by the City that went into the financial proposal provided to Council.

The City leveraged other subject matter experts (SME) to provide independent verification of specific financial elements of the proposal. This included a cost consultant, Turner and Townsend (T&T), for the estimated construction costs as well as Altus Group (Altus) who assisted in the due diligence for the value of the air rights proceeds, the cost of construction, and leasing revenues for the parking stalls. The City’s internal experts were also leveraged; specifically, the Corporate Real Estate Office (CREO) for calculation of air rights and the Revenue Services Branch for the calculation of the property tax uplift.

These financial projections were estimated by OSEG to result in **\$790.5 million**⁵ in distributions from the waterfall over the life of the Partnership Agreement, assuming the proposed changes to the Partnership Agreement and associated waterfall redevelopment structure. Based on the due diligence performed by EY, as part of their realistic scenario,

⁴ Lansdowne 2.0 Financial Due Diligence – City of Ottawa. EY Report; September 13, 2023; page 5.

⁵ Lansdowne 2.0 Financial Due Diligence – City of Ottawa. EY Report; September 13, 2023; page 94

the estimate for these distributions was decreased to **\$725.4 million**⁶. This baseline was further adjusted by Management to **\$716.8 million**. **Table 1** below summarizes the City's adopted 52-year operating revenue, expenses and operating income projections through the life of the Partnership Agreement. **Table 2** summarizes the City's adopted cashflow projections through the life of the Partnership Agreement.

Table 1: Revised 52-Year Operating Revenue, Expense and Operating Income

City-Adopted Projections (in millions \$)			
Business Line	Revenue (A)	Expenses (B)	Operating Income (A) – (B)
Redblacks	1,879.2	1,728.5	150.7
Ottawa 67s	392.2	396.7	(4.5)
Stadium/Event Centre	1,284.3	1,449.2	(164.9)
Retail	1,710.8	627.4	1,083.4
Total	<u>5,266.5</u>	<u>4,201.8</u>	<u>1,064.7</u>

Table 2: Revised 52-Year Cashflows

<i>Total Operating Income (from Table 1)</i>	<u>1,064.7</u>
Other Cashflows(in millions \$)	
Interest Expense	(204.9)
Changes in Working Capital and Other Cashflows from Operating Activities	22.7
Retail Leasing Costs/Tenant Inducements	(60.1)
Asset Acquisitions	(330.2)
Borrowing	3.4

⁶ Lansdowne 2.0 Financial Due Diligence – City of Ottawa. EY Report; September 13, 2023; page 97.

Contributions from Partners	165.6
Lifecycle Reserve	55.6
Projected Waterfall Distributions	<u>716.8</u>

Both the City’s report and EY’s report included references to financial risks. EY indicated that several factors could have an impact on the viability of the project, including: economic conditions, interest rates, construction costs, operational costs, local competition and team performance. The City confirmed that many of these have a high degree of sensitivity on the waterfall distributions; however, because of the debt funding strategy outlined above, management has indicated that the impact of these risks is reduced.

OAG Agile Audit

Given the inherent risks related to the Lansdowne 2.0 redevelopment project, the Office of the Auditor General (OAG) announced its intention to engage early in the transformation and conduct an agile audit of the project over its life. The audit aims to provide recommendations and support informed decisions in real-time.

Audit objective and scope

The objective of this audit sprint was to provide assurance that key components and underlying assumptions of the Lansdowne revitalization **financial proposal** (i.e., budget and funding strategy) and due diligence represent reasonable and sound financial estimates.

The audit scope included key elements and assumptions forming the basis of the financial due diligence performed to support the approved Lansdowne 2.0 proposal. This included projections/assumptions related to ticket revenue, sponsorship revenue, retail and residential revenue, parking revenue, property tax uplift, construction costs, lifecycle and operating expenditure costs, and business interruption costs⁷. More specifically, the audit focused on management’s financial projections and assumptions forming the basis of the proposal submitted to Council in November 2023 and the supporting due diligence activities.

⁷ Business interruption costs relate to early lease termination costs awarded to some existing retail tenants, whose retail spaces will be demolished as part of the project.

The following areas were scoped out of this engagement; however, could be considered for future agile audit sprints:

- Proposed revisions to the Partnership Agreement
- Procurement strategies and costing
- Costs borne by third parties
- Assumptions around funds from Federal and Provincial funding sources
- Other streams of due diligence work performed on the Lansdowne 2.0 proposal outside of the financial due diligence

Refer to [Appendix 1](#) for additional details on the audit criteria and approach. This audit was conducted in conformance with the Institute of Internal Auditors International Standards for the Professional Practice of Internal Auditing⁸.

Value of Audit: This audit has highlighted and quantified specific risks within the Lansdowne 2.0 financial proposal and potential impacts to the City to help inform future decisions linked to this project.

Conclusion

The due diligence process demonstrated a significant effort to engage sufficient and appropriate expertise, both internal and external to the City, to validate significant financial assumptions and projections for Lansdowne 2.0.

Our work confirmed that all significant financial assumptions embedded in the financial projections were validated by external or internal⁹ subject matter experts with the necessary qualifications and expertise to provide such input. These experts contributed in various capacities, including the development of proformas, validation of projections and provision of informative market analyses. We appreciate that several of the components of the financial projections were updated to reflect the results of those due diligence activities.

⁸ [ipf-standards-2017-english.pdf \(theiia.org\)](#)

⁹ In the case of the property tax uplift, the calculation of the projections included in the Report were prepared by the City's Revenue Services Branch, as they are considered the experts in property taxes; however, their calculations were informed by input from third party analysis.

For the cost of construction of the Event Centre and North Side Stands, estimated at \$419.1 million, the estimates were on the lower end of City acceptable ranges for contingencies, and utilities construction costs. Given the inherent risks related to construction, including the delayed construction horizon and already increasing construction costs, we believe this approach has resulted in some construction estimates that are optimistic. As a result of our analysis, the construction cost estimates provided to Council could be **understated by \$74.3 million** (17.7% of total construction costs of \$419.1 million) and the new parking structure cost estimates could be **underestimated by \$2.7 million** (14.5% of total new parking construction costs of \$18.6 million).

The OAG recognizes that many different assumptions went into the proforma projections to arrive at an estimated distribution to the City from the waterfall over the life of the revised Partnership Agreement. **We noted that many of the assumptions that supported the financial information were reasonable and were supported by detailed analysis and evidence.** This includes projections for: retail revenue, air rights valuation, existing parking demand, new parking structure revenues, operating expenses and lifecycle costs, Stadium/Event Centre revenues, property tax uplift, business interruption costs and interest rates. While the OAG considered these assumptions reasonable, it is important to acknowledge the inherent risk associated with long-term projections. Since the model projects financial performance up to 2066, it is difficult to say definitively whether assumptions that appear reasonable currently will remain as such given the extended time period.

There were specific assumptions, including Redblacks revenue growth and overall expense growth, that have a significant impact on the potential downstream waterfall distributions. The OAG has quantified the risk associated with not achieving these assumptions that are currently embedded in the waterfall projections. The impact of more modest assumptions ranges from \$10 million to \$30 million – per risk scenario - in decreased waterfall distributions available to the City over the life of the Partnership Agreement.

