The City of Edmonton has rigorous policies and procedures in place to maximize investment returns at a prudent level of overall risk.

These policies and procedures guide the City’s Investment Committee in managing and building upon the City’s financial assets to help sustain Edmontonians’ quality of life.

Over the past 10 years, these accomplishments have contributed $759 million of investment earnings and dividends to the City’s budget. If this amount was related to taxation, property taxes would have increased by more than 7% over that time to make up the difference.

Successful management of the City’s investment portfolio—which comprises seven funds—is one of the key factors in maintaining Edmonton’s financial sustainability, as set out in the City’s Financial Sustainability Plan.
2016 OVERVIEW
EDMONTON’S INVESTMENTS SHOW CONTINUED STRENGTH.

CANADIAN EQUITIES IMPROVED

Ongoing uncertainty with respect to the many political and economic events that occurred throughout 2016 was a prevailing theme that impacted capital markets.

Unlike the two previous years, the price of oil and the Canadian dollar increased in 2016. The price of oil rose 45%, which was the largest one-year gain since 2009, while the Canadian dollar had a slight increase of 3% versus the U.S. dollar. As a result, Canadian equities were one of the best performing markets in 2016, posting a much improved return of 21.1% for the year.

Although U.S. equities gained a respectable 12%, this was the first time the U.S. market underperformed Canada since 2010. Foreign equity returns were mixed; however, the strength of the Canadian dollar meant that all of these returns were reduced, once converted back into Canadian dollars.

Finally, reflecting the historic low interest rates that currently exist, Canadian fixed-income securities (bonds) ended the year with a muted return of 1.7%.

EDMONTON’S INVESTMENTS OUTPERFORM OVER TIME

Performance of the City of Edmonton investment funds ranged from 0.8% (Money Market Fund) to 8.1% (Ed Tel Endowment Fund), depending on each fund’s asset mix.

On a four-year basis, absolute returns have been strong and from a relative perspective, all of the City’s funds continued to exceed their benchmarks.

The City’s largest fund, the Ed Tel Endowment Fund, paid $40 million in dividends to the City.

KEY PROJECTS IN 2016

The City’s investment custodian is a trust company responsible for the safekeeping of the City’s financial assets. A custody review was initiated in 2016. The scope of the project included reviewing the custody agreement and associated fees, overall portfolio activity as well as cash management and foreign exchange services.

New members were appointed to the City’s Investment Committee in 2016. As per the Terms of Reference, external members can only serve two consecutive three-year terms on the Investment Committee. This ensures continued good governance of the City’s financial assets.

An upgrade of the internal Investment Tracking System was a project originally scheduled for 2016, but was deferred until 2017 in order for work with the City’s investment custodian to be finalized.
WHAT’S AHEAD?

Looking ahead, many of the same challenges that have prevailed over the last number of years are expected to continue influencing investment returns. Global economic growth is likely to be tempered; however, monetary policy around the world remains accommodative. An increased focus on fiscal stimulus is gaining more acceptance as a means to improve growth prospects. With respect to Canada, the Canadian dollar and the price of oil appear to have stabilized.

Eight years after the financial crisis, U.S. and Canadian equity markets ended 2016 at close to all-time highs. U.S. and Canadian equities are now up approximately 230% and 100%, respectively, since the lows reached in March 2009. Given this noteworthy performance, equity market returns are expected to be more moderate with continued volatility in the periods ahead. In addition, given the current interest rate environment, returns from bonds are likely to be low.

In the upcoming year, the Investment Committee will monitor the following key projects:

Investment Tracking System Upgrade. The current internal Investment Tracking System records, tracks and controls investment activity for the City’s fixed income securities, excluding money market. The upgrade will allow the system to also support money market activity, thereby enabling the use of straight-through processing and electronic settlement of money market investment transactions.

Custody review. The review that was initiated in 2016 confirmed that services are fairly well aligned; however, there is room for improvement in some areas. Administration will discuss the findings and any desired changes with the City’s investment custodian in 2017.

Internal Fixed Income Management. As part of an ongoing commitment to innovation and improvement, internal fixed income management processes will be refined. In particular, the relative importance of strategies used to add value within the fixed income portfolios will be reviewed and the security selection process will be further enhanced.

