THE WAY WE FINANCE

INVESTMENTS WHITE PAPER

BUILDING ON GOOD DECISIONS

1. A VISIONARY DECISION: INVESTING IN EDMONTON'S FUTURE

Edmonton is gaining a growing reputation as a forward-thinking city of the future. We are building and revitalizing in new and exciting ways that jurisdictions around the country and the world are recognizing and emulating. From our inner city redevelopment strategies, to our consistently praised waste management practices, to our much-lauded cultural vibrancy, not to mention the wisdom of creating and preserving one of the world's largest urban parks in our river valley, Edmonton is making headlines at home and abroad for all the right reasons.

But one of the City of Edmonton's most successful municipal programs—our Investment Program—is still flying somewhat under the radar. In some ways, this is understandable, since it does not command the public or the media eye with much regularity (though perhaps it's fair to say, post-2008, that no news is good news). Yet the City of Edmonton's Investment Program has, since its inception in 1995, evolved to become one of the most unique and successful of Edmonton's city-building activities. It's the envy of many municipalities and is a key chapter in the broader story of *The Way We Finance*.

If, as the Brundtland Report[1] stated in 1987, "financial stability" means meeting today's needs without compromising the ability of future generations to meet their own needs, then the City of Edmonton's Investment Program is an excellent example of that definition. But what is important to note is that many sound decisions in our Investment Program have flowed from one vitally important decision made in 1995. That year, the City-owned Edmonton Telephones was sold to Telus Corporation for $465 million. Given increased competition within the telecommunications industry, the business risk to Edmonton Telephones, and therefore the City, was expected to increase. In addition, the requirements to continue to innovate and remain competitive were beyond the City's capacity. It would have been uncontroversial and perhaps even the norm for a City Council at that time and in a city of Edmonton's size and budget to have simply used that money to pay for specific projects or to place it into general revenue. But City Council made a remarkable and forward-thinking decision; they created the Ed Tel Endowment Fund solely to hold the financial assets generated from the sale. Instantly, the City of Edmonton had a $465 million endowment fund, the purpose of which was to assist in ensuring the city's long-term financial stability.

Addressing the ensuing challenges, however, were key: How should this fund be put to work? What was the best strategy to ensure that this visionary decision be maximized? What investment strategies should be adopted to meet present needs while accumulating towards helping meet future needs? The story of the City of Edmonton's Investment Program is told by explaining how these questions were successfully answered. The added bonus is that it's a success story still being told today.

[1] World Commission on Environment and Development *Our Common Future* (the "Brundtland Report"), 1987

2. A SOLID FOUNDATION: THE FUNDS WE MANAGE

Every municipality does its best to cover its day-to-day expenses, to create and pay for the "extras" that often enhance a city's livability, to manage unexpected revenue shortfalls or expenditure overruns, and, of course, to make sure it has enough money to meet its obligations, such as debt repayment or pensions and benefits to its employees. The City of Edmonton, however, has an added advantage over most municipalities in North America in that it has a unique revenue source to contribute to the above—the Ed Tel Endowment Fund. It's a truly innovative municipal revenue stream, and since 1995 it has contributed to a stable, sustainable and growing dividend for the City, essentially creating a positive financial legacy for future generations.

Of course, the Investment Program has evolved and diversified in the 18 years since the Ed Tel Endowment Fund was created. Various legislative and managerial actions—in the tradition of building on good decisions—have allowed the City to arrive at the enviable place it occupies today, while recognizing that such a favourable position is but a sound launching pad for the future of the program. A timeline of the evolution of this program is below.

