

City of Edmonton
Edmonton Police Commission

Funding Formula Options Analysis

July 12, 2023



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As we seek reconciliation and a new relationship with First Peoples in Canada, one based on honour and respect, we acknowledge their oppression and struggles for justice. Multiple people have contributed to the development of this report, each of us residing in a different place across the country, and each of these places have history, traditions, and stories that should be honoured.

Headquarters of the Edmonton Police Commission and Edmonton Police Services are built and exist on the traditional lands that honour Treaty 6, and are traditional meeting grounds and home for many Indigenous Peoples, including the Cree, Tsuut'ina, Saulteaux, Niitsitapi(Blackfoot), Iroquois (Haudenosaunee), Dene, Inuit, Nakota Sioux, and Métis Nation of Alberta, Region 4. Both organizations, along with PwC, are grateful to have the opportunity to work in the community and on these traditional lands. We are not here to simply utter names and move on, we are here to recognize our point of departure: we start by honoring our hosts, the struggles they have endured, and continue to endure to this day and everything that we have been privileged with on their account.

Notice to reader

This report is issued by PricewaterhouseCoopers LLP (“PwC”) for the exclusive use of the Edmonton Police Commission (the “EPC” or the “Commission”) in connection with its assessment of the funding formula for the Edmonton Police Service (“EPS”).

Our work did not constitute an audit conducted in accordance with generally accepted auditing standards, an examination of internal controls nor attestation nor review services in accordance with the standards established by the Canadian Institute of Chartered Professional Accountants. Accordingly, we do not express an opinion nor any other form of assurance on the financial or other information, or operating internal controls, of the Project. Further, this report does not constitute an opinion as to legal matters, including the interpretation of the Police Act or any other similar matters.

Our work is based primarily on the information and assumptions listed in the body of this report. While we read information from various sources, we did not perform checking or verification procedures except where expressly stated in the report to form part of the scope of our work. Our work and commentary is subject to assumptions, which may change with the benefit of further detailed information. We make no representation regarding the sufficiency of our work and had we been asked to perform additional work, additional matters may have come to our attention that would have been reported to the Commission.

Some of the documents and figures we reviewed were produced by third parties. We did not corroborate or verify these documents and figures with these parties. It is outside the scope of our review to evaluate the methodology used to conduct independent studies; therefore, we have accepted the information as presented, including conclusions.



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Executive Summary

Purpose and Scope of PwC's Engagement

Edmonton City Council requested the Edmonton Police Commission (EPC) to identify options for adjusting the policing services budget formula based on objective and reasonable criteria that can be consistently applied.

A Working Group represented by the City of Edmonton Administration, EPC and the Edmonton Police Service (EPS) has identified categories of options to be examined, including the following:

- Alternatives to using population growth rates that are in the current budget formula based on demand for calls, crime severity and other public safety outcomes
- Applying affordability limits
- Applying cost efficiency factors
- Service packages and grants
- Salary Settlements

These options are outlined on the following page.

EPC engaged PwC to conduct an independent review of the police funding formula options produced by the Working Group. PwC has been tasked to perform the following services:

- Conduct an assessment/impact to EPC related to draft options produced by the Working Group with respect to the requirements set out by Council in its 2022 motion to review the current policing budget formula.
- Provide independent advice to Commissioners on how each option, or combination of options, if applicable, could impact the police budget at one, three, and five year intervals.
- Provide objective assessment on the complexity of the proposals and the possible impacts on the Commission with respect to commonly understood municipal budgeting and accounting principles. (i.e. how easy are they to understand and implement?)
- Provide thoughts on potentially unintended outcomes impacting the Commission, police service and their budget.
- Develop assumptions with respect to factors such as population growth, salary settlements, crime rates, city spending overall, city spending in areas detailed in the existing policy, or any other factor or metric that may be developed by the Working Group. Assumptions will need to be developed in a manner that is objective, reasonable, and defensible.

In addition to these services, PwC also developed a dynamic model to share with EPC. This model deconstructs the current formula, outlines the options, and has the ability to show the impact of applying said options to the ratio and funding values.



Framework and Analysis

The options analysis has been conducted on a qualitative and quantitative basis. The qualitative analysis is based on a framework that is consistent with the City’s budgeting principles and addresses adaptability, impartiality, predictability/stability, and appropriate governance. Each option is scored out of a maximum total score of 10.

The pillars of the framework and their descriptions are outlined below:

Core Pillars		Description of Pillar
1	Adaptable	Ability of the option to evolve with legislative changes (including policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome
2	Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.
3	Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.
4	Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula
5	Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act

The financial analysis is based on a financial forecast model whereby each option is compared to the existing formula (baseline scenario) that is dependent on population growth rates. The model is flexible and dynamic and allows for each option to be modelled based on a set of forecast assumptions, including some with trend analysis. The base case reflects recent retroactive pay settlements, no EPS revenue growth and constant growth rates for inflation and civic expenditures. With each option, forecasted budgets at the one, three and five year intervals are developed, as well as the ratio of EPS expenditures to total forecasted civic expenditures, which under the current formula is capped at 30%.

PwC worked with the Commission throughout the study and presented draft findings to the Working Group. The assessment has been conducted without any conflict of interest with the EPC, the EPS and the Council of the City of Edmonton.

The funding values that were used in the model and serve as the foundation of the model and the analysis are shown in the snapshot.



Funding Formula Options & Alternatives:

Below is the list of options developed by the Working Group*. This is what the scenarios we have developed in the Excel Workbook are based on.

	Alternatives for factor G, as described in Attachment 1	Alternative mechanisms to achieve Statement 5, as described in Attachment 1, including efficiency factors;	A process to incrementally reduce the 30% factor as outlined in Procedure 8, and/or a process to maintain the 30% ratio through reductions, if necessary;	Narrower parameters for future service packages;	Consideration for one-time versus ongoing increases in provincial and federal grants;	Language regarding options to address Edmonton Police Service salary settlements within the funding formula which are currently managed corporately.
1	Dispatched calls for service (EPS)	efficiency factor in formula, as dollar amount	reduce the 30% factor by some increment per year (i.e. 1%, 0.5%, 0.25%, etc.)	service packages not permitted during 4 year cycle; growth must be managed within funding allowances of formula	Where ongoing grant funding is for a specific EPS program, funding formula is not impacted	Incorporate salary settlements (personnel inflation) factor into formula. Mechanisms to address formula funding amounts above/below actual settled increases.
2	Non-dispatched calls for service (EPS)	efficiency factor in formula, as percentage amount (% of growth formula subtracted from formula)	re-base the ratio of the EPS budgeted net operating expenditures to civic department budgeted net operating expenditures after OP12 is completed. Use this % to replace the 30%.	service packages not permitted during 4 year cycle; emergencies are to be managed solely through EPS reserve	Where ongoing grant funding is for general EPS spending, funding formula is reduced by equivalent amount	Incorporate a fixed percentage personnel inflation factor into the formula (i.e. 2%). Any variances between these amounts and actual settlements (either above or below) are managed by EPS.
3	Total requests for assistance to EPS (EPS)	fixed % of total budget efficiency amount per year (% of base budget subtracted)		maximum allowable service package request per fiscal year outside formula - as dollar amount		Incorporate a fixed percentage personnel inflation factor into the formula (i.e. 2%). Any variances between these amounts and actual settlements (either above or below) are managed by Administration.
4	Crime severity index (statcan)	EPS budget reductions/efficiencies to be proportional to civic department budget reductions/efficiencies for each fiscal year		maximum allowable service package request per fiscal year outside formula - as % of total EPS budget amount		
5	Violent crime severity index (statcan)			Any growth funding for EPS service packages cannot exceed X% tax increase per year		
6	Non-violent crime severity index (Statcan)					
7	Number of police reported criminal incidents - total criminal code (excluding traffic) (statcan)					
8	Combination of 2 (or more) growth factors		**Please note that the options highlighted in gray are not modeled and/or analyzed as the options for service packages have no impact in determining the funding projections for EPS. Since OP12 has not been completed, we have not modeled or analyzed this option.			
9	Uniform crime reporting survey - incident-based crime statistics - total (all violations) - Edmonton CMA (statscan 35-10-0177-01)					
10	Uniform crime reporting survey - incident-based crime statistics - total all Criminal Code violations (excluding traffic) - Edmonton CMA (statscan 35-10-0177-01)					

Summary of Findings

A summary of the options assessment is provided below:

Alternatives to Population Growth (Factor G)

The Alternatives to Factor G as a direct substitute for population growth rates that are based on demand for calls and public safety outcomes are in general problematic on their own; These alternatives are, on the one hand, not necessarily indicators of required policing effort and, on the other hand, not best suited for civic budgeting due to their volatility and forecasting challenges. The application of these alternatives without any guardrails could result in budgets that exceed the rate of growth of civic expenditures at one extreme, or act to reduce police budgets to below their 2023 values. Of the Alternatives to Factor G considered, crime severity index is the highest rated option, but it still lags behind the qualitative rating of the current formula.

Efficiency Factors

The introduction of efficiency factors are more predictable than the Alternatives to Factor G from a budgeting perspective. Efficiency in the policing budget is important for several reasons including that the City has limited funding and competing priorities. There is also added pressure from the introduction of many public safety reforms that also require more funding to accomplish goals. Some of these initiatives also require capital investment, training and other start-up costs. Best practice suggests these initiatives be linked to Key Performance Indicators (KPIs) or strategic goals, otherwise the risk is that the strategy can be arbitrary and diminish the effectiveness of all services, regardless of their value.

Ratio Thresholds

Ratio limits on their own are not viewed as effective as a standalone budgeting tool, however they may work in combination with population growth forecasts to set limits to budget increases and stay within affordability limits.

Service Packages

The service package approach can be used to tie budgets to specific program goals. While it may serve to reduce or control costs as well as other approaches, it lacks appropriate governance.

Grants

The grant approach can be reasonably transparent but only with extensive negotiation. There can be bias introduced with co-mingling of services. As a result the grant approach is not viewed as a permanent budgeting solution approach but may work on an interim basis. Grants also need to be examined closely as most provincial and federal grants are designed to supplement funding in areas of interest and not as a replacement to municipal funding. Grants may also work in combination with other factors and/or as enhancements to the base formula.

Salary Settlements

This approach is compatible with settlements of collective agreements which is a major driver of incremental cost. Under this approach there is a risk that policing budgets would outpace those of civic budgets. There is also the issue of which party bears the risk associated with the unpredictability of forecasted settlements.

Combinations of Factors

Combinations of factors introduce more complexity to the civic budgeting process. However, some combinations, for example adjusting population growth with more refined forecasts of the Crime Severity Index, may be effective in a budget formula. The initial high-level modelling of this option has been based on forecasts that are based on a trend line; other approaches are possible and worthy of further exploration in combination with population growth.

Summary Analysis

Below is a summary of the qualitative and quantitative analysis. It provides the framework score and the ratio and funding values for Year 1 (2024), Year 3 (2026), and Year 5 (2028) for the options examined. Most of the options do not exceed the 30% ratio or the base case funding values in any of the years. These results are based on variable assumptions that are subject to change.

*denotes that the value is the total funding received by EPS.

Options	Framework Score	Ratio Values			Funding Values		
		2024	2026	2028	2024	2026	2028
Basecase - Population Growth	8	29.50%	29.06%	28.38%	\$439,800,000	\$459,600,000	\$478,100,000
Factor G - Dispatched Calls for Service	4	28.47%	26.26%	24.18%	\$404,800,000	\$394,000,000	\$382,700,000
Factor G - Non-dispatched Calls for Service	4	26.43%	21.70%	17.20%	\$346,700,000	\$286,700,000	\$221,800,000
Factor G - Total Requests for Assistance	4	27.62%	24.39%	21.34%	\$380,800,000	\$350,200,000	\$317,800,000
Factor G - Crime Severity Index	7	29.46%	28.78%	27.11%	\$435,700,000	\$454,300,000	\$473,400,000
Factor G - Violent Crime Severity Index	5	29.47%	28.84%	28.22%	\$436,300,000	\$455,700,000	\$475,900,000
Factor G - Non- Violent Crime Severity Index	5	29.45%	28.76%	28.07%	\$435,400,000	\$453,700,000	\$472,500,000
Factor G - Total Criminal Code	5	29.97%	30.23%	30.37%	\$453,200,000	\$489,000,000	\$525,000,000
Factor G - UCR-2 All violations	5	29.77%	29.65%	29.47%	\$446,200,000	\$475,100,000	\$504,200,000
Factor G - UCR-2 excluding traffic violations	5	29.86%	29.92%	29.89%	\$449,500,000	\$481,500,000	\$513,800,000
Efficiency Factor - in the formula as a dollar amount subtracted from the formula	4	29.49%	28.79%	27.95%	\$436,000,000	\$453,100,000	\$468,200,000
Efficiency Factor - in the formula as a percentage subtracted from the growth formula	4	29.58%	29.03%	28.33%	\$439,400,000	\$458,900,000	\$476,900,000
Efficiency Factor - in the formula as a fixed percentage subtracted from the base budget	4	29.47%	28.72%	27.84%	\$435,800,000	\$451,400,000	\$465,500,000
Efficiency Factor - Proportional to the Civic Department Net Operating Expenditure Budget	4	29.39%	28.49%	27.44%	\$433,000,000	\$445,600,000	\$456,200,000
Ratio Threshold - reducing ratio threshold by % every year	4	29.59%	29.06%	28.38%	N/A	N/A	N/A
Service Packages - maximum allowable SP request per fiscal year, outside the formula as a dollar amount*	4	29.59%	29.06%	28.38%	\$439,800,000	\$464,100,000	\$478,100,000
Service Packages - maximum allowable SP request/fiscal year, outside the formula as a percentage of total EPS budget*	4	29.59%	29.06%	28.38%	\$439,800,000	\$464,900,000	\$478,100,000
Service Packages - tax ceiling*	4	29.59%	29.06%	28.38%	\$440,800,000	\$460,700,000	\$479,200,000
Grants - grant funding for a specific EPS program*	5	29.59%	29.06%	28.38%	\$439,900,000	\$459,700,000	\$478,200,000
Grants - grant funding for a general EPS spending	5	29.58%	29.04%	28.35%	\$439,700,000	\$459,300,000	\$477,600,000
Salary Settlements - Incorporating Salary Settlements into the formula	4	29.50%	29.06%	28.38%	\$439,800,000	\$459,600,000	\$478,100,000
Salary Settlements - Incorporating a fixed percentage personnel inflation factor. Variances managed by EPS or Administration	4	29.54%	28.94%	28.21%	\$438,300,000	\$456,900,000	\$474,200,000



Project Objectives and Methodology

Purpose of the Engagement

PwC has been engaged to conduct an independent review of the police funding formula options produced by City of Edmonton Administration, EPC Administration and the police service (hereafter referred to as the Working Group) with respect to a motion passed by Edmonton City Council in 2022.

Scope of Work

PwC has been tasked to perform the following services (the “Services”):

- Conduct an assessment/impact to EPC related to draft options produced by the Working Group with respect to the requirements set out by Council in the motion.
- Provide independent advice to Commissioners on how each option, or combination of options, if applicable, could impact the police budget at one, three, and five year intervals.
- Provide objective assessment on the complexity of the proposals and the possible impacts on the Commission with respect to commonly understood municipal budgeting and accounting principles. (i.e. how easy are they to understand and implement?)
- Provide thoughts on potentially unintended outcomes impacting the Commission, police service and their budget.
- Develop assumptions with respect to factors such as population growth, salary settlements, crime rates, city spending overall, city spending in areas detailed in the existing policy, or any other factor or metric that may be developed by the Working Group. Assumptions will need to be developed in a manner that is objective, reasonable, and defensible. These assumptions will be used when conducting the assessment of proposed new options.
- Develop a report for tabling with Commissioners and Council that will be made a part of the public record

Approach & Methodology

PwC designed an iterative and agile approach to support the accelerated timeline for this assessment. The approach was concurrently executed over a 10-week period and included the following phases:

Phase 1	Gather, review and analyze data
Phase 2	Develop Financial Framework
Phase 3	Evaluate options against framework
Phase 4	Compile the data and analysis into a comprehensive report

For detailed descriptions of each of the stages, please refer to [Appendix A](#).

Contractual Independence

This assessment was completed without any conflict of interest with the EPC, the EPS and the Council of City of Edmonton.

PwC implements industry leading processes and procedures to meet the most stringent data privacy laws. These best practice processes and procedures are embedded in every facet of our operation, including any technology platforms leveraged in the services delivered to Edmonton Police Commission. All PwC personnel are required to complete security and privacy training when first hired and annually thereafter. In addition, PwC personnel must annually certify their compliance to PwC's security policies. All of these efforts are led by a dedicated Privacy Office and Ethics and Compliance group, which as part of their mandate review legislative and regulatory changes to ensure PwC remains compliant with the latest standards.

None of our team, or our contractors have been employed as members of the EPS or other public safety service providers in Alberta in the last 10 years. PwC has no vested interest in the outcome of the study. We truly are independent and impartial and have conducted this assessment with that in mind.

Although we have collaborated with the EPS at times on projects of mutual interest, we do not have any vested interests directly or indirectly with their budget processes, nor the processes or procedures of the Commission or City Council. Our focus at PwC is to help our clients solve their most challenging problems, in a professional and unbiased manner.

Our project team was very aware of the need for independence and impartiality when delivering this sensitive engagement. Our team has built internal controls to ensure that we are maintaining confidentiality and utilizing data with discretion to ensure that we work within the ethical boundaries defined by the firm.



Introduction & Background

City of Edmonton

The EPS serves just over **1.05 million people** in Edmonton, over an area of **765 square kilometres**. The City of Edmonton provides tax funding to the EPS, although the EPS also receives some funding from provincial government grants and internal revenue sources.¹

As the City's population continues to grow (+2.86% from 2021-22, figure 2), the capacity of the EPS will likely be expected to increase. Over recent years, the ratio of city-supported police budget relative to the City's total expenditures has risen to over 15% (figure 3). The role of policing in Edmonton has been changing, and associated funding has risen in recent years, so it is possible that these trends will continue.