Implementation of the unlisted infrastructure strategy. The City continues to transition assets to the unlisted infrastructure strategy as suitable investment opportunities arise.
The rate of return for each City asset class is compared with the published total return of its corresponding broad-market index. These indices, weighted by the Policy Asset Mix, are used to calculate the performance benchmark for each fund.

The City uses the following performance benchmarks as points of reference by which the investment performance of each fund is evaluated:

- **Bonds**: FTSE TMX Canada Universe Bond Index (FTSE TMX Universe)
- **Canadian Equity**: TSX Composite Index (TSX)
- **Global Equity**: Morgan Stanley Capital International Inc. World Index excluding Canada (MSCI World ex-Canada)
- **Emerging Market Equity**: Morgan Stanley Capital International Inc. Emerging Markets Index (MSCI EM)
- **Infrastructure**:
  - **Unlisted**: Consumer Price Index (CPI) + 5%
  - **Listed**: Standard & Poor’s Global Infrastructure Index (S&P Global Infrastructure)

Investment performance returns are presented before management fees are deducted — according to industry standard.

### 2016 Capital Market Returns

<table>
<thead>
<tr>
<th>Index Type</th>
<th>Local S Return</th>
<th>CS Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation (CPI)</td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Cash (91 Day T-Bills)</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Bonds (FTSE TMX Universe)</td>
<td>1.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Canadian Equity (TSX)</td>
<td>8.1%</td>
<td>12.0%</td>
</tr>
<tr>
<td>US Equity (S&amp;P 500)</td>
<td>5.3%</td>
<td>8.1%</td>
</tr>
<tr>
<td>International Equity (MSCI EAFE)</td>
<td>-2.5%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Global Equity (MSCI World ex-Canada)</td>
<td>3.3%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Emerging Market Equity (MSCI EM)</td>
<td>7.3%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Infrastructure (S&amp;P Global Infrastructure)</td>
<td>13.7%</td>
<td>21.1%</td>
</tr>
</tbody>
</table>

### 2016 Performance vs. Benchmark

<table>
<thead>
<tr>
<th>Fund Type</th>
<th>2016</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Tel Endowment Fund</td>
<td>8.1%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Pension Fund</td>
<td>8.0%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Sinking Fund</td>
<td>1.3%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Balanced Fund</td>
<td>4.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Long-Term Disability Fund</td>
<td>5.6%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Short-Term Bond Fund</td>
<td>1.1%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Money Market Fund</td>
<td>0.8%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

### Four-Year Performance vs. Benchmark (2013–16)

<table>
<thead>
<tr>
<th>Fund Type</th>
<th>2013-2016</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Tel Endowment Fund</td>
<td>9.7%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Pension Fund</td>
<td>9.7%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Sinking Fund</td>
<td>2.8%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Balanced Fund</td>
<td>6.4%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Long-Term Disability Fund</td>
<td>7.3%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Short-Term Bond Fund</td>
<td>2.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Money Market Fund</td>
<td>0.8%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>
PORTFOLIO PERFORMANCE

INVESTMENT FUNDS

ED TEL ENDOWMENT FUND  |  PENSION FUND  |  LONG-TERM DISABILITY FUND  |  SINKING FUND

RESERVES AND WORKING CAPITAL FUNDS

MONEY MARKET FUND  |  SHORT-TERM BOND FUND  |  BALANCED FUND

ED TEL ENDOWMENT FUND

Fund Management
Multiple Investment Managers

Market Value
$815 million (Dec. 31, 2016)

Performance (rate of return)
Over one year (2016)  +8.1%
Over four years (2013–2016, per annum)  +11.6%

Performance against Policy Benchmark
Over one year (2016)  -0.1%
Over four years (2013–2016, per annum)  +1.9%

Description
The Ed Tel Endowment Fund was created in 1995 to hold the financial assets generated by the sale of Edmonton Telephones to Telus Corporation. The objective of an endowment fund is to provide a source of income in perpetuity while ensuring the real purchasing power of the fund is maintained. The Ed Tel Endowment Fund is considered a financial legacy for future generations that delivers a stable, sustainable and growing dividend for the City.

The Ed Tel Endowment Fund paid a dividend of $40 million in 2016. This was comprised of a regular dividend of $32 million and a special dividend of $8 million, as a result of the strong performance achieved by the fund over the preceding several years.
Since 1995, the Ed Tel Endowment Fund has earned a compound annual rate of return of 8.3 per cent versus the benchmark return of 7.3 per cent, grown its principal from $465 million to $815 million and paid $705 million in dividends to the City.

