Risk Analysis and Financial Risk Exposures - Risk Ratings

The following is the risk rating/probability methodology used for the purposes of the Financial Stabilization Reserve risk based review.

Likelihood: Given the current state/environment, how likely is this risk to occur over the next 3 years?

#	*Likelihood*	*Description*
1	Rare	May only occur in exceptional circumstances; no previous incidence
2	Unlikely	Could occur at some time; less than 25% chance of occurring
3	Possible	Might occur at some time; 25-50% chance of occurring
4	Likely	Will probably occur in most circumstances; 50-75% chance of occurring
5	Almost Certain	Can be expected to occur in most circumstances; more the 75% chance of occurring

Mitigation: Is this risk being mitigated?

#	*Mitigated?*
1	Fully mitigated
2	Mostly mitigated
3	Partly mitigated
4	Low mitigating factor
5	Not mitigated

Risk Score: Likelihood x Mitigation

Score			***%***	
Min	***Max***	***Rating***	***Min***	***Max***
1	6	Low	5%	25%
7	12	Medium	25%	50%
13	20	High	50%	75%
21	25	Extreme	75%	100%

Risk Analysis and Financial Risk Exposures - Summary
(in millions of $)

The following table summarizes the risks faced by the City of Edmonton for which there are related financial exposures. Each of the risks identified in the table are discussed further in the more detailed Risk and Financial Exposure table.

	Summary of Risks and Financial Exposure			
Risk	**Maximum Financial Exposure**	**Probability Range**	**Adjusted Minimum Exposure**	**Adjusted Maximum Exposure**
EXTREME EVENTS				
Natural Disasters / Climate Change	$130.0	Low	$6.5	$32.5
Cybercrime	$42.0	Medium	$10.5	$21.0
REVENUE AND EXPENDITURE VOLATILITY				
Pandemic	$150.0	Low	$7.5	$37.5
Inflation, Fuel & Utilities Price Increases	$23.0	Medium	$5.8	$11.5
Revenue Volatility	$20.0	Medium	$5.0	$10.0
Franchise Fees	$13.3	Medium	$3.3	$6.7
Snow and Ice Control	$15.0	Medium	$3.8	$7.5
Road Maintenance	$7.3	Medium	$1.8	$3.7
Realty Tax Appeals & Adjustments	$10.0	Medium	$2.5	$5.0
Personnel	$60.0	Medium	$15.0	$30.0
Post-employment Benefit Costs	$4.5	Medium	$1.1	$2.3
Legal Claims, Project Risks and Uninsured Claim	$43.0	Low	$2.2	$10.8
Contaminated Sites - Risk Managed	$160.8	Low	$8.0	$40.2
Contaminated Sites - Other	$3.0	Medium	$0.8	$1.5
CAPITAL FUNDING & DELIVERY				
Grants	$100.0	Low	$5.0	$25.0
Investment Earnings	$26.0	Medium	$6.5	$13.0
Infrastructure	$55.0	Medium	$13.8	$27.5
LEVERAGE				
Credit Risk of Loans	$26.0	Medium	$6.5	$13.0
Deficit Reserves	$148.2	Low	$7.4	$37.1
Potential Balances:			$112.9	$335.6

2023 Tax-Supported Operating Expenses (excluding non-cash amortization)*	$2,676.3	
Percentage of Tax-Supported Operations Expenses	4.2%	12.5%

Current minimum and target balances - %	5.0%	8.3%
Calculated minimum and target balances - $*	$133.8	$222.1

* Based on 2023 City of Edmonton Consolidated Financial Statements

Risk Analysis and Financial Risk Exposures - Detailed
(in millions of $)

