



Hamilton



ERASE[∞] 2018

ENVIRONMENTAL REMEDIATION AND SITE ENHANCEMENT

COMMUNITY IMPROVEMENT PLAN (CIP)

REVIEW OF CITY OF HAMILTON ERASE CIP INCENTIVE PROGRAMS

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EXECUTIVE SUMMARY

Introduction

The City of Hamilton adopted its first Environmental Remediation and Site Enhancement (ERASE) Community Improvement Plan (CIP) in 2001. This award-winning plan was the first of its kind in Canada to offer municipal incentive programs for the remediation and redevelopment of brownfield sites. The City of Hamilton updated the ERASE CIP in 2005, and last updated the ERASE CIP in 2010. When it was first developed, the ERASE CIP applied only to the City's Older Industrial Area, but in 2005, it was expanded to apply to the entire Urban Area. The City of Hamilton has been consistently cited and recognized as a leader in Canada for its municipal programs to promote brownfield redevelopment.

As part of the current preparation of Phase 2 of the Bayfront Industrial Area Renewal Strategy, the City of Hamilton retained RCI Consulting (in association with Dillon Consulting and ASI) to conduct a comprehensive review of the ERASE Programs in the Bayfront Industrial Area and across the entire Urban Area. This report presents the results of this comprehensive review of the City's ERASE Programs.

Study Goals

The primary goals of this review of the ERASE Programs are to:

- Evaluate the uptake and economic performance of the programs;
- Identify any issues and concerns with current program content and administration; and,
- Make recommendations on program content and administrative enhancements to address identified program and administrative issues and further improve the effectiveness and performance of the ERASE Programs across the Urban Area, and especially in the City's Bayfront Industrial Area; and,
- Provide guidance and recommendations to inform potential revisions to the ERASE Programs.

Methodology

A comprehensive methodology relying on both quantitative and qualitative analysis was developed to review the ERASE Programs. This methodology included:

- A review of benchmark (best practice) municipal brownfield redevelopment incentive programs employed by ten (10) Canadian municipalities with long-standing brownfield incentive programs;
- Qualitative Interviews and discussion with City staff responsible for ERASE Program development and administration;
- A comprehensive quantitative analysis of ERASE Program results data over the last 15 years to evaluate program uptake, effectiveness, and economic impacts;
- Development of draft recommendations for enhancements to the ERASE Programs; and,
- Consultation with key brownfield stakeholders and the public to refine and finalize the ERASE Program recommendations.

Best Practices

The ERASE programs are very competitive when compared with the incentive programs offered by other municipalities in Ontario. The City of Hamilton is the only municipality in the comparison that offers a remediation loan program (see Figure 2 "Comparison of Municipal Brownfield Redevelopment Incentive Programs"). Only minor enhancements to the types/cost of environmental studies and environmental

remediation expenses eligible for the ERASE Programs are required to maintain the competitiveness of the City of Hamilton's ERASE Programs.

Analysis of ERASE Programs, 2001-2016

Overall, the ERASE Programs have been very well utilized and have produced the following impressive results:

- 121 sites have been approved for ERASE Study Grants, resulting in the environmental study of approximately 383 acres of land with an average study grant cost to the City of only \$3,657 per acre;
- 44 sites have been approved for ERASE Redevelopment Grants;
- Of the 44 sites approved for ERASE Redevelopment Grants, 22 projects (50%) are complete or substantially complete and these 22 projects have resulted in:
 - ✓ The construction of approximately 600,000 sq.ft. of new industrial/commercial space;
 - ✓ The construction of approximately 450 new residential units;
 - ✓ A total project construction value of approximately \$170 Million;
 - ✓ The creation of at least 325 jobs in the industrial/commercial sector;
 - ✓ An increase in assessment value due solely to the impact of the ERG projects of \$129 Million;
 - ✓ An increase in property taxes collected by the City due solely to the impact of ERG projects of \$2.3 Million annually;
 - ✓ \$5.5 Million collected by the City in development charges; and,
 - ✓ \$1.4 Million collected by the City in building permit fees.
- Once construction is completed on all 44 ERG sites, it is anticipated that this will result in:
 - ✓ The remediation and redevelopment of 213 acres of brownfield land in Hamilton;
 - ✓ The construction of approximately 1,150 new residential units;
 - ✓ The creation of approximately 530 jobs; and,
 - ✓ Approximately \$391 Million in construction value.

While the ERASE Programs have clearly met and even exceeded the goals of the ERASE CIP, the comprehensive analysis of the programs did identify minor issues around eligible study and remediation costs, and program administration and marketing that can be addressed in order to improve program efficiency, effectiveness and performance.

Recommendations

A series of draft report recommendations have been developed to address minor issues identified in the ERASE programs and these recommendations were then revised and finalized based on input received at a workshop with key stakeholders, a public meeting, and via ongoing consultation with City staff.

A summary of the key report recommendations is provided below:

ERASE Program Administration and Monitoring

It is recommended that City staff:

- a) Check the completeness of all data, information, and cost estimates collected for all ERASE Program applications and ensure that construction cost estimates are realistic based on comparable projects;
- b) Conduct follow up tracking on every ERG application after projects are completed to determine and record accurate actual amounts for all project performance monitoring variables; and,

- c) Conduct accurate long-term tracking of the assessment value and property taxes on all properties participating in the ERASE Programs; and,
- d) Clarify that a minimum of two (2) cost estimates are required from a qualified person for the ERASE Study Grant Program and the ERASE Redevelopment Grant Program to ensure cost-efficient environmental study and remediation approaches.

ERASE Study Grant (ESG) Program

It is recommended that the City:

- a) Increase the maximum grant level per property/project for two environmental studies from its current level of \$25,000 to \$35,000;
- b) Add the cost of “designated substances and hazardous materials surveys” to the eligible costs of the ESG Program across the ERASE Community Improvement Project Area, but only where such studies are being done on current or former institutional sites or properties designated under Parts IV or V of the *Ontario Heritage Act*;
- c) Enhance the ESG Program in the Older Industrial Area (Area 2) by:
 - i) adding expanded study types such as designated substances and hazardous materials surveys and industrial and office reuse feasibility studies to the list of eligible program costs; and,
 - ii) increasing awareness and marketing of the ESG Program to existing and prospective business in the Older Industrial Area.
- d) Develop enhanced submission requirements for the ESG Program to restrict this program only to applicants who have clearly demonstrated their legitimate intention to redevelop a brownfield site.
- e) Implement measures to ensure that all current and future applicants to the ESG Program complete and submit their approved environmental studies in a timely manner.
- f) Increase the annual budget for the ESG Program on a go forward basis to approximately \$250,000 per year.

ERASE Redevelopment Grant (ERG) Program

It is recommended that the City:

- a) Add the “removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey” as a stand-alone eligible cost in the Older Industrial Area (Area 2);
- b) Add the “removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey” as a stand-alone eligible cost only for current or former institutional sites or for properties designated under Parts IV or V of the *Ontario Heritage Act* in the rest of the ERASE Community Improvement Project Area;
- c) Increase awareness and marketing of the ERG Program to existing and prospective business in the Older Industrial Area.
- d) Follow up on approved ERG applications where an RSC has yet to be submitted to determine the status of these projects, and where the applicant is no longer interested in the program, these applications should be formally closed and the grant cancelled.
- e) Develop and implement a standardized process to resolve disagreements between the developer's consultant and the City's peer review consultant regarding submitted environmental studies for ERG applications that are not changes to a more sensitive use.
- f) Review the few ERG projects where there have been cost overruns to determine the causes of these cost overruns and address these causes through modifications to the ESG and/or ERG programs.
- g) Commence utilizing the City's current ability to conduct spot and random audits of eligible expenses on ERG projects.

- h) Develop and distribute to applicants a Guideline that clearly specifies eligible costs for the ERG Program and the level of detail expected in eligible cost invoice submissions and other supporting documentation.

ERASE Tax Assistance Program (TAP)

It is recommended that the City add the following eligible costs to the ERASE TAP:

- i) clean fill, grading and compaction to replace contaminated soils;
- ii) filing a Record of Site Condition (RSC) and a Certificate of Property Use (CPU);
- iii) environmental insurance premiums; and,
- iv) removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey.

Downtown Hamilton/West Harbourfront Remediation Loan (LOAN) Program

It is recommended that the City modify the ERASE LOAN Program to include a 0% annual interest rate and a 5 year amortization period, with all other program details and requirements remaining the same.

ERASE Marketing and Opportunities Program (MOP)

It is recommended that the City:

- a) Review, revise and augment the components of its ERASE MOP to support and coincide with the launch of the City's revised ERASE CIP, including the revised ERASE incentive programs; and,
- b) Better document marketing initiatives and resources to better track program strategies and outcomes.

1.0 INTRODUCTION

1.1 Background and Purpose

The 3,700 acre Bayfront Industrial Area is Hamilton's largest industrial area and presents a major opportunity for Hamilton to continue on its current path of economic renewal and revitalization. The reuse and redevelopment of brownfield sites in the Bayfront Industrial Area will play a key role in helping the City maximize the market potential of underutilized employment lands in the Bayfront Industrial Area.

Phase 1 of the Bayfront Industrial Area Renewal Strategy, the Market Opportunities Study, was completed by Deloitte LLP in August of 2015. One of the key findings of the Phase 1 Strategy is that the abandoned and derelict buildings in the Bayfront must be rejuvenated if the city plans to take advantage of the significant opportunity for economic development that exists in this area. The Phase 1 Strategy stressed the importance of promoting brownfield redevelopment to help achieve this goal and the significant role that the provision of government incentives plays in brownfield redevelopment.

The City of Hamilton retained the consulting team of Dillon Consulting, RCI Consulting and ASI to prepare Phase 2 of the Bayfront Industrial Area Renewal Strategy. One of the key tasks undertaken as part of the Phase 2 Strategy was a Brownfield Review. This task included a review of the City's Environmental Remediation and Site Enhancement (ERASE) Brownfield Programs. Initially, this review was intended to focus only on the use of the City's ERASE programs in the Bayfront Industrial Area. However, as the City's ERASE CIP programs had not been reviewed since the last time the ERASE CIP was revised in 2010, the comprehensive review of the City's ERASE CIP programs was expanded to include the entire urban area.

The purpose of this report is to present the results of the comprehensive review of the City of Hamilton's ERASE programs and associated recommendations. The recommendations contained in this report are designed to improve the effectiveness of the ERASE programs, both in the Bayfront Industrial Area, and urban area wide. The recommendations relating to ERASE program enhancements will have to be implemented via an amendment to the existing ERASE CIP, while recommendations relating to data collection, monitoring and program administration can largely be implemented via internal process improvements that do not necessarily require amendment to the existing ERASE CIP.

1.2 General Methodology

The first step in reviewing the ERASE programs was to review the history of the ERASE CIP and how the programs changed as the ERASE CIP was periodically updated since first being developed and adopted by the City in 2001.

The second step in the study involved a review of benchmark municipal brownfield redevelopment incentive programs in ten Canadian municipalities (including Hamilton), with well-established brownfield redevelopment incentive programs. The comparator municipalities were selected in consultation with City of Hamilton staff. This exercise helped to indicate program areas where the City of Hamilton was competitive with the comparator municipalities and areas where the City of Hamilton could enhance its ERASE programs.

Next, interviews and discussions were conducted with City staff currently and previously responsible for administering the ERASE incentive programs. The focus of these discussions with City staff was on programs gaps, administrative issues, and future program direction. Discussions with City staff continued throughout the

preparation of this report to ensure that the recommendations in this report address the programs gaps and administrative issues identified by City staff.

Next, City staff supplied historical data and mapping on the uptake of the various different ERASE Programs from the time the first ERASE CIP was approved in late 2001 to the end of 2016. The available data was then analysed to determine patterns and trends in the historical take-up and economic impact of the ERASE Programs.

Finally, once draft recommendations for revisions to the ERASE Programs and administrative processes had been developed, these were presented to key brownfield redevelopment stakeholders at a facilitated workshop held on May 29, 2017. Approximately 30 people attended this event. A public open house was also held on August 28, 2017 to share information on the proposed ERASE Program review and recommendations with members of the public. Input received during the stakeholder and public consultation sessions was used in consultation with staff to finalize the ERASE Program recommendations contained in this report.

1.3 Report Content

Section 2.0 of the report provides a summary of the review of benchmark municipal brownfield redevelopment incentive programs. The full review of benchmark municipal brownfield redevelopment incentive programs is contained in **Appendix A**.

Section 3.0 of the report provides a basic history of the ERASE CIP and how the incentive programs contained in the CIP have changed over the years.

Section 4.0 of the report contains a summary of the review of the uptake and results of Hamilton's ERASE Programs over the period 2001 to 2016. This section of the report also discusses administration and monitoring issues. The full review of Hamilton's ERASE programs is contained in **Appendix B**.

Finally, Section 5.0 of the report contains a summary of recommendations for revisions to the ERASE programs contained in the ERASE CIP along with a summary of recommendations pertaining to program administration and monitoring.

2.0 REVIEW OF BENCHMARK MUNICIPAL BROWNFIELD REDEVELOPMENT INCENTIVE PROGRAMS

2.1 Introduction

In order to help inform the consideration of ERASE incentive program improvements, a scoped best practices review of benchmark municipal brownfield redevelopment incentive programs used by other municipalities in Ontario was conducted. This section of the report contains a summary of this review, also referred to herein as a best practices review. The full best practices review is contained in **Appendix A**.

In consultation with City of Hamilton staff, nine Ontario municipalities with well-established brownfield incentive programs were selected for the best practices review. The City of Edmonton, AB. was also included in the best practices review (See Figure 2).

2.2 Methodology

Numerous municipalities in Ontario offer incentives to promote brownfield redevelopment, in their older industrial areas, downtowns, and often municipality wide. **Figure 1** below shows the most recent statistics (2012) collected by the Ontario Ministry of Municipal Affairs and Housing (MMAH) on municipalities in Ontario that offer brownfield redevelopment incentive programs. 52 municipalities in Ontario offer a variety of brownfield redevelopment incentive programs, and of these 52 municipalities:

- 96% offer pay-as-you-go tax increment grants;
- 77% offer combined municipal and education property tax assistance through the Province's Brownfields Financial Tax Incentive Programs (BFTIP);
- 58% offer environmental site assessment (ESA) grants;
- 54% offer planning and building permit fee rebates/grants;
- 52% offer partial or total development charge reduction; and,
- Only 4% (2 municipalities including Hamilton) offer a direct remediation grant or loan.

Figure 1 Municipal Brownfield Redevelopment Incentive Programs in Ontario

Type of Financial Incentive Program	Number of Municipalities	% of all Municipalities (52) with Brownfield CIPs
Tax Increment Grant	50	96%
Tax Assistance	40	77%
Environmental Study Grant	30	58%
Planning/Building Fees Grant	28	54%
Development Charge Reduction/Exemption	27	52%
Rehabilitation and Redevelopment Grant/Loan	2	4%

Source: Ontario MMAH, 2012

The Brownfield CIPs (and development charge by-laws, as applicable) in each municipality were reviewed and the web sites of each municipality were also examined to determine which brownfield incentive programs are currently being offered by each municipality. The details of the brownfield incentive programs being offered by each municipality are provided in **Appendix A**, and the types of brownfield incentive programs offered by each

municipality are summarized in **Figure 2** below. The best practices review contained herein is not intended as an exhaustive analysis. It was conducted to compare eligible costs and different types of municipal incentive programs used by the City of Hamilton to promote brownfield redevelopment on private sector lands to a number of benchmark municipalities.

2.3 Overview of Incentive Programs

Taken as a whole, the 10 municipalities in this comparison offer nine different types of financial incentive programs to promote private sector brownfield redevelopment. The incentive programs that are most commonly offered include the environmental study grant, brownfields property tax assistance, tax increment grant, and to a slightly lesser degree, the development charge reduction. Many of the municipalities in this best practices review, including Hamilton, also engage in municipal leadership activities on publicly and privately owned brownfields, including the maintenance of brownfield/historical land use inventories, and brownfield redevelopment supportive planning, data base, marketing and monitoring programs.

All 10 of the municipalities in this comparison offer assistance with the cost of environmental studies such as Phase II Environmental Site Assessments (ESAs) and Remedial Work Plans. The range of environmental studies funded varies somewhat from municipality to municipality.

All of the Ontario municipalities in this comparison offer a program to freeze, or in some cases, even cancel the municipal and education property taxes on a brownfield property for up to 3 years with some of the municipalities increasing the duration of the municipal property tax freeze/cancellation to 5 years.

All of the municipalities in this comparison offer grants to help offset the costs of environmental remediation. In Ontario, these remediation grants take the form of pay-as-you-go tax increment grants (TIGs) where the developer front-ends the costs of remediating and redeveloping the brownfield site, and an annual grant is paid out to the developer after the brownfield site is remediated and redeveloped.

Six (6) of the 10 municipalities in the comparison also offer development charge reductions or deferrals. This is typically done by allowing an applicant with an approved TIG to apply their remediation expenses against the municipal development charges payable. The TIG is then reduced (or "offset") by the amount of remediation expenses applied against the municipal development charges. Both of the upper tier governments in Niagara and Waterloo have separate development charge reduction programs for brownfield redevelopment.

Finally, the City of Hamilton is the only municipality in the comparison that offers a remediation loan, while the City of Cornwall is the only municipality in the comparison that also offers a municipal tipping fee grant and a grant to help offset the payment of parkland dedication fees on brownfield sites that are being redeveloped.

Overall, the best practices comparison of the ERASE programs in the City of Hamilton to brownfield redevelopment incentive programs offered by other leading municipalities suggests that the City of Hamilton is still at the forefront of municipal incentive programs used to promote brownfield redevelopment. Furthermore, as outlined in Section 4.0 of this report, the City of Hamilton's ERASE Programs have produced very impressive results in terms of the number and size of brownfield redevelopment projects and their economic impacts.

Figure 2 Comparison of Municipal Brownfield Redevelopment Incentive Programs

Type of Program	Municipality									
	Brantford	Cornwall	Guelph	Hamilton	Kingston	Kitchener, Cambridge, Waterloo/ Waterloo Region	Niagara Falls/ Niagara Region	Ottawa	Windsor	Edmonton
1) Project Feasibility Study Grant		X						X	X	
2) Environmental Study Grant		X	X	X	X	X	X	X	X	X
3) Property Tax Assistance (Freeze/ Cancellation)	X	X	X	X	X	X	X	X	X	
4) Tax Increment Grant (TIG)	X	X	X	X	X	X	X	X	X	X
5) Development Charge Reduction	X			X		X	X	X	X	
6) Remediation Loan				X						
7) Municipal Tipping Fees Grant		X								
8) Planning/ Building Permit Fees Grant		X						X	X	
9) Payment-in-Lieu of Parkland Dedication Grant		X								

2.4 Geographic Approach

Ontario municipalities that have prepared and adopted CIPs for the promotion of brownfield redevelopment have done so both on an area specific and urban area wide basis. However, most municipalities have tended to designate the entire urban area as a community improvement project area for their CIP, especially if their brownfield sites are in several parts of the urban area or spread out across the urban area. A number of municipalities, such as Hamilton and Guelph, originally started by designating only their older industrial areas, and then expanded their community improvement project areas to the entire urban area. Of the 10 municipalities in the comparison, 7 offer their brownfield CIP incentive programs across their entire urban area, while Cornwall's Brownfield CIP covers most of its urban area. Kingston's Brownfield CIP covers its downtown and older industrial areas, but it should be noted that the City of Kingston has had to twice expand its brownfield community improvement project area since inception of its Brownfields CIP.

Clearly, the choice of a community improvement project area depends on the location of brownfield sites in a municipality, which in turn depends in part on the historic industrialization and growth pattern of the municipality. While occurring more naturally in older industrial areas, brownfields can be found across most municipalities in the form of former uses such as gasoline stations, dry cleaners, printers, manufacturers, blacksmiths, textile mills, asphalt plants, petroleum storage and automobile wrecking yards.

A number of the municipalities in the comparison, including Hamilton, Niagara Falls and Ottawa have chosen to combine the urban area wide and area specific geographic approaches, i.e., a "hybrid approach". These municipalities have designating community improvement project areas for their Brownfield CIPs that are urban area wide, but have then identified "sub-areas" or "priority areas" within their larger community improvement project areas, e.g., areas that contain legacy brownfield sites and/or downtown areas. The brownfield incentive programs in these municipalities have then been tailored to provide more generous incentives and/or accomplish specific planning and economic development goals in these priority areas.

Best Practice Considerations for the ERASE CIP:

The ERASE CIP utilizes the hybrid approach to designation of a brownfields community improvement project area. Based on the broad geographic distribution of approved brownfield incentive program applications in Hamilton since inception of the ERASE Program, this approach appears to be appropriate and will continue to serve the City of Hamilton.

2.5 Environmental Study Grant Programs

All of the municipalities in the comparison except for Brantford offer an environmental study grant program. These are also referred to as environmental site assessment (ESA) grant programs. ESA grant programs in Ontario typically provide a matching grant that covers 50% of the cost of a Phase II Environmental Site Assessments (ESA), Risk Assessment and/or Risk Management Plan, and Remedial Work Plan (RWP). Two (2) of the 9 municipalities in Ontario, Guelph and Windsor, also allow Designated Substance and Hazardous Materials Surveys as an eligible cost under their ESA Programs.

The ESA Grant for 50% of the cost of the environmental study typically ranges from \$12,000 to \$20,000 for a single environmental study. The Region of Waterloo offers the most generous maximum ESA Grant among Ontario municipalities at \$40,000. Many of the Ontario municipalities allow for two environmental studies. In this case, the maximum grant amount for two environmental study grants typically ranges from \$20,000 to \$30,000.

While many of the above-noted ESA grant programs in Ontario municipalities have been in place for ten years or more, the maximum grant levels of these programs have never increased, or have increased only slightly over the years. Yet, the cost of Phase II ESAs, Remedial Work Plan and Risk Assessments has increased significantly since the Ministry of Environment (MOE) introduced more stringent site condition standards and environmental site assessment requirements in O.Reg 511/09, which took effect in 2011. Therefore, Ontario municipalities should be reviewing their maximum environmental study grant amounts to determine if they are adequate in the face of increased costs for the undertaking of environmental studies.

The City of Hamilton is one of only a few municipalities that has increased its maximum environmental study grant amount, from \$10,000 in 2001, to \$15,000 in 2005, to the current \$20,000 in 2010. While Hamilton's maximum single grant amount is higher than most other municipalities, Hamilton's maximum grant amount for two studies (\$25,000) is similar to most of the other municipalities in Ontario, and actually less than Guelph and Waterloo. This could prove limiting where an applicant wishes to conduct multiple environmental studies on a site, e.g., Phase II ESA and a Risk Assessment, and this is quite often the case.

It is important from a municipal perspective to ensure that environmental study grants are provided to owners or purchasers of properties that will actually be cleaned up and redeveloped, and where there will be an increase in assessment value, and therefore property taxes. Therefore, inquiries regarding redevelopment plans should be made by the municipality in the application for an environmental study grant, and the veracity of the information and responses should be evaluated by municipal staff. However, the submission of detailed redevelopment plans as a required condition for environmental study grants is not necessarily recommended.

Best Practice Considerations for the ERASE CIP:

The ESG Program offers a level of funding that is currently competitive with most Ontario municipalities that offer environmental study grants. As noted in Section 4.0, Hamilton's ESG Program has been well utilized and has produced good results to date. However, the following revisions to the ESG Program should be considered:

- 1) Increase the maximum grant level for two environmental studies per property/project from its current level of \$25,000 to \$35,000;***
- 2) Add "designated substance and hazardous materials survey" as an eligible cost ; and,***
- 3) Include enhanced program eligibility criteria to restrict program application only to a property owner or a bona fide arms-length prospective purchaser who has clearly demonstrated their legitimate intention to redevelop a brownfield site.***

2.6 Brownfields Property Tax Assistance Programs

The *Municipal Act, 2001* allows a municipality to pass a by-law providing tax assistance to an eligible property in the form of cancellation of all or a portion of the taxes levied on that property for municipal and education purposes during the "rehabilitation period" and the "development period" of the property, as defined in Section 365.1 of the *Municipal Act, 2001*. The matching education tax assistance is subject to approval by the Province (Minister of Finance) through its Brownfields Financial Tax Incentive Program (BFTIP) on a case by case basis. The municipality must make application to the Province for the matching education tax assistance. This process is complicated and time consuming, often taking more than six

months to obtain approval from the Province. This is one of the main reasons that the Province's BFTIP Program has not been well utilized since its introduction in 2004.

All of the Ontario municipalities in the comparison offer a Brownfields Property Tax Assistance Program. Eligible costs include the cost of any action taken to reduce the concentration of contaminants on, in or under the property to permit an RSC to be filed. The City of Brantford Brownfields Property Tax Assistance Program also specifically includes the cost to remove/abate designated substances and hazardous materials as an eligible cost, while some other municipalities may include this cost under environmental remediation.

The City of Hamilton ERASE Tax Assistance Program (TAP) includes eligible costs that are similar to those in other tax assistance programs in Ontario. However, the Hamilton TAP does not include the cost of abatement/removal of designated substances and hazardous materials and environmental insurance premiums. It is also not clear if the program includes the cost of clean fill, grading and compaction to replace contaminated soils and the costs of filing an RSC and CPU. The inclusion of these items as eligible costs would improve the applicability and attractiveness of the City's ERASE TAP, and potentially expand the ability of the City (on behalf of the applicant) to obtain additional funding for these eligible costs from the Province.

Considerations for the ERASE CIP:

The following revisions to the ERASE TAP should be considered:

- 1) Clarify that the cost of environmental remediation includes the cost of clean fill, grading and compaction to replace contaminated soils, and the costs of filing an RSC and CPU;***
- 2) Add the following as eligible costs:***
 - a) "environmental insurance premiums" ; and,***
 - b) "removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey".***

2.7 Tax Increment Grant (TIG) Programs

Numerous U.S. municipalities have successfully used tax increment financing (TIF) to promote the redevelopment of brownfield properties. Simply defined, TIF utilizes the difference between the total future tax payable and current tax payable, i.e., the tax increment generated by the redevelopment, to pay for the specific costs associated with the redevelopment.

In Ontario, municipalities utilize a variation of TIF known as a tax increment grant (TIG). Instead of the municipality retaining the future tax increase when a brownfield property is remediated and redeveloped, it returns part or all of that increase to the owner/developer in the form of an annual "pay-as-you-go" grant for a specified period of time after the property has been remediated and redeveloped. This annual grant is based on a percentage of the tax increment generated by the project. This grant can include simply the cost of environmental assessment and remediation as eligible costs, and it can include other costs such as demolition, building rehabilitation, infrastructure upgrading, or even new construction.

In terms of the level of the TIG, virtually all of the municipalities use a constant percentage rate rather than a sliding scale. Brantford offers the most competitive TIG at 100% of the tax increment for up to 20 years. Waterloo municipalities are next with a TIG of 100% of the tax increment for 10 years. Ottawa offers an 85%

TIG but only for 5 years. This is a recent change from their previous 50% TIG for 10 years. Guelph, Hamilton, Kingston, Niagara Falls and Windsor offer their TIG at 80% for 10 years.

In terms of eligible brownfield costs permitted under the TIG programs, virtually all of the municipalities include the full suite of environmental remediation related expenses. This includes the costs of: environmental studies (excluding Phase I ESAs) not covered by environmental study grants, remediation, including costs to excavate, haul and dispose of contaminated soils, and/or in-situ or ex-situ treatment of contaminated soils, groundwater treatment, the supply, grading and compaction of clean fill to replace contaminated soils removed from the site, site monitoring and management measures, environmental insurance, and the preparation and filing of an RSC and CPU. A few of the municipalities also include the cost of abatement/removal of designated substances and hazardous materials, either directly, or under the environmental remediation category, demolition category, or under the building rehabilitation/retrofit category if an adaptive reuse project. Therefore, the City of Hamilton should consider the inclusion of the cost of abatement/removal of designated substances and hazardous materials as an eligible cost under its ERASE Redevelopment Grant Program.

All of the Ontario municipalities also include part or all of the non-environmental costs typically associated with the redevelopment of brownfield sites. This includes the cost of building demolition, building rehabilitation, and the cost of upgrading or replacing on-site and off-site public infrastructure. However, the eligible non-environmental costs and the percentage of those costs included in their TIGs vary significantly by municipality. For example, demolition is a 100% TIG eligible expense in all 9 of the Ontario municipalities, except in Ottawa where it is only 50% eligible, and in Hamilton where it is not an eligible expense in Area 1. Five of the 9 Ontario municipalities include building rehabilitation and retrofitting as a TIG eligible expense with building rehabilitation and retrofitting a 100% TIG eligible expense in Brantford, Niagara Falls and Windsor, and a 50% TIG eligible expense in Guelph and Ottawa.

Removal, upgrading and construction of on-site infrastructure works (water service, sanitary and storm sewers) are a TIG eligible expense in 7 of the 9 Ontario municipalities. In Brantford, Cornwall, Niagara Falls and Windsor, 100% of on-site infrastructure works are TIG eligible. In Kingston and Ottawa, 50% of on-site infrastructure works are TIG eligible. In Hamilton, only the costs of removing on-site infrastructure are TIG eligible, but these costs are limited to 25% of on-site infrastructure costs. Upgrading and construction of off-site infrastructure works is a 100% TIG eligible expense in only 3 of the 9 Ontario municipalities.

A number of municipalities in Ontario have reduced their allowance (percentage) for demolition and allowable on-site and off-site infrastructure upgrading eligible costs in recent years, because in some applications, these costs have begun to form a large percentage of approved brownfield TIG. Hamilton's restriction of TIG eligible infrastructure costs only to infrastructure removal and 25% of total on-site infrastructure costs and non-eligibility of demolition costs in Area 1 satisfactorily addresses this issue.

Six (6) of the 10 municipalities in the comparison also include LEED certification and increased material/construction costs required to achieve LEED certification as TIG eligible costs. These municipalities include Guelph, Hamilton, Kingston, Ottawa, Windsor and Edmonton. Hamilton caps eligible LEED costs at 50% of LEED costs and Windsor caps eligible LEED costs at 10% of total construction costs.

With the exception of Brantford and Hamilton, all of the Ontario municipalities in the comparison currently require submission of an RSC when applicants are accessing environmental remediation funding as part of a TIG, regardless of whether or not a mandatory change of use RSC is required as per O. Reg 153/04. Where a change of use RSC is not required by O. Reg 153/04, Brantford allows an applicant to provide an affidavit

stating that the property is environmentally suitable for the proposed use, and Hamilton allows a risk assessment to be peer reviewed by a consultant selected by the municipality. Ostensibly, this practice of providing an affidavit or peer review alternative to the RSC in non-mandatory RSC situations has been adopted by a few municipalities in response to complaints from incentive program applicants of increasing delays and complexities in the Province of Ontario's RSC review and acknowledgement process, especially as it relates to risk assessments.

All the municipalities in the best practices review require the applicant to enter into an agreement with the municipality specifying the terms of the funding assistance, obligations of the municipality and the owner, and defaults and remedies. Review of the standard TIG agreements utilized by several of the municipalities in the comparison show these agreements to be similar and still patterned largely after the City of Hamilton's seminal ERASE Redevelopment Grant Agreement. Generally speaking, standard TIG agreements should only be modified to suit the particulars of each application, e.g., a multi-phase brownfield redevelopment project versus a smaller single phase project.

Best Practice Considerations for the ERASE CIP:

The ERG Program offers a level of funding that is currently competitive with most Ontario municipalities that offer tax increment grants to promote brownfield redevelopment. As noted in Section 4.0, Hamilton's ERG Program has been well utilized and has produced good results to date. However, the following revisions to the ERG Program should be considered:

- 1) Add the "removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey" as an eligible cost, but only under certain circumstances (See Section 4.5).***

2.8 Development Charge Reduction Programs

Five (5) of the 9 municipalities in the comparison (Brantford, Hamilton, Niagara Falls, Kitchener, and Windsor) offer a development charge (DC) reduction for contaminated sites that are remediated and redeveloped, while Ottawa offers a DC deferral. The municipalities offering a DC Reduction allow the eligible costs of environmental studies, remediation and LEED certification approved under their TIG program to be applied against City development charges. If the applicant elects this option, all eligible costs approved under the TIG applied against DCs payable are deducted from the TIG to be paid (known as a TIG offset). The City of Ottawa offers a two year deferral of the DC payable based on eligible costs up to a 50% deferral in priority brownfield areas and a 25% deferral in non-priority brownfield areas. This change in Ottawa from a DC reduction to a DC deferral took place in late 2015 in response to escalating development charge reductions associated with approved brownfield TIGs. Development charge reductions on larger brownfield redevelopment projects can often be into the millions of dollars.

It should be noted that both the Regions of Niagara and Waterloo offer their own Brownfield DC Reduction Programs. In Niagara, if the brownfield project is located within a Central Area Community Improvement Project Area, e.g., Downtown Niagara Falls, there is an automatic 75% Regional DC Reduction, and if the project is located outside a Central Area Community Improvement Project Area, there is an automatic 50% Regional DC Reduction¹. An additional 25% or 50% Regional DC Reduction can be obtained (depending on location) if the applicant can demonstrate the inclusion of a number of Niagara Smart Growth Design

¹ Under the Region of Niagara's new proposed Development Charges By-law, the Regional DC Reduction is equal to 100% of actual remediation costs regardless of project location and an additional 50% Regional DC reduction can be obtained if the applicant can demonstrate the inclusion of a number of Niagara Smart Growth Design principles into the proposed development.

principles into the proposed development. In Waterloo, the Region's DC Reduction (Exemption) Program allows the direct remediation costs (plus a pre-determined 20% indirect remediation costs) to be applied against Regional DCs payable, up to 100% of the Regional DCs payable.

Representatives from several of the municipalities using the DC reduction tool such as the Region of Waterloo and Hamilton, along with a number of major developers of brownfield sites have consistently indicated that this particular incentive is the single most attractive and effective incentive program to promote brownfield redevelopment. As opposed to TIGs, which are paid out over a number of years after project completion, a DC reduction offers an up-front cost savings to the developer because development charges are paid at the building permit stage, or at the latest, upon project completion. Development charge deferral programs, while they can save significant financing costs on large brownfield redevelopment projects, are not nearly as effective as DC reduction programs.

2.9 Remediation Loan Programs

The only municipality in the comparison that offers a loan for remediation is the City of Hamilton. This program was introduced by the City of Hamilton as a pilot program in 2010. This program offers a low interest loan (1% below prime) for the remediation of brownfield properties being developed/redeveloped for residential or residential/commercial use within Downtown Hamilton and the West Harbourfront. The low interest loan is equal to 80% of the cost of remediating a property to a maximum of \$400,000 per property/project. The original maximum amount was \$100,000, but this was increased to \$400,000 because it was found that \$100,000 was too low to complete most remediation projects in this area.

This program is designed to help finance the remediation by acting as bridge financing until property owners receive their ERG payments, at which time, the applicant has the option of repaying the loan through the assignment of their annual ERG payments. This is an innovative approach to repayment of the loan.

2.10 Planning and Building Permit Fee Grant Programs

Only 3 of the 9 Ontario municipalities in the comparison offer planning and building permit fee grants or rebates to promote brownfield redevelopment. Planning and building permit fee grants by themselves do not appear to be significant inducements for brownfield redevelopment. That is likely why most municipalities do not offer them. Therefore, planning and building permit fee grants/rebates are not considered a necessary incentive to promote brownfield redevelopment.

2.11 Payment in Lieu of Parkland Dedication Grant Programs

Only one municipality in the comparison offers a Payment in Lieu of Parkland Dedication Grant. The City of Cornwall offers a grant at the subdivision stage that is equal to the parkland dedication fees paid by the applicant on a brownfield redevelopment project. However, this grant is offered only on brownfield sites where land dedication is not feasible, and the grant is entirely at the discretion of Council. Preference is given to key brownfield sites identified by the City of Cornwall.

