Guelph and Waterloo Brownfield Redevelopment Policy: A Comparative Analysis

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References
1.0 Introduction:

Brownfields became part of the landscape starting in the 70s because of multiple plant closures followed by structural change in the economies of North America and Western Europe. The economy moved away from manufacturing and industrial activities and the polluter pays principle adopted. There are approximately thirty thousand Brownfields in Canada and half a million in the United States (MAH, 2007). The majority of the municipalities are encouraging Brownfield redevelopment in planning application protocols, in Official Plans, and Community Improvement Plans (CIPs).

1.1. Problem:

Urban sprawl and scarcity of green space are becoming a major issue in Canadian communities. The redevelopment of Brownfield sites is important because it saves green space from becoming developed, as well as changes existing land that is potentially contaminated and under utilized into a productive space.

1.2. Research Significance:

The study seeks to determine the advantages and disadvantages of Brownfield redevelopment within the cities of Guelph and Waterloo. It could be a basis for public education, as it can help educate the public on why Brownfield redevelopment is important. This research can inform policy formulation and implementation in Guelph and Waterloo. Additionally by comparing the two regions it will potentially inform planners of the best of both as well as areas that need improvement.

1.3. Literature Review Conclusions
Brownfield redevelopment is of increasing interest to planners particularly with more stakeholders concerned about the environment. However, although there are multiple opportunities that come from brownfield revitalization, there are still numerous challenges and barriers to brownfield redevelopment that need to be mitigated in order to ensure the success of brownfield restoration. Some studies suggest that the financial burden of developing brownfields is the main reason that developers are less likely to develop on these types of lands, given the potential contamination of the site. Therefore it is important to examine case studies, to analyze what types of financial incentives work best. Furthermore, it will be important to examine municipalities’ brownfield redevelopment policies in order to determine, which ones are promoting and leading to successful brownfield redevelopment and draw some lessons for planners.

This paper will explore what constitutes a Brownfield, what the opportunities and challenges are, how redevelopment is actually done and what drives it. The paper will review Guelph and Waterloo’s Brownfield policies and experience and conclude with recommendations on how to promote and improve Brownfield redevelopment.

1.4. Research Questions:

The study asks the following questions:

1. What are the brownfield redevelopment policies within the regional municipalities of Guelph and Waterloo?

2. How are the current brownfield incentive programs working for the municipality/government, the developers, and the realtors

3. What are the advantages and disadvantages of each?
1.5. Objectives:

1) To develop an understanding of brownfield redevelopment policies within the regions of Guelph and Waterloo

2) To assess the effectiveness of their incentive programs

3) By comparing the cases, create a framework to assess the policies

2.0. Research Methods:

After completing a Literature Review of the information available in North America and EU the gaps in the research were analyzed and the research questions and objectives conceptualized. Information was gathered through key Informant Interviews in Guelph and Waterloo. Two different questionnaires were developed separately for developers and planners in both Guelph and Waterloo.

The questions developed for the Planners, sought to gain a better understanding of how Brownfield redevelopment is being done in the region, the factors impacting their Brownfield redevelopment, as well as the planners experience with Brownfield versus Greenfield developments and how brownfield revitalization can be improved. Eight planners were willing to participate in the interviews from the two specific regions. Please see Appendix A for the Planner Interview Guide.

The questionnaire for Developers, sought to understand their perspective of Brownfield redevelopment whether the incentives are working for them, their overall experiences and how the process could be improved. Unfortunately, developers were rather hesitant to participate. Most stated they were too busy to participate or were
worried about legal issues that the company was involved with. The two interviews still provided important information. Please see Appendix B – Developer Interview Guide.

3.0. Research Results:

3.1. What Constitutes a Brownfield?

Brownfields are underused or vacant properties that can potentially be redeveloped. The land may potentially be contaminated from previous uses (MAH, 2012). This may allow the land to be partially used (Glumac et al, 2011). The conditions of brownfields vary from one site to the other and no two Brownfields are the same. This means the types of development are variable and instable. For instance the soil can be infertile and hazardous. This means that redeveloping these sites require risk assessments and remediation before landscape redesign (Doick and Sellers, et al, 2009). Davies (1999) adds that the public believes that brownfields are visibly unpleasant, and attract crimes such as industrial trespassing, or arson (Davies, 1999). Because of these uncertainties Chen et al (2012) add that Brownfield redevelopment sites involve financial risks related to both land as well as market value (Chen et al, 2012).

Thus, brownfield redevelopment is a complex planning problem that involves careful risk management and planning on part of developers and planners and requires municipal support. Owning brownfield sites can expose developers to requirements such as environmental assessment and clean ups that they are normally not used to. Some developers stay away from developing these sites due to the stigma accompanying them. (Chakrapan and Hernandez, 2009).
There are multiple definitions of what constitutes a Brownfield, however they generally emerge from a similar history. The following are several definitions of Brownfields:

In England, a brownfield is defined as “land so damaged by previous industrial or other development that is incapable of beneficial use without treatment” (Adams, et al, 2010, pg. 98). In Scotland a Brownfield refers to derelict properties and is defined as “land which has been so damaged by a development or use that it is incapable of being used beneficially without rehabilitation and which is not being used for the purpose for which it is held in the local plan and where contamination is known or suspected” (Adams, et al, 2010).

In North America, the purpose of Brownfield redevelopment is to restore contaminated land in both rural and urban settings to a state in which it can be reused efficiently (Davies, 1999). In the study by Adams and his team, the definition of Brownfields evolved from a problem in planning, but as the opposite of Greenfield development (Adams et al, 2010). This viewpoint has been adopted in North America in order to encourage Brownfield redevelopment and to remove the negative associations with contamination to the land (Adams et al, 2010).

3.2. Shared history of brownfields

Activities that occurred in the past that may trigger environmental contamination include:
a) Commercial or industrial activities involved in the storage, treatment or removal of hazardous substances, such as petroleum, pesticides, chemicals, metals and solvents

b) Locations that were previously used for transportation purposes (City of Guelph, 2014).

All of these may result in contaminated land, hence a Brownfield is created or a contaminated site.

3.3. Definition of Brownfield versus Other Land Redevelopment

Contaminated sites are any piece of land that has been exposed to some form of pollution that has penetrated into the groundwater and/or the soil. This type of land can be found all over Canada in both urban and rural settings. On the other hand, Brownfields are considered to be a type of contaminated land that has the potential to be redeveloped (City of Guelph, 2014).