<p>EPS Budget</p> <p>\$481,360,000</p>	<p>Total Tax Supported Budget</p> <p>\$3,068,933,000</p>	<p>Base Budget : Civic Expenditure Ratio</p> <p>29.38%</p>	<p>EPS Budget : Total Tax Supported Budget</p> <p>15.68%</p>
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Figure 1: EPS Budget Relative to the City Budget²

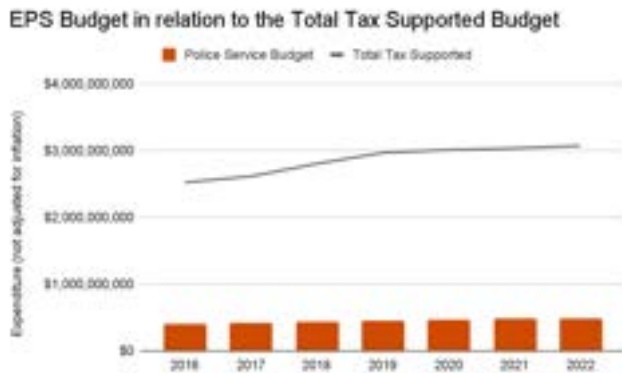


Figure 2: Edmonton Population

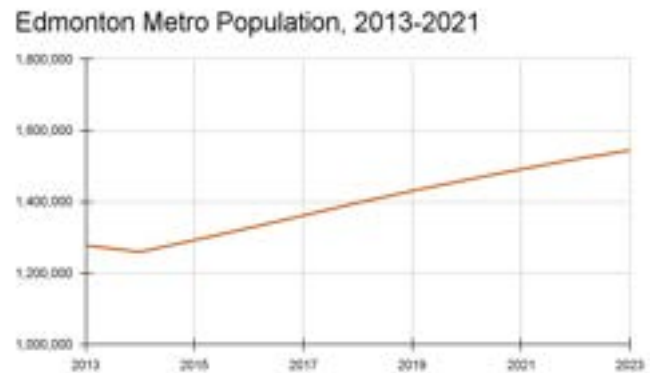


Figure 3: Historical Ratio values

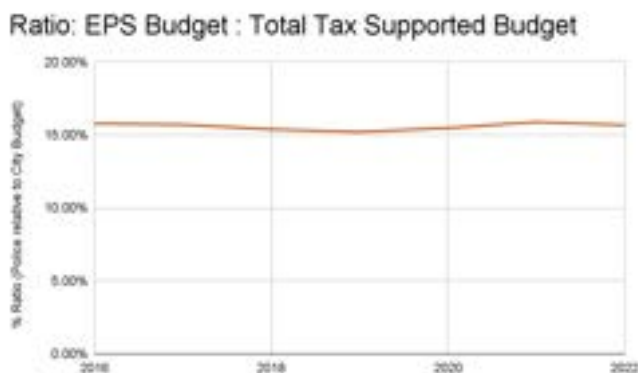
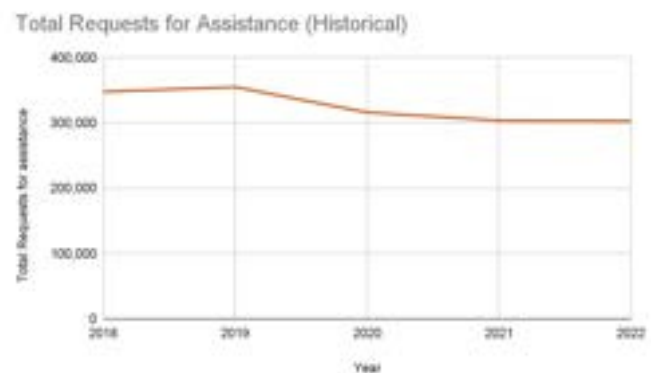


Figure 4: Total Requests for Assistance

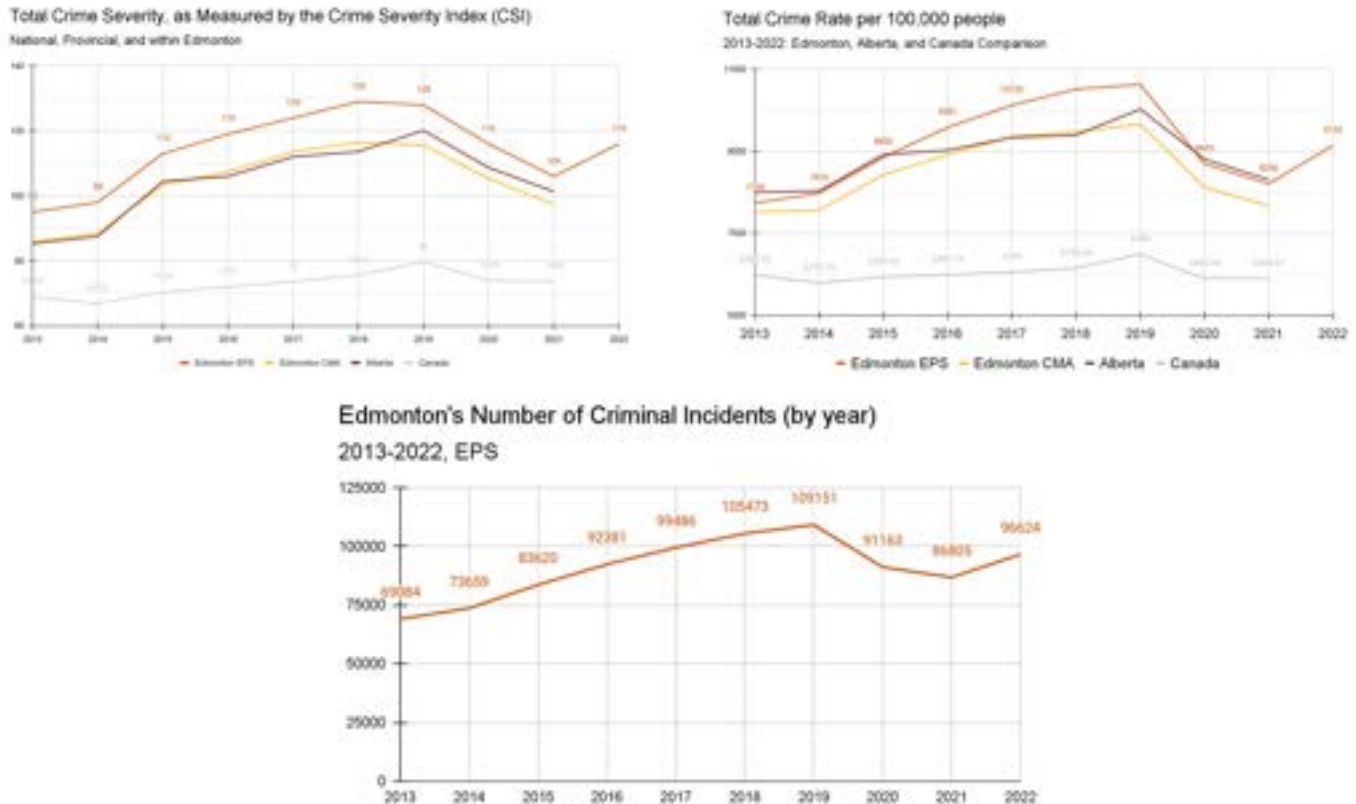


City of Edmonton

The City of Edmonton is home to **1.05 million people**, over an area of **765 square kilometres**. The City of Edmonton provides tax funding to the EPS, although the EPS also receives some funding from provincial government grants and internal revenue sources.¹

As the City’s population continues to grow (+2.86% from 2021-22), the capacity of the EPS will likely be expected to increase. The role of policing in Edmonton has been changing, and associated funding has risen in recent years, so it is possible that these trends will continue.

Figure 5: Crime Severity, Crime Rate, and Number of Incidents (Edmonton)²



About Edmonton Police Commission

The Edmonton Police Commission (EPC) is a non-political body appointed to represent the citizens of Edmonton. While the Commission is appointed by and accountable to City Council, they remain an unbiased body whose primary commitment is ensuring Edmonton remain a safe and vibrant city. The Commission acts as a board of governors, and cannot involve itself in day-to-day police operations or investigations.

They recognize that Edmonton is changing and that these changes affect how the city must be policed. By working closely with the Chief of Police and the EPS, they are able to create an essential balance between public accountability and police independence. The Commission also connects with the community through meetings and public forums. This allows them to respond to civilian concerns and expectations, and take the necessary steps to build a safer community for everyone.

Four main roles

1. Oversee the Edmonton Police Service
2. Help develop annual policing plan and budget
3. Respond to the Public’s concerns on policing matters
4. Build positive relationships with community partners

Responsibilities

Governance

Oversight

Leadership

Innovation

Municipal Budgeting Principles and Practices

The City of Edmonton’s municipal budget process consists of activities that encompass various stages in providing municipal services and deploying capital assets. These include development, implementation, and evaluation. The objective is to help decision makers make informed choices regarding these services and capital assets.

A strong financial foundation consisting of effective financial policies and long range financial plans can help the City of Edmonton adapt to changing landscapes. As much as strong financial principles and policies are necessary to the success of the municipal budgetary process, municipal budget approaches are continually evolving and changing.

The City of Edmonton has adopted a multi-year budgeting approach that is consistent with good budgeting practice. The benefits of a multi-year budgeting approach include:

- better accountability between funding plans and costs of services to Edmontonians;
- better aligns longer term goals and objectives with longer term funding plans;
- greater certainty for residents about the future direction of their taxes; and
- more efficient use of time and resources as the organization is not constantly preparing budgets.

Annual or other periodic updates provide Council the opportunity to adjust the budget to provide flexibility for events or circumstances that require funding. Other features in the City’s budget process that are reflective of practices recommended by the Government Finance Officers Association (GFOA) which represents public finance officials throughout the United States and Canada, are listed below.



Recommended Budget Practices from the National Advisory Council on State and Local Budgeting

Incorporates a long-term perspective	Establishes linkages to broad organizational goals	Focuses budget decisions on results and outcomes	Involves and promotes effective communication with stakeholders	Provides incentives to government management and employees
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The operating budget outlines the City's spending plan to implement Council's goals and priorities. It is based upon service area day-to-day operations of programs and services, such as the cost of water supply and wastewater collection and treatment, transit, garbage collection and disposal, recycling, parks, arenas, recreation programs, road maintenance, libraries and policing. Major operating expenses include salaries and wages, supplies, fuel, and utilities.

The majority of the City’s operating budget is funded through property tax revenue. Although other revenue streams are vital to providing services, they are limited in nature and frequently restricted by legislative and other requirements and market conditions. In recognition of the essential service of policing, the City’s base policing budget is funded from property taxes.

Funding formula principles for Edmonton policing services

The budgeting for Edmonton policing services is consistent with many of the municipal budgeting principles described above. Principles developed by the City of Edmonton administration for police services supporting funding formulas include the following:

- certainty and/or predictability are important to allow for long term planning;
- clarity of accountability while respecting the boundaries of the Police Act and the Municipal Government Act and the statutory function of police;
- acknowledgement that the police are part of Community Safety and Well Being where there is an interconnectivity and interdependency; and
- recognition of the Police as an essential service instrumental in the provision of Public Safety.

The funding for regular operating budgets of policing services is guided by policy C604A which states the funding formula will provide a predictable funding for each year within a four-year cycle in order to provide planning certainty. In addition, the formula is intended to provide funding to manage financial impacts of population growth, inflation and operating impacts of capital investment. The operating budget formula is not intended to fund major capital, salary settlements, significant changes in legislation, urban growth due to annexation, or operating impacts of police initiated capital projects.

Notwithstanding that the formulas for policing services in use by the City are largely the result of salaries and non-personnel costs that are adjusted for inflation and population growth, establishing police budgets has proven to be a complex and challenging task. The budgeting process has been influenced by incrementalism, and a Funding Formula in place was suspended by City Council in July 2020. City Administration officials worked with the EPS and the EPC to develop a replacement funding formula for Council's consideration:

- The formula calculates funding based on EPS net expenditures for that applicable fiscal year, and ensures that funding growth for EPS does not outpace that of other civic departments
- The funding formula will be used to adjust the budget based on a forecast, but the formula will also undergo a true-up adjustment every two years to reflect more up-to-date population growth and inflation forecasts, or actuals when available
- The design of the formula is to adjust the EPS budget for inflation and population growth - it is not intended to be an expansionary budget formula

The budget is capped by a ratio of 30% of civic expenditures - if the EPS formula budget exceeds this threshold, budget increases are to be reduced. The revised formula was approved for one year only.

City Council have since requested the Edmonton Police Commission to identify options for adjusting the formula based on objective and reasonable criteria that can be consistently applied.

Accordingly, the Commission has identified categories of options to be examined, including the following:

- Alternatives to using population growth rates that are based on demand for calls, crime severity and other public safety outcomes
- Affordability limits
- Cost efficiency factors
- Service packages and grants

With all of these options, public safety goals are to be maintained. The formula and the alternatives are described in more detail in the following pages.

The Funding Formula

The EPS Funding Formula was created to provide a predictable level of funding for each year within the four-year budget cycle, with a goal of making it easier for EPS and City Administration to plan stable programs and services.

The Funding Formula was guided by the following **principles**:

- The EPS Funding Formula will provide sustainable budget growth based on predictable indicators that best reflect police cost inflation and demand growth
- The EPS Funding Formula will provide funding certainty to allow for long-term budgeting and workforce planning.
- The EPS Funding Formula will be simple, consistently applied, and transparent.
- The EPS Funding Formula will recognize the need for agility through evidence-based analysis.
- The EPS Funding Formula will be reviewed, assessed, and refined for improvements prior to the start of each new Operating Budget Cycle (eg. every four years).

The formula is **intended** to manage the financial impacts of:

- ✓ Population growth,
- ✓ Inflation, and
- ✓ Operating impacts of capital for projects that are funded by the EPS.

The formula is **not intended** to provide funding:

- ✗ For major capital projects, including new buildings and facilities,
- ✗ For the EPS salary settlements,
- ✗ To address significant changes in legislation
- ✗ To address significant urban growth due to annexation,
- ✗ For operating impacts of police-initiated capital projects that are City Council approved,
- ✗ For operating impacts of significant City of Edmonton initiated capital projects that increase the demand for policing.

The formula is based on EPS' net expenditures for that applicable fiscal year. Growth is calculated on EPS expenditures and then added to EPS' base tax-supported funding.

For a given fiscal year, EPS's total tax-supported funding is equal to the sum of:

- Total tax-supported funding from the previous fiscal year,
- The EPS Funding Formula increment, and
- EPS salary settlements, which are held corporately and not provided under this policy, nor calculated under the funding formula.

What is the Formula?

(A) Tax Supported Funding

$$A = [B + C + D]$$

where,

- **A**: Total tax supported Funding for EPS for the applicable fiscal year
- **B**: Total tax supported funding for EPS for the previous fiscal year (**Net Operating Requirement**)
- **C**: EPS Formula as calculated
- **D**: EPS Salary Settlements

(B) Net Operating Requirements

$$B = B1 * (1 + B2 + B3 - B4)$$

where,

- **B1**: Base Budget
- **B2**: Population Change
- **B3**: Police Price Index
- **B4**: Efficiency Factor

(C) Formula for Growth

$$C = [(F * G) + (H * I)]$$

where,

- **F**: Personnel net expenditure budget for the applicable fiscal year (prior to any salary settlements)
- **G**: Population growth rate for Edmonton for the applicable fiscal year
- **H**: Non-personnel net expenditure budget for the applicable fiscal year
- **I**: Non-personnel inflation calculator (NPIC) for the applicable fiscal year

Funding Formula Options & Alternatives

Below is the list of options developed by the Working Group*. This is what the scenarios we have developed in the Excel Workbook are based of.

	Alternatives for factor G, as described in Attachment 1	Alternative mechanisms to achieve Statement 5, as described in Attachment 1, including efficiency factors;	A process to incrementally reduce the 30% factor as outlined in Procedure 8, and/or a process to maintain the 30% ratio through reductions, if necessary;	Narrower parameters for future service packages;	Consideration for one-time versus ongoing increases in provincial and federal grants;	Language regarding options to address Edmonton Police Service salary settlements within the funding formula which are currently managed corporately.
1	Dispatched calls for service (EPS)	efficiency factor in formula, as dollar amount	reduce the 30% factor by some increment per year (i.e. 1%, 0.5%, 0.25%, etc.)	service packages not permitted during 4 year cycle; growth must be managed within funding allowances of formula	Where ongoing grant funding is for a specific EPS program, funding formula is not impacted	Incorporate salary settlements (personnel inflation) factor into formula. Mechanisms to address formula funding amounts above/below actual settled increases.
2	Non-dispatched calls for service (EPS)	efficiency factor in formula, as percentage amount (% of growth formula subtracted from formula)	re-base the ratio of the EPS budgeted net operating expenditures to civic department budgeted net operating expenditures after OP12 is completed. Use this % to replace the 30%.	service packages not permitted during 4 year cycle; emergencies are to be managed solely through EPS reserve	Where ongoing grant funding is for general EPS spending, funding formula is reduced by equivalent amount	Incorporate a fixed percentage personnel inflation factor into the formula (i.e. 2%). Any variances between these amounts and actual settlements (either above or below) are managed by EPS.
3	Total requests for assistance to EPS (EPS)	fixed % of total budget efficiency amount per year (% of base budget subtracted)		maximum allowable service package request per fiscal year outside formula - as dollar amount		Incorporate a fixed percentage personnel inflation factor into the formula (i.e. 2%). Any variances between these amounts and actual settlements (either above or below) are managed by Administration.
4	Crime severity index (statcan)	EPS budget reductions/efficiencies to be proportional to civic department budget reductions/efficiencies for each fiscal year		maximum allowable service package request per fiscal year outside formula - as % of total EPS budget amount		
5	Violent crime severity index (statcan)			Any growth funding for EPS service packages cannot exceed X% tax increase per year		
6	Non-violent crime severity index (Statcan)					
7	Number of police reported criminal incidents - total criminal code (excluding traffic) (statcan)					
8	Combination of 2 (or more) growth factors					
9	Uniform crime reporting survey - incident-based crime statistics - total (all violations) - Edmonton CMA (statscan 35-10-0177-01)					
10	Uniform crime reporting survey - incident-based crime statistics - total all Criminal Code violations (excluding traffic) - Edmonton CMA (statscan 35-10-0177-01)					

**Please note that the options highlighted in gray are not modeled and/or analyzed as the options for service packages have no impact in determining the funding projections for EPS. Since OP12 has not been completed, we have not modeled or analyzed this option.