While the City of Hamilton does not offer a grant for payment in lieu of parkland, the City of Hamilton's Parkland Dedication By-law (By-Law No. 09-214) does contain a provision that provides a favourable calculation of the payment in lieu of parkland dedication for higher density brownfield redevelopment projects in the older industrial area and West Harbourfront Area of the City.

3.0 HISTORY OF THE ERASE CIP

3.1 Original ERASE CIP (2001)

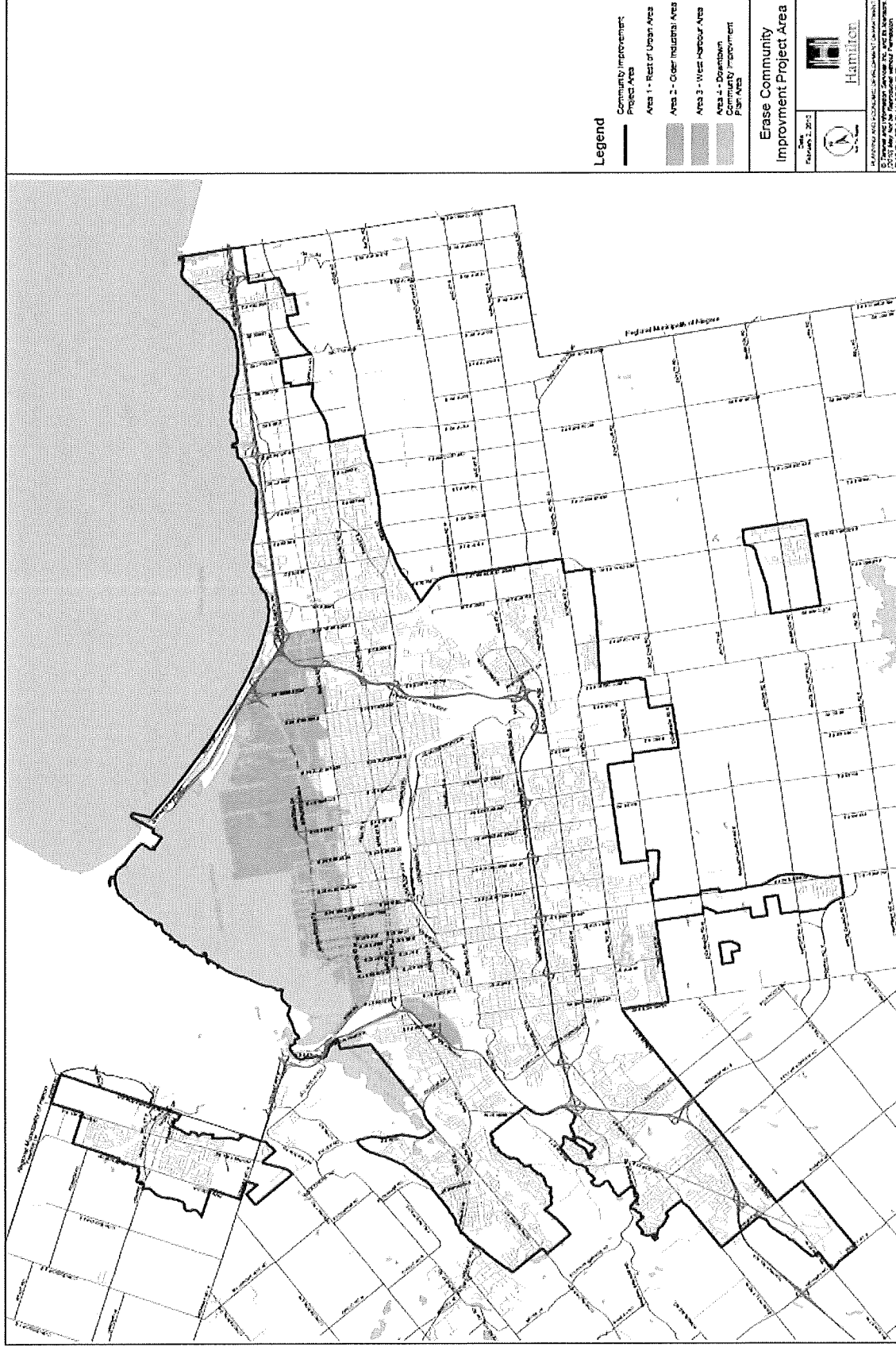
The original ERASE CIP (2001) was the first plan of its kind in Canada to offer municipal incentives for the remediation and redevelopment of brownfield sites. The original ERASE CIP was adopted in 2001 and applied only to the City's Older Industrial Area (the Project Area) which corresponds to the area shown as Area 2 - Older Industrial Area in the current CIP (2010) (see **Figure 3**). The original ERASE CIP (2001) included the following programs:

1. ERASE Study Grant (ESG) Program – a grant equal to 50% of the cost of eligible environmental studies (Phase II ESA, Remedial Work Plan), with a maximum grant of \$10,000 per study and a maximum of two (2) studies (\$20,000) per property.
2. ERASE Redevelopment Grant (ERG) Program – a “pay-as-you-go” tax increment grant (TIG) program that provides an annual grant equal to 80% of the municipal property tax increase generated by an approved project for up to 10 years or up to the point when total annual grant payments equal the total value of work done under eligible program costs.

Eligible program costs for the ERG Program included the following costs:

- i) Environmental studies not paid for by the ESG;
 - ii) Environmental remediation;
 - iii) Demolition; and
 - iv) Site preparation including the construction and improvement of on-site public works such as water services, private sanitary and storm drains, and private sewers.
3. ERASE Development Charge Exemption Program (implemented through the Development Charges By-law and not the ERASE CIP) – allowed applicants with an approved ERG Program application to apply their environmental study and remediation costs against City Development Charges payable.
 4. ERASE Planning and Development Fees Program – grant equal to the cost of planning application fees, the demolition permit fee, and the building inspection fee (but not the building permit fee).
 5. ERASE Redevelopment Opportunities Marketing and Data Base Program (ROMDB) – a multi-faceted City program that includes marketing of the incentive programs and key redevelopment sites by various means and a data base with respect to vacant and underutilized properties in the Project Area.
 6. ERASE Municipal Acquisition, Investment and Partnership Program (MAPP) – a general program of City acquisition, investment and involvement in public/private partnerships to remediate and redevelop brownfield properties. The program was intended to be funded from the 20% of the annual municipal tax increment retained on participating ERG projects and any other monies allocated by Regional Council.

Figure 3 ERASE Community Improvement Project Area



3.2 ERASE CIP (2005)

In 2005, the ERASE CIP was amended. The Community Improvement Project Area to which the CIP applied was expanded from the Older Industrial Area (Area 2) to the entire Urban Area. The Community Improvement Project Area was further refined by carving out the West Harbour Area (Area 3) and the Downtown (Area 4) from the Rest of the Urban Area (Area 1).

The ESG Program was expanded to include risk assessments and the 50% grant was increased from a maximum of \$10,000 to a maximum of \$15,000 with a maximum of two studies and \$20,000 grant per property/project.

The ERG Program was expanded to include the cost of risk assessments and RSCs as eligible costs. However, the costs of demolition were restricted to Areas 2 (Older Industrial Area) and 3 (West Harbour Area) only. The cost of on-site infrastructure works was restricted only to costs of removal of on-site infrastructure prior to replacement, up to a maximum of 25% of the total cost of on-site public works, and only in Areas 2 and 3. Finally, the costs of relocation/removal for existing and operating industrial manufacturing and transportation uses, where such costs relate to or contribute directly to the actual remediation and rehabilitation of the site were made eligible, but only in Area 3.

The ERASE Tax Assistance Program (TAP) was also introduced in 2005 after enabling legislation was passed at the Provincial level. This program offers a cancellation of 80% of the municipal and education portion² of the property tax increase that results from redevelopment.

The ERASE MAPP remained the same, although the CIP did note that the 20% of the tax increment or tax assistance retained by the City for properties participating in the ERG or TAP will be placed in a Brownfields Pilot Project (BPP) Account for use by the City to undertake environmental studies and remediation on properties owned or controlled by the City, for brownfield site acquisition, and to fund brownfield pilot projects (public-private partnerships). Furthermore, the CIP specified that the BPP was to function as a revolving fund with any profits from redevelopment deposited back into the fund, and that the funds in the BPP Account were not intended for transfer to general revenues.

The ERASE Development Charge Exemption Program was renamed the ERASE Development Charge Reduction Program and expanded to the entire urban area along with the ERG program.

3.3 ERASE CIP (2010)

In 2010, the ERASE CIP was again amended and the 2010 ERASE CIP is the version currently in place.

The maximum 50% grant available under the ESG Program was increased from \$15,000 to \$20,000 for one study per property/project, and from \$20,000 to \$25,000 for two studies per property/project.

The ERG Program was expanded to include the installation, monitoring and maintenance of engineering controls/works as eligible costs and specific Leadership in Energy and Environmental Design (LEED) program components up to a maximum of 50% as per the City of Hamilton's LEED Grant Program (LGP) to achieve LEED certification. Similarly, the ERASE TAP was expanded to include the installation, monitoring and maintenance of engineering controls/works as eligible costs.

² Subject to approval from the Minister of Finance.

Finally, a Remediation Loan Program (LOAN) was added as a Pilot Program for the West Harbour and Downtown Areas (Areas 3 and 4). This program originally provided a loan equal to 75% of the cost of remediating a property within Areas 3 and 4 to a maximum of \$100,000 per property/project with grant payments under the ERG Program being used to repay the loan over up to 10 years. The Program was subsequently amended to increase the loan amount to 80% of the cost of remediating a property to a maximum of \$400,000 per property/project. The annual interest rate on the loan is 1% below the prime rate as established by the Royal Bank of Canada. The loan functions as bridge financing until the property owner receives their ERG money which they can then use to repay the loan.

In summary, the ERASE programs currently available as per the 2010 ERASE CIP are:

1. **ERASE Study Grant (ESG) Program** – a grant equal to 50% of the cost of eligible environmental studies (Phase II ESA, Remedial Work Plan), with a maximum grant of \$20,000 per study, a maximum of two (2) studies per property/project, and maximum grant of \$25,000 per property/project.
2. **ERASE Redevelopment Grant (ERG) Program** – a “pay-as-you-go” tax increment grant (TIG) program that provides an annual grant equal to 80% of the municipal property tax increase generated by an approved project for up to 10 years or up to the point when total annual grant payments equal the total value of work done under eligible program costs.
3. **ERASE Development Charge Exemption Program** (implemented through the Development Charges By-law and not the ERASE CIP) – allows applicants with an approved ERG application to apply their environmental study and remediation costs against City Development Charges payable.
4. **ERASE Tax Assistance Program (TAP)** – a cancellation of 80% of the municipal and education property tax increase³ that results from remediation and redevelopment of a brownfield property for a period of up to 3 years, or up to the point when the total property tax cancellation equals the total value of work done under eligible program costs.
5. **Downtown Hamilton – West Harbourfront Remediation Loan (LOAN) Program** – a low-interest rate loan equal to 80% of the cost of remediating a property to a maximum loan of \$400,000 per property/project, with the loan amortized over a maximum 10 year period and the loan repaid by grant payments under the ERG Program .
6. **ERASE Municipal Acquisition, Investment and Partnership Program (MAPP)** – a general program of City acquisition, investment and involvement in public/private partnerships to remediate and redevelop brownfield properties.
7. **ERASE Marketing and Opportunities Program (MOP)** – a general program to aggressively and regularly communicate and explain the ERASE Programs to brownfield market makers and advertise and market publicly and privately owned brownfield redevelopment opportunities.

³ Subject to approval from the Minister of Finance.

4.0 REVIEW OF HAMILTON'S ERASE PROGRAMS

4.1 Methodology

4.1.1 Staff Interviews

A comprehensive review of Hamilton's ERASE Programs was conducted to identify program and administrative issues that need to be addressed and recommendations for revisions to the ERASE programs designed to address these issues.

First, interviews and discussions were conducted with City staff currently and previously responsible for administering the ERASE incentive programs. Based on their experience with the current programs and interactions with applicants, staff were asked to identify program gaps, constraints, incidences of eligible cost exceedance, misalignment between program goals and results, future program goals, and any other significant program content issues. Staff were also asked about program administration issues such as compliance with information and study submission requirements, application approval processes and adherence to timelines, economic impact data tracking, and program monitoring.

4.1.2 Quantitative Analysis

City of Hamilton staff responsible for administering the ERASE Programs provided historical data on the types of ERASE applications from the time the first ERASE CIP was approved in late 2001 to the end of 2016. The consultant worked extensively with City staff to review available data, identify data errors and discrepancies, and finalize data spreadsheets.

The available data was then quantitatively analysed to determine patterns and trends in the historical uptake and impact of the ESG and ERG programs. This included an analysis of the status of ESG and ERG applications and approved grant amounts. The estimated and actual economic impacts of proposed projects approved under the ERG Program were also examined, including construction value, new residential units built, new industrial/commercial square footage built, and estimated jobs created. The increase in assessment value, property taxes, development charges and building permit fees generated by completed ERG projects was also analyzed.

4.1.3 Consultation

Based on the above-noted quantitative and qualitative analysis, draft recommendations for revisions to the ERASE programs and administrative processes were developed, presented and discussed with some 30 key brownfield stakeholders at a stakeholder workshop held on May 29, 2017, and at a public meeting held on August 28, 2017. Finally, input received during the stakeholder and public consultation sessions was used by the consultant in consultation with City staff to finalize the ERASE Program recommendations contained in this report.

A summary of the above-noted analysis of the ERASE Programs, administrative processes, and the resulting recommendations is presented in the balance of this section. The full analysis of ERASE Programs best is contained in **Appendix B**. This analysis represents one of the most comprehensive, if not the most comprehensive analysis of the uptake and results of a municipal brownfield incentive program ever completed in the over 50 Ontario municipalities that currently offer brownfield redevelopment incentive programs.

4.2 Staff Identified Program and Administration Issues

Staff indicated that the ERASE programs have been very successful in promoting brownfield redevelopment and achieving the goals of the CIP. The analysis of program uptake and economic impact data contained in this section clearly bears out this claim. Staff indicated that the expansion of the ERASE Project Area in 2005 and the refinements that have been made to the ERASE programs over the years have directly led to the success of the ERASE CIP across the municipality.

A number of program and administrative issues identified by staff are listed below by program type. The recommendations developed to address these issues are included in the balance of Section 4.0 and summarized in Section 5.0 of the report.

4.2.1 ESG Program

- Enquiries have been made by developers to City staff regarding the inclusion of designated substances and hazardous materials surveys as an eligible cost under the ESG Program, particularly for current or former institutional sites and for properties designated under Parts IV or V of the *Ontario Heritage Act*;
- Some applicants are not submitting a minimum of two cost estimates from qualified persons;
- A number of ESG applications are lagging in the system and not proceeding to report submission and payment of the ESG in a timely fashion;
- More stringent environmental study and remediation standards introduced in 2011 by the MOE have resulted in a number of Phase II ESA studies done before 2011 or those lagging in the application process becoming stale dated and therefore unusable for purposes of filing an RSC; and,
- Qualitative and quantitative evidence suggest the ESG Program is being used by some applicants who simply want to fund a Phase II ESA needed for purposes of a property sale, purchase or refinancing, without any real intention of redeveloping the brownfield site.

4.2.2 ERG Program

- Enquiries have been made by developers to City staff regarding the inclusion of the costs of abatement/removal of designated substances and hazardous materials as an eligible cost under the ERG Program, particularly for current or former institutional sites and for properties designated under Parts IV or V of the *Ontario Heritage Act*;
- Some applicants are not submitting a minimum of two cost estimates from qualified persons;
- Some applicants are not providing detailed invoices to support their eligible cost submissions and some applicants are submitting invoices for costs that are clearly not eligible.
- While there have only been a few instances of cost overruns of estimated eligible costs, these have happened in the last few years, and these cost overruns have been large, necessitating that staff return to Council for authorization to significantly increase already approved grant amounts;
- City staff have implemented a process to allow approved applicants who do not wish to file an RSC for ERG applications in non-RSC mandatory situations use of a peer review option, but disagreements between the applicant's Qualified Person (QP) and the City's QP with regards to risk assessment findings has led to a lengthier ERG approval process than anticipated; and,
- Uptake of the ERG Program in the City's Bayfront Industrial Area has waned in recent years and the City needs to find a way to improve uptake of the ERG program for industrial redevelopment and expansions in the Bayfront Industrial Area.

4.2.3 Loan Program

- With only two loans approved to date, program uptake has been moderate. There was discussion of making the program more attractive by lowering the interest rate to 0%, while changing the term of the loan from 10 years to 5 years, which would match the loan term for the Hamilton TIG Program.

4.3 Data and Monitoring Issues

City of Hamilton staff responsible for administering the ERASE Programs provided historical data on the following types of ERASE applications from the time the first ERASE CIP was approved in late 2001 to the end of 2016:

- a) ERASE Study Grant (ESG) Program (149 applications);
- b) ERASE Redevelopment Grant (ERG) Program (51 applications);
- c) Downtown/West Harbourfront Remediation Loan (LOAN) Program (2 applications); and,
- d) ERASE Municipal Acquisition and Partnership Program (MAPP) (4 applications).

The list of data variables provided by City staff for the ESG and ERG Program applications is shown in Appendix B (Attachment 2).

The consultant worked extensively with City staff to review the available data, identify data errors and discrepancies, and finalize data spreadsheets. The process of assembling and analyzing the data revealed a number of issues associated with ERASE Program data collection and monitoring, including missing data, which should be addressed via implementation of the following recommendations.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that City staff:

- 1) **Check the completeness of data collected for all ESG and ERG applications prior to application processing, ensuring that:**
 - a) **all requested data and required estimates for all monitoring variables, including estimates of residential units and industrial/commercial space to be constructed, jobs to be created/retained, and estimated construction value, post-project assessment value and property taxes, have been provided by applicants; and,**
 - b) **the construction value estimates provide by applicants are realistic, e.g., by comparison with recent known construction values per unit/per sq.ft. for similar types of construction.**
- 2) **Clarify that a minimum of two (2) cost estimates are required from a qualified person for the ERASE Study Grant Program and the ERASE Redevelopment Grant Program to ensure cost-efficient environmental study and remediation approaches.**
- 3) **Conduct follow up tracking on every ERG application after projects are completed to determine and record accurate actual amounts for:**
 - a) **the grant amount paid out and how the grant was applied (against development charges, as an annual TIG, or both); and,**
 - b) **all monitoring variables, including number of residential units constructed, industrial/commercial space (square footage) constructed, number of jobs created/retained, construction value, and post-project assessment value.**

- 4) Track and record assessment value and property taxes on all properties participating in the ERG Program year over year from the approval date to at least 10 years out in order to fully capture long-term increases in assessment and property taxes generated by all projects, and especially multi-phase projects that take several years to complete and be captured via property reassessment.
- 5) Formalize the data spreadsheets prepared for this project as a tracking tool for ESG, ERG, LOAN and MAPP applications, and that these spreadsheets be updated as new applications are received, and as current applications are approved and completed.

4.4 ERASE Study Grant (ESG) Program

4.4.1 Program Uptake

Between program inception in late 2001 and the end of 2016, the City of Hamilton received 149 Environmental Study Grant (ESG) program applications. The location of these applications is shown in **Figure 4**. The status of these applications is shown in **Table 1** below.

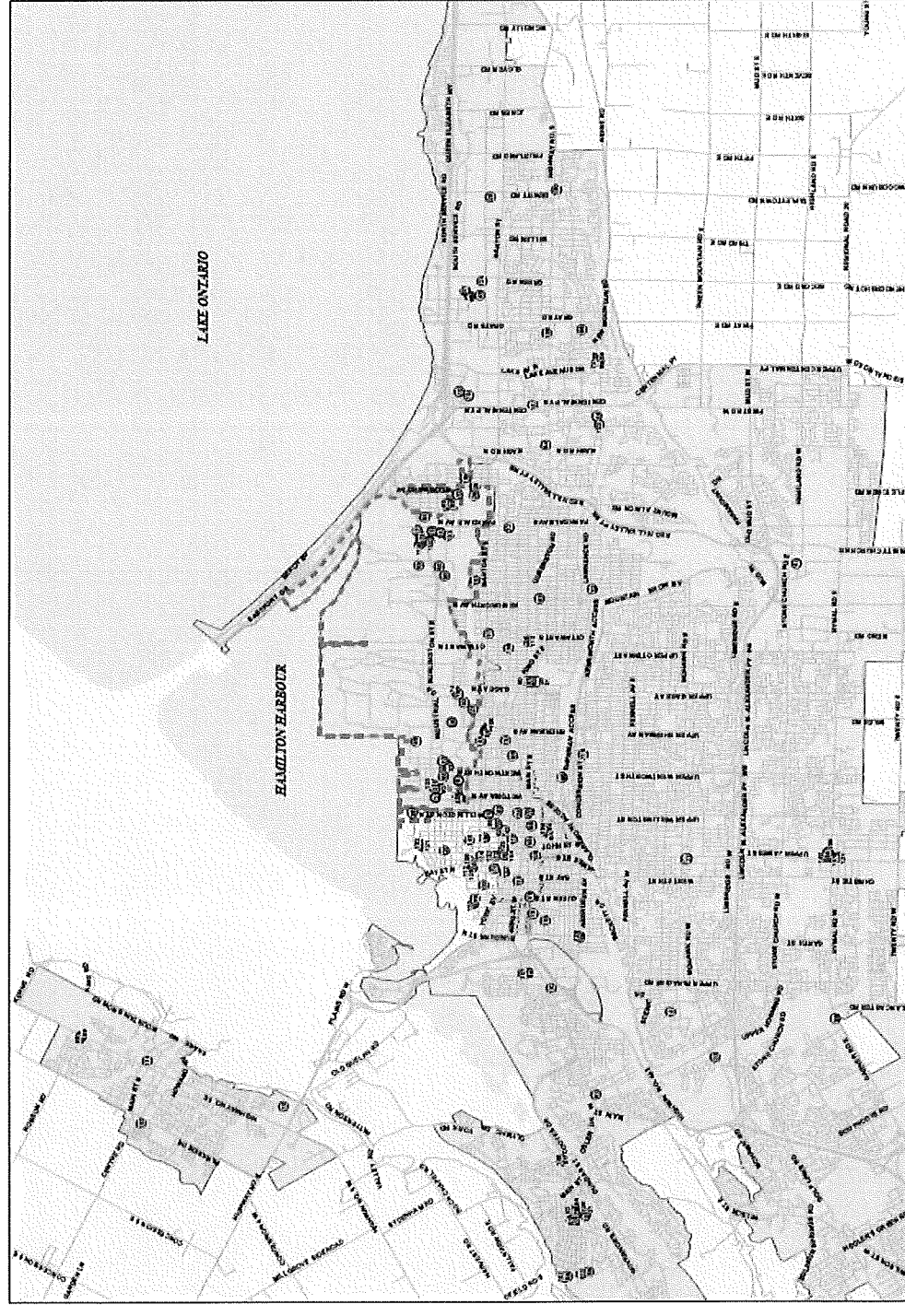
Table 1 Status of ESG Applications 2001-2016

149 Received =	432.5 acres	
3 Not approved =	3.6 acres	
1 Cancelled =	0.3 acres	
145 Sub-Total =	428.6 acres	
143 approved =	425.0 acres	
2 in due diligence =	3.6 acres	
24 (16.5%) were (2nd studies) =	45.7 acres	(double counted)
121 properties =	382.9 acres to be environmentally studied	

The level of uptake of the ESG program has been very high. The relative number of ESG applications not approved or cancelled is very small (less than 3%) and that indicates a good understanding of the program on the part of applicants. The 145 applications approved to the end of 2016 represents a grant commitment from the City of \$1,411,748.67, and an average approved grant amount of \$9,736.20 per application. The cost to the City of the ESG Program per acre studied for all 145 applications approved is \$3,677.39. This represents excellent value for the ESG program in terms of the cost per acre of land studied and the cost per application. The ESG Program has achieved its goal which is to promote the undertaking of environmental studies so that more and better information is available with respect to the type of contamination and potential remediation costs on brownfield properties.

One concerning statistic is that approximately \$500,113 in approved ESG applications has yet to be paid out. Looking further into this issue, 30 (26.5%) of the 113 ESG applications approved from 2001 to 2014 have not proceeded to payment. Virtually all of 30 of these environmental studies should have been submitted by the end of 2016, but for one reason or another, these applicants have not fulfilled the ESG program requirements. This relatively large number of ESG applications lagging in the system and not proceeding to report submission represents a substantial drain on the budget for the ESG program. Therefore, it is imperative that City staff determine why these ESG applications are not being completed, and take steps to remedy this situation and prevent it from occurring in the future. This should include the imposition of realistic deadlines for the completion of approved ESG applications.

Figure 4



The number of ESG applications proceeding to an ERG application is an important indicator of program continuity and success. Therefore, the fact that the City has committed to fund ESG applications on a total of 121 properties to the end of 2016, and ERG applications were filed for only 47 properties during this time period is of concern. It is expected that some percentage of environmental studies funded under the ESG program would conclude a particular brownfield site does not require remediation, and that some percentage of environmental studies would conclude a particular brownfield site cannot be cost-effectively remediated or risk-assessed based on the proposed land use. However, it is also a reasonable expectation that a good number of completed ESG applications would proceed to an ERG application, and ultimately a completed brownfield redevelopment project.

In order to shed some light on this question, the addresses for the 47 sites with ERG applications were compared to the addresses of the 121 properties with ESG applications and it was determined that 29 (62%) of the 47 ERG applications also previously filed ESG applications. This is a positive result and indicates that environmental studies conducted under the ESG program are effective in leading to ERG applications and brownfield redevelopment projects, where that is in fact the intention of the applicant. However, it would appear that the high number of ESG applications versus ERG applications is likely a result of the ESG Program being used by some applicants who simply want the program to fund a Phase II ESA needed for purposes of a property sale, purchase or refinancing. This practice should be strongly discouraged by the City as it does not correspond with the intent of the ESG Program and is an ineffective use of ESG program funding.

City staff indicated that the more stringent environmental study and remediation standards introduced in 2011 by the MOE have resulted in a number of Phase II ESA studies done before 2011 or those lagging in the application process becoming unusable (stale dated) for purposes of filing an RSC. Therefore, it is advisable that approved ESG applicants who completed their environmental studies prior to July 1, 2011 be permitted to re-apply for ESG funding.

Finally, there have been enquiries to City staff by potential applicants regarding the inclusion of the cost of designated substances and hazardous materials surveys in the ESG Program eligible costs, particularly for former institutional sites. As noted in the Best Practices Review, a few other Ontario municipalities include these types of studies as eligible costs in their ESG programs.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that:

- 1) City staff contact all applicants with approved but not paid ESG applications outstanding more than two years from date of approval and advise that all approved studies (except for Risk Assessments) must be submitted within 6 months, or approved ESG funding will be cancelled.**
- 2) City staff contact all applicants with approved but not paid ESG applications outstanding less than two years from date of approval and all applicants in due diligence, and advise that all approved studies (except for Risk Assessments) must be submitted within two years of date of ESG approval, or approved ESG funding will be cancelled.**
- 3) For all new ESG applications on a go forward basis, the City include in the Program Guide and Application Form a statement advising that all ESG funded studies except for Risk Assessments must be completed and submitted to the City within two years of application approval, or approved ESG funding will be cancelled.**

- 4) The City develop and include in the ERASE CIP and the ESG Program Guide and Application Form, enhanced submission requirements to restrict the ESG Program only to applicants who have clearly demonstrated their legitimate intention to redevelop a brownfield site. These requirements should include mandatory submission of a letter of intent to develop the property and a preliminary development plan (if planning applications have not yet been submitted).
- 5) Approved ESG applicants who completed their environmental studies prior to July 1, 2011 be permitted to re-apply for ESG Program funding based on the same rules as applicants applying for the program after July 1, 2011.
- 6) The cost of “designated substances and hazardous materials surveys” be added to the eligible costs of the ESG Program across the ERASE Community Improvement Project Area, but only where such studies are being done on current or former institutional sites or properties designated under Parts IV or V of the *Ontario Heritage Act*.

4.4.2 Historical Trends

As shown in **Figure 5** below, once the ERASE CIP was expanded to the urban area in 2005, the number of ESG applications received by the City increased significantly to around 10 applications per year. This was the intent of the expanded project area.

Since 2010, the City has averaged about 15 ESG applications per year with a high of 21 applications received in 2016. Therefore, it appears that demand for the ESG Program is still very strong. It is reasonable to expect the City will receive an average of 15 to 20 ESG Program applications per year over the next several years.

RECOMMENDATION:

Based on the above-noted analysis, it is recommended that:

If the City plans to continue the ESG program and increase the maximum funding amount for second studies, the annual budget for the ESG Program on a go forward basis should be in the order of approximately \$250,000 per year.

4.4.3 Location

As shown in Figure 4, ESG applications have been spread over the entire urban area. **Figure 6** below displays the geographic breakdown of the 149 ESG applications received between 2001 and 2016.

Figure 5 ESG Applications by Year, 2001 - 2016

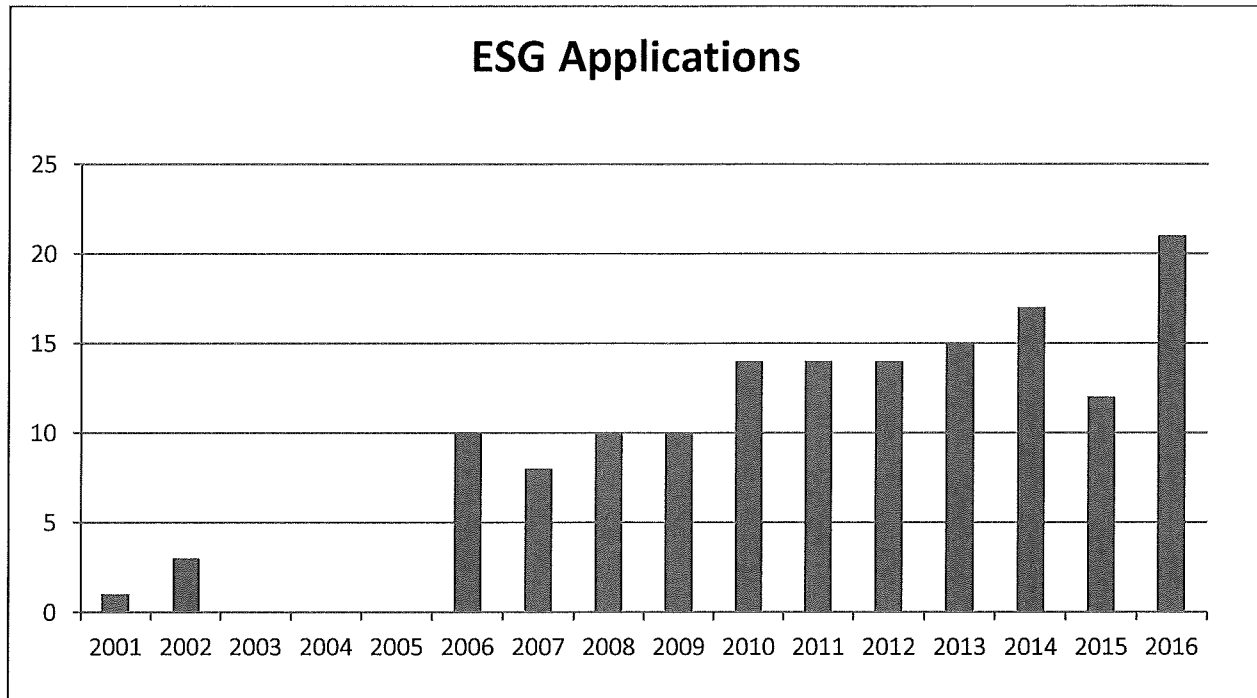
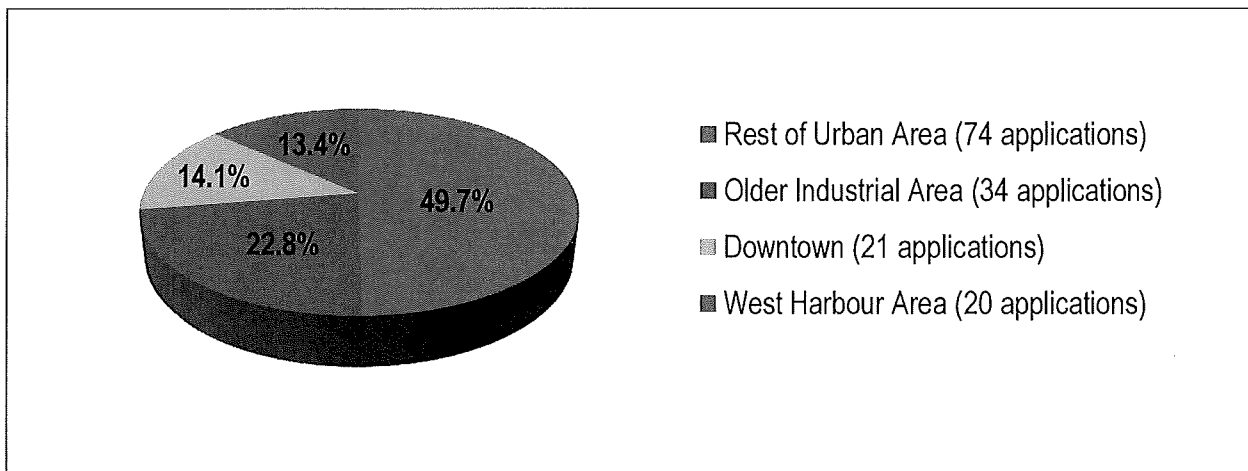
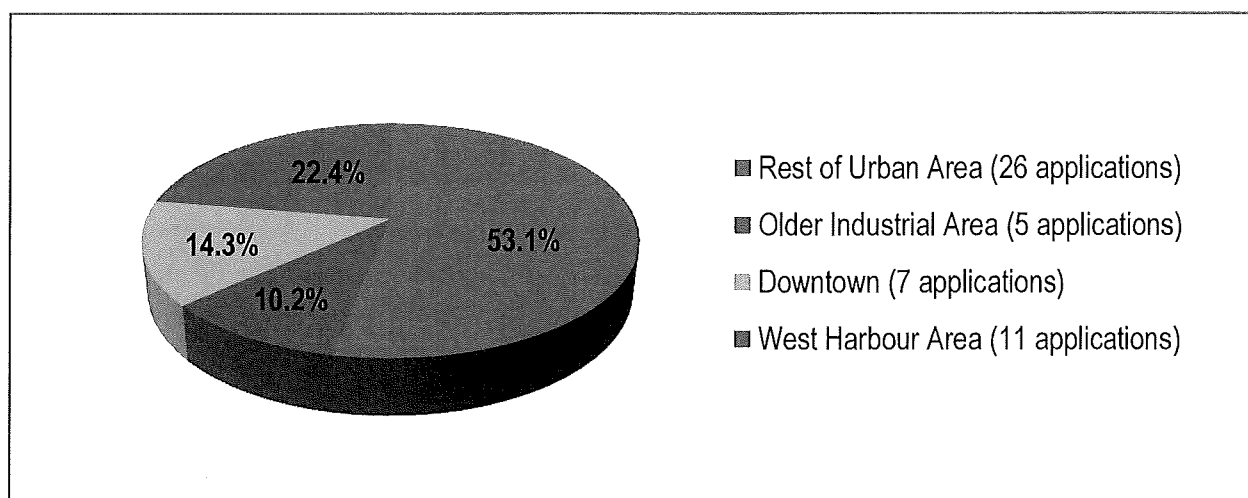


Figure 6 ESG Applications by Location, 2001 - 2016



As shown in **Figure 7** below, if we examine the geographic distribution of the 49 ESG applications submitted in the last three years, i.e., 2014 to 2016, a different pattern emerges. The shift away from using ESG applications for environmental studies in the Older Industrial Area is very noticeable with only 10% of ESG applications over the last three years in the Older Industrial Area compared to 23% over the period 2001 to 2016. In recent years, ESG applications are increasingly being used to conduct environmental studies in the West Harbour Area and the Rest of the Urban Area, while the percentage of ESG applications in the Downtown Area has remained relatively stable. This geographic trend is concerning for the Older Industrial Area which includes the Bayfront Industrial Area and suggests that the City should take steps to encourage the uptake of the ESG Program in the Older Industrial Area.