Similar to Brownfield redevelopment, Greyfields also involve underutilized land, such as older strip malls that are no longer attracting tenants or investment, however they are not necessarily contaminated properties (Chester County Planning, no date).

Opposite of Brownfields, Contaminated sites and Greyfields, is Greenfield development. Greenfield development is developing on previously undeveloped land, such as a forest in order to develop commercial buildings, houses, etc. (Chester County Planning, no date).

3.4. Rationale for brownfield redevelopment
Brownfields are associated with potentially contaminated land. Buildings being left alone for many years on these sites frequently lead to vandalism, further damaging the image of the neighbourhoods and surrounding areas. Owners of these properties generally rely greatly on municipal resources, such as, fire, police and maintenance services. This issue goes hand in hand with the fact that many of these sites fall behind on their property taxes and some so far behind that the sites are put up for sale through a municipal tax sale. Unfortunately, the contamination, the vandalism and tax arrears, makes them extremely difficult to sell.

If these lands continue to be left vacant, they will continue to deteriorate and therefore have a strong negative impact on their surrounding neighbourhoods. Therefore it is extremely important to redevelop and utilize the opportunities that are included with Brownfield redevelopment (NRTEE, 2005).

4.0. The Policy and planning response to the Opportunities

There are several objectives that all Brownfield redevelopments strive to achieve; to revitalize the land to a public use, to redevelop the land to an attractive manner, increase the use of land to a recreational space, involve the community in the design phase and finally to enhance the environmental biodiversity (Doick and Sellers, et al, 2009).

The opportunities that come from Brownfields falls under three different categories: economic, social and environmental. The economic objectives are considered to; permit businesses to be competitive, as well as efficient, in favor of local
diversity, as well as provide competitive employment opportunities (Williams and Diar, 2005).

The social opportunities that are offered by Brownfield redevelopments are affordable housing, quality developments, improvement to local services and maintaining local heritage sites where applicable (Williams and Diar, 2005). These social opportunities can all be achieved because Brownfield redevelopment can lead to quality, affordable housing in areas that are centrally located, while still preserving the local heritage of a building.

Lastly, the environmental objectives include, the use of minimal resources, the reduction of pollution, and to ensure the protection of the environment (Williams and Diar, 2005). Brownfield redevelopment can protect the environment, as it is reusing land, rather then destroying a Greenfield property. This type of development can help reduce pollution and reduce resource use as it can reuse existing infrastructure and it is centrally located therefore generally minimizing travel time.

Brownfield redevelopment is a great way to reduce urban sprawl, as well as create a sustainable environment (Williams and Diar, 2005). For example, Brownfield redevelopment preserves approximately 4.5 acres of Greenfields for every acre that is developed on a Brownfield (Wedding and Crawford-Brown, 2007. The most important aspect of Brownfield redevelopment is the consideration that a previously developed piece of land is returned back to use and reduces stress on Greenfield development (Williams and Diar, 2005). The opportunity of developing on Brownfields allows
developers to take advantage of developing on preexisting infrastructure, which decreases the cost of building on these lands.

To the public Brownfields are seen as eyesores, and on the economic balance sheet of a municipality they are seen as liabilities (Chakrapan and Hernandez, 2009). It is stated by several studies, that by leaving Brownfields the way they are, they may endanger the health of the local community, as well as harm the local economy. However when this type of land is developed, the social, environmental and the economic benefits can be plentiful (Chakrapan and Hernandez, 2009).

The Growth Plan for the Greater Golden Horseshoe, the Greenbelt, as well as the Provincial Policy Statement (PPS), all have development intensification targets and in order to meet these goals, Brownfields are a great piece of land that can be restored (MAH, 2012). With these plans in mind, municipalities have been given the opportunity to encourage Brownfield redevelopment by offering financial incentives through Community Improvement Plans (CIPs). As of 2001, forty-four municipalities in Ontario have adopted Community Improvement Plans that include Brownfield requirements (MAH, 2012). Thus, Brownfields bring about an opportunity to meet development goals, however, there are challenges that need to be overcome.

4.1. Business Opportunities:

There are several benefits that can be identified by Brownfield redevelopment, these are, businesses can purchase the land at a lower cost, and their location tends to be near the core of a town. With the location of Brownfields already being in the downtown core, there are already important services around the area, such as other
businesses, or public transit (Attoh-Okine, et al, 2001). This makes the development more valuable in the long run.

Several benefits are expected to come from redeveloping Brownfields. These benefits include; the creation of new employment opportunities, an increase in tax revenues, the reuse of existing infrastructure, a reduction in urban sprawl and the protection of Greenfields (Attoh-Okine, et al, 2001). Moreover, Brownfield and Greyfield redevelopment creates a huge cost savings on building infrastructure, for example, $1 spent on Brownfield redevelopment vs. $10 spent on Greenfield development (Paul, 2002). Furthermore, Brownfield redevelopment is still being measured mainly by its economic prosperity rather than in terms of the larger picture of the government and social benefits of the revitalization, which should be the major drivers (De Sousa, 2005).

4.2. Government Opportunities:

In Canada, it is estimated that 25% of the land in major urban and rural centers is possibly contaminated land. A survey was conducted to determine what Canadians thought was the biggest environmental threat, the results were ozone depletion as number one and second to that was contaminated land. This gave governments the encouragement to redevelop Brownfields. However since the redevelopment of Brownfields is expensive, governments in Canada have had to partner up with the private sector in order to ensure the development is paid and done properly, so that the government can gain more in property taxes (De Sousa, 2001). Although the government has increased programs to ensure the development of Brownfields, they have also started to allow some contamination to be left on the site in order to reduce
the costs of the cleanup and fast track the economic benefits for the employment sector of the town (De Sousa, 2001). Lafortezza argues that it is unsafe to not fully clean up the sites if the land is going to hold human interaction and argues that instead, Brownfields that can meaningfully provide an ecological function should be targeted for a thorough remediation, where as Brownfields that cannot provide a significant ecological function should just be cleaned to industrial benchmarks and re-used as an industrial site (Lafortezza, 2002). Therefore, by allowing fast tracks, property tax can be collected faster benefiting the government and the community.

