STAFF REPORT
ACTION REQUIRED

Tower Renewal City Wide Implementation

Date:	May 31, 2010
To:	Executive Committee
From:	City Manager
Wards:	All
Reference Number:	

SUMMARY

In September 2008, City Council recognized Tower Renewal as an opportunity to transform older apartment buildings to result in a cleaner and greener environment, stronger communities with increased social and cultural benefits, and improvements in the local economy. At that time Council gave direction to investigate and develop a range of opportunities at selected pilot locations. A series of feasibility studies was undertaken, focused on the pilot sites, to better understand the impact of Tower Renewal if applied to the over 1,000 strong cohort of concrete slab style apartment buildings.

These investigations determined that it would be possible to dramatically reduce energy and water use, increase waste diversion and reduce greenhouse gas emissions throughout the apartment building sector. The results of the findings are provided in the attached Tower Renewal –Implementation Book. In summary, studies indicate that reductions of 50% in electricity use, 70% natural gas use, 20% water use and waste diversion rates improved by 30% are possible. By addressing this class of buildings, greenhouse gas emissions for the City overall can be reduced by 5%. With City-wide participation, renewal activities will generate billions of dollars in investment and create tens of thousands of person years of employment. Tower Renewal will provide greater opportunities for engagement of people in neighbourhoods and enhance the quality of life for residents.

There are, however, many barriers to achieving these benefits. Due to the complex nature of the projects and significant upfront cost, coupled with a lack of appreciation by property owners of the full benefits to be gained, Tower Renewal projects will not be undertaken in significant numbers under current circumstances.

To address these barriers, the Tower Renewal – Implementation Book outlines the Sustainable Towers=Engaged People (STEP) program that will provide a guide to how and what to do. This program will guide and support the movement of buildings to increased levels of performance. To address the financing challenge, the creation of a new financing option that, once established, can be designed to operate on a self-sustaining basis, is proposed.

The financing option includes two critical components: creating a “pool” of projects to reduce costs and improve credit terms, and making use of the City’s ability to collect unpaid obligations by way of adding to the tax rolls and according priority lien status to any project payments that might fall into arrears. At approximately $4 million per project, that means providing the opportunity for billions of dollars in local investment. The majority of the pool of funds will be from capital markets. The City, as part of its capital that is available for investment, may direct some investment to the corporation’s pool of funds at competitive rates of return. Implementation of the financing option will require the creation of a new city services corporation and obtaining from the Province legislative amendments to implement this financing structure.

RECOMMENDATIONS

The City Manager recommends that:

1. Council endorse the approach to implementing the Tower Renewal Program City-wide presented in the ***Tower Renewal Implementation Book*** (Attachment 1 to this report) including the Sustainable Towers, Engaged People (STEP) Program and the proposed financing option.

2. As required by Ontario Regulation 609/06 prior to establishing a city services corporation, Council adopt the Tower Renewal Corporation Business Case Study (Attachment 2 to this report) for the establishment of a new corporation referred to as the Tower Renewal Corporation with a mandate to administer the financing option as described in this report and to coordinate all incentive programs and tools that will minimize the amount of project financing required.

3. Council authorize the City Manager to request that the Province make appropriate legislative or regulatory amendments:

    a. to permit the City to provide financial assistance in the initial start-up phase to city services corporations incorporated pursuant to Ontario Regulation 609/06, including the proposed Tower Renewal Corporation;

    b. to give effect to the proposed financing mechanism by providing the City the authority to add payments in default owing to the Tower Renewal Corporation to the tax roll and according such payments priority lien status; and

c. to permit the City to invest in the new Tower Renewal Corporation.

4. Council authorize the City to collect defaulted payments owing to the Tower Renewal Corporation by adding such payments to the tax roll and collecting them in the same manner as municipal taxes.

5. Once the Province has enacted the legislative amendments described in Recommendation 3, the City Manager report on the recommended corporation model including its structure and board composition, policies to be applied to the corporation and its reporting relationship to the City.

6. Funding required to undertake activities necessary to support the development of the financing option and establishment of the Corporation be set out in the 2011 Operating Budget.

Financial Impact

For the current year, there will be no direct financial impact beyond what has already been approved in the current year's budget.

Over the long term, based on recovery of all costs through service payments from Tower Renewal participants, the proposed Tower Renewal Corporation will be self-financing. When the Corporation is created, after the required Provincial actions requested are undertaken, the City will provide start-up funding in the form of a loan, which will be sourced from existing Reserve Funds, such as the Strategic Infrastructure Reserve Fund. No new funds will be required in 2010. In 2011, any funding requirements will be identified in the 2011 Budget process. Once operations begin, the Corporation will be entering into contracts with building owners, and contract fees will be included in the agreements which will recover all corporate costs. The Start-up funding provided by the City is envisioned to be repaid over time through these fees.