Figure 7 ESG Applications by Location, 2014 - 2016



RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that the City enhance the ESG Program in the Older Industrial Area (Area 2) by:

- 1) Adding expanded study types, including designated substances and hazardous materials surveys, and industrial and office reuse feasibility studies, to the list of eligible program costs; and,
- 2) Developing ways to increase awareness of and interest in the ESG Program, including enhanced ERASE Program marketing and assistance to existing business in the Older Industrial Area and business seeking locations in the Older Industrial Area.

4.5 ERASE Redevelopment Grant (ERG) Program

4.5.1 Program Uptake

Between program inception in late 2001 and the end of 2016, the City of Hamilton received 51 ERG applications. The location of these 51 applications is shown in **Figure 8**. Eliminating duplicate applications on the same property and abandoned or lapsed applications from the total results in 44 ERG applications on a total of 213 acres. This is an impressive number of applications and amount of brownfield land that will be remediated, redeveloped or adaptively reused.

The status of these 44 ERG applications is shown in **Table 2**. Of the 44 applications, 38 applications (210 acres) have been approved and 6 applications (3 acres) are still in due diligence. Assuming the 6 applications in due diligence are approved, the total City grant commitment for the ERG Program to the end of 2016 is \$32,100,516.

FIGURE 8

BAYFRONT INDUSTRIAL AREA RENEWAL STRATEGY ERASE REDEVELOPMENT GRANT APPLICATIONS

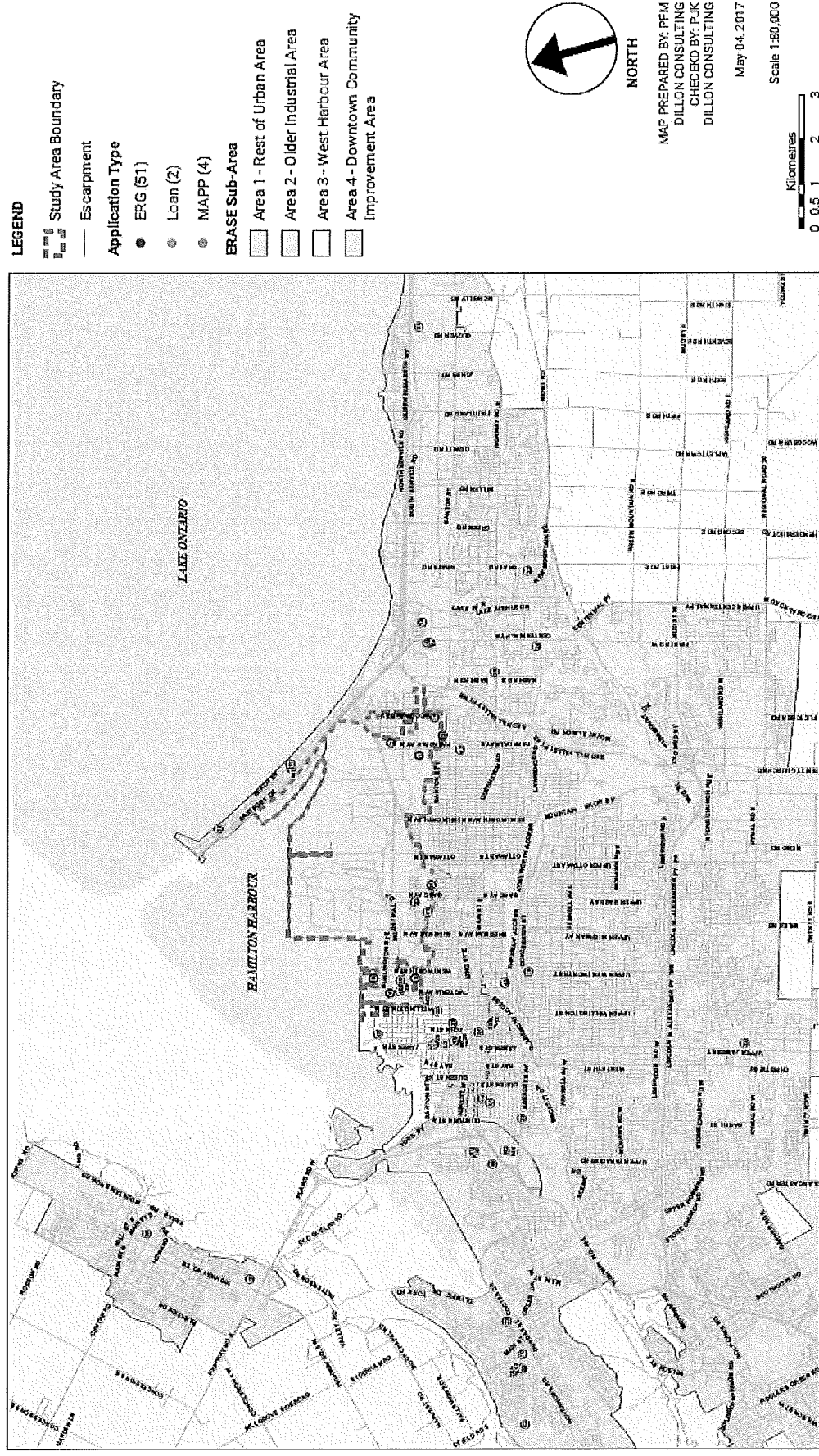


Table 2 Status of ERG Applications 2001-2016

51 Applications Received =	231.0 acres
4 duplicates =	0.0 acres
47 Sites =	231.0 acres
3 abandoned/lapsed =	18.0 acres
44 sites =	213.0 acres to be remediated and redeveloped
38 sites approved to date =	210.0 acres
25 sites remediated to date =	123.0 acres (59% of approved land area)
Construction completed or underway on 24 of 25 remediated sites = 122.0 acres	

Virtually all, i.e., 24 of the 25 sites (96%) where remediation has been completed and an RSC has been filed have been redeveloped or are currently being redeveloped. This is a very positive result and clearly indicates that once a brownfield site is remediated under the ERG Program, it is usually redeveloped immediately. The ERG Program has produced a significant number of applications encompassing a large amount of brownfield land and redevelopment activity has already taken place on most (24 of 38) of the approved application sites. Therefore, the program has met its primary goal which is to encourage environmental remediation, rehabilitation, redevelopment and adaptive re-use of brownfield sites. Moreover, as will be demonstrated later in this section, the economic impact of projects completed under the ERG Program has been substantial.

Of some concern with the ERG Program is that there were at least two approved applications where remediation and redevelopment was completed and payment of the grant was not requested. The owners of these sites should be contacted by City staff to determine why they did not request grant payment, and if these owners qualified for the grant payment, whether or not they still wish to receive the grant payment.

There are concerns with the progress on a number of the 13 ERG applications that have been approved but not yet remediated, especially since these 13 applications represent 87 acres or 41% of the ERG approved land area. A number of these 13 sites have not yet been able to achieve remediation while the few that have been remediated and/or risk assessed have experienced lengthy delays in obtaining an RSC.

In other cases, applicants have indicated that they will not likely be able to cost-effectively obtain an RSC in a timely manner so they are no longer interested in pursuing their approved ERG. This has become an issue on a few applications where the proposed redevelopment is not a change to a more sensitive use and the applicant wishes to use a risk assessment approach. To accommodate these situations, City staff implemented a peer review option to the RSC requirement. While this option has allowed applicants to avoid the MOE's often lengthy RSC process, use of this option has resulted in disagreements between the applicant's consultant and the City's consultant, which has led to a lengthier ERG approval process. Therefore, it is imperative that City staff implement a standardized process to resolve disagreements under its peer review process, and establish a maximum timeframe for the optional peer review process, e.g., 9 months.

It is also important that City staff follow up on all 13 of the approved ERG applications where an RSC has not been completed (acknowledged) to determine the status of the site remediation and the owner's current site redevelopment plans. In cases where the applicant is no longer interested in the ERG, these applications should be formally closed and the ERG cancelled. Where the property has been sold, new owners should be consulted to determine if they wish to pursue the ERG approved project or similar project.

For the 20 ERG projects completed to date, most of the projects spent less or approximately the same on eligible environmental remediation costs as the estimate provided in their application. However, 4 (20%) of the 20 completed projects exceeded their cost estimates. Of these four projects, two only modestly exceeded their eligible cost estimates (7% and 27%), but the other two exceeded their eligible cost estimates by over 100% (104% and 110%). Additionally, City staff indicated that a few ERG projects currently in the remediation phase have also experienced significant cost overruns. While significant cost overruns on brownfield remediation projects can occur, large cost overruns potentially indicate that there has been some deficiency in the environmental studies used to estimate remediation costs, and/or an underestimation of other eligible costs. Therefore, it is important that staff review ERG projects where there have been cost overruns to determine the causes of these cost overruns and address these causes through modifications to the ESG and/or ERG programs. It is also important for staff to discourage eligible cost overruns in the future.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that City staff:

- 1) **Contact the current owners of ERG approved sites where remediation and redevelopment has taken place to determine why these owners did not request grant payment, and if these owners qualified for the grant payment, whether or not they still wish to receive their grant payment.**
- 2) **Follow up on all 13 approved ERG applications where an RSC has not been completed (acknowledged) to determine the status of the site remediation and the owner's current site redevelopment plans. In cases where the applicant has abandoned their redevelopment plans and/or the applicant or new owner is no longer interested in meeting the requirements for the ERG, these applications should be formally closed and the ERG cancelled.**
- 3) **Develop and implement a standardized process to resolve disagreements between the developer's QP and the City's peer review QP regarding submitted environmental studies for approved ERG applications that are not changes to a more sensitive use as per O. reg 153/04 and establish a maximum timeframe for the optional peer review process, e.g., 9 months.**
- 4) **Review ERG projects where there have been cost overruns to determine the causes of these cost overruns and address these causes through modifications to the ESG and/or ERG programs.**
- 5) **Commence utilizing the City's current ability to conduct spot and random audits of eligible expenses on ERG projects.**
- 6) **Develop and distribute to applicants a Guideline that clearly specifies eligible costs for the ERG Program and the level of detail expected in eligible cost invoice submissions and other supporting documentation.**

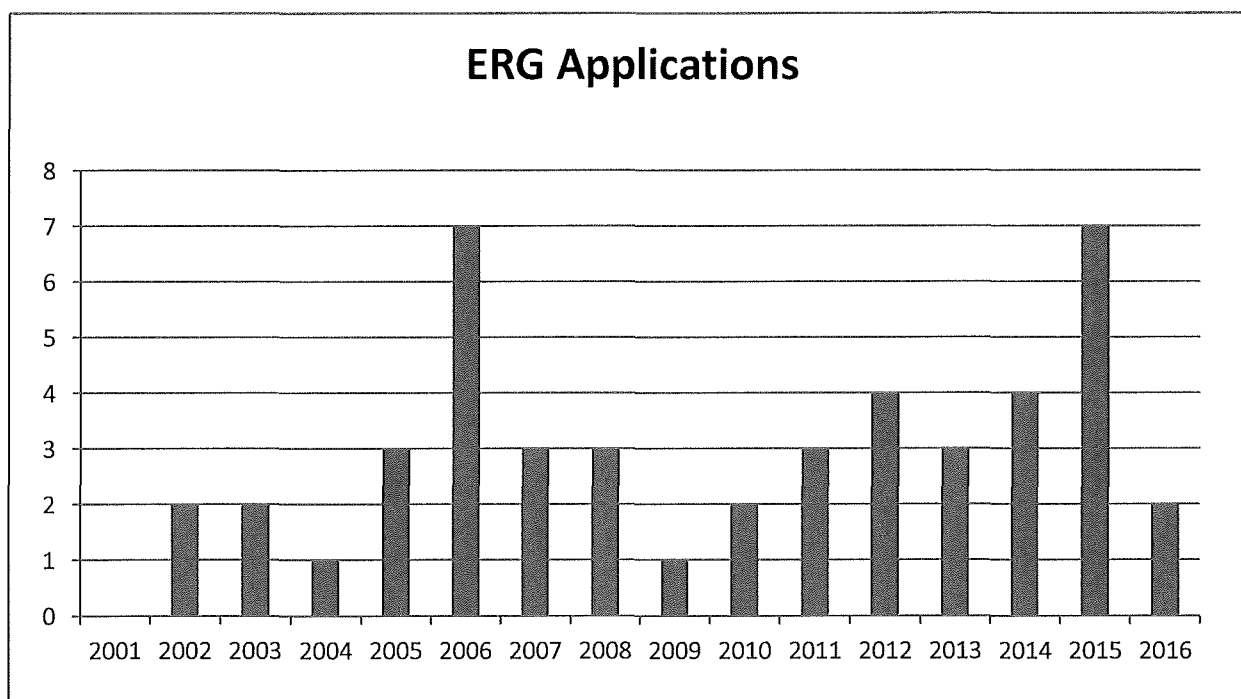
Based on the above-noted analysis, it is recommended that the City:

- 7) **Add "the removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey" as a stand-alone eligible cost for the TIG component of the ERG Program across the ERASE Community Improvement Project Area, but only for brownfield redevelopment projects (including adaptive reuse projects) on current or former institutional sites or properties designated under Parts IV or V of the *Ontario Heritage Act*. N.B. this cost is not eligible for application against City development charges payable.**

4.5.2 Historical Trends

As shown in **Figure 9**, the number of ERG applications varies considerably from year to year, peaking at 7 applications in 2006 and again in 2015. The average number of applications per year over the first 7 years of the ERG program was 3.1 applications per year, while the average number of applications per year over the last 7 years of the ERG program was 3.6 applications per year. While the number of ERG applications received in more recent years has been slightly higher than in earlier years, the same cannot be said for the land area contained in these ERG applications. Of the 44 active site applications, the first 22 applications received between 2002 and 2010 comprised 149 acres (70%) of the 213 acres, while the last 22 applications received between 2011 and 2016 comprised only 64 acres (30%) of the 213 acres. This suggests a clear shift in ERG applications over time from larger industrial and commercial sites to smaller residential, commercial and mixed use sites. This is also borne out by an examination of the location of ERG applications over time contained in Section 4.5.3 below.

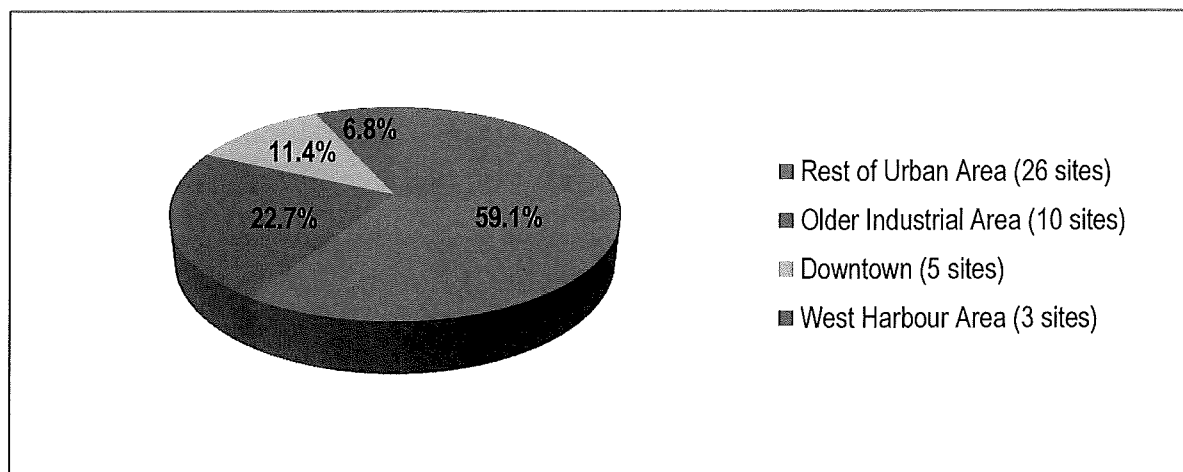
Figure 9 ERG Applications by Year



4.5.3 Location

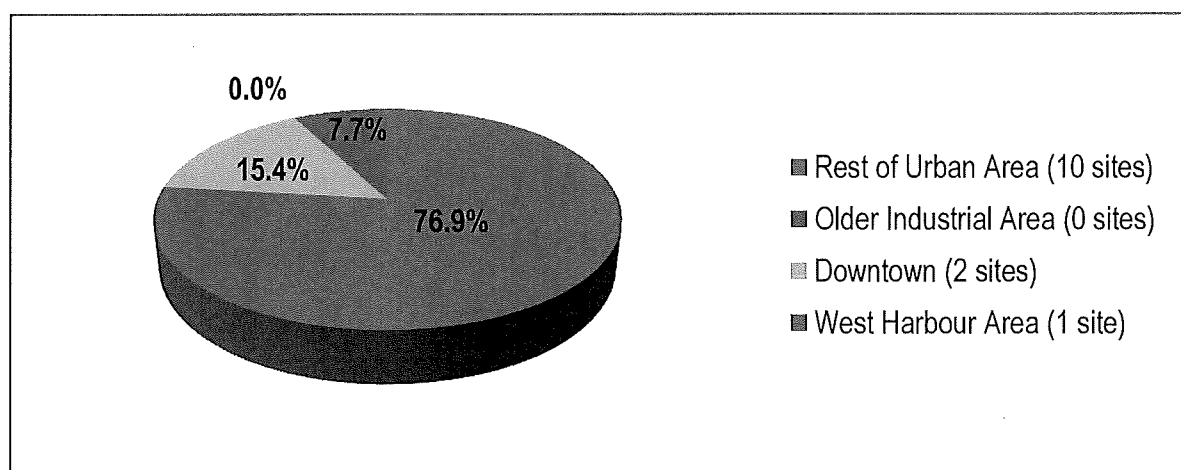
As shown in **Figure 10**, while 23% of the 44 active ERG applications have been for projects in the Older Industrial Area, 11% in the Downtown, and 7% in the West Harbour Area, 59% of ERG applications have been spread over the rest of the urban area, from Flamborough through to Dundas, West Hamilton, Lower Hamilton and Stoney Creek. With almost 60% of the 44 ERG applications located in the rest of the urban area, this is a higher percentage than the 50% of ESG applications located in the rest of the urban area.

Figure 10 **ERG Applications by Location, 2001 - 2016**



However, if we examine the geographic distribution of the 13 ERG applications submitted in just the last three years, i.e., 2014 to 2016, shown in **Figure 11** below, the trend toward more ERG projects in the rest of the urban area intensifies significantly with 77% of the applications over the last three years in the rest of the urban area. None of the ERG applications submitted in the last 3 years are located in the Older Industrial Area. Two (15%) are in the Downtown and only one (8%) is in the West Harbour. The City has attempted to address the need for brownfield redevelopment in the Downtown and West Harbour Area with the Loan Program available in these areas, but there have been no enhancements to the ERG Program in the Older Industrial Area and no new programs in the Older Industrial Area.

Figure 11 **ERG Applications by Location, 2014 - 2016**



A significant percentage of ERG applications in the rest of the urban area is expected due to the large size of the rest of the urban area and the spatially extensive industrial history in Hamilton. However, the lack of recent ERG applications in the Older Industrial Area is concerning in regard to the promotion of brownfield redevelopment in the Bayfront Industrial Area. This suggests that the City should take steps to improve the attractiveness of the ERG program in the Older Industrial Area to counter this trend.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that the City encourage more use of its ERG program in the Older Industrial Area (Area 2) by:

- 1) Adding “the removal/ abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey” as a stand-alone eligible cost for the TIG component of the program. N.B. this cost is not eligible for application against City development charges payable; and,
- 2) Enhancing ERASE program marketing and assistance to existing business in the Older Industrial Area and business seeking locations in the Older Industrial Area.

4.5.4 Type of Applications

Of the 44 active ERG applications, the pre-project use for these applications was as follows: 23 (52.3%) were Commercial; 19 (43.2%) were Industrial; 1 (2.3%) was Institutional; and 1 (2.3%) was Residential.

The proposed end use for the 44 active ERG applications is as follows: 21 (47.7%) are Commercial; 18 (40.9%) are Residential; and 5 (11.4%) are Industrial.

Only 11% of the active ERG applications are for a proposed industrial use. The last ERG application for industrial use was in 2014, and before that it was 2005. Conversely, approximately 48 % of ERG applications are for Commercial use and 41% are for residential use, and the residential percentage has been growing, with 52% of the ERG applications from 2012 to 2016 being for residential use. Virtually all of the recent redevelopment projects being proposed and constructed under the ERG Program are for residential and commercial use. The ERG Program is now rarely being used for its original intent, which was to promote redevelopment of industrial lands within the Older Industrial Area, and this is concerning.

4.5.5 Economic Impact

4.5.5.1 Industrial/Commercial Square Footage

Several large industrial buildings/facilities were approved for the ERG program. Based on the available building size data for completed industrial/ commercial projects and a rough estimate of the square footage of completed industrial/commercial projects where data was not available, it is estimated that approximately 600,000 sq.ft. of industrial and commercial space has been constructed using the ERG Program.

4.5.5.2 Residential Dwelling Units

It is estimated that the 18 residential redevelopment projects with approved ERG applications will create 1,155 new residential units when completed. Seven (7) of the 18 residential ERG projects have been completed or are underway and these 7 projects include 448 (39%) of the projected 1,155 residential units. Most of the large residential redevelopment projects (8 applications containing 790 (68%) of the 1,155 residential units) have been filed in the last 4 years. This indicates that more recent usage of the ERG Program is shifting to residential brownfield redevelopment projects. Also, as previously mentioned, the average ERG site size has decreased in recent years, and this also correlates with a move away from industrial redevelopment projects on larger sites to residential and commercial redevelopment projects on smaller sites.

4.5.5.3 Employment

In terms of employment⁴ estimated to be created by the industrial and commercial redevelopment projects under the ERG Program, applicants estimated that they would create approximately 531 jobs. No follow up was done to determine the actual number of jobs created for each industrial/commercial project. Based on projects completed to date, it is estimated that at least 325 industrial and commercial jobs have been created projects that have participated in the ERG Program.

4.5.5.4 Construction Value

Total construction cost for the 44 active ERG sites was estimated by applicants at approximately \$572,488,925 (an average of \$13 million per project), while total construction cost for the 20 ERG projects that have been completed to date was estimated by applicants at approximately \$169,936,325. Actual construction values for these 20 completed projects taken from building permit data indicate that the total actual construction value of these 20 projects was \$116,145,820, or 31.7% less than estimated by the applicants. If this rate of construction value overestimation carries over to the remaining 24 active projects, then the \$572,488,925 in estimated construction costs for all 44 ERG projects will translate into an actual construction cost of approximately \$391,277,120. While this is certainly still an impressive construction value, averaging just under \$8.9 million per project, it is significantly less than what is being estimated by applicants at the time of application.

Comparing the total City grant commitment for the 20 completed ERG projects to date of \$9,598,969 with the actual construction cost for these 20 completed projects of \$116,145,820 produces an ERG program leverage ratio of 11.1. Therefore, every \$1 that the City has contributed toward completed ERG projects to date (via development charge reductions and tax increment grants), has generated approximately \$11.10 in private sector construction. This is an impressive leverage ratio and speaks to the demonstrated ability of the City's ERG Program to consistently and significantly leverage municipal funding to generate high value construction projects on remediated brownfield sites in Hamilton.

It appears that the construction costs of a number of the larger projects applying for the ERG were significantly overestimated by applicants. This practice should be discouraged by additional vetting of the construction cost estimates provided by applicants. This can be done by comparing construction cost estimates provided by applicants to a sample of actual construction cost estimates (from building permit values) for similar type projects, with this sample periodically updated to keep it current. Where construction cost estimates provided by applicants appear to be inflated, these should be adjusted using the sample of actual construction cost estimates for similar type projects.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that City staff compare construction cost estimates provided by applicants to a sample of actual construction costs (from building permit values) for similar type projects, with this sample periodically updated to keep it current. Where construction cost estimates provided by applicants appear to be inflated, these should be adjusted using the sample of actual construction costs for similar type projects.

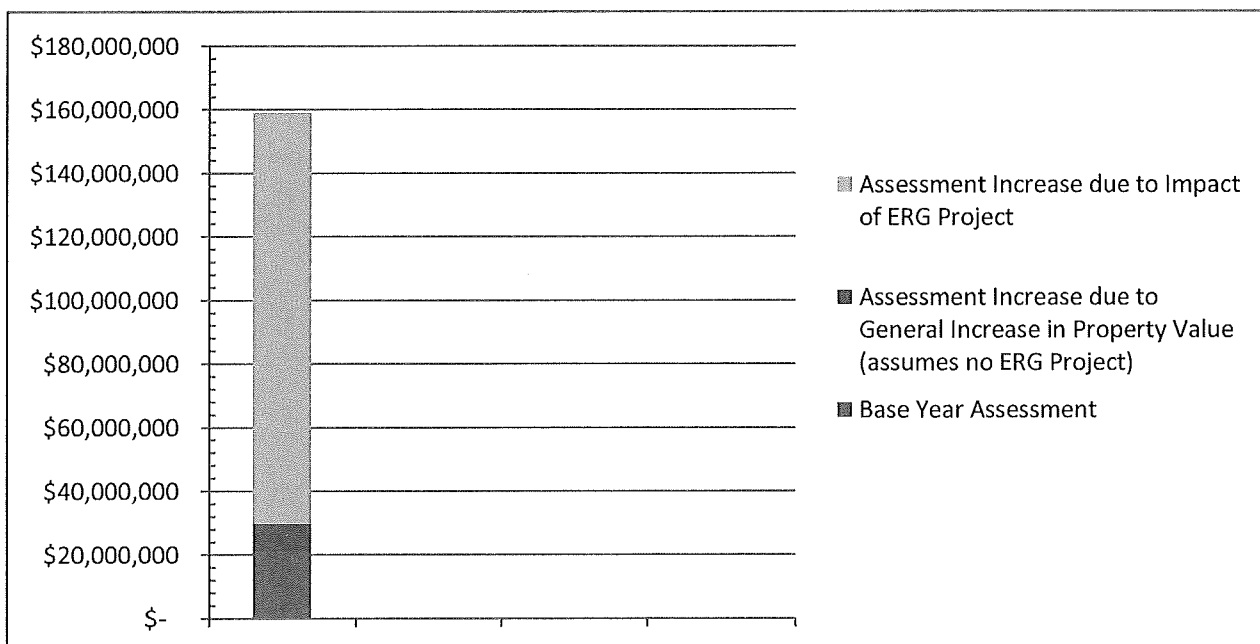
⁴ Includes only permanent jobs created by the business occupying the industrial/commercial projects. Does not include jobs created during construction.

4.5.5.5 Assessment Value and Property Taxes

The total assessment value and property taxes for the 20 ERG projects that have been completed and fully reassessed and 2 of the ERG projects under construction that are substantially complete was compared between the year of each application, ranging from 2002 to 2014, and 2016. As shown in **Figure 12**, the total assessment value of these 22 properties in the year of application was approximately \$21.4M. The total assessment value of these 22 properties in 2016 was approximately \$159.0M, an increase of \$137.6M or 6.9 times the original assessment value.

However, part of this very large \$137.6M assessment increase would have been due to general increases in property values from the year of application to 2016 for the 22 properties. i.e., the assessment value of these brownfield properties likely would have increased somewhat even if they were left in their unimproved state. In order to determine the portion of the total \$137.6M increase in assessment attributable to general increases, a multiplier was calculated (see Appendix B) and applied to determine that only \$8.6M (6%) of the assessment value increase was attributable to general assessment value increase. Therefore, approximately \$129.0M (94%) of the \$137.6M increase in assessment value on these 22 properties can be directly attributed to their remediation and redevelopment under the ERG Program. This is an impressive finding and speaks to the ability of the ERG Program to create significant long-term assessment value increases in participating properties.

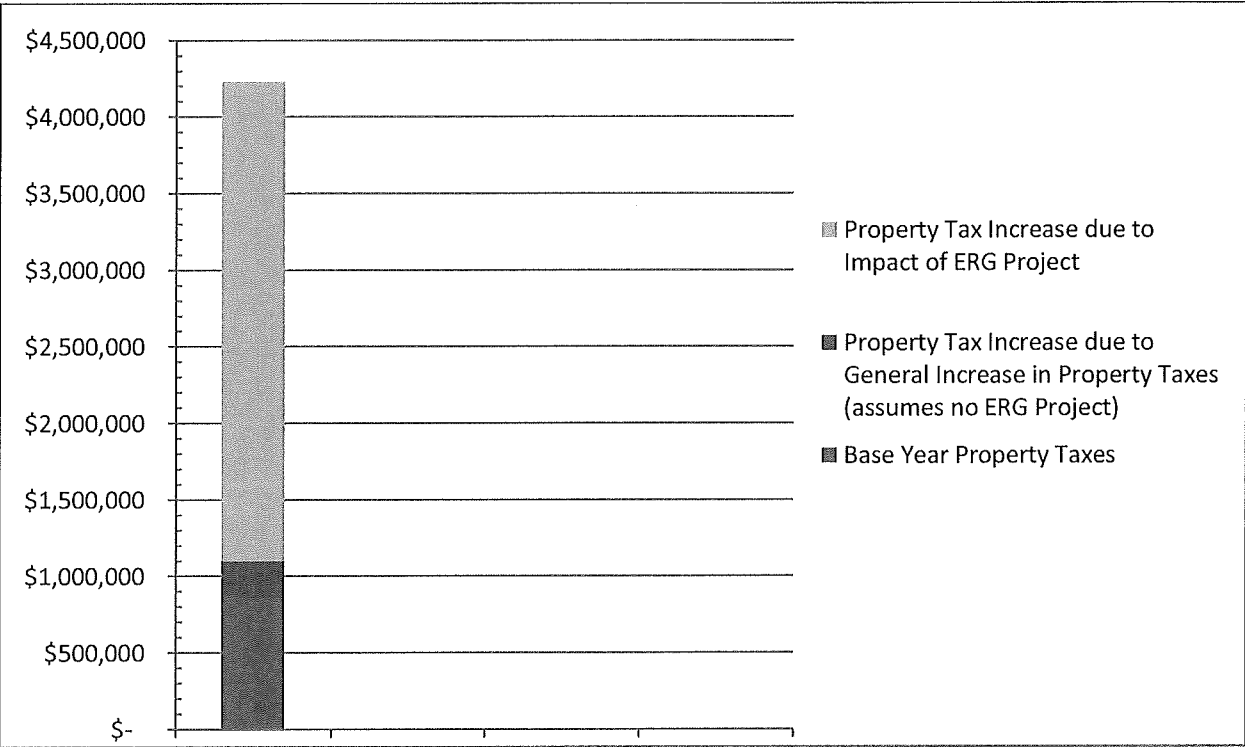
Figure 12 Total Assessment Value of Completed and Substantially Completed ERG Applications



A similar exercise was conducted on the 22 properties to determine the increase in property taxes (City and Education) between the year of each application and 2016. As shown in **Figure 13**, total property taxes for the 22 properties in the year of application was approximately \$865,020. The total property taxes on these 22 properties in 2016 was approximately \$4,229,825, an increase of \$3,364,805 or 4.9 times the original property taxes. As with assessment value, part of this large increase in property taxes would have been due to general increases in property taxes from the year of application to 2016 if the properties had been left in their unimproved state.

Two methodologies were used to estimate this impact of general property tax increases on the 22 ERG projects (see Appendix B). Even using the more conservative methodology, it was estimated that approximately \$3.13M (93%) of the \$3.36M increase in property taxes on these 22 properties can be directly attributed to their remediation and redevelopment under the ERG Program. Again, this is an impressive finding and speaks to the ability of the ERG Program to create significant long-term property tax revenue increases in participating properties.

Figure 13 Total Property Taxes on Completed and Substantially Completed ERG Applications



While the City's total ERG commitment on these 22 properties totals approximately \$12.3M, it is important to remember that the City and Province collect an extra \$3.1M in property taxes **annually, year after year** on these properties as a result of their remediation and redevelopment under the City's ERG Program. Based on the split of 2016 property taxes on these 22 properties (73.4% City versus 26.6% Education), the City's share of this \$3.1M is approximately \$2.3M. This means that just the annual increase in property taxes collected by the City for these 22 ERG projects will pay for the City grant commitment on these projects in only 5.5 years. This impressive statistic demonstrates the ability of the ERG Program to generate significant long-term property tax revenues for the City of Hamilton. Assuming that all or even most of these brownfield redevelopment projects would not have occurred without the ERG Program, the program essentially pays for itself in a very short period of time through increased City property tax revenues.

4.5.5.6 Development Charges and Building Permit Fees

As per City of Hamilton Development Charges By-law 14-153, applicants with approved ERG applications have the option of applying environmental remediation costs approved under their ERG application against City Development Charges (DCs) payable. Many of the applicants with approved ERG applications have taken advantage of this DC exemption option. Data was not available on how much of the approved ERASE Redevelopment Grants for projects that have been constructed or are underway was applied against City DCs

payable. However, it is known that 11 approved ERG projects paid a total of approximately \$5.5M in City DCs over and above any ERG approved remediation costs applied against City DCs payable.

Building permit fee data was also examined, and it was determined that 19 approved ERG projects have paid a total of approximately \$1.4M in building permit fees to the City of Hamilton.

Taking into consideration the almost \$7M in City development charges and building permit fees paid by brownfield redevelopment projects participating in the ERG Program further demonstrates the ability of this exceptional program to generate both long-term assessment base increases and property tax revenues, as well as significant development charge and building permit fee revenues for the City of Hamilton.

4.6 ERASE Tax Assistance Program (TAP)

As in most other Ontario municipalities that offer a tax assistance program that includes the Province's education component of property taxes on brownfield sites, the City of Hamilton's TAP has been little used since it was introduced in 2005. This finding is no doubt directly related to the complicated and time consuming process that the Province of Ontario has put in place for municipalities and applicants seeking to access the Province's education property tax assistance for brownfield redevelopment projects. Notwithstanding that this difficulty is likely to remain, based on discussions with City staff and best practices, a number of minor enhancements to the City's ERASE TAP are recommended.

RECOMMENDATIONS:

It is recommended that the City add the following eligible costs to the ERASE TAP:

- a) Clean fill, grading and compaction to replace contaminated soils";**
- b) Filing a Record of Site Condition (RSC) and a Certificate of Property Use (CPU);**
- c) Environmental insurance premiums; and,**
- d) "removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey".**

4.7 Downtown Hamilton – West Harbour Remediation Loan (LOAN) Program

The LOAN Program offers a low interest loan (1% below prime) equal to 80% of the cost of remediating a property to a maximum of \$400,000 per property/project for the remediation and redevelopment of brownfields for residential or residential/commercial use within Downtown Hamilton and the West Harbourfront. This program is designed to help finance remediation by acting as bridge financing until property owners receive their ERG payments, at which time, the applicant has the option of repaying the loan through the assignment of their annual ERG payments. This is an innovative approach to repayment of the loan.

While the LOAN Program does provide an extra up-front incentive to redevelop brownfield properties in the Downtown Hamilton and the West Harbourfront area, uptake of the program has been moderate to date with only two applications approved under this loan program by the City of Hamilton over the seven year period that it has been in existence. Both of these applications were on James Street North in the West Harbour Area.

Based on the \$400,000 program cap, the real benefit of the program likely lies in promoting smaller brownfield redevelopment projects in Downtown Hamilton and the West Harbourfront Area. While the City should retain the LOAN Program in the short to medium term, it is not clear that this program will be necessary in the long-

term based on the large scale of development (including brownfield redevelopment) being witnessed and planned for in Downtown Hamilton, and especially in the West Harbourfront Area.