Municipal goals can be met through Brownfield redevelopment, by using existing infrastructure, increasing land values, as well as increasing the local economy (MAH, 2007). These municipal goals fall under several sustainable development plans, such as Places to Grow, (Hayek, et al, 2010). Not only does Brownfield redevelopment help with the goals of the municipality, many authors argue it increases the employment sector, as well as increases the property taxes that are received by the government (De Sousa, 2002). Furthermore, it has been argued by multiple people that by revitalizing Brownfields within a community it upgrades the community’s environment, therefore improving government support (De Sousa, 2002). As previously mentioned Brownfield redevelopment can help contribute to a town’s development goals. De Sousa (2005) argues that the most important goal that this revitalization can attain is the development of Smart Growth. This in turn benefits the government as they are meeting a specific development standard., The community as they can benefit from a better
development strategy (De Sousa, 2005). Therefore, there are numerous government benefits that in turn lead to community benefits.

4.3. Community Opportunities:

Brownfield revitalization can reduce the unfavorable effects it has had on soil and water quality, which in turn benefits the population when the land is clean. The redevelopment also reduces the development that takes place near agriculture sites, which generally causes environmental problems. By redeveloping on Brownfields, it can be argued that environmental problems are minimized, as well as urban sprawl and congestion, which in turn benefits the community. Brownfield redevelopment can also be seen as a way to promote sustainable growth, as it promotes economic development in the inner core of the city (Alberini, et al, 2004). Successful developments meet the provincial standards of intensification, as well as protect important green space and valuable agricultural land for the community (MAH, 2007). Communities want to be involved in the decision making of Brownfield redevelopment and Davies argues that community participation works best when both environmental justice and Brownfield restoration work together (Davies, 1999). For example Greenberg et al conducted a case study in the US, which showed that three quarters of the respondents indicated that they would want to participate in the redevelopment process, so that their voices were heard and they had an impact on the type of development that occurred. This study suggested that residents want to see recreational, community, or cultural developments before any other type of development and then they would want to see affordable housing (Greenberg et al, 2000). Meaningful public engagement in
Brownfield redevelopment, leads to community satisfaction with the development and to be more supportive of the government and the economic goals of the community.

4.4. Environmental Opportunities:

Many stakeholders might favor brownfield development if it means the remediation of environmentally contaminated land, as well as the visual improvement of the land. Additionally, this type of development can reduce urban sprawl and preserve Greenfields and in turn decrease our environmental footprint (Davies, 1999). Additionally, Brownfield redevelopment supports the current environmental movement, as the revitalization can accommodate approximately 2.8 million households, as well as save approximately 20-40% of vehicle miles traveled, therefore reducing emissions and the global footprint (Paul, 2002). This can occur because with the redevelopments being centrally located it generally tends to reduce vehicle use and promotes public transportation, as well as many Brownfields tend to be redeveloped into housing therefore accommodating more affordable housing for the community.

5.0. What are the Challenges?

The term Brownfield redevelopment has become more common and important to the planning world, but there remains challenges involved in the development of Brownfields. All countries and municipalities seem to be faced with similar challenges. It is stated that the four major barriers are; uncertain remediation criteria, availability of funding, legal liability and finally complicated development requirements (McCarthy, 2002). These challenges and others are discussed below.

5.1. Challenge: Financial Barrier:
There are numerous financial barriers in developing Brownfields, such as: high costs of management and remediation, lack of incentives, extremely expensive capital cost, high possibility of bankruptcy, as developers do not know the actual cost till they dig in the ground, and the cost of environmental insurance and remediation (DiFrancesco, J, 2006).

The cost of redeveloping Brownfield land is unknown, compared to developing on a Greenfield property (MAH, 2012). This is because of the costs associated with the potential contamination of the property (MAH, 2012). The cost of developing on a Brownfield has been calculated by determining the internal rate of return, as well as the conjoint choice question method. The financial risks that need to be considered are; hidden reduction in land values, declines in social costs, lack of economic incentives, and inflexible development regulations (Brantford City Council, 2002). All these add to the uncertainties in the cost of redevelopment.

A major concern for developers is the perverse subsidies and tax barriers that come with developing and owning a Brownfield property. In order to overcome the tax challenge, Bill 56 has come into play in Ontario. This bill is now a law, which allows municipalities to provide municipal tax relief, which will cancel property taxes until after the remediation period of the Brownfield redevelopment. However, the minister of finance must approve each property in order to revoke the property taxes for a specified time (Abdek-Aziz and Elliot, S et al, 2011).

Nonetheless, most Brownfield redeveloper owners do not find the current tax to be the issue, but the tax arrears to be an issue as it increases the cost of the property,
(NRTEE, 2005). Municipalities have expressed interest in encouraging Brownfield redevelopment by eradicating tax arrears and/or liens on qualifying properties (NRTEE, 2005). With the removal of tax arrears or liens it is an upfront redevelopment incentive, which are hard to come by in Brownfield redevelopment. This type of incentive is very important for developers.

An additional tax barrier that needs to be managed when it comes to Brownfield redevelopment is that once a Brownfield property is assessed, the developments tax class is automatically changed. This leads to the property being taxed in a higher bracket even before the official use is able to take place (CIELAP, 2011). Greenfield sites maintain their low property value, as well as low farmland tax rate until construction commences, while Brownfields are given a higher property value due to their previous industrial use. The difference in tax assessment for a Brownfield compared to a Greenfield can be hundreds of thousands of dollars (CIELAP, 2011).

Although there are numerous financial incentives available, the private sector is still reluctant to develop on these lands, as there is competition from Greenfields, there is a negative public perception of Brownfields, the risk and cost of the development and the complex revitalization process. In order to ensure Brownfield redevelopment success, this issue needs to be addressed. (Hayek et al, 2010).

5.2. The Issue of Liability:

It has been noted by many, that civil and regulatory liability are major impediments for Brownfield redevelopment. This potential liability diminishes the interest for Brownfield redevelopment among developers, financers, lessors, buyers, as
well as provincial and municipal approval boards. This adds to the view among many private sector developers of Brownfield redevelopment as more costly and uncertain.