**ED TEL ENDOWMENT FUND BYLAW — KEY SUCCESS FEATURES**

**Inflation Indexing:** To ensure real purchasing power is not eroded, the City maintains the “Inflation Adjusted Principal” of the fund.

**Spending Rate:** The fund’s investment policy sets the portion of the fund paid out annually as dividends.

**Smoothing Mechanism:** The dividend calculation formula minimizes the effects of volatile investment returns and provides for a more stable and predictable annual dividend from the fund.
**PENSION FUND**

**Fund Management**
Multiple Investment Managers

**Market Value**
$227 million (Dec. 31, 2016)

**Performance (Rate of Return)**
- Over one year (2016) +8.0%
- Over four years (2013–2016, per annum) +11.6%

**Performance against Policy Benchmark**
- Over one year (2016) -0.2%
- Over four years (2013–2016, per annum) +1.9%

**Description**
The Pension Fund consists of the Firefighters’ Supplementary Pension Plan, the Fire Chief and Deputy Fire Chiefs’ Supplementary Pension Plan and one closed pension plan with only a few beneficiaries. Over time, the smaller plan will be wound up.

---

**LONG-TERM DISABILITY FUND**

**Fund Management**
Multiple Investment Managers

**Market Value**
$128 million (Dec. 31, 2016)

**Performance (Rate of Return)**
- Over one year (2016) +5.6%
- Over four years (2013–2016, per annum) +8.7%

**Performance against Policy Benchmark**
- Over one year (2016) +0.0%
- Over four years (2013–2016, per annum) +1.4%

**Description**
The LTD Fund holds investments for five City of Edmonton long-term disability plans.
SINKING FUND

Fund Management
City of Edmonton Investment Management (internal)

Market Value
$86 million (Dec. 31, 2016)

Performance (Rate of Return)
Over one year (2016)  +1.3%
Over four years (2013–2016, per annum)  +2.8%

Performance against Policy Benchmark
Over one year (2016)  n/a
Over four years (2013–2016, per annum)  n/a

Description
The Sinking Fund was established to meet the needs of various public debenture issues (borrowings) that require monies be set aside regularly for the eventual redemption of these debenture issues. One outstanding debenture issue will mature in 2018, and the Sinking Fund is accumulating assets for that redemption.

In the second quarter of 2013, the fund management strategy transitioned to meet the cash flow requirements of the final debenture maturity in 2018, making a traditional benchmark comparison ineffective.
MONEY MARKET FUND

Fund Management
City of Edmonton Investment Management (internal)

Market Value
$503 million (Dec. 31, 2016)

The City’s revenue streams are cyclical; the fund value peaks each July at approximately $1 billion.

Performance (Rate of Return)
Over one year (2016) +0.8%
Over four years (2013–2016, per annum) +1.0%

Performance against Policy Benchmark
Over one year (2016) +0.3%
Over four years (2013–2016, per annum) +0.2%

Description
The Money Market Fund absorbs the excess or shortfall in the daily operating requirements of the City. The fund ensures that sufficient cash and liquid assets are available to cover the City’s short-term obligations. The time horizon of the fund is one year or less, depending on the City’s forecast of commitments.

<table>
<thead>
<tr>
<th>Money Market Fund Performance vs. Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
</tr>
<tr>
<td>2013-2016</td>
</tr>
</tbody>
</table>

[Chart showing performance对比 Benchmark]

[Legend: Fund Benchmark]
**SHORT-TERM BOND FUND**

**Fund Management**
City of Edmonton Investment Management (internal)

**Market Value**
$264 million (Dec. 31, 2016)

**Performance (Rate of Return)**
- Over one year (2016): +1.1%
- Over four years (2013–2016, per annum): +2.2%

**Performance against Policy Benchmark**
- Over one year (2016): +0.1%
- Over four years (2013–2016, per annum): +0.1%

**Description**
The Short-Term Bond Fund provides an investment vehicle for working capital that is not currently needed to fund City operations but will be needed in less than five years. The investment horizon, accordingly, is less than five years.