THE EVOLUTON OF THE CITY'S INVESTMENT PROGRAM - HOW WE GOT TO WHERE WE ARE TODAY

- **1995** — **INCEPTION** Ed Tel Endowment Fund $465 million
- **2000** — **PROVINCIAL GOVERNMENT** passed the Major Cities Investment Regulation
- **2001** — **ASSETS BROUGHT IN-HOUSE** Sinking Fund $470 million
- **2001** — **UNIT TRUST STRUCTURE** Funds pooled to generate economies of scale
- **2003** — **RESTRUCTURING** Working capital funds and the City's reserves
- **2003** — **ENDOWMENT DIVIDEND POLICY: YALE FORMULA** Ed Tel Endowment Fund
- **2006** — **ASSETS BROUGHT IN-HOUSE** New fixed income structure $220 million
- **2008** — **DIVERSIFYING STRATEGIES** Increased active management and broadened investment mandates
- **2011** — **DIVERSIFYING ASSET CLASSES** Added emerging markets & listed infrastructure
- **2012** — **DIVERSIFYING ASSET CLASSES** Added unlisted infrastructure
- **2013** — **DIVERSIFYING STRATEGIES** New fixed income structure - added global fixed income and brought $250 million in-house
- **2014** — **DIVERSIFYING STRATEGIES** Review of the equity structure

The work detailed above is consistent with three high level objectives:

1. Cost Efficiencies, Internal Expertise and Better Alignment of Funds

Changes in the investment structure have allowed the City to realize cost efficiencies and better align funds with varying objectives and risk profiles. In conjunction, the expertise of the investment management function has expanded, supporting cost effective internal management of assets. The development of the City's investment platform continues to give the Program the capacity to pursue new investment strategies and asset classes.

2. Diversifying Investment Strategies

Introduction of new investment strategies has increased added value over time. Developments to date have included increased active management within the City's investment funds, addition of new mandates and giving managers more discretion in selecting certain securities.

3. Diversifying Asset Classes

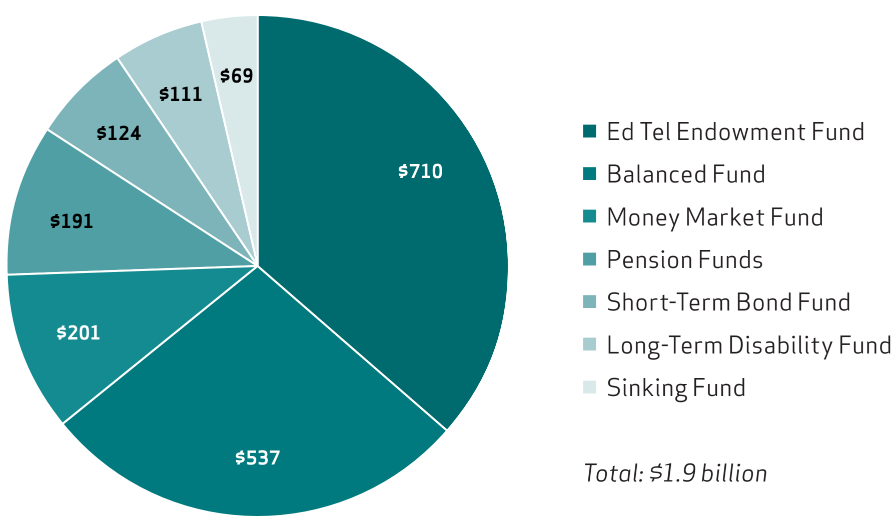
Consistent with asset allocation reviews, the City continues to broaden the opportunity set for its investments. This has allowed for diversification into new asset classes such as emerging market equities and global infrastructure, with the goal of increasing overall portfolio returns.

The chart below summarizes the type and value of the City's current investment funds.