Conversely, there have been recent changes made to the provincial regulatory and legal regime, which now gives Brownfield redevelopers some regulatory liability protection, as well as some civil liability protection. An example of this liability protection, is granting exemption from some environmental orders for contaminated cleanup, if the owner has registered their site for a Record of Site Condition (CIELAP, 2011).

5.3. Challenge: Lack of a Database

Tracking in the United States is improving, however, as of now the tracking of the sites, as well as the information of the property is still rather difficult to access (Adams, et al, 2010). It is argued that a lack of a formal system to register Brownfields is the reason why real estate developers are less keen on getting involved with these types of developments (Adams, et al, 2010). However, Hayek et al (2010), argue that this challenge can be overcome with the use of GIS in identifying the potential contaminates of the land (Hayek et al, 2010).

5.4. Challenge: Multiple or Unknown Ownership:

In most cases, multiple owners own a particular Brownfield property, therefore the actual owner of a site can be very difficult to determine. This is because land ownership rights exist in bundles, which means that the ownership of a particular development may be allocated among numerous entities. Subsequently, Brownfield redevelopment is generally delayed until ownership can be determined for a sole entity
(CIELAP, 2011). This could also be due to a spill or contamination that happened historically, and the current owner wanting the previous owner to take responsibility.

Ownership is further complicated when owners are timid to sell their land due to a belief that they deserve more money for their particular piece of land or under the assumption that prices will increase in the near future. This is problematic, as it leaves Brownfield sites vacant for a longer period of time (CIELAP, 2011).

5.5. Challenge: Regulatory and Administrative obstacles:

Administration obstacles were seen as a key impediment on Brownfield redevelopment. Developers find it very difficult to meet as well as understand the remediation criteria, as it is seen to be tedious, unscientific and sometimes unrealistic. It is difficult to get risk assessments approved and signatures of completion from remediated inspectors. Lack of consistency when it comes to the approval process, as it is different in every municipality also contributes to the lack of developer interest. Finally, the most common administration comment and challenge is dealing with slow and lengthy reviews and approval processes, especially when it comes to risk management and remediation (DiFrancesco, J, 2006).

5.6. Challenge: Leapfrogging

Leapfrogging is a newer challenge to Brownfield redevelopment. It occurs when a new development “leaps” over a Greenbelt and targets a remote region beyond the suburbs. Leapfrogging impedes on Brownfield revitalization, but it also obstructs Greenbelt protection plans. Therefore, Leapfrogging hampers the effort to decrease urban sprawl and segregates Greenbelts natural landscapes from their adjacent
ecosystems (CIELAP, 2011). Consequently, Leapfrogging needs to be addressed in order to ensure Brownfield redevelopment, as well as the protection of the surrounding areas.

5.7. Overcoming the Challenges:

To overcome the financial challenges of Brownfield redevelopment, many municipalities have created toolkits in order to promote the financial incentives of the CIP. These programs are aimed at developers, as well as landowners (Brantford City Council, 2002). The most popular aid to develop on Brownfields is; increment equivalent grants and then tax assistance and study grants (MAH, 2012). Table 1 is a list of financial incentives that have been used to promote Brownfield redevelopment in municipalities:

**Table 1: Common Brownfield Financial Incentives in Ontario**

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<th>Grant</th>
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<tr>
<td>Study Grant Programs</td>
<td>Used in order to compensate environmental remediation costs. These incentives are used in order to estimate potential costs, as well as to promote the collection of information on development sites (MAH, 2012, pg. 25).</td>
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<tr>
<td>Rehabilitation and redevelopment grants</td>
<td>Used in order to provide financial incentives for redevelopment activities. However most municipalities cannot afford to provide upfront financial incentives in Ontario (MAH, 2012, pg. 25).</td>
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<td>Tax Assistance program</td>
<td>A municipality uses, the Tax Assistance program in order to defer or cancel a portion of the property tax for the redeveloped brownfield (MAH, 2012, pg. 25).</td>
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<td>The Municipal Fees Grant Program</td>
<td>This grant offers a town money in order to pay for all or a portion of the municipalities development fees, these fees include, planning and development applications, permit fees, etc. (MAH, 2012, pg. 25).</td>
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<td>Brownfield municipal leadership strategy (MLS),</td>
<td>Used to explain the role that the municipality will have throughout the development of the brownfield (MAH, 2012, pg. 25).</td>
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<tr>
<td>Site Assessment Grants</td>
<td>Used in the US in order to conduct Baseline Environmental Assessment (BEA). These assessments identify as much information about the site that can be possibly known (Davies, 1999).</td>
</tr>
</tbody>
</table>
In 1998 the U.S Conference of Mayors ensured that funding for Brownfield redevelopment was their most important project. They also agreed that all Brownfield redevelopment’s need to include public engagement (Greenberg, et al, 2000). Pavlot (2013) concludes that public engagement is central to Brownfield redevelopment. Nonetheless the study also showed that not all residents in the US support low-density communities (Pavlot, 2013). Solitaire (2005) argues how important public engagement is for Brownfield redevelopment, and how the government and developers need to ensure that the public is engaged in meaningful participation. However, the case studies that were examined in this research also showed that residents do not always see Brownfield redevelopment as an ultimate threat. These residents may not insist that Brownfields be revitalized, which could lead to further problems (Solitaire, 2005). Therefore, it is important to make the public aware of the issues that are involved in leaving Brownfields alone, in order to encourage their redevelopment.

Although there are numerous challenges to Brownfield redevelopment, it is argued by many authors, that the revitalization of Brownfields can provide numerous economic and social benefits to a community and that is why Brownfield redevelopment is becoming more common. (Glumac, et al, 2011). The National Round Table on the Environment and the Economy (NRTEE) believes that the challenge is to create an atmosphere that encourages investors to find productive uses for Brownfields with the input of all levels of governments. Furthermore, it is argued that all stakeholders need to be treated fairly in order to ensure redevelopment (NRTEE, 1998). Therefore, we
need to ensure these challenges are addressed in the actual practice of Brownfield redevelopment.