---

**BALANCED FUND**

**Fund Management**
Multiple Investment Managers

**Market Value**
$655 million (Dec. 31, 2016)

**Performance (Rate of Return)**
- Over one year (2016): +4.8%
- Over four years (2013–2016, per annum): +7.5%

**Performance against Policy Benchmark**
- Over one year (2016): +0.2%
- Over four years (2013–2016, per annum): +1.1%

**Description**
The Balanced Fund has a time horizon of greater than five years and is a long-term investment vehicle for operating and capital reserve funds, deferred revenue accounts and other similar funds. Because it has a longer-term investment horizon, it has a risk tolerance that permits owning some equities.
INVESTMENT PHILOSOPHY

A PRUDENT APPROACH TO INVESTING MUNICIPAL ASSETS

The investment program plays an important role in Edmonton’s Financial Sustainability Plan, which addresses Edmonton’s financial sustainability and the development of a long-range financial plan. Strong accountability and oversight matched with diversified expertise have allowed the program to provide considerable added value to the City of Edmonton over time.

Empirical evidence suggests the most important determinant of investment returns and risk is asset mix. As a result, the City establishes an asset allocation policy for each of its investment funds that is consistent with the specific objectives, risk profile and investment time horizon of each fund.

Within the various asset classes, diversification is further enhanced through the split between internal and external investment managers, which results in a multi-asset, multi-manager investment framework.

Expanding the depth of employed strategies and broadening the scope of investment opportunities have been key drivers of the program’s successful evolution over time. Different investment styles offer additional risk control, reduce the possibility of investment losses and ensure that fund objectives are met. Comparative advantages, such as liquidity, the ability to invest long term and a cost-effective investment program, allow the City the opportunity to generate a significant incremental return over time. As an example, the City typically falls within the positive value-added and low-cost category in an annual survey of institutional investment managers around the world.

The guiding principles used to determine the broad investment structure and strategy for the City’s various funds are called investment beliefs. One of the main beliefs is that over the long term, equities will outperform bonds to compensate for their higher risk. Although equity returns are expected to be greater than bonds over the long run, they are also more volatile. For this reason, equity investments are only suited for investment portfolios with longer-term (for example, more than five years) investment horizons. Accordingly, only the Ed Tel Endowment Fund and the Pension Fund have significant equity allocations (each has 60% equity). Conversely, the investment funds with a lower tolerance for risk and shorter time horizons (for example, working capital funds) are not invested in equities and therefore are sheltered from the higher volatility of equity markets.

Finally, as part of an annual review process, a formal risk assessment of the City’s investment program ensures risk mitigation strategies and controls are in place and consistent with industry best practices.

ASSET ALLOCATION

The mix of asset classes in a fund is called the asset mix. For example, a fund could have an asset mix of 30% bonds, 25% Canadian equity, 30% global equity, 5% emerging market equity and 10% infrastructure.

The asset mix reflects the investor’s underlying goals and objectives for the fund in terms of risk and reward.

The Policy Asset Mix is the long-term target asset mix of the fund, as stated in the Investment Policy. This allocation is structured to allow the fund to meet its stated investment objectives over time. Over shorter time periods, the returns may fall short or exceed the investment objectives.

INFRASTRUCTURE INVESTMENTS

Infrastructure is defined as large-scale projects that provide essential services to society. Examples include toll roads, airports and utilities and may involve developing, operating and/or maintaining the asset.

The infrastructure asset class is a global market. Investments can be made either through unlisted (private) or listed (publicly-traded) strategies. Possible opportunities for investors are expected to continue expanding significantly in the coming years.
INVESTMENT BELIEFS

1. The investment return on the funds is a function of capital market returns, asset allocation, manager structure and individual managers.

2. There is a relationship between risk and return — higher returns generally require taking higher risk.

3. In the long term, equities will outperform bonds to compensate for their higher risk.

4. The long-term asset mix is the most important component of a portfolio’s risk and return.

5. Active management can add value but comes with added costs and effort which must be assessed along with the passive alternative, whenever changes are made.

6. Alternative strategies/asset classes may be appropriate and will be evaluated based on their liquidity, the management time needed to monitor the investment and the level of transparency.

7. Market timing at the policy level is an inefficient strategy for consistently increasing returns.

8. Diversification of asset classes, implementation strategies and security selection can improve the risk and return characteristics of the funds.