The bottom line is that the City is responsible for the cost of construction for Lansdowne 2.0 and any cost overruns. While this is a City-owned asset, the funding strategy requires the City to cover these costs in the short-term (primarily through the issuance of debt) with the most significant revenue source from this redevelopment (i.e., waterfall distributions) only anticipated to be realized in the later years of the Partnership Agreement, increasing the risk and uncertainty of these revenues. If the cost of construction has been underestimated, this most likely will result in additional debt required by the City. Further, should proforma projections associated with the Partnership

fall short, distributions from the waterfall will not be available to the City to support debt servicing.

Audit findings and recommendations

In the Report, the City presented a financial proposal based on what was characterized as “realistic assumptions”, which were supported by due diligence and analysis from both internal and external experts. These assumptions related to costs of construction, revenues/costs directly attributable to the City and revenue/cost projections associated with the Partnership Agreement. However, as noted by Management in the Report, the proposed funding strategy is not without risk and is not [revenue neutral](#). As noted above, the Report indicated that EY’s analysis flagged specific assumptions having the highest degree of sensitivity on waterfall distributions, which included stabilized growth rates of operating expenses and revenues, number of new events, sponsorship and naming rights and mortgage interest rate. They further indicated that other factors such as economic conditions, sports team/league performance and local competition for sports/events could impact the waterfall. The impact of this could be that the expected net cashflows from the Partnership do not materialize as waterfall distributions to offset the cost of debt, which the funding strategy for Lansdowne 2.0 depends on.

The following sections outline the audit results associated with the estimates and assumptions embedded in the Report.

1. Construction Costs

In this section, the OAG has quantified risk events related to construction cost assumptions presented in the Report. These risk events have varying degrees of likelihood but carry a direct potential impact to the cost of the Lansdowne 2.0 redevelopment and ultimately, the amount of debt that the City must take on.

1.1 Variance Between Independent Cost Consultant Estimates

OSEG was responsible for developing the OSEG 2022 Concept Plan as well as estimates for the costs of construction to be included in the City’s financial model. As part of this, OSEG retained a third party, BTY Group (BTY) to prepare a Class D¹⁰ cost estimate for the Lansdowne 2.0 Project, which was completed in July 2023.

¹⁰ As per the City’s Capital Cost Estimate Classification System, Class D refers to conceptual level estimate which is based on a rough order-of-magnitude estimate used for comparison based on historical costs for similar work. There should be a 40% to 50% contingency applied and the level of accuracy is +/- 25%.

As part of its due diligence activities, the City retained T&T, an independent third party, in August 2023 to complete their own Class D estimate, peer review the BTY Class D estimate, and conduct a stadium benchmarking study.

In the stadium benchmarking study report, T&T concluded that both T&T's and BTY's estimates were within the range of comparable stadiums (based on a set of factors determined by T&T) on a dollar per seat basis. Although, in the peer review report, there were variances in the construction cost estimate developed by T&T, compared to that of OSEG's construction cost estimate prepared by BTY. These variances amounted to an increase of **\$22.3 million** in [asset net amounts](#), representing an 8.7% variance of estimated [hard construction costs](#) of \$254.9 million or a 5.3% variance of total estimated construction costs of \$419.1 million.

Variances noted largely stemmed from differences in the interpretation of the scope of work included in the design brief, [unit rates](#) used for the calculation, and methodology for reflecting net asset amounts. Ultimately, T&T felt that their Class D estimate was more comprehensive and reflective of market rates compared to BTY's. Despite the differences, the BTY hard construction costs were used in the City's total capital costs presented in the financial proposal, as the \$22.3 million net variance was within the expected level of accuracy range set by the City for a Class D estimate. It is also within the range identified in the T&T benchmarking study report. Although it is understood that there remains uncertainty in estimating costs at this stage of the project (e.g., there is a +/- 25% level of accuracy between projected and actual costs expected for Class D estimates as per the City's Project Delivery Review and Cost Estimating Guide (the Guide) and aligned to industry best practices), there is a risk that construction costs have been underestimated.

1.2 City of Ottawa's Class C Cost Estimate

In its original May 2022 proposal, the City estimated construction costs at \$332.6 million based on "conceptual level planning". Once the City received BTY's Class D construction cost estimates, they undertook the process to refine this estimate to a Class C¹¹ level to reflect a "planning level" estimate to account for functional requirements of the site, as well as cost estimates for [escalation](#) and contingency. As per the City's Guide, which aligns to industry best practices, the level of accuracy at a Class C level is +/- 20% level

¹¹ As per the City's Capital Cost Estimate Classification System, Class C refers to planning level estimate which is based on a "ballpark" estimate used for planning purposes that is prepared based on functional requirements/environmental assessments with limited site information. There should be a 20% to 30% contingency applied and the level of accuracy is +/- 20%.

of accuracy. As such, the OAG recognizes that there remains uncertainty in estimating costs at this stage of the project.

In determining the Class C estimate, the City leveraged BTY's construction cost estimate, specifically for hard construction costs related to:

- The Event Centre and Stadium Base Construction Costs, including the Event Centre, North Side Stands, Shared and Stand-Alone Areas, North Side Stands Access, and Shared Areas and Shared Corridor; and
- The Retail Podium Construction Costs.

As of November 2023, the total capital cost of the revised Redevelopment Plan was estimated at \$419.1 million. This Class C estimate included the cost of preliminary works, construction, [soft costs](#) related to design and delivery, escalation allowances, and contingency. A separate construction cost was established for the 140 parking stalls, which was deemed the responsibility of the City. It should also be noted that a proposed Partnership Agreement amendment included in the Report was for the City to pay for cost overruns, if any, related to the Event Centre, Stadium and parking construction.

1.2.1 Contingency Amount is Not in Alignment with the City's Guide Leading to a Potential Underestimation of Costs

The City leverages the Project Delivery Review and Cost Estimate Guide (the Guide) for their infrastructure projects. This Guide, which was last updated and approved by City Council in 2013, is used as a means of standardizing cost estimate classification, cost estimation, associated contingencies and level of accuracy at various stages of a project.

At a Class C level, the Guide specifies that a contingency of 20% to 30% should be included in the cost estimate, which is based on total costs (both hard and soft costs). The Guide states that "For Class B, C and D estimates, a larger range of contingency allowance is shown to account for the fact that the level of detail at a particular design stage can range from project to project depending on its complexity and degree of design development". However, the Guide does not make mention of additional risk factors the City should take into consideration when determining a contingency allowance that could impact overall costs of a project, such as logistics and supply chain disruptions, labour shortages and rates, contractor risk (including contractor delays and claims), potential changes to regulatory and legislative requirements, and project agreement risk, if applicable.

Per the City's Guide

$$\text{Contingency} = (\text{Hard Costs} + \text{Soft Costs}) \times (20\% \text{ to } 30\%)$$

In the Report, \$50.9 million was included for contingency which represents **20%** of **only the hard construction costs** for the Event Centre and Stadium (\$254.9 million). This calculation of the contingency amount is not in alignment with the City's Guide, since it was only based on hard construction costs. Further, the OAG found that \$3.2 million of hard construction costs included in the City's Report¹² did not have contingency applied to them. Management has indicated that contingency was not applied to these hard costs because the design of these construction elements was not well known at the time and management believes there is sufficient buffer within these amounts. The OAG believes these costs should have been included in the total hard construction costs for contingency purposes. As such, we have recalculated total hard construction costs as \$258.1 million.