FUND	SOURCE OF FUNDS	PURPOSE
Ed Tel Endowment Fund	Proceeds from the sale of Edmonton Telephones	Governed by the Ed Tel Endowment Fund Bylaw. The fund distributes an annual dividend back to the City.
Short Term Bond Fund and Money Market Fund	The City's working capital	Principal and earnings are matched to short term cash needs
Balanced Fund	The City's reserves	This fund provides a longer term investment vehicle for the City's reserves.
Sinking Fund	Principal and interest payments into this fund are made by EPCOR	To meet debt repayment obligations on behalf of EPCOR
Pension Funds	Employee and employer contributions	To meet pension benefit obligations
Long-Term Disability (LTD) Fund	Employee contributions	To meet long-term disability benefit obligations

MARKET VALUE OF THE INVESTMENT FUNDS

in $millions, as at December 31, 2013



Total: $1.9 billion

In this light, and observing the number of different decisions made since 1995, it can be seen that the success of the City's Investment Program is not just the result of one smart move, but rather honouring a good decision by continuing to build on it. The result is that today the City has diversified and broadened its portfolio to a considerable extent, and considerably increased the value of that original $465 million investment. Of course, professional accountability combined with a high level of civic pride means the pressure to maintain and even improve upon the Program's success is constant. The search for Best Practices in other jurisdictions is ongoing, as is a continual self-examination of our internal practices.

3. BEST PRACTICES: CREATIVE STABILITY

We have illustrated how we arrived at the point where the City manages a diverse investment portfolio. But what about from today forward? To paraphrase a commonly used sports metaphor, "You're only as good as your last investment." Resting on laurels is not an option, but neither is overexposure.

INVESTMENT STRATEGIES AND RISK MANAGEMENT

The weight of empirical evidence tells us that the most important determinant of risk and return on investment is asset mix. In other words, the proportion of fixed income (bonds) to equities (stocks) within a portfolio. Getting that mix right is essential. Knowing this, the City has established an Asset Allocation Policy for each of the investment funds noted in the previous chart, so that they can meet specific objectives. The policy outlines how this can be done while also remaining consistent with each fund's individual risk profile and investment time horizon. The Program also adheres to a core set of guiding principles when determining its general investment structure and strategy for the City's various funds. These principles are called Investment Beliefs and can be accessed in the City's Investment Policy and Procedures, which is freely available to the public. One of the fundamental principles in this document is that over the long-term equities ought to outperform bonds in order to compensate for their higher risk. This is a recognized historical observation commonly know as the "Equity Risk Premium." Inherent in this principle, of course, is the reality that while equity returns can be expected to be greater, equities can also be prone to greater volatility. Equity investments, therefore, are suitable only for portfolios with longer-term investment horizons (greater than five years). Which is why, in the City's portfolio, only the Ed Tel Endowment Fund and the Pension Funds have significant equity allocations (60%). These funds have long-term investment horizons, but even bearing that in mind, the Program also patterns the Ed Tel fund's dividend policy after Yale University's Endowment Fund, which utilizes a smoothing mechanism to the dividend formula in order to produce a stable, predictable and sustainable annual dividend to the City. This helps offset the fund's inherent year-to-year equity volatility. This and many other facets of the City's Ed Tel Endowment Fund can be found in the Ed Tel Endowment Fund bylaw at *www.edmonton.ca/edtelfund*.

"In our opinion, the City of Edmonton has one of the most sophisticated investment management of all the cities we rate in the country."