9. Asset mix rebalancing generally adds value relative to buy and hold strategies.

10. Effective manager structure can improve the net returns and lower the risk of the funds.
GOVERNANCE

Established by the City Manager, the Investment Committee governs the investment of the City’s financial assets and provides proper oversight of the City’s investment efforts. Committee members bring investment and business expertise. Continual monitoring of the City’s investment program and implementing changes as necessary ensures that the funds are well positioned and appropriately invested to meet their objectives. This approach also assures Edmontonians that the City’s policies and procedures maximize investment returns at a prudent level of overall risk.

INVESTMENT COMMITTEE MEMBERS

Todd Burge  Chairperson
Deputy City Manager and Chief Financial Officer
City of Edmonton

Stacey Padbury  Secretary
Deputy City Treasurer and
Branch Manager, Financial Services
City of Edmonton

Greg Holubowich
President
Edmonton Fire Fighters’ Union

Filip Ksiazkiewicz
Senior Portfolio Manager
TELUS Investment Management

Savvas Pallaris
Vice-President, Life Investments
Addenda Capital

Robert Seidel, QC
Canada Managing Partner
DLA Piper (Canada) LLP

Blake Walker
Manager Treasury and Deputy City Treasurer
City of Calgary

KEY RESPONSIBILITIES OF THE INVESTMENT COMMITTEE

• Review and recommend changes to the Investment Policy and Terms of Reference.
• Review investment strategies, capital market assumptions and manager structure.
• Monitor all reported investment activities for compliance with City policy and statutory requirements.
• Meet with external investment managers, performance measurement advisors and external auditors.
• Monitor investment performance versus established performance benchmarks.
• Assist the Chief Financial Officer in preparing an annual report on investment performance for recommendation to the City Manager and City Council.

KEY RESPONSIBILITIES OF CITY COUNCIL

City Council, as senior governing fiduciaries, receives reports and recommendations from the City Manager and approves the Investment Policy, which establishes the following:

• investment objectives and beliefs,
• permitted investment categories and asset allocation,
• performance benchmarks and implementation strategies,
• proxy voting guidelines and
• monitoring, controls and reporting requirements.

PROXY VOTING

The City’s Investment Policy contains a commitment for the City of Edmonton to support social and ethical business practices through proxy voting — the shareholder resolution process.

A proxy voting agent is retained to vote the City’s ballots for the companies in which the City owns shares. The voting service adheres to the City’s guidelines through careful analysis of each voting issue.

During 2016, the City of Edmonton exercised its shareholder rights and voted its proxies in accordance with the Investment Policy.
MANAGEMENT STRATEGIES

The City’s investment structure combines active and passive management strategies.

**Active strategies** are in place when the potential to exceed the return of the established benchmark by actively selecting securities is believed to be high:

- Active managers try to exceed performance benchmarks by investing in a subset of securities expected to outperform the broader benchmark index — basing the selection of securities on a specific theory or investment style.

**Passive strategies** are used in markets where active management has generally not outperformed the benchmark over time:

- Passive managers fully replicate a broad market index such as the TSX or S&P 500 (by buying securities in the same proportion) — ensuring returns are virtually the same as the published index returns. As a result, passive managers minimize the risk of underperformance and have little opportunity for outperformance, but their fees and expenses are significantly lower than those for active management.

**INVESTMENT MANAGERS**

The Ed Tel Endowment Fund, Pension Fund, Long-Term Disability Fund and Balanced Fund all share the same investment managers.

**Canadian Equity**
- QV Investors
- Triasima Portfolio Management
- City of Edmonton Investment Management (internal/passive)

**Canadian Fixed Income**
- City of Edmonton Investment Management (internal)

**Global Fixed Income**
- Investec Asset Management

**Global Equity**
- Arrowstreet Capital
- Copper Rock Capital Partners

**Emerging Market Equity**
- Arrowstreet Capital

**US Equity**
- TD Asset Management (passive)

**International Equity**
- Fidelity Institutional Asset Management

**Infrastructure**
- Northleaf Capital Partners (unlisted)
- RARE Infrastructure (listed)

**INTERNAL FUND MANAGEMENT**

The Sinking Fund, Money Market Fund and the Short Term Bond Fund are all managed internally by the City of Edmonton Investment Management Section. The fee savings from managing a portion of the City’s financial assets in-house are approximately $1.5 million a year. This approach has resulted in more than $15 million in savings over the last 10 years.