The Corporation would be expected to develop a business plan during its first year of operation to set out its future plan. It is expected that this non-program funding could be augmented from other sources such as the Federation of Canadian Municipalities, Toronto Atmospheric Fund, Ontario Power Authority and other entities.

Although various City staff can provide significant resources to assist in establishing the new Corporation, it is expected that specific external expertise will be required to address issues that the Province may identify to support the establishment of the financing option and to assist with setting up the technical and legal structures, such as setting out model contracts and establishing service provider qualifications, necessary to support the financing option implementation. Funding for the activities that will take place prior to the Corporation being established will be undertaken within existing budgeted activities in 2010 and based on identified requirements to be addressed, further funding will be included in the 2011 Operating Budget process with the source of the funding likely to be from existing Reserve Funds.

Separate from start-up funding, the recommended financing option calls for the potential future investment by the City in the pool of funds that will support Tower Renewal projects. The City's investment would be a small portion of the overall fund, with the bulk of funds raised from the capital markets. The City's investment would take the form of equity or subordinated debt, and would not be required until projects are actually signed. It is estimated that the invested capital would be in the amount of no more than $5 million over the first 2 years of the Corporation's operations.

This investment would be part of the City's portfolio of investments and would be subject to the same security provisions that the City applies to other investments. The City would earn a return on the invested capital. It is staff's intent to structure the corporation, it's capitalization and its operations so that the debt of the new corporation will not have an impact on the City's credit rating and its ability to borrow for its regular needs. Financial participation from other orders of government or their agencies would assist in this regard. The details of the arrangements for the capital provided as an investment by the City in the program will be subject to a further report to Council. The City is currently limited under Provincial legislation in its ability to invest in its own Corporation so this permission would have to be granted by the Province.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

City Council on September 24 and 25, 2008, adopted the Mayor's Tower Renewal Report recommendations that included the direction that potential financing options that could provide support for energy efficiency and renewable energy implementation be investigated.

At its Meeting of November 30 – December 7, 2009, Council adopted the The Power to Live Green: Toronto's Sustainable Energy Strategy, including the direction that funding options including, but not limited to, revenue bond financing, grants, tax incentives, funding from the Federation of Canadian Municipalities, funding from the rate-base through Ontario Energy Board, and funding from Ontario Power Authority, in particular the new Municipal Renewable Energy Program be explored.

http://www.toronto.ca/legdocs/mmis/2008/cc/decisions/2008-09-24-cc24-dd.pdf

http://www.toronto.ca/legdocs/mmis/2009/cc/decisions/2009-11-30-cc42-dd.htm

ISSUE BACKGROUND

In September 2008, City Council recognized Tower Renewal as an opportunity to make tremendous progress on a wide range of City initiatives. At that time Council gave direction to investigate and develop a range of opportunities at selected pilot locations.

The Tower Renewal Office was established to investigate these opportunities. A series of feasibility studies was undertaken. These studies were focused on the pilot sites with the view to how these findings could be applied to the over 1,000 strong cohort of concrete slab style apartment buildings that were constructed between 1945 and 1984. The studies involved many City divisions and other stakeholders to develop a broad range of elements of Tower Renewal for the pilot sites. The lessons learned have contributed to the strategy outlining how Tower Renewal will be implemented across all Toronto neighbourhoods. Details of the Tower Renewal Implementation Plan are provided in the attached ***Tower Renewal Implementation Book***.

Pilot Site Project Development

The purpose of Tower Renewal pilot site investigations was to understand the implementation requirements of a wide range of tower renewal opportunities in different neighbourhood contexts. The pilot sites consisted of projects of varying scales and mandates appropriate to site conditions and the geography of each particular apartment neighbourhood. Taken together, the combination of pilot sites has tested a wide range of tower renewal objectives and actions and has provided information needed to set out a city wide roll-out of Tower Renewal.

Wide-ranging Benefits

Tower Renewal can be a multi-faceted city-wide project that will provide benefits to the residents of Toronto. It ties together key City of Toronto initiatives including the Climate Change, Clean Air and Sustainable Energy Strategy, Agenda for Prosperity, Transit City and the work of the Neighbourhood Action Teams in communities with poor access to services and wide spread economic challenges. It combines the efforts and resources of many City Divisions and Agencies and stakeholders in the public, private and non-profit sectors.

Studies were conducted to assess apartment building potential for energy and water saving, and increased waste diversion as well as undertaking safety audits and walkability reports. Ways through which better on-site amenity spaces could be provided were determined. The types and number of jobs that Tower Renewal projects will generate was also assessed. The broad range of benefits that can be expected to result from Tower Renewal projects being undertaken throughout the City has been established, and these are explained in more detail in the ***Tower Renewal Implementation Book.*** Some highlights include:

A cleaner and healthier environment. A Community Energy Plan Report prepared by ARUP Consulting examined the apartment buildings at the pilot locations for energy and water savings. Based on their findings, it is projected that through applying a range of retrofits and providing renewable energy sources, Green House Gas emissions from apartments can be reduced by 70%. The energy efficiency savings could be in the order of 50%. Water audits indicate that 20% reductions in water consumption can be expected from the apartment sector. A Waste Diversion Feasibility Study carried out by Genivar has established that current recycling rates of about 10% can be increased to 40% by applying a series of best practice measures.