The City determined soft costs by applying a percentage to certain hard costs (as per the Guide), however also included specific soft cost fees in their construction cost estimate, if they were known¹³. Furthermore, the City included some contingency to the above calculated costs. Management felt that this approach provided them with sufficient contingency amounts and as such, did not use total costs in the determination of the overall contingency amount. However, this approach does not account for the difference if the City had applied the contingency calculation to total costs as indicated in the Guide. This further increases the risk that construction costs presented in the Report could be underestimated.

As stated above, the City's Guide indicates that for Class B¹⁴, C and D estimates, a larger range of contingency allowance is shown to account for the fact that the level of detail at a particular design stage can range from project to project depending on its complexity and degree of design development. It also states that a contingency allowance can be reduced from what is specified in the Guide for Class C and Class D estimates for projects in which there is a greater certainty of detail and scope. However, given that many of the

¹² Related to development of a landscape area and reduction of a berm wall.

¹³ Known costs for soft costs fees included site plan, zoning, official plan amendment, building permits, legal fees, and project management costs.

¹⁴ As per the City's Capital Cost Estimate Classification System, Class B refers to design level estimate which is based on design completed to a preliminary to detailed level, after site investigations and studies have been completed. There should be a 10% to 20% contingency applied and the level of accuracy is +/- 15%.

risk factors mentioned above exist with the Lansdowne 2.0 project, we believe adopting an amount of contingency on the higher end of the acceptable range would be considered appropriate. Further in this report we outline additional factors supporting a higher contingency allowance (i.e., construction timeline delays and incremental cost exclusions). The table below highlights how the contingency amount impacts the total project cost:

Table 3: Impact of Contingency Amounts on the Redevelopment Project Cost

Description	City's Class C Estimate	Revised Estimate Calculating Contingency Based on <u>Hard Costs</u> at 30%	Revised Estimate Calculating Contingency Based on <u>Total Costs</u> at 30%
Contingency Amount	\$50.9M	\$76.5M	\$95.1M
Contingency Variance from November 2023 Estimate	\$ -	\$25.6M	\$44.1M
<i>Potential Impact to the City</i>			
Total Construction Costs	\$419.1M	\$444.7M	\$463.2M
Impact to Debt Requirements ¹⁵	\$312.7M	\$338.3M	\$356.8M

As noted in the table above, an increase in the contingency percentage from 20% to 30% of hard construction costs **only** (i.e., how the City approached the calculation and not following the City's Guide of calculating the contingency on total cost) would result in a contingency amount of \$76.5 million, representing **an underestimation of \$25.6 million in total contingency** for the project. However, applying a 30% contingency percentage to total costs (i.e., in alignment with the Guide and the level of risk associated with this project) would result in a contingency amount of \$95.1 million, representing **an underestimation of \$44.1 million of contingency**. Under both of these scenarios, the City would likely be required to increase the amount of debt required to fund the project.

¹⁵ This assumes that all other variables remain the same.

1.2.2 Utilities Allowance is Not in Alignment with the City's Guide Leading to a Potential Underestimation of Costs

The Guide also indicates that a certain percentage of the construction estimate should be allocated for the relocation of existing utilities for Class C estimates, ranging from 5% to 20% of the construction estimate (i.e., hard costs). In the May 2022 Staff Report, a preliminary estimate for utilities allowance was included amounting to \$5 million. This \$5 million cost was carried forward to the Report, which represents only 1.6% of hard construction costs. Management noted that the current stadium and arena are serviced by existing utilities, and therefore the risk associated with this cost item was considered low as a result of site-specific knowledge that allowed for more accuracy with known conditions. This included a reduction in footprint for the retail podium. While we believe it is reasonable that the City may have greater knowledge of the utilities for this site as compared to other potentially unknown sites, which would help to support rationale for using the low end of the range, it does not support going below the range identified in the City's Guide. The utilities allowance included in the City's capital cost estimate is currently not aligned with the City's Guide. An increase in utilities allowance to 5% of hard costs, which is the low range of the allowance amount as per the City's Guide at a Class C estimate level, would result in a utilities allowance of \$12.9 million, representing a potential **\$7.9 million underestimation in utilities allowance**.

1.2.3 Incremental Costs Exclusions

Within T&T's Class D Cost Report, a number of exclusions were noted. The exclusion of these costs in T&T's report were considered reasonable, as these costs would not form part of the hard construction cost estimates and would fall under the responsibility of the City to establish. For many cost exclusions noted by T&T, these costs were reviewed by the City and characterized as post-tender costs, meaning they had not been included in the overall construction cost estimate. At the estimate level, it is expected that any post-tender costs would be included in the contingency amount included in the Class C estimate. These costs should be reviewed at the next class level (Class B), at which point it is expected that the contingency would be reduced and hard/soft costs would be further refined to a more detailed level.

However, the OAG noted that the City excluded other costs, such as Fixtures, Fittings and Equipment; IT and Communication Equipment; and Loose Furniture and Digital / TV Screens, in its capital cost estimate. Although the exclusion of these costs at the Class C level is consistent with the City's practices for facility projects, industry best practices would typically see these costs included in a Class C estimate. It is not yet clear whether

the City will be responsible for these costs, as the revised terms of the Partnership are being negotiated. These terms are expected to define the responsibilities for these costs. Notwithstanding, there remains a risk that if the City is required to cover these costs, there may be an increase in the capital costs for the project. Due to the uncertainty of the City’s ownership of these future costs, the OAG did not attempt to estimate these amounts. However, this further supports the OAG’s position of the utilization of a 30% contingency to account for these unknown costs.

1.3 Construction Timelines

It is critical to understand the risk associated with delays and the impact on all construction costs. For example, between the Report (November 2023) to the April 2024 Staff Report to Council on the Lansdowne 2.0 Procurement Options Analysis ([ACS2024-PRE-GEN-0002](#)), delays in the estimated timelines for construction have already been realized as noted in the table below.

Table 4: City Estimated Timelines for Construction

Area	November 2023 Report ¹⁶	April 2024 Report ¹⁷
Event Centre	Start as early as Fall 2024 and ready for use for the 2026/2027 Ottawa 67’s season.	Estimated timeline from 2026 to 2028 for a duration of 24 months.
North Side Stands	Start as early as Fall 2026 for a duration of 30 months.	Estimated timeline from 2028 to 2030 for a duration of 24 months.

To account for cost increases, the City has applied escalation to the construction cost estimate because construction contracts are anticipated to occur in the future. The City’s detailed capital costs include a 7% escalation for the Event Center and new parking structure (discussed below in Section 2.3) and 10.5% for the North Side Stands and other areas. This represents a 3.5% annual escalation for 2024 and 2025. After this point, it was assumed that construction would begin and the escalation risk would be borne by the successful bidder of the Request For Offer (RFO). However, we would also expect that bidders of the RFO will factor the estimated construction timeline into their proposed price, including any anticipated delays.

¹⁶ File Number: [ACS2023-PRE-GEN-0009](#)

¹⁷ File Number: [ACS2024-PRE-GEN-0002](#)

We believe that these delays have likely already impacted the reasonableness of estimated construction cost escalations. Further delays would continue to compound the magnitude of this impact.

1.4 Parking Cost Escalation Estimates are Insufficient to Cover Anticipated and Realized Increases in Costs

The Report outlined that 140 stalls were to be constructed under the North Side Stands, meant to cover expected parking demand for the new residents of the towers to be constructed on the site. The estimated cost of construction to the City for the 140 new stalls was estimated at \$18.6 million, but was not included in the \$419.1 million construction estimate amount (discussed above in Section 1.2).