6.0. Generic Brownfield Redevelopment Process:

A generic four-step process can be used in order to redevelop Brownfield sites. The steps are as follows; 1) site identification, 2) Site assessment, 3) Site remediation and 4) Site redevelopment (Attoh-Okine, et al, 2001). Once a Brownfield site is identified, a site assessment is conducted, which determines the level of contamination on the land. The first site assessment is a phase 1 assessment in which environmental consultants prepare an analysis through research, interviews, records, etc. in order to determine if the land is contaminated. If the land is contaminated, a phase 2-site assessment is needed, this includes, actual sampling of the water and soil around the land in order to determine the extent to which it is contaminated and how the site can be cleaned-up to an appropriate level so that it can be used again (Attoh-Okine, et al, 2001). In order to create a practical and feasible plan that will clean up a contaminated site, the succeeding criteria is considered; economic considerations, future land use, exposure pathways and toxicity (Attoh-Okine, et al, 2001).

7.0. Results and Discussion:

Although, there are numerous policies that are encouraging Brownfield redevelopment in Canada, policies in Canada are not as developed as they are in Europe and in the US (De Sousa, 2001). Canadian polices in the last five years have been weakened, resulting in a lot of variability among the provinces of Canada as there is no standard to follow, therefore many provinces have started to look to the US for answers
(De Sousa, 2001). Furthermore, in since Brownfield redevelopment is a land use issue most of the responsibility is left in the hands of the Provincial and Municipal government versus the Federal government. Therefore, the actual practice of Brownfield redevelopment needs to be coherent with the challenges and opportunities of the redevelopment in order to encourage the development. The following sections will explore the policies of Guelph and Waterloo.

7.1. Brownfield Redevelopment in the Municipality of Guelph

Guelph has a number of properties that are now considered to be Brownfields due to their previous commercial and/or industrial use. These sites are often left abandoned, underutilized or unoccupied due to fears of the stigma attached to the property, the environmental contamination and the financial burden of site remediation. Although the city of Guelph agrees these properties are a challenge, they believe that the benefits of Brownfield redevelopment far outweigh the costs. This section will analyze the policy, as well as the incentives that are provided for Brownfield redevelopment.

The city of Guelph has developed a Brownfield Redevelopment Community Improvement Plan that includes a number of financial incentives that are anticipated to encourage private sector investment in order to offset some redevelopment costs. The incentives that Guelph utilizes for Brownfield redevelopment, include: Tax Increment Financing Program, Tax Arrears Cancellation Policy, Tax Assistance Policy during Rehabilitation and Consideration of Possible Development Change Incentives. These incentives are typically used because Brownfield redevelopment is potentially more
difficult compared to Greenfield development. This is of course due to the fact that there are many unknowns when it comes to Brownfield redevelopment, such as the amount of contaminates and how much it will take to remediate the property, demolition costs, as well as risk versus liability. Although in recent years incentives have come into play, the market for Brownfield redevelopment will most likely remain a niche market. Moreover, current changes to the provincial Brownfield legislation now permit towns to start tax sales in order to commence suitable ESA’s exclusive of the exposure to environmental accountability (City of Guelph, 2002).

7.1.1 Guelph Brownfield Redevelopment Objectives and Goals:

Incentives are used in order to encourage Brownfield redevelopment, but there also has to be a way to guarantee that Brownfield redevelopment is happening in a specific fashion. In order to certify that the Brownfield Redevelopment Policy that Guelph has in place is achieving its purpose, it was important that the city develop objectives in order to ensure its efficiency, therefore the following objectives were created:

1) To support and assist safe revitalization of contaminated locations

2) To develop guidelines for the evaluation of identified and potentially contaminated properties

3) To certify that contaminated properties are remediated to suitable Provincial standard or risk-based criteria allowing development only to take place on properties where the environmental conditions are appropriate for the proposed use

4) To encourage the improvement, restoration and revitalization of land and buildings situated on possibly contaminated sites
5) To recognize known and potentially contaminated sites that are suitable for financial assistance for environmental site assessment and remediation through the city’s Brownfield redevelopment Community Improvement Plan

6) To safeguard, improve or restore the quantity and quality of the city’s groundwater resources (City of Guelph, 2014).

The city of Guelph has developed several principles underlying their Brownfield redevelopment strategy:

1) The principal responsibility of the municipality is to provide guidance and simplify private sector attentiveness in the redevelopment of Brownfield through the harmonized use of financial, monitoring, advertising and planning tools

2) Guelph’s Council has recognized “Brownfield” reuse as a Council precedence establishing part of the City’s Smart Growth initiative

3) Municipal as well as Provincial and Federal assets are essential to overcome impediments to Brownfield revitalization

4) Municipal incentives to assist Brownfield restoration signify an investment in the City by enabling development on properties, which are underutilized, and consequently not contributing their full potential (City of Guelph, 2002).

7.1.2. Guelph Brownfield Redevelopment Incentive Programs:

In order to gain a better understanding of the incentives for Brownfield, please review Appendix C – Brownfield Redevelopment Incentives. The previously mentioned incentives are projected to equal out the playing field by counterbalancing the extra expenses, which are sustained as a consequence of onsite contamination (City of Guelph, 2002). The following will provide a brief description of the incentives provided by the city of Guelph:

7.1.2.1 Tax Increment Financing:
Tax increment financing uses the forthcoming upturn in tax assessment and property tax profits on a site associated with a planned development to pay for the expenses related to the ESA and remediation. This type of incentive program works by establishing the pre and post construction property assessments, the cost of the environmental cleanup is determined, then the difference between the pre-construction tax compared to the post-construction tax will determine if a full or partial tax increment base grant will be given to aide in the ESA and the remediation portion of the development. This type of incentive is only available for a specific period of time determined by the municipality and the proponent (City of Guelph, 2002).

7.1.2.2 Tax Arrears Cancellation Policy:

This type of incentive only applies to Brownfield properties that are in tax arrears, where there is a third party interested in purchasing the site. This approach is capable of promoting Brownfield sites, without the municipality exposing themselves to the risk of ownership. Furthermore, this type of incentive can only apply to properties where the expense of the taxes, remediation and property tax consequences exceed the existing market price of the property as a remediated site (City of Guelph, 2002).

7.1.2.3 The Tax Write-Off Approach:

Calculating the present value of the property if there was no contamination and the cost of the remediation and ESA would also be calculated to use this approach. The difference between the present value of the site and the remediation costs and ESA would be considered the amount of outstanding taxes that would be paid and the remaining taxes would be exempted (City of Guelph, 2002).
7.1.2.4 Tax Assistance during Rehabilitation:

The Brownfield Amendment Act established an incentive, which allows cities to terminate or hold some or all of the taxes during the redevelopment and rehabilitation time phases. This incentive permits tax relief to commence while the cleanup is happening until specified by the municipality or when the cost equals the cost of rehabilitation (City of Guelph, 2002).