Stronger communities. Job opportunities that would be created from renewal projects could require 30,000 person years of employment with a roll-out of projects to the apartment sector over the next 20 years. These employment opportunities can be of particular benefit to the City's youth.

Enhanced local economic activity. Tower Renewal projects represent a multi-billion dollar investment over the next 20 years. This will support the growth of a number of local industries, including green product suppliers and service providers.

COMMENTS

Tower Renewal looks at what can be done to improve how an apartment building can use energy and water better, divert more materials to recycling, improve how residents can have a safer, healthier environment and more places to interact and engage in activities. It can also assess how amenities such as local retail and health clinics can be added to a community to meet the needs of residents. These actions generate investment at the sites that in turn supports job opportunities and industry growth.

City Wide Implementation

In new construction, the City's Green Standard sets out high environmental performance standards. In the commercial sector there has been widespread adoption of building retrofit as a means to securing the long term viability of real estate. We know that most of the buildings that are here today will still be here in 50 years. The Tower Renewal program will provide a way to move the existing apartment building stock to adopt the types of sustainability practices found in other sectors. There are 1,189 apartment buildings that are over 8 stories high, built between 1945 and 1984. Of these, approximately 800 buildings are for-profit businesses. These buildings are of particular interest because there was little provision for energy or water efficiency in their building design. Moreover, the buildings have many similarities, and typical owners own multiple buildings, so Tower Renewal can achieve economies of scale. The sector represents a significant opportunity for improvement.

In investigating the opportunities, the feasibility studies undertaken found that the most multi-faceted projects afforded the greatest benefits. A typical project could include changing to higher efficiency lighting, improving the insulation value of the building envelop through replacing windows and recladding, replacing bathroom fixtures to save water, implementing an improved material management system to increase the amount of recycling, providing ongoing property management training, and undertaking a tenant engagement program.

Project benefits include utility savings that can be a significant economic driver for the projects to be undertaken. However, the benefits are not widely known by apartment building property owners and there is currently an underdeveloped ability to design and execute multi-faceted projects. To overcome these hindrances, a strategy for action that calls for working with property owners, residents and other business and community partners to expand, support and implement Tower Renewal has been developed. This strategy is the ***Sustainable Towers-Engaged People (STEP) Program***, as detailed in the ***Tower Renewal Implementation Book.*** STEP describes what can be done to achieve improvements, how to plan for renewal projects and what supports such as case studies and incentive programs are available to help in doing the projects.

STEP Program Summary Outline

Level	Actions
Foundation Stage	**Preparation** In the foundation stage, the property owner is enrolled into the program. Materials will be collected and data tracked to determine a baseline. This baseline will be used to measure the building's progress through the STEP program. The primary activities involved in this preparatory stage include collecting existing data (i.e. tracking utility bills to establish a benchmark), creating an inventory of existing resources and building assets.
STEP 1	**Learning and Planning** STEP 1 involves building the knowledge and skills necessary to develop and implement future plans. This stage will build upon the findings from the studies conducted and customize recommendations for each building. Examples of activities include conducting audits and technical studies, collecting data, determining the need for education and training sessions for building staff, and undertaking tenant surveys.
STEP 2	**Action and Implementation** STEP 2 involves investments in short-term improvements. The focus is on implementing projects that result in significant yet easily attainable benefits. Generally these projects are retrofits with less than a five-year simple payback on investment. In this step, developing and implementing a strategy to engage tenants is one component. Examples of other possible activities include changing to energy efficient lighting, replacing showerheads, improving recycling efforts and engaging tenants in safety measures implementation.
STEP 3	**High Performance**

	STEP 3 requires investment in comprehensive improvements. Building on the momentum and skill capacity established in the previous levels, building owners will understand how to realize even greater benefits. Examples of possible activities include installing an energy efficient heating/cooling system, over-cladding, developing a community garden, and revitalizing tenant recreation space through renovations and/or programmed activities.
STEP 4	**Leadership** In STEP 4, leadership in promoting new technology, new solutions and best strategies will be demonstrated. Examples of possible projects at this step might include on-site energy generation and off-site tenant-led community projects.