*The committee formed to work on this review and bring back a report with recommendations was led by City administration with support and input from both the Commission and EPS. This group is referred to as the "Working Group" Individuals from all 3 organizations are:
 COE: Stacey Padbury, Jodie Graham, Milap Petigara
 EPC: Matthew Barker, Bonnie Riddell,
 EPS: Justin Krikler, Lori Lorenz, Rob Davidson, Iryna Pyasta



Understanding the Analysis & Assessment

Key Terms:

In order to fully understand the Funding Formula, we have defined the key terms and inputs.

Tax Supported Funding: Amount of funding received by the EPS through tax dollars

Police Price Index (PPI): The police price index (PPI) is the annual inflation relative to Edmonton policing operating expenditures. The index is calculated by the City of Edmonton's Chief Economist and considers a variety of inflation factors and their forecasted values.

Edmonton Police Service Reserve: This is an uncommitted Reserve Account established for the purpose of managing operational surpluses and deficits of the EPS,

Civic Department Net Operating Expenditures: The net operating expenditures of the City Departments. This is total net operating expenditures for tax-supported operations, less corporate expenditures, Neighbourhood Renewal Program expenditures and Boards and Commissions expenditures.

Net Operating Requirement: The amount of funding required for the EPS expenditure less revenue on an annual basis.

Base Budget: The Net Operating Requirement used to calculate the Funding Formula for the upcoming budget cycle, is the last year of the current budget cycle, adjusted for one-time budget items and the budgeted Transfer from the Traffic Safety and Auto Enforcement Reserve in that year, in compliance with the Traffic Safety and Automated Enforcement Reserve City Policy C579.

Transfer from Traffic Safety and Auto Enforcement Reserve: represents the budgeted amount of funding provided to EPS from the Traffic Safety and Automated Enforcement Reserve, as approved by City Council.

Non-Personnel Inflation Calculator: The forecasted annual inflation rate on EPS non-personnel related expenditures, represented as a percentage. This figure is calculated by City Administration.

Personnel Net Expenditure: The expenses incurred by the EPS for all things related to personnel, excluding salary settlements.

Salary Settlements: A salary and/or a benefits settlement between the EPS and the City of Edmonton.

Key Terms:

In order to fully understand the alternatives and options presented by Council, we have defined key terms that make up the options.

Population Growth: The annual average rate of change of population size, for a given geographic area, during a specified period of time.

Population Growth Rate: The forecasted annual percentage change in population for a specific city, In this case, the City of Edmonton. This figure is provided by City Administration.

Dispatched calls for service: Calls to the EPS where units must be dispatched to the incident, and the incident cannot be a reopened call.

Non-dispatched calls for service: Calls to the EPS where units do not need to be dispatched to the incident, and the incident cannot be a reopened call. Online occurrences are counted as part of non-dispatched calls.

Total requests for assistance: Calls to the EPS that include dispatched and non-dispatched calls for service. These include requests for assistance from EMS and Fire as well.

Crime Severity Index¹: The Crime Severity Index (CSI) enables Canadians to track changes in the severity of police-reported crime from year to year. It includes all Criminal Code and federal statute offences, including traffic and drug violations. The principle behind CSI was to have more serious crimes carry a higher weight than less serious crimes, therefore more serious offences have a greater impact on changes in the index. The level of seriousness is based on actual sentences handed down by the courts in all provinces and territories. The CSI helps answer questions such as “is the crime coming to the attention of the police more or less serious than in Canada overall?”. For the purpose of this study, we pulled data from Statistics Canada for the years 2013 to 2021.

Violent crime severity index²: The Violent CSI includes all incident-based uniform crime reporting survey (UCR2) violent violations, some of which were not previously included in the aggregate violent crime category, including uttering threats, criminal harassment and forcible confinement. For the purpose of this study, we retrieved data from Statistics Canada for the years 2013 to 2021.

Non-violent crime severity index²: The Non-violent CSI includes all non-violent Criminal Code violations, including traffic as well as drug violations and all Federal Statutes. For the purpose of this study, we retrieved data from Statistics Canada for the years 2013 to 2021.

Incident-based Crime Statistics³: Violations in the province, reported by the specific authorities, For this report, we retrieved data from Table 35-10-0183-01, which included incidents reported by local police services through the Incident-based Uniform Crime Reporting Survey. This report from Statistics Canada gives the public the ability to manipulate data based on the type of violations that are handled specifically by their local police service. For the purposes of this study, we retrieved data from 2013 to 2021, for all Criminal Code violations. We have also retrieved data from Table 35-10-0177-01, which includes violations reported by the Canadian Forces Military Police, and based on Census Metropolitan Areas. From this report, we retrieved data from 2013 to 2021, for all Criminal Code violations, and for all Criminal Code violations excluding traffic violations.

Efficiency factor: The efficiency factor is an annual reduction factor, a percentage, provided by the City of Edmonton City Council meant to represent expected annual gains in operational efficiency. Operational efficiency can be defined as either resource allocation or technological advancement.

Service packages: New or enhanced services, or increases resulting from growth or impact of capital, that require funds. Service packages require Council approval through the budget process. Fo example, in the last few years, EPS has received only two service packages - one for the annexation of Leduc County, and one for the national legalization of cannabis.

One-time grant: A sum of money given by the provincial or federal government to the EPS for provision of specific services.

Salary Settlements: A salary and/or a benefits settlement between the EPS and the City of Edmonton.



Analysis & Assessment

Introduction to the Options Assessment Framework

The framework proposed below will be the basis for evaluation of the current funding formula and the options associated with it. This framework provides guidance to ensure that the formula can live up to the principles that supported its initial development. The framework’s objective is to evaluate the suitability of each alternative, and the viability of using it, if the funding formula is altered to incorporate the alternative.

Core Pillars that make up the Options Assessment Framework

Core Pillars	Description of Pillar	Validation Questions
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome	<ul style="list-style-type: none"> • Can the option accommodate sudden/drastring events or changes? • Is it adaptable to the evolving needs of citizens, the evolving responsibilities of the police service and public safety trends? • Does it accurately reflect the current/most recent state of the City? • Is the option interlinked/interdependent on legislation and/or policies and can it be impacted by changes to any of the above? If so, can it adapt to the changes?
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	<ul style="list-style-type: none"> • Does the option lend to a perceived bias towards EPS or EPC? • Is it based on the performance of the EPS in previous years? • Is the option derived based on appropriate and relevant statistics? • Can the option be utilized in the formula through a transparent process or measure that meets the goals set out by the City for the EPC?
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	<ul style="list-style-type: none"> • Is there research to support the use of this option across other jurisdictions? • Is it being derived from a reliable source? • Will it provide a level of funding that allows the police to deliver an adequate level of service to the citizens of Edmonton? • Is it a reasonable input for predicting demand for policing services? • If forecasting is required, is it done in a reliable and logical manner?
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula	<ul style="list-style-type: none"> • Does the alternative match industry best practices? • Can repeated use of the option provide accurate and realistic results? • Is the use of the option sustainable over time? • Is the risk relatively low if this option/alternative was used over time?
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	<ul style="list-style-type: none"> • Does the option diminish the oversight role of the EPC? • Are statutory functions of the EPS impacted? • Is proper cost control by the City impacted? • How does the responsibility of covering the variance amounts for salary settlements impact the City or the EPS?

Application of the Framework

To supplement the framework and evaluate the options, we have developed a scoring criteria between 0 and 2. The criteria is broken down as follows:

- If the option does not meet criteria, it is given **zero points**.
- If the option partially meets criteria, it is given **one point**.
- If the option substantially meets criteria, it is given **two points**.

The sum of these points will make up the overall ranking. A **total of 10 points** can be awarded to any particular option. This is determined by multiplying the maximum number of points available (2pts) by the number of pillars that are being used in the evaluation (5).

Once a total score as been determined, the overall score is put divided into two categories: **Good Alternative** and **Poor Alternative**. The guidelines for overall indicators is as follows: Total score **between 0 and 4** indicates that it is a poor alternative, any score **higher than 5** indicates that is a good alternative.

The template shown below will be used to justify the scoring for each alternative. The final score for each alternative will then be used in the analysis later in the report.

Overall Name of Option

Alternative

Core Pillars		Description of Pillar	Analysis	Score
1	Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome		
2	Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.		
3	Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.		
4	Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula		
5	Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act		

Alternatives for Factor G

Population Growth (Base Case for Comparison)

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome	Population growth is reflective of how quickly a city may be growing and can be used to establish a baseline criteria for adequate policing services. As this metric is calculated ahead of time, it is more rigid in its application as it is less adaptable to policy and legislation changes.	1
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	This metric is not impacted by EPS, the City or the Commission as it is an unbiased metric to indicate Edmonton's growth. Therefore, it has the ability to remain unbiased. While there may be factors, such as global events that lead to mass migration, that can impact the population, these factors are typically beyond the control of the city.	2
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	Population growth is a metric that is reasonably predictable over a period of years. It is usually predicted by third parties on a large scale (ie. for multiple cities, provinces and countries). Though sudden changes can impact migration and affect population growth, this is generally a stable metric.	2
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula	Population growth may be less related to crime rates and policing effort. Crime rates associated and policing effort can vary depending on the scale and demographics of in-migration at the city and regional level for example. The nature of crime and policing effort to control it can also vary with density trends.	1
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	This option does not diminish the existing governance roles of the parties as the factor being used in the funding formula is not controlled or influenced by either party.	2

8

Alternatives for Factor G

Dispatched Calls for Service, Non-Dispatched Calls, Total Requests for Assistance

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome.	Dispatched calls for service indicates how often police attend in person to public requests for assistance. Non-Dispatched Calls for service indicate how often calls are made to the Police, but they are not dispatched. Total requests for assistance combine values of Dispatched and Non-Dispatched calls. Because of the nature of these metrics, they are able to provide a snapshot of demand for support at a given time. Independently, dispatched and non-dispatched call volume values are not as adaptable as they do not take the other values into consideration, ie. Dispatched Call values do not consider Non-dispatched call volumes and vice versa. These values are not influenced by legislative changes, but are sensitive to internal changes.	1
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	The values are directly reported by EPS, and as mentioned previously, are sensitive to internal changes. These changes can be resourcing related, ie. staffing constraints, or operational/policy changes, ie. changes in prioritization of type of calls. These are not impartial metrics as they it is very sensitive to factors, such as the demand for police, beyond the control of the City or EPS.	0
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	Historical values can be used to forecast future call volumes to provide an estimate, however, demand for service is generally quite volatile. This leads to any metric derived from demand for service to be predictable, but not stable.	1
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula.	The data for these values can be gathered on a rolling basis and can be retrieved at any point in time. This makes using these values cost effective (no cost to gather data), is reflective of the demand for policing services, and is aligned with the goals of the formula. However, it does lend itself to manage financial risk within the formula as the single input has a significant impact on the funding received.	1
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	These values are sensitive to internal EPS policies and procedures. Therefore, it increases the governance requirements for EPS to ensure that their services are aligned with the responsibilities outlined for them in the Police Act and the Municipal Government Act. This option diminishes the oversight role of the EPC as the outcome is being derived from a metric that have no control over.	1

Alternatives for Factor G Crime Severity Index

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome.	Crime Severity Index is analyzes changes in police-reported crime rates across the country. To facilitate comparisons among geographic areas as well as over time, police-reported crime has traditionally been expressed as a rate per 100,000 population ¹ . This metric is a good indicator to predict police resourcing, as an increase in the index suggests an increase in personnel is required. This index is less sensitive to local legislative and policy changes thus reducing the number of factors that can impact the values. It also factors in violent and non-violent CSI values to produce a holistic index.	2
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	Since this index is calculated by Statistics Canada, it can be considered standardized. Although the number of crimes are reported by EPS, the process to determine the index is consistent across the various police services in Canada. Because there are strict reporting rules laid out by Statistics Canada, the values presented by police services have to be transparent and backed by evidence. This increases accountability and impartiality. It is important to note that this metric is not demand driven, but outcome driven.	2
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	As mentioned above, the index is not determined based on demand for police services, but rather on the outcomes. Using historical values, and understanding how the index is calculated, this metric can be forecasted reasonably. However, it is important to note that these values are sensitive to current events which can hinder the accuracy of the forecasts.	1
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula.	Because this index can be forecasted, and the information used to forecast it is readily and publicly available, this is a sustainable option to use as part of the funding formula. However, it is important to note that gathering the actual values of this index to use as part of the funding formula can be problematic as Statistics Canada releases these values retroactively and there may be variances in the predicted vs. actual values. This, along with the delay in obtaining actual values is reflected in the scoring.	1
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	Although this index is not sensitive to internal EPS policies and procedures, it increases the governance requirements for EPS as it must comply with reporting rules to ensure transparency and accuracy in the type of crime. This option does not change the oversight role of the EPC as the index is being derived from a metric that it has no control over.	1
			7

Alternatives for Factor G

Violent Crime Severity Index, Non-Violent Crime Severity Index

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome.	Crime Severity Index is analyzes changes in police-reported crime rates across the country. To facilitate comparisons among geographic areas as well as over time, police-reported crime has traditionally been expressed as a rate per 100,000 population ¹ . Violent CSI and Non-Violent CSI values are calculated selectively, ie. Violent CSI does not consider Non-Violent CSI values and vice versa. This makes these values not as reflective of the overall crime trends and police requirements. These indexes are less sensitive to local legislative and policy changes reducing the number of factors that can impact the values, which is reflected in the scoring.	0
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	Since this index are calculated by Statistics Canada, they can be considered standardized. Although the number of crimes are reported by EPS, the process to determine the index is consistent across the various police services. Because there are strict reporting rules laid out by Statistics Canada, the values presented by police services have to be transparent and backed by evidence. This increases accountability and aids to this metric being impartial. It is important to note that this metric is not demand driven, but outcome driven.	2
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	As mentioned above, the index is not determined based on demand for police services, but rather on the outcome of those requests. Using historical values, and understanding how the index is calculated, this metric can be forecasted reliably. It is important to note that these values are sensitive to current events which can hinder the accuracy of the forecasts. However, using them in the formula is not recommended as they are calculated in a selective manner.	1
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula.	Because these index can be forecasted, and the information used to forecast it is readily and publicly available, this is a sustainable option to use as part of the funding formula. However, it is important to note that gathering the actual values of these indexes to use as part of the funding formula can be problematic as Statistics Canada releases these values retroactively. It is important to note that there may be variance in the predicted vs. actual values. This, along with the delay in obtaining actual values is reflected in the scoring.	1
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	Although this index is not sensitive to internal EPS policies and procedures, it increases the governance requirements for EPS as they must comply with reporting rules to ensure transparency and accuracy in the types of crime being reported. This option does not change the oversight role of the EPC as the index is being derived from a metric that have no control over.	1
			5

Alternatives for Factor G

Total Criminal Code, UCR-2 All Violations, UCR2 excluding Traffic Violations

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome	These values are less sensitive to local legislative and policy changes but can be impacted by national changes. For example, the definitions and severity of crimes drives the category it will fall under. If these are altered, the values reported for each category will change. Values for Total Criminal Code, and UCR-2 ¹ all violations consider all crimes and have a holistic, 'all-encompassing' value. However, values UCR-2 excluding traffic violations is selective.	1
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	Although the values for each of the factors are reported by EPS, the categories and definitions for types of crime is consistent across the various police services. Because there are strict reporting rules laid out by Statistics Canada, the values presented by police services have to be transparent and backed by evidence. This increases accountability and aids to these factors being impartial. It is important to note that these factors are not demand driven, but outcome driven.	1
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	As mentioned above, the index is not determined based on demand for police services, but rather on the outcome of those requests. Using historical values, and understanding how the values is calculated, this metric can be forecasted. It is important to note that historically, these values will ebb and flow and in order to forecast well, a larger data set should be considered. There may also be a variance between actual and predicted values. This, along with the delay in gathering this information is reflected in the scoring.	1
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula	Because these values can be forecasted, and the information used to forecast it is readily and publicly available, this is a sustainable option to use as part of the funding formula. However, it is important to note that gathering the actual values of these indexes to use as part of the funding formula can be problematic as Statistics Canada releases these values retroactively. It is important to note that there may be variance in the predicted vs. actual values. This, along with the delay in obtaining actual values is reflected in the scoring.	1
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	Although these values are not as sensitive to internal EPS policies and procedures, they increase the governance requirements for EPS as they must comply with reporting rules to ensure transparency and accuracy in the types of crime being reported. This option does not change the oversight role of the EPC as the index is being derived from a metric that have no control over.	1
			5

Efficiency Factor

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome	Efficiency in the policing budget is important for several reasons including that the City has limited funding and competing priorities. There is added pressure from the introduction of many public safety reforms that also require more funding to accomplish goals. An efficiency target can be set by the City for a term and adjusted annually. The efficiency target can be applied to core areas of change which drive transformation in policing services including technology. Some of these initiatives may require more work to address and may require capital investment, training and other start-up costs.	1
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	The internal funding to achieve efficiency targets can come from reallocating funds from activities EPS can stop doing or start doing differently. Some examples of cost saving opportunities that are often considered with policing budgets include centralizing support services, wider use of non-sworn staff, emphasis on prevention programs, divesting of low-value services and review of special units. However, an efficiency target can be arbitrarily set and diminish the effectiveness of all services, regardless of their value.	0
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	Efficiency targets can be established on a predictable basis for a budget term(s), either as a fixed amount or as a percentage of the EPS budget. They can also be linked to Key Performance Indicators (KPIs) or strategic policing goals, in contrast to traditional methods for saving money that include across-the-board cuts to services or cutting “nonessential” line items.	1
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula	The objective of an efficiency target is largely to reduce or control costs. It can help address affordability issues but can also be set without regard to performance or growing demand for services. Efficiency targets that are too aggressive can result in reduced service. There can also be challenges in measuring short and long term outcomes.	1
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	This option does not change the oversight role of the EPC but has the potential of reducing EPS’ ability to fulfill its responsibilities under the Police Act and the Municipal Government Act by reducing the amount of funding they receive.	1
			4