Risk Description	Current Mitigations	Maximum Financial Exposure	Likelihood	Mitigating Impact	Risk Score	*Risk Assessment (Based on Legend Tab Formula)*	Adjusted Min *(exposure x low %)*	Adjusted Max *(exposure x high %)*
EXTREME EVENTS								
Natural Disasters / Climate Change								
The impacts of climate change and extremes of weather and climate events have the potential to affect every aspect of life in Edmonton, from compromising the City's core services, to new service demands in areas of emergency response and preparedness. According to the City's Vulnerability and Risk Assessment: Projected Future Climate Hazards and Impacts for the City of Edmonton report (June 2018), "Edmonton's climate is projected to continue to change into the foreseeable future, leading to a wide range of potential impacts, including increased risk of flooding and drought, increased strain on water resources, more frequent and intense heat waves, more frequent wildfires and intense storms." The report indicates that drought and extreme heat are the City's greatest climate change concerns, while freezing rain, high winds, heavy snow and urban flooding are of next greatest concern. The slow-onset events such as shifting seasonal precipitation patterns, temperature rise, land degradation, and habitat degradation and species loss can result in a very significant impact in the long-run, but may not require immediate disaster prevention or emergency funds. However, sudden-onset events, such as flooding, wildfires, and tornadoes, may require access to reserve funds for rapid emergency response. These extreme weather events are happening with increasing regularity and represent environmental exposures that are not covered by insurance, such as damage to trees, river banks, culverts and roads. Snow storms are discussed further below under Expenditure Volatility. Emergency response and public assistance funding during and after extreme weather events are often necessary. As Alberta's second-largest city, Edmonton may not only need to respond to these challenges locally but also assist neighboring municipalities. In accordance with Alberta's Emergency Management Act and the Local Authority Emergency Management Regulation, the City of Edmonton continues to strengthen its Emergency Management Program by supporting Edmontonians during emergency events, and providing assistance to regional and national neighbors in response to environmental emergencies. To quantify the risk associated with climate change to various assets in the City of Edmonton, the Climate Planning and Strategy Unit conducted a Cost of Inaction study (All One Sky Foundation, 2022). The study projected that Edmonton should expect about $1.3 billion in annual direct economic impacts by 2025 due to current climate change conditions. These economic impacts are comparable to those experienced by various communities across Canada during recent extreme events such as floods, hailstorms, and wildfires. One of Edmonton's greatest sudden-onset impacts is flooding. Losses from the Southern Ontario flooding were approximately $101 million (August 2024), with the City of Calgary's net loss in 2013 of almost $80 million (approximately $105 million in 2024 dollars). With the Provincial Government announcement in 2021 to cap funding for extreme weather events at 90 per cent, property owners including municipalities are now responsible for covering at least 10 percent of the costs. This leaves the City of Edmonton exposed to financial risks from climate change. According to the financial exposure from various extreme events examined in the Cost of Inaction Study, offset by the provincial Disaster Recovery Program and the experiences of other municipalities, an estimated exposure of $100 - $130 million in unfunded costs for City infrastructure and operations is possible.	The City of Edmonton's strategic approach to climate adaptation was first outlined in The Way We Green, Edmonton's Environmental Strategic Plan, which was approved by City Council in July 2011. The Way We Green established goals, objectives, and strategic actions to address climate change impacts. Since then, several reports have been prepared, including projections of climate data and extreme weather events for Edmonton, as well as the Climate Change Vulnerability and Risk Assessment for the City of Edmonton. Following the City's declaration of a Climate Emergency in August 2019, City Council adopted the Climate Resilient Policy C627 and strategies for climate change adaptation as well as mitigation. To better understand the costs associated with adaptation measures and the risks of inaction, the City completed two key studies: the Adaptation Costing Study for major assets in April 2022 (Stantec Consulting Ltd, 2022) and the Cost of Inaction: Economic Analysis of Edmonton's Climate Risks in May 2022 (All One Sky Foundation, 2022). EPCOR and the City are working actively on the Flood Mitigation Strategy to identify areas of Edmonton that have the highest risk of impact from flooding, engage the community to frame a plan around shared priorities, build a plan to slow, move, secure, predict and respond to flood waters in the community, and empower home and property owners to help flood-proof private property. In the past municipalities that have faced extreme weather events have received reimbursement from the federal and provincial governments through disaster recovery programs, and although it is not guaranteed, it is likely that support from other orders of government will continue to some extent. To manage the risks associated with the City's assets, the City carries insurance coverage for extreme weather events such as floods, fires, and tornadoes. However, certain items, such as damage to trees, riverbanks, culverts, and roads are subject to exclusions and retention/deductibles. Therefore, access to reserve funds may be required to ensure Edmonton's resilience in the face of changing climate conditions and their impacts.							
The City can face many many natural disaster and climate change events. One of Edmonton's greatest sudden-onset impacts is flooding, estimated at a direct financial exposure of $100 - $130 million in costs for City infrastructure and operations. Funds may be required for emergency response and public assistance during and after an extreme weather event with up to 90 per cent of the costs associated with natural disasters compensated through the Provincial Government Disaster Relief Program, requiring property owners to cover at least 10 percent of the costs.		*$130.0*	*3*	*2*	*6*	*Low*	*$6.5*	*$32.5*

Risk Analysis and Financial Risk Exposures - Detailed
(in millions of $)