Grants and subsidies are useful tools and should be maximized, but they are not available to the extent needed to encourage widespread implementation of Tower Renewal. Currently the City, through the Energy Efficiency Office, provides a number of incentives for building retrofits and has seen success in achieving electricity savings in apartment buildings. The Sustainable Energy Fund provides the incentive of a zero interest loan and there are performance incentives for electricity savings. The Toronto Atmospheric Fund also provides some supports for building retrofit initiatives. Other orders of government and non-profit organizations also can potentially provide some financial support. Grants and subsidies however are in limited supply. The multi-faceted projects contemplated by Tower Renewal are beyond the limit of what can be supported through such funds. Tower Renewal staff will be working with the Energy Efficiency Office (EEO) as well as Toronto Hydro, Enbridge Gas and the Toronto Atmospheric Fund to ensure that any future incentive programs are designed to meet the needs of Tower Renewal participants.

Tower Renewal Project Financing Barrier

Multi-faceted projects can cost $4 million per building or more– even after taking advantage of all available incentives – and offer a simple payback period of over 10 years. The most commonly available financing option for these projects is through a mortgage on the property. This limits the owner’s ability to invest in alternatives that provide higher rates of return. Comprehensive tower renewal projects cannot compete with other investment options. In the for-profit sector, based on currently available financing options, these projects are unlikely to be undertaken. To realize the benefits of multi-faceted renewal projects, it is necessary to provide an alternative financing option that resolves these issues and encourages landlords to proceed with renewal projects.

In the case of non-profit buildings, there are financing options that exist that are not available to the for profit sector. For instance there are government programs such as Canada Mortgage and Housing funds and the Social Housing Services Corporation provides financing mechanisms. These will assist the non-profit sector in undertaking Tower Renewal. The Tower Renewal Office will continue to work with all groups and agencies involved to support these efforts.

New Financing Option

To encourage participation in Tower Renewal, a financing option is needed that will provide financing from a source that does not compete with typical investment opportunities. A way to achieve this is to offer a financing option that provides attractive rates, offers quality services and does not impinge on the property as collateral. This can be achieved by offering renewal projects as a package whereby the services provided include building retrofits and on-going maintenance of installations, training and performance monitoring. This will provide significant value added as a measure of product quality. This package would be provided to a property through a multi-year contract wherein the payments made would be commensurate with the cost-savings generated by the project.

As these projects are cost intensive, a key characteristic has to be keeping the financing costs as low as possible. If the projects are financed privately, on a project by project basis and are unsecured, the financing cost would be prohibitive. The City can play a critical role in providing a new financing option. This financing option is detailed in the appended Business Case. There are two major components of the new financing option:

Creation of a capital pool. A pool of projects will have a higher credit rating, and better credit terms, than individual projects on their own. This is true both because of the efficiency of larger capital raises, and because of the lower risk associated with pools consisting of multiple discrete projects. In addition, City support for the pool, in the form of equity or subordinated debt, will further improve the credit rating and terms, which will result in a lower cost of financing and so improve the overall feasibility for the financing of tower renewal projects.

The City's investment in the pool would earn a return, as would any other investment by the City. In order to make such an investment, the Province would have to provide the City authority to do so, as currently the City is limited in its ability to invest in its own corporations. Alternatively, this investment could come from another source, such as the Provincial or Federal Government, if they wished to support the program.

Property tax mechanism to recover defaulted payments. The City currently has the authority to recover certain types of obligations through transfer to property tax rolls in the event that property owners fail to make payments, and certain such transferred amounts are accorded priority lien status. Certain of those along with the ability of the City to enforce a "property tax sale" in the event that payments are not made. Amounts that can currently be transferred include defaulted water, sewage and solid waste charges.

If the City were granted authority by the Province to include Tower Renewal payments in this mechanism, then this would constitute a strong form of security that Tower Renewal repayment obligations would be honoured. The result would be a lower cost of capital for the program, and a much greater likelihood of program success.

Tower Renewal Corporation

In order to create this financing option, it is proposed that a Tower Renewal Corporation be created. The Corporation would have the ability to raise funds and manage the program commercially. It would provide the administrative structure required that could ultimately manage a multi-billion dollar program, supported by the capital markets. This corporation would not be created until the Province has provided the requested authorities. At that time, City Council will be presented with a detailed proposal for the governance structure, scope and policies applicable to the Corporation.

The impact of the tax recovery mechanism on the accounting treatment of the Corporation's debt on the City's balance sheet will require further investigation. It is staff's intent to structure the corporation, it's capitalization and its operations in such a way that the debt of the new corporation will not have an impact on the City's credit rating and its ability to borrow for its regular needs. Ideally, the debt of the new corporation should not appear on the City's balance sheet. The accounting treatment of the new corporation's debt could also be influenced by financial participation of other levels of governments and/or their agencies. The details of the financial operations of the corporation and its impact on the City will be included in a further report to Council before any lending activity takes place.

It is envisaged that the City Manager's Office would continue to have overall responsibility for Tower Renewal, and in particular taking the lead on community development aspects of the program, as well as coordinating City activities to support projects, such as public realm improvements.