7.1.3. Procedures for Brownfield Redevelopment in Guelph:

With the previous objectives and principles in mind, Brownfield redevelopment can occur in the city of Guelph. In order for a proponent to develop a Brownfield property, the city of Guelph may require a Phase 1 or a Phase 2 Environmental Site Assessment (ESA) on the property for the development application. A qualified person must conduct an ESA either to the liking of the city of Guelph or in agreement with the provincial standards and regulations. Furthermore, before development approval is given to the property, the city will require a condition of development approval, which is a written statement completed by the qualified person who ensures the property meets provincial standards. Additionally, the city may require that a peer review of the ESA, if this is the case the city will hire a qualified person to assess, but the cost of the peer review falls in the hands of the proponents (City of Guelph, 2014).

Furthermore, the letter will state whether or not the property has been made suitable for the proposed use in harmony with provincial legislation. This letter may require the inclusion of a Record of Site Condition (RSC), which must also be signed by a qualified person. It is anticipated that the RSC is filed in accordance to meet the water
and soil quality benchmarks set out by the Ministry of the Environment. Therefore, by completing the RSC and the risk assessment, it must be determined that the city’s drinking water is completely protected from adverse effects. Once all of these standards are met and the property meets the required conditions, whether that is through remediation or not the proponent may then begin to develop the Brownfield site into the proposed use. However in order to get from a Brownfield property, through the approval process, all the way to the new development there are several steps the proponent must take that can be extremely costly and that is why many need to utilize the incentives provided (City of Guelph, 2014).

Generally, Brownfield redevelopment investigations are completed in two phases, which are audits. Phase one consists of gathering all the information on the previous land uses and activities in order to determine the potential contaminants that may be on the property. This phase will determine whether or not there needs to be further investigation. This will normally include: a meeting with former owners/employees, a visual examination of the property and a review of any obtainable records, however this phase does not include obtaining hard samples. A phase two audit encompasses on site investigations, which are used to determine the nature and magnitude of contamination on the property with remediation and monitoring recommendations. Since samples are taken and the investigation is further in-depth it can be very expensive and may take a long time to complete (City of Guelph, 2002). With these policies in mind, Guelph’s overall Brownfield redevelopment experience will be explored.
7.1.4. Overall Guelph Experience:

The city of Guelph has developed an inventory system of Brownfields. The city currently has 175 probable sites (not a public list), which is based on previous uses of the properties. Appendix D shows a partial Brownfield Map in their Community Improvement Area. Even with this information, the city is looking into creating a more informative inventory of the sites and potentially others, as they are available. They believe that this current strategy will help in evaluating the success of their Brownfield strategy and get the ball rolling on increasing their Brownfield redevelopments.

Furthermore, the city of Guelph conducted an analysis of four Brownfield properties and it suggested that the property evaluation augmented by $27,000,000 following revitalization and taxes were boosted by $600,000 signifying a 10% growth in municipal income from the properties (City of Guelph, 2002). With this in mind there is no wonder why the city of Guelph is encouraging this type of development.

7.1.5 Guelph Experience with Record of Site Conditions (RSC):

Another question that was asked during the interview concerned RSC’s. The Planning Act does not provide specifications as to when an RSC is needed for a development, so it is up to the municipality to determine when one is required. This is generally dependent on the culture of the municipality. However Guelph believes that it is a fundamental balancing act between safety and time for developers, planners and the general public. As the municipality needs to ensure the development is safe and not contaminated, they also need to ensure that it is achievable and timely enough for the developer to accommodate the requests of the municipality. Additionally, the city
believes that engineers and planners do not see eye to eye on this matter. Therefore, it may require further research and discussion within the city.

The importance of an RSC is that it gives protection to the Ministry of Environment (MOE) and therefore current owners are no longer liable for the environmental contamination on the proposed development. The issue with this being the case, is that the polluter of the property is generally gone, therefore most proponents see that since the person who contaminated the land, took off, no one else should have to pay for their mistake. This deal can create numerous problems as the ground is contaminated and therefore, needs to be cleaned-up but it is hard to get anyone to do this unless there is incentive to do so. And that is why there needs to be an excessive amount of upfront incentives in order to encourage Brownfield redevelopment.

**7.1. 6. Benefits of Brownfield Redevelopment in Guelph:**

The planners of Guelph believes like most municipalities that Brownfield sites are generally located in prestige locations and that their revitalization would result in the following benefits:

1) Improvement of the downtown core and proximate neighborhoods

2) More efficient use of current municipal infrastructure

3) Reduced pressure for urban sprawl

4) Clean-up of environmentally polluted properties

5) Amplified tax income and employment opportunities (City of Guelph, 2002).
The previous benefits were further discussed in an interview with municipal planners from the city of Guelph. However on the opposite end they discussed several common disadvantages such as time and risk costs, for example site investigations can take a very long time and that time and money is not required for a Greenfield development. Bureaucratic hurdles, which they feel are not so much about policy, but more about the process of Brownfield redevelopment and the standards developed by the Ministry of Housing, as they tend to be very strict.

Another common theme discussed was how sophisticated a developer had to be in order to undertake Brownfield redevelopment, compared to Greenfield development. This is because there are many more steps in order to get the ball rolling on the development, there are a lot more known quantities in Greenfield development and way more unknown quantities in Brownfield redevelopment therefore making it extremely difficult to develop this type of land. However overall the city of Guelph has seen a lot of exciting changes in the past five years, which has included many progressive elements for Brownfield development.

7.1. 7. Guelph Perception of Provincial Policy Support

The question was also asked whether or not it was useful that the Provincial Policy statement supports Brownfield redevelopment? For example, Section 1/7/1c states, “Long-term economic prosperity should be supported by promoting the redevelopment of Brownfield sites” the planners of Guelph believes that this statement doesn’t hurt Brownfield redevelopment, but it still does not provide guidance or state how Brownfield redevelopment should be done or how it should be regulated.
Furthermore, they believed that it didn’t really help gain public or council support since not everyone reads the PPS, therefore they wouldn’t understand the matter. The majority of the public suffers from Not In My Back Yard syndrome, meaning that unless the matter directly affects them they do not necessarily care. Hence, it is very crucial that the general public and council members are educated on the matters of Brownfield redevelopment and the importance of revitalizing Brownfields compared to Greenfield development, which is just creating urban sprawl and diminishing any green space.