Several experts were involved in the new parking structure projections, including an analysis completed by EY on construction, operating and lifecycle costs. The City's hard cost construction estimate of \$260 per square foot was within the \$210-\$275 range suggested by a 2023 Altus Canadian Cost Guide (related to hard costs) specific to the Ottawa market for underground parking. Subsequent to the City presenting its costing estimates to Council, the 2024 Altus Canadian Cost Guide was released, which showed an increase of \$30/sq ft or 12.4% in the average cost (i.e., 2024 hard costs per square foot of \$230-\$315). While this information was not available at the time the City was finalizing its financial projections, these updated amounts speak to the variability and increasingly costly estimates of construction in Ottawa's present-day economy. As noted in EY's detailed report, the specific challenges associated with construction at the Lansdowne site suggest this construction estimate will trend upwards, in line with the increase evidenced from 2023 to 2024. This increase, in conjunction with confirmed delays in construction timelines, suggests that estimated construction costs may have already surpassed those originally projected. While management included a 7% escalation on hard costs in this cost estimate, it was not sufficient to cover the approximate 12.4% increase based on Altus' increased range in 2024, nor does it account for continued cost escalations between 2024 and the projected completion date of constructing these parking stalls (between 2028 and 2030).

Table 5 below depicts the City-adopted estimates as well as a revised calculation using the 2024 rates from the Altus Cost Guide (in place of the 2023 rates), all else remaining the same (i.e., contingency, escalation and soft cost percentage rates assumed by the City). The 2024 rate used in the table below was determined based on approximating the same methodology applied by the City in their estimate (i.e., the City's hard cost estimate

of \$260/sq ft was 95% of the 2023 high end rate of \$275, therefore the OAG assumed 95% of the 2024 high end rate of \$315, equating to \$298/sq ft).

Table 5: New Parking Structure Estimates

Description	City-Adopted Estimate	Audit Assumption Based on 2024 Altus Cost Guide
Cost per Sq. Ft. for Construction of Stalls	\$260	\$298
Estimated Hard Costs of Construction	\$13.7M	\$15.6M
Contingency, Soft Costs and Escalation	\$4.9M	\$5.6M
Total Estimated Cost	\$18.6M	\$21.3M

As noted in the table above, applying the 2024 rates would result in a revised construction cost estimate of \$21.3 million, representing **an increase in construction costs of \$2.7 million (14.6%)**. Any increases to cost of construction also potentially represents an equivalent increase to the debt required to fund this construction.

As the City has assumed ownership of these stalls in its financial model, expected net leasing revenues of \$400,000 annually were projected. These leasing revenues are expected to partially cover debt servicing costs required to construct these stalls, which are estimated to be \$1.0 million annually (based on the \$18.6 million total). This implies an average shortfall in debt servicing cost coverage projected at \$600,000 annually, after accounting for net revenues with operating expenses and lifecycle costs¹⁸. We understand that this shortfall is expected to be funded from the City’s Parking Reserve, which represents an opportunity cost for the use of those funds. Any increases in costs of construction and associated annual debt servicing costs will consequently **increase this annual shortfall to the City to be covered from the City’s Parking Reserve**.

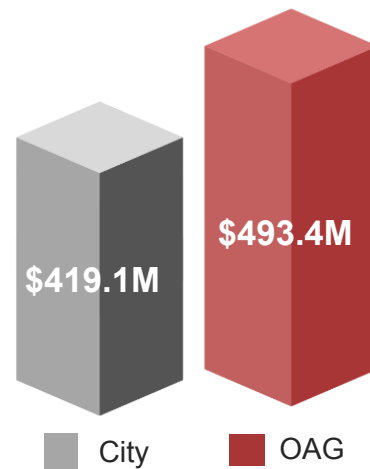
¹⁸ Lifecycle costs represent costs such as renovations and upgrades or replacement of major capital components of the parking structure.

While it is noted that a contingency of 10% on hard costs is considered appropriate for an underground parking structure, there remains a risk that the City’s elevated buffer of 20% contingency will remain insufficient, given the substantial cost escalations observed from 2023 to 2024 from inflation and other construction cost increases. Given the current volatile market conditions, there is a risk that relying on a high contingency alone may not fully absorb unexpected spikes in material costs, increased labor rates, or additional regulatory requirements considering that the project timeline is now delayed.

Construction Costs – Overall Conclusion

Generally, we noted that the estimated costs of construction are supported by detailed analyses, as well as due diligence stemming from credible, independent third parties whose role was to validate the reasonability of some of the estimates developed by OSEG. However, we believe the City, in some instances, chose estimates that were on the lower end of existing ranges. Given the inherent risks related to construction, and this project in particular, we believe this approach has resulted in some construction estimates that are optimistic. Specifically, those related to contingency, utilities, and parking construction estimates. As a result, we believe the construction cost estimates could be understated by approximately \$74.3 million (17.7% increase of total construction costs of \$419.1 million – resulting in a revised estimate of \$493.4 million) and the new parking structure cost estimates could be underestimated by approximately \$2.7 million (14.5% of total new parking construction costs of \$18.6 million). We further noted other considerations that, while not quantified in our report, could impact the overall construction cost.

**Stadium and Event Centre
Construction Cost Estimate**
(in millions)



We understand that the final construction costs based on the results of the RFO process will be presented to Council in Q3/Q4 2025, along with the air rights bid result, amended Partnership Agreements, and an update on the City’s funding strategy. At that point, it is expected that Council will provide Management with a clear, “go or no go” decision prior to the commencement of construction based on the final tender price. As such, developing an updated construction cost estimate may not be feasible prior to this, since responsibility for covering certain incremental costs is expected to be determined in the amended Partnership Agreements. However, considering that the Class C construction

costs could be **underestimated by up to \$74.3 million**, it is important that Council is aware of the risk.

RECOMMENDATION 1 – CLARITY OF EXPECTATIONS ESTABLISHED IN THE CITY’S GUIDE

The General Manager, Infrastructure and Water Services should review and update the Project Delivery Review and Cost Estimating Guide to clarify expectations on how to apply the ranges of estimates, including contingencies, based on specific risk factors.

MANAGEMENT RESPONSE 1

Management agrees with the recommendation to review and update the Project Delivery Review and Cost Estimating Guide. However, Management has in this case adhered to Council’s direction to conduct a validation exercise of the 2022 Funding Strategy and Cost Estimating. This work, as stated in the audit report, demonstrated an extensive effort to engage sufficient and appropriate expertise, both internal and external to the City, to validate the financial assumptions and projections for Lansdowne 2.0.

The General Manager of Infrastructure and Water Services will continue to ensure that construction cost estimates reflect the Project Delivery Review and Cost Estimating Guide (the ‘Guide’) and is aligned with the respective level of risk. The Guide allows for contingencies in Class C and D estimates to be reduced from those specified for projects in which there is a greater certainty of detail and scope, and Management applied this allowance to Lansdowne 2.0 through various due diligence exercises, including planning reports and studies, additional cost estimating, and advancement in design elements. This was done to provide Council with a high degree of reasonableness in the cost estimating. Council will have the benefit of the actual costs for the construction of the event centre, podium and north side stands in response to the results of the Request for Proposals (RFP) prior to consideration of its final decision to proceed. A review of the Guide will be undertaken and reported back to Council by Q4 2025 to ensure it continues to align with industry standards on both the application of contingency ranges and risk factors.