Cybercrime									
	Cyber crimes are crimes that involve a computer and a network and are used in the commission of a crime. Cyber crime could also include privacy breach such as loss/release of physical sensitive records. The City of Edmonton's risk register has identified cyber crimes as an extreme risk to the City. Local governments are a target for cyber criminals and extortionists for monetary gain or political reasons. Local governments tend to be subject to greater public scrutiny with respect to cyber security and the use and protection of personal identifiable information. A 2024 Cost of Data Breach Study by Ponemon Institute for IBM determined that the industry average total cost of a breach is $4.88 million USD ($6.7 million CAD). The study also found that 48 per cent of all information breaches included the personally identifiable information of customers; and 37 per cent of all breaches included the personally identifiable information of employees. The likelihood of a breach occurring is fairly high. Although the average loss is noted as $6.7 million, a worst case scenario can result in significant losses such as a recent loss of City of Hamilton with roughly $8 million in incident response, that is considered insurable losses, and additional $34 million for the rebuilding of the enterprise systems and associated mitigations. With a total impact of $42 million.	The City has employed a Corporate Information Security Officer since 2018 who ensures the cyber security controls are in place across the city to mitigate the risk of cyber attacks. During that time the cyber security team has matured and grown and has implemented the processes and technologies to enhance cyber security defenses in the City. This includes governance and risk management activities such as: the Cyber Security Administrative Directive, and the supporting Standards and Specifications; the delivery of cyber security awareness sessions and regular phishing tests with all staff; and the performance of cyber security risk assessments against all technology projects and initiatives. Cyber security technologies operating at the City include: regular vulnerability assessment testing throughout the City; managed detection and response technologies to detect, assess, mitigate and respond to attacks in real time and on a 24/7 basis; and an identity and access management program that enhances, simplifies and manages access that all staff have to information resources within the City. The City also has cyber liability insurance subject to deductibles and exclusions.							
Historical information regarding financial losses as a result of cybercrime is limited. Based on a 2024 industry study estimating the average cost of per breach could be $6.7 million CAD, however the City of Hamilton has experienced $42 million of costs to this date in regard to their recent ransomware attack. As such, a maximum financial risk exposure of $42 million has been estimated.			*$42.0*	*3*	*3*	*9*	*Medium*	*$10.5*	*$21.0*
REVENUE AND EXPENDITURE VOLATILITY									
Pandemic									
	The City's revenues can be severely impacted by a pandemic and restrictions resulting from public health guidance. Pandemics also result in additional costs for municipalities, including enhanced cleaning and personal protective equipment. Further to this, economic downturns negatively impact municipal user fees as a result of less spending per capita and/or decisions by City Council to strategically reduce user fees in order to lessen the impact of the economic downturn on the citizens. The budget shortfall as a result of the pandemic in 2020 was $152.9 million, and in 2021 was $152.0 million. This amount decreased to $97 million for 2022, however the long-term effects of the pandemic continue to impact some industries, such as public transportation. The largest impacted areas from a long-term standpoint have been Edmonton Transit Systems. Studies from organizations such as Gavi - The Vaccine Alliance, show that there is about a 2 percent chance of another COVID-19-like pandemic occurring each year. While the probability of another pandemic happening in the short-term is low based on studies, the long-term impact of the pandemic on economic fluctuations is probable.	In the event of a pandemic or significant event impacting City's revenues streams, Administration would advocate for financial support through other levels of government and implement expense management strategies. Funds would be redirected from capital where possible, without worsening the existing economic situation.							
Based on the above factors, the City is estimating an exposure as a result of a pandemic and/or economic fluctuations at $150 million.			*$150.0*	*2*	*3*	*6*	*Low*	*$7.5*	*$37.5*
Inflation, Fuel & Utilities Price Increases									
	The City is exposed to fluctuations in non-personnel expenses, largely due to increases in inflation (materials, contractors, consulting, etc.), fuel, and utility costs. Annual average MPI inflation from 2009 through 2023 was 2.1%. MPI inflation was 4.4% in 2022, more than double the 15-year historical average. MPI inflation is projected to average 2.1% in 2024. On August 14, 2024, Administration presented report FCS02478 Financial Stability: Addressing Budget and Growth Challenges to Executive Committee, which stated that the structural budget pressures arising from fuel, parts inflation and facility maintenance inflation to be approximately $23 million in the current 2023-2026 operating budget. The City purchases fuel that is exposed to market price volatility which has increased since the pandemic and resulting global uncertainties. This results in fuel budgets that are difficult to predict and actual costs that may vary significantly from budget. The City purchases approximately 42 million litres of fuels annually. Over the past 13 years, the largest annual unfavourable hedged variance from budget was $7.3 million in 2022 (gross fuel costs were $18.8 million unfavourable). This compares to the largest annual favourable hedged variance of $5 million in 2021 (gross fuel costs were $0.9 million favourable). In addition to the outlined costs above, the City is also subject to these risks surrounding other non-personnel related costs that it incurs each year.	The City includes estimates for increased inflation, fuel and utilities in its proposed budget based industry experts and best estimates.							
On August 14, 2024, Administration presented report FCS02478 Financial Stability: Addressing Budget and Growth Challenges to Executive Committee, which stated that the structural budget pressures arising from fuel, parts inflation and facility maintenance inflation to be approximately $23 million in the current 2023-2026 operating budget.			*$23.0*	*3*	*3*	*9*	*Medium*	*$5.8*	*$11.5*

Risk Analysis and Financial Risk Exposures - Detailed
(in millions of $)