City staff noted that the ERASE LOAN Program has an interest rate of 1% below prime and an amortization period of 10 years, while the Downtown LOAN Program has a 0% interest rate and an amortization period of 5 years. Staff indicated that 10 years is a long time for the City to have a LOAN outstanding and that the amortization period of the ERASE LOAN Program should be shorter. Therefore, in order to bring the two programs into line, it was determined that the ERASE Loan Program should adopt the Downtown LOAN Program structure, i.e., 0% interest rate and a 5 year amortization period. This will also make the administration of both programs more consistent and easier.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that the City modify the ERASE LOAN Program to include a 0% annual interest rate and a 5 year amortization period, with all other program details and requirements remaining the same.

4.8 ERASE Municipal Acquisition and Partnership Program (MAPP)

The purpose of the MAPP as specified in the 2010 ERASE CIP is to create awareness of brownfield redevelopment by having the City remediate its own brownfield sites, acquire and remediate key strategic brownfield sites, and engage in pilot projects with the private sector to showcase innovative brownfield remediation tools and approaches. Four (4) projects have been approved under the MAPP since 2001 (see Appendix B) and all of these projects were very significant and successful brownfield redevelopment projects.

4.9 ERASE Marketing and Opportunities Program (MOP)

The purpose of the ERASE MOP is to aggressively and regularly communicate and explain the ERASE Programs to brownfield market makers. Another purpose of the MOP is to advertise and market publicly and privately owned brownfield redevelopment opportunities throughout the municipality.

The ERASE MOP specified that a number of methods should be used by the City to market the ERASE incentive programs and brownfield redevelopment opportunities. These include:

- a) A marketing brochure;
- b) Program guides and application forms;
- c) Program information available on the City's website;
- d) Presentation to brownfield market makers including the development industry, real estate professionals, environmental consultants, planning consultants, lawyers, accountants and other support professionals;
- e) Targeted mailings to property owner in the Project Area; and,
- f) The use of RFPs on City owned brownfield properties.

With the possible exception of item e) above, the City has utilized all of the marketing and education methods outlined above. However, with the revisions to the ERASE CIP that will result out of this report, this presents an excellent opportunity for City staff to review, revise and augment the components of its ERASE MOP to coincide with and support the revised ERASE CIP programs. As previously noted, particular emphasis should be placed on marketing the ERASE Programs and available brownfield redevelopment and adaptive reuse opportunities to existing business in the Older Industrial Area and business seeking locations in the Older Industrial Area.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that the City:

- a) review, revise and augment the components of its ERASE MOP to support and coincide with the launch of the City's revised ERASE CIP, including the revised ERASE incentive programs; and,
- b) better document marketing initiatives and resources to better track program strategies and outcomes.

5.0 SUMMARY OF RECOMMENDATIONS

Based on the results of the best practices review and the analysis of the ERASE Programs, the recommendations on ERASE Program content, administration and monitoring identified in the previous sections of the report are summarized below.

5.1 ERASE Program Administration and Monitoring

It is recommended that City staff:

- a) Check the completeness of data collected for all ESG and ERG applications prior to application processing, ensuring that:
 - i) all requested data and required estimates for all monitoring variables, including estimates of residential units and industrial/commercial space to be constructed, jobs to be created/retained, and estimated construction cost, post-project assessment value and property taxes, have been provided by applicants;
 - ii) the construction cost estimates provided by applicants are realistic by comparing these construction cost estimates to a sample of actual construction cost estimates (from building permit values) for similar type projects, with this sample periodically updated to keep it current; and,
 - iii) where construction cost estimates provided by applicants appear to be inflated, these should be adjusted using the sample of actual construction cost estimates for similar type projects
- b) Clarify that a minimum of two (2) cost estimates are required from a qualified person for the ERASE Study Grant Program and the ERASE Redevelopment Grant Program to ensure cost-efficient environmental study and remediation approaches.
- c) Conduct follow up tracking on every ERG application after projects are completed to determine and record accurate actual amounts for:
 - i) the grant amount paid out and how the grant was applied (against Development Charges, as an annual TIG, or both); and,
 - ii) all monitoring variables, including number of residential units constructed, industrial/ commercial space (square footage) constructed, number of jobs created/retained, construction value, and post-project assessment value and property taxes.
- d) Track and record assessment value and property taxes on all properties participating in the ERG Program year over year from the approval date to at least 10 years out in order to fully capture long-term increases in assessment and property taxes generated by all projects, and especially multi-phase projects that take several years to complete and be captured via property reassessment.
- e) Formalize the data spreadsheets prepared for this project as a tracking tool for ESG, ERG, LOAN and MAPP applications, and that these spreadsheets be updated as new applications are received, and as current applications are approved and completed.

5.2 ERASE Study Grant (ESG) Program

It is recommended that the City:

- a) Increase the maximum grant level for two environmental studies from its current level of \$25,000 to \$35,000;

- b) Add the cost of “designated substances and hazardous materials surveys” to the eligible costs of the ESG Program across the ERASE Community Improvement Project Area, but only where such studies are being done on current or former institutional sites or on properties designated under Parts IV or V of the *Ontario Heritage Act*;
- c) Enhance the ESG Program in the Older Industrial Area (Area 2) by:
 - i) adding expanded study types, including “designated substances and hazardous materials surveys”, and “industrial and office reuse feasibility studies”, to the list of eligible program costs; and,
 - ii) developing and implementing ways to increase awareness of and interest in the ESG Program in this area, including enhanced ERASE Program marketing and assistance to existing business in the Older Industrial Area and business seeking locations in the Older Industrial Area.
- d) Develop and include in the ERASE CIP and the ESG Program Guide and Application Form, enhanced submission requirements to restrict the ESG Program only to applicants who have clearly demonstrated their legitimate intention to redevelop a brownfield site. These requirements should include mandatory submission of a letter of intent to develop the property and a preliminary development plan (if planning applications have not yet been submitted).
- e) Contact all applicants with approved but not paid ESG applications outstanding more than two years from date of approval and advise that all approved studies (except for Risk Assessments) must be submitted within 6 months, or approved ESG funding will be cancelled.
- f) Contact all applicants with approved but not paid ESG applications outstanding less than two years from date of approval and all applicants in due diligence, and advise that all approved studies (except for Risk Assessments) must be submitted within two years of date of ESG approval, or approved ESG funding will be cancelled.
- g) For all new ESG applications on a go forward basis, include in the Program Guide and Application Form a statement advising that all ESG funded studies except for Risk Assessments must be completed and submitted to the City within two years of application approval, or approved ESG funding will be cancelled.
- h) Permit approved ESG applicants who completed their environmental studies prior to July 1, 2011 to re-apply for ESG Program funding based on the same rules as applicants applying for the program after July 1, 2011.
- i) Increase the annual budget for the ESG Program on a go forward basis to approximately \$250,000 per year, especially if it plans to implement recommendations a), b), and h) above.

5.3 ERASE Redevelopment Grant (ERG) Program

It is recommended that the City:

- a) Add “the removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey” as a stand-alone eligible cost for the TIG component of the ERG program across the ERASE Community Improvement Project Area, but only for brownfield redevelopment projects (including adaptive reuse projects) on current or former institutional sites or properties designated under Parts IV or V of the *Ontario Heritage Act*. *N.B. this cost is not eligible for application against City development charges payable*;

- b) Encourage more use of its ERG program in the Older Industrial Area (Area 2) by:
 - i) adding "the removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey" as a stand-alone eligible cost for the TIG component of the ERG program. *N.B. this cost is not eligible for application against City development charges payable*; and,
 - ii) developing and implementing ways to increase awareness of and interest in the ERG Program in this area, including enhanced ERASE Program marketing and assistance to existing business in the Older Industrial Area and business seeking locations in the Older Industrial Area.
- c) Contact the current owners of ERG approved sites where remediation and redevelopment has taken place to determine why these owners did not request grant payment, and if these owners qualified for the grant payment, whether or not they still wish to receive their grant payment.
- d) Follow up on all 13 approved ERG applications where an RSC has not been completed (acknowledged) to determine the status of the site remediation and the owner's current site redevelopment plans. In cases where the applicant has abandoned their redevelopment plans and/or the applicant or new owner is no longer interested in meeting the requirements for the ERG, these applications should be formally closed and the ERG cancelled.
- e) Develop and implement a standardized process to resolve disagreements between the developer's QP and the City's peer review QP regarding submitted environmental studies for approved ERG applications that are not changes to a more sensitive use as per O. reg 153/04 and establish a maximum timeframe for the optional peer review process, e.g., 9 months.
- f) Review ERG projects where there have been cost overruns to determine the causes of these cost overruns and address these causes through modifications to the ESG and/or ERG programs.
- g) Commence utilizing the City's current ability to conduct spot and random audits of eligible expenses on ERG projects.
- h) Develop and distribute to applicants a Guideline that clearly specifies eligible costs for the ERG Program and the level of detail expected in eligible cost invoice submissions and other supporting documentation.

5.4 ERASE Tax Assistance Program (TAP)

It is recommended that the City:

- a) Add the following to the eligible costs for the ERASE TAP:
 - i) clean fill, grading and compaction to replace contaminated soils;
 - ii) filing a Record of Site Condition (RSC) and a Certificate of Property Use (CPU);
 - iii) environmental insurance premiums; and,
 - iv) "the removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey".

5.5 Downtown Hamilton/West Harbourfront Remediation Loan (LOAN) Program

It is recommended that the City:

- a) Modify the ERASE LOAN Program to include a 0% annual interest rate and a 5 year amortization period, with all other program details and requirements remaining the same.

5.6 ERASE Marketing and Opportunities Program (MOP)

It is recommended that the City:

- a) Review, revise and augment the components of its ERASE MOP to support and coincide with the launch of the City's revised ERASE CIP, including the revised ERASE incentive programs; and,
- b) Better document marketing initiatives and resources to better track program strategies and outcomes.

APPENDIX A

Review of Benchmark Municipal Brownfield Redevelopment Incentive Programs

A REVIEW OF BENCHMARK MUNICIPAL BROWNFIELD REDEVELOPMENT INCENTIVE PROGRAMS

A1 Introduction

In order to help inform the development and consideration of ERASE incentive program improvements, a scoped best practices review of incentive programs used by other municipalities in Ontario was conducted. In consultation with City of Hamilton staff, a number of Ontario municipalities with well-established brownfield incentive programs were selected. Very few municipalities in Canada outside of Ontario offer municipal incentives for the redevelopment of privately owned brownfield sites. This is in part due to restrictive legislative regimes in other parts of Canada. The City of Edmonton, AB. is one of the few good examples of a municipality outside of Ontario that offers a package of brownfield incentive programs, so it was also included in the best practices review.

While a plethora of incentive programs designed to promote brownfield remediation and redevelopment are available in many U.S. municipalities, most of these programs are in fact federal⁵ and state⁶ funded brownfield incentive programs that are simply administered by local municipalities or local economic development agencies. Local municipalities and economic development agencies sometimes augment this federal and state funding with local grants or tax abatements and incentives such as participating with the state in tax increment financing (TIF), but most of the government funding for brownfield redevelopment in the United States comes from the federal and state governments. Therefore, locally administered state and federal brownfield redevelopment incentive programs in the U.S. are not directly comparable to municipally funded brownfield redevelopment incentive programs in Ontario or the rest of Canada.

It should also be noted that many US municipalities offer a broad range of tax abatement/incentives, and grant and loan incentive programs designed to promote downtown revitalization/redevelopment, e.g., enterprise zones, and industrial/commercial property revitalization and reutilization that can be applied to brownfield redevelopment projects. Nevertheless, two U.S. municipalities (Cuyahoga County and) that offer USEPA sponsored incentive programs to promote brownfield redevelopment are highlighted at the end of this best practices review. Because of the availability of federal and state funding, and in part out of necessity due to the blighted state of some of their brownfield sites, many U.S. municipalities also take a much more active direct role in brownfield site assessment, remediation and redevelopment than their Canadian counterparts.

A2 Methodology

Numerous municipalities in Ontario offer incentives to promote brownfield redevelopment, in their older industrial areas, downtowns, and often municipality wide. **Figure A1** below highlights the most recent statistics (2012) collected by the Ontario Ministry of Municipal Affairs and Housing (MMAH) on municipalities in Ontario that offer brownfield redevelopment incentive programs. Figure 1 shows that 52 municipalities in Ontario offer a variety of brownfield redevelopment incentive programs.

⁵ Includes USEPA Targeted Brownfield Assessment Grants, Brownfield Cleanup Revolving Loan Fund Grants, Cleanup Grants and Superfund Program Grants.

⁶ Includes tax increment financing (TIF), and site assessment, remediation and redevelopment grants and loans. Incentive programs vary by state.

Figure A1 Municipal Brownfield Redevelopment Incentive Programs in Ontario

Type of Financial Incentive Program	Number of Municipalities	% of all Municipalities (52) with Brownfield CIPs
Tax Increment Grant	50	96%
Tax Assistance	40	77%
Environmental Study Grant	30	58%
Planning/Building Fees Grant	28	54%
Development Charge Reduction/Exemption	27	52%
Rehabilitation and Redevelopment Grant/Loan	2	4%

Source: Ontario MMAH, 2012

Of these 52 municipalities:

- 96% offer pay-as-you-go tax increment grants;
- 77% offer combined municipal and education property tax assistance through the Province's Brownfields Financial Tax Incentive Programs (BFTIP);
- 58% offer environmental site assessment (ESA) grants;
- 54% offer planning and building permit fee rebates/grants;
- 52% offer partial or total development charge reduction; and,
- Only 4% (2 municipalities including Hamilton) offer a direct remediation grant or loan.

A number of the municipalities in Ontario with long-standing brownfield redevelopment CIPs/incentive programs were chosen for this best practices review. These include: Brantford, Cornwall, Guelph, Kingston, Kitchener/ Cambridge/Waterloo/Waterloo Region, Hamilton, Niagara Falls/Niagara Region, Ottawa, and Windsor. Edmonton, AB was also added as it has one of the best benchmark brownfield incentive programs outside of Ontario. Two of the Ontario municipalities, Niagara Falls and the Waterloo lower-tier municipalities are in two-tier jurisdictions. For these municipalities, brownfield incentive programs offered by the upper tier municipality, either matching the lower tier brownfield incentive programs, or as separate programs, were also reviewed. Therefore, brownfield redevelopment incentive programs in 10 Canadian municipalities were reviewed.

The Brownfield CIPs (and development charge by-laws, as applicable) in each municipality were reviewed and the web sites of each municipality were examined to determine which brownfield incentive programs are currently being offered by each municipality. The details of the brownfield incentive programs being offered by each municipality are provided in **Attachment 1**, and the types of brownfield incentive programs offered by each municipality are summarized in **Figure A2** below.

This review of best practices is not intended as an exhaustive analysis. It was conducted to compare eligible costs and the characteristics of different types of municipal incentive programs used to promote brownfield redevelopment on private sector lands by a number of benchmark municipalities to those used by the City of Hamilton.

Figure A2 Comparison of Municipal Brownfield Redevelopment Incentive Programs

Type of Program	Municipality									
	Brantford	Cornwall	Guelph	Hamilton	Kingston	Kitchener, Cambridge, Waterloo Region	Niagara Falls/ Niagara Region	Ottawa	Windsor	Edmonton
1) Project Feasibility Study Grant		X						X	X	
2) Environmental Study Grant		X	X	X	X	X	X	X	X	X
3) Property Tax Assistance (Freeze/ Cancellation)	X	X	X	X	X	X	X	X	X	
4) Tax Increment Grant (TIG)	X	X	X	X	X	X	X	X	X	X
5) Development Charge Reduction	X			X		X	X	X	X	
6) Remediation Loan				X						
7) Municipal Tipping Fees Grant		X								
8) Planning/ Building Permit Fees Grant		X						X	X	
9) Payment-in-Lieu of Parkland Dedication Grant		X								

A3 Overview of Incentive Programs

Taken as a whole, the 10 municipalities in this comparison offer nine different types of financial incentive programs to promote private sector brownfield redevelopment. The types of incentive programs that are most commonly offered include the environmental study grant, brownfields property tax assistance, tax increment grant, and to a slightly lesser degree, the development charge reduction. The types of incentive programs that are offered by only a few or even just one of the municipalities includes the project feasibility study grant, planning/building permit fees grant, remediation loan, municipal tipping fees grant, and payment-in-lieu of parkland dedication grant. It should be noted that many of the municipalities in this best practices review also engage in municipal leadership activities on publicly and privately owned brownfields, including the maintenance of brownfield/historical land use inventories, and brownfield redevelopment supportive planning, data base, marketing and monitoring programs.

Three (3) of the 10 municipalities in this comparison offer a project feasibility study grant which typically assist with the cost of design drawings and/or studies required to determine the feasibility of the proposed project, including adaptive building reuse type studies.

All ten of the municipalities in this comparison offer assistance with the cost of environmental studies such as Phase II Environmental Site Assessments (ESAs) and Remedial Work Plans. The range of environmental studies funded varies somewhat from municipality to municipality.

All of the Ontario municipalities in this comparison offer a program to freeze, or in some cases, even cancel the municipal and education property taxes on a brownfield property undergoing or that has undergone remediation and redevelopment for up to 3 years. The inclusion of the education property taxes in this freeze or cancellation requires approval from the Province (Minister of Finance) on a case by case basis. Some of the municipalities will consider increasing the duration of the municipal property tax freeze/cancellation to 5 years.

All of the municipalities in this comparison offer grants to help offset the costs of environmental remediation during the redevelopment of brownfield properties. In Ontario, these remediation grants take the form of pay-as-you-go tax increment grants (TIGs). The developer front-ends the costs of remediating and redeveloping the brownfield site, and these grants are paid out to the developer after the brownfield site is remediated and redeveloped in the form of an annual grant based on the property tax increase or "tax increment" (TI) generated by the brownfield redevelopment project. In Ontario, these TIGs are typically paid out over a period of 10 years, although Brantford will consider up to a 20 year TIG period on a case by case basis. In Edmonton, AB., the developer has the option of receiving a TI grant for 6 years or a lump sum payment at the time of remediation with the lump sum payment capped at \$200,000.

Six (6) of the 10 municipalities in the comparison also offer development charge reductions or deferrals. Typically, this is done by allowing an applicant with an approved TIG to apply their remediation expenses against the municipal development charges payable. The TIG is then typically reduced (or "offset") by the amount of remediation expenses applied against the municipal development charges. Both of the upper tier governments in Niagara and Waterloo have separate development charge reduction programs for brownfield redevelopment.

Only 3 of the 10 municipalities in the comparison offer a grant to reduce planning/building permit fees, although Windsor offers theirs as part of their TIG.

The City of Hamilton is the only municipality in the comparison that offers a remediation loan, while the City of Cornwall is the only municipality in the comparison that also offers a municipal tipping fee grant and a grant to help offset the payment of parkland dedication fees on brownfield sites that are being redeveloped.

A4 Geographic Approach

Ontario municipalities that have prepared and adopted community improvement plans for the promotion of brownfield redevelopment have done so both on an area specific and urban area wide basis. Municipalities such as Kingston, have designated a community improvement project area for brownfields that corresponds to a specific geographic area that contains the greatest number of potential brownfield sites. This is usually an older industrial area(s), older urban areas of the municipality, and/or older downtown areas. However, most municipalities have tended to designate the entire urban area as a community improvement project area for their CIP, especially if their brownfield sites are in several parts of the urban area or spread out across the urban area. A number of municipalities, such as Hamilton and Guelph, originally started by designating only their older industrial areas or older parts of the City, and then expanding their community improvement project area to the entire urban area.

Of the 10 municipalities in the comparison, 7 offer their brownfield redevelopment incentive programs (Brownfield CIPs) across their entire urban area, and Cornwall's Brownfield CIP covers most of its urban area. Kingston's Brownfield CIP covers its downtown and older industrial areas, but it should be noted that the City of Kingston has had to twice expand its brownfield community improvement project area since inception of its Brownfields CIP.

The City of Ottawa Brownfields Redevelopment CIP designates the Urban Area and the designated Villages as shown in the Official Plan as the Community Improvement Project Area because even though brownfield sites in Ottawa are scattered throughout the urban and rural area, the Official Plan directs growth in the rural area to the 26 designated villages. A number of municipalities, such as Niagara Falls, have designated "the entire urban area as amended from time to time" as the community improvement project area for its Brownfield CIP. This use of a text reference to the urban area as amended from time to time rather than a map avoids having to amend the CIP if there is a change to the urban area boundary in the future.

Clearly, the choice of a community improvement project area depends on the location of brownfield sites in a municipality, which in turn depends in part on the historic industrialization and growth pattern of the municipality. While occurring more naturally in older industrial areas, brownfields can be found across most municipalities in the form of former uses such as gasoline stations, dry cleaners, printers, manufacturers, blacksmiths, textile mills, asphalt plants, petroleum storage and automobile wrecking yards.

It should be noted that a number of the municipalities in the comparison, including Hamilton, Niagara Falls and Ottawa have chosen to combine the urban area wide and area specific geographic approaches, i.e., a "hybrid approach". These municipalities have done this by designating community improvement project areas for their Brownfield CIPs that are urban area wide, but have then identified "sub-areas" or "priority areas" within their larger community improvement project areas, e.g., areas that contain legacy brownfield sites and/or downtown areas. The brownfield incentive programs in these municipalities have then been tailored to provide more generous incentives and/or accomplish specific planning and economic development goals in these priority areas.

Best Practice Considerations for the ERASE CIP:

The ERASE CIP utilizes the hybrid approach to designation of a brownfields community improvement project area as described above. This geographic approach is utilized by a number of municipalities. Based on the broad geographic distribution of approved brownfield incentive program applications in Hamilton since inception of the ERASE Program, this approach appears to be appropriate based on need, and has served and will continue to serve the municipality well.

A5 Project Feasibility Study Grant Programs

Cornwall, Ottawa and Windsor offer matching grants that cover 50% of the cost of studies to determine project feasibility. Eligible studies typically include market analyses, concept plans, design drawings, structural analyses, evaluation of existing mechanical and HVAC systems, etc... Cornwall and Windsor offer a 50% grant to a maximum grant of \$7,500 per property, while Ottawa offers a maximum matching grant of \$5,000 per property. In Ottawa this grant is actually offered as part of the tax increment based grant. Based on experience to date with project feasibility study grants, it does not appear that they are particularly highly utilized and they are not nearly as significant in leading to brownfield redevelopment, as environmental study grant programs.

Best Practice Considerations for the ERASE CIP:

This type of incentive program would likely add little value to the ERASE Programs which already include a broad and well-established package of brownfield incentive programs. Therefore, project feasibility study grants are not considered necessary for inclusion in the ERASE CIP.

A6 Environmental Study Grant Programs

All of the municipalities in the comparison except for Brantford offer an environmental study grant program. These are also referred to as environmental site assessment (ESA) grant programs. In the case of the Ontario municipalities, a Phase I ESA is not covered as an eligible cost. In Edmonton, a Phase I ESA is an eligible cost for their grant program.

Environmental study grant programs in Ontario typically provide a matching grant that covers 50% of the cost of a Phase II Environmental Site Assessments (ESA), Risk Assessment and/or Risk Management Plan, and Remedial Work Plan (RWP). Two of the 9 municipalities in Ontario, Guelph and Windsor, also allow Designated Substance and Hazardous Materials Surveys as an eligible cost under their ESA Programs. This provides flexibility to include studies that determine the cost of removal of hazardous substances such as asbestos and lead paint in former industrial and institutional buildings, which in turn helps facilitate the redevelopment or adaptive reuse of these buildings.

All the Ontario municipalities offer a Phase II ESA Grant for 50% of the cost of the environmental study, with the maximum grant for a single environmental study typically in the \$12,000 to \$20,000 range. However, the Region of Waterloo offers the most generous maximum ESA Grant among Ontario municipalities at \$40,000. Many of the Ontario municipalities allow for two environmental studies, e.g., a Phase II ESA and Risk Assessment, or a Phase II ESA and RWP. In this case, the maximum grant amount is usually increased if there is more than one environmental study approved under the program, with the maximum for two environmental study grants typically ranging from \$20,000 to \$30,000. It should be noted that Ottawa's ESA grant is paid as part of the tax increment based grant, not as a payment once the environmental study is completed. The City of Edmonton offers a very generous grant for Phase I and Phase II ESAs. Grants for a

Phase I ESA equal 80% of the cost of the Phase I ESA to a maximum grant of \$5,000. Grants for a Phase II ESA equal 80% of the cost of the Phase II ESA to a maximum grant of \$80,000. This is much higher both in terms of percentage covered and maximum grant amount than any of the municipalities in Ontario.

It should be noted that while many of the above-noted environmental study grant programs have been in place for ten years or more, the maximum grant levels of these programs have never been increased, or have not been increased for many years. Yet, the cost of Phase II ESAs, Remedial Work Plan and Risk Assessments has increased significantly since the Ministry of Environment (MOE) site condition standards and environmental site assessment requirements were strengthened as a result of O.Reg 511/09, taking effect in 2011. As a result, Ontario municipalities should review their maximum environmental study grant amounts to determine if they are adequate in the face of these increased costs for the undertaking of environmental studies. In this regard, it should be noted that the City of Hamilton is one of only a few municipalities that has consistently increased its maximum environmental study grant amount, from \$10,000 in 2001, to \$15,000 in 2005, to the current \$20,000 in 2010. While Hamilton's maximum single grant amount is higher than most other municipalities, except for Waterloo and Edmonton, Hamilton's maximum grant amount for two studies (\$25,000) is similar to most of the other municipalities in Ontario, and actually less than Guelph and Waterloo. This could prove limiting where an applicant wishes to conduct multiple environmental studies on a site, e.g., Phase II ESA and a Risk Assessment.

Most municipalities require submission of a copy of the completed environmental study and verification that the environmental consultant has been paid prior to issuing an environmental study grant. Hamilton and Guelph will not typically release environmental studies funded using an environmental assessment study grant to a prospective purchaser or the public. Some municipalities, on the other hand, specify in their application materials that they are free to provide the environmental study to prospective purchaser(s). This practice is not advisable as it will dissuade owners from conducting environmental studies and permitting environmental studies to be conducted on their properties.

In order to facilitate the transfer of brownfield sites to parties who wish to remediate and rehabilitate these sites, most municipalities will provide the environmental study grant program to the property owner or a prospective purchaser (with consent from the property owner). It is important from a municipal perspective to ensure that environmental study grants are provided to owners or purchasers of properties that will actually be cleaned up and redeveloped, and where there will be an increase in assessment value, and therefore property taxes. One way to do this is to require planning applications or a redevelopment plan be submitted prior to submission of the environmental study grant application. However, in practice, this requirement can be problematic. First, it is not realistic to expect an owner or prospective purchaser to submit detailed redevelopment plans for a property they are not certain can be feasibly cleaned up. This determination can be made only once the environmental studies are complete. Second, even if redevelopment plans are submitted, this is no guarantee that the property will be redeveloped. Again, actual development on a brownfield site usually hinges in large part on the results of the environmental studies. Therefore, while inquiries regarding redevelopment plans should be made by the municipality in the application for an environmental study grant, and the veracity of the responses should be evaluated by municipal staff, the submission of detailed redevelopment plans as a required condition for environmental study grants is not recommended.

There is the question of whether or not environmental study grants should be given to polluting owners. Again, the issue is not a simple one because it is often difficult to determine which owner(s) actually polluted the site. Because the detailed environmental site information is so crucial to initiating brownfield redevelopment, consideration should be given to providing a study grant to a polluting owner only where there is potentially a bona fide arm's length purchaser wishing to redevelop the site.

A number of municipalities in the comparison, including Hamilton and Guelph, utilize a “roll-over” budget mechanism to ensure that any environmental study grant monies not used in a given year are rolled over into the next year. Hamilton puts the monies into a capital budget fund. Guelph rolls any leftover funds from the annual operating budget for environmental assessment grants into a reserve fund that pays for environmental site assessments of city-owned and/or strategically located privately owned parcels. This rollover flexibility is advisable as these programs are sometimes not fully utilized in certain years. Also, flexibility with respect to the uses of the environmental assessment funds (assessments of private and/or public property) is advisable to maximize use of funds available for this purpose.

Best Practice Considerations for the ERASE CIP:

The ERASE Study Grant Program offers a level of funding that is currently competitive with most Ontario municipalities that offer environmental study grants. The Program has been well utilized and has produced good results to date. However, the following enhancements to the ERASE Study Grant should be considered:

- 1) Increase the maximum grant level for two studies from \$25,000 to \$35,000; and,***
- 2) Consider permitting designated substance and hazardous materials surveys as an eligible cost.***

A7 Brownfields Property Tax Assistance Programs

The *Municipal Act, 2001* allows a municipality to pass a by-law providing tax assistance to an eligible property in the form of cancellation of all or a portion of the taxes levied on that property for municipal and education purposes during the “rehabilitation period” and the “development period” of the property, as defined in Section 365.1 of the *Municipal Act, 2001*. The matching education tax assistance is subject to approval by the Province (Minister of Finance) through its Brownfields Financial Tax Incentive Program (BFTIP) on a case by case basis. The municipality must make application to the Province for the matching education tax assistance. This process is complicated and time consuming, often taking more than six months to obtain approval from the Province. This is one of the main reasons that the Province’s BFTIP Program has not been well utilized since its introduction in 2004.

For a brownfield property to benefit from this tax assistance, it must be within a community improvement project area for which a CIP is in effect. The CIP must contain provisions with respect to said tax assistance. Safeguards must also be put in place in the CIP to ensure that the tax assistance provided does not exceed the cost of any action taken to reduce the concentration of contaminants on, in or under the property to permit an RSC to be filed in the Environmental Site Registry, and that the total grant made under Section 28(7) of the *Planning Act* and the tax assistance provided under Section 365.1 of the *Municipal Act, 2001* does not exceed the eligible cost of the community improvement plan with respect to those lands and buildings.

A municipal by-law is then required for properties where this tax assistance is provided and the municipality must make application to the Province for the education property tax assistance through the BFTIP. Certain provincial requirements must be built into these municipal by-laws. These requirements include restricting:

- the amount of tax assistance to the costs of reducing contaminants to permit filing of a record of site condition (RSC); and,
- the amount of matching education property tax assistance to a maximum of three (3) years, except in exceptional circumstances.

In two-tier municipalities, if upper tier tax assistance is to be provided, the upper tier must also approve its participation in the brownfields property tax assistance. For municipalities that offer both brownfields property tax assistance and a tax increment based grant, the tax assistance is provided first, and then the annual tax increment based grant starts to be paid out when the tax assistance ends. The tax assistance is not portable from one landowner to another and it cannot be assigned. Therefore, the tax assistance (both municipal and education) terminates at the date of sale, conveyance, severance or registration of plan of subdivision, whichever comes first. The municipality can convert the municipal tax assistance to a grant program at this time (and some municipalities do this), but the lack of portability of the education tax assistance component, along with the general three year maximum on education property tax assistance, restricts the potential effectiveness of the education tax assistance tool. Still, a tax assistance program may offer benefits for properties which increase substantially in assessed value after remediation/redevelopment, or properties which already have a high value prior to remediation/redevelopment if the municipality is financially willing to cancel existing property taxes on these properties.

All of the Ontario municipalities in the comparison offer a Brownfields Property Tax Assistance Program. Eligible costs include the cost of any action taken to reduce the concentration of contaminants on, in or under the property to permit an RSC to be filed. This typically includes the cost of environmental studies not covered by environmental study grants, environmental remediation including clean fill, grading and compaction to replace contaminated soils, installation, operation and maintenance of site monitoring and risk management works, filing of an RSC and Certificate of Property Use (CPU), and environmental insurance premiums. The City of Brantford Brownfields Property Tax Assistance Program specifically includes the cost to remove designated substances and hazardous materials as an eligible cost.

The City of Hamilton ERASE Tax Assistance Program includes the following eligible costs:

- i) environmental remediation, i.e., the cost of any action taken to reduce the concentration of contaminants on, in or under the eligible property to permit an RSC to be filed for the proposed use by a qualified person, including costs of preparing the RSC;
- ii) Phase II ESAs, risk assessments and remedial work plans not covered by the Study Grant Program;
- iii) installing environmental and/or engineering controls/works, as specified in the Remedial Work Plan and/or Risk Assessment and/or CPU;
- iv) monitoring, maintaining and operating environmental and/or engineering controls/works, as specified in the Remedial Work Plan and/or Risk Assessment and/or CPU.

It should be noted that this is very similar to the eligible costs for other tax assistance programs in Ontario, however the Hamilton ERASE Property Tax Assistance program does not include environmental insurance premiums and is not clear on whether or not the costs of filing an RSC and Certificate of Property Use are included.

While most of the Ontario municipalities typically match the 3 years of property tax assistance provided by the Province, some, such as Cornwall, Niagara Falls and the municipalities in Waterloo extend the municipal share of the property tax assistance to 5 years. Most Ontario municipalities that have a brownfields property tax assistance program just freeze property taxes on a brownfield site at the pre-development amount for the 3/5 years, and continue to collect the pre-development property taxes for this period. However, a number of municipalities, such as Brantford, Cornwall, Guelph and Kingston will actually cancel all property taxes for the 3 year period. While most brownfield sites do not generate substantial property taxes, this approach can be

beneficial on large brownfield sites that have existing buildings where existing property taxes are a significant impediment to redevelopment.

However, the complicated and time consuming process of applying for the Province's BFTIP Program and the general 3 year time limit on the education portion of the property tax is a mitigating factor. With no more than a dozen provincial BFTIP applications approved province-wide since the program was introduced over 12 years ago, it is not clear that the cancellation of all municipal and education property taxes on a brownfield site rather than just the property tax increase would have a significant positive impact for anything other than very large brownfield sites where current property taxes are considerable, e.g., brownfield sites with a large building(s). Furthermore, this property tax burden on brownfield sites with large buildings can be partially mitigated through the vacant building property tax rebate available in all Ontario municipalities.

Best Practice Considerations for the ERASE CIP:

The following revisions to the ERASE Tax Assistance Program should be considered:

- 1) Clarify that the cost of environmental remediation includes the cost of clean fill, grading and compaction to replace contaminated soils and the costs of filing a Record of Site Condition and Certificate of Property Use;***
- 2) Add environmental insurance premiums as an eligible cost;***
- 3) Add the "removal of designated substances and hazardous materials" as an eligible cost.***

A8 Tax Increment Grant (TIG) Programs

Numerous U.S. municipalities have successfully used tax increment financing (TIF) to promote the redevelopment of brownfield properties. Simply defined, TIF utilizes the difference between the total future tax payable and current tax payable, i.e., the tax increment generated by the redevelopment, to pay for the specific costs associated with the redevelopment.

In Ontario, municipalities utilize a variation of TIF known as tax increment based grants or tax increment grant (TIG). Instead of the municipality retaining the future tax increase when a brownfield property is remediated and redeveloped, it returns part or all of that increase to the owner/developer in the form of an annual "pay-as-you-go" grant for a specified period of time after the property has been remediated and redeveloped. This annual grant is based on a percentage of the tax increment generated by the project. This grant can include simply the cost of environmental assessment and remediation as eligible costs, or it can include other costs such as demolition, building rehabilitation, infrastructure upgrading, or even new construction.

The underlying principle of a TIG is that without offering the program, the brownfield redevelopment project would not take place. Therefore, the municipality is generating a property tax increase that would not otherwise take place, and simply returning part or all of that property tax increase to the developer in the form of a grant. Consequently, there is no net impact on the general property tax levy for a TIG program and the TIG is simply a flow-through item for budgeting purposes, but, the municipality may wish to include the increased property tax revenues and grant expenditures for accounting purposes.

Most of the municipalities in the comparison offer their annual TIG programs for up to 10 years, i.e., 10 annual grant payments or equivalent. Brantford offers up to a 20 year TIG with the duration of the TIG determined on a case by case basis, while Edmonton offers their TIG for 6 years and Ottawa for only 5 years.