The financing mechanism proposed for the Tower Renewal program is dependent on the City's ability to add payments owing to Tower Renewal to the City's tax roll and accord them priority lien status. This would be accomplished by seeking enactment of appropriate legislative or regulatory provisions from the Province, either by amendment to the *City of Toronto Act*, amendment to the relevant regulations under the Act, or other appropriate legislative mechanism.

The City would also seek authority from the Province to provide assistance to city services corporations incorporated pursuant to Ontario Regulation 609/06, including the ability to give or lend money and to guarantee borrowing. This is in order to enable the City to provide Tower Renewal, and any other city services corporations, with necessary start-up funding.

The City would also seek authority from the Province to invest in the pool of funds the Corporation will source from the capital markets.

Consultations on Proposed Financing Option

In order to prove the concept and determine that there is interest in the program option, discussions have been held with representatives of the building owner community, contractor/project managers that would ultimately perform the building upgrade work, and the financial sector. Property owners have confirmed that an alternative financing option is critical to supporting multi-faceted and extensive Tower Renewal projects to be undertaken. In all cases, stakeholders have expressed interest in the concept, and the potential to generate significant results from the Tower Renewal Program. As the details of the financing option are developed and the Province reviews the requests recommended in this report, it is anticipated that further substantive consultations will take place to establish the details of the program.

CONTACT

Eleanor McAteer
Project Director, Tower Renewal
Tel: 416-392-9716
e-mail: emcatee@toronto.ca

SIGNATURE

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Joseph P. Pennachetti
City Manager

ATTACHMENTS

Attachment 1: Tower Renewal Implementation Book
Attachment 2: Tower Renewal Corporation- Business Case Study

Attachment 2

Tower Renewal Corporation- Business Case Study

Business Case Outline:

1. **Situation**
2. **Opportunity**
3. **Financing Barrier**
4. **Assessment of Financing Options and Recommended Option**
5. **Corporation Model to Manage the Financial Structure**
6. **Sourcing Project Financing**
7. **Consultations Undertaken regarding the Preferred Option**
8. **Conclusion and Recommendation**

1. **Situation**

A substantial number of apartment buildings in Toronto are candidates for comprehensive renewal. In particular, buildings constructed between 1945 and 1984, often with little insulation and single-paned windows, are currently in need of significant state of good repair investment and provide substantial opportunities for utility savings through building efficiency retrofits. There are more than 1,000 such buildings in Toronto, with approximately 800 buildings owned privately.

Significant reductions in greenhouse gas (GHG) emissions can be achieved through basic conservation measures with short term payback periods. More comprehensive renewal projects will result in more comprehensive benefits. Technical studies undertaken by ARUP Engineering suggest that GHG emissions can be reduced by 74% on a typical building in the study group where maximum GHG reduction measures are implemented. Projecting these reductions to all apartment towers in the target group, we could expect reductions in GHG emissions of 770,500 tonnes per year through basic conservation measures and more than double that when a more comprehensive program is undertaken. The significance of this can be demonstrated when we consider that total Canadian GHG emissions in 2007 were reported as 747 Mt CO_2-equivalent. This will result in substantial reductions in electricity, gas and water costs. When utility costs fall significantly, the value of the building increases because the valuation is based on the net operating income:

Building Value = Cap Rate * (rental income – operating costs (including water, electricity, gas) – property taxes)

A comprehensive retrofit program can also improve the overall property value due to better aesthetics from the exterior improvements, improved indoor air quality and the overall state of good repair rating of the building. These results also increase the likelihood of tenants renting or continuing to live at a location.

Although studies have shown that the most comprehensive projects will provide the best overall range and depth of benefits, these projects are not typically undertaken today because they are frequently viewed as too complicated and the benefits are not commonly understood. Despite providing a positive return on investment, the financial commitment and amount of funding required often deters owners and property managers from undertaking these more complex projects.

The City of Toronto Tower Renewal Office commissioned a report prepared by Morrison Park Advisors to review the current financing situation for renewal projects, assess how well the financing options are currently applied and to determine how the financing situation could be improved. This business case study is based on the findings in that report.

2. **Opportunity**

Tower Renewal is a comprehensive program to rejuvenate older apartment buildings in Toronto to significantly reduce energy and water use, divert waste to recycling, encourage walking, cycling, and transit by providing safe and conveniently located services and amenities, and generally improve the quality of life in apartment communities. The feasibility studies conducted for Tower Renewal (available for download at towerrenewal.ca) that are referenced in this Business Case are:

(1) ARUP - Community Energy Planning
(2) Genivar - Maximizing Residential Waste Diversion
(3) Kesik - Workforce Challenges and Opportunities Study
(4) Kesik and Saleff – Tower Renewal Guidelines
(5) Building Water Audits

All buildings in the cohort of more than 1,000 buildings can find advantage in undertaking tower renewal, whether owned by the private sector or in the non-profit or public sector.