Revenue Volatility									
	Due to the economic and political environment, there is risk that the City receives lower than budgeted non-tax levy revenues. In 2023, Edmonton Transit Services experienced $11.7 million less revenue than initially budgeted, and is forecasting $13 million less than budgeted for 2024. This decrease is attributed to shifts in fare purchasing behaviour and related changes in travel patterns, including increased demand for discounted / subsidized fare products and hybrid work. Furthermore, in 2023, the Parks and Road Services branch saw $6.8 million less revenue than initially budgeted for permit fee revenue, and is estimated $6.0 million less than budget permit revenues in 2024. The decreased revenues are primarily from the On-Street Construction and Maintenance (OSCAM) area.	The City is able to mitigate the volatility demonstrated in revenue through methods such as increasing user fees, tax-levy, and advocacy from the government. While multiple mitigations exist, they are not easy to implement quickly due to limited tax tolerance and affordability issues with increasing fees. Additionally, advocacy can take a long time. Due to the timing of solutions, there could be an impact to the reserve as solutions are being worked on and implemented.							
Considering the revenue volatility experienced with transit fare revenues and permit fees (OSCAM), the maximum revenue exposure used for this analysis is approximately $20 million.			*$20.0*	*3*	*3*	*9*	*Medium*	*$5.0*	*$10.0*
Franchise Fees									
	Historically the largest fluctuations in franchise fees have been experienced through the ATCO natural gas franchise fee. Natural gas franchise fees are calculated based on a percentage of distribution revenue earned by ATCO Gas for delivery and transmission of natural gas to customers within the municipality. The fluctuation in distribution revenue has two components, consumption and rates. The consumption is variable depending on the weather. When the weather is warmer, less natural gas is consumed and when demand decreases the franchise fee revenue experiences a corresponding decrease. There is also a seasonality factor in consumption as more natural gas is required in winter than in the summer. The revenue can also be impacted by delivery revenue rate changes implemented by ATCO. This was seen in 2018, when ATCO Gas updated the delivery revenue rates resulting in an $8.5 million reduction in the 2018 gas franchise fees. In the past 10 years, the City has experienced a maximum unfavourable variance for natural gas franchise fees of $11.3 million in 2023, and a maximum favourable variance of $6.1 million in 2020, and an average unfavourable budget variance of $0.9 million over that same time period. On November 13, 2024 City Council approved a new franchise fee formula for the EPCOR electricity (power) franchise fee, based on a percentage of distribution revenue similar to the existing ATCO natural gas franchise fee. Inherently, the new electricity franchise fee revenue is subject to the same revenue fluctuation risks of consumption and rates. Based on historical fluctuations in electricity distribution revenues, there is potential for electricity franchise fees to be lower than planned by $1 - $2 million.	Departments have the ability to control spending to a certain extent and therefore offset the reduced revenues with lower costs. The City has the option to increase the gas franchise fee rate and electricity franchise fee rate in accordance with the franchise fee agreement and with Alberta Utilities Commission (AUC) approval to the maximum allowable rates of 35 per cent and 20 per cent respectively. The City has been at the maximum allowable rate for the natural gas of 35 per cent since January 1, 2019, and so an application would have to go through the AUC to request approval to exceed this rate. On November 13, 2024 City Council approved a rate of 17.65 percent for the electricity franchise fee rate.							
The largest annual shortfall to date for the natural gas franchise fee was $11.3 million in 2023. As a result of the new franchise fee formula for the electricity franchise fee, an additional amount of $2 million has been estimated as a potential exposure for electricity franchise fee revenue volatility, for a total maximum exposure of $13.3 million.			*$13.3*	*3*	*4*	*12*	*Medium*	*$3.3*	*$6.7*
Snow and Ice Control									
	The City is also at risk for costs associated with blizzards and other severe winter storms. Snowfalls are highly unpredictable and actual costs can vary substantially from budget. Over the past 10 years (2013 - 2023), the Snow and Ice Control program has experienced variances from budget ranging from a deficit of $20 million in 2014 to a surplus of $26 million in 2016. While the largest deficit in the past 10 years was $20 million in 2014, the area has seen favourable variances since 2016, with the exception of a $1 million unfavourable variance in 2020.	The Snow & Ice Control expense budget has increased over the years from $47 million in 2011 to $67 million in 2024. Departments have the ability to control spending to a certain extent and therefore can partly offset the higher costs.							
Historical deficits in the Snow & Ice Control program are a good indicator of future financial impacts, given the highest deficit of $20 million experienced in the last 10 years, there is a potential financial exposure of up to $20 million in any one year. With the budget increase for this program since 2011 (from $47 million in 2011 to $67 million in 2024) the financial exposure has been adjusted to $15 million.			*$15.0*	*3*	*4*	*12*	*Medium*	*$3.8*	*$7.5*
Road Maintenance									
	The City of Edmonton maintains and cleans City roads all year round. City crews sweep sand, dirt and debris from city boulevards, and perform road maintenance work. Due to weather impacts (i.e. heavy snowfall resulting in more sand clearing required in the spring) and unanticipated road maintenance work there historically has been volatility in road maintenance expenses. Over the past ten years, the largest annual unfavourable variance from budget was $7.3 million, with the greatest favourable variance being $1.2 million, and the average variance being $2.3 million unfavourable.	Departments have the ability to control spending to a certain extent and therefore can partly offset the higher costs.							
Over the past 10 years the largest unfavourable budget variance related to road maintenance was $7.3 million, therefore estimated the financial exposure at $7.3 million.			*$7.3*	*3*	*3*	*9*	*Medium*	*$1.8*	*$3.7*
Realty Tax Appeals & Adjustments									
	Realty tax appeals and adjustments are municipal tax adjustments for the current year resulting from Assessment Review Board (ARB) decisions, assessment corrections and tax exemption status changes. Appeals and adjustments have a potentially large degree of fluctuation due to the unpredictability of the appeals process. In the last 10 years, losses as a percentage of revenue have averaged approximately 0.6 per cent of total tax revenue; however, during periods of economic volatility loss rates can increase significantly. This fluctuation is managed through careful planning and increased in budget as necessary. Over the past 10 years the largest annual unfavourable variance from budget was $5.0 million in 2015. In Edmonton's current economic circumstances, it is possible that appeals may increase significantly owing to a combination of real estate market volatility, economic constraints and higher property taxes; which could result in as much as a $10 million unfavourable variance.	Fluctuations in assessment appeals and other adjustments to the assessment roll are driven by two primary factors: 1) market conditions - mitigated through proactive pre-roll consultations and actively monitoring appeals and possible changes in exemption status; and 2) annual budget increases - mitigated through regular review and adjustment as part of the monthly forecast/variance explanation and annual budget review processes. Even with appeal volumes and results remaining the same, tax losses will increase each year simply because the tax levy has increased, which generally leads to the forecast for revisions losses increasing on an annual basis.							
Over the last 10 years the largest unfavourable budget variance related to realty tax appeals and adjustments was $5.0 million (2015). Considering the economic constraints and higher property taxes it is possible that this amount continues to increase. There has been a trend of higher property taxes leading to more homeowners defaulting on payments outside of the scope of what has originally been budgeted. Considering the outside financial pressures on homeowners, and the proposed property tax increases, the maximum financial exposure is assessed as $10 million.			*$10.0*	*3*	*3*	*9*	*Medium*	*$2.5*	*$5.0*