In terms of the level of the TIG, virtually all of the municipalities use a constant percentage rate rather than a sliding scale. Cornwall is the only municipality that uses a sliding scale with the annual grant equal to 80% of the tax increment (TI) in years 1 and 2, 70% of the TI in years 3 and 4, 60% of the TI in years 5 and 6, 50% of the TI in years 7 and 8, and 40% of the TI in years 9 and 10. Brantford offers the most competitive TI based grant at 100% of the TIF for up to 20 years. Waterloo municipalities are next with a TI based grant at 100% of the TI for 10 years. Ottawa offers an 85% TI Grant but only for 5 years. This is a recent change from their previous 50% TIG for 10 years. Guelph, Hamilton, Kingston, Niagara Falls and Windsor offer their TIG at 80% of the TI for 10 years. However, the City of Niagara Falls offers its 80% TIG for 10 years only in its highest priority brownfield area (Area 1), which is a 200+ acre area of brownfields just north of its historic downtown. This TIG is offered for only 7 years in the rest of the urban area. It should also be noted that Niagara Falls is the only municipality that offers a TIG for properties that do not require brownfield remediation, sometimes referred to as "greyfields". However, the 80% TIG for greyfields in Niagara Falls is offered only for 5 years, and only in the two highest priority brownfield areas.

In terms of eligible brownfield costs permitted under the TIG programs, virtually all of the municipalities include the full suite of remediation related expenses. This includes the costs of: environmental studies not covered by environmental study grants, remediation, including costs to excavate, haul and dispose of contaminated soils, and/or in-situ or ex-situ treatment of contaminated soils, groundwater treatment, the supply, grading and compaction of clean fill to replace contaminated soils removed from the site, site monitoring and management measures, environmental insurance, and the preparation and filing of an RSC and CPU.

The City of Brantford explicitly includes the cost of removal/abatement of designated substances and hazardous materials in the eligible costs for its TIG program. A number of other municipalities include the removal/abatement of designated substances and hazardous materials as an eligible cost under the category of environmental remediation and/or under the category of building demolition, or under the category of building rehabilitation and retrofit works in the case of an adaptive reuse. Therefore, the City of Hamilton may wish to consider adding the cost of removal/abatement of designated substances and hazardous materials as an eligible cost to its TIG Program.

All 9 of the Ontario municipalities also include part or all of the non-environmental costs typically associated with the redevelopment of brownfield sites. This includes the cost of building demolition, building rehabilitation, and the cost of upgrading or replacing on-site and off-site public infrastructure. However, the eligible non-environmental costs and the percentage of those costs included in their TIGs by the Ontario municipalities vary significantly. For example, demolition is a 100% TIG eligible expense in all 9 of the Ontario municipalities, except in Ottawa where it is only 50% eligible, and in Hamilton where it is not an eligible expense in Area 1. However, Waterloo requires that the applicant demonstrate that the building demolition (part or all) is required to permit remediation. Five of the 9 Ontario municipalities include building rehabilitation and retrofitting as a TIG eligible expense with building rehabilitation and retrofitting a 100% TIG eligible expense in Brantford, Niagara Falls and Windsor, and a 50% TIG eligible expense in Guelph and Ottawa.

Removal, upgrading and construction of on-site infrastructure works (water service, sanitary and storm sewers) are a TIG eligible expense in 7 of the 9 Ontario municipalities. Kingston even includes gas, hydro and communication utilities. In Brantford, Cornwall, Niagara Falls and Windsor, 100% of on-site infrastructure works are TIG eligible, but in Cornwall, the on-site infrastructure works must be triggered by the existence of contamination and requirement for remediation and TIG eligibility is at the discretion of Council. In Kingston and Ottawa, 50% of on-site infrastructure works are TIG eligible. In Hamilton, only the costs of removing on-site infrastructure are TIG eligible, but these costs are limited to 25% of on-site infrastructure costs.

Upgrading and construction of off-site infrastructure works is a 100% TIG eligible expense in only 3 of the 9 Ontario municipalities. In Cornwall, off-site infrastructure works (water service, sanitary and storm sewers) are 100% TIG eligible at council's discretion. In Niagara Falls and Windsor, off-site infrastructure works include water service, sanitary and storm sewers, and electrical and gas utilities.

A number of municipalities in Ontario have reduced their allowance (percentage) for demolition and allowable on-site and off-site infrastructure upgrading eligible costs in recent years, because in some applications, these costs have begun to form a large percentage of approved brownfield TIGs, i.e., the demolition, on site and off site infrastructure upgrading costs have been larger (sometimes significantly) than the remediation costs. This is what led the City of Ottawa to specify that demolition, building rehabilitation and on-site infrastructure upgrading costs all together cannot exceed 15% of the total TIG eligible costs. Hamilton's restriction of TIG eligible infrastructure costs only to infrastructure removal and 25% of total on-site infrastructure costs and non-eligibility of demolition costs in Area 1 appears to satisfactorily address this issue.

Six (6) of the 10 municipalities in the comparison also include LEED certification and increase material/construction costs required to achieve LEED certification as TIG eligible costs. These municipalities include Guelph, Hamilton, Kingston, Ottawa, Windsor and Edmonton. Again, the particulars of the LEED related expenses included as TIG eligible vary from municipality to municipality. All six municipalities include base plan review, working drawings, energy modelling and certification expenses. Guelph, Hamilton, Windsor and Edmonton also include the material and construction costs required to achieve LEED certification. However, Hamilton caps eligible LEED costs at 50% of LEED costs and Windsor caps eligible LEED costs at 10% of total construction costs.

A few Ontario municipalities have included other costs associated with brownfield redevelopment such as planning fees, legal fees, and financing fees for environmental remediation as TIG eligible costs. For example, in Waterloo, the Joint Lower-Tier/Region TIG includes an allowance for such indirect remediation costs of 10% of eligible remediation costs. These indirect costs include planning fees, legal fees, and financing fees associated with remediation. The indirect cost allowance is an automatic 10% of remediation costs and is not tied to the actual cost of indirect expenses such as planning fees, legal fees, and financing fees.

Finally, 3 of the 9 Ontario municipalities, including Hamilton, Cornwall, and Windsor, formally dedicate the retained portion of the annual TI generated by the brownfield redevelopment project to a special brownfield reserve account for use by the municipality for environmental study and brownfield redevelopment on its own properties or to fund pilot brownfield remediation/redevelopment projects or public-private brownfield redevelopment partnerships. In municipalities where there has been approval of a number of TIG applications, such as Hamilton, it has been demonstrated that the retained portion of the TI can generate significant funds over time as more and more brownfield properties participate in the TIG program. However, as also noted in Hamilton, as these brownfield TIG programs mature, the retained portion of the TI may eventually be redirected to general revenues or used for other purposes instead of being used for brownfield redevelopment purposes. This defeats the original purpose and benefit of retaining the portion of the annual TI generated by participating brownfield redevelopment projects, which is to spur further brownfield redevelopment on publicly and privately owned brownfield sites. If a municipality, such as Hamilton, that initially intended to do so is not going to utilize the retained portion of the TI for environmental study and brownfield redevelopment on its own properties or to fund pilot brownfield remediation/redevelopment projects or public-private brownfield redevelopment partnerships, then it is preferable for that municipality to simply offer a 100% TIG instead of lower percentage TIG.

As per section 168.3.1 of the Environmental Protection Act and O. Reg 153/04, filing of an RSC is mandatory in Ontario when there is a "change to a more sensitive land use". The purpose of this RSC requirement is to help ensure that the site is environmentally suitable for the proposed use. An MOE acknowledged RSC is regarded by municipalities in Ontario as a proxy sign-off that a site has been assessed and remediated (as and where necessary) in accordance with MOE standards. This system of reliance on the RSC has worked well and continues to be used by most all Ontario municipalities in making decisions on planning applications and brownfield incentive program applications.

With the exception of Brantford and Hamilton, all of the Ontario municipalities in the comparison currently require submission of an RSC when applicants are accessing environmental remediation funding as part of a TIG, regardless of whether or not a mandatory change of use RSC is required as per O. Reg 153/04. Where a change of use RSC is not required by O. Reg 153/04, Brantford allows an applicant to provide an affidavit stating that the property is environmentally suitable for the proposed use, and Hamilton allows a risk assessment to be peer reviewed by a consultant selected by the municipality. Ostensibly, this practice of providing an affidavit or peer review alternative to the RSC in non-mandatory RSC situations has been adopted by a few municipalities in response to complaints from incentive program applicants of increasing delays and complexities in the Province of Ontario's RSC review and acknowledgement process, especially as it relates to risk assessments.

When municipalities are providing funding for environmental remediation or risk assessment through a TIG and/or a development charge reduction, there are three alternatives for ensuring that the brownfield site is or has been made environmentally suitable for the proposed use:

- i) Rely on a submitted and MOE acknowledged RSC, the approach used by most municipalities;
- ii) Rely on an affidavit from the qualified person that states that the site is environmentally suitable for the proposed use; or,
- iii) In-house review or external consultant peer review of all environmental study reports on the property.

The practice of not requiring an RSC when municipal funds are being utilized to remediate or risk assess a property where the proposed development does not represent a change to a more sensitive use as per O. Reg 153/04 raises a number of issues and questions for a municipality. First, it is highly unlikely in the current legislative and regulatory environment that any qualified person (QP) in Ontario would sign an affidavit that attests that a property is environmentally suitable for the proposed use. With regard to peer reviews, few municipalities, with the exception of the City of Toronto which utilizes in-house peer review, have the in-house staff resources to review environmental reports. Furthermore, this practice may actually attract environmental liability to the municipality should the in-house reviewer miss something or make an error.

Municipalities relying on external peer reviews have found that this process is not without issues regarding the time required for external peer reviews and inevitable disagreements between the external peer reviewer and the applicant's qualified person. Furthermore, the use of an external peer reviewer may also attract environmental liability to the municipality should the external peer reviewer miss something or make an error. It is instructive to note that most municipalities in Ontario require an RSC when providing TIG funding and DC reduction funding, regardless of whether or not the development is a change to a more sensitive use. In fact, most municipalities that offer DC reduction funding for brownfields in their DC bylaws write this RSC requirement right into the DC By-law. Finally, it is instructive that the Province's BFTIP program requires mandatory submission of an RSC even in cases where there is not a change to a more sensitive use, and even when a risk assessment is used to achieve that RSC. The established advantages and safeguards of relying on an RSC to demonstrate that a brownfield site has been assessed and remediated (as and where

necessary) in accordance with MOE standards generally tend to outweigh any time and cost savings and the liability risks associated with the currently available alternatives, i.e., QP affidavit, in-house or peer review.

While some of the municipalities in the comparison may not initially have utilized formal agreements to govern their TIGs, all the municipalities now require the applicant to enter into an agreement with the municipality specifying the terms of the funding assistance, obligations of the municipality and the owner, and defaults and remedies. The development and use of these agreements between the municipality and the applicant is critical to the success of the TIG programs and is needed to minimize financial and legal risks to the municipality. Furthermore, review of the standard TIG agreements utilized by several of the municipalities in the comparison show these agreements to be similar. These agreements should only be modified to suit the particulars of each application, e.g., a multi-phase brownfield redevelopment project versus a smaller single phase project.

Municipalities providing financial incentives to promote brownfield redevelopment must eventually address the issue of whether or not to provide funding to polluting owners. The “polluter pays” principle suggests that polluting owners should pay for the cleanup. An extension of this principle to financial incentives suggests that polluting owners should not be permitted to access any government funding for the purpose of environmental remediation. Most Ontario municipalities in fact follow this principle and do not provide TIGs or other major funding to polluting owners of brownfield sites. This is also the case in most U.S. jurisdictions (state and municipal). It is preferable from an environmental justice perspective for municipalities not to provide grants or other major remediation funding to polluting owners. However, in certain situations where the benefits of the brownfield redevelopment project are very significant and there is no alternative, municipal councils may wish to reserve the right to provide financial incentives to polluting owners. For this purpose, municipalities may wish to differentiate between polluting owners who knowingly contaminated their properties and polluting owners who were merely operating under the environmental standards in place at the time.

Best Practice Considerations for the ERASE CIP:

The ERASE Redevelopment Grant Program (RGP) offers a level of funding that is currently competitive with most Ontario municipalities that offer tax increment grants to promote brownfield redevelopment. The ERASE RGP has been well utilized and has produced good results to date. However, the following revisions to the ERASE RGP should be considered:

- 1) Add the “removal of designated substances and hazardous materials” as an eligible cost, but with consideration of a hard cap on these costs. Cap options include a fixed dollar amount, or capping these costs at no more than or some pre-determined percentage of the environmental remediation costs.***

A9 Development Charge Reduction Programs

Five (5) of the 9 municipalities in the comparison (Brantford, Hamilton, Niagara Falls/Niagara Region, Waterloo Region, and Windsor) offer a development charge (DC) reduction on contaminated sites that are remediated and redeveloped, while Ottawa offers a DC deferral. Brantford, Hamilton, Niagara Falls and Windsor allows the eligible costs of environmental studies, remediation and LEED certification (where applicable) approved under their TIG program to be applied against City development charges for the brownfield redevelopment project. If the applicant elects this option, all eligible costs approved under the TIG that are applied against DCs payable are deducted from the TIG to be paid. In Brantford, Hamilton, and Windsor, 100% of the DC payable can be wiped out by the application of eligible costs approved under the TIG, whereas in Niagara Falls up to 75% of the City DC payable can be wiped out by the application of eligible costs approved under the TIG. Ottawa offers a two year deferral of the DC payable based on eligible environmental study, remediation and

LEED certification costs up to a 50% deferral in priority brownfield areas and a 25% deferral in non-priority brownfield areas. Again, this change in Ottawa from a DC reduction to a DC deferral took place in late 2015 and was in response to escalating development charge reductions associated with approved brownfield rehabilitation grants. Development charge reductions on larger brownfield redevelopment projects can often be into the millions of dollars.

It should be noted that both the Region of Niagara and Region of Waterloo offer their own Brownfield DC Reduction Programs. In Niagara, if the brownfield project is located within a Central Area Community Improvement Project Area, e.g., Downtown Niagara Falls, there is an automatic 75% Regional DC Reduction. If the brownfield project is located outside a Central Area Community Improvement Project Area, there is an automatic 50% Regional DC Reduction. An additional 25% or 50% Regional DC Reduction can be obtained (depending on location) if the applicant can demonstrate the inclusion of the requisite number of Niagara Smart Growth Design principles into the proposed development. Separate application has to be made for this Smart Growth component of the Regional DC Reduction to the Region of Niagara. The initial 75% or 50% Regional DC reduction (depending on location) is applied at the time of building permit issuance, with the developer paying the balance of Regional DCs payable at that time. The Region then inspects the as-built project to determine if the applicant has complied with the requisite Smart Growth Design Criteria and if so, then provides a grant equal to the additional 25% or 50% Regional Smart Growth DC Reduction. In Niagara, the Regional DC Reduction amount was not traditionally deducted from the Joint TIG offered by Niagara and its local municipalities. However, the Region of Niagara has now revised its administration of this program and has indicated that if the local municipality deducts its DC reduction from its share of the TIG, the Region will do the same.

In Waterloo, the Region's DC Reduction (Exemption) Program allows the direct remediation costs (plus a pre-determined 20% indirect remediation costs) to be applied against Regional DCs payable, up to 100% of the Regional DCs payable. This makes the Region of Waterloo's DC Reduction program one of the most generous in Ontario. This Regional DC reduction can be applied at the time of building permit issuance if the applicant has filed an RSC and provides their remediation expense invoices well in advance of the building permit issuance to allow time for review and approval of the expenses. Otherwise, Regional DCs must be paid in full at the time of building permit issuance and then a grant will be provided once the remediation expense invoices have been audited and approved. The joint Local Municipality/Waterloo Region TIG is then reduced by the amount of any Regional DC Reduction.

The use of a DC Reduction Program is the most powerful incentive tool for promoting brownfield redevelopment and a number of Ontario municipalities leading the way on brownfield redevelopment (both lower and upper tier) offer some form of DC reduction. Representatives from several of the municipalities using the DC reduction tool such as the Region of Waterloo and Hamilton, along with a number of major developers of brownfield sites have consistently indicated that this particular incentive is the single most attractive and effective incentive program to promote brownfield redevelopment. As opposed to TIGs, which are paid out over a number of years after project completion, a DC reduction offers an up-front cost savings to the developer because development charges are paid at the building permit stage, or at the latest, upon project completion. Development charge deferral programs, while they can save significant financing costs on large brownfield redevelopment projects, are not nearly as effective as DC reduction programs.

Furthermore, most of the municipalities with DC Reduction Programs have chosen to address the fiscal challenge of providing DC reductions by deducting the amount of the DC reduction from any TIG provided to the applicant. Therefore, over time, the municipality will eventually collect the amount of the DC reduction in the form of increased property taxes rather than returning this increase in property taxes to the developer in

the form of a TIG. This increase in property taxes collected and retained by the municipality can be used to help offset or eliminate the shortfall in capital cost recovery from the DC reduction for brownfields.

A10 Remediation Loan

The only municipality in the comparison that offers a loan for remediation is the City of Hamilton. This program was introduced by the City of Hamilton as a pilot program in 2010 through an amendment to its ERASE CIP. This program offers a low interest loan (1% below prime) for the remediation of brownfield properties being developed/redeveloped for residential or residential/commercial use within Downtown Hamilton and the West Harbourfront. The low interest loan is equal to 80% of the cost of remediating a property to a maximum of \$400,000 per property/project. The original maximum amount was \$100,000, but this was increased to \$400,000 because it was found that \$100,000 was too low to complete most remediation projects in this area.

This program is obviously designed to provide some financial assistance early in the brownfield redevelopment process, i.e., to help finance the remediation and act as a bridge until property owners receive their ERASE Redevelopment Grant payments. The loan is provided to the successful applicant in progress payments based on 80% of the actual qualifying remediation costs incurred. Such progress payments will be advanced within 30 days of submission of the property owner's request for a loan draw. There is a limit of six draws, spaced no less than 30 days apart. The annual interest rate on the loan is 1% below the prime rate as established by the Royal Bank of Canada. Such rate shall be established at the time the first instalment of the loan is advanced by the City and reset annually on the anniversary date of the first advance.

The applicant has the option of repaying the loan through the assignment of TIG payments under the City's ERASE Redevelopment Grant Program against the loan. This is a positive and innovative approach to repayment of the loan. In the event that the full 10 year grant amount is not sufficient to repay the loan in its entirety, supplemental payments from the applicant will be required. The loan, together with interest can be prepaid in full by the owner without notice, penalty or bonus at any time. To date, only two applications have been approved under this loan program by the City of Hamilton over the six year period that it has been in existence.

While the addition of this program to the ERASE Programs provides an extra up-front incentive to redevelop brownfield properties in the Downtown Hamilton and the West Harbourfront area, uptake of the program has been moderate to date. Furthermore, based on the \$400,000 program cap, the real benefit of the program likely lies in promoting smaller brownfield redevelopment projects in the Downtown Hamilton and the West Harbourfront Area. It is not clear that this program will be necessary in the long-term based on the large scale of development (including brownfield redevelopment) being planned for and anticipated in Downtown Hamilton and especially in the West Harbourfront Area. Increases in demand and market value in Downtown Hamilton, and eventually in the West Harbourfront Area, combined with the other ERASE Incentive Programs and the Downtown Incentive Programs available from the City of Hamilton, may be sufficient to spur all but the smaller brownfield redevelopment projects in both Downtown Hamilton and the West Harbourfront Area.

Best Practice Considerations for the ERASE CIP:

The following revisions to the Downtown/West Harbourfront Remediation Loan Program (RLP) should be considered:

- 1) Sunsetting the program at the end of 2020; and/or,***
- 2) Restricting the program to smaller and medium sized brownfield redevelopment projects where the cost of remediation represents a significant component of total project costs.***

A11 Municipal Tipping Fees Grant

Cornwall is the only municipality in the comparison that offers a discounted tipping fee at its own landfill. This is not a common practice and only a handful of municipalities in Ontario, e.g., Welland, offer discounted tipping fees at their municipally owned landfills for contaminated soils. Rather, most municipalities in Ontario simply include the cost of tipping fees as an eligible cost of environmental remediation in their tax increment based grant programs.

A12 Planning and Building Permit Fees Grant Programs

Only 3 of the 9 Ontario municipalities in the comparison offer planning and building permit fee grants or rebates to promote brownfield redevelopment. The City of Cornwall offers a grant equal to 100% of the planning and building permit fees paid on a brownfield redevelopment project. The City of Windsor also offers a grant equal to 100% of the planning and building permit fees paid on a brownfield redevelopment project, but this grant is paid as part of the TIG rather than as a stand alone grant at the end of the project. The City of Ottawa offers a grant equal to 30% of the building permit fee, but only for brownfield redevelopment projects in its priority brownfield area.

Planning and building permit fee grants or rebates by themselves do not appear to be significant inducements for brownfield redevelopment, and that is likely why most municipalities do not offer them to promote brownfield redevelopment. The building permit fee component is likely the only significant incentive on large brownfield redevelopment projects. However, the municipality should keep in mind that even if the building permit fee is waived or granted back, the building department must still conduct the review of the application and inspections. While intended as an “extra” inducement on brownfield sites, with the exception of building permit fees on large projects, planning fee rebates become virtually an afterthought when compared to potential remediation and demolition costs. Fee rebate programs can also be cumbersome to administer. Therefore, planning and building permit fee grants/rebates are not considered a necessary incentive to promote brownfield redevelopment.

A13 Payment in Lieu of Parkland Dedication Grant Program

Only one municipality in the comparison offers a Payment in Lieu of Parkland Dedication Grant. The City of Cornwall offers a grant at the subdivision stage that is equal to the parkland dedication fees paid by the applicant on a brownfield redevelopment project. However, this grant is offered only on brownfield sites where land dedication is not feasible, and the grant is entirely at the discretion of Council. Preference is given to key brownfield sites identified by the City of Cornwall. The City of Hamilton's Parkland Dedication By-law (By-Law No. 09-214) contains a provision that provides a favourable calculation of the payment in lieu of parkland dedication for higher density brownfield redevelopment projects in the older industrial area and West Harbourfront Area of the City.

On some large brownfield sites, the payment in lieu of parkland dedication can be very significant. Therefore, in theory, this type of grant could be very attractive to a developer considering a brownfield site. On the other hand, this type of grant really has no relationship to the remediation or other brownfield related costs of a brownfield redevelopment. Providing this type of grant could also directly impact the ability of the municipality to provide much needed parkland. This is a particularly important consideration where the brownfield redevelopment project is increasing the residential density of the site, e.g., conversion or redevelopment of a former industrial use to a residential use. Therefore, the provision of a payment in lieu of parkland dedication grant is not considered a necessary incentive to promote brownfield redevelopment.

A14 U.S. Municipal Brownfield Incentive Programs

Cuyahoga County (upper tier) in Ohio has a Brownfield Community Assessment Initiative that provides professional services to conduct Phase I and Phase II environmental site assessments on Brownfield contaminated with hazardous substances and/or petroleum products. The County contracts directly with experienced environmental consulting firms to conduct the assessment work. The most appropriate consultants will be assigned to a selected project. Eligible applicants are public entities (including lower tier municipalities), non-profit organizations, businesses, and developers located in the County. Funds are not available to any parties that caused or contributed to the contamination of the site. Through June 2015, the Cuyahoga Brownfield Community Assessment Initiative had funded over \$4 million for the assessment of 165 sites comprised of over 4,200 acres.

Cuyahoga County also has a Brownfield Redevelopment Fund (BRF) which provides low interest loans of up to \$1,000,000 per project to pay for land acquisition, environmental studies, site clearance and demolition (Cuyahoga County of Ohio). This program is available to private developers and lower tier municipalities within Cuyahoga County. Projects are selected using the successful criterion that has been established through the County's BRF program on a first come first serve basis. BRF dollars are focused on cleanup activities associated with hazardous substance contamination at brownfield sites. Cleanup activities must be done under the Ohio EPA Voluntary Action Program (VAP) and be issued a "No Further Action" (NFA) letter which is similar to but more definitive than Ontario's RSC. Borrowers cannot be potentially responsible parties (PRPs) or responsible parties. County staff prepare and submit competitive grant applications to the U.S. EPA Revolving Loan Fund (RLF) and the State of Ohio (Clean Ohio Funds) in order to receive the funds needed for the BRF. As of September 2014, the County had participated in funding the cleanup of 34 of these sites through its BRF resulting in the remediation of over 130 acres, creation or retention of over 2,200 jobs, and leveraging of over \$450 million in development. An additional 86 of the 159 sites moved forward with private funding at an approximate investment estimated to exceed \$550 million. Source: www.cuyahogacounty.us website.

The City of Milwaukee in Wisconsin, offers a Brownfields Site Assessment Matching Grant Program through its City Redevelopment Authority (RACM), to encourage the investigation and redevelopment of industrial and commercial properties. Grants of up to \$25,000 (or one-half of the cost, whichever is less) are available to assist with Phase II Site Assessments and related work such as remedial action plans and confirmatory sampling.

Similar to environmental study grant requirements in Ontario municipalities:

- the Applicant has completed an Phase I ESA to document potential environmental concerns and to focus further investigation;
- the Applicant must own or intends to buy the property;
- the site is to be redeveloped;
- the applicant agrees to report on results of testing and redevelopment plan;
- competitive bids for covered services must be obtained from at least two qualified providers; and,
- the applicant must be current on all property taxes and free from code violations.

Similar to Cuyahoga County, the City of Milwaukee RACM has a remediation loan fund that provides low interest loans to pay for land acquisition, environmental studies, site clearance and demolition. The City's Economic Development Authority (MEDA) manages the remediation loan fund for the RACM. Since 1990, Milwaukee has been actively involved in the redevelopment of at least 87 brownfield redevelopment projects. Successful redevelopment projects have included manufacturing, residential, retail, and commercial projects.

The City of Milwaukee has invested over \$21.7 million in the testing and clean-up of these properties. To date, \$766.1 million of redevelopment investment and 3,384 jobs have been created/retained as a result of these redevelopment projects.

Source: www.city.milwaukee.gov/BrownfieldRedevelopment#.WHk9MdQrLX6 web site.

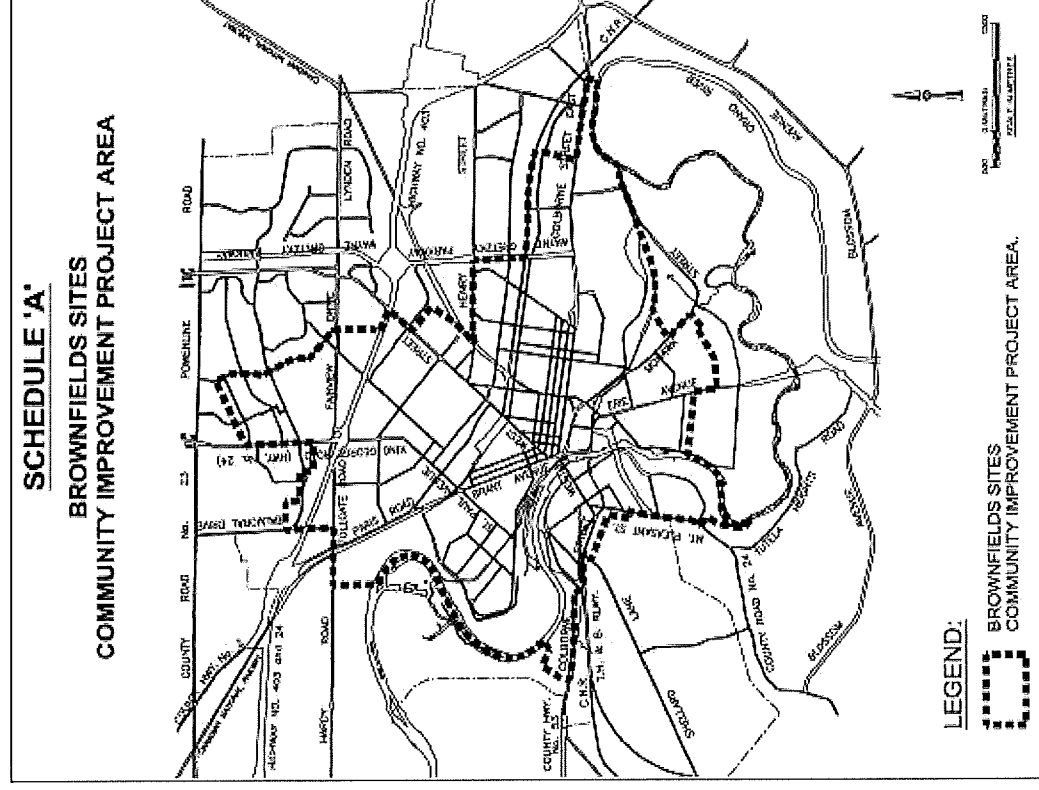
ATTACHMENT 1

Summary of Municipal Brownfield Redevelopment Incentive Programs

City of Brantford, Ontario

Brownfields CIP Adopted: 2006.

Geographic Coverage: The Community Improvement Project Area includes the Downtown and the older part of the urban area including older employment areas and residential neighbourhoods.



Incentive Programs Offered:

Program Name	Eligible Costs	Type and Amount	Program Notes
1) Brownfields Property Tax Assistance Program (BFTIP)	Phase I ESA, Phase II ESA, Risk Assessment, RWP, environmental remediation (includes removal of designated substances and hazardous materials)	Cancellation of 100% of municipal and education property taxes. No duration limit specified, but generally 3 to 5 years. Actual duration to be determined on a case by case basis.	
2) Brownfield Performance Tax Grant Back Program	As in 2) above, plus costs associated with building and property rehabilitation, and construction/removal of on-site infrastructure works, e.g., water, sanitary and storm services, roads.	Tax Increment (TI) Based Grant. Annual Grant = 100% of TI for up to 20 years or repayment of eligible costs. Actual duration determined on a case by case basis.	
3) Brownfields Development Charge Reduction	Phase I ESA, Phase II ESA, Risk Assessment, RWP, environmental remediation (includes removal of designated substances and hazardous materials) for the issuance of an affidavit that the lands are suitable for the proposed use, or the filing of an RSC, or the cost of complying with any Certificate of Property Use (CPU) issued under the Environment Protection Act (EPA).	Up to 100% DC Reduction. Offsets the Tax Grant Back program. The DC Reduction is net of any other grant provided by the City for eligible work.	

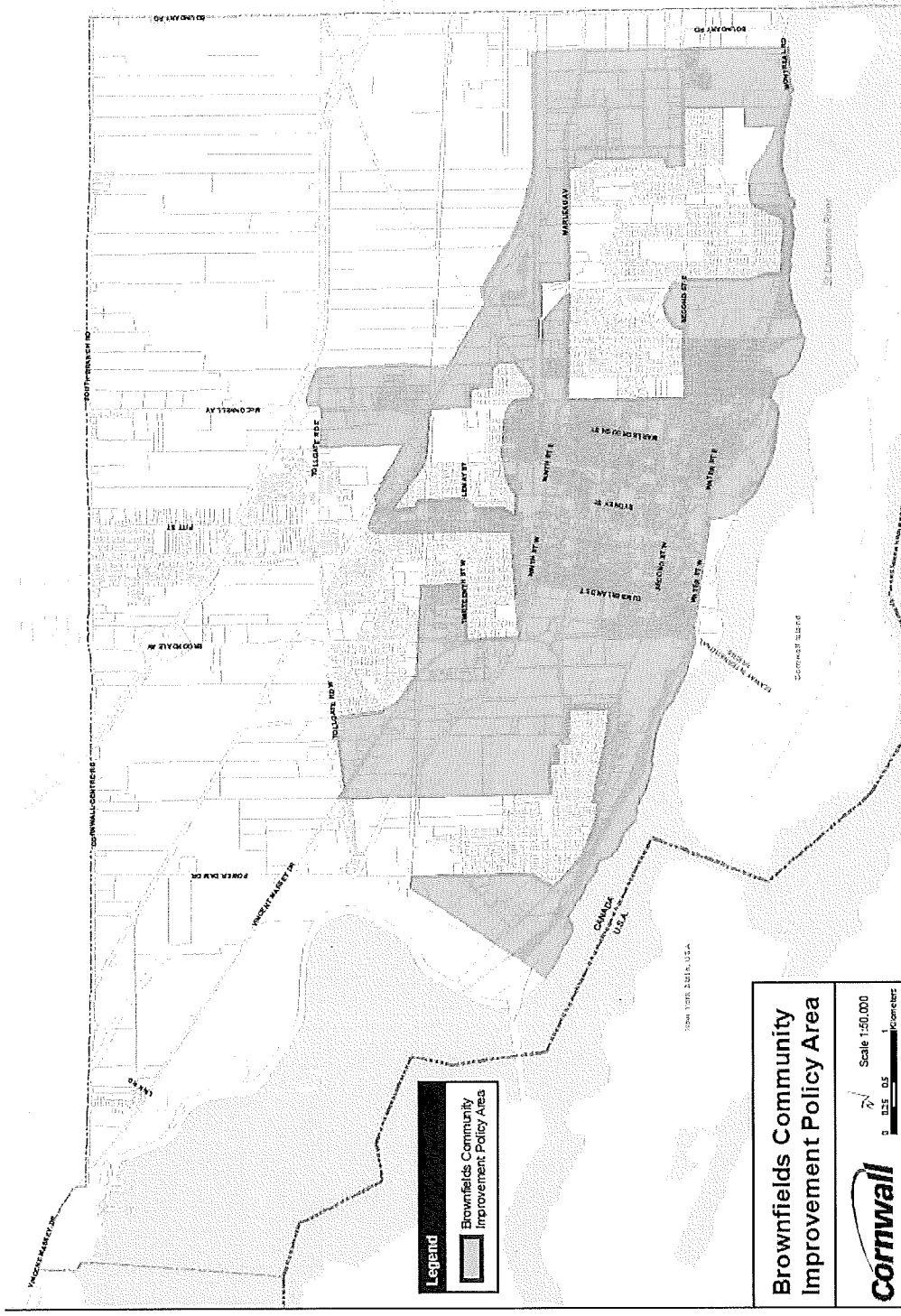
General Comments:

Applications for the BFTIP are evaluated by the Brownfield Technical Advisory Committee (made up of staff members) and the Community Advisory Committee (2 councilors and 7 citizens). The applicant must attend a meeting with the Community Advisory Committee. The joint decision of the Brownfield Technical Advisory Committee and the Community Advisory Committee is then forwarded to Council. This multi-layered approval process appears to have the potential to be cumbersome, time consuming and overly onerous. While the Brownfield CIP did contain an Environmental Study Grant Program, it was never actually offered. Only a few Brownfield Performance Tax Grant Back Program applications have been approved since inception of the CIP. Since the Brownfield CIP was approved, the City of Brantford has vested a number of brownfield sites and paid for environmental site assessments and remediation on these sites.

City of Cornwall, Ontario

Brownfields CIP Adopted: 2005, revised several times since 2005.

Geographic Coverage: Brownfields Strategy Community Improvement Policy Area – captures most of the City's "urban" land, with the exception of a number of stable residential neighbourhoods and future development areas within the City's new Industrial Park.



Incentive Programs Offered:

Program Name	Eligible Costs	Type and Amount	Program Notes
1) Project Design Study Grant Program	Development Feasibility Study and Design Work – available only to recipients of ESA Grant	Grant = 50% of cost of feasibility study to maximum grant of \$7,500. Maximum grant assistance to individual applicant (all sites) = \$42,500.	
2) Environmental Site Assessment (ESA) Grant Program	Phase II ESA, Risk Assessment, Remedial Work Plan (RWP)	Grant = 50% of cost of study to maximum grant of \$15,000. Maximum grant assistance to individual applicant (all sites) = \$45,000.	Preference given to key brownfield sites identified by City.
3) Brownfields Property Tax Cancellation Assistance Program	As in 2) above, plus: i) environmental remediation; ii) clean fill, grading and compaction to replace contaminated soils; iii) filing of RSC and Certificate of Property Use (CPU); iv) site monitoring, and risk management measures; v) environmental insurance; and, vi) At discretion of Council, demolition, and on-site infrastructure works triggered by existence of contamination and requirement for remediation (only for municipal portion of tax assistance).	Cancellation of 100% of municipal and education property tax increase up to maximum 3 years for education portion and 5 years for City portion.	
4) Brownfield Rehabilitation Grant (Tax Based) Program	As in 2i) to 2v) above, plus: i) At the discretion of Council, demolition, and improvement or reconstruction of off-site infrastructure works (water, sanitary and storm).	Tax Increment (TI) Based Grant. For residential development, Annual Grant = 100% of TI for up to 10 years or up to repayment of eligible costs. For non-residential development, Annual Grant = sliding scale with 80% of TI in years 1 and 2, 70% of TI in years 3 and 4, 60% of TI in years 5 and 6, 50% of TI in years 7 and 8, and 40% of TI in years 9 and 10, or up to repayment of eligible costs.	Portion of TI retained by City used to fund other brownfield initiatives. Focus of this grant program is on key brownfield sites identified by City.
5) Discretionary Municipal Tipping Fees Grant Program	Tipping fees for non-hazardous material at the municipal landfill. Other non-hazardous soil treatment facilities or non-hazardous landfill sites may also be considered.	Grant at discretion of Council. Grant = up to 50% of cost of tipping fees. No maximum specified.	A Guideline for delivery of soils to Landfill Site is provided by the City.