To encourage city-wide participation in Tower Renewal projects, the Sustainable Towers Engaged People (STEP) program was developed to:

- provide the opportunity for all apartment buildings to participate
- build the capacity of property owners and managers step-by-step so that they may undertake projects of greater complexity and with greater benefits
- build the capacity of residents to participate in Tower Renewal
- assess the performance levels of buildings on an ongoing basis
- integrate social, cultural, economic and environmental initiatives in one program.

The STEP program is a staged process that includes a foundation stage followed by four STEPS. Each STEP represents a successively higher level of commitment and participation that results in higher benefits. The Foundation stage and STEP 1 (Planning) are projected to obtain significant enrolment based on Tower Renewal providing project planning tools, facilitating peer-to-peer support and enabling easy access to incentive programs. STEPs 2 (Implementation), 3 (High Performance) and 4 (Leadership) are incrementally more complex and require greater capacity on the part of building management, buy-in from the tenants and substantive financing. If an effective financing option is available based on the analysis of current participation in apartment building renewal initiatives, renewal programs in other building sectors and the nature and scope of the work required as set out in the Tower Renewal Guidelines it is expected that within a 20 year timeframe, almost all of the buildings can reach STEP 3, with up to 400 of those buildings moving onto STEP 4.

The Toronto Community Housing Corporation (TCHC) is the largest provider of social housing in Toronto and has the long term owner perspective to support undertaking Tower Renewal, as funding permits, through its existing programs and tenant participation processes. Approximately 800 buildings in the target category are privately owned. It is estimated that 75% to 85% of private buildings (600 to 700 buildings) would be interested in and could benefit from a comprehensive renewal project. Such projects require a potential capital expenditure of $4 to $5 million per building (aggregate of $2.5 to $3.5 billion) to undertake Tower Renewal. Based on the findings in the ARUP study, these projects have positive internal rates of return, however the simple payback periods are over 10 years (including interest costs). To encourage maximum participation rates across the City, and to enroll higher numbers in the more comprehensive renewal projects for maximum benefit, it is essential that a more attractive financing option be available.

The objective would be to enroll virtually all buildings in the target group in the Tower Renewal Program by 2030 at least at the STEP 2 level that involves basic conservation measures with short term payback periods. With appropriate incentives and attractive financing options, as many as 90% of those would initiate more comprehensive projects at STEP 3 and as many as 40% would engage in the Leadership Program of STEP 4.

Tower Renewal Participation Targets:
(targeting the 1, 189 buildings)

Performance Rating, Project Planner and Tool Kit

Projected Participation at each step (no. of buildings)

2011	2015	2020	2030	Step	
3	50	200	400	Step 4	*Leadership*
5	200	500	900	Step 3	*High Performance*
20	500	800	1000	Step 2	*Implement*
100	700	1000	1000	Step 1	*Plan*
300	1000	1000	1000	Foundation	*Prepare*

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Mayor's Tower Renewal

These participation levels are projected based on the experience and patterns of participation in a range of programs including the City's Better Buildings Partnership, Toronto Atmospheric Fund Towerwise Program, Social Housing Services Corporation GLOBE, Green Globe®, LEED® and the Federation of Rental Property Owners Certified Building Program. Undertaking projects up to the Step 2 level will be relatively easy to capture once the program is established and promoted. Beyond Step 2 the financial requirements, particularly in the privately owned building sector will present a barrier to enrolment. By addressing the barrier with an attractive alternative financing mechanism, the participation rates that could see tower renewal projects undertaken on the wide scale basis projected.

Some projects will not need to utilize the proposed financing mechanism. In particular non-profit buildings may find methods to finance projects through alternative means. It is envisioned that for profit buildings will use the financing mechanism in substantial numbers. At these projected participation levels, projects utilizing the financing option proposed will generate a demand for at least an estimated $1 billion in investment by 2020. Ultimately, the proposed financing option can be used to support an estimated $3.5 billion of work to be undertaken by 2030. Industry experts (see Workforce Opportunities Report) estimate that the time needed to perform the retrofit work for all Toronto concrete slab apartment buildings is at least 20 years. The net wages for these workers would amount to approximately $2.12 billion and generate an estimated total of 30,000 person years of employment.

Indications from the feasibility studies undertaken are that these projects will result in energy savings of at least 50% of current use. Further it is expected that water use will decrease by 20% and recycling rates will increase by 30%. The result will be the achievement of high levels of environmental sustainability and reducing the potential adverse impacts from resource cost escalations. The more comprehensive renewal projects will also bring improvements that lead to better quality of living for residents, with a healthier and safer living environment.