Risk Analysis and Financial Risk Exposures - Detailed
(in millions of $)

Personnel									
A large portion of the City's personnel costs can be attributed to employees under 7 different unions. The City's priority is to reach a fair deal with each Union that supports delivering excellent services to Edmontonians. Salary settlements and arbitrations can have a significant impact on the City's budget, with an increased risk when agreements are outstanding for multiple years, requiring the settlement to be applied retroactively. The City includes estimated settlement costs for each union in its budget, but prolonged negotiations can lead to discrepancies between these estimates and the final settlement amounts, due to changing economic conditions and other unforeseen factors. In 2023, the City experienced an unfavourable budget variances of approximately $44 million due to retro impacts of salary settlements. Over the past few years, post pandemic, the City has experienced increased instances of overtime across many branches, primarily due to higher WCB claims, long term disability coverage, vacancy coverage, or higher staffing due to increased demand for services in some areas. In 2024, Edmonton Transit and Fire Rescue Services are projecting unfavorable budget variances due to overtime of approximately $14 million combined (ETS - $8 million; Fire Rescue $6 million).	The City includes personnel cost increases in its 4 year budgets, including a reasonable amount for salary settlements based on analysis and estimates from the City's labour negations group. The City is active in addressing the health and wellness of employees and is proactive in identifying current or future potential areas of concern to help minimize the risk of illnesses, injuries, and incidents. There are a variety of health and wellness resources available for employees to help promote healthy living, including the mental health aspect.								
Increased personnel costs due to higher than expected settlements and increased overtime in recent years has had impacts as high as $60 million (approximately $44 million retro payments and $14 million overtime).		*$60.0*	*3*	*3*	*9*	*Medium*	*$15.0*	*$30.0*	
Post-employment Benefit Costs									
The City has post-employment benefit costs which include the continuation of benefits for employees on long-term disability, and the City's share of pensioners' eligible medical, dental and other obligations. The liability is adjusted annually based on actuarial assumptions and calculations that are received at year-end. There is no set annual budget assigned to post employment benefits. In the past 10 years the largest unfavourable variance was $4.5 million in 2016, with an average change of $1 million favourable.	The City is active in addressing the health and wellness of employees and is proactive in identifying current or future potential areas of concern to help minimize the risk of illnesses, injuries, and incidents. There are a variety of health and wellness resources available for employees to help promote healthy living, including the mental health aspect.								
The estimated cost to the City for the continuation of benefits for employees on long-term disability, and the City's share of pensioners' eligible medical, dental and other obligations will follow an upward trend because of the inflationary costs on benefits as well as the increasing numbers of staff on disability. The City's largest unfavourable exposure has been up to $4.5 million over the past 10 years.		*$4.5*	*3*	*3*	*9*	*Medium*	*$1.1*	*$2.3*	
Legal Claims, Project Risks and Uninsured claims									
The City faces litigation cases each year and typically manages the claims paid out within existing budgets. Over the last five years, the City has paid out approximately $22 million in total uninsured claims. In recent years the City has received more significant claims that are still unsettled. The City continues to be involved in a number of larger and more complex projects that inherently expose the City to greater financial risks. These risks could come in the form of claims against the City and/or cost implications as a result of project challenges. To measure the City's exposure to potential cost impacts due to project challenges and legal claims, 0.5 percent and 1 percent of the 2024 tax supported operating and capital budgets respectively have been used to quantify the City's potential financial exposure. The 2024 operating expenditure budget is $3,612.7 million and the annual average capital budget from 2023-2026 is $2,238.4 million, which results in approximately $18.1 million and $22.4 million in potential exposure respectively, or $40.5 million total potential exposure. The Risk Management program has identified additional financial risk exposure related to increase in frequency and severity of damages to City owned properties (e.g. fire, water damage, vandalism, etc.) and injury settlements primarily due to a number of external factors such as growth, inflation, aging infrastructure, impacts of climate change, change in legal environment, recent court decisions/higher appetite for litigation as well as insurance market, higher exposures such as vandalism, terrorism, cyber attacks, etc. This exposure is currently estimated at $2.5 million. Based on existing claims outstanding and the number of large complex projects the City is involved with, a total financial risk exposure of $43 million is estimated.	The City mitigates the financial risk of legal claims and contractor disputes through budgeting for potential losses in the operating budget, including contingencies for unforeseen costs in the capital project budgets, and through risk management strategies implemented in insurance policies, construction contracts, and ongoing bolstering claims handling to mitigate the increase in injury and other third party and first party settlements.								
Based on existing claims outstanding and the number of large complex projects the City is involved with, $43 million is estimated financial exposure for the City.		*$43.0*	*3*	*2*	*6*	*Low*	*$2.2*	*$10.8*	