Ratio Threshold

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome	The ratio can be established to ensure affordability and equitable allocation of civic expenditures. It can be set for a term and adapted annually as required. While it can reflect the state of City finances, it may be less representative and adaptable to the evolving needs of citizens, the responsibilities of the EPS and public safety trends.	1
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	While reasonably transparent, the application of the ratio may be biased towards the City as it is established without regard to EPS performance and outcomes, and changing public safety requirements.	0
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	The budgets can be forecasted based on the ratio and increase or decrease in line with overall civic expenditures. While predictable it is less stable in its application, and it can result in reductions in policing budgets that are unrelated to public safety needs.	1
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula	Applying the ratio can be to reduce or control costs overall civic expenditures and help address affordability issues. However, it may limit the ability of the EPS to respond to growing demand for services. It may work best in combination with other factors.	1
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	This option does not change the oversight role of the EPC but has the potential of reducing EPS' ability to fulfill its responsibilities under the Police Act and the Municipal Government Act by impacting the amount of funding they receive.	1
			4

Service Packages

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome	Service packages exist to support the EPS because of legislative changes. Service packages can be defined to match strategic goals with defined program objectives.	2
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	The service package approach can be transparent when based on defined program areas. There can be bias introduced with the bundling of services within service packages.	1
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	The service package approach may meet cost control objectives, but is harder to predict. It is important to note that although legislative changes that require a service package can be known and predicted, their operational impact, and by extension, financial impact is harder to predict. While the service packages can be defined on a term basis, agreement on budgets can lead to protracted negotiation. It is also important to note that in the last few years, there have only been two service packages that have been given to the EPS (Annexation and Marijuana Legalization).	0
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula	The service package approach can be used to tie budgets to specific program goals. It may not serve to reduce or control costs as well as other approaches.	0
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	This option does not change the oversight role of the EPC but has the potential of reducing EPS' ability to fulfill its responsibilities under the Police Act and the Municipal Government Act by impacting the amount of funding they receive.	1
			4

Grants

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome	A grant can be set for a term and adjusted annually, in order to reflect legislative changes that have an immediate effect on EPS. This may work to address core areas of change which drive transformation in policing services, including but not only, technology enhancements.	2
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	The grant approach can be reasonably transparent but only with extensive negotiation. There can be bias introduced with co-mingling of services.	0
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	The grant approach is likely less predictable and stable in its application. Properly designed, the grant approach can result in policing budgets that are more related to public safety needs.	1
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula	It may work best in combination with provincial and federal funding. It may also work with other factors and/or as enhancements to the base formula.	1
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	This option does not change the oversight role of the EPC but has the potential of increasing EPS' ability to fulfill its responsibilities under the Police Act and the Municipal Government Act by impacting the amount of funding they receive.	1
			5

Salary Settlements

All options outlined

Core Pillars	Description of Pillar	Analysis	Score
1 Adaptable	Ability of the option to evolve with legislative changes (incl. policies and criminal law changes), and is flexible enough to adjust annually while being an informed input that results in an expected outcome	This input is compatible with settlements of collective agreements which is a major driver of cost and can be altered to reflect legislative changes. In the case of EPS, salary settlements are negotiated retroactively, it decreases adaptability, but gives the Administration, the Commission and the Police Service the flexibility to adjust as needed.	1
2 Impartial	Ability of the option to be objective and recognize factors that are transparent and those beyond the control of the City that influence EPS cost drivers.	While the factor may be seen as transparent, the application within the formula is based on settlements that are retroactive. While the forward looking amount has been set to an incremental amount, the over/ under funding liabilities are unclear. The forward looking amounts may be established without regard to EPS performance outcomes, and changing public safety requirements.	1
3 Predictable & Stable	The extent to which the option utilizes inputs that are research based, appropriately projected and data driven. It should also maintain the integrity of the data being utilized.	Currently, salary settlement negotiations are conducted after contracts have expired. This leads to settlements being incorporated into the formula in a retroactive manner. Therefore, this input ranks lows on the predictability and stability scale.	0
4 Sustainable	Ability of the option to identify a sustainable outcome for both the City and EPS that is cost effective, manages financial risk and aligns to agreed upon goals of the formula	A salary settlement factor within the formula as a required element does not consider sustainability or outcome measures as a driver to manage financial risks that are aligned to outcomes.	0
5 Governance	Ability of the option to provide for accountability in line with the responsibilities of the Police Act and the Municipal Government Act	<p><i>Variance responsibility of EPS:</i> This option increases the responsibility of the EPS as they would have to cover the variance between salary settlements and the actual negotiated salary settlements. These settlements tend to happen retroactively, making it challenging for the EPS to plan their budget in advance.</p> <p><i>Variance responsibility of Administration:</i> This option increases the responsibility of the Administration as they would have to cover the variance between salary settlements and the actual negotiated salary settlements. These settlements tend to happen retroactively, making it challenging for the Administration to plan their budget in advance. However, neither of the options presented change the oversight role of the EPC but have the potential of impacting EPS' ability to fulfill its responsibilities under the Police Act and the Municipal Government Act by altering the amount of funding they receive.</p>	2
			4

Summary Analysis of the Framework

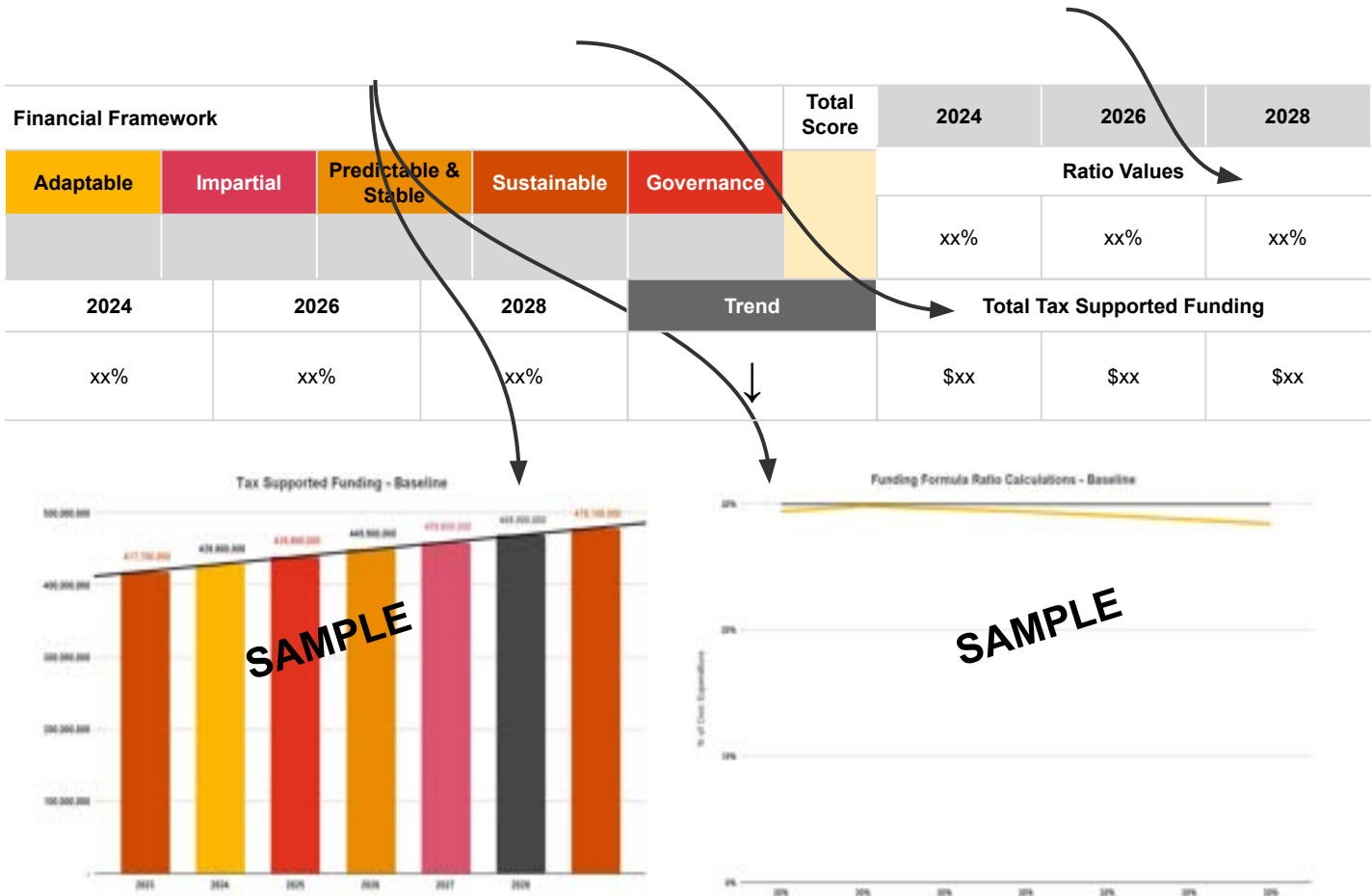
Below is a summary of the application of the framework in the form of a heatmap. This is colour coded based on the scores that each alternative received when evaluated against individual pillars, and its total scoring.

Options	Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	Total Score
Basecase - Population Growth	1	2	2	1	2	8
Factor G - Dispatched Calls for Service	1	0	1	1	1	4
Factor G - Non Dispatched calls for service	1	0	1	1	1	4
Factor G - Total Requests for Assistance	1	0	1	1	1	4
Factor G - Crime Severity Index	2	2	1	1	1	7
Factor G - Violent Crime Severity Index	0	2	1	1	1	5
Factor G - Non Violent Crime Severity Index	0	2	1	1	1	5
Factor G - Number of Police reported criminal incidents (Total Criminal Code)	1	1	1	1	1	5
Factor G - UCR2 all Violations	1	1	1	1	1	5
Factor G - UCR2 excl. Traffic Violations	1	1	1	1	1	5
Efficiency Factor	1	0	1	1	1	4
Ratio Threshold	1	0	1	1	1	4
Service Packages	2	1	0	0	1	4
Grants	2	0	1	1	1	5
Salary Settlements	1	1	0	0	2	4

How to: Read the Template for Analysis of Options/Alternatives

To support your understanding of the analysis, we have developed a template that provides a snapshot of the alternative’s impact on multiple factors. This template includes scoring from the financial framework that was discussed previously, it highlights the variable that is manipulated to produce the final ratio and funding values. It also includes a list of assumptions we have made while developing each scenario, followed by a comprehensive analysis based on the values highlighted.

The template highlights the base budget to civic department net operating expenditure ratio, labeled as “Ratio Values”, along with the Total tax supported funding, for each scenario. Both of these quantitative values are also shown graphically.



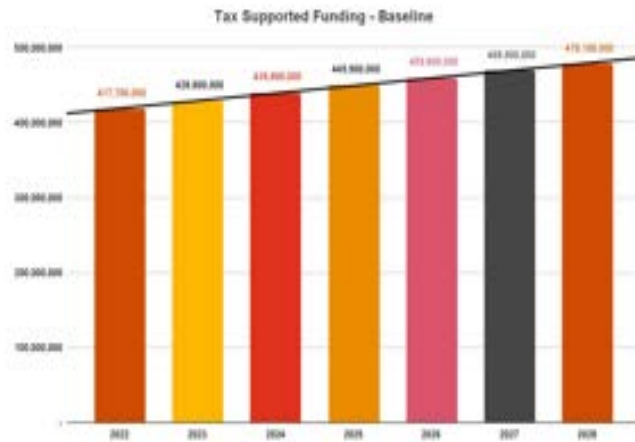
- Assumptions**
-
- Analysis**
-

Below are the values for fiscal year 2022. These values have been provided to us by the Edmonton Police Commission. The assumptions for other scenarios use these values as a baseline.

	Net Operating Requirement	Revenue	Base Budget	Salary Settlements	Total Tax Supported Funding	Ratio Values
2022	\$407,000,000	\$74,000,000	\$481,000,000	\$3,207,000,000	\$417,677,741	29.38%

Base Case Scenario Current Funding Formula - Population Growth

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	8	Ratio Values		
1	2	2	1	2		29.59%	29.06%	28.38%
2024	2026	2028	Factor Trend		Total Tax Supported Funding*			
1.55%	1.20%	1.05%	↓		\$439,800,000	\$459,600,000	\$478,100,000	



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- The model utilizes population growth as Factor G. Sources for population growth values can be found in the 'Historical Data Inputs' tab.
- Population Growth Rate is the forecasted annual percentage change in population for a specific city. In this case, the City of Edmonton. This figure is provided by City Administration.

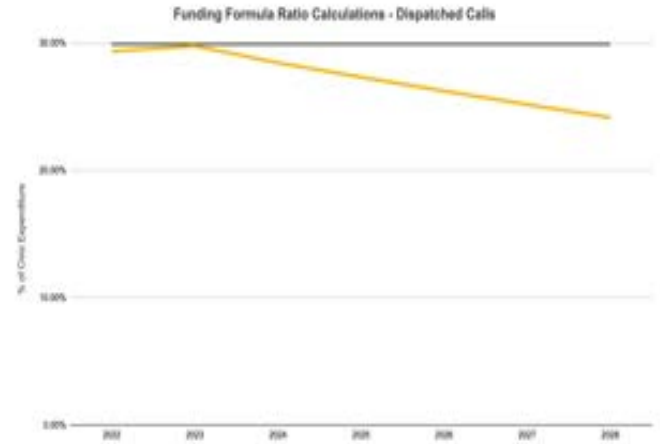
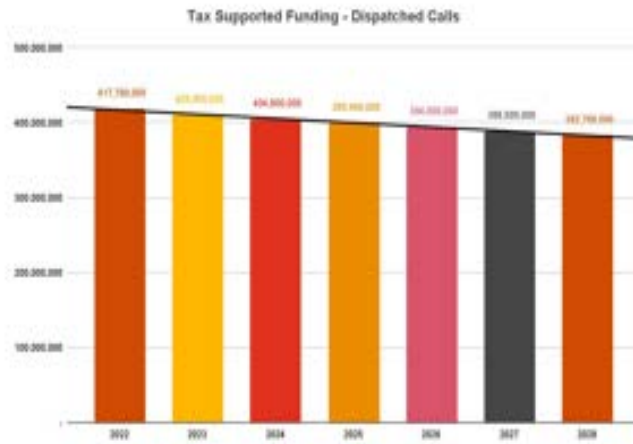
Analysis

- To forecast population growth for years 2023-2028, official data published by the UN was used. [Source](#)
- Even though the trend for this option indicates that the growth rate is declining, there is an increase in funding over the years as the percent change values are still positive and not decreasing drastically. This can be seen in the graph above
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- All funds received by EPS are provided through tax revenues.
- Population projections may not always incorporate sudden migrations. Hence there can be a variance in forecasted and actual values.
- It may be beneficial for EPC to conduct further research into using this option in combination with other options that have been presented to us.

* Please note at these values are based on modeled data using our assumptions. These have been rounded to reduce accuracy and should not be used as official projections.

Alternatives for Factor G Dispatched Calls for Service

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	0	1	1	1		28.47%	26.26%	24.18%
2024		2026		2028	Trend	Total Tax Supported Funding		
-2.43%		-2.55%		-2.69%	↓	\$404,800,000	\$394,000,000	\$382,700,000



Assumptions

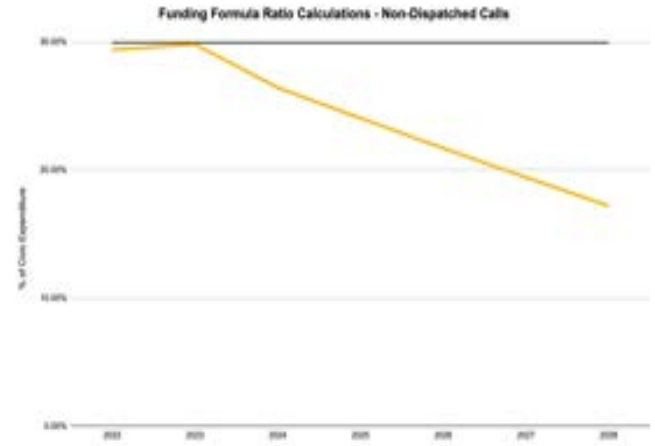
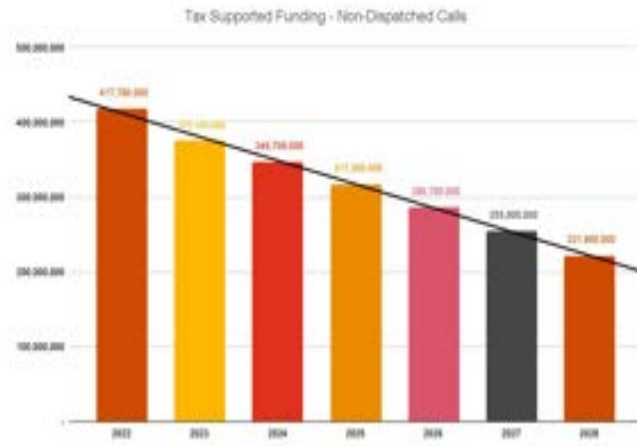
- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- Dispatched calls to services are defined as calls to the EPS where units must be dispatched to the incident, and the incident cannot be a reopened call. This data can be found in the 'Historical Data Inputs' tab.
- Fire and EMS requests for services are included in dispatched call volumes.

Analysis

- To forecast dispatched calls for service values from 2023-2028, historical values of dispatched calls from 2018-2021 were used. The forecasted values were calculated using the trend from historical. Historical values for this data were provided by the EPC.
- The trend for projected values of this option is declining significantly, as is the the forecasted funding required by the EPS.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **significantly lower** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- This option is not suggested for use as a replacement for Factor G because not only does it score low on the framework, it is demand driven and thus, volatile. This increases the likelihood that there will be a greater variance between actual and projected values.
- If used independently, this option could be a useful tool for allocating resources, but it lacks the reliability and stability required to be used as a measure for funding requirements.