Program Name	Eligible Costs	Type and Amount	Program Notes
6) Municipal Planning/Development Fees Grant Program	Official Plan Amendment (OPA), Zoning By-Law Amendment (ZBA), Site Plan, Consent/Minor Variance, Plan of Subdivision/Condominium, Building Permit Fee	No maximum specified.	
7) Payment-in-Lieu of Parkland Dedication Program	Parkland dedication fees of 2% for industrial/commercial and 5% for residential and other.	Grant at discretion of Council. Grant of fees paid at subdivision approval stage.	Preference given to key brownfield sites identified by City.

General Comments:

Applications are evaluated by the Cornwall Brownfields Strategy Evaluation Committee (made up of general managers of several departments (Planning, Public Works, Finance, Economic Development), one member of Council and three community group members. Projects are required to demonstrate a “significant leveraging” of private sector investment as a result of public sector assistance, but this is not defined in the application materials. The Cornwall Program is very robust and Council has a significant amount of discretion with respect to eligible costs and grant amounts approved. The Rehabilitation Grant Program has been used to approve a few very large brownfield redevelopment projects with grants provided by the municipality in the millions of dollars to these projects.

City of Guelph, Ontario

Brownfields CIP Adopted: 2004, updated in 2012.

Geographic Coverage: All land within the municipal boundaries of the City of Guelph.

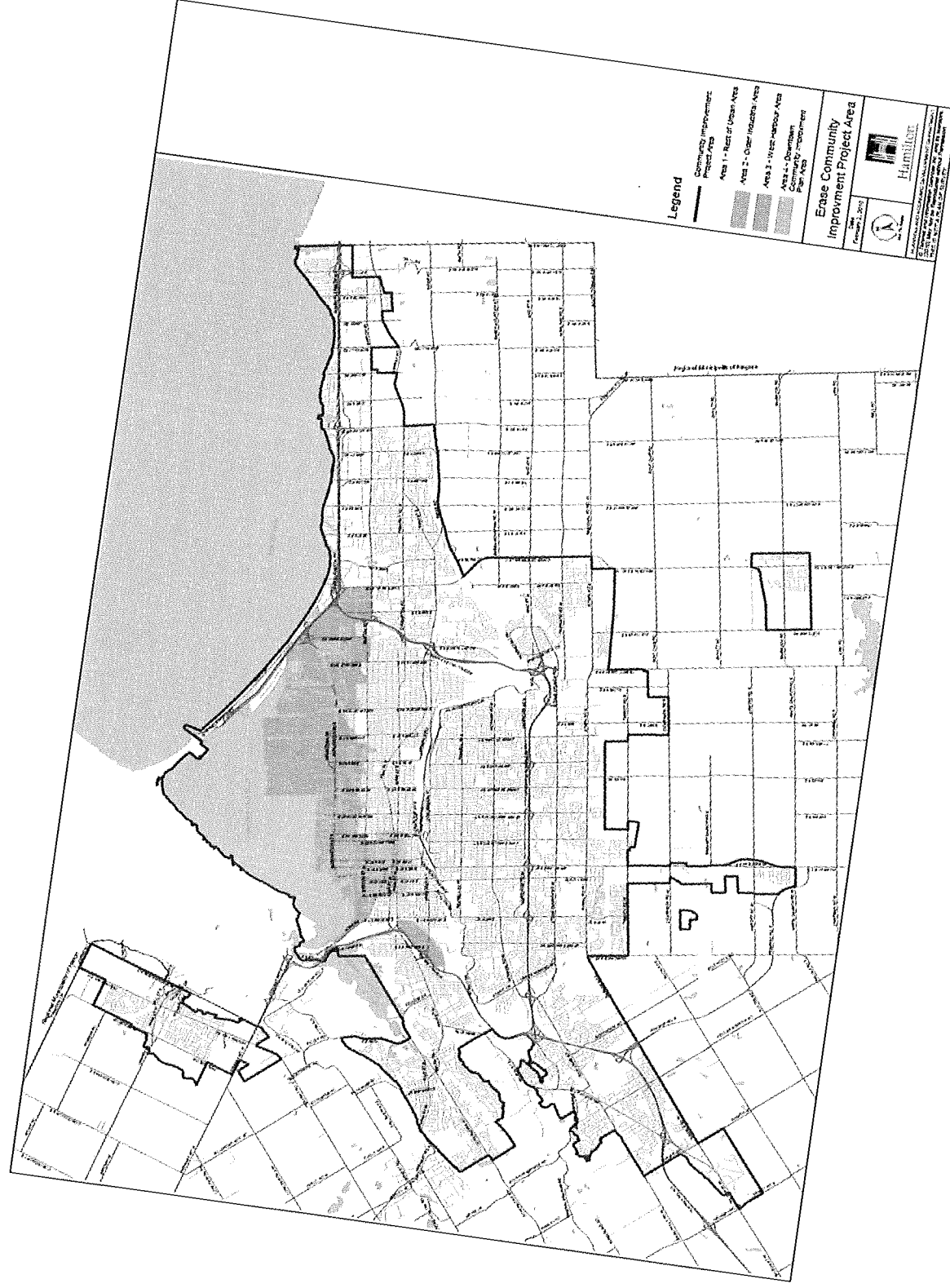
Incentive Programs Offered:

Program Name	Eligible Costs	Type and Amount	Program Notes
1) Environmental Study Grant Program	Phase II ESA, RWP, Designated Substances and Hazardous Materials Survey, Risk Assessment and Risk Management Plan	Grant = 50% of cost of study to maximum grant of \$15,000. Maximum of 2 studies per property/project and maximum grant of \$30,000 per property/project.	
2) Brownfields Property Tax Assistance Program	As in 1) above, plus: i) environmental remediation; ii) clean fill, grading and compaction to replace contaminated soils; iii) filing of RSC and CPU iv) site monitoring and risk management measures; v) environmental insurance.	Cancellation of municipal and education property tax increase for up to 3 years.	
3) Tax Increment Based Grant (TIBG) Program	As in 2) above, plus: i) demolishing buildings; ii) 50% of building rehabilitation works; and, iii) achieving any level of LEED Certification including: a) base plan review by certified LEED accredited professional; b) preparing working drawings to LEED standard; c) submitting and administering constructed element testing and certification used to determine LEED designation; d) increase in material/construction cost of LEED components over standard building code or City requirements.	TI Based Annual Grant = 80% of TI for up to 10 years or up to repayment of eligible costs.	

City of Hamilton, Ontario

ERASE Brownfields CIP Adopted: 2001, revised in 2004 and 2010. Community improvement project area expanded from older industrial area (2001) to the entire urban area in 2004. Program additions and minor modifications made in 2012.

Geographic Coverage: The municipality's entire urban area with four distinct sub-areas, including 1 Rest of Urban Area, 2 Older Industrial Area, 3 West Harbour Area, and 4 Downtown CIP Area.



Incentive Programs Offered:

Program Name	Eligible Costs	Type and Amount	Program Notes
1) Environmental Study Grant Program (SGP)	Phase II ESA, RWP, Risk Assessment.	Grant = 50% of cost of study to maximum grant of \$12,000 per study. Maximum of 2 studies per property/project and maximum grant of \$25,000 per property/project.	
2) ERASE Tax Assistance Program	As in 1) above, plus: i) environmental remediation; ii) filing of RSC; iii) site monitoring and risk management measures.	Cancellation of 80% of the municipal and education property tax increase for up to 3 years.	Portion of Tax Assistance retained by City is used to fund the ERASE Municipal Acquisition and Partnership Program (MAPPP).
3) ERASE Redevelopment Grant Program (RGP)	As in 2) above, plus: i) 50% of costs of achieving any level of LEED Certification including: a) consultation costs; b) energy modelling; c) certification fees; d) increase in material/construction cost of LEED components over standard building code or City requirements; ii) demolition costs (Areas 2 and 3 only); iii) removal of existing on-site infrastructure prior to replacement up to a maximum of 25% of construction/improvement costs for of on-site public works (water services, sanitary sewers and storm sewers) (Areas 2 and 3 only); iv) Certain relocation/removal costs for existing and operating industrial manufacturing and transportation uses, where such costs relate to or contribute directly to the actual remediation and rehabilitation of the site (Area 3 only).	TI Based Grant Annual Grant = 80% of TI for up to 10 years or up to repayment of eligible costs.	Portion of TI retained by City is used to fund the ERASE MAPPP.

Program Name	Eligible Costs	Type and Amount	Program Notes
4) ERASE Development Charge Reduction	The applicant with an approved ERASE RGP will have the option of applying the eligible costs in 2) and 3i) above against development charges payable (after any demolition charge credits are applied). If applicant chooses to exercise this option, eligible costs in 2) and 3i) applied against development charges payable will be deducted from eligible costs under the ERASE RGP. Residential development in Area 2 is not eligible for this program unless it is a conversion from a former industrial/commercial use. Industrial development in Area 3 is not eligible for this program.	Eligible environmental study, remediation and LEED certification costs as per RGP can be deducted from City development charges payable up to 100% DC reduction. Offsets the Redevelopment Grant.	Program provides option to developer to take certain eligible costs as a DC reduction or a TIG.
5) Downtown Hamilton/West Harbourfront Remediation Loan Program	As in 2) above.	Low interest rate loan (1% below prime) = 80% of cost of remediation of properties being developed or redeveloped for residential or commercial use only in Area 4. Maximum loan = \$400,000 per property/project. Loan can be repaid through assignment by applicant of grant payments under the ERASE RGP back to City.	Loan acts as a bridge until the property owner receives their ERASE RGP or Hamilton Downtown Property Improvement Grant.

General Comments:

This program has been very successful since inception and continues to be well utilized. A total of 145 Study Grant applications have been approved⁷ since 2001 for a total Study Grant amount approved of approximately \$1,411,750 allowing the environmental study of approximately 383 acres (155.1 ha.) of land.

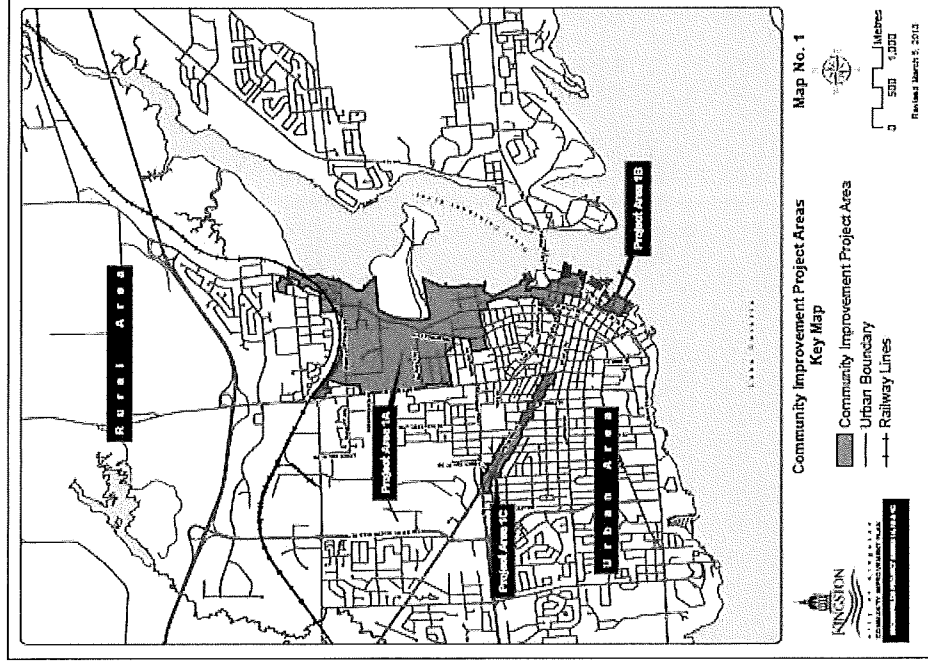
A total of 44 Redevelopment Grant Applications have been approved since 2001 for a total Redevelopment Grant amount of approximately \$32,100,156. These projects will result in the remediation and redevelopment of 213.0 acres (86.2 ha.) of land. To date, 25 sites totaling 123.0 acres (49.8 ha) have been completely remediated. Construction has been completed on 16 of these 25 sites and total construction expenditures on these 16 sites is \$116,145,820 including the construction of approximately 500 new residential units, 600,000 sq.ft. of industrial/commercial space, and the creation of 325 jobs. The ERASE Program is currently being reviewed by the City of Hamilton.

⁷ Includes 2 applications in due diligence.

City of Kingston, Ontario

Brownfields CIP Adopted: 2005, revised in 2006 and 2013. Revisions twice expanded the project area and included some housekeeping amendments.

Geographic Coverage: Three distinct project areas. Project Area 1A comprises the Old Industrial Area of the former City of Kingston, the lands along the Inner Harbour of the Great Cataraqui River, and a portion of the downtown, including a four-and-a-half block area known as the North Block Central Business District. Project Area 1B includes the property between Lake Ontario and Ontario Street known as Block 'D', as well as a few other parcels of land to the north-west of Ontario Street. Project Area 1C comprises the Williamsville Main Street Area along both sides of Princess Street between Division Street and the Bath Road/Concession Street intersection.



Incentive Programs Offered:

Program Name	Eligible Costs	Type and Amount	Program Notes
1) Initial Study Grant Program	Phase II ESA, Risk Assessment, RWP	Grant = 50% of cost of study to a maximum of 2 studies per property and maximum grant of \$20,000 per property.	
2) Brownfields Financial Tax Incentive (BFTIP) – same as Tax Assistance	As in 1) above, plus: i) environmental remediation; ii) clean fill, grading and compaction to replace contaminated soils; iii) filing of RSC and CPU; iv) environmental insurance; v) cost of financing (interest charges) of preparing the studies and undertaking the environmental remediation.	Cancellation of municipal and education property taxes (not just the increase) for up to 3 years.	
3) Tax Increment Based Rehabilitation Grant (TIBRG) Program	As in 2) above, plus cost of: i) Building demolition; ii) Environmental monitoring and management measures; iii) 50% of constructing/improving on-site infrastructure (water, sanitary, storm, gas, hydro and communication utilities); iv) Legal costs for brownfield related agreements and the RSC; v) MPAC estimate of assessment value; vi) Achieving any level of LEED Certification including: a) base plan review by certified LEED accredited professional; b) preparing working drawings to LEED standard; c) submitting and administering constructed element testing and certification used to determine LEED designation;	TI Based Annual Grant = 80% of TI for up to 10 years or up to repayment of eligible costs.	

General Comments:

The City of Kingston is currently reviewing its brownfield incentive programs.

Waterloo - Cities of Kitchener, Cambridge and Waterloo, and Region of Waterloo

Brownfields CIP Adopted: Kitchener – 2003, amended in 2008; Cambridge – 2010; Waterloo - 2013.

Geographic Coverage: The entire Urban Area of each municipality.

The three municipalities in Waterloo partner with the Region of Waterloo to offer brownfield redevelopment incentive programs.

Incentive Programs Offered:

Program Name	Eligible Costs	Type and Amount	Program Notes
1) Phase II ESA Study Grant Program	Phase II ESA, Risk Assessment and Risk Management Plans.	Grant = 50% of cost of study to maximum grant of \$40,000 per site.	Program is offered and administered by the Region of Waterloo.
2) Brownfields Tax Assistance Program	Direct remediation costs as in 1) above, plus: i) environmental remediation; ii) clean fill, grading and compaction to replace contaminated soils; iii) site monitoring and risk management measures.	Cancellation of 100% of municipal and education property tax increase up to maximum 3 years for education portion and 5 years for City portion.	
3) Joint Tax Increment Grant (TIG) Program	Direct remediation costs as in 2) above, plus: i) building demolition only if related to remediation; plus, Indirect remediation costs to a maximum of 10 % of above-noted eligible direct remediation costs (i.e. planning and legal fees, financing costs associated with remediation, insurance premiums, assessment estimates, preparation and filing of RSC).	TI Based Annual Grant = 100% of municipal TI (includes City and Regional portion) for up to 10 years or up to repayment of eligible costs.	Separate approval of the applications is required from the lower-tier municipality and the Region.
4) Development Charge Exemption	Direct remediation costs as in 2) above, plus: i) building demolition only if related to remediation, plus, Indirect remediation costs to a maximum of 20 % of above-noted eligible direct remediation costs (i.e. planning and legal fees, financing costs associated with remediation, insurance premiums, assessment estimates, preparation and filing of RSC, audit of invoices).	Up to 100% Regional DC Reduction. Offsets the Joint TIG.	Program is offered and administered by the Region of Waterloo.

General Comments:

The Region of Waterloo assists the lower tier municipalities with administration of the Joint TIG Program. The brownfield redevelopment incentive programs in Waterloo are “back-end” programs, i.e., applicants apply after the remediation has been completed. This aspect has created a number of issues with applicants around documentation and verification of eligible costs. Otherwise, the programs have been well utilized for a number of projects, particularly in Kitchener and Cambridge. The Region of Waterloo is currently reviewing its brownfield redevelopment incentive programs.

Niagara Falls - City of Niagara Falls, and Region of Niagara

Brownfields CIP Adopted: 2006.

N.B. Several of the lower-tier municipalities in Niagara have Brownfield CIPs similar to Niagara Falls and partner with the Region of Niagara to offer brownfield redevelopment incentive programs.

Geographic Coverage: The municipality's entire urban area, with three distinct sub-areas, including Area 1 - Pilot Project Area, Area 2 - Other General Areas for Community Improvement, and Area 3 - Rest of Urban Area.



- Area 1 - Pilot Project Area
- Area 2 - General Areas for Community Improvement
- Area 3 - Rest of Urban Area

Incentive Programs Offered:

Program Name	Eligible Costs	Type and Amount	Program Notes
1) Environmental Study Grant Program	Phase II ESA, RWP, Risk Assessment/Risk Management Plans.	Grant = 50% of cost of study to maximum grant of \$12,500 per study. Maximum of 2 studies per property/project and maximum grant of \$20,000 per property/project.	
2) Brownfields Tax Assistance Program	As in 1) above, plus: i) environmental remediation; ii) clean fill, grading and compaction to replace contaminated soils; iii) filing of RSC; iv) site monitoring and risk management measures; v) environmental insurance.	Cancellation of 100% of municipal and education property tax increase up to maximum 3 years for education portion and 5 years for City portion.	
3) Brownfields Rehabilitation Grant Program	As in 2) above, plus: i) demolishing buildings; ii) building rehabilitation and retrofit works; iii) upgrading on-site infrastructure (water, sanitary and stormwater management facilities); iv) constructing/upgrading off-site infrastructure including roads, water services, sanitary sewers, stormwater management facilities, electrical and gas utilities, where required to permit remediation, rehabilitation and/or adaptive reuse of the property.	<p>TI Based Annual Grant = 80% of municipal TI (includes City and Regional portion) for up to 10 years or up to repayment of eligible costs. Eligible costs and duration of Grant depends on sub-area where project is located and whether or not the property requires environmental remediation.</p> <p>If property requires environmental remediation, all costs as per 2) and 3) are eligible, and duration of grant is as follows: Area 1 = up to 10 years; Area 2 = up to 7 years; Area 3 = up to 7 years.</p> <p>If property does not require environmental remediation, only 3i) - 3iv) are eligible, and duration of grant is as follows: Area 1 = up to 5 years; Area 2 = up to 5 years; Area 3 = No grant available.</p>	Region's TI component matches the lower tier municipality on a percentage basis.

Program Name	Eligible Costs	Type and Amount	Program Notes
4) Development Charge Reduction	The applicant with an approved Brownfields Rehabilitation Grant will have the option of applying the eligible costs in 2) above against development charges payable (after any demolition charge credits are applied) up to 75% of the City development charge payable. If applicant chooses to exercise this option, eligible costs in 2) applied against development charges payable will be deducted from eligible costs under the Brownfields Rehabilitation Grant. An additional 25% City development charge reduction will be provided if the applicant can demonstrate the inclusion of the requisite number of Regional Smart Growth Design principles into the proposed development.	<p>Eligible environmental study and remediation certification costs as per the Brownfields Rehabilitation Grant can be deducted from City development charges payable. Offsets the Redevelopment Grant.</p> <p>The Region of Niagara also offers a Development Charge Reduction Program for Brownfields. If the brownfield project is located within a Central Area Community Improvement Project Area, there is an automatic 75% Regional DC Reduction. If the brownfield project is located outside a Central Area Community Improvement Project Area, there is an automatic 50% Regional DC Reduction.</p> <p>An additional 25% or 50% Regional DC Reduction can be obtained if the applicant can demonstrate the inclusion of the requisite number of Smart Growth Design principles into the proposed development.</p>	<p>The Region of Niagara reviews and evaluates the Smart Growth Design applications.</p> <p>The Region of Niagara has developed Smart Growth Design Criteria for several different types of land uses. For example, for the Smart Growth Design Criteria for Development of Five or More Storeys, brownfield redevelopment projects must include at least 5 of the 8 Smart Growth Design Criteria in order to obtain the additional 25% or 50% Regional DC Reduction.</p>

General Comments:

The Region of Niagara implemented its Smarter Niagara Incentive Programs in 2003 updated the programs in 2012, and introduced enhanced Smart Growth Design Criteria for their DC Reduction Program in 2015. The Region of Niagara has recently begun a review of both its Smarter Niagara Incentive Programs and DC Reduction Program. Over the last few years, the Region of Niagara has shown an increasing interest in evaluating local brownfield redevelopment incentive and other joint TI applications to ensure they meet Regional goals and interests.

The Region of Niagara very recently made changes to its Development Charge Reduction Program for Brownfields in its new Development Charges By-law. A Development Charge Reduction equal to 100% of eligible remediation costs will now be provided. At the time of preparation of this report, the Region of Niagara's new Development Charges By-law had yet to be adopted. The Region of Niagara will also be reviewing all of its Smarter Niagara Incentive Programs, including its participation in Brownfields Tax Increment Grants, by the end of 2018.

City of Ottawa, Ontario

Brownfields CIP Adopted: 2007, revised in 2010 and in 2015.

Geographic Coverage: The entire Urban Area and the areas designated "Village" in the City of Ottawa Official Plan. The Brownfields CIP places the highest priority for brownfield redevelopment in the Central Area, Mixed Use Centres, along Mainstreets and within 600 metres of existing or planned rapid transit stations. This area is known as the "Priority Area".

Incentive Programs Offered:

Program Name	Eligible Costs	Type and Amount	Program Notes
1) Project Feasibility Study Grant Program	Structural analyses, evaluation of mechanical and electrical systems, concept plans, market analyses, any other feasibility study as approved by the City	Grant = 50% of cost of feasibility study to maximum grant of \$5,000.	
2) Environmental Site Assessment (ESA) Grant Program	Phase II ESA, Risk Assessment, Remedial Work Plan (RWP)	Grant = 50% of cost of study to maximum grant of \$15,000 per study. Maximum of 2 studies per property/project and maximum grant of \$25,000 per property/project.	
3) Property Tax Assistance Program	As in 2) above, plus: i) environmental remediation; ii) clean fill, grading and compaction to replace contaminated soils; iii) filing of RSC; iv) site monitoring, and risk management measures; v) environmental insurance.	Cancellation of 100% of municipal and education property tax increase up to maximum 3 years.	Available only for properties in the Priority Area.
4) Rehabilitation Grant Program	As in 3) above, plus: i) the following LEED Program Components: a) base plan review by certified LEED consultant; b) preparing new working drawings to LEED standard; c) submitting and administering the constructed element testing and certification used to determine LEED designation; ii) 50% of cost of demolishing buildings; iii) 50% of cost of building rehabilitation and retrofit works; iv) 50% of cost of upgrading on-site infrastructure including water services, sanitary sewers and stormwater management.	TI Based Annual Grant = 85% of TI for up to 5 years or up to repayment of eligible costs. Eligible cost items 3ii) to 3iv) cannot exceed 15% of total eligible costs.	Eligible demolition, building rehabilitation and on-site infrastructure costs reduced from 100% to 50% in 2010 and 2015.

Program Name	Eligible Costs	Type and Amount	Program Notes
5) Development Charge Deferral	Tipping fees for non-hazardous material at the municipal landfill. Other non-hazardous soil treatment facilities or non-hazardous landfill sites may also be considered.	Eligible cost items 3 and 4i) can be applied as a deferral against DCs up to 50% DC Deferral for projects in Priority Areas, and up to 25% DC Deferral for projects in Non-Priority Areas. DC deferral for 2 years after issuance of building permit or 3 years after approval, whichever comes first, at which time payment of DC must be made.	DC Reduction Program was changed to a DC Deferral Program in 2015.
6) Building Permit Fee Grant Program	Building Permit Fee	Grant = 30% of building permit fee in Priority Area. Not available in Non-Priority Area.	

General Comments:

The City of Ottawa has approved several very large grants for large brownfield redevelopment projects in and around the Downtown. The City recently made numerous program changes to reduce costs, including limiting the total of all grants, property tax assistance and development charge reduction to 50% of eligible costs and changing the DC Reduction Program to a Deferral Program.

City of Windsor, Ontario

Brownfields CIP Adopted: 2010

Geographic Coverage: The municipality's entire urban area.

Incentive Programs Offered:

Program Name	Eligible Costs	Type and Amount	Program Notes
1) Feasibility Design Study Grant Program	Structural analyses, evaluation of mechanical and electrical systems, concept plans, market analyses, any other feasibility study as approved by the City	Grant = 50% of cost of feasibility study to maximum grant of \$7,500.	
2) Environmental Site Assessment Grant Program	Phase II ESA, Designated Substances and Hazardous Materials Survey, RWP, Risk Assessment.	Grant = 50% of cost of study to maximum grant of \$15,000 per study. Maximum of 2 studies per property/project and maximum grant of \$25,000 per property/project.	
3) Brownfields Property Tax Assistance Program	As in 2) above plus: i) environmental remediation; ii) cost of preparing an RSC; iii) placing clean fill and grading; iv) installing environmental and/or engineering controls/works; v) monitoring, maintaining and operating environmental and engineering controls/works; vi) environmental insurance premiums.	Cancellation of 100% of the municipal and education property tax increase for up to 3 years.	Portion of Tax Assistance retained by City is used to fund the ERASE Municipal Acquisition and Partnership Program (MAPP).
4) Brownfields Rehabilitation Grant Program	As in 1) and 3) above, plus: i) the following Leadership in Energy and Environmental Design (LEED) Program Components: a) base plan review by a certified LEED consultant; b) preparing new working drawings to LEED standard; c) submitting and administering constructed element testing and certification used to determine LEED designation; d) increase in material/construction cost of LEED components over standard building code requirements to maximum 10% of total construction costs;	TI Based Grant Annual Grant = 80% of TI for up to 10 years or up to repayment of eligible costs.	Portion of TI retained by City is used to fund the ERASE MAPP.

	<ul style="list-style-type: none"> ii) demolishing buildings (excluding permit fees); iii) building rehabilitation and retrofit works (excluding permit fees); iv) development application fees and building permit fees v) upgrading on-site infrastructure including water services, sanitary sewers and stormwater management facilities; vi) constructing/upgrading off-site infrastructure including roads, water services, sanitary sewers, stormwater management facilities, electrical and gas utilities, where this is required to permit remediation, rehabilitation and/or adaptive reuse of the property that is subject of the application. 		
5) Brownfields Development Charge Exemption Program	<p>The applicant with an approved Brownfields Rehabilitation Grant program application will have the option of applying the eligible costs as in 3) above against development charges payable (after any demolition charge credits are applied). If applicant chooses to exercise this option, eligible costs in 3) above applied against development charges payable will be deducted from eligible costs under the Brownfields Rehabilitation Grant.</p>	<p>Eligible environmental study, remediation and LEED certification costs as per RGP can be deducted from City development charges payable up to 100% DC reduction. Offsets the Redevelopment Grant.</p>	<p>Program provides option to developer to take certain eligible costs as a DC reduction or a TIG.</p>

City of Edmonton, Alberta

Program initiated as a pilot in 2006 to deal with contaminated gasoline stations, with limited success. Official program launched in 2011 and then retooled in 2014.

Geographic Coverage: The entire Urban Area.

The program includes the following eligible costs:

- Environmental consulting fees;
- Environmental remediation;
- Groundwater management and disposal;
- Excavation and handling of clean soil;
- Landfill tipping fees;
- Backfill and compaction of imported fill;
- LEED Silver Certification expenses and other discretionary costs.

The program offers the following grants:

Phase I – 80% of the cost of a Phase I ESA to a maximum grant of \$5,000;

Phase II – 80% of the cost of a Phase II ESA to a maximum grant of \$80,000;

Phase III – 50% of the cost of remediation (100% if LEED Silver or better) or the net municipal property tax increase (uplift) over 6 years, whichever is less, dispersed in 6 annual grant payments; or,

Phase IV – 80% of the cost of remediation and exposure control (risk management) to a maximum of \$200,000.

An applicant may apply for one or more grants for different phases but grants will not be issued for both Phase III and Phase IV of any one project. In other words, each project may be eligible for a Phase III or Phase IV Grant but not both.

The amount of the grants provided for Phase I and Phase II ESAs far exceed similar grants provided by the most progressive municipalities in Ontario or anywhere else in Canada. The Phase III Grant is modest in comparison to brownfield tax increment grants offered by municipalities in Ontario, but there is the ability to increase the grant to 100% if the project achieves at least LEED Silver Certification. With a maximum of \$200,000, the Phase IV Grant is likely to benefit smaller and medium sized remediation or risk management projects, but the advantage of this program is that the grant is advanced in installments during the remediation/risk management project instead of the developer having to wait several years to recoup remediation/risk management expenses via an annual tax increment grant payment.

All applications (with the exception of Phase II Grant applications in in Community Revitalization Levy (CRL) Zones are reviewed and approved by the City of Edmonton Brownfield Grant Panel. In CRL Zones, the City of Edmonton Brownfield Grant Panel will recommend either approval or refusal of the application to the City of Edmonton Corporate Leadership Team. Annual grant payments for all grants (including all Phase I, II, III and IV Grants) are limited to \$5,000,000 per year.

The City also supports its Brownfield Redevelopment Grant Program by providing applicants with an Environmental Site Assessment Guidebook which outlines the City's Phase I and Phase II ESA reporting requirements, and a Green Building Checklist which all applicants for new construction must complete and submit with their application.

General Comments:

The program has been well received and used since being retooled in 2014.

APPENDIX B

Review of Hamilton's ERASE Programs

B REVIEW OF HAMILTON'S ERASE PROGRAMS

B1 Staff Identified Program and Administration Issues

Staff indicated that the ERASE programs have been very successful in promoting brownfield redevelopment and achieving the goals of the CIP. Staff indicated that the expansion of the ERASE Project Area in 2005 and the refinements that have been made to the ERASE programs over the years have directly led to the success of the ERASE CIP across the municipality.

City staff currently and previously responsible for administration of the ERASE CIP programs and the revisions to the 2010 ERASE CIP were interviewed as a group and asked a number of questions regarding program content and administration. This was followed up with discussions with individual staff and again as a group.

Based on their experience with the current programs and interactions with applicants, staff were asked to identify any program gaps, constraints, incidences of eligible cost exceedance, misalignment between program goals and results, future program goals, and any other significant program content issues. In response to these questions, staff identified a number of potential enhancements to the ERASE programs and these were further discussed and refined in consultation with staff and also based on best practices in other municipalities.

Staff were also asked about program administration issues such as compliance with information and study submission requirements, application approval processes and adherence to timelines, economic impact data tracking, and program monitoring. Staff did identify a number of program and administrative issues that need to be addressed and methods for addressing these issues were discussed and refined with staff.

The program and administrative issues identified by staff are listed below by program type. Recommendations developed to address these issues are included in the balance of this Appendix.

B1.1 ESG Program

- Prior to and during the consultation with stakeholders, there were enquiries from developers to City staff regarding the inclusion of designated substances and hazardous materials surveys as an eligible cost under the ESG Program, particularly for current or former institutional sites and buildings designated under Parts IV and V of the *Ontario Heritage Act*, where the lack of information on substances such as asbestos and lead paint often make the redevelopment or adaptive reuse of these sites very difficult;
- A number of ESG applications are lagging in the system and not proceeding to report submission and payment of the ESG in a timely fashion;
- The more stringent environmental study and remediation standards introduced in 2011 by the MOE have resulted in a number of Phase II ESA studies done before 2011 or those lagging in the application process becoming stale dated and therefore unusable for purposes of filing an RSC; and,
- There is a much higher number of ESG applications versus ERG applications and this suggests that the ESG Program is being used by some applicants who simply want to fund a Phase II ESA needed for purposes of a property sale, purchase or refinancing, without any real intention of redeveloping the brownfield site.

B1.2 ERG Program

- Prior to and during the consultation with stakeholders, there were enquiries from developers to City staff regarding the inclusion of the costs of abatement/removal of designated substances and hazardous materials as an eligible cost under the ERG Program, particularly for current or former institutional sites and properties designated under Parts IV or V of the *Ontario Heritage Act*, where these costs can be significant and therefore represent a major impediment to redevelopment or adaptive reuse of these sites;
- Some applicants are not providing detailed invoices to support their eligible cost submissions and this makes it difficult for staff to verify eligible costs. Some applicants are submitting invoices for costs that are clearly not eligible. A Guideline that clearly specifies eligible costs and detail requirements for invoice submissions and other supporting documentation could help with this issue;
- While there have only been a few instances of cost overruns of estimated eligible costs, these have happened in the last few years, and these cost overruns have been large, necessitating that staff return to Council for authorization to significantly increase already approved grant amounts;
- City staff are permitting approved applicants who do not wish to file an RSC for ERG applications where there is no change to a more sensitive use the option of submitting their risk assessment studies to the City and have these risk assessments peer reviewed by an environmental consultant (QP) selected by the City, with said peer review paid for by the applicant. This option has allowed applicants to avoid the MOE's lengthy RSC approval process for risk assessments (typically 2 to 3 years). However, use of this option has also resulted in disagreements between the applicant's Qualified Person (QP) and the City's QP with regards to the risk assessment findings, and in turn, this has led to a lengthier ERG approval process than anticipated;
- Uptake of the ERG Program in the City's Bayfront Industrial Area has waned in recent years and the City needs to find a way to improve uptake of the ERG program for industrial redevelopment and expansions in the Bayfront Industrial Area.

B1.3 Loan Program

- With only two loans approved to date, program uptake has been moderate. There was discussion of making the program more attractive by lowering the interest rate to 0%, while changing the term of the loan from 10 years to 5 years, which would match the loan term for the Hamilton TIG Program.

B2 Data and Methodology

City of Hamilton staff responsible for administering the ERASE Programs provided historical data on the following types of ERASE applications from the time the first ERASE CIP was approved in late 2001 to the end of 2016:

- e) ERASE Study Grant (ESG) Program (149 applications);
- f) ERASE Redevelopment Grant (ERG) Program (51 applications);
- g) Downtown/West Harbourfront Remediation Loan (LOAN) Program (2 applications); and,
- h) ERASE Municipal Acquisition and Partnership Program (MAPP) (4 applications).