Risk Analysis and Financial Risk Exposures - Detailed
(in millions of $)

Contaminated Sites									
As of December 31, 2024, the City owns land valued at $2.1 billion, held for various purposes, including surplus lands held for resale. Should the City determine land is contaminated or becomes responsible for any contamination, the financial risk exposure may be significant and the City would need to recognize the estimated cost of the remediation. In order to mitigate this risk and manage the City's contaminated sites financial exposure, the City established the Contaminated Sites Management Program (CSMP). Although not all sites have been evaluated, sites with the highest risk for contamination are currently managed within the program. The number of sites evaluated by the program increases annually as the evaluation process of the City's land continues. To date, 291 sites have been added to the CSMP for evaluation. Eighty-eight (88) sites are currently known to have contaminant concentrations exceeding guidelines and are the responsibility of the City. A financial liability in the amount of $21.5 million (2023) was recorded for 13 of these sites, some of these liabilities will be resolved in 2024. The estimated financial exposure of the 75-77 remaining sites is $160.8 million.	The City has existing processes that help identify and manage City-owned contaminated sites. If contaminated sites are identified early enough and the cost can be estimated with an appropriate level of certainty, the City will attempt to incorporate the cost impacts into the operating and/or capital budget. The likelihood of regulators requiring the City to take significant additional actions over and above the City's planned management is low. The City's contaminated sites management has more oversight than in the past with the implementation of the CSMP, significantly mitigating the risk of this happening.								
The maximum potential financial exposure for the City, related to contaminated sites as described above, is estimated to be $160.8 million based on current information and records.		*$160.8*	*3*	*2*	*6*	*Low*	*$8.0*	*$40.2*	
Another type of contaminated sites exposure is within the category of "unexpected contamination". Historical practices that were considered acceptable in the past, but are now known to cause contamination or changes to environmental legislation are examples of situations that may result in unexpected contamination requiring remedial measures. Contractual obligations with the sale of a site can also lead to a liability to remediate the contamination. Finally, an unexpected spill could lead to a contaminated sites event and an unplanned expense. The maximum exposure that the City has experienced regarding these types of circumstances since the implementation of the Contaminated Sites Management Plan is up $3 million.	If an unexpected contamination occurs, the City will attempt to incorporate the cost impacts into the operating and/or capital budget. Where this is not possible, the added cost can impact the annual financial results and impact the FSR.								
Based on historical experience, the financial exposure related to unexpected site contamination is $3 million.		*$3.0*	*3*	*3*	*9*	*Medium*	*$0.8*	*$1.5*	
CAPITAL FUNDING & DELIVERY									
Grants									
The City of Edmonton operates in an environment of continual financial uncertainty around the security and stability of provincial and federal grants. Grant funding is an essential component of the City's Budget. In the 2023 - 2026 Capital Budget cycle, approximately 38 per cent ($3 billion) of the City's capital projects were dependent upon grants. An unexpected reduction in capital grant funding / or grant funding not keeping pace with inflation may result in the City's need to reprioritize or to defer capital projects, and / or to take on additional debt. The primary risks to the City's grant funding are: 1. reductions to capital grants in the annual federal and provincial budgets; 2. changes to grant funding cash flows by the federal or provincial governments; 3. changes in project costs due to inflation and other factors that grant programming and related funding does not account for, and; 4. late grant payments by the federal or provincial governments on the City's funding claims. Past economic conditions have significantly impacted grant revenue received from the Province. During times of low oil prices, the Province has realized lower non-renewable resource revenue, resulting in a reduced amount of grant funding provided to the City. A reduction in capital funding requires the reprioritization of capital projects, potentially resulting in deferring maintenance and replacement projects, increasing infrastructure deficits. In the recession of 2009-2010, capital grant funding was reduced by $109 million. From 2019 to 2023, the Alberta government reduced capital funding provided through the provincial Municipal Sustainability Initiative (MSI). Beginning in 2024, the Local Government Fiscal Framework (LGFF), which replaced MSI, provides capital funding to municipalities, but at levels below those prior to 2019. Given the current and forecast provincial budget deficits along with the forecast continued low commodity prices into the medium-term, there is the possibility of further reductions in Provincial capital transfers to Edmonton over the next 10 years. For example, Budget 2024 has forecasted a reduction in LGFF funding over 2025 and 2026 ($820 million in 2025-26 / $808 million in 2026-27). Also to note is that, currently, much of the funding over the next ten years (both federal and provincial) is specifically targeted for public transit, green initiatives, social infrastructure and housing. Constraints on grant funding make it challenging for the City to fund renewal and growth infrastructure that often does not fit within the funder's priority areas. Moreover, neither federal or provincial funding programs take into account inflationary pressures or other project cost increases. In other words, project specific grants provide a set funding amount, as opposed to a contribution that provides a set percentage of project costs that would assist the City in dealing with external market pressures (e.g., inflation) and reduce the necessity to take on additional debt financing.	Some risk is mitigated by funding agreements that identify specific dollar amounts, such as Public Transit Infrastructure Fund and many federal grants. When funding is reduced unexpectedly, the City revisits the capital plan to re-prioritize and/or delay projects not yet started, and potentially borrow to complete key projects in accordance with the City's Debt Management Fiscal Policy. The City works diligently with other order of government to secure funding through grant funding contribution agreements. These documents formalize the requirements of each party and funding amounts. However, other order of governments can make changes to legislation to adjust amounts, as recently occurred with changes in MSI and LGFF.								
Based on historical reductions, the most recent review of the LGFF funding and anticipated payment reductions, and the significant portion of the capital budget funded through federal and provincial grants, it is estimated that the total financial exposure to grant revenue could be $100 million per year.		*$100.0*	*3*	*2*	*6*	*Low*	*$5.0*	*$25.0*	