3. **Financing Barrier**

A significant reason that property owners across North America have not been pursuing comprehensive retrofits is because they are very reluctant to spend their available equity and/or available capital on opportunities that have long simple payback profiles. A recent McKinsey report (based on a national survey in the U.S.) stated that owner's hurdle rate on equity is 40%+. This means that a retrofit financed through owner's equity would have to have 3-year payback, thereby excluding much of the Tower Renewal program initiatives. Now property owners will evaluate a tower renewal project in comparison to other proposed investments, and since tower renewal projects have paybacks that are longer than 3 years, they will not be done. By providing a source of financing that does not compete with alternative investment options, projects that have a longer payback are more likely to be looked on favourably. To accomplish such a source of financing Morrison Park Advisors examined options that would not tap into property owner equity funds nor impinge meaningfully on the mortgage financing capability of building owners.

4. **Assessment of Financing Options and Recommended Option**:

- Subsidies
    - these include Incentives, Grants and Interest Rate Buy-downs
    - subsidies reduce the payback period for investments, making them more attractive to building owners
    - to be effective, subsidies would need to result in a 3-year simple payback period; since many renewal projects have long intrinsic payback periods (upwards of 10 years), subsidies would need to be massive to shorten the payback period by more than half
    - the City would need to generate required subsidy funds through other budgetary sources, such as property taxes, fees, etc.
    - funding to this level is not available

- Low-cost loans
    - City is limited by law to borrowing for capital projects only; cannot finance program spending

- City had approx. $2.75 billion net long-term debt outstanding as at December 31, 2008, and has many other requirements for money in the future

- *Overall, where these measures have been applied, subsidy and loan programs have not generated participation in multi faceted retrofit projects in the for profit sector*
    - Over 2000 such programs have been offered throughout North America (including many in Toronto), with limited impact in achieving deep retrofits (see Morrison Park Report for examples)

- A Credit-enhanced capital pool (Pooled Fund) is considered the preferred option
    - In a capital pool mechanism, the City would contribute equity or subordinated debt to a pool of funds (these funds would ultimately be returned to the City, and would appear on the City's balance sheet as an asset)
    - The bulk of capital needed to undertake a significant number of retrofit projects (the demand for the pool of funds) would be raised through bond issue(s) to the private sector
    - The credit rating of the pooled fund is expected to be based on several factors
        - Number of different assets (i.e., the Renewal Projects)
        - Credit quality of assets
        - Degree of over-collateralization of the fund (i.e., proportion of equity/subordinated debt in the total fund). Cost of funds to program participants is equal to the price of the associated bonds, plus the cost of the return to the City's equity/subordinated debt, plus administration costs
        - This offering would not likely match mortgage interest rates, but would be superior to any other financing
        - Over-collateralization would add approx 1% to the cost of funds for borrowers (based on rates prevalent in April 2010)
- The Pooled Fund program's success requires that retrofit loans NOT be secured against buildings
    - If mortgage security were required, the program would not be successful, since that would effectively reduce owner's access to capital
    - Some alternate form of security is required to ensure that payments are made
    - Treatment similar to current water bills would provide a form of security:
    - If a property owner defaults on a water bill, the unpaid sum is ultimately transferred to property tax rolls;
    - Property tax rolls have "priority lien status", which ensures that municipalities can recover outstanding amounts owing, even in the event of bankruptcy, by forcing the sale of the property in question
    - Treatment would be "next-best-thing" to mortgage security, and would result in high credit quality for the assets in the pooled fund

- Result would be a higher credit rating for the pooled fund, a lower over-collateralization amount, and a lower cost of funds
- This option would not tie up a property owners' available capital since the funding source would not require real property security

To implement the financing option that can support wide spread uptake of tower renewal projects, a change to Ontario legislation or regulations will be required. The *City of Toronto Act*, and specifically Ontario Regulation 594/06 under the Act, specifies which outstanding payment items the City can transfer to property tax. This regulation currently allows unpaid amounts for water, sewage, and waste collection to be transferred to property tax and receive priority lien status. Additionally, Business Improvement Area charges are specifically included in this regulation. The regulation would have to be amended to include "Tower Renewal Services" on the list of priority lien items.

5. **Corporation Model to Manage the Financial Structure**

The capital pool created to fund the Tower Renewal projects should be non-recourse to the City, in order to protect the City's balance sheet, and hence a separate financial entity from the City is required. At the same time, in order to enhance the credibility of the Tower Renewal program as a financial opportunity, and hence to reduce its expected credit rating/credit cost, a corporation with a dedicated board of directors, and dedicated management responsible for implementing the program will be required.

The impact of the tax recovery mechanism on the accounting treatment of the Corporation's debt on the City's balance sheet will require further investigation. It is staff's intent to structure the corporation, it's capitalization and its operations in such a way that the debt of the new corporation will not have an impact on the City's credit rating and its ability to borrow for its regular needs. Ideally, the debt of the new corporation should not appear on the City's balance sheet. The accounting treatment of the new corporation's debt could also be influenced by financial participation of other levels of governments and/or their agencies. The details of the financial operations of the corporation and its impact on the City will be included in a further report to Council before any tower renewal project financing takes place.