Steve Ogilvie
Standard & Poor's

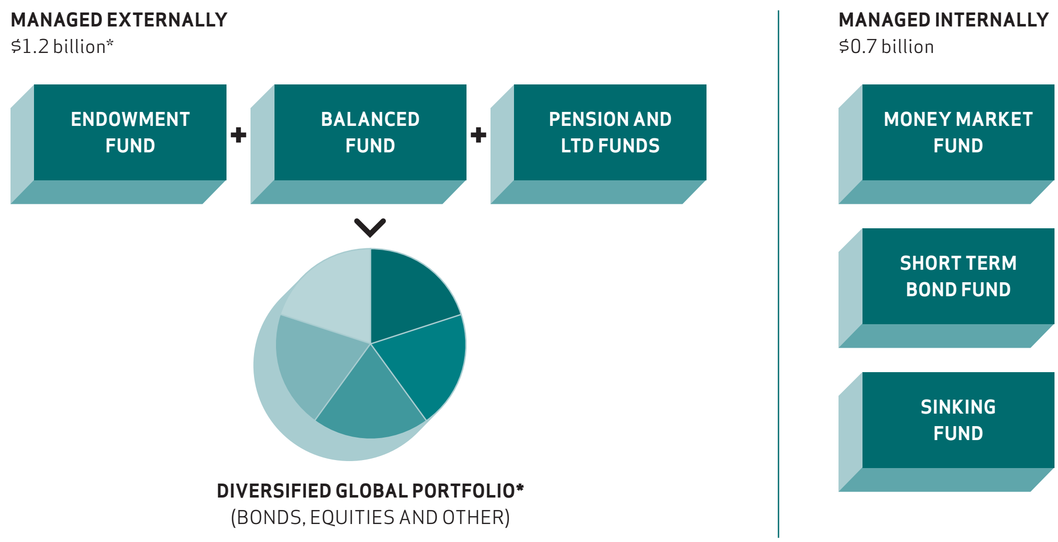
The other side of the risk coin concerns those investment funds with a lower tolerance for risk and shorter time horizons, such as working capital funds. These funds are not invested in equities and consequently are sheltered from the higher volatility of the equity markets.

In addition, there are other tools we have at our disposal. Within various asset classes, for instance, diversification is enhanced even further (which means risk is managed even further) by using multiple external managers who are then paired with internal management. Differing investment styles and strategies offer additional risk control and greatly reduce the possibility of investment losses, while also ensuring that fund objectives are met. Essentially, using multiple approaches means we don't put "all our eggs into one basket." The City's current investment fund structure is outlined below:

The total market value of the City's investment funds is $1.9 billion.

INVESTMENT FUND STRUCTURE

as at December 31, 2013



** In addition to the Money Market Fund, Short Term Bond Fund, and the Sinking Fund, the Internally Managed component also includes half of the fixed income assets within the diversified global portfolio.*

An annual report on the investment performance of the City's funds, which details the previous year's accomplishments and the planned activities for the upcoming year can be found at *www.edmonton.ca/investmentreports.*

Of course, the City has certain comparative advantages such as liquidity, patience (e.g. investing for a longer term) and a cost-effective investment program, all of which help create the opportunity to earn a significant incremental return over time. A good illustration of this is the manner in which the City aggregates its financial assets and uses a pooled fund approach to invest (which also allows for further cost-efficiencies and fee savings). This gives the City the ability to pursue and participate in attractive investments that typically have high barriers to entry. The restructuring of the City's reserves and working capital funds in 2003, which led to the creation of the City's Money Market, Short Term Bond and Balanced Funds, further aligned assets and investment strategies with objectives, risk parameters and time horizon of the various deposits. As a result, the City typically falls within the high value added and low cost category in an annual survey of institutional investment managers around the world.

In addition to the above, asset mix reviews are regularly conducted to ensure the optimal combination of asset classes—given market expectations—to maximize returns at an acceptable level of risk. This approach makes use of a practice called Modern Portfolio Theory (MPT) in that new asset classes and investment strategies are analyzed in terms of how they interact with current investments and contribute to the total portfolio's return and risk, rather than simply evaluating them in isolation. Furthermore, as part of an annual review process, a formal risk assessment of the City's investment program ensures the various risk mitigation strategies and controls are appropriate and consistent with industry standards. Finally, owning common stock confers certain rights. These include the right to propose and vote on corporate policies through the shareholder resolution process (proxy voting). The City is committed to responsible investing by supporting social and ethical business practices through this process. The City's Investment Policy and Procedures, including the asset allocation policies, investment principles and guidelines, and risk management controls can be found at *www.edmonton.ca/investmentpolicy*.