Risk Analysis and Financial Risk Exposures - Detailed
(in millions of $)

Investment Earnings									
	Historically investment earnings have been significantly impacted by economic conditions. The most important factor of investment risk and return is asset mix; that is, the proportion of fixed income (bonds) to equities (stocks) within a portfolio. The City has established an asset allocation policy for each of its investment funds. The only City funds that have any allocation to equities are the Ed Tel Endowment Fund at 60 percent and the Balanced Fund at 30 percent. Over the last 10 years, the largest negative variance of investment earnings versus budget was $24 million in 2022. If a similar event were to occur today, based on higher fund balances due to growth in assets and considering the same mix of assets, the financial impact could be up to $26 million lower than budgeted investment earnings.	The City of Edmonton has rigorous policies and procedures in place to maximize investment returns at a prudent level of overall risk. These policies and procedures guide the City's Investment Committee in managing and building upon the City's financial assets to help sustain Edmontonians' quality of life. As per a budget strategy initiated in 2010, fluctuating revenue streams such as investment earnings have been redirected to fund capital in order to eliminate the impact of the volatility of investment earnings on the operating budget. The risk has shifted to capital where the City has more flexibility to manage the reduced funding by reprioritizing or deferring projects. However, shifting the risk to capital may compound funding challenges for deferred maintenance, infrastructure replacement and infrastructure growth, areas that already deal with other funding constraints. When capital funding (i.e. investment earnings) are reduced unexpectedly, the City revisits the capital plan to re-prioritize and/or delay projects not yet started, and potentially borrow to complete key projects in accordance with the City's Debt Management Fiscal Policy.							
Based on historical information, the total financial exposure for investment earnings is estimated to be up to $26 million.			*$26.0*	*3*	*3*	*9*	*Medium*	*$6.5*	*$13.0*
Infrastructure									
	As infrastructure ages, its state and condition inevitably deteriorates, thus increasing its risk of failure. In most cases, infrastructure does not fail catastrophically, but gradually, allowing Administration to make decisions in advance of significant failures. Strategic investment in the renewal of infrastructure assets, helps to extend the life of the infrastructure, and helps to reduce the risk of failure, however, can not remove the risk completely. While Administration manages the risk of failure through strategic investment, outside influences, such as natural events, or third-party intervention could result in a significant, or catastrophic failure. The assets most at risk of failure due to outside influences are those assets already in a weakened state, or considered in poor or very poor condition. Approximately 10.5 per cent ($3.6 billion) of the City's assets are currently in poor or very poor condition. The risk of asset failure is difficult to estimate and involves a great deal of judgement, however the likelihood of a significant failure occurring is very low. Therefore, if 1 - 2 percent of these assets experience failure, this would represent a potential financial exposure between $36.4 - $72.9 million, or an average of approximately $54.7 million. Historically the City has not experienced significant critical infrastructure failures where they were not already protected through insurance.	The City closely monitors the condition of its assets, and strategically programs and prioritizes capital renewal investment to extend the life of assets where practical, reducing the percentage of assets in poor or very poor condition. Capital budgets are then prepared based on these priorities. When unanticipated emergent needs occur, priorities are shifted within the capital budget to accommodate urgent needs. The City could use debt to fund emergent capital expenditures in accordance with the Debt Management Fiscal Policy.							
The estimated cost to the City for immediate replacement of critical City infrastructure could be up to $55 million.			*$55.0*	*3*	*3*	*9*	*Medium*	*$13.8*	*$27.5*
LEVERAGE									
Credit Risk of Loans									
	Over the years the City has borrowed on behalf of external entities or provided loans directly in order to support initiatives with an overall benefit to the community. Although there are agreements in place with these entities that require repayment in order to fund the related debt servicing payments or repay the loan, the City still bears the credit risk of these entities. For example, in the case where the City has borrowed on behalf of an external entity, if the entity was no longer able to repay the City for use of the debt proceeds, the City would need to repay the annual debt servicing amounts using the City's funds and build the debt servicing payments into its operating budget. This includes loans to HomeEd, Explore Edmonton, Fort Edmonton Management Company, Winspear, Edmonton Catholic School Board, and Edmonton Soccer Association. The annual amount of loan payments related external entities projected at December 31, 2023 is approximately $4.3 million, excluding debt held by the City for Drainage infrastructure which is recoverable through a promissory note from EPCOR. Once the currently approved loans have been fully drawn the annual loan payments are forecasted to be up to $9.1 million. The City is also providing bridge financing to the Blatchford Renewable Energy Utility in the amount of $17 million as at the end of December 31, 2023. If the utility is not able to be financially sustainable in the long term and secure required grant funding the loan may not be repaid back to the City.	The City has agreements in place with these organizations that mitigates the risk of the loans to external entities. Longer term financial impacts would be addressed through the operating budget.							
The maximum financial exposure resulting from the inability in external entities to pay the City for debt borrowed on their behalf is estimated to be $26 million ($9.1 million related to external entities and $17 million for the Blatchford Renewable Energy Utility).			*$26.0*	*3*	*3*	*9*	*Medium*	*$6.5*	*$13.0*