The list of data variables provided by City staff for the ESG and ERG Program applications is shown in **Attachment 2**.

The consultant worked extensively with City staff to review the available data, identify data errors and discrepancies, and finalize the data spreadsheets. It should be noted that despite best efforts by City staff to assemble all of the data in Attachment 2 for all of the ESG and ERG applications, some of the data listed in Attachment 2 is missing for a few of the ESG and ERG sites.

The available data was then analysed to determine patterns and trends in the historical uptake and impact of the ESG and ERG programs. This data analysis included an analysis of basic information on the status of the ESG and ERG applications and approved grant amounts. The estimated and actual impacts of proposed projects approved under the ERG Program were also examined, including (where data was available), construction value, new residential units built, new industrial/commercial square footage built, and estimated jobs created. The increase in assessment value, property taxes, development charges and building permit fees generated by completed ERG projects was also analyzed. Again, all of the data analysis was subject to data availability.

The analysis contained in this Appendix is one of the most comprehensive, if not the most comprehensive analysis of the uptake and results of a municipal brownfield incentive program ever completed in the over 50 Ontario municipalities that currently offer brownfield redevelopment incentive programs.

As previously mentioned, there are a few missing data points for the ESG and ERG applications. More specifically, missing data points for the ESG applications include:

- Site Area (9 sites missing) – ESG 02-02, ESG 14-03, ESG 14-13, ESG 15-01, ESG 15-02, ESG 15-03, ESG 15-07, ESG 16-01, and ESG 16-04.
- Date the grant was paid - numerous missing sites.

Missing data points for the ERG applications include:

- Estimated grant amount (4 missing) – ERG 13-02, ERG 14-06, ERG 14-07, and ERG 15-07;
- Estimated industrial/commercial square footage – missing for several large projects that have been completed including ERG-03-02 Tinnerman Palnut, ERG-02-02 Paletta, and ERG 06-05 Lowes;
- Estimated construction costs (5 missing) – ERG 12-03, ERG 13-02, ERG 14-06, ERG 14-07, ERG 15-07);
- Assessment at time of application (Applied Assessment) – numerous missing sites;
- Property Tax at time of application (Applied Tax) – numerous missing sites;

Also, there does not appear to have been any regular follow up on the actual number of residential units constructed, actual amount of industrial/commercial space constructed, or jobs created.

The above-noted issues made detailed analysis of the actual economic impacts of completed projects and expected economic impacts of approved project somewhat more difficult. The process of assembling and analyzing the data revealed a number of issues associated with data collection and monitoring, including missing data, which should be addressed via implementation of the following recommendations.

RECOMMENDATIONS:

It is recommended that City staff:

- 1) Check the completeness of data collected for all ESG and ERG applications prior to application processing, ensuring that:**
 - a) all requested data and required estimates for all monitoring variables, including estimates of residential units and industrial/commercial space to be constructed, jobs to be created/retained, and estimated construction value, post-project assessment value and property taxes, have been provided by applicants; and,**
 - b) the construction value estimates provide by applicants are realistic, e.g., by comparison with recent known construction values per unit/per sq.ft. for similar types of construction.**

- 2) Conduct follow up tracking on every ERG application after projects are completed to determine and record accurate actual amounts for:
 - iii) the grant amount paid out and how the grant was applied (against development charges, as an annual TIG, or both); and,
 - iv) all monitoring variables, including number of residential units constructed, industrial/ commercial space (square footage) constructed, number of jobs created/retained, construction value, and post-project assessment value.
- 3) Track and record assessment value and property taxes on all properties participating in the ERG Program year over year from the approval date to at least 10 years out in order to fully capture long-term increases in assessment and property taxes generated by all projects, and especially multi-phase projects that take several years to complete and be captured via property reassessment.
- 4) Formalize the data spreadsheets prepared for this project as a tracking tool for ESG, ERG, LOAN and MAPP applications, and that these spreadsheets be updated as new applications are received, and as current applications are approved and completed.

B3 ERASE Study Grant (ESG) Program

B3.1 Program Uptake

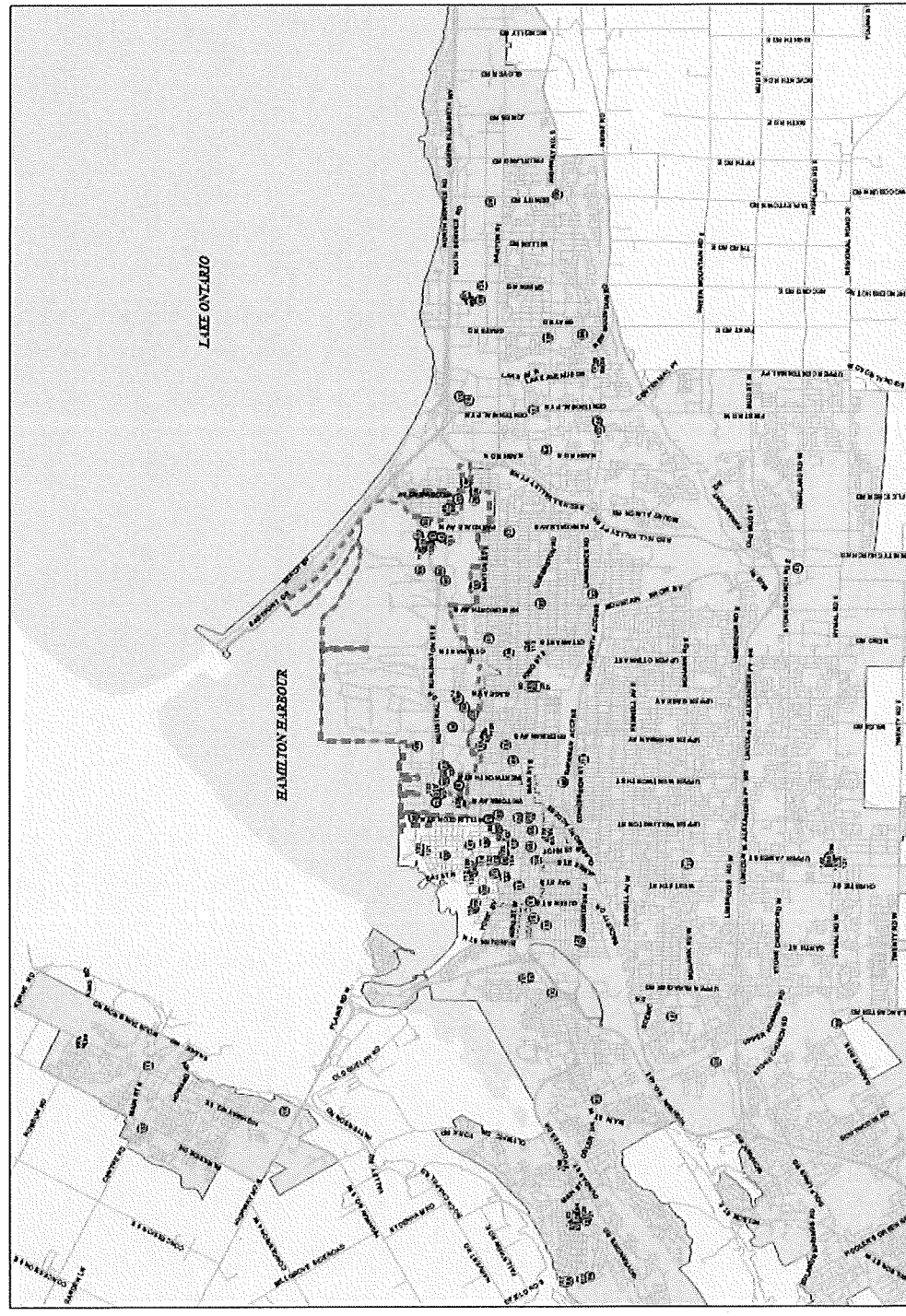
Between program inception in late 2001 and the end of 2016, the City of Hamilton received 149 Environmental Study Grant (ESG) program applications. The location of these applications is shown in **Figure B1**. The status of these applications is shown in **Table 1** below.

Table 1 Status of ESG Applications 2001-2016

149 Received =	432.5 acres
3 Not approved =	3.6 acres
1 Cancelled =	0.3 acres
145 Sub-Total =	428.6 acres
143 approved =	425.0 acres
2 in due diligence =	3.6 acres
24 (16.5%) were (2nd studies) =	45.7 acres (double counted)
121 properties =	382.9 acres to be environmentally studied

The level of uptake of the ESG program has been very high. The relative number of ESG applications not approved or cancelled is very small (less than 3%) and that indicates a good understanding of the program on the part of applicants. The 145 applications approved (including 2 in due diligence) to the end of 2016 represents a grant commitment from the City of \$1,411,748.67, and an average approved grant amount of \$9,736.20 per application. To the end of 2016, the City had paid out \$886,385.42 on 92 applications on 78 properties, an average payout of \$9,634.62 per application.

Figure B1



Approximately 16% of ESG applications to date have applied for a second study in the form of a Supplemental Phase II ESA, Risk Assessment (RA) or a Remedial Work Plan (RWP). The cost to the City of the ESG Program per acre studied for all 145 applications approved is \$3,677.39. This represents excellent value for the ESG program in terms of the cost per acre of land studied and the cost per application. The ESG Program has achieved its goal which is to promote the undertaking of environmental studies so that more and better information is available with respect to the type of contamination and potential remediation costs on brownfield properties.

One concerning statistic is that approximately \$500,113 in approved ESG applications has yet to be paid out. Looking further into this issue, 30 (26.5%) of the 113 ESG applications approved from 2001 to 2014 have not proceeded to payment. For one reason or another, these applicants have not fulfilled the ESG program requirements. These applications should have all been completed and the environmental studies submitted by the end of 2016. Therefore, a relatively large number of ESG applications are lagging in the system and not proceeding to report submission and payment of the ESG in a timely fashion. This represents a substantial drain on the current and future budget for the ESG program, and this may also indicate that there is a tendency on the part of some ESG applicants to either delay or not undertake environmental studies approved under the ESG Program. Therefore, it is imperative that the City determine why these ESG applications are not being completed, and take steps to remedy this situation and prevent it from occurring in the future. This should include the imposition of realistic deadlines for the completion of approved ESG applications.

The number of ESG applications proceeding to an ERG application is an important indicator of program continuity and success. It should be expected that some percentage of environmental studies funded under the ESG program would conclude that a particular brownfield site does not require remediation, and this certainly was the case with a number of the ESG applications. It should also be expected that some percentage of environmental studies would conclude that a particular brownfield site cannot be cost-effectively remediated or risk-assessed based on the proposed land use. However, a reasonable expectation is that a good number of completed ESG applications (where the study has been completed and the ESG paid out) would proceed to an ERG application, and ultimately a completed brownfield redevelopment project

The fact that the City has committed to fund ESG applications on a total of 121 properties to the end of 2016, and ERG applications were filed for only 47 properties during this time period is of concern. To have over 2.5 times the number of ESG application sites versus ERG applications sites suggests that one of two things is occurring:

- i) A very high percentage of the sites being studied under the ESG program either require no remediation or are too heavily contaminated to be cost-effectively redeveloped; or,
- ii) Some applicants are taking advantage of the ESG program to fund environmental studies that are not truly intended for the purposes of determining redevelopment potential of a site, but rather these studies are being done simply for purposes of transacting a land sale, transfer, or for bank financing/re-financing, where there is in fact no real intent on the part of the ESG Program applicant to redevelop the site.

In order to shed some light on this question, the addresses for the 47 sites with ERG applications were compared to the addresses of the 121 properties with ESG applications and it was determined that 29 (62%) of the 47 ERG applications also previously filed ESG applications. This is a positive result and indicates that almost two-thirds of the ERG applications followed on sites that were studied using an ESG application. Looking just at the more recent data, between 2012 and 2016, 17 (85%) of the 20 ERG applications submitted had also filed an ESG application. This makes sense as earlier applications to the ERG program may have already completed their environmental studies prior to the start of the ESG program in 2001.

These findings indicate that studies conducted under the ESG program are effective in leading to ERG applications and brownfield redevelopment projects, where that is in fact the intention of the applicant. Therefore, it would appear that the high number of ESG applications versus ERG applications is very likely a result of the ESG Program being used by some applicants who simply want the program to fund a Phase II ESA needed for purposes of a property sale, purchase or refinancing. This practice should be strongly discouraged by the City as it does not correspond with the intent of the ESG Program and is an ineffective use of ESG program funding.

City staff indicated that the more stringent environmental study and remediation standards introduced in 2011 by the MOE have resulted in a number of Phase II ESA studies done before 2011 or those lagging in the application process becoming unusable (stale dated) for purposes of filing an RSC. Therefore, it is advisable that approved ESG applicants who completed their environmental studies prior to July 1, 2011 be permitted to re-apply for ESG funding.

Finally, there have been enquiries to City staff by potential applicants regarding the inclusion of the cost of designated substances and hazardous materials surveys in the ESG Program eligible costs, particularly for former institutional sites. As noted in the Best Practices Review in Appendix A, a few other Ontario municipalities include these types of studies as eligible costs in their ESG programs.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that:

- 1) City staff contact all applicants with approved but not paid ESG applications outstanding more than two years from date of approval and advise that all approved studies (except for Risk Assessments) must be submitted within 6 months, or approved ESG funding will be cancelled.**
- 2) City staff contact all applicants with approved but not paid ESG applications outstanding less than two years from date of approval and all applicants in due diligence, and advise that all approved studies (except for Risk Assessments) must be submitted within two years of date of ESG approval, or approved ESG funding will be cancelled.**
- 3) For all new ESG applications on a go forward basis, the City include in the Program Guide and Application Form a statement advising that all ESG funded studies except for Risk Assessments must be completed and submitted to the City within two years of application approval, or approved ESG funding will be cancelled.**
- 4) The City develop and include in the ERASE CIP and the ESG Program Guide and Application Form, enhanced submission requirements to restrict the ESG Program only to applicants who have clearly demonstrated their legitimate intention to redevelop a brownfield site. These requirements should include mandatory submission of a letter of intent to develop the property and a preliminary development plan (if planning applications have not yet been submitted).**
- 5) Approved ESG applicants who completed their environmental studies prior to July 1, 2011 be permitted to re-apply for ESG Program funding based on the same rules as applicants applying for the program after July 1, 2011.**

- 6) The cost of designated substances and hazardous materials surveys be added to the eligible costs of the ESG Program across the ERASE Community Improvement Project Area, but only where such studies are being done on current or former institutional sites.

B3.2 Historical Trends

As shown in **Figure B2** below, considering the CIP was originally restricted to the Older Industrial Area, uptake of the ESG Program naturally started slowly when the CIP launched in late 2001 with only a few applications per year in 2001 and 2002 and no ESG applications received from 2003 to 2005. Once the ERASE CIP was expanded to the urban area in 2005, the number of ESG applications received by the City increased significantly to around 10 applications per year and that was the intent of the expanded project area.

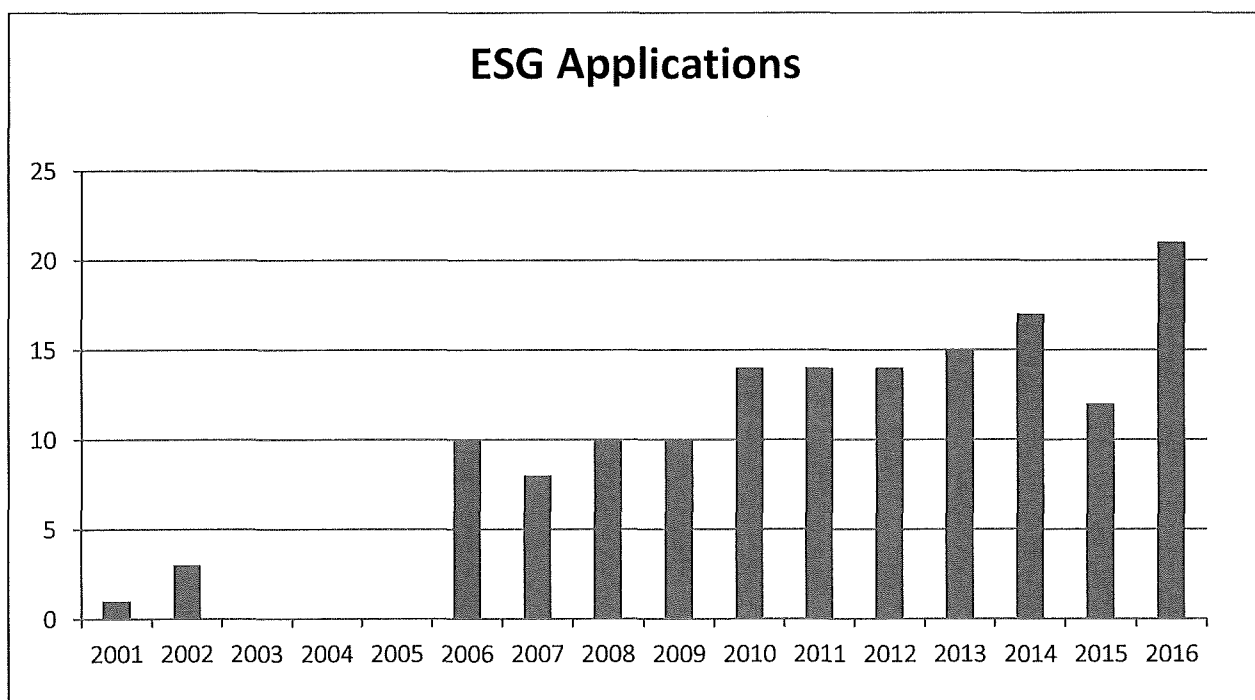
Since 2010, the City has averaged about 15 ESG applications per year with a high of 21 applications received in 2016. Therefore, it appears that demand for the ESG Program is still very strong. It is not unreasonable to expect that the City will receive an average of 15 to 20 ESG Program applications per year over the next several years.

RECOMMENDATION:

Based on the analysis of historical ESG Program uptake, it is recommended that:

If the City plans to continue the ESG program and increase the maximum funding amount for second studies, the annual budget for the ESG Program on a go forward basis should be in the order of approximately \$250,000 per year.

Figure B2 ESG Applications by Year, 2001 - 2016

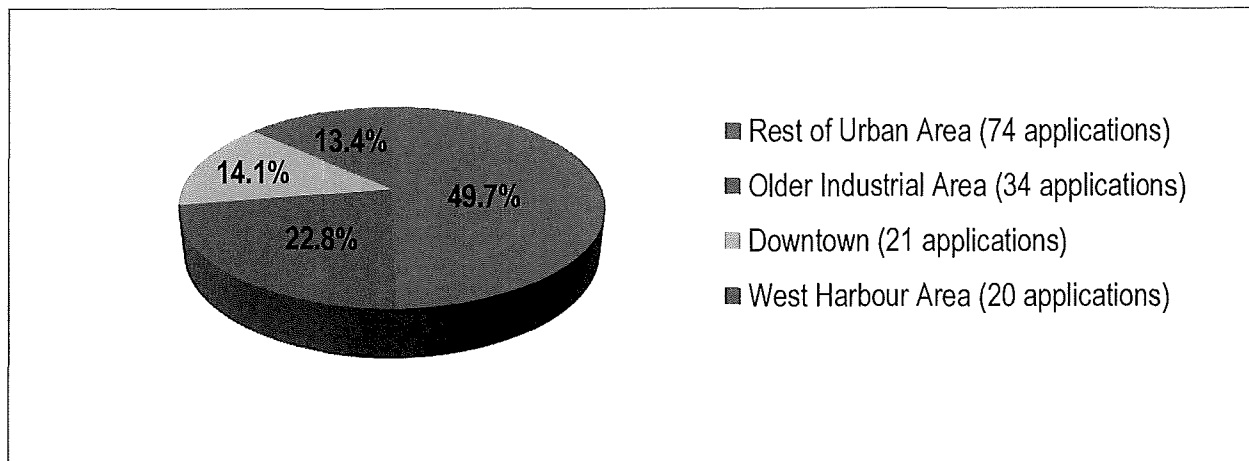


B3.3 Location

As shown in Figure 4, ESG applications have been spread over the entire urban area. **Figure B3** below displays the geographic breakdown of the 149 ESG applications received between 2001 and 2016:

Area 1 – Rest of Urban Area = 74 applications (49.7%);
Area 2 – Older Industrial Area = 34 applications (22.8%)
Area 3 – West Harbour Area = 20 applications (13.4%)
Area 4 – Downtown = 21 applications (14.1%)

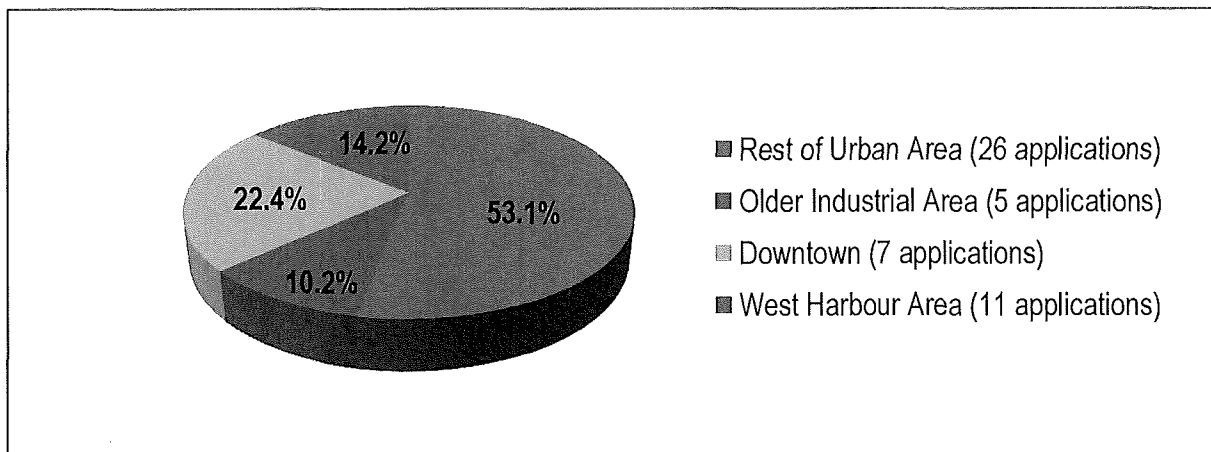
Figure B3 ESG Applications by Location, 2001 - 2016



However, if we examine the geographic distribution of the 49 ESG applications submitted in the last three years, i.e., 2014 to 2016, a different pattern emerges, as shown in **Figure B4** below.

Area 1 – Rest of Urban Area = 26 applications (53.1%);
Area 2 – Older Industrial Area = 5 applications (10.2%)
Area 3 – West Harbour Area = 11 applications (22.4%)
Area 4 – Downtown = 7 applications (14.2%)

Figure B4 ESG Applications by Location, 2014 - 2016



Comparing the location of ESG applications over the last three years to the entire 16 year period of ESG applications, the shift away from using ESG applications for environmental studies in the Older Industrial Area is very noticeable. Only 10% of ESG applications over the last three years have been for environmental studies in the Older Industrial Area. In recent years, ESG applications are increasingly being used to conduct environmental studies in the West Harbour Area and the rest of the urban area, while the percentage of ESG applications in the Downtown Area has remained relatively stable.

This geographic trend is concerning for the Older Industrial Area which includes the Bayfront Industrial Area. There may be a number of reasons behind this trend, including but not limited to: relatively decreased interest in remediating and redeveloping industrial land in the Older Industrial Area (Area 2), or interest only in reoccupying vacant and underutilized industrial land in the Older Industrial Area without remediating these sites, combined with accelerated interest in redeveloping brownfield sites in other parts of the city, including the West Harbour Area and the rest of the Urban Area.

RECOMMENDATIONS:

In light of the above-noted findings, it is recommended that the City enhance the ESG Program in the Older Industrial Area (Area 2) by:

- 1) Adding expanded study types, including designated substances and hazardous materials surveys, and industrial and office reuse feasibility studies, to the list of eligible program costs; and,**
- 2) Developing ways to increase awareness of and interest in the ESG Program, including enhanced ERASE Program marketing and assistance to existing business in the Older Industrial Area and business seeking locations in the Older Industrial Area.**

B4 ERASE Redevelopment Grant (ERG) Program

B4.1 Program Uptake

Between program inception in late 2001 and the end of 2016, the City of Hamilton received 51 ERG applications. The location of these applications is shown in **Figure B5**. Some of these 51 applications were submitted in parts on the same property and one application was withdrawn and resubmitted. Eliminating these duplicate applications, there were ERG applications received for 47 sites totaling 231 acres. Two (2) of these 47 applications were abandoned by the applicants before the applications were approved, and a third application has lapsed because the applicant has not undertaken remediation within the 5 year timeframe allotted in the approved ERG Agreement. In this case, the property was sold and the new owners were not interested in undertaking remediation and redevelopment of the property. Removing these abandoned and lapsed applications from the total results in 44 ERG applications on a total of 213 acres. The status of these applications is shown in **Table 2**. Of these 44 ERG applications, 38 applications (210 acres) have been approved and 6 applications (3 acres) are still in due diligence. Assuming the 6 applications in due diligence are approved, the total City grant commitment for the ERG Program to the end of 2016 is \$32,100,516.

Table 2 shows that only 2 of 47 ERG applications were abandoned by the applicants, and only one (1) approved ERG application lapsed as a result of the applicant not completing remediation within the specified timeframe. This small percentage of abandoned and lapsed applications is acceptable and inevitable as applicant's business plans can change and/or properties are sometimes sold to new owners who do not have plans to remediate and redevelop the brownfield property.

BAYFRONT INDUSTRIAL AREA RENEWAL STRATEGY ERASE REDEVELOPMENT GRANT APPLICATIONS

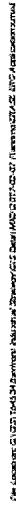


Table 2 Status of ERG Applications 2001-2016

51 Applications Received =	231.0 acres
4 duplicates =	0.0 acres
47 Sites =	231.0 acres
3 abandoned/lapsed =	18.0 acres
44 sites =	213.0 acres to be remediated and redeveloped
38 sites approved to date =	210.0 acres
25 sites remediated to date =	123.0 acres (59% of approved land area)
Construction completed or underway on 24 of 25 remediated sites = 122.0 acres	

Virtually all, i.e., 24 of the 25 sites (96%) where remediation has been completed and an RSC has been filed and acknowledged have been redeveloped or are currently being redeveloped. This is a very positive result for the ERG Program and clearly indicates that once a brownfield site is remediated under the ERG Program, it is usually redeveloped immediately. The overall level of uptake for the ERG Program has been very high.

It is interesting to note that there were at least two approved applications (ERG-03-02 and ERG 05-01) where remediation and redevelopment was completed and payment of the grant was not requested. These were both large grants (ERG 03-02 = \$430,000 and ERG 05-01 = \$266,936) for large redevelopment projects with large corporate owners. The owners of these sites should be contacted by City staff to determine why they did not request grant payment, and if these owners qualified for the grant payment, whether or not they still wish to receive the grant payment.

The ERG Program has certainly produced brownfield redevelopment activity on most (24 of 38) approved application sites. Therefore, the program has met the primary goal of the program which is to encourage environmental remediation, rehabilitation, redevelopment and adaptive re-use of brownfield sites. However, there are concerns with the progress on a number of the 13 ERG applications that have been approved but have not yet been remediated, especially since these 13 applications represent approximately 87 acres or 41% of the ERG approved land area. Staff comments indicate that a number of these 13 sites have not yet been able to achieve remediation and an MOE acknowledged RSC. A few of these 13 sites have been remediated and/or risk assessed but have experienced lengthy delays in obtaining an RSC acknowledgement from the MOE. These sites are now close to obtaining an acknowledged RSC, and it is expected that once these applicants have an MOE acknowledged RSC in hand, redevelopment of these sites will take place quickly.

In a few cases, ERG approved applicants appear to have sold the property or simply have lost interest in pursuing the ERG for business related reasons. In other cases, applicants have indicated that they will not likely be able to obtain an RSC, or the amount of the grant is not worth the effort and cost of obtaining an RSC, and they are therefore no longer interested in pursuing their approved ERG. This has become a particular issue for a few applications where the proposed redevelopment is from industrial to industrial or industrial to commercial and an RSC is not required as per O. Reg 153/04 because the proposed developed is not a change to a more sensitive use. To accommodate these situations, City staff has developed and implemented a peer review option that replaces the RSC requirement for an approved ERG application which is not a change to a more sensitive under O. Reg 153/04. Under this option, the applicant's environmental consultant (Qualified Person or "QP") submits their environmental studies to the City and has these studies peer reviewed by an environmental consultant (QP) selected by the City, with said peer review paid for by the applicant. While this option has allowed applicants to avoid the MOE's lengthy RSC approval process for risk assessments (typically 2 to 3 years), use of this option has resulted in disagreements between the applicant's

QP and the City's QP with regards to study findings, in particular as they relate to risk assessment findings, and this has led to a lengthier ERG approval process than anticipated. Therefore, in order to avoid replicating the issues that in part contribute to the lengthy and cumbersome MOE RSC approval process at the local level, it is imperative that the City staff implement a standardized process to resolve disagreements between the developer's QP and the City's peer review QP regarding submitted environmental studies and establish a maximum timeframe for the optional peer review process, e.g., 9 months.

It is important that City staff follow up on all 13 of the approved ERG applications where an RSC has not been completed (acknowledged) to determine the status of the site remediation and the owner's current site redevelopment plans. In cases where the applicant has abandoned their redevelopment plans and/or is no longer interested in meeting the requirements for the ERG, these applications should be formally closed and the ERG cancelled. Where the property has been sold, the new owners should be consulted to determine if they wish to pursue remediation/risk assessment and the ERG approved project or similar project.

For the 20 ERG projects completed to date, the grant commitment from the City as per the approved applications was \$9,303,643. The actual total grant paid out/to be paid out through the ERG programs for these 20 completed projects was \$9,598,969 or 103.2% of the grant commitment. While this overall statistic would suggest that cost overruns have not been a serious concern with ERG applications, closer examination of the estimated versus actual grant for each of the 20 completed ERG projects reveals that while most of the projects spent less or approximately the same on eligible environmental remediation costs as the estimate provided in their application, 4 (20%) of the 20 completed projects exceeded their cost estimates. Of these four projects, two only modestly exceeded their eligible cost estimates (7% and 27%), but the other two exceeded their eligible cost estimates by over 100% (104% and 110%). While only 2 of the 20 completed projects to date involved large cost overruns, these large eligible cost overruns are concerning.

City staff indicated that a few ERG projects currently in the remediation phase have also experienced significant cost overruns. While significant remediation cost overruns on brownfield remediation projects can certainly occur even when contamination is adequately delineated, such large cost overruns even on a few ERG projects can potentially indicate that there has been some deficiency in the environmental studies used to estimate remediation costs on these sites, and/or an underestimation of other eligible costs. The administrative process when there are cost overruns on an ERG project is that staff bring these cost overruns to Council for approval. Staff have indicated that to date, Council has approved these cost overruns.

In conclusion, it is very important that staff review ERG projects where there have been cost overruns to determine the causes of these cost overruns, e.g., deficient Phase II ESAs/Remedial Work Plans, and address these causes through modifications to the ESG and or ERG programs. It is also important for staff to discourage eligible cost overruns in the future.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that City staff:

- 1) Contact the current owners of ERG approved sites where remediation and redevelopment has taken place to determine why these owners did not request grant payment, and if these owners qualified for the grant payment, whether or not they still wish to receive their grant payment.**
- 2) Follow up on all 13 approved ERG applications where an RSC has not been completed (acknowledged) to determine the status of the site remediation and the owner's current site redevelopment plans. In cases where the applicant has abandoned their redevelopment plans**

and/or the applicant or new owner is no longer interested in meeting the requirements for the ERG, these applications should be formally closed and the ERG cancelled.

- 3) Develop and implement a standardized process to resolve disagreements between the developer's QP and the City's peer review QP regarding submitted environmental studies for approved ERG applications that are not changes to a more sensitive use as per O. reg 153/04 and establish a maximum timeframe for the optional peer review process, e.g., 9 months.
- 4) Review ERG projects where there have been cost overruns to determine the causes of these cost overruns and address these causes through modifications to the ESG and/or ERG programs.
- 5) Commence utilizing the City's current ability to conduct spot and random audits of eligible expenses on ERG projects.
- 6) Develop and distribute to applicants a Guideline that clearly specifies eligible costs for the ERG Program and the level of detail expected in eligible cost invoice submissions and other supporting documentation.

Based on the above-noted analysis, it is recommended that the City:

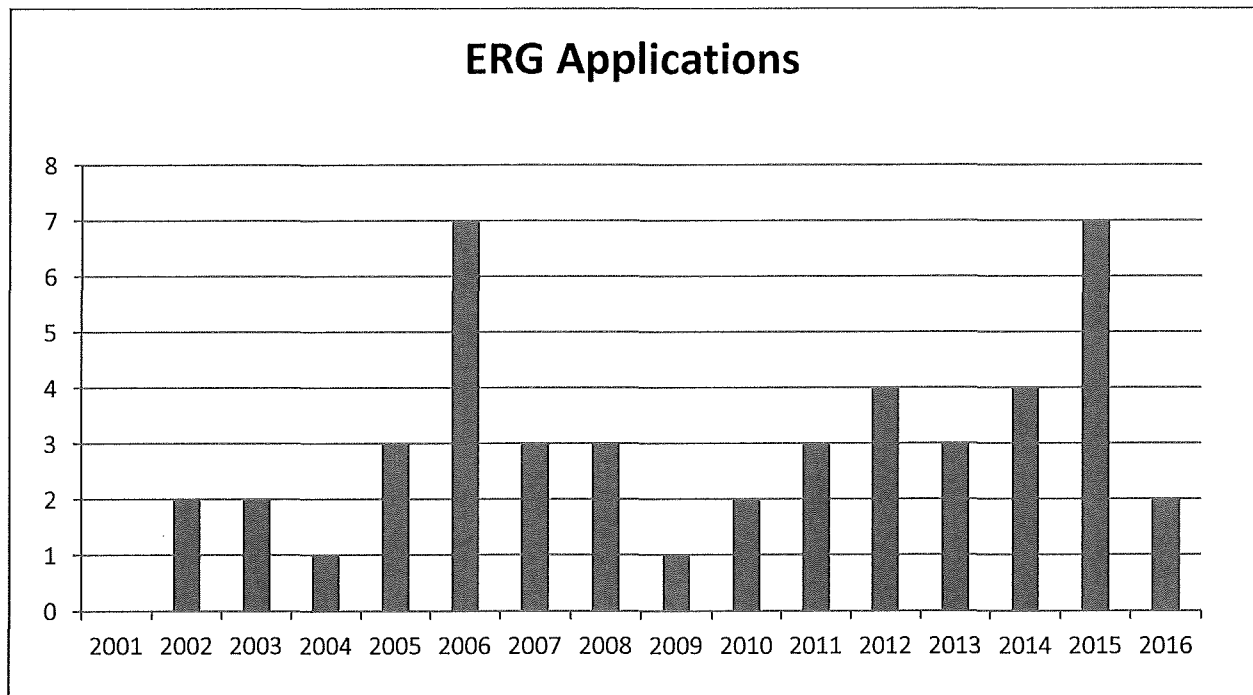
- 7) Add "the removal/ abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey" as a stand-alone eligible cost for the TIG component of the ERG Program across the ERASE Community Improvement Project Area, but only for brownfield redevelopment projects on current or former institutional sites. N.B. this cost is not eligible for application against City development charges payable.

B4.2 Historical Trends

The number of ERG applications by year is shown in **Figure B6**. The number of ERG applications varies considerably from year to year, peaking at 7 applications in 2006 and again in 2015. The average number of applications per year over the first 7 years of the ERG program was 3.1 applications per year, while the average number of applications per year over the last 7 years of the ERG program was 3.6 applications per year.