Moreover, the city found that the Growth Plan for the Greater Golden Horseshoe to be more useful as it was created under the Places to Grow Act and aims at directing growth to built-up areas, requiring municipalities to develop intensification targets. This helped the city of Guelph as it identified the downtown as a growth area, which has been extremely valuable for them. It helped increase public investment into the downtown core, as well as increase financial incentives for the area. This also meant that the city of Guelph has to update their current development plan for the city, this updated the former plan from 1970 to 2009 to meet the required legislation, but also made the development plan an OPPI award winning plan.

7.1.8. Public Opposition to Guelph’s Brownfield Redevelopment Policy:

One of the many concerns of Brownfield redevelopment is public opposition, as most people have concerns about this type of development as it is seen as contaminated. Concerns can include the fact that when developers are being dug up contaminates become air-borne, or that it will seep through the ground and in to the ground water system, etc. Furthermore, since incentives are generally paid via taxpayer
money, both the public and city council question as to whether or not these developments would occur anyways without the incentive programs. However, it is generally assumed that fewer developers would be interested in Brownfield revitalization if there were no incentives in order to offset the general costs, as Greenfield development is less expensive and there are fewer unknowns about the development process.

Another major issue is that some of the public would rather see development occur as usual compared to revitalization. This is because they would rather see new buildings being developed and at the same time still have all their green space available. As we all know this is not possible, therefore it is important to educate the public on development in order to encourage them to be on board with Brownfield redevelopment.

7.1. 9. Guelph Brownfield Redevelopment Policy: Advantages and Disadvantages:

Planners view that the planning side of things it is not very difficult however on the developer side it is a lot more complicated. For example, the development review process is extremely difficult and time consuming and the approvals that encompass this stage can be slightly backwards, such as the Record of Site Condition comes after planning approvals, but you cannot get actual permits till the Record of Site Condition is completed and approved. A disadvantage is the complications that come with the development, such as the unknown amount of contamination in the ground, therefore making the development and planning of the project more complicated. However, once
the disadvantages are overcome, there are numerous advantages that can be achieved, such as environmental remediation of the land and increased income to the municipality.

An opportunity in order to promote and strengthen Brownfield redevelopment is to move up the incentives so that they are received earlier on during the development process. For example, the tax increment grant, which is seen as the best incentive is not given till after the development units are occupied. Therefore, this type of incentive is not given to the proponents at a time when it is actually needed. A place that does do incentives in the most efficient manner according to the city of Guelph is the city of Hamilton, as they provide incentives upfront and the developers do not need to wait until the whole revitalization stage is complete. Additionally, this is a change that Guelph would like to propose in order to encourage Brownfield redevelopment. They believe that if incentives were offered earlier in the process then more developers would be interested in developing contaminated sites and the city would also have more private sector investments. Hence, this would help the city reach their development goals earlier.

7.2. Brownfield Redevelopment in the Regional Municipality of Waterloo

The historic developments in Waterloo and the historic land uses and employment activities were generally: manufacturing, industrial and commercial activities. These land use types did not consider the impact that they would later have or the implications that would come from their daily activities. As an impact of these
land uses and developments some of these properties today may still have some
contaminates on the property, which can act as an impediment to the revitalization of
the property. Since these lands are contaminated they are often not considered a
valuable redevelopment opportunity due to the financial costs, the uncertainties,
liabilities and risks associated with the remediation procedures. For the city of Waterloo
this has resulted in a loss of tax revenue, inefficient use of property and pressure to
expand the city. Therefore, Waterloo has enacted a Brownfield Community
Improvement Plan in order to encourage revitalization. Although there have been many
properties redevelopment, there are still several Brownfield sites that still need to be
restored (City of Waterloo, 2013).

The city of Waterloo defines a “Remediated Brownfield” as a site, which
encompassed environmental contamination either on the property somewhere due to
the events of a former land use, where the magnitude of the contamination deemed the
site unoccupied, underutilized, hazardous, unproductive, or uninhibited and for which
an RSC has been filed (City of Waterloo, 2013).

7.2.1. Benefits of Brownfield Redevelopment in Waterloo:

Waterloo believes there are many benefits that come from Brownfield
redevelopment, these are as follows: brownfield properties are generally located in core
areas, and if these sites are developed they can help rejuvenate the surrounding
neighbourhoods, this will also ensure that developments in this area will include mix use
developments where people may be able to live and work in the same neighborhood.
Moreover, these developments generate more employment opportunities as well as tax
revenue for the city. Lastly and most importantly to the city of Waterloo, the remediation of Brownfields eliminates the pressures of health and safety while minimizing any exposure to water contamination (City of Waterloo, 2013).

7.2.2. Regional Municipality of Waterloo: Goals of the CIP

To go hand in hand with the benefits of Brownfield redevelopment, the goals of the Community Improvement Plan are as follows:

1) Advance communities
2) Support intensification and/or transit oriented development
3) Maintain and improve uptown Waterloo
4) Enhancing environmental, social, cultural, economic development and/or safety conditions (City of Waterloo, 2013).
5) Encourage private and public sector investment
6) Diminish outward growth
7) Increase tax revenues
8) Improve the appearance of the municipality
9) Maintain environmental health and public safety
10) Increase employment opportunities
11) Educate and create awareness of Brownfield revitalization (City of Waterloo, 2013).

The previous mentioned objectives are coherent with the Provincial regulation and the strategic focus of the Region of Waterloo. Furthermore, they are sustained by the city of Waterloo’s official plan.

7.2.3. Waterloo Brownfield Redevelopment Incentive Programs:
Since there are many reasons to redevelop Brownfields even though it may be time consuming and costly, the City of Waterloo initiated some incentive programs in order to gain some investment from the private and public sector. Therefore, the following incentives have been initiated under Waterloo’s Brownfield Financial Incentive Program (BFIP); the incentives help both the owners and the developers with the costs associated with the environmental examination and revitalization of a Brownfield property:

7.2.2.1 Tax Increment Grant (TIG):

The TIG will provide financial incentives to encourage private sector investment to remediate rehabilitate and redevelop Brownfield properties throughout the City of Waterloo. This program is monitored closely in order to determine the efficiency of the incentive relative to the goals of the CIP. The monitoring will include any modifications the city believes are necessary and will report their findings to city council every two years (City of Waterloo, 2013). This grant is given annually to a developer and the payment is equal to the upsurge in annual property taxes after a Brownfield is revitalized (Region of Waterloo, 2010).