Risk Analysis and Financial Risk Exposures - Detailed
(in millions of $)

Deficit Reserves

The City has leveraged its working capital in order to proceed with priority projects in advance of project funding. Larger projects include the Downtown Arena, Quarters downtown redevelopment, Belvedere and brownfield site redevelopment. The use of working capital for these projects has been segregated and reported within the Downtown, Quarters, and Belvedere Community Revitalization Levy (CRL) Reserves, the Interim Financing Reserve and the Brownfield Redevelopment Reserve.

The CRL reserves will be repaid through future incremental property tax revenues within the community revitalization zones. As at December 31, 2023 these reserves had a combined accumulated deficit balance of $46.2 million. Based on the annual CRL update provided to Executive Committee on March 20, 2024 (UPE0223 2024 Community Revitalization Levy Update - Downtown, the Quarters, Belvedere) all three CRL reserves are expected to end in deficit positions by the end of their CRL terms. The Capital City Downtown CRL reserve is expected to have a shortfall of $75.9 million over the 20-year CRL term ending 2034. The Quarters CRL is expected to have a shortfall of $47.9 million over the 20-year CRL term ending 2031. The Belvedere CRL is expected to have a shortfall of $12.9 million over the 20-year CRL term ending 2032. The combined deficit balance at the end of the CRL terms is expected to be $136.7 million.

The Interim Financing reserve will be repaid through future contractual non-tax revenues. As at December 31, 2023, the reserve had a deficit balance of $34.8 million mainly related to the use of working capital for the downtown arena on an interim basis. The deficit reserve balance peaked in 2019 at $40.6 million. A prolonged economic slowdown could result in lower than expected contractual non-tax revenues (ticket surcharges and lease revenues). Assuming that 25 percent of the reserve balance in the peak year could not be offset with contractual non-tax revenues, the financial exposure to the City could be $10.2 million.

The Brownfield reserve will be repaid through future incremental municipal tax uplift from the redevelopment and remediation of Brownfield sites. As at December 31, 2023 this reserve had a deficit balance of $2.0 million. The deficit forecast for this reserve is dependent on the number and dollar amount of new agreements for Phase III Brownfield sites. The reserve is projecting a deficit balance of $5.2 million as at December 31, 2024. Slower economic conditions could result in lower than expected redevelopment and incremental property taxes from brownfield sites. Ultimately, if future revenue streams are not realized or conditions of the agreement are not met, payments are not made to the developer and hence repayment of the reserve is delayed.

As a risk mitigation strategy in leveraging the City's working capital to advance corporate initiatives, it is Administration's position that negative reserves only be established if future funding to repay the use of City working capital has been identified at the time of creating the reserve. This is reflected in City Policy C217B – Reserve and Equity Accounts.

The CRL areas are constantly monitored and with ongoing updates to revenue forecasts based on development activity and market conditions. Council has directed Administration to explore several options to extend the timeframe and/or boundaries for the existing CRL areas. This could add new catalyst projects to the plans and accelerate development in the CRL areas. Administration is currently analyzing the impacts of these potential changes. That being said, based on the most recent annual CRL update provided to Executive Committee on January 20, 2024, all three CRL reserves are expected to end in deficit balances by the end of the CRL term. Ongoing municipal tax revenues would likely be used to cover these shortfalls until the deficit reserves are repaid.

The Interim Financing Reserve existing deficit is to be offset with dedicated non-tax revenue sources, some of which are guaranteed through contract. Any shortfall of these revenues sources would need to be addressed through alternate funding strategies in the long-term.

Ultimately, if funding sources for deficit reserves were unable to offset existing deficit balances (i.e. use of City working capital), the City would use alternative long-term funding strategies to offset existing deficits, and limit the use of the FSR.

CRL reserves are expected to have a combined deficit balance of $136.7 million at the end of their terms. The Interim Financing Reserve deficit peaked in 2019 at $40.6 million and the Brownfield reserve is projected to have a deficit balance of $5.2 million at the end of 2024. Assuming that budget funding sources for the Interim Financing Reserve (contractual non-tax revenues) and the tax uplift required to repay the Brownfield Redevelopment Reserve were not sufficient to fund 25 per cent of these deficit reserves, the financial exposure of the City could be up to $11.5 million.	*$148.2*	*3*	*2*	*6*	*Low*	*$7.4*	*$37.1*