While the number of applications received in more recent years has been somewhat higher than in the earlier years of the ERG Program, the same cannot be said for the land area contained in these ERG applications. Of the 44 active site applications, the first 22 applications received between 2002 and 2010 comprised 149 acres (70%) of the 213 acres, while the last 22 applications received between 2011 and 2016 comprised only 64 acres (30%) of the 213 acres. In fact, only 4 of the 22 active ERG applications submitted during the last 6 years of the ERG Program was for a site larger than 5 acres, while 9 of the 22 active ERG applications submitted during the first 9 years was on a site larger than 5 acres. This suggests a clear shift in applications to the ERG Program over time from larger industrial and commercial sites to smaller residential, commercial and mixed use sites. This is also borne out by an examination of the location of ERG applications over time contained in Section 4.4.3 below.

Figure B6 **ERG Applications by Year**

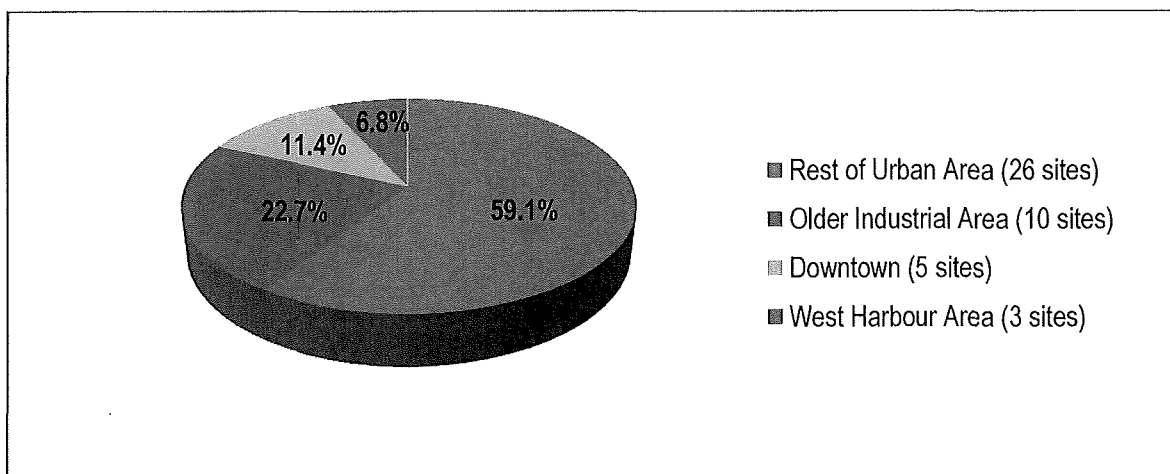


B4.3 Location

As shown in **Figure B7**, while 23% of the 44 active ERG applications have been for projects in the Older Industrial Area, 11% in the Downtown, and 7% in the West Harbour Area, 59% of ERG applications have been spread over the rest of the urban area, from Flamborough through to Dundas, West Hamilton, Lower Hamilton and Stoney Creek. Figure B7 below displays the geographic location of the 44 active ERG applications breaks down as follows:

- Area 1 – Rest of Urban Area = 26 sites (59.1%);
- Area 2 – Older Industrial Area = 10 sites (22.7%)
- Area 3 – West Harbour Area = 3 sites (6.8%)
- Area 4 – Downtown = 5 sites (11.4%)

Figure B7 **ERG Applications by Location, 2001 - 2016**



Therefore, almost 60% of the 44 ERG applications are located in the rest of the urban area. This is a higher percentage than the 50% of ESG applications located in the rest of the urban area. Approximately 23% of ERG applications are located in the Older Industrial Area which is virtually identical to the approximately 23% of ESG applications located in the Older Industrial Area. A relatively lower percentage of ERG applications are located in the Downtown and the West Harbour Area when compared to the percentage of ESG applications located in these areas.

However, if we examine the geographic distribution of the 13 ERG applications submitted in just the last three years, i.e., 2014 to 2016 shown in **Figure B8** below, the trend toward more ERG projects in the rest of the urban area intensifies. None of the ERG applications submitted in the last 3 years are located in the Older Industrial Area. In fact, with the exception of one project originally applied for in 2012, there have been no ERG applications in the Older Industrial Area since 2008, and the two ERG applications in the Older Industrial Area submitted in 2008 were abandoned or lapsed. Two (15%) of the 13 ERG applications submitted in the last three years are in the Downtown and only one (8%) is in the West Harbour, while 10 (77%) are in the rest of the urban area. The City has attempted to address the need for brownfield redevelopment in the Downtown and West Harbour Area with the Loan Program available in these areas, but there have been no enhancements to the ERG Program in the Older Industrial Area and no new programs in the Older Industrial Area.

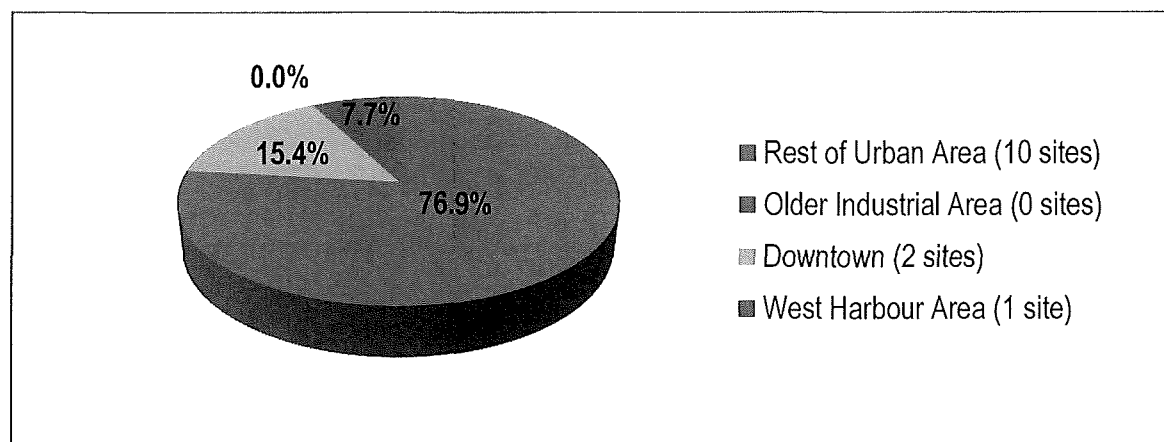
While a significant percentage of ERG applications in the rest of the urban area is not unexpected due to the large size of the rest of the urban area and the spatially extensive industrial history in Hamilton, the geographic distribution of ERG applications is of concern because ERG applications in the Older Industrial Area have fallen off considerably during the last several years. This does not bode well for uptake of the City's ERG program in the Bayfront Industrial Area and suggests that the City should improve the attractiveness of the ERG program in the Older Industrial Area to counter this concerning trend.

RECOMMENDATIONS:

It is recommended that the City encourage more use of its ERG program in the Older Industrial Area (Area 2) by:

- 1) Adding “the removal/ abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey” as a stand-alone eligible cost for the TIG component of the program. N.B. this cost is not eligible for application against City development charges payable; and,**
- 2) Enhancing ERASE program marketing and assistance to existing business in the Older Industrial Area and business seeking locations in the Older Industrial Area.**

Figure B8 **ERG Applications by Location, 2014 - 2016**



B4.4 Type of Applications

Of the 44 active ERG applications, the pre-project use for these applications was as follows:

- 23 (52.3%) were Commercial;
- 19 (43.2%) were Industrial;
- 1 (2.3%) was Institutional; and,
- 1 (2.3%) was Residential.

The proposed use for the 44 active ERG applications is as follows:

- 21 (47.7%) are Commercial;
- 18 (40.9%) are Residential;
- 5 (11.4%) are Industrial.

Approximately 43% of the active applications for the ERG program were industrial uses prior to redevelopment, but only 11% of the applications are for a proposed industrial use. Approximately 41% of the active ERG applications are for residential use, and this percentage has been growing, with approximately 52% of the ERG applications from 2012 to 2016 being proposed for residential use. The last ERG application for industrial use was in 2014, and before that it was 2005. Therefore, it is clear that the ERG Program is now rarely being used for its original intent which was to promote redevelopment of industrial lands within the Older Industrial Area. Virtually all of the recent redevelopment projects being proposed and constructed under the ERG Program are for residential and commercial use.

B4.5 Economic Impact

B4.5.1 Industrial/Commercial Square Footage

Several large industrial buildings/facilities, including 425 Parkdale Avenue (JNE), 686 Parkdale Avenue (Tinnerman Palnut), 400/424/442 Burlington Street (Bunge), and 41 Oliver Street (BIOX) were approved for the ERG program. However, actual building square footage constructed for most of these sites was not available. Based on the available building size data for completed industrial/ commercial projects and a rough estimate of the square footage of completed industrial/commercial projects where data was not available, it is estimated that approximately 600,000 sq.ft. of industrial and commercial space has been constructed using the ERG Program.

B4.5.2 Residential Dwelling Units

It is estimated that the 18 residential redevelopment projects with approved ERG applications will create 1,155 new residential units. Seven (7) of the 18 residential ERG projects have been completed or are underway and these 7 projects include 448 (39%) of the 1,155 residential units. Most of the large residential redevelopment projects taking advantage of the ERG Program have been filed in the last 4 years. In fact, 8 applications containing 790 (68%) of the 1,155 residential units to be created under the ERG Program were submitted between 2012 and 2016. Moreover, 547 of these residential units (47% of the total 1,155 residential units) were applied for in just the last two years, with most of these units being in the Downtown. This indicates that more recent usage of the ERG Program is shifting to residential brownfield redevelopment projects and commercial projects. Also, as previously mentioned, the average ERG site size has decreased in recent years, and this also correlates with a move away from industrial redevelopment projects on larger sites to residential and commercial redevelopment projects on smaller sites.

B4.5.3 Employment

In terms of employment⁸ estimated to be created by the industrial and commercial redevelopment projects under the ERG Program, applicants estimated that they would create approximately 531 jobs. This was an estimate provided by the applicant at the time of application. No follow up was done to determine the actual number of jobs created for each industrial/commercial project. Based on projects completed to date, if these projects actually created the number of jobs estimated by applicants, they would have created 325 jobs. However, it appears that job estimates were not provided for a few of the commercial redevelopment projects. On the other hand, one project estimated at 205 of the 531 jobs to be created has yet to be approved. Therefore, it is impossible to know the actual number of long-term jobs created to date by the industrial and commercial projects that have participated in the ERG Program, but it can be safely assumed that this number of jobs is at least 325 at this point in time.

B4.5.4 Construction Value

Total construction cost for the 44 active ERG sites was estimated at approximately \$572,488,925. Total construction cost for the 20 ERG projects that have been completed to date was estimated by applicants at approximately \$169,936,325. Actual construction values for these 20 completed projects were taken from building permit data, and it was determined that the total actual construction value of these 20 projects was \$116,145,820, or 31.7% less than estimated by the applicants. Therefore, it appears that on average, applicants with completed projects under the ERG Program overestimated the actual construction value of their projects by about one-third. If this rate of construction value overestimation carries over to the remaining 24 active projects, then the \$572,488,925 in estimated construction costs for all 44 ERG projects will translate into an actual construction cost of approximately \$391,277,120. While this is certainly still an impressive construction value, it is significantly less than what is being estimated by applicants at the time of application.

Comparing the total City grant commitment for the 20 completed ERG projects to date of \$9,598,969 with the actual construction cost for these 20 completed projects of \$116,145,820 produces a program leverage ratio of 11.1. Therefore, every \$1 that the City has contributed toward completed ERG projects to date (via development charge reductions and tax increment grants), has generated approximately \$11.10 in private sector construction. This is an impressive leverage ratio and speaks to the ability of the City's ERG Program to significantly leverage municipal funding to generate high value construction projects on remediated brownfield sites in Hamilton.

⁸ Includes only permanent jobs created by the business occupying the industrial/commercial projects. Does not include jobs created during construction.

Comparing the total estimated \$32,100,516 grant commitment from the City against the applicant estimated construction costs of \$572,488,925 produces a program leverage ratio of 16.8. However, if actual construction costs continue to be approximately two-thirds of estimated construction costs, then the actual leverage ratio of the ERG program will be approximately 11.2, which is in-line with the actual leverage ratio of 11.1 produced by the ERG Program to date.

The overestimation of construction value by applicants is not unexpected, as applicants will attempt to position the economic impact of their ERG projects in a very favourable light in order to help garner application approval. However, it appears that the construction costs of a number of the larger projects applying for the ERG were significantly overestimated by applicants. Therefore, this practice should be discouraged by additional vetting of the construction cost estimates provided by applicants. This can be done by comparing construction cost estimates provided by applicants to a sample of actual construction cost estimates (from building permit values) for similar type projects, with this sample periodically updated to keep it current. Where construction cost estimates provided by applicants appear to be inflated, these should be adjusted using the sample of actual construction cost estimates for similar type projects.

RECOMMENDATIONS:

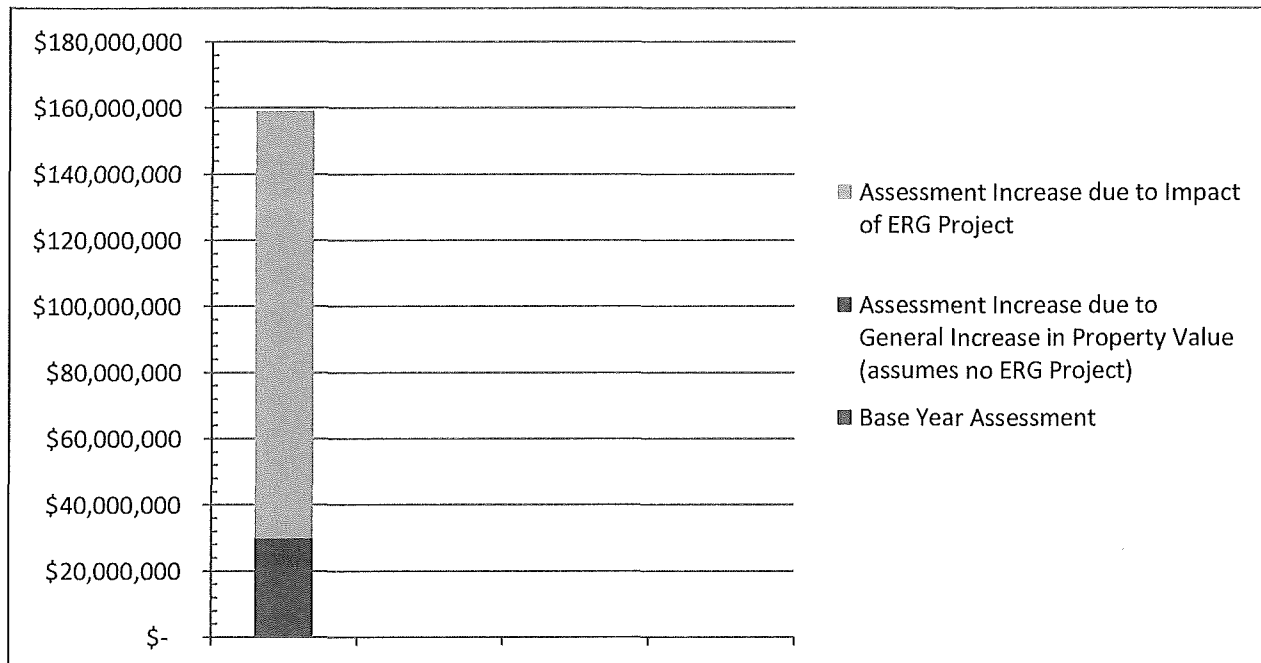
It is recommended that City staff compare construction cost estimates provided by applicants to a sample of actual construction cost estimates (from building permit values) for similar type projects, with this sample periodically updated to keep it current. Where construction cost estimates provided by applicants appear to be inflated, these should be adjusted using the sample of actual construction cost estimates for similar type projects.

B4.5.5 Assessment Value and Property Taxes

The total assessment value and property taxes for the 20 ERG projects that have been completed and fully reassessed and 2 of the ERG projects under construction that are substantially complete was compared between the year of each application, ranging from 2002 to 2014, and 2016.

As shown in **Figure B9**, the total assessment value of these 22 properties in the year of application was \$21,361,973. The total assessment value of these 22 properties in 2016 was \$158,961,400, an increase of \$137,599,427 or 6.9 times the original assessment value. However, part of this very large assessment increase would have been due to general increases in property values from the year of application to 2016 for the 22 properties, i.e., the assessment value of these brownfield properties likely would have increased somewhat even if they were left in their unimproved state. In order to determine the portion of the total \$137,599,427 increase in assessment attributable to general increases in assessment value on the 22 properties, the increase in total assessment value for all industrial and commercial properties across the City for each year from 2002 to 2016 was used to calculate a multiplier to determine the assessment increase attributable to general increases in assessment value for applications in each year from 2002 to 2016.

Figure B9 Total Assessment Value of Completed and Substantially Completed ERG Applications

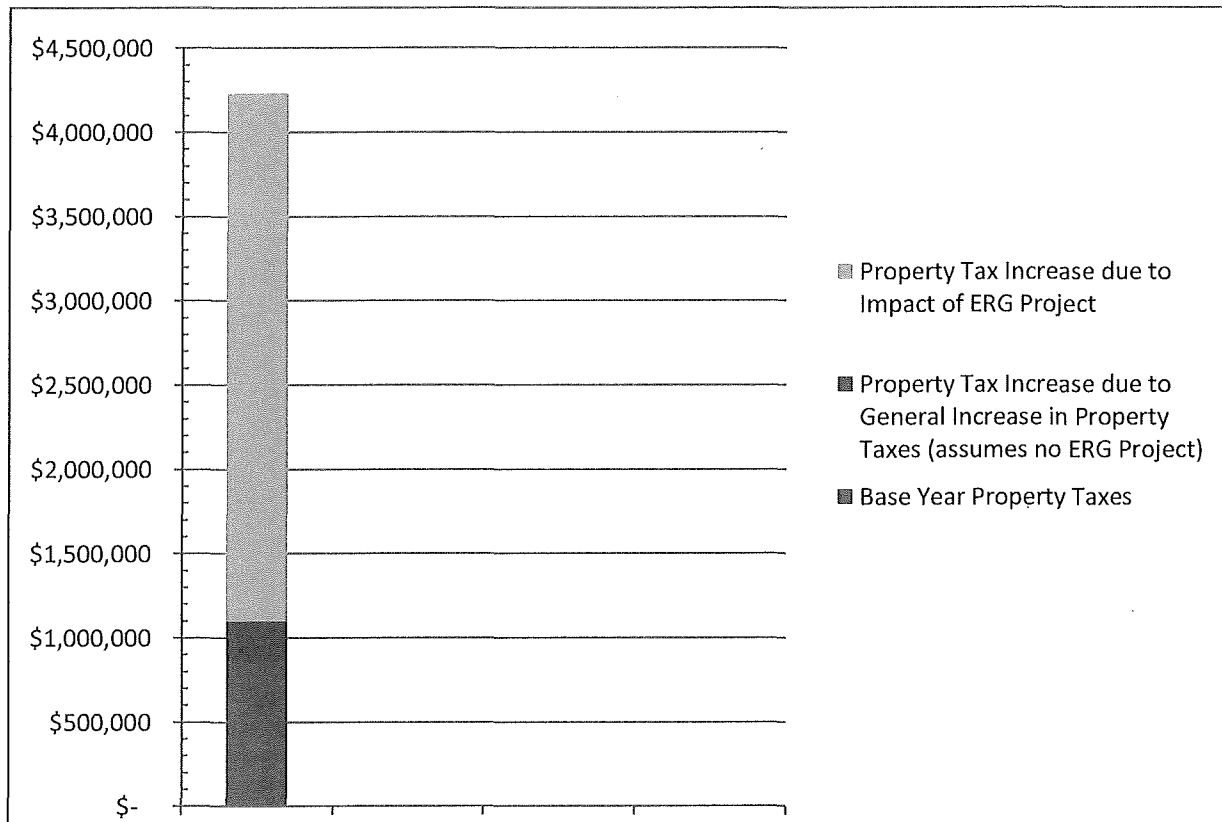


This multiplier is shown in **Attachment 3**. This multiplier was applied to each of the 22 ERG applications based on the year of application and land use (industrial or commercial) in that year to scale up the assessment value in the year of application to the assessment value in 2016 that would have been expected on each of the 22 properties had they remained in their land use and state (vacant/occupied) in the year of application. Using this methodology, it was determined that if the 22 properties had not participated in the ERG Program, the total assessment on these 22 properties would have increased from \$21,361,973 to \$29,932,021 by 2016, an increase of only \$8,570,048. Therefore, approximately \$129,029,379 (94%) of the \$137,599,427 increase in assessment value on these 22 properties can be directly attributed to their remediation and redevelopment under the ERG Program.

A similar exercise was conducted on the 22 properties to determine the increase in property taxes (Municipal and Education) between the year of each application and 2016. As shown in **Figure B10**, total property taxes for the 22 properties in the year of application was \$865,022. The total property taxes on these 22 properties in 2016 was \$4,229,827, an increase of \$3,364,805 or 4.9 times the original property taxes. As with assessment value, part of this large increase in property taxes would have been due to general increases in property taxes from the year of application to 2016 for the 22 properties, i.e., the property taxes on the 22 properties would have increased somewhat even if they were left in their unimproved state.

Two methodologies were used to estimate the impact of general property tax increases on the 22 ERG projects. The first methodology was the same as that used to calculate the assessment multiplier. The increase in total property taxes for all industrial and commercial properties across the City for each year from 2002 to 2016 was used to calculate a multiplier to determine the property tax increase attributable to general increases in property taxes for applications in each year from 2002 to 2016. This multiplier is shown in **Attachment 4**.

Figure B10 Total Property Taxes on Completed and Substantially Completed ERG Applications



This multiplier was applied to each of the 22 ERG applications based on the year of application and land use (industrial or commercial) in that year to scale up the property taxes in the year of application to the property taxes in 2016 that would have been collected on each of the 22 properties had they remained in their land use and state in the year of application. Using this methodology, it was estimated that if the 22 properties had not participated in the ERG Program, total property taxes collected on these 22 properties would have increased from \$865,022 to \$943,349 by 2016, an increase of only \$78,327.

The second methodology used to estimate the impact of general property tax increases on the 22 ERG projects multiplied the estimated 2016 assessment if no ERG project had taken place (calculated using the assessment multiplier as described above) by the current applicable tax rate (industrial or commercial) had the properties remained in their land use and state (vacant/occupied) in the year of application. Using this methodology, it was estimated that if the 22 properties had not participated in the ERG Program, total property taxes collected on these 22 properties would have increased from \$865,022 to \$1,100,070, an increase of \$235,048. Even utilizing this second methodology which attributes a higher percentage of the increase on property taxes on the 22 properties to the general increase in property taxes, approximately \$3,129,757 (93%) of the \$3,364,805 increase in property taxes on these 22 properties can be directly attributed to their remediation and redevelopment under the ERG Program.

While the City's total ERG commitment on these 22 properties totals \$12,322,990, it is important to remember that the City and Province collect an extra \$3,129,757 in property taxes **annually, year after year** on these properties as a result of their remediation and redevelopment under the City's ERG Program. Based on the split of 2016 property taxes on these 22 properties (73.4% City versus 26.6% Education), the City's share of this \$3,129,757 is approximately \$2,297,916. This means that the annual increase in property taxes collected

by the City for these 22 ERG projects will pay for the City grant commitment on these projects in approximately just 5.5 years.

B4.5.6 Development Charges

As per the City of Hamilton Development Charges By-law 14-153, applicants with approved ERG applications have the option of applying environmental remediation costs approved under their ERG application against City development charges payable, up to but not exceeding the amount of the development charges otherwise payable under the Development Charges By-law. Many of the applicants with approved ERG applications who completed remediation and undertaken construction have in fact taken advantage of this development charge exemption and applied their environmental remediation costs approved under their ERG application against City development charges payable. Data was not available on how much of the approved ERASE Redevelopment Grants for projects that have been constructed or are underway was applied against City development charges payable for those projects. However, it is known that 11 approved ERG projects paid a total of \$5,549,613 in City development charges over and above any ERG approved remediation costs applied against City development charges payable.

B4.5.7 Building Permit Fees

Building permit fee data was also examined, and it was determined that 19 approved ERG projects have paid a total of \$1,389,923 in building permit fees to the City of Hamilton.

B5 ERASE Tax Assistance Program (TAP)

As in most other Ontario municipalities that offer a tax assistance program that includes the Province's education component of property taxes on brownfield sites, the City of Hamilton's TAP has been little used since it was introduced in 2005. This finding is no doubt directly related to the complicated and time consuming process that the Province of Ontario has put in place for municipalities and applicants seeking to access the Province's education property tax assistance for brownfield redevelopment projects. Notwithstanding that this difficulty is likely to remain in place, as shown below, a number of minor enhancements to the City's ERASE TAP are recommended.

RECOMMENDATIONS:

It is recommended that the City add the following eligible costs to the ERASE TAP:

- a) Clean fill, grading and compaction to replace contaminated soils";
- b) Filing a Record of Site Condition (RSC) and a Certificate of Property Use (CPU);
- c) Environmental insurance premiums; and,
- d) "removal/abatement of designated substances and hazardous materials as identified in a designated substances and hazardous materials survey".

B6 Downtown Hamilton – West Harbour Remediation Loan (LOAN) Program

The LOAN Program offers a low interest loan (1% below prime) for the remediation of brownfield properties being developed/redeveloped for residential or residential/commercial use within Downtown Hamilton and the West Harbourfront. The low interest loan is equal to 80% of the cost of remediating a property to a maximum of \$400,000 per property/project. This program is designed to help finance remediation by acting as bridge financing until property owners receive their ERG payments, at which time, the applicant has the option of

repaying the loan through the assignment of their annual ERG payments. This is an innovative approach to repayment of the loan.

The loan is provided to the successful applicant in progress payments based on 80% of the actual qualifying remediation costs incurred. Such progress payments will be advanced within 30 days of submission of the property owner's request for a loan draw. There is a limit of six draws, spaced no less than 30 days apart. The annual interest rate on the loan is 1% below the prime rate as established by the Royal Bank of Canada. Such rate shall be established at the time the first instalment of the loan is advanced by the City and reset annually on the anniversary date of the first advance. In the event that the full 10 year grant amount is not sufficient to repay the loan in its entirety, supplemental payments from the applicant will be required. The loan, together with interest can be prepaid in full by the owner without notice, penalty or bonus at any time.

While the addition of this program to the ERASE Programs provides an extra up-front incentive to redevelop brownfield properties in the Downtown Hamilton and the West Harbourfront area, uptake of the program has been moderate to date. To date, only two applications have been approved under this loan program by the City of Hamilton over the seven year period that it has been in existence. Both of these applications were on James Street North in the West Harbour Area.

Based on the \$400,000 program cap, the real benefit of the program likely lies in promoting smaller brownfield redevelopment projects in Downtown Hamilton and the West Harbourfront Area. While the City should retain the LOAN Program in the short to medium term, it is not clear that this program will be necessary in the long-term based on the large scale of development (including brownfield redevelopment) being witnessed and planned for in Downtown Hamilton, and especially in the West Harbourfront Area. Increases in demand and market value in Downtown Hamilton, and eventually in the West Harbourfront Area, combined with the other ERASE Incentive Programs and the Downtown Incentive Programs available from the City of Hamilton, may be sufficient to spur most brownfield redevelopment projects in both Downtown Hamilton and the West Harbourfront Area. Staff indicated that for the time being, the \$400,000 cap on the program essentially restricted the program only to the smaller brownfield redevelopment projects in the Downtown and the West Harbour Area.

Finally, City staff identified that the ERASE LOAN Program has an interest rate of 1% below prime and a an amortization period of 10 years, while the Downtown LOAN Program has a 0% interest rate and an amortization period of 5 years. Staff indicated that 10 years is a long time for the City to have a LOAN outstanding and that the amortization period of the ERASE LOAN Program should be shorter. Therefore, in order to bring the two programs into line, it was determined that the ERASE Loan Program should adopt the Downtown LOAN Program structure, i.e., 0% interest rate and a 5 year amortization period. This will also make the administration of both programs more consistent and easier.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that the City modify the ERASE LOAN Program to include a 0% annual interest rate and a 5 year amortization period, with all other program details and requirements remaining the same.

B7 ERASE Municipal Acquisition and Partnership Program (MAPP)

The purpose of the MAPP as specified in the 2010 ERASE CIP is to create awareness of brownfield redevelopment by having the City remediate its own brownfield sites, acquire and remediate key strategic brownfield sites, and engage in pilot projects with the private sector to showcase innovative brownfield remediation tools and approaches.

The following four (4) projects have been approved under the MAPP since 2001:

- 1) A 78 unit townhouse project on Beach Boulevard;
- 2) The Hamilton General Hospital Redevelopment at Wellington and Barton Streets; and,
- 3/4) Two buildings at the McMaster University Innovation Park.

All of these projects were very significant and successful brownfield redevelopment projects. These projects represent the culmination of innovative partnerships under the MAPP between the City and the developer (in the case of Project 1), and between the City and major health and educational institutions (in the case of Projects 2, 3 and 4). In the coming years, the City could consider participation in MAPP projects on brownfield sites in the Bayfront Industrial Area as one way of promoting brownfield redevelopment in this area.

The 2010 ERASE CIP specifies that the MAPP be funded from the 20% of the tax increment retained by the City year over year as a result of properties participating in the ERG or TAP programs, and other monies as may be allocated by Council. The CIP specified that this 20% retained by the City be placed in a Brownfields Pilot Project (BPP) Account to help fund MAPP projects. The BPP Account would function as a revolving fund, with any profits from brownfield redevelopment activities under the MAPP deposited back into the BPP Account. The CIP specified that funds in the BPP Account are not intended for transfer to general revenues. The 2010 ERASE CIP also notes that the allocation of the 20% tax increment or tax assistance to the MAPP will end when the ERG and the TAP end, i.e., approximately ten (10) years. At that time, if the City wishes to continue utilizing the BPP Account to fund the MAPP, it may do so without amendment to the CIP. Alternatively, the City may return any funds remaining in the BPP Account to general revenues.

Staff responsible for the administration of the ERASE Programs are not sure if the 20% of the TIG retained from participating ERG projects has been placed in a BPP Account, or if these are the funds that were used for the City's participation in the above-noted MAPP projects. Based on the 22 ERG projects that have been completed/substantially completed and reassessed, the City is now collecting in the neighbourhood of an extra \$2,300,000 per year in City property taxes on these projects. At 20% of the property tax increase every year for up to 10 years on each per project, and even accounting for the City's financial participation in the above-noted projects and ERG projects where the eligible TIG remediation costs were applied against City development charges, the BPP should have accumulated to a few million dollars by this point in time. Therefore, it is important that City staff enquire to determine if the BPP is still operational, and if so, the level of funds in the BPP.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that City staff investigate the ERASE MAPP to determine if:

- a) The 20% of the TIG retained from participating ERG projects was placed in a BPP, or if another source of funds was used to fund the City's participation in the above-noted MAPP projects;
- b) The BPP still exists; and if so,
- c) The amount of funds in the BPP.

4.8 ERASE Marketing and Opportunities Program (MOP)

The purpose of the ERASE MOP is to aggressively and regularly communicate and explain the ERASE Programs to brownfield market makers. This includes property owners, the development industry, real estate professionals, environmental consultants, planning consultants, lawyers, accountants and other support professionals. Another purpose of the MOP is to advertise and market publicly and privately owned brownfield redevelopment opportunities throughout the municipality.

The ERASE MOP specified that a number of methods should be used by the City to market the ERASE incentive programs and brownfield redevelopment opportunities. These include:

- g) A marketing brochure;
- h) Program guides and application forms;
- i) Program information available on the City's website;
- j) Presentation to brownfield market makers including the development industry, real estate professionals, environmental consultants, planning consultants, lawyers, accountants and other support professionals;
- k) Targeted mailings to property owner in the Project Area; and,
- l) The use of RFPs on City owned brownfield properties.

With the possible exception of item e) above, the City has utilized all of the marketing and education methods outlined above. However, with the revisions to the ERASE CIP that will result out of this report, this presents an excellent opportunity for City staff to review, revise and augment the components of its ERASE MOP to coincide with and support the revised ERASE CIP programs. As previously noted, particular emphasis should be placed on marketing the ERASE Programs and available brownfield redevelopment and adaptive reuse opportunities to existing business in the Older Industrial Area and business seeking locations in the Older Industrial Area.

RECOMMENDATIONS:

Based on the above-noted analysis, it is recommended that the City review, revise and augment the components of its ERASE MOP to support and coincide with the launch of the City's revised ERASE CIP and ERASE incentive programs.

ATTACHMENT 2

Data Variables for the ESG Program and the ERG Program

ERASE Study Grant (ESG) Program

- Application Number;
- Date Application Submitted;
- Address of Application;
- Property Size;
- Name of Applicant/Owner;
- Application Status;
- Grant Amount;
- Date Grant Paid.

ERASE Redevelopment Grant (ERG) Program

- Application Number;
- Date Application Submitted;
- Address of Application;
- Property Size;
- Name of Applicant/Owner;
- Application Status;
- Remediation Status;
- Construction Status;
- Estimated Residential Units;
- Estimated Industrial/Commercial Square Footage;
- Estimated Employment;
- Estimated Construction Cost;
- Actual Construction Cost;
- Estimated Grant Amount;
- Actual Grant Amount;
- Council Approval Date;
- Assessment Value in Year Application Made;
- Total Property Taxes (City and Education) in Year Application Made;
- Assessment Value in 2016;
- Total Property Taxes (City and Education) in 2016;
- Land Use in Year Application Made;
- Proposed/Actual Land Use.

ATTACHMENT 3

Total City-Wide Assessment and Multiplier

Total City-Wide Assessment and Multiplier

Year	Industrial	Industrial Multiplier by Year of Application	Commercial	Commercial Multiplier by Year of Application
2002	750,039,168	1.57	2,887,185,259	2.13
2003	810,905,343	1.45	3,192,399,430	1.92
2004	828,953,770	1.42	3,381,401,988	1.82
2005	851,813,767	1.38	3,412,003,458	1.80
2006	912,681,210	1.29	3,734,523,619	1.64
2007	915,073,840	1.29	3,767,869,559	1.63
2008	844,277,876	1.39	3,881,719,123	1.58
2009	893,949,116	1.32	4,156,851,534	1.48
2010	964,940,388	1.22	4,574,177,852	1.34
2011	1,029,044,383	1.14	5,019,795,514	1.22
2012	1,067,747,211	1.10	5,364,345,650	1.14
2013	1,098,226,616	1.07	5,454,460,357	1.13
2014	1,068,799,681	1.10	5,624,294,095	1.09
2015	1,137,042,577	1.03	5,874,156,654	1.04
2016	1,176,803,763	1.00	6,137,556,216	1.00

ATTACHMENT 4
Total City-Wide Property Taxes and Multiplier

Total City-Wide Property Taxes and Multiplier

Year	Industrial	Industrial Multiplier by Year of Application	Commercial	Commercial Multiplier by Year of Application
2002	\$ 41,762,381	1.04	\$ 89,670,262	1.53
2003	\$ 40,676,294	1.07	\$ 89,590,547	1.53
2004	\$ 41,199,171	1.06	\$ 87,181,719	1.57
2005	\$ 41,984,974	1.04	\$ 92,875,000	1.48
2006	\$ 42,831,705	1.02	\$ 95,000,361	1.45
2007	\$ 43,643,691	1.00	\$ 97,556,586	1.41
2008	\$ 40,896,446	1.07	\$ 102,538,346	1.34
2009	\$ 41,121,891	1.06	\$ 104,601,285	1.31
2010	\$ 42,390,238	1.03	\$ 111,009,306	1.24
2011	\$ 43,158,135	1.01	\$ 117,342,075	1.17
2012	\$ 42,824,538	1.02	\$ 121,511,945	1.13
2013	\$ 43,213,688	1.01	\$ 123,484,663	1.11
2014	\$ 40,863,865	1.07	\$ 126,403,550	1.09
2015	\$ 42,947,048	1.01	\$ 132,474,022	1.04
2016	\$ 43,589,931	1.00	\$ 137,283,597	1.00