Alternatives for Factor G Non-Dispatched Calls for Service

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	0	1	1	1		26.43%	21.70%	17.20%
2024		2026		2028	Trend	Total Tax Supported Funding		
-8.92%		-10.87%		-13.89%	↓	\$346,700,000	\$286,700,000	\$221,800,000



Assumptions

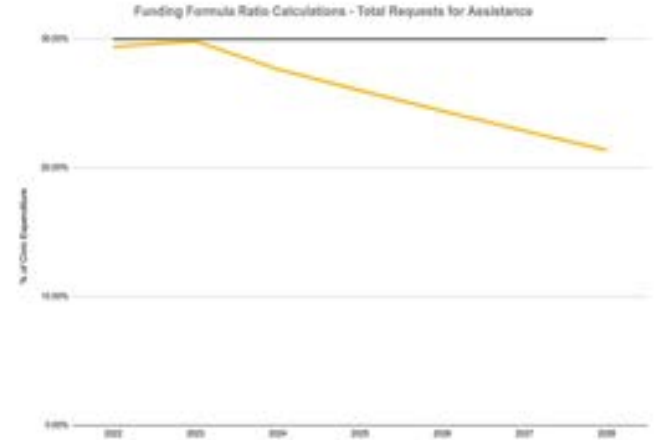
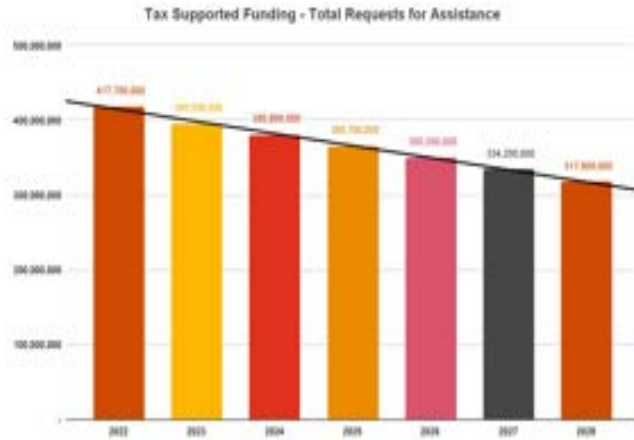
- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- Non-dispatched calls for service are calls to the EPS where units do not need to be dispatched to the incident, and the incident cannot be a reopened call. Online occurrences are counted as part of non-dispatched calls.
- Online Occurrences utilize EPS resources but not dispatched, therefore we assume these occurrences are counted in non-dispatched call volumes.

Analysis

- To forecast non-dispatched calls for service values from 2023-2028, historical values of non-dispatched calls from 2018-2021 were used. The forecasted values were calculated using the trend from historical. Historical values for this data were provided by the EPC.
- The trend for projected values of this option is declining significantly, as is the the forecasted funding required by the EPS.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **significantly lower** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- This option is not suggested for use as a replacement for Factor G because not only does it score low on the framework, it is demand driven and thus, volatile. This increases the likelihood that there will be a greater variance between actual and projected values.
- If used independently, this option could be a useful tool for allocating resources, but it lacks the reliability and stability needed to be used as a measure for funding requirements.

Alternatives for Factor G Total Requests for Assistance

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	0	1	1	1		27.62%	24.39%	21.34%
2024		2026		2028	Trend	Total Tax Supported Funding		
-4.98%		-5.53%		-6.21%	↓	\$380,800,000	\$350,200,000	\$317,800,000



Assumptions

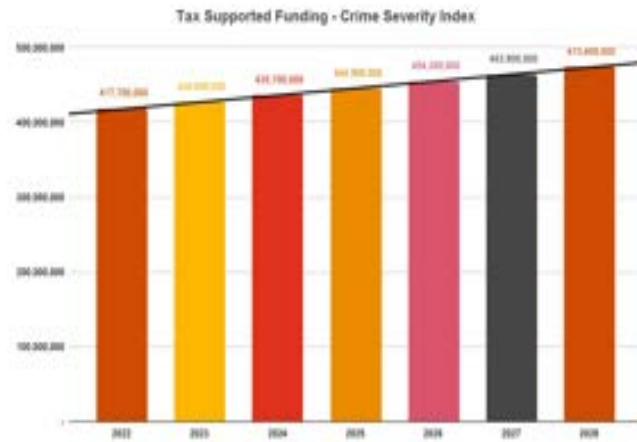
- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- Total requests for assistance are calls made to the Edmonton Police Service that include dispatched and non-dispatched calls for service. These include requests for assistance from EMS and Fire as well.

Analysis

- This option combines the dispatched and non-dispatched call volumes to indicate the total volume of calls received by EPS.
- Since the projected values for dispatched, and non-dispatched calls are declining, the forecasted funding required by the EPS in this scenario is also decreasing..
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **significantly lower** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- This option is not suggested for use as a replacement for Factor G because not only does it score low on the framework, it is demand driven and thus, volatile. This increases the likelihood that there will be a greater variance between actual and projected values.
- If used independently, this option could be a useful tool for allocating resources, but it lacks the reliability and stability needed to be used as a measure for funding requirements.
- This option may be used in combination with other options to factor in the demand for police when determining funding requirements.

Alternatives for Factor G Crime Severity Index

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	7	Ratio Values		
2	2	1	1	1		29.46%	28.78%	28.11%
2024		2026		2028	Trend	Total Tax Supported Funding		
1.11%		1.13%		1.16%	↑	\$435,700,000	\$454,300,000	\$473,400,000



Assumptions

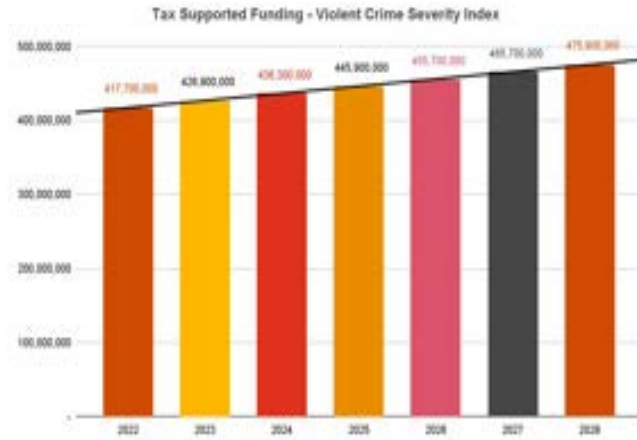
- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **The Crime Severity Index (CSI) enables Canadians to track changes in the severity of police-reported crime from year to year. It includes all Criminal Code and federal statute offences, including traffic and drug violations. This data can be found in the 'Historical Data Inputs' tab.**

Analysis

- To forecast CSI values from 2023-2028, historical values of the index from 2013-2021 were used in forecasting values based on trend analysis. Historical data was obtained from Statistics Canada.
- The trend for this option shows an increase in the index, indicating a steady increase in the budget over the years. This can be seen in the graph above.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **slightly lower** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- A significant drawback of this option, when compared to population growth, is that it is a lagging indicator. As a result, it cannot be obtained and utilized within a reasonable period of time to determine funding projections, making it a less appropriate alternative for Factor G.
- However it is important to note that this factor could be used in combination with other factors, such as population growth. It will be recommended that EPC conduct further analysis into using this factor in combination with other options for factor G.

Alternatives for Factor G Violent Crime Severity Index

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	5	Ratio Values		
0	2	1	1	1		29.47%	28.84%	28.22%
2024		2026		2028	Trend	Total Tax Supported Funding		
1.19%		1.23%		1.27%	↑	\$436,300,000	\$455,700,000	\$475,900,000



Assumptions

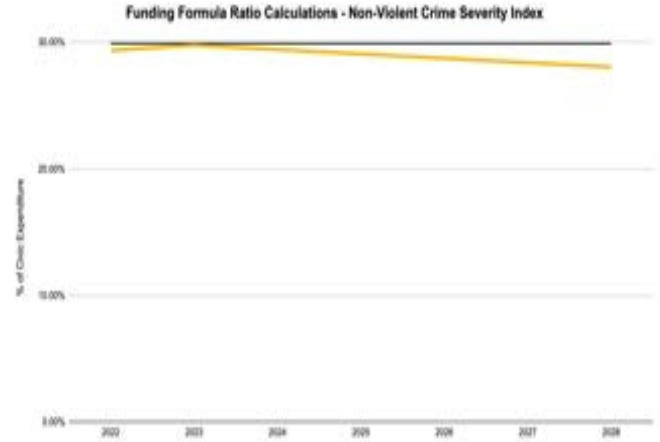
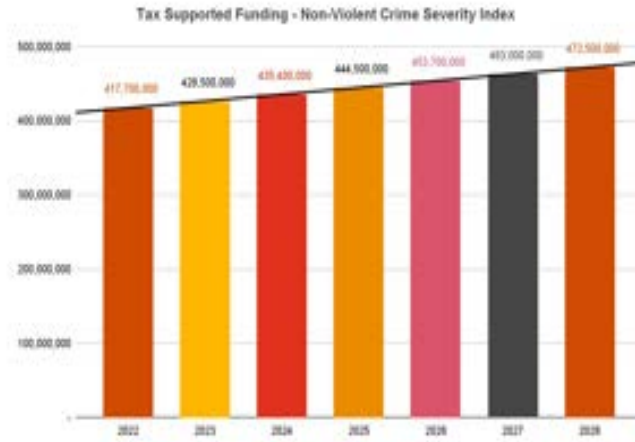
- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **The Violent CSI includes all incident-based uniform crime reporting survey (UCR2) violent violations, some of which were not previously included in the aggregate violent crime category, including uttering threats, criminal harassment and forcible confinement.**

Analysis

- To forecast Violent Crime Severity values from 2023-2028, historical values of the index from 2013-2021 were used in forecasting values based on trend analysis. Historical data was obtained from Statistics Canada.
- The trend for this factor shows an increase in the index, indicating a steady increase in the budget over the years. This can be seen in the graph above.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **slightly lower** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- A significant drawback of this option, when compared to population growth, is that it is a lagging indicator. As a result, it cannot be obtained and utilized within a reasonable period of time to determine funding projections, making it a less appropriate alternative for Factor G.
- This option would not be a good alternative to be used in combination with other options as it is selective in the crimes that it weighs and will not provide a holistic and accurate representation of crime trends.

Alternatives for Factor G Non-Violent Crime Severity Index

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	5	Ratio Values		
0	2	1	1	1		29.45%	28.76%	28.07%
2024	2026		2028	Trend	Total Tax Supported Funding			
1.08%	1.09%		1.11%	↑	\$435,400,000	\$453,700,000	\$472,500,000	



Assumptions

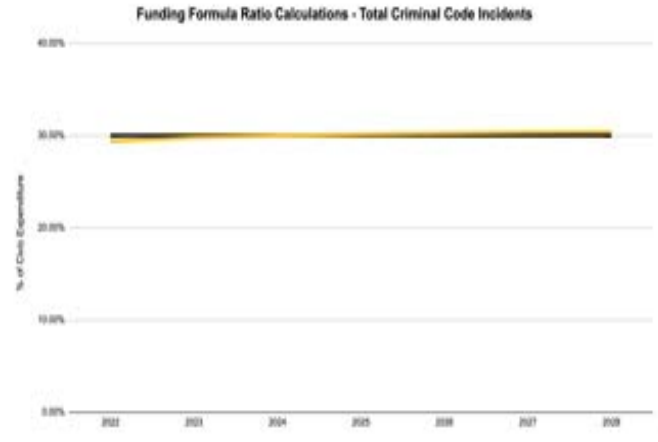
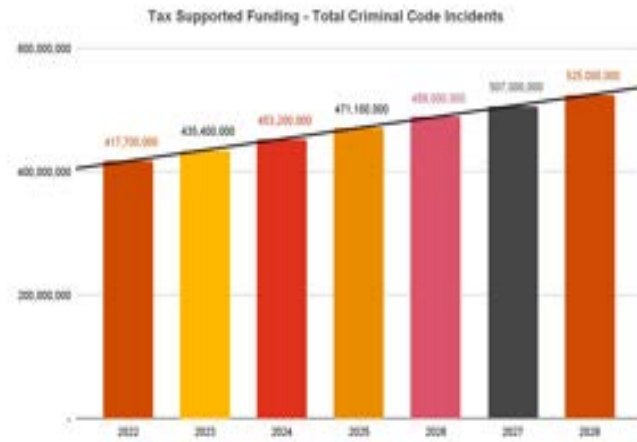
- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **The Non-violent CSI includes all non-violent Criminal Code violations, including traffic as well as drug violations and all Federal Statutes.**

Analysis

- To forecast Non-Violent CSI values from 2023-2028, historical values of the index from 2013-2021 were used in the forecasting of values based on trend analysis. Historical data was obtained from Statistics Canada.
- The trend for this option shows an increase in the index, indicating a steady increase in the budget over the years. This can be seen in the graph above.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **slightly lower** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- A significant drawback of this option, when compared to population growth, is that it is a lagging indicator. As a result, it cannot be obtained and utilized within a reasonable period of time to determine funding projections, making it a less appropriate alternative for Factor G.
- This option would not be a good alternative to be used in combination with other options as it is selective in the crimes that it weighs and will not provide a holistic and accurate representation of crime trends.

Alternatives for Factor G Total Criminal Code

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	5	Ratio Values		
1	1	1	1	1		29.97%	30.23%	30.37%
2024		2026		2028	Trend	Total Tax Supported Funding		
3.17%		2.98%		2.82%	↓	\$453,200,000	\$489,000,000	\$525,000,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **Total Criminal Code incidents include all reported incidents by the local police.**

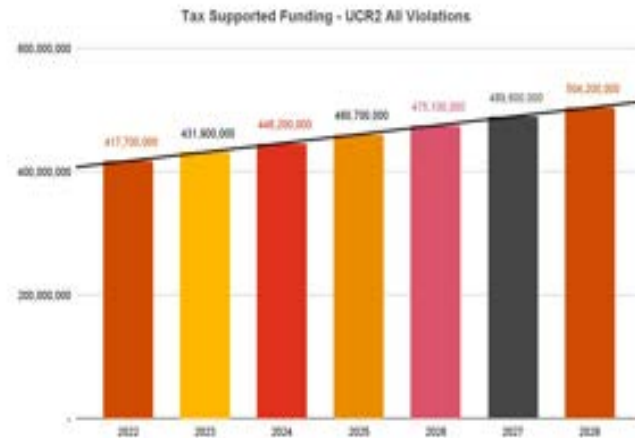
Analysis

- To forecast the values for the volume of Total Criminal Code violations, historical values of the violations from 2013-2022 were used in calculated the trend indicated by these historical values. Historical data was obtained from Statistics Canada.
- The trend for this option shows a decline in the values, however, since the numerical values of the year over year change are greater than that of the baseline, there is an increase in the budget. This can be seen in the graph above.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **passed in 2025**. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **higher** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- A significant drawback of this option, when compared to population growth, is that it is a lagging indicator. As a result, it cannot be obtained and utilized within a reasonable period of time to determine funding projections, making it a less appropriate alternative for Factor G.
- This option would not be a good alternative to be used in combination with other options because since the forecasted percent change values are numerically high, therefore it will inflate the funding projections regardless of which combination is used in the formula with.

Alternatives for Factor G

UCR-2 All Violations

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	5	Ratio Values		
1	1	1	1	1		29.77%	29.65%	29.47%
2024		2026		2028		Total Tax Supported Funding		
2.36%		2.25%		2.16%	↓	\$446,200,000	\$475,100,000	\$504,200,000



Assumptions

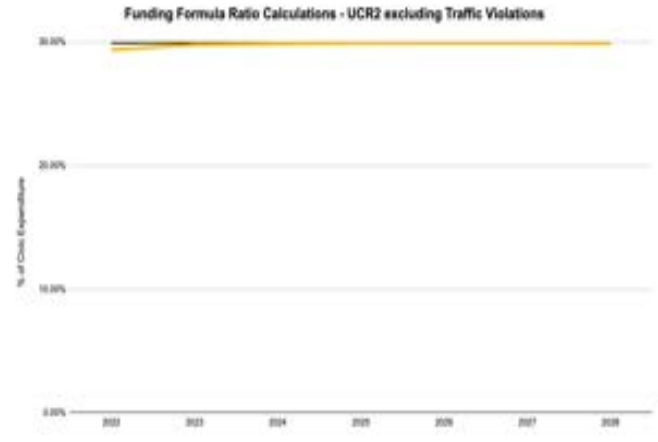
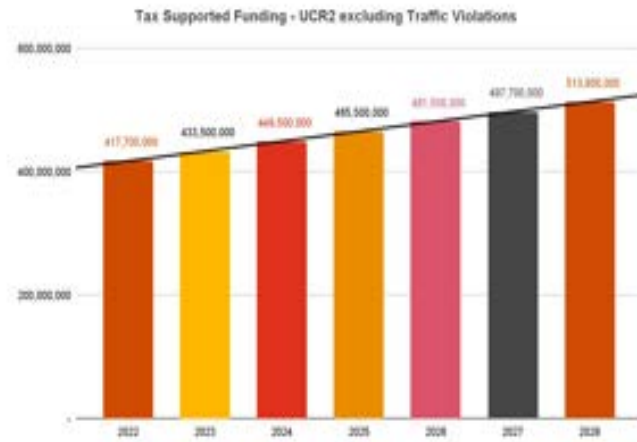
- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- We have retrieved data from Table 35-10-0177-01, which includes violations reported by the Canadian Forces Military Police, and based on Census Metropolitan Areas. For this model, we retrieved data from 2013 to 2021, for all Criminal Code violations.

Analysis

- To forecast the values for the volume of UCR-2 all violations, historical values of the violations from 2013 - 2022 were used. The forecasted values were calculated by using the trend indicated by historical values. Historical values for this data were obtained from Statistics Canada.
- The trend for this option shows a decline in the values, however, since the numerical values of the year over year change are greater than that of the baseline, there is an increase in the budget. This can be seen in the graph above.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **higher** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- A significant drawback of this option, when compared to population growth, is that it is a lagging indicator. As a result, it cannot be obtained and utilized within a reasonable period of time to determine funding projections, making it a less appropriate alternative for Factor G.
- This option would not be a good alternative to be used in combination with other options because since the forecasted percent change values are numerically high, therefore it will inflate the funding projections regardless of which combination is used in the formula with.