OAG RESPONSE

While Management has indicated agreement with recommendation #1, there appears to be a fundamental disagreement with the basis of the finding as Management has indicated that they followed the Guide and incorporated risk into the determination of their estimates.

It is the OAG's perspective's that the Guide was not followed for the determination of the utilities allowance and the determination of overall contingency. Furthermore, the OAG believes that there was insufficient consideration of risk commensurate to this project when establishing their contingency amount. It is imperative that various risks, not outlined in the Guide, be considered as part of the determination of a contingency allowance, including:

- logistics and supply chain disruptions;
- labour shortages and rates;
- contractor risk (including contractor delays and claims);
- potential changes to regulatory and legislative requirements; and
- project agreement risk.

Lastly, the OAG believes that the timeline associated with management's action plan to review the Guide for inclusion of risk elements into their future project estimates of Q4 2025 is not timely. The OAG believes that such a review can, and should, be performed in a timelier fashion.

2. Quantification of Risks Impacting Waterfall Distributions

In the sections below, the OAG has quantified risk events related to certain assumptions presented in the Report. These risk events have varying degrees of likelihood but carry an impact to expected distributions to the City from the waterfall. The OAG has not quantified potential mitigating measures in the impacts noted below; however, we recognize that the City and the Partnership have varying measures available to them to potentially reduce the impacts noted.

Disclaimer:

Please note that for the purpose of calculating the quantification of financial risk in this report, the OAG leveraged the City's financial model. Our scope did not include auditing the integrity of this financial model. This is applicable to all scenarios discussed below. Additionally, all scenarios have been run independently from each other (i.e. impacts have not been aggregated) and calculated on a net present value basis. Our scenario analysis is based on individual business units in order to be consistent with the approach of the EY due diligence report.

2.1 There is a risk that the assumed Redblacks' short and medium-term annual revenue growth rates will not be achieved

Within the financial proforma projections for the waterfall, annual revenue growth rates have been assumed for all business lines and are separated between the next six (6) years and the remaining 37 years assumed of the Partnership Agreement.

The Redblacks business unit is the second most significant contributor to the waterfall

distributions, after Retail. The primary driver of revenues for the Redblacks is ticket sales, which are earned through attendance and ticket prices. Other associated revenues, including concessions and merchandise, increase or decrease in conjunction with ticket sales and related attendance. Based on OSEG's projections, EY, as a result of their due diligence, amended the assumptions related to this business unit as they were deemed to be optimistic. After the due diligence, annual revenue growth rates were assumed to average 5.9% over the next six (6) years (2023-24 to 2028-29), with growth rates of 3% for years seven (7) to nine (9) (2029-30 to 2031-32), and 2% stabilized growth thereafter (up to 2066).



Pre-pandemic ticket revenue growth rates varied between 6.5% and -15.1%¹⁹ since the Redblacks inception. The basis for future growth assumptions relate to improved team performance, with attendance and ticket prices expected to increase with anticipated improvements in on-field performance as well as excitement around the new stadium.

While the OAG acknowledges that the due diligence resulted in a reduction in the assumptions related to Redblacks revenue, there continues to be a risk that short-term annual growth rates (average estimated at 5.9%) for the Redblacks will not be achieved as projected. Historical information is challenging to use to predict future growth due to the volatility experienced. The Redblacks have only been playing since 2015 and while they experienced strong on-field performance in the early years, sales were negatively impacted by the COVID pandemic and poor on-field performance in the last number of years. The most recent season of 2023 saw a decrease in revenue as compared to budget, which fell short of the projected average annual growth rate of 5.9%. We further understand that, as a result of the 2023 season, OSEG has reduced its 2024-25 revenue budget for this business unit as compared to the projections presented as part of the due diligence. If this trend continues, there could be a significant impact on the projected waterfall cashflows available to the City.

Given the variability in past performance and results, the OAG quantified the risk of lower short and medium-term revenue growth which could be brought on by poor team performance, an economic downturn, or increased local competition in the Ottawa market such as the Ottawa Senators' potential relocation.

As an alternative, for the short-term, the OAG updated the projections based on the Redblacks actual revenues earned/expenses incurred for 2023-24 only. If all else remains the same, the impact of this would be an estimated **\$25.1 million decrease in waterfall distributions to the City. This would be compounded should the impacts of the reduced Redblacks budget for 2024-25 be realized.**

Further, the OAG assumed a more modest revenue growth in the medium term, specifically reducing these growth rates from 3% to 2%²⁰ for years seven to nine (2029-30 to 2031-32) – effectively stabilizing growth by year seven and going forward to 2%. This would align with the associated expense growth assumed for this business line. Given the volatility of the Redblacks revenue growth and the dependence on on-field

¹⁹ Lansdowne 2.0 Financial Due Diligence – City of Ottawa. EY Report; September 13, 2023; page 23.

²⁰ Reducing the medium-term revenue growth assumption to 2% from 3% aligns with the assumption about long-term revenue growth and also equates to the same growth in projected expenses, representing the possibility for ticket prices to increase with inflation.

performance, 2% revenue growth for the medium-term is more modest. If this risk were to materialize, the impact would be an estimated **\$10.3 million decrease in waterfall distributions to the City**.

2.2 Overall operating expenses would significantly impact waterfall distributions if assumed growth rates are exceeded

Similar to revenues, OSEG’s proforma projections included short-term (years one to six) and long-term expense growth for the different business lines. For each of the Redblacks, Ottawa 67’s, Stadium/Civic Centre and Retail lines, a predicted 2% long-term, stabilized expense growth rate has been assumed (which is aligned with long-term revenue growth rate projections). Short-term expense growth rates adopted by the City vary within each business line, as well as year over year (ranging from 2% to 2.5% in years 1 to 6). EY focused their own sensitivity analysis on stabilized expense growth rates (ranging between 1% and 3%) and confirmed that expense growth assumptions across all business units are “one of the most sensitive OSEG model inputs”²¹.

Historically, operating expenses in the Partnership have varied at significantly different rates year over year, often above 2% to 2.5% which are the short-term growth rates projected in the financial model. **Table 6** below depicts average historical operating expense growth rates pre-pandemic. It is noted that the high growth rates of the expenses noted below could be in part driven by the fact that the operations were relatively new over the periods indicated and there were potential inefficiencies that made costs more volatile.

Table 6: Historical Average Operating Expense Growth Rates

Business Line	Average operating expense growth rate from years 2015-16 to 2018-19
Redblacks	10%
Ottawa 67’s	16%
Stadium/Event Centre	17%
Retail	9%
Overall Average	10%

While we understand that price increases and cost containment measures have been implemented by OSEG in the past, historical net losses of the Partnership across various segments bring into question the extent these measures can offset operating expense

²¹ Due Diligence Report – City of Ottawa. EY – September 13, 2023; page 38

increases. Further, operating expenses are also highly sensitive to changes in the economic environment, with fluctuations in factors such as inflation rates, labour costs, and market conditions directly impacting expenditure levels.

The City's assumed 2% long-term growth rate in expenses is largely predicated on historical price increases and the Bank of Canada's inflation target (2%). However, some of the factors that led to lower inflation historically, may not continue going forward. Current economic trends and geo-political factors could lead to higher expenses over the long-term.