RELATIONSHIPS

An important responsibility of the Investment Management Section is to maintain and strengthen the City's working relationships and reputation within the banking and investment community. The City's investment staff are involved with the City of Calgary Investment Advisory Governance Committee (IAGC), the University of Alberta Investment Committee, the University of Alberta Program for Research and Investment Management Excellence (PRIME) and are members of the Edmonton Chartered Financial

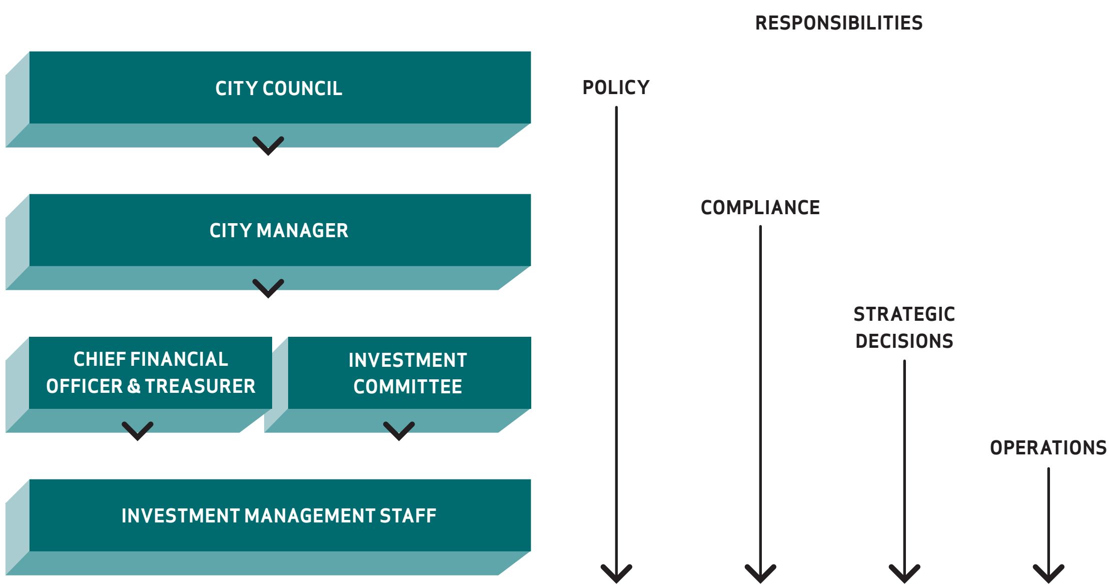
Analyst (CFA) Society, the CFA Institute, the Pension Investment Association of Canada (PIAC), the Association of Financial Professionals (AFP) and the Government Finance Officers Association (GFOA).

GOVERNANCE

Ensuring oversight and providing assurance to citizens that the City manages its investments wisely and in the city's best interests is what good governance is all about. Good governance also reassures taxpayers that policies, procedures and controls are firmly in place—while always being assessed for improvement—to soundly manage the City's investments at a prudent level of overall risk. An Investment Committee was created in 1995 to oversee the investment of the City's financial assets, and in 2000 the Province of Alberta passed the Major Cities Investment Regulation, which allowed for an expansion of the list of permitted investments for the City of Edmonton. This regulation reflected the scale, the need, and the growing sophistication of the City's investment management practice. This legislation is reviewed every five years in conjunction with the Province and amendments are made as required to remain relevant given market conditions.

In terms of direct governance and process, the Investment Committee Terms of Reference, which is approved by the City Manager, details a structure with respect to investments. This governance structure lays out the roles and responsibilities of the City's Investment Committee as well as City Council, the City Manager, the Chief Financial Officer and Treasurer, and the Investment Management Section. As the chart below illustrates, the City utilizes a structure in which responsibilities shift from broad to specific according to the roles of the persons involved, from policy at the Council level down to operations at the investment management staff level. City Council, in its role as senior governing fiduciary, is responsible for approving the City's Investment Policy outlining investment objectives. Council also directs how the City's funds are to be invested. Decisions of a more strategic nature are made by the Chief Financial Officer and Treasurer (who also acts as the chair of the Investment Committee), with the Investment Committee operating in an advisory role. The implementation of these decisions and day-to-day operations of the investment area is, in turn, the responsibility of the Investment Management Section. What is also of great relevance is that a strong governance structure like the one used here not only manages the risk of the City's assets, but it also allows for an improvement in the investment returns generated by this risk. In other words, sound oversight means our investment decisions are stronger *and* safer.