Alternatives for Factor G UCR-2 excluding Traffic Violations

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	5	Ratio Values		
1	1	1	1	1		29.86%	29.92%	29.89%
2024		2026		2028		Total Tax Supported Funding		
2.74%		2.59%		2.47%	↓	\$449,500,000	\$481,500,000	\$513,800,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- We have retrieved data from Table 35-10-0177-01, which includes violations reported by the Canadian Forces Military Police, and based on Census Metropolitan Areas. For this model, we retrieved data from 2013 to 2021, for all Criminal Code violations excluding traffic violations.

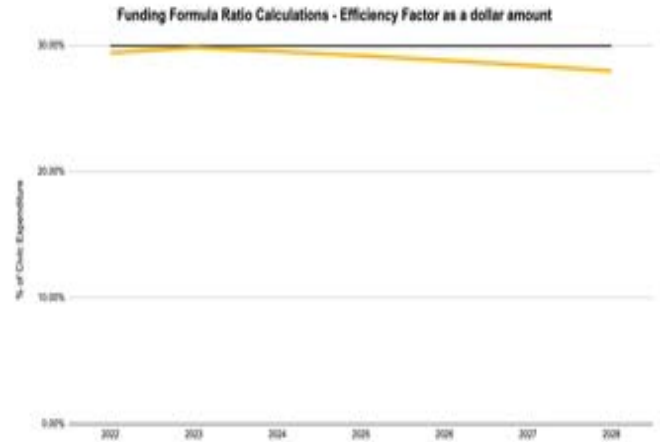
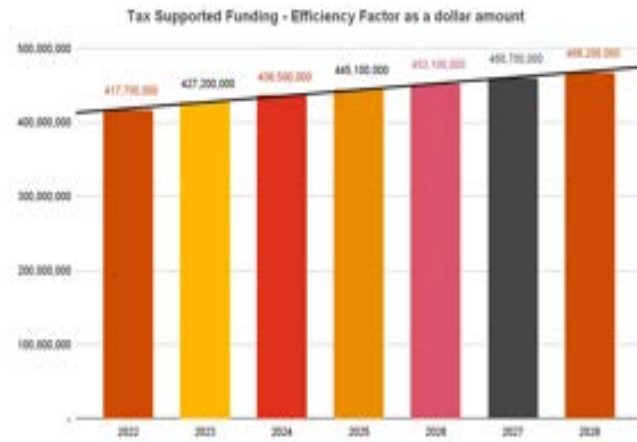
Analysis

- To forecast the values for the volume of UCR-2 excluding traffic violations, historical values of the violations from 2013 - 2022 were used. The forecasted values were calculated by using the trend indicated by historical values. Historical values for this data were obtained from Statistics Canada.
- The trend for this option shows a decline in the values, however, since the numerical values of the year over year change are greater than that of the baseline, there is an increase in the budget. This can be seen in the graph above.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **higher** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- A significant drawback of this option, when compared to population growth, is that it is a lagging indicator. As a result, it cannot be obtained and utilized within a reasonable period of time to determine funding projections, making it a less appropriate alternative for Factor G.
- This option would not be a good alternative to be used in combination with other options. The forecasted percent change values are numerically high and they will inflate the funding projections regardless of which other factor is used in combination in the formula.

Efficiency Factor

In the formula, as a dollar amount subtracted from the formula

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	0	1	1	1		29.49%	28.79%	27.95%
2024		2026		2028	Trend	Total Tax Supported Funding		
\$1.6 million		\$1.6 million		\$1.6 million	N/A	\$436,500,000	\$453,100,000	\$468,200,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- The efficiency factor is an annual reduction factor, a percentage, provided by the City of Edmonton City Council meant to represent expected annual gains in operational efficiency.
- This model assumes a value of \$1,600,000 for the efficiency factor every year.
- This option is applied to the base case scenario.

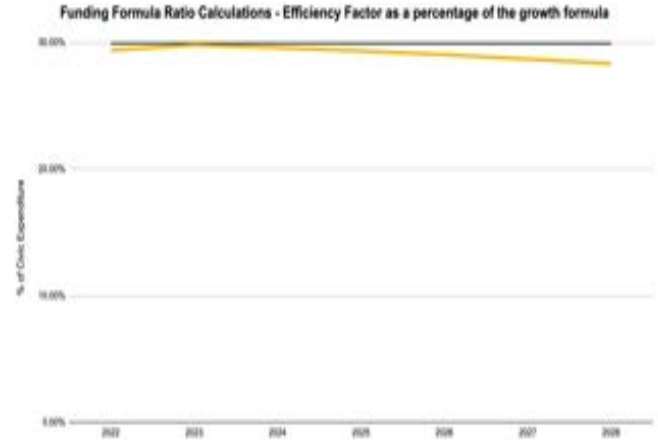
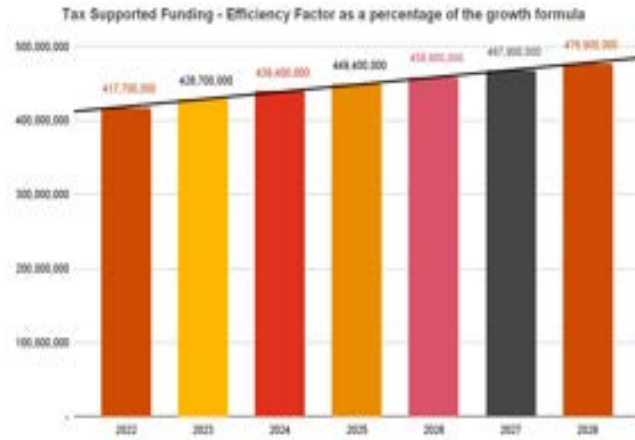
Analysis

- For this scenario, we have used the base case scenario and subtracted \$1.6 million from the tax supported funding to give us these final values.
- The value of the efficiency factor of \$1.6 million was the value set by City in 2016. This number was then used as the efficiency factor until 2018. For the purposes of this model, the assumption to continue using \$1.6 million was validated and approved by EPC.
- If this option is exercised, there is a steady increase in the funding received by the EPS, which is consistent with our base case scenario.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **slightly lower** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- The introduction of efficiency factors are more predictable than the Alternatives to Factor G from a budgeting perspective. Efficiency in the policing budget is important for several reasons including that the City has limited funding and competing priorities. There is also added pressure from the introduction of many public safety reforms that also require more funding to accomplish goals. Some of these initiatives also require capital investment, training and other start-up costs. Best practice suggests these initiatives be linked to Key Performance Indicators (KPIs) or strategic goals.
- Since the reduction of the budget by the efficiency factor is not tied to specific initiatives, it may be difficult to measure and track the true impact it has on the police service. Some areas that may see a decrease in funding include technological advancement, operational or administrative services and resource allocation. These could have the unintended effect of increases in crime and lower clearance rates.

Efficiency Factor

In the formula, as a percentage subtracted from the growth formula

Financial Framework					Total Score	2024	2026	2028		
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values				
1	0	1	1	1		29.58%	29.03%	28.33%		
2024		2026		2028		Trend		Total Tax Supported Funding		
2.50%		3.50%		4.50%		N/A		\$439,400,000	\$458,900,000	\$476,900,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- The efficiency factor is an annual reduction factor, a percentage, provided by the City of Edmonton City Council meant to represent expected annual gains in operational efficiency.
- This model uses 2.00% as the percentage, increasing by 0.5% each year.

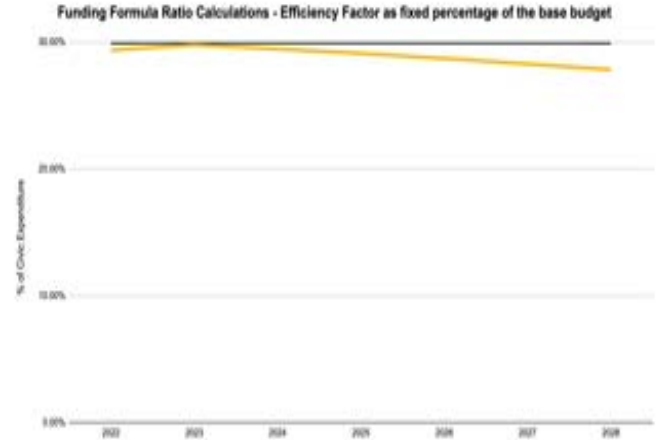
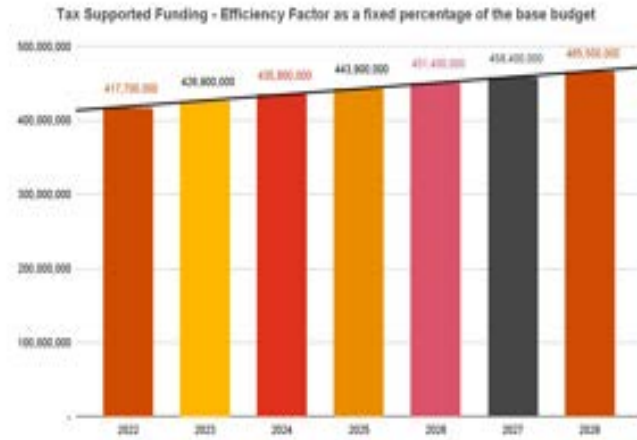
Analysis

- For this scenario, we have used the base case scenario and subtracted 2.50%, 3.50% and 4.50% from the growth formula to give us the final values for the year 2024, 2026, and 2028, respectively.
- For the purposes of this model, 2.00% was used to calculate the efficiency factor in 2023 and was reduced by 0.5% every year. The values and reduction was validated and approved by EPC.
- If this option is exercised, there is a steady increase in the funding received by the EPS, which is consistent with our base case scenario.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **slightly lower** than the values established in the baseline.
- All funds received by EPS are provided through tax revenues.
- The introduction of efficiency factors are more predictable than the Alternatives to Factor G from a budgeting perspective. Efficiency in the policing budget is important for several reasons including that the City has limited funding and competing priorities. There is also added pressure from the introduction of many public safety reforms that also require more funding to accomplish goals. Some of these initiatives also require capital investment, training and other start-up costs. Best practice suggests these initiatives be linked to Key Performance Indicators (KPIs) or strategic goals.
- Since the reduction of the budget by the efficiency factor is not tied to specific initiatives, it may be difficult to measure and track the true impact it has on the police service. Some areas that may see a decrease in funding include technological advancement, operational or administrative services and resource allocation. These could have the unintended effect of increases in crime and lower clearance rates.

Efficiency Factor

In the formula, as a fixed percentage subtracted from the base budget

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	0	1	1	1		29.47%	28.72%	27.84%
2024		2026		2028	Trend	Total Tax Supported Funding		
0.40%		0.40%		0.40%	N/A	\$435,800,00	\$451,400,000	\$465,500,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- The efficiency factor is an annual reduction factor, a percentage, provided by the City of Edmonton City Council meant to represent expected annual gains in operational efficiency.
- This model uses 0.40% as the percentage of the base budget to calculate the efficiency factor.

Analysis

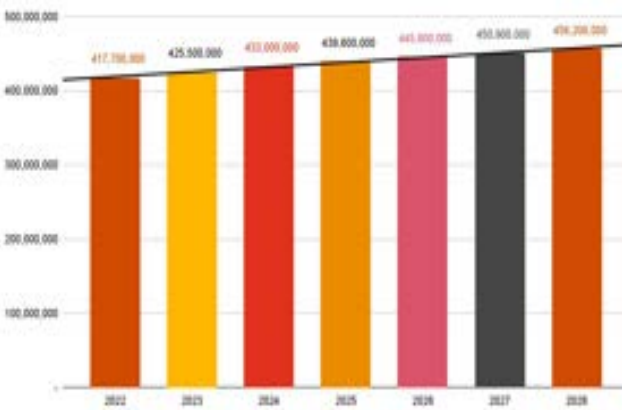
- For this scenario, we have used the base case scenario and subtracted 0.40% from the base case to give us the final values.
- For the purposes of this model, 0.40% was used to calculate the efficiency factor throughout. This value validated and approved by EPC.
- If this option is exercised, there is a steady increase in the funding received by the EPS, which is consistent with our base case scenario.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **lower** than the values established in the baseline. This can be seen in the graph above.
- All funds received by EPS are provided through tax revenues.
- The introduction of efficiency factors are more predictable than the Alternatives to Factor G from a budgeting perspective. Efficiency in the policing budget is important for several reasons including that the City has limited funding and competing priorities. There is also added pressure from the introduction of many public safety reforms that also require more funding to accomplish goals. Some of these initiatives also require capital investment, training and other start-up costs. Best practice suggests these initiatives be linked to Key Performance Indicators (KPIs) or strategic goals.
- Since the reduction of the budget by the efficiency factor is not tied to specific initiatives, it may be difficult to measure and track the true impact it has on the police service. Some areas that may see a decrease in funding include technological advancement, operational or administrative services and resource allocation. These could have the unintended effect of increases in crime and lower clearance rates.

Efficiency Factor

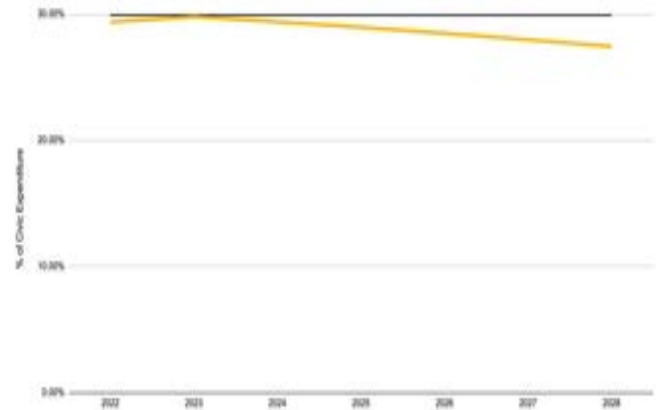
Proportional to the Civic Department Net Operating Expenditure Budget

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	0	1	1	1		29.39%	28.49%	27.44%
2024		2026		2028	Trend	Total Tax Supported Funding		
0.20%		0.20%		0.20%	N/A	\$433,000,000	\$445,600,000	\$456,200,000

Tax Supported Funding - Efficiency Factor proportional to the Civic Department Expenditure



Funding Formula Ratio Calculations - Efficiency Factor proportional to the Civic Department Expenditure



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- The efficiency factor is an annual reduction factor, a percentage, provided by the City of Edmonton City Council meant to represent expected annual gains in operational efficiency.
- This model uses 0.20% as the percentage of the Net Operating Expenditure to calculate the efficiency factor.

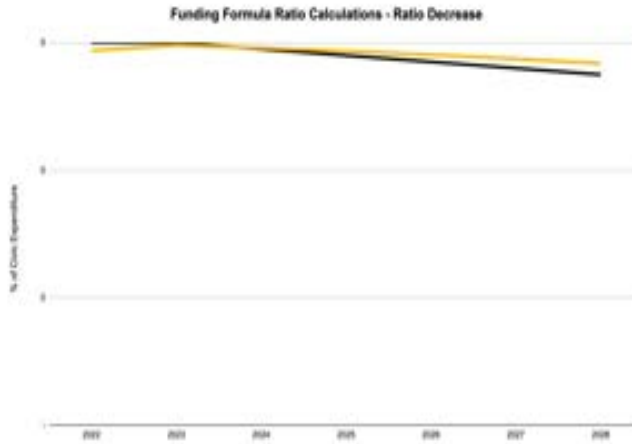
Analysis

- For this scenario, we have used the base case scenario and subtracted 0.20% of the Net Operating Expenditure from the base case to give us the final values.
- For the purposes of this model, 0.20% was used to calculate the efficiency factor throughout. This value validated and approved by EPC.
- If this option is exercised, there is a steady increase in the funding received by the EPS, which is consistent with our base case scenario.
- Given the assumptions that are presented, if this option is used in the funding formula, the 30% Civic Expenditure Ratio that has been set out by the City is **not passed** in the next five years. This can be seen in the graph above.
- In this scenario, the funding calculated by this formula is **lower** than the values established in the baseline. This can be seen in the graph above.
- All funds received by EPS are provided through tax revenues.
- The introduction of efficiency factors are more predictable than the Alternatives to Factor G from a budgeting perspective. Efficiency in the policing budget is important for several reasons including that the City has limited funding and competing priorities. There is also added pressure from the introduction of many public safety reforms that also require more funding to accomplish goals. Some of these initiatives also require capital investment, training and other start-up costs. Best practice suggests these initiatives be linked to Key Performance Indicators (KPIs) or strategic goals.
- Since the reduction of the budget by the efficiency factor is not tied to specific initiatives, it may be difficult to measure and track the true impact it has on the police service. Some areas that may see a decrease in funding include technological advancement, operational or administrative services and resource allocation. These could have the unintended effect of increases in crime and lower clearance rates.