As a result, there is a risk that operating costs cannot be stabilized at 2% over the long-term, given the variability in expenditure trends observed since OSEG's inception and inflationary factors the model may be susceptible to until 2066. As such, the OAG selected 2.25% as a long-term expense growth rate, as it represents a point between the City's estimated 2% and the high end of 3% per the Bank of Canada's inflation target range. The higher long-term expense rate captures some of the additional risks noted above while considering the Partnership's ability to mitigate cost increases. This rate was also selected to highlight the sensitivity of this assumption, as even a modest change in expense growth rate (25 basis points) can lead to a material impact on cash flows, as discussed below.

If this risk were to materialize and costs were only stabilized at 2.25% in the long-term, the impact would be an estimated **decrease of \$30.2 million in waterfall distributions to the City, available for debt servicing or overall City services.**

While the OAG did not quantify the risk of higher short-term expense growth rates, the historical volatility of these business lines indicates additional risk of increased expenses in years one to six. In other words, if expenses are higher than projected in the short term, it will have a compounding effect over the life of the Partnership Agreement. It is noted that increased short-term operating expenses for any of the business lines in years one to six above what has been projected would further decrease waterfall distributions to the City.

2.3 Should Ottawa no longer have a CFL team at any point during the Partnership Agreement, there would be an impact on waterfall distributions

The presence of Canadian Football League (CFL) football has been unpredictable in Ottawa in the last 30 years, with three teams in this market since 1996. Specifically, the Roughriders played until 1996, the Renegades played from 2002 to 2005 and the Redblacks commenced in 2014. The City has assumed that the Redblacks will play at Lansdowne over the entire life of the Partnership Agreement (up to December 2066) and

has therefore projected the team will generate significant revenues and resulting profits available for waterfall distributions to the City. While we recognize the Partnership has no intention of removing the team from its portfolio, we found that based on the history of CFL team interruptions in Ottawa, there is a risk of the Redblacks exiting at some point over the investment horizon.

Given the historical turnover in teams, and gap years between each, the OAG assumed there was a 1/3 chance that there could be further turnover during the investment horizon and used this to calibrate related cash flows. This means that we assumed ticket revenues, sponsorship revenues and related expenses may decrease by one-third from 2030 to 2067. If this risk were to materialize, the impact would be an estimated **\$16.1 million decrease in waterfall distributions to the City, available for debt servicing or overall City services.**

It is also important to note that the Redblacks' current contract ends in 2032, representing a contractually viable year for the team to discontinue operations at Lansdowne. The impact of this risk materializing would be an estimated **\$29.6 million decrease in waterfall distributions to the City, available for debt servicing or overall City services.**

For the remainder of the OAG's analysis on the assumptions considered as part of the due diligence and included in the waterfall projections presented by the City, please refer to [Section 3.0](#) of this report.

Quantification of Risk to Waterfall Distributions – Overall Conclusion

As previously noted, a key risk to the waterfall distributions is the model's duration. More specifically, the City's model projects financial performance to 2066; and as result, it is challenging to assess the reasonability of assumptions over such a long time period. This is further exacerbated by business units that have experienced recent volatility as a result of the COVID pandemic and some which do not have sufficient historical trend information available. We acknowledge that EY, as part of their due diligence, amended specific assumptions related to OSEG's business lines to provide a more realistic picture. For assumptions that have a significant impact on the potential downstream waterfall distributions, as part of the audit we have quantified the risk associated with not achieving the assumptions embedded in the projections. The impact of these more modest assumptions ranges from \$10 million to \$30 million – per risk scenario - in waterfall distributions available to the City over the life of the Partnership Agreement.

RECOMMENDATION 2 – UPDATES TO WATERFALL PROFORMA PROJECTIONS

The Director, Lansdowne Park Project, in consultation with the Deputy City Treasurer, Corporate Finance, should take into consideration recent actual results and modest future assumptions to update the proforma projections for the Partnership. This information and the potential impact on waterfall distributions available for debt servicing and/or City services should be provided to Council for their information.

MANAGEMENT RESPONSE 2

Management agrees with this recommendation, as it is consistent with current practice and with what was outlined in the staff Report ACS2023-PRE-GEN-0009 (Recommendation 7) and Report ACS2024-PRE-GEN-0002 (Table 1). As such, staff will provide Council with information and updates of the potential impact on waterfall distributions available for debt servicing and/or City services going forward as part of the report recommending a preferred proponent, should this be the outcome of the request for proposals. In that report, the Director, Lansdowne Park Project, will work with the Deputy City Treasurer, Corporate Finance to ensure that actual recent results that could impact long term financial and economic projections, with due consideration for any potential short-term anomalies that would not impact long term projections will be reflected in the revised proforma projections. This report to Council is planned for Q4 2025.

3. Other Assumptions

Unlike the assumptions presented in [Section 2](#), the following assumptions presented by Management in the Report were considered less sensitive to the distributions from the Partnership (i.e., lower impact to the City) or the risk event was considered less significant after accounting for the financial due diligence completed. In the section below, we have presented these assumptions and our rationale for reasonableness or for perceived lower risk. It is, however, important to note that given the time horizon of the Partnership Agreement, changes over time due to evolving conditions or unforeseen events could significantly impact these assumptions.

3.1 Team Performance – Playoff Games**3.1.1 Ottawa Redblacks**

The City assumed a 50% probability of the Redblacks hosting a playoff game in a given year. However, there is a risk that the Redblacks may have less than a 50% chance of

hosting a playoff game due to recent team performance. The probability of the Redblacks hosting a playoff game in a given year would be 44% based on the team's historical performance, evidenced by the team's first and only Grey Cup win in 2016. Since their inaugural season, the Redblacks have hosted four playoff games over nine seasons to date. While not quantified, it should be noted that if this risk were to materialize, the impact would result in decreased ticket revenues, and in turn a decrease in waterfall distributions to the City.

3.1.2 Ottawa 67's

The City assumed that the Ottawa 67's would host 4.65 playoff games annually. Based on historical performance, the Ottawa 67's have made the playoffs 8 times since the 2013-14 season and have hosted an average of 4 playoff games per year. Therefore, there is a risk that the 67's may host less playoff games in a given year than predicted. It should be noted that if this risk were to materialize, the impact would be decreased ticket revenues resulting in a decrease in waterfall distributions to the City, although we do not expect this to be significant.

3.2 Ottawa 67's Annual Ticket Sales Growth Rates

The City assumed that there would be varying annual growth rates for Ottawa 67's ticket sales between 3% and 6.5% in the initial 6 years of redevelopment. Historical revenues for the Ottawa 67's have varied drastically year over year (ranging from a 37% decline in 2015 from 2014, to a 57% increase in 2019 from 2018), speaking to the cyclical nature of the league. As such, there is a risk that the Ottawa 67's short-term ticket sale projections may be overestimated. While not quantified, it should be noted that if this risk were to materialize, the impact would be decreased ticket revenues from lower short-term ticket growth, resulting in a decrease in waterfall distributions to the City.

3.3 Retail Revenue Projections

Overall, retail revenue projections were based on reasonable assumptions and supported analyses. EY's expertise was used to inform recommendations related to the OSEG 2022 Concept Plan, including the reduction in total redevelopment retail space from 108,000 (Option 1) to 49,000 (Option 2) square feet.