GOVERNANCE STRUCTURE



An annual report on the investment performance of the City's funds, which details the previous year's accomplishments and the planned activities for the upcoming year can be found at www.edmonton.ca/investmentreports.

4. RESULTS: A STRONG BOTTOM LINE

The City's investment program has from the start been a process of building on good decisions. Strong accountability and oversight matched with diversified expertise has allowed the program to offer significant added value to the City of Edmonton over time. Importantly, these investment decisions have meant considerable increases in Edmonton's overall sustainability, since it has created a revenue stream outside the standard municipal revenue streams, which has in turn given the City options that might not have otherwise been within its capacity.

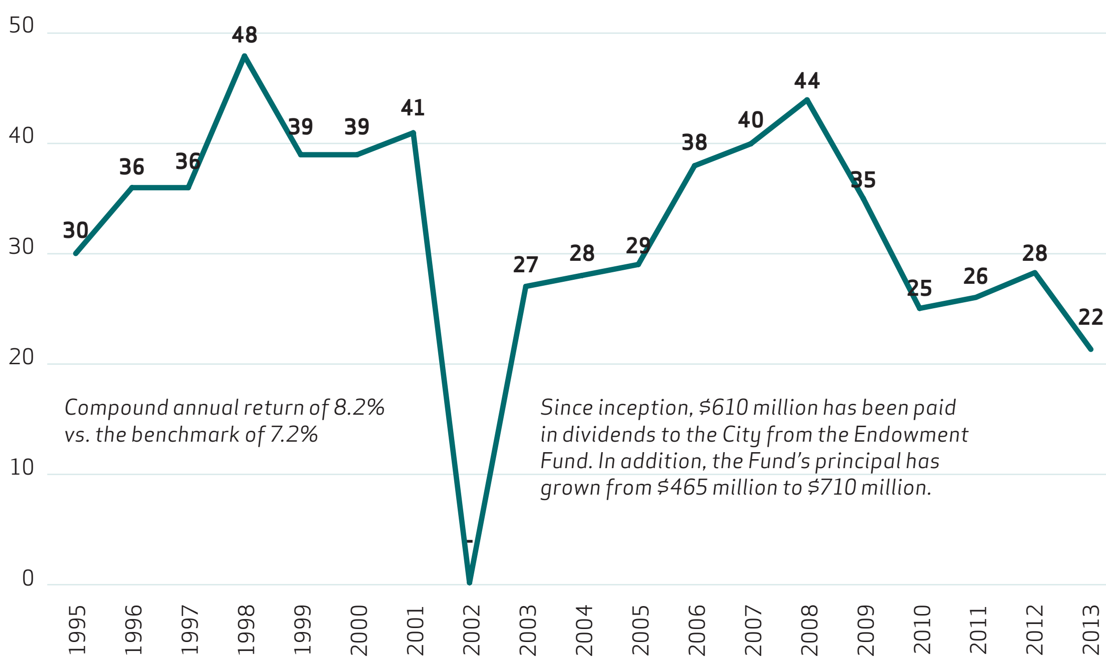
As alluded to earlier, considerable cost savings have been achieved from the pooling of assets and managing a large portion of the City's investments internally. The restructuring of the City's reserves and working capital funds better aligned investment strategies with objectives, which has also resulted in additional earnings. Expanding the breadth of investment strategies employed and opening up the investment opportunity set has allowed the City's investment program to achieve notable success.