Ratio Threshold

Reducing ratio threshold of 30% by a % every year

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	0	1	1	1		29.59%	29.06%	28.38%
2024		2026		2028	Trend	Ratio Threshold		
\$439,800,000		\$459,600,00		\$478,100,000	Decrease by 0.5% per year	29.50%	28.50%	27.50%



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00%, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **This option is applied to the base case scenario.**
- **Ratio threshold is decreased by 0.50% every year.**

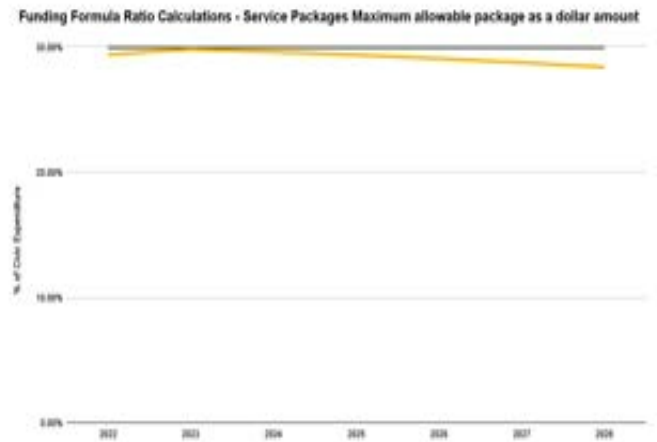
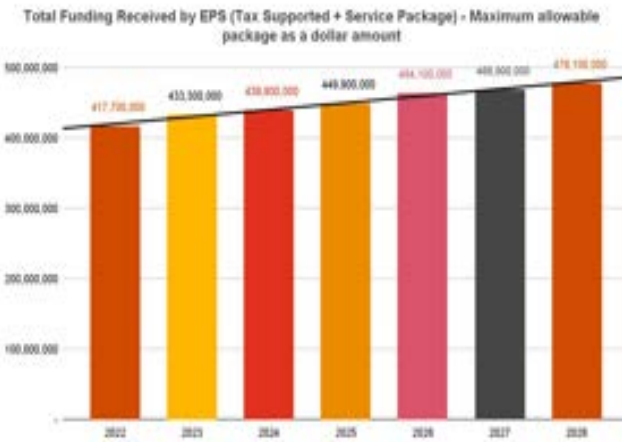
Analysis

- This scenario uses the base case scenario to evaluate the impact on the ratio. As such, the amount of funding received by EPS is not altered to carry out this manipulation.
- This option decreases the 30% ratio of base budget to civic expenditure by 0.5% every year. This results in the threshold changing to 29.50%, 28.50% and 27.50% in years 2024, 2026 and 2028, respectively.
- Given the assumptions that are presented, if this option is used in the funding formula, the Civic Expenditure Ratio is passed 2024 and stays above the moving targets until 2028. This can be seen in the graph above.
- The funding formula does not account for a moving ratio target, therefore, the calculated ratio surpassing the threshold is expected.
- This option is not considered desirable from a budgeting perspective on its own as it is established without regard to EPS performance and outcomes, and changing public safety requirements, but may be used in combination with other factors.
- In interpreting the results, it is important to note that if the calculated ratio exceeds the threshold set by the City, the EPS Funding Formula will be automatically reduced to manage this ratio. Caveats or considerations for this are:
 - The value for the funding formula cannot be reduced to a negative figure.
 - In fiscal years where the formula is reduced to zero, but where the ratio still exceeds 30.0% due to salary settlements, the formula will be reduced in future fiscal years within the budget cycle until the ratio returns to 30.0%.
 - The application of this ratio limit will be adjusted for consideration of structural changes in the way.

Service Packages

Maximum allowable service package request per fiscal year, outside the formula as a dollar amount

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
2	1	0	0	1		29.59%	29.06%	28.38%
2024		2026		2028	Trend	Total Funding Received by EPS		
\$0		\$4,500,000		0	N/A	\$439,800,000	\$464,100,000	\$478,100,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- Service packages are defined as new or enhanced services, or increases resulting from growth or impact of capital, that require funds. Service packages require Council approval through the budget process.
- This model assumes that service package will be \$4,500,000 of allocated funding.
- This model assumes that funding for service packages is received in 2023 and 2026. No support is provided for the subsequent years, until a new service package has been introduced.
- Values in the 'Adjusted Tax Supported Funding' are used for the following year's base budget.

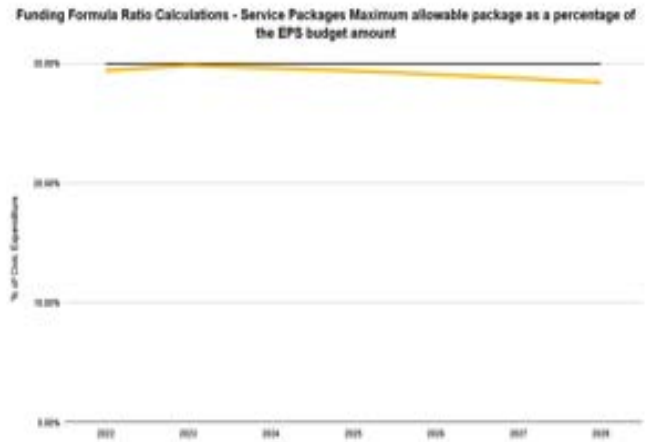
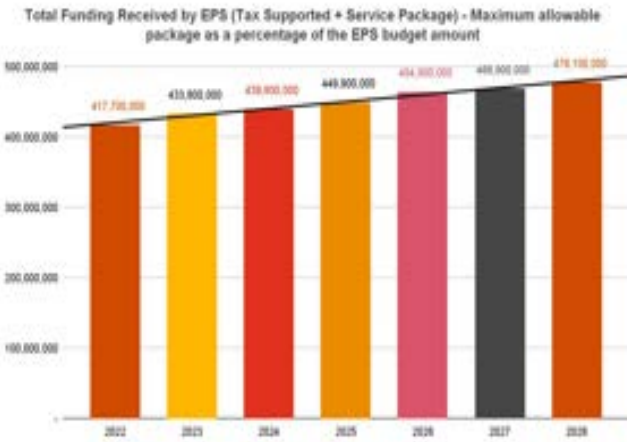
Analysis

- This scenario adds \$4.5 million to the funding formula in years 2023 and 2026. The change in the funding values can be seen in the graphs above for the year 2026.
- Despite the addition of \$4.5 million in 2 years, the ratio values are the same as the values baseline scenario. This is because the ratio is calculated using the values for total tax supported funding received by EPS, not the total funding (ie. inclusive of service packages). They still **do not pass** than the 30% Civic Expenditure Ratio that has been set out by the City.
- The total funding received by EPS is **higher** only in the year that the service package is received. Otherwise, it stays consistent with the baseline values.
- It is important to note that in the last few years, EPS has only received 2 service packages - one for the annexation of the city of Leduc, and the other for the legalization of cannabis. This is important to note because although this scenario seems plausible and reasonable, it does occur frequently. Thus, depending on service packages to increase the funds available for the police service is not appropriate.
- The service package approach can be used to tie budgets to specific program goals. While it may serve to reduce or control costs as well as other approaches, it lacks appropriate governance and is not reliable as the influx of funds is not consistently received over the years.

Service Packages

Maximum allowable service package request per fiscal year, outside the formula as a percentage of the total EPS budget amount

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
2	1	0	0	1		29.59%	29.06%	28.38%
2024	2026		2028	Trend	Total Funding Received by EPS			
0%	1%		0%	N/A	\$439,800,000	\$464,900,000	\$478,100,000	



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- Service packages are defined as new or enhanced services, or increases resulting from growth or impact of capital, that require funds. Service packages require Council approval through the budget process.
- This model assumes that funding for service packages is received in 2023 and 2026. No support is provided for the following years, until a new service package has been introduced.
- Values in the 'Adjusted Tax Supported Funding' is what are used for the following years base budget.

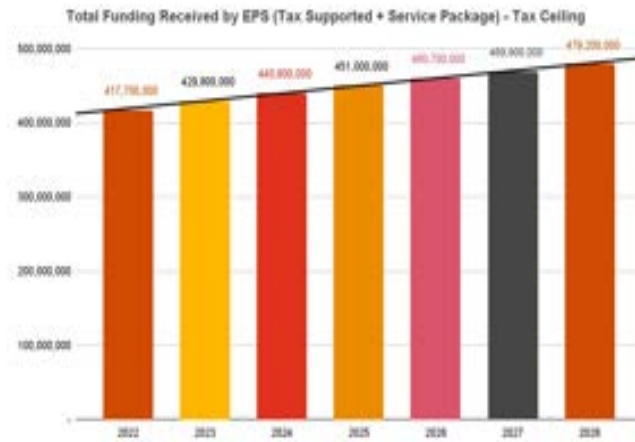
Analysis

- This scenario adds 1% of the budget to the funding formula in years 2023 and 2026. The change in the funding values can be seen in the graphs above for the year 2026.
- Despite the addition of the service packages in 2 years, the ratio values are the same as the values baseline scenario. This is because the ratio is calculated using the values for total tax supported funding received by EPS, not the total funding (ie. inclusive of service packages). They still **do not pass** than the 30% Civic Expenditure Ratio that has been set out by the City.
- The total funding received by EPS is **higher only in the year that the service package is received**. Otherwise, it stays **consistent** with the baseline values.
- It is important to note that in the last few years, EPS has only received 2 service packages - one for the annexation of the city of Leduc, and the other for the legalization of cannabis. This is important to note because although this scenario seems plausible and reasonable, it does occur frequently. Thus, depending on service packages to increase the funds available for the police service is not appropriate.
- The service package approach can be used to tie budgets to specific program goals. While it may serve to reduce or control costs as well as other approaches, it lacks appropriate governance and is not reliable as the influx of funds is not consistently received over the years.

Service Packages

Any growth funding for EPS Service Package cannot exceed x% tax increase per year

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
2	1	0	0	1		29.59%	29.06%	28.38%
2024		2026		2028	Trend	Total Funding Received by EPS		
0.20%		0.20%		0.20%	N/A	\$440,800,000	\$460,700,000	\$479,200,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- This model assumes that the maximum allowance is 1.00% of the base budget.
- This mode assumes a tax increase of 0.20% every year.
- This model assumes that EPS receives service packages only in 2023 and 2026.

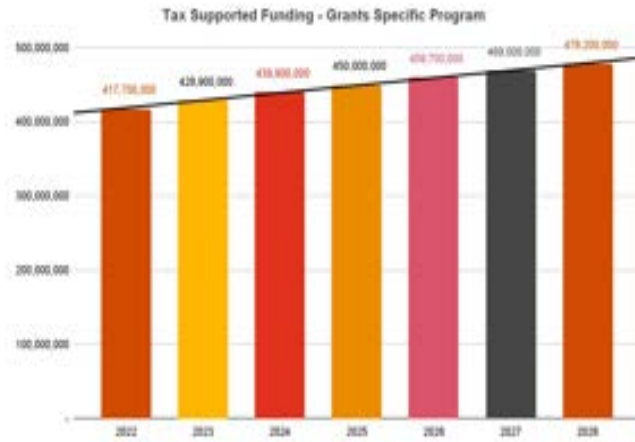
Analysis

- This scenario adds 0.20% of the budget to the funding formula every year. The change in the funding values can be seen in the graphs above.
- Despite the yearly addition of service packages, the ratio values are the same as the values baseline scenario. This is because the ratio is calculated using the values for total tax supported funding received by EPS, not the total funding (ie. inclusive of service packages). They still do not pass than the 30% Civic Expenditure Ratio that has been set out by the City.
- The total funding received by EPS is **higher** the baseline values.
- It is important to note that in the last few years, EPS has only received 2 service packages - one for the annexation of the city of Leduc, and the other for the legalization of cannabis. This is important to note because although this scenario seems plausible and reasonable, it does occur frequently. Thus, depending on service packages to increase the funds available for the police service is not appropriate.
- The service package approach can be used to tie budgets to specific program goals. While it may serve to reduce or control costs as well as other approaches, it lacks appropriate governance and is not reliable as the influx of funds is not consistently received over the years.

Grants

Grant funding for a specific EPS program does not impact the funding formula

Financial Framework					Total Score	2024	2026	2028		
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	5	Ratio Values				
2	0	1	1	1		29.59%	29.06%	28.38%		
2024		2026		2028		Trend		Total Funding Received by EPS		
\$100,000		\$100,000		\$100,000		N/A		\$439,900,000	\$459,700,000	\$478,200,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **This model assumes that grants received are \$100,000**

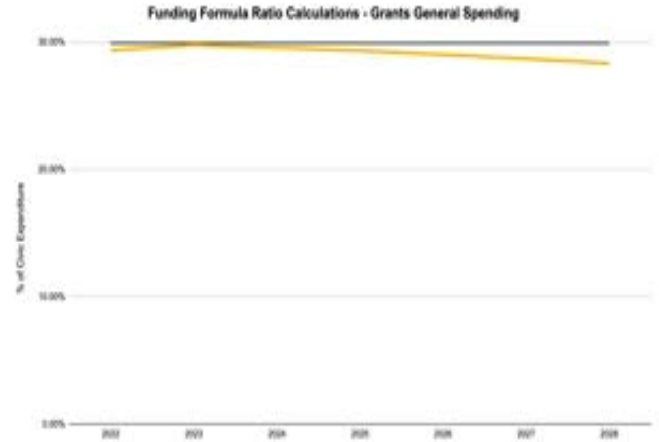
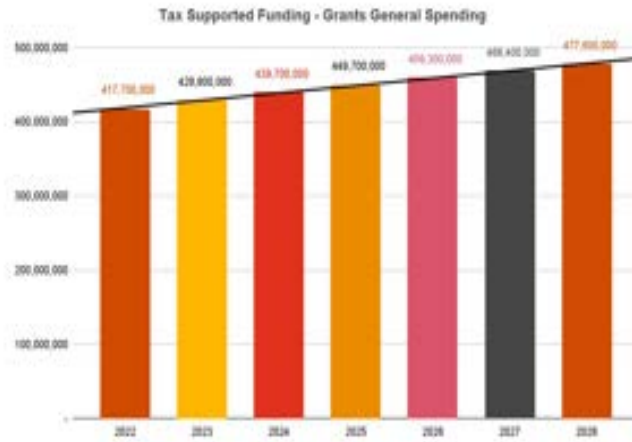
Analysis

- Analyzing this scenario is straightforward as it does not require manipulation of the formula, but rather includes an enhancement to the base funding already received by the EPS.
- As expected, the final funding values for this scenario are **\$100,000 more** than values determined for the base case scenario.
- Even with the increase in the final funding values, the ratio values **do not pass** the 30% civic expenditure ratio threshold set out by the City.
- All funds received by EPS are provided through tax revenues, in the form of budgeted amounts and grants.
- The grant approach may work well as an interim budget solution but is not viewed as a permanent solution due to its lack of predictability and stability. It is intended to be an enhancement to the base formula, and should not be relied upon as a source of steady funding for the EPS.

Grants

Grant funding for a general EPS spending reduces tax supported funding by equivalent amount

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	5	Ratio Values		
2	0	1	1	1		29.58%	29.04%	28.35%
2024		2026		2028	Trend	Total Tax Supported Funding		
\$100,000		\$100,000		\$100,000	N/A	\$439,700,000	\$459,300,000	\$477,600,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **This model assumes that grants received are \$100,000**

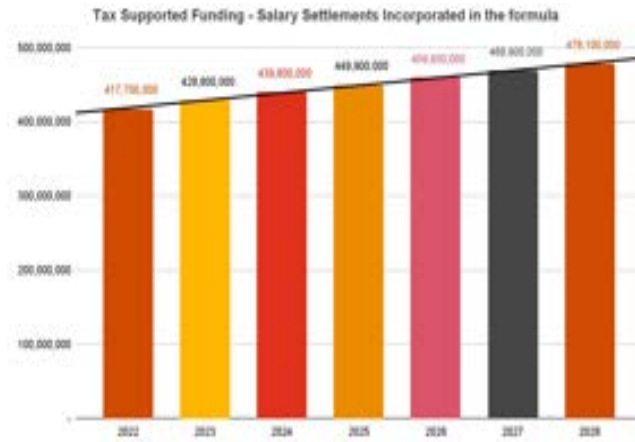
Analysis

- Analyzing this scenario is straightforward as it does not require manipulation of the formula, but rather includes an enhancement to the base funding already received by the EPS. It is important to note that although the amount of funding required and received by EPS does not change, the amount of tax supported funding received is **less** the value of the grant.
- As expected, the final funding values for this scenario are **\$100,000 less** than values determined for the base case scenario.
- Even with the decrease in the final funding values, the ratio values **do not pass** the 30% civic expenditure ratio threshold set out by the City.
- All funds received by EPS are provided through tax revenues, in the form of budgeted amounts and grants.
- The grant approach may work well as an interim budget solution but is not viewed as a permanent solution due to its lack of predictability and stability. It is intended to be an enhancement to the base formula, and should not be relied upon as a source of steady funding for the EPS.

Salary Settlements

Incorporating salary settlements into the formula

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	1	0	0	2		29.50%	29.06%	28.38%
2024		2026		2028	Trend	Total Tax Supported Funding		
\$3,800,000		\$3,800,000		\$3,800,000	N/A	\$439,800,000	\$459,600,000	\$478,100,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **This model assumes that salary settlements are \$3,800,000 every year.**
- **This model assumes no growth in salary settlements, however realistically this value will change every year.**

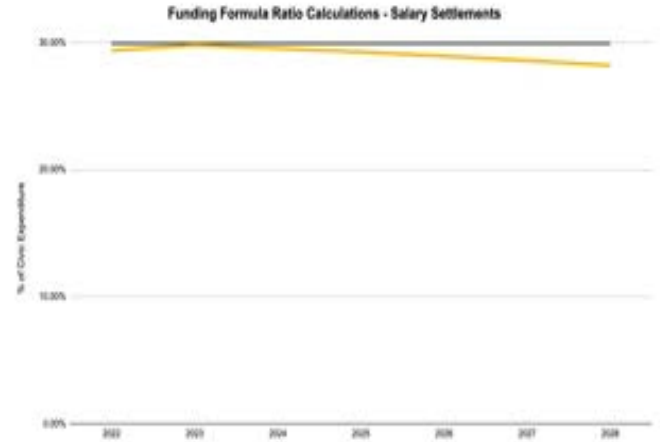
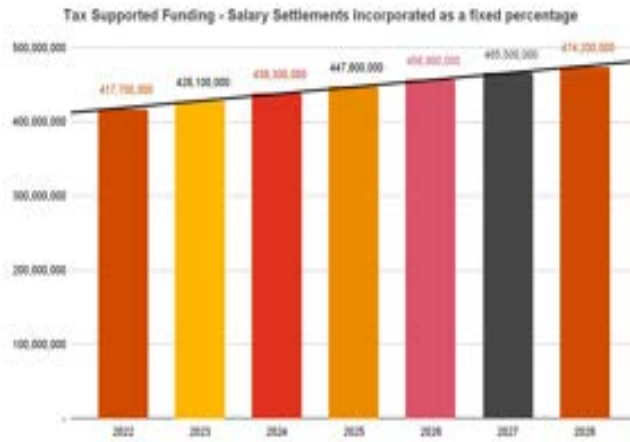
Analysis

- This scenario does not manipulate the formula as salary settlements are currently incorporated into the funding formula as a dollar amount. Thus, the funding and ratio values for this scenario are the same as that of the base case as none of our assumptions have changed.
- This approach is compatible with settlements of collective agreements which is a major driver of incremental cost. Under this approach there is a risk that policing budgets would outpace those of civic budgets. There is also the issue of which party bears the risk associated with the unpredictability of forecasted settlements.