EY analyzed eight years of historical Lansdowne retail revenue data as well as projections for redevelopment retail prepared by OSEG. However, it was noted that the historical data may be skewed due to factors such as the COVID pandemic, resulting in challenges in determining a stabilized year for input of the 40-year investment horizon used in the

financial model. The OAG did not consider these due diligence limitations to be significant, since EY's assumptions for retail included a staggered tenant absorption period to account for any delays in retail leasing and allowance for leasing activities that may incur costs to the project. Further, a general vacancy of 3% of potential gross revenue for retail space was assumed, which further mitigates risks of overconfidence in OSEG's original retail projections, all of which were deemed to be reasonable.

3.4 Air Rights Valuation

Overall, the OAG found that air rights estimated proceeds of \$39 million were based on reasonable assumptions and supported analyses. The City carried out due diligence including a Request for Expression of Interest (REOI) process and effectively utilized expert input to conduct market analysis and scenario analysis to ensure that assumptions related to the disposal of subterranean and property air rights were supported by market research and feasibility assessments.

In September 2023, CREO completed an internal valuation of the air rights proceeds, which concluded that the estimated market value ranged from \$37 million to \$39 million.

Altus was then engaged by the City to conduct an air rights valuation in November 2023 based on the two-tower design, which assumed 750 units of residential high-rise rental apartments and 507,000 square feet as the highest-and-best-use²² of the redevelopment opportunity. It is important to note that the unit mix would ultimately be decided by the builder/developer as part of the RFO and subsequent processes. Two industry-accepted approaches were used by Altus to assess the air rights value, which yielded relatively similar results with a range from \$35.5 million to \$38.3 million.

Although the air rights valuation is considered reasonable, there remains a risk that the air rights proceeds may generate less revenue than estimated, which would result in an increase in the amount of debt required to fund the redevelopment and City investments required to service this debt.

3.5 Existing Parking Demand Projections

Overall, the OAG found that demand projections for the existing parking structure were based on reasonable assumptions and supported analyses.

²² As per the Appraisal Institute of Canada, highest-and-best-use is defined by the Canadian Uniform Standards of Professional Practice (CUSPAP) as "the reasonably probable and legal use of property, that is physically possible, appropriately supported, and financially feasible, and that results in the highest value."

An additional source of revenue expected from waterfall distributions is parking revenue from the existing structure. This revenue is derived from all usage of the parking facility on game days, shopping, during the holiday season, or other events. Parking demand is anticipated to increase as a result of the redevelopment, with an estimated 22.5% increase from current levels upon final completion of Lansdowne 2.0.

EY performed market research on expected parking demand for the existing structure and completed a sensitivity analysis on parking demand increases, which found that if the projected increase in demand was only 15% from current levels, it would result in a \$14.2 million decrease to waterfall distributions as compared to projections. Ultimately, EY projected higher demand for existing parking than was originally estimated by OSEG. We considered this to be reasonable, given that the rationale for this increase includes the addition of residential units as well as parking currently being at-capacity on game days. There is also potential to increase demand for parking outside of game days during the holiday season or special events, exemplified by the Professional Women's Hockey League team that now brings higher parking demand on game days.

Notwithstanding, there is a risk that parking demand may be lower than what was projected in the Report should there be challenges increasing demand outside of game days. The impact of a reduction in growth of existing parking demand from 22.5% to 20%, which was originally estimated by OSEG, would represent a **\$7.1 million decrease to waterfall distributions**.

3.6 New Parking Structure Revenues, Operating Expenses and Lifecycle Costs

Overall, the parking projections surrounding the revenues, operating expenses and lifecycle costs associated with the 140 new parking stalls were based on reasonable assumptions and supported analyses. The City has assumed that once the parking stalls are constructed, they will be leased out to residents of the new residential towers, earning \$240 per rented spot at 95% occupancy, operating expenses representing 37% of revenues, and lifecycle costs representing 1.25% of revenues.

Several experts were involved in these new parking structure projections, including an analysis completed by EY on revenues and costs (i.e., leasing income, construction, operating and lifecycle costs), and Altus performing additional due diligence on revenues. The OAG found the above-listed assumptions to be reasonable based on market rates and supported by due diligence from independent parties.

3.7 Stadium/Event Centre Revenue Projections

The OAG found that the assumptions related to the events centre ticket sales were based on reasonable assumptions and supported analyses, especially considering the addition of a Professional Women's Hockey League team for Ottawa, which has increased the number of events for the Civic Centre starting in 2023/24. We understand that for 2023/24, as a result of the Professional Women's Hockey League and other events, the operating results of this business line was higher than budgeted. We further understand that because the World Junior Championships will take place at the Civic Centre in 2024, the budget for 2024/25 for this business line is higher than the original projection for this year.

However, it should be noted that OSEG had originally estimated 26 events per year in their Lansdowne redevelopment proforma projections, which represents a 30% increase in the baseline number of events, whereas EY increased this projection to 30 per year. The sensitivity analysis performed by EY as part of their due diligence presented that if the total number of events offered is 26, as originally estimated by OSEG, this would result in a **\$14.5 million decrease to total waterfall distributions**.



3.8 Property Tax Uplift Projections

Overall, the OAG found property tax uplift projections to be based on reasonable assumptions and supported analyses.

The Report projects an average annual residential and hotel property tax increase of \$3.3 million and a \$100,000 increase in commercial property tax over 40 years (2026 to 2066). The residential, hotel and commercial property tax uplift represent 75% of the total annual estimated property tax uplift for 750 residential and hotel units, which will be used to partially offset the City's cost for the redevelopment, specifically the debt servicing amount. The remaining 25% will be allocated to delivering City services.

The OAG concluded that the projections developed by the City were based on reasonable projections, with input from EY's market and absorption rate analyses, and informed by the respective expertise in these groups. Although projections are reasonable, there remains a risk that the unit mix decided by the developer may be significantly different

from that modeled by the City, potentially leading to less property tax funds available to offset the cost for development.

3.9 Business Interruption Costs

It was acknowledged that, as a result of redevelopment, business interruption costs would be incurred by the Partnership. The potential impact of these costs were estimated by OSEG in their proforma projections at \$23.2 million. This was subject to EY's due diligence review. Overall, the OAG found that business interruption costs were based on reasonable assumptions and supported analyses.

The more impactful costs associated with business interruption include the loss of Redblacks ticket revenue (during construction when the North Side Stands will be torn down and only limited temporary seating will be available as replacement), relocation costs and the length and timing of the interruption period.

At the time of the Report, the responsibility for covering business interruption costs was still being decided between the City and OSEG as part of ongoing negotiations to amend the Partnership Agreements. The City had agreed to pay for half of actual business interruption costs, but specific calculation methods for the City's portion of business interruption costs were still being determined. As such, the City included \$12 million of their expected contributions to business interruption coverage in the financial proposal (included in the \$419.1 million construction costs and representing 50% of the total \$23.2 million estimate noted above); however, as this is only an estimate, if actual business interruption costs are above this amount, there could be potential impacts to the City.

3.10 Financing Costs

There are two types of financing costs assumed as part of the financial model: interest on the debt to be issued to cover the construction costs (assumed to be \$331.1 million for both the Event Centre/North Side Stands and new parking structure) and the interest on the retail mortgage. Both interest rates were assumed to be 4.25%. Overall, the OAG found that the assumed interest rate was based on reasonable assumptions and supported analyses.