After the initial start-up period, the corporation would be self-sustaining. All administrative costs associated with the projects will be recouped in the fee structure. The renewal projects would be undertaken through a contractual agreement with building owners for building upgrades and associated training, operating practices support and monitoring of performance requirements being specifically included. The corporation would arrange for the funds needed to undertake the Tower Renewal projects through short-term financing, and ultimately through issuance of revenue bonds, and it would undertake the management of the pooled fund.

The recommended characteristics of the Tower Renewal Corporation (TRC) are:

Mission: To raise funds and manage the program commercially. It would provide the administrative structure required that could ultimately manage a multi-billion dollar program, supported by the capital markets.

Key Relationships:
TRC will need to work very closely and cooperatively with a number of key partners within the City including the City Manager's Office, Finance and Treasury.

Activities:
The corporation will need to develop the financing option structure, including establishing model contracts, mechanisms to verify and secure energy savings, determine the scope of projects to be undertaken and the qualifications of service providers.

Detailed market research and analysis must be done to satisfy the needs of stakeholders in the financing product. The contracts must be sound. The fees must be sufficient to cover costs, but low enough to encourage participation. The capital financing methods must secure the lowest cost for carrying out projects.

There is significant expertise within City Divisions that will be used to support the participation of buildings in tower renewal projects. This will be supplemented where needed with external expertise in areas such as energy contracts, performance agreements and post project evaluation. Technical expertise will also be required in renewal programs and real estate financing. Marketing expertise will be needed to ensure product is designed to be widely accepted by the market and to drive enrolment (contract materials, distribution of information on product, expert evaluation and verification on product value, case studies). The financing option components must be integrated with the overall Step Program, so the corporation must have ongoing broad knowledge of City policies and objectives and work in a complementary manner with City services.

Pending the necessary Provincial regulatory and/or legislative changes being made, the City Manager will bring forward details of the corporate shareholder direction, structure and funding and financing arrangements of the new corporation.

6. **Sourcing Project Financing:**

Tower Renewal projects fundamentally depend on the economics of investments in building upgrades generating substantial long-term savings. Since savings are, by design, more than sufficient over the long-term to repay the cost of investment, they are desirable and financeable projects.

The most efficient financing is long-term financing matching the life of the economic agreement between a building owner and the Tower Renewal Corporation. However, long-term financing in the form of revenue bonds is not available in the $4 million increments that are expected to be required to finance individual tower projects. As a result, projects will need to be accumulated until a bond issue would be possible. As the program matures, it may be possible to issue bonds once per year, or potentially more often. However, the first issuance of bonds may not occur until the third year after the founding of the Corporation. Short-term financing arrangements will be required to finance individual projects prior to long-term bond issuance, which may take the form of bank-financing, credit lines, or ultimately a commercial paper program, if that becomes more efficient when the program is mature. All financing costs will be included in the cost of financing quoted for individual projects.

In addition, there are administrative costs associated with the Tower Renewal Corporation and running the program. All of these costs will be included in the cost of projects. On-going, each project should be charged a “program fee” designed to recoup the long-term costs of the Corporation. As projects accumulate, these program fees will ultimately be sufficient to pay the annual costs of operating the program. In the early years, however, “seed” funding will be required from the City to support the creation of the Tower Renewal Corporation and its initial administrative costs and marketing programs. Success of the program should result in a self-sustaining corporation, and the repayment of all City seed-funding.

7. **Consultations Undertaken regarding the Preferred Option**

Property owners have indicated that under current circumstances the Tower Renewal project investments cannot be made because the returns cannot compete favourable with alternative investment opportunities. With an alternative financing option, the projects will be given more favourable consideration. Coupled with other support mechanisms being put in place, such as that provided with the STEP Program, multi-faceted projects will be much more attractive.

In order to prove the concept and determine that there is interest in the program option, discussions have been held with representatives of the building owner community, contractor/project managers that would ultimately perform the building upgrade work, and the financial sector. In all cases, stakeholders have expressed interest in the concept, and the potential to generate significant results from the Tower Renewal Program.

8. **Conclusion and Recommendation**

A wide range of environmental, economic and social benefits can be achieved through the undertaking of tower renewal projects on a wide scale. To make these projects happen in the private sector an alternative way of financing them must be available. Arranging for a pooled fund that is secured through priority lien status, will provide an alternative financing stream that does not have to compete with alternative investment opportunities. The City can through seeking the necessary changes from the Province and setting up a Tower Renewal Corporation, provide this alternative financing mechanism. By doing so, the City can play a key role in unlocking the potential of tower renewal.