One of the metrics the City uses to gauge performance can be found within the *Cost Effectiveness Measurement (CEM) Survey*, an annual survey of institutional investment managers around the world (conducted by CEM Benchmarking Inc.). This survey shows that the City typically falls within the high value added and low cost category. Since 2001, coinciding when funds were brought in-house, actual investment returns have exceeded the City's various policy benchmarks, which has meant a total added value of approximately $188 million. During this same time, a significant portion of the City's investments have been managed internally by the City's Investment Management Section. This has allowed for the establishment of internal expertise and capacity—vital to developing talent that has both ability and an understanding of Edmonton as a city—while also saving the City approximately $1.5 million a year in investment management fees, a savings of $19.5 million to date.

Since the Ed Tel Endowment Fund's inception in 1995, the fund has made a significant contribution to Edmonton's long-term financial sustainability, even if it has sometimes gone unheralded. The following chart illustrates the annual and cumulative dividends that have been contributed back to the City since 1995 as well as the growth to the fund's principal.

ED TEL ENDOWMENT FUND

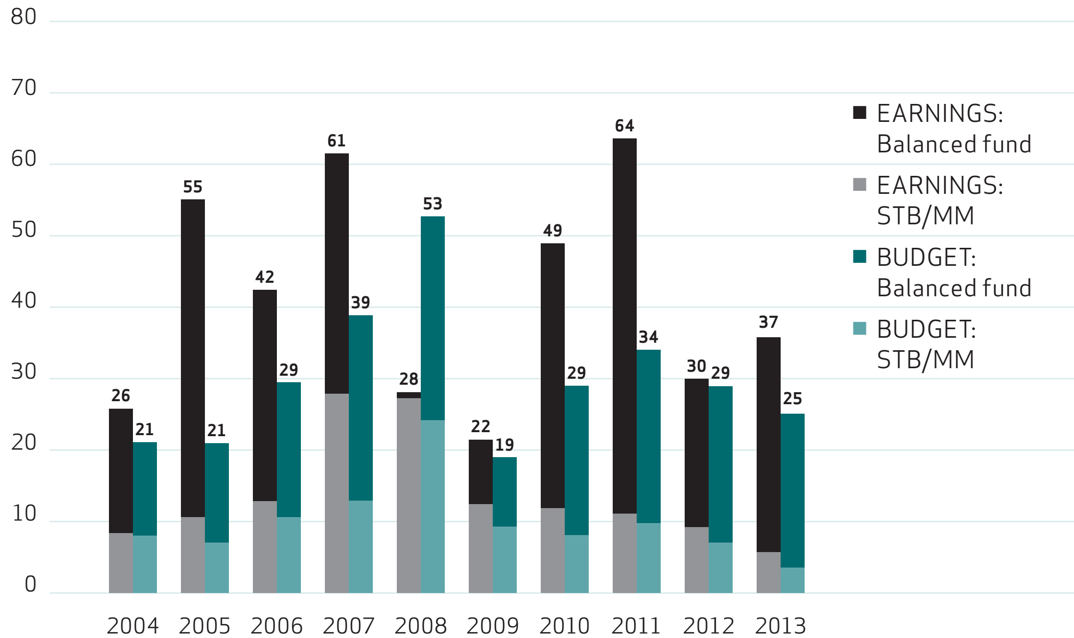
annual dividend payments



These have not been the only successes, of course; the realized investment earnings from the City's Money Market, Short Term Bond and Balanced Funds have also exceeded their budgeted earnings by over $100 million, as the chart below, comparing actual investment earnings to budget, illustrates.

INVESTMENT EARNINGS

actual $414 million vs. budget $299 million



What the presentation of information to this point is meant to illustrate is how the City's Investment Program is today part of the pattern of building on good decisions. If strong practices and decision-making are woven into the everyday fabric of how this program operates, then it can continue to be both simple and cutting-edge at the same time. It's a success story, one that the City of Edmonton wants to share, but it also leads to the question: What precisely does it all mean to the citizens of Edmonton today? And what will it mean tomorrow?