As part of their financial due diligence work, EY conducted a comprehensive review of the historical interest rates and municipal credit spreads and concluded an interest rate assumption of 4.25% for the 40-year bond issuance was reasonable. However, EY also concluded that the average mortgage interest rate was an assumption with one of the highest degrees of sensitivity. EY's sensitivity analysis indicated that an increase to the

mortgage interest rate to 5.75% from 4.25% would result in an estimated **decrease in waterfall distributions of \$9.8 million.**

It is important to note that interest rates last reached 5.75% in January 2001, and have not reached this level since. Further, management noted that the risk associated with the bond interest rates can be managed by issuing the debt earlier, in order to capitalize on a better interest rate, if needed. As such, the OAG found that the assumptions and due diligence performed over financing costs to be reasonable.

Other Assumptions – Overall Conclusion

While our audit results above suggest a degree of confidence in many of the assumptions embedded within the Partnership's proforma results, it is important to acknowledge the inherent risk associated with long-term projections. Given the extended time frame of the financial model until 2066, there is a possibility that these projections might not come to fruition. This long-term risk, driven by various factors such as economic changes, market volatility, or regulatory shifts, underscores the need for caution when relying on projections that extend over several decades.

Appendix 1 – About the audit

Audit objectives and criteria

The objective of this audit sprint was to provide assurance that key components and underlying assumptions of the Lansdowne revitalization financial proposal (i.e., budget and funding strategy) and due diligence represent reasonable and sound financial estimates.

Criteria listed below have been developed from our assessment of key risks within in-scope areas:

1. Key Revenue Projections and Assumptions	
1.1	Ticket sales revenue projections, including tickets for sporting and other events, are based on reasonable assumptions and supported analyses.
1.2	Sponsorship revenue projections are based on reasonable assumptions and supported analyses.
1.3	Retail and residential revenue projections are based on reasonable assumptions and supported analyses.
1.4	Parking revenue projections are based on reasonable assumptions and supported analyses.
1.5	Property tax uplift projections are based on reasonable assumptions and supported analyses.
2. Key Cost Projections and Assumptions	
2.1	Estimated cost of construction ²³ is based on reasonable assumptions and supported analyses.
2.2	Operating expense growth rates are based on reasonable assumptions and supported analyses.
2.3	Business interruption cost estimates are based on reasonable assumptions and supported analyses.

²³ A breakdown of estimated construction costs is listed in the Lansdowne Partnership Plan – Authorization to Proceed to the Next Steps in Redevelopment Report dated November 10, 2023. The most significant categories listed are the Event Centre, North Side Stands and soft costs.

3. Approach and Process to Conduct Financial Due Diligence

3.1	The financial due diligence approach and process undertaken by the City was appropriate and aligned with perceived risks associated with the project.
3.2	Sufficient and appropriate expertise was sought to validate significant financial assumptions and projections.

Scope

The audit scope included key elements and assumptions forming the basis of the financial due diligence performed to support the approved Lansdowne 2.0 proposal. This included projections/assumptions related to ticket revenue, sponsorship revenue, retail and residential revenue, parking revenue, property tax uplift, construction costs, operating expenditure costs, and business interruption costs.

As well, the following due diligence activities were considered in scope:

- OSEG financial projections, impact analysis and supporting assumptions
- Third party due diligence on OSEG projections, analysis and supporting assumptions
- City analysis of OSEG projections, revisions and supporting assumptions

The following areas were scoped out of this engagement; however, could be considered for future agile audit sprints:

- Proposed revisions to the Partnership Agreement
- Procurement strategies and costing
- Costs borne by third parties
- Assumptions around funds from Federal and Provincial funding sources
- Other streams of due diligence work performed on the Lansdowne 2.0 proposal outside of the financial due diligence

Audit approach and methodology

The following procedures were performed by the OAG as part of the audit approach:

- Review of relevant information and documents
- Interviews with City representatives, consulting firms involved in the financial due diligence and other external stakeholders (e.g., OSEG)
- Utilizing subject matter expertise to review and challenge assumptions
- Comparisons with other jurisdictions, where relevant

- Review and stress testing of certain assumptions of the City's Lansdowne Redevelopment Financial Model and the Waterfall Financial Model²⁴
- Other audit testing and analysis, as necessary

²⁴ Note that the audit did not assess or verify the integrity of the model itself as part of this audit, but rather stressed certain assumptions as inputs to the City's financial models.

Appendix 2 – Glossary

Term	Description
Agile Audit	An agile audit approach provides periodic reports, performed in iterative cycles (or sprints) of an audit on a continual basis with a focus on areas of greatest risk to the City.
Air Rights	Air rights are a type of development rights which permit the control and development of a specific amount of unused air space above real property. Similar to rights tied to real property, air rights can be leased, sold, or transferred with, or separate from, fee title to property.
Asset Net Amounts	Asset net amounts represent costs for the shell, interiors services and site and ancillary work. Whereas, asset gross amounts are inclusive of general requirements, design allowances and construction contingency, but not escalation.
Closed Financial System	Defines equity contributions from the City and OSEG to be used solely for the purposes of the total project and cash-flows from operations to provide the basis for distribution to the City and to OSEG.
Debentures Premiums	When debentures are issued at a price that is higher than their nominal (face) value.
Debt Servicing	Refers to the total cash required to pay back all debt obligations, representing principal and interest.
Equity Contribution	A financial investment made by individuals or entities into a company.
Hard Costs	Costs that are directly relate to construction such as structure, construction site and landscape.
Escalation	Provision in the cost estimate for increases in the cost of equipment, material, labor, etc., due to continuing price changes over the time.



Term	Description
	Escalation is used to estimate the future cost of a project or to bring historical costs to the present.
Optimistic Case	Refers to the most favorable projected outcome.
Podium	A podium construction is typically defined as a construction method that divides a building into lower and upper portions. In this case, the Lansdowne Redevelopment will feature a 49,000 square foot podium to be used for retail at the bottom of the two residential towers.
Property Tax Uplift	Property tax uplift is the measurement of a property tax increase due to redevelopment. Property tax uplift can occur when a property is redeveloped and its assessed valued increases. “Uplift” is the difference in tax on the property before and after redevelopment.
Proforma	A method of calculating financial results using certain projections or presumptions.
Realistic Case	Refers to the average scenario, based on management assumptions.
Revenue Neutral	Based on the principle of not increasing the overall cost to the taxpayer. To assess revenue neutrality, cash inflows to the City over the Partnership Agreement’s term are compared to the cash outflows to ensure they are of equal or greater value.
Sensitivity Analysis	Determines how different values of an independent variable affect a particular dependent variable under a given set of assumptions. In other words, sensitivity analyses study how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty.
Soft Costs	Costs that are not considered direct construction costs such as architectural and engineering.

Term	Description
Unit Rates	The monetary value allocated to a unit of measurement for a given item in a bill of quantities such as cost per square meter of floor area, cost per kilogramme of steel reinforcement.
Waterfall	Under the current Partnership Agreement, the Waterfall consists of six (6) levels of distribution that represent the order in which positive cash flows will be distributed. Distributions cannot be made until the previous level's distribution requirements have been fulfilled (i.e. Distributions to Level 2, OSEG Return on Equity, cannot be made until all required Level 1, Additions to the Lifecycle Fund, distributions have been completed).

Visit us online at www.oagottawa.ca

Follow us on Twitter [@oagottawa](https://twitter.com/oagottawa)

The **Fraud and Waste Hotline** is a confidential and anonymous service that allows City of Ottawa employees and members of the general public to report suspected or witnessed cases of fraud or waste 24 hours a day, seven days a week.

www.ottawa.fraudwaste-fraudeabus.ca / 1-866-959-9309