Salary Settlements

Incorporating a fixed percentage personnel inflation factor into the formula. Variances are managed by EPS

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	1	0	0	2		29.54%	28.94%	28.21%
2024		2026		2028	Trend	Total Tax Supported Funding		
0.75%		0.75%		0.75%	N/A	\$438,300,000	\$456,900,000	\$474,200,000



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **This model assumes that Salary settlements are 0.75% of the Net Personnel budget every year.**

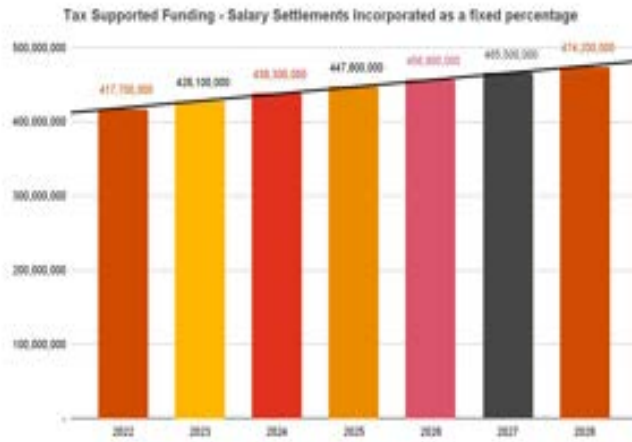
Analysis

- Analyzing this scenario is straightforward as it does not require manipulation of the formula, but rather requires an adjustment to the base funding already received by the EPS.
- The final funding values for this scenario are **slightly lower** than values determined for the base case scenario. Thus, as expected, the ratio values **do not pass** the 30% civic expenditure ratio threshold set out by the City.
- All funds received by EPS are provided through tax revenues.
- Using 0.75% to calculate the values for salary settlements, the model calculates settlement values that range between \$3,000,000 and \$3,400,000. These values are lower than the assumed salary settlement values (\$3,800,000) in the base case, therefore, resulting in lower funding values and lowered ratio values relative to the base case.
- Under this approach Salary Settlements need to be reviewed and if forecasted, forecasted with criticality. Historical values, updates to legislation, demand and responsibilities for police service, operational requirements are only a few of the factors that need to be considered in the forecasting exercise.
- It is important to note that although values for this scenario and the next scenario are the same, the variances between forecasted and actual salary settlements will be managed by the EPS. Negative variances could result in requirements to reduce policing services.

Salary Settlements

Incorporating a fixed percentage personnel inflation factor into the formula. Variances are managed by Administration

Financial Framework					Total Score	2024	2026	2028
Adaptable	Impartial	Predictable & Stable	Sustainable	Governance	4	Ratio Values		
1	1	0	0	2		29.54%	28.94%	28.21%
2024	2026		2028	Trend	Total Tax Supported Funding			
0.75%	0.75%		0.75%	N/A	\$438,300,000	\$456,900,000	\$474,200,000	



Assumptions

- This model assumes no increase in revenue over the years in the model, however, realistically revenue will increase based on various factors, including population growth in the city.
- This model assumes that the NPIC is assumed to be 80%.
- This model assumes no increase in salary settlements over the years in the model, realistically they will change from year to year.
- This model does not consider retroactive pay for any year other than 2022.
- This model assumes static growth rate for Civic Department Net Operating Expenditures at 3.00% per annum, although realistically growth rate will fluctuate from year to year.
- This model assumes that inflation is consistent.
- In this model, the base budget for 2022 (\$407,000,000) absorbs the retroactive salary settlement of \$3,700,000 million. This brings the total value of the base budget for 2022 to \$410,700,000.
- This model uses 'Adjusted Base Funding' Values from the previous year for the new year.
- **This model assumes that Salary settlements are 0.75% of the Net Personnel budget every year.**

Analysis

- Analyzing this scenario is straightforward as it does not require manipulation of the formula, but rather requires an adjustment to the base funding already received by the EPS.
- The final funding values for this scenario are **slightly lower** than values determined for the base case scenario. Thus, as expected, the ratio values **do not pass** the 30% civic expenditure ratio threshold set out by the City.
- All funds received by EPS are provided through tax revenues.
- Using 0.75% to calculate the values for salary settlements, the model calculates settlement values that range between \$3,000,000 and \$3,400,000. These values are lower than the assumed salary settlement values (\$3,800,000) in the base case, therefore, resulting in lower funding values and lowered ratio values relative to the base case.
- Under this approach Salary Settlements need to be reviewed and if forecasted, forecasted with criticality. Historical values, updates to legislation, demand and responsibilities for police service, operational requirements, and inflation are only a few of the factors that need to be considered in the forecasting exercise.
- It is important to note that although values for this scenario and the previous scenario are the same, the variances between forecasted and actual salary settlements will be managed by the Administration. Negative variances could result in requirements to recommend to Council to reduce other civic services, increase in taxes or reallocate resources.



Summary

Summary of Findings

A summary of the options assessment is provided below:

Alternatives to Population Growth (Factor G)

The Alternatives to Factor G as a direct substitute for population growth rates that are based on demand for calls and public safety outcomes are in general problematic on their own; These alternatives are, on the one hand, not necessarily indicators of required policing effort and, on the other hand, not best suited for civic budgeting due to their volatility and forecasting challenges. The application of these alternatives without any guardrails could result in budgets that exceed the rate of growth of civic expenditures at one extreme, or act to reduce police budgets to below their 2023 values. Of the Alternatives to Factor G considered, crime severity index is the highest rated option, but it still lags behind the qualitative rating of the current formula.

Efficiency Factors

The introduction of efficiency factors are more predictable than the Alternatives to Factor G from a budgeting perspective. Efficiency in the policing budget is important for several reasons including that the City has limited funding and competing priorities. There is also added pressure from the introduction of many public safety reforms that also require more funding to accomplish goals. Some of these initiatives also require capital investment, training and other start-up costs. Best practice suggests these initiatives be linked to Key Performance Indicators (KPIs) or strategic goals, otherwise the risk is that the strategy can be arbitrary and diminish the effectiveness of all services, regardless of their value.

Ratio Thresholds

Ratio limits on their own are not viewed as effective as a standalone budgeting tool, however they may work in combination with population growth forecasts to set limits to budget increases and stay within affordability limits.

Service Packages

The service package approach can be used to tie budgets to specific program goals. While it may serve to reduce or control costs as well as other approaches, it lacks appropriate governance.

Grants

The grant approach can be reasonably transparent but only with extensive negotiation. There can be bias introduced with co-mingling of services. As a result the grant approach is not viewed as a permanent budgeting solution approach but may work on an interim basis. Grants also need to be examined closely as most provincial and federal grants are designed to supplement funding in areas of interest and not as a replacement to municipal funding. Grants may also work in combination with other factors and/or as enhancements to the base formula.

Salary Settlements

This approach is compatible with settlements of collective agreements which is a major driver of incremental cost. Under this approach there is a risk that policing budgets would outpace those of civic budgets. There is also the issue of which party bears the risk associated with the unpredictability of forecasted settlements.

Combinations of Factors

Combinations of factors introduce more complexity to the civic budgeting process. However, some combinations, for example adjusting population growth with more refined forecasts of the Crime Severity Index, may be effective in a budget formula. The initial high-level modelling of this option has been based on forecasts that are based on a trend line; other approaches are possible and worthy of further exploration in combination with population growth.

Summary Analysis

Below is a summary of the qualitative and quantitative analysis. It provides the framework score and the ratio and funding values for Year 1 (2024), Year 3 (2026), and Year 5 (2028) for the options examined. Most of the options do not exceed the 30% ratio or the base case funding values in any of the years. These results are based on variable assumptions that are subject to change.

*denotes that the value is the total funding received by EPS.

Options	Framework Score	Ratio Values			Funding Values		
		2024	2026	2028	2024	2026	2028
Basecase - Population Growth	8	29.50%	29.06%	28.38%	\$439,800,000	\$459,600,000	\$478,100,000
Factor G - Dispatched Calls for Service	4	28.47%	26.26%	24.18%	\$404,800,000	\$394,000,000	\$382,700,000
Factor G - Non-dispatched Calls for Service	4	26.43%	21.70%	17.20%	\$346,700,000	\$286,700,000	\$221,800,000
Factor G - Total Requests for Assistance	4	27.62%	24.39%	21.34%	\$380,800,000	\$350,200,000	\$317,800,000
Factor G - Crime Severity Index	7	29.46%	28.78%	27.11%	\$435,700,000	\$454,300,000	\$473,400,000
Factor G - Violent Crime Severity Index	5	29.47%	28.84%	28.22%	\$436,300,000	\$455,700,000	\$475,900,000
Factor G - Non- Violent Crime Severity Index	5	29.45%	28.76%	28.07%	\$435,400,000	\$453,700,000	\$472,500,000
Factor G - Total Criminal Code	5	29.97%	30.23%	30.37%	\$453,200,000	\$489,000,000	\$525,000,000
Factor G - UCR-2 All violations	5	29.77%	29.65%	29.47%	\$446,200,000	\$475,100,000	\$504,200,000
Factor G - UCR-2 excluding traffic violations	5	29.86%	29.92%	29.89%	\$449,500,000	\$481,500,000	\$513,800,000
Efficiency Factor - in the formula as a dollar amount subtracted from the formula	4	29.49%	28.79%	27.95%	\$436,000,000	\$453,100,000	\$468,200,000
Efficiency Factor - in the formula as a percentage subtracted from the growth formula	4	29.58%	29.03%	28.33%	\$439,400,000	\$458,900,000	\$476,900,000
Efficiency Factor - in the formula as a fixed percentage subtracted from the base budget	4	29.47%	28.72%	27.84%	\$435,800,000	\$451,400,000	\$465,500,000
Efficiency Factor - Proportional to the Civic Department Net Operating Expenditure Budget	4	29.39%	28.49%	27.44%	\$433,000,000	\$445,600,000	\$456,200,000
Ratio Threshold - reducing ratio threshold by % every year	4	29.59%	29.06%	28.38%	N/A	N/A	N/A
Service Packages - maximum allowable SP request per fiscal year, outside the formula as a dollar amount*	4	29.59%	29.06%	28.38%	\$439,800,000	\$464,100,000	\$478,100,000
Service Packages - maximum allowable SP request/fiscal year, outside the formula as a percentage of total EPS budget*	4	29.59%	29.06%	28.38%	\$439,800,000	\$464,900,000	\$478,100,000
Service Packages - tax ceiling*	4	29.59%	29.06%	28.38%	\$440,800,000	\$460,700,000	\$479,200,000
Grants - grant funding for a specific EPS program*	5	29.59%	29.06%	28.38%	\$439,900,000	\$459,700,000	\$478,200,000
Grants - grant funding for a general EPS spending	5	29.58%	29.04%	28.35%	\$439,700,000	\$459,300,000	\$477,600,000
Salary Settlements - Incorporating Salary Settlements into the formula	4	29.50%	29.06%	28.38%	\$439,800,000	\$459,600,000	\$478,100,000
Salary Settlements - Incorporating a fixed percentage personnel inflation factor. Variances managed by EPS or Administration	4	29.54%	28.94%	28.21%	\$438,300,000	\$456,900,000	\$474,200,000



Appendix

Phase 1: Gather, review and analyze available data and information

PwC conducted a desktop review of the quantitative and qualitative data that was provided by EPC and used this information to establish context and a base understanding of the formula, how it was developed and the guiding principles that were used. This phase included numerous discussions with members of EPC and EPS for clarification of terminology, data, sources and more.

Key Activities:

- Submitted a preliminary and subsequent data requests to EPC for relevant project information.
- Analyzed the information to gather insights and identify key project activities.

Desired Outcomes:

- Gain a better understanding of the formula and how it was developed
- Understand the options developed by the working group, and its impact on the formula
- Understand the guiding principles are regarding the formula and decision making process
- Gather financial data (historical, actual and forecasted values) to deconstruct the formula. This allowed us to manipulate the formula to understand the impact of each option on the final funding values

Phase 2: Develop Financial Framework

Based on the information that was gathered in Phase 1, PwC developed a financial assessment framework. The intent of this framework was to evaluate all the options presented to us in a qualitative way and asses their impact and feasibility as a manipulation to the current funding formula. The guiding principles and goals of the EPC and EPS supported in the development of the framework.

Key Activities:

- Determine core pillars that can be used to assess all options presented
- Determine the description of each pillar and its importance relative to the formula
- Determine questions that must be answered for each pillar, with regard to each option
- Develop scoring criteria and heat map

Desired Outcomes:

- Develop an objective assessment for each option presented, while comparing it to the current funding formula
- Objective assessment would include qualitative analysis and justification for scores received by each option
- The scoring would then be used to later in the report for further discussion

Phase 3: Evaluate Options using Framework and build Dynamic Model

Stage 3 forms the basis of the evaluation. PwC reviewed the data and documents provided by EPC to evaluate the options presented. PwC developed a dynamic model that is capable of manipulating individual options, but also a combination of various options to show the impact they have on the overall funding values. PwC then used the scoring from the framework, in addition to the model to determine the applicability and relativity of each option as an alternative to the current funding formula.

Key Activities:

- Develop dynamic model
- Develop discussion points to deem applicability of each option
- Discuss impact of manipulation on final funding values

Desired Outcomes:

- Understanding the impact of each option on the final funding values relative to the current funding formula
- Identify advantages and disadvantages of each option
- Discuss the impact of each option in 1, 3 and 5 year intervals, along with the impact on the ratio threshold determined by the City of Edmonton.

Phase 4: Compile the data and analysis into a comprehensive report

Based on the analysis and synthesis of information, the last stage of the engagement is to draw conclusions and insights and communicate them in an effective manner. PwC provided an initial draft of the report for EPC to review, and updated the report to address any gaps or inconsistencies.

Key Activities:

- Develop final report and recommendations.

Desired Outcomes:

- Communicate the findings, conclusions, and recommendations in a clear and concise manner through a thorough and comprehensive final report.

- EPS information 2000-2019.xls
- Edmonton Police Service Funding Formula Policy - CR_5986. Attachment 1.pdf
- Data for Police Commission - May 31_23. Xlsx
- Council Motion - Funding Formula.docx
- 2020-06 Memo to Council re June 17 Motion.pdf
- 5.4 - Funding Formula Update.pdf
- 5.5 - Funding Formula Update.pdf
- 6.5 - Funding Formula Update.pdf
- 7.2 - Funding Formula Update.pdf
- 8. Funding Formula Update.pdf
- Administration Presentation - EPS Funding Formula Revised - FCS01331.pdf
- Attachment 1 - Police Budgeting Final Report_June 2022.pdf
- Attachment 2 - FCS01332 Jurisdictional Scan of Police Funding.pdf
- Edmonton Police Service Funding Formula Policy - CR_5986 - Edmonton Police Service Funding Formula Policy - Attachment 2.pdf
- Edmonton Police Service Funding Formula Policy - CR_5986 - Edmonton Police Service Funding Formula Policy - REPORT.pdf
- Edmonton Police Service Funding Formula Policy - CR_5986 - Edmonton Police Service Reserve Policy - Attachment 3.pdf
- Edmonton Police Service Funding Formula Policy - CR_5986 Edmonton Police Service Funding Formula Policy - Attachment 1.pdf
- EPS 2023-2026 Budget Presentation.pdf
- EPS Funding Formula - Google Docs.pdf
- EPS Reserve Policy - 2018.pdf
- FCS01331 Edmonton Police Service - Revised Funding Formula and Related Policy Council Report .pdf
- FCS01332 Jurisdictional Scan of Police Funding - REPORT.pdf
- Funding Formula Policy 2022.pdf
- Part 2 of Motion - Matrix of Options.pdf
- Recommendations for EPSs New Funding Formula.pdf
- Resource-Analysis-Funding-Police-Funding-HomelessServices.pdf
- 2019 Q4 Report - EPS Response Time & Dispatch Call Vols..pdf
- Att. 1 - 2019 Q4 EPC Report - Dispatch Call Response Time.pdf
- Att. 2 - 2019 Q4 EPC Dispatch Response Time v5.pdf & pptx.
- Att.1 - B21-148 City Wide & Downtown Trends Report.pdf
- Att.2 - B21-148 Dispatched CFS Map.pdf
- Att.3 - B21-148 Occurrence Map - Division.pdf
- Att.4 - 2020 Mental Health Infographics.pdf
- Att.5 - 2020 Social Disorder Infographic.pdf
- Attachment 1 - Police Budgeting Final Report_June 2022.pdf
- Attachment 2 - FCS01332 Jurisdictional Scan of Police Funding.pdf
- Citywide calls for service and occurrence trends-Briefing Note.pdf
- Edmonton Police Service 2023-2026 Budget Submission - Oct 07 2022.pdf
- EPC Data_Doc Request_April26.pdf
- EPS-Budget-Overview-2016-18-Document-Approved-Budget-Revised.pdf

Our Services were performed, and this Report was developed, in accordance with our engagement letter dated April 18, 2023 and are subject to the terms and conditions included therein.

Our role is advisory only. The Edmonton Police Commission (EPC) is responsible for all management functions and decisions relating to this engagement, including establishing and maintaining internal controls, evaluating and accepting the adequacy of the scope of the Services in addressing EPC needs, and making decisions regarding whether to proceed with recommendations. EPC is also responsible for the results achieved from using the Services or deliverables.

This information is strictly confidential and has been prepared solely for the use and benefit of, and pursuant to a client relationship exclusively with, the EPC (Client). This Report should not be copied or disclosed to any third party or otherwise be quoted or referred to, in whole or in part, without the prior written consent of PwC. In the event that this Report is obtained by a third party or used for any purpose other than in accordance with its intended purpose, any such party relying on the Report does so entirely at their own risk and shall have no right of recourse against PwC, and its partners, directors, employees, professional advisors or agents.

Our work was limited to the specific procedures and analysis described herein and was based only on the information made available through June 23, 2023. Accordingly, changes in circumstances after this date could affect the findings outlined in this Report. We are providing no opinion, attestation, or other form of assurance with respect to our work and we did not verify or audit any information provided to us.

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