5. THE INVESTMENT ADVANTAGE: HOW EDMONTONIANS BENEFIT TODAY AND TOMORROW

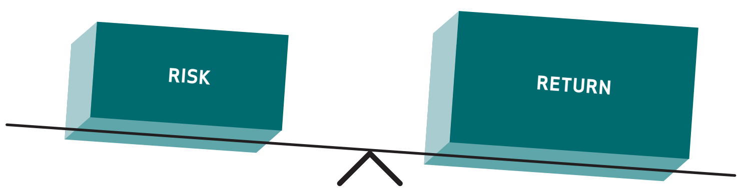
We know that the City's Investment Program has been a success— with the Ed Tel Endowment Fund, having earned a compound annual rate of return of 8.2% versus the benchmark return of 7.2%, while growing its original principal from $465 million to $710 million—but how precisely has this helped Edmontonians? What does it mean to the average citizen to say to them that we have "diversified our portfolio" or that we have "increased the market value of the funds we manage"? These may sound like hypothetical questions or concepts to the majority of Edmontonians, but there are quantifiable and concrete results from this program that have made a positive impact on the daily lives of citizens. For instance, over the course of the last decade investment earnings and dividends from this program have contributed an average of $70 million a year back to the City's budget, for a total contribution of over $700 million.

What does that mean to the average citizen? Well, if you relate these numbers to taxation, property taxes would have increased roughly 7% over that time to make up the $700 million difference. That is significant, indeed. The Investment Program is also beneficial in ways beyond reducing the tax burden, since it offers the City an additional revenue stream and helps diversify the revenue base, both of which are essential for helping to regulate the highs and lows of varying economic conditions. The benefits of this Program to Edmontonians are many—lower taxes, better services, more highly skilled "homegrown" managers. It's a template worth emulating.

"I skate to where the puck is going to be, not where it has been."

Wayne Gretzky

Bearing in mind the current success of the program, we must always balance today with tomorrow. From the moment the first good decision was made in 1995 to create the Ed Tel Endowment Fund up to the good decisions being made today, the goal of the Program has always been to contribute to the city's long-term financial sustainability. This means continuously weighing return against risk, forever searching for that fine balance between growth and stability. Of course, we want to maximize returns but not if it means placing the future of the program at risk. Conversely, we want to offer security to the fund's future but not invest it so conservatively that we strangle its potential for growth. By always seeking that best balance of risk and return—through the practices and principles we have outlined in this paper—the City's Investment Program will grow at healthy levels, meeting today's needs without compromising those of the future.



The City of Edmonton and, specifically, City Council, have made and continue to make sometimes difficult decisions in a thoughtful manner with a vision towards Edmonton's future. The investments and structure of the Investment Program are aligned with and support City Council's direction. With that in mind, there are three conditions vital to the continued success of the investment program.

1. ***Strong Governance Structure***
2. ***Maintaining the Integrity of the City's Investment Program***
3. ***Commitment to Innovation***

A strong governance structure is the foundation of future success and the structure currently in place has allowed the investment program to achieve significant results. Going forward, it will remain intact while always being open to evolution. A sizeable asset base compared to other municipalities has allowed the City to pool financial assets and therefore structure a cost-effective and diversified investment program. This approach has proven successful, and limiting fund withdrawals to earnings alone has protected, and will continue to protect, the integrity of the program. Lastly, a commitment to innovation and best practice is essential to the future success of the program. Already, we have seen that the introduction of new asset classes and investment strategies has expanded the program's investment opportunities and improved overall returns.

CONCLUSION

Building on good decisions has been the trademark of the City's Investment Program, and the simple goal for the future of the Program is for this to continue. Of course, the execution of this simple premise is enormously complex, given the realities, and volatility, of the global financial markets. *The Way We Finance* will, ultimately, be a multi-faceted and complicated document, but the strengths of the Investment Program will feature prominently in it. If the program continues to adhere to its core principles of strong governance, maintaining sufficient portfolio size, remaining committed to innovation, and, above all else, to honouring the balance between today and tomorrow, it will stand an excellent chance of increasing both its reputation and the gains it brings to the citizens of Edmonton.