7.2.2.2 Regional Development Charge (RDC) Exemptions:

All areas in the city of Waterloo are eligible for the RDC incentive. The worth of the RDC is established on the entire costs of revitalization, plus 20% for unintended costs, minus any Brownfield monetary support already received (Region of Waterloo, 2010).

7.2.2.3 Phase Two Environmental Site Assessment (ESA) Grant:
This grant is also available throughout the municipality. This incentive provides money towards a Phase two Environmental Site Assessment (ESA) that addresses apprehensions about the effect the development may have on the groundwater quality in the area. This incentive will cover approximately 50% of a Phase two Environmental Site Assessment per property up to a maximum of $40,000 (Region of Waterloo, 2010).

7.2.4. Waterloo Overall Experience:

The Region of Waterloo has found the Planning and Conservation Land Statue Law Amendment Act, 2006 (Bill 51), to be very useful for the city as it initiated several amendments to the planning act that offers supplementary tools for the enactment of provincial legislation and contribute additional sustenance for sustainable development, this includes Brownfield redevelopment. Beneath the Act, the Region of Waterloo now has the capacity to partake in local municipal CIPs through the establishment of incentives to encourage private sector development actions through financing programs (City of Waterloo, 2013). Through interviews with the region, as well as through secondary research it is easy to tell that the city of Waterloo has had a lot of success when it comes to Brownfield redevelopment. However, there is still much more they wish to do in order to ensure all Brownfields are revitalized.

7.2.3.1. Waterloo Experience with RSC’s:

Just like in the city of Guelph, the city of Waterloo has several steps and hurdles to go through in order for the proponent to start developing the property. The city of Waterloo has to go through an RSC every time a developer wants to develop on a Brownfield site. Furthermore, the proponent will need to go through if required a Phase
1 ESA, which is a history of land use on the site, a Phase 2 ESA, which includes onsite investigations, a Phase 3, which is a site remediation, which includes contracted work and finally the RSC will be signed and development can take place once all the proper documents are signed.

In order to fulfill the conditions of an RSC there are two common approaches:

1) Generic Clean Up: This type of cleanup deal with contamination by removing and/or cleaning up the site to the standards set out by the MOE

2) Risk Assessment: By utilizing this approach, specific standards are set out for the particular property and for each contaminate that is known on the site in order to remediate to the designated land use. This method will also have standards in order to mitigate any future exposure. These methodologies are used in order to ensure Brownfield redevelopment in the Region of Waterloo is done in a safe manner in order to mitigate any further contamination and to bring the property back to productive use (Lambert, B, 2011).

7.2.3.2 Waterloo: Brownfield vs. Greenfields:

When asked about what they believed to be the biggest difference between developing on a Brownfield compared to a Greenfield, it was plain to see that of course they are both just completely different. For example with Brownfields you never know what you are going to encounter until you dig up the property, they suggest that once the costs are estimated you need to double it and that will be closer to what you’re actually going to pay. Therefore, the developer is taking a great risk on this type of development and has many more hoops to jump through in order to have a successful development.

7.2.3.3 Greatest Hurdles
The greatest hurdle when planning a Brownfield redevelopment for both planners and developers in this region is seen to be the unpredictability of the contamination, as the true amount is unknown until the soil is actually dug up. Furthermore, money does not get into the developers' hands until much later in the process and it may take up to two to three years. This is a major issue as time is money for developers even according to the planners of the region of Waterloo. They also believe that Brownfield redevelopment is extremely tough on smaller companies and that is why larger developers do most of these developments. It is the intention of the region to make Brownfield redevelopment more affordable for all developers in order to level out the playing field.

7.2.4 Waterloo Case Example: Seagram Lofts:

An example of some of their success is Waterloo’s Seagram Lofts. These lofts are located uptown Waterloo and were a former Footwear factory. The objectives of this development were to restore city life into Uptown Waterloo, as well as preserve the 150-year-old heritage building. In order for this development to be so successful the region waived development charges and offered free road and utility infrastructure and assistance, as well as a minimized the purchase price for the owner of the building. Additionally, the region offered a staff member to help with the application/approval process, as well as, provided rebates for all building and planning fees. The building now has 270 occupied living spaces and won the 2005 Brownie Award for being the Best Overall Project. This is one example of successful Brownfield redevelopments within the region, however there are many more, such as the Google building. Even though there
are some great developments, there still needs to be more done in order to ensure all Brownfields are developed and are successful (Region of Waterloo, 2010).

7.2.5. Benefits of Waterloo Brownfield Redevelopment

In order to further gain a better understanding of the Brownfield redevelopment process and experiences within the region of Waterloo, Key Informant Interviews were conducted. Just like most cities, Waterloo believe there are countless benefits for developing on Brownfields, such as: clean land, vacant sites brought back to life, employment opportunities and tax revenue are seen as the biggest benefits for municipalities. The city generally does not see any disadvantages to this type of development, but they did state that it is a big financial risk and/or burden for the developers as they can pay for the cleanup for five to seven years, but once the cleanup is completely paid for the return on the property is great. Additionally, they stated that there are no disadvantages because the benefits outweigh the disadvantages, for example, they stated that administration work can be tedious and time consuming, but the outcome is so worth any of the obstacles that need to be overcome.

7.2.6 Waterloo Perception of Provincial Policy Support

The planners of the city of Waterloo, like most municipalities, agree that the current Brownfield Policies and CIPs are achieving their objectives. They believe that the legislation is improving everything and it will continue to be improved. For example, the region has increased investment in the transit corridor, resulting in high density and high quality developments in key transit areas. Therefore, increasing intensification,
which is what the region is hoping to achieve with the Brownfield CIP. However, it is argued that this intensification would never happen if there were no programs in place. Likewise, the Growth Plan for the Greater Golden Horseshoe has assisted on the awareness and the promotion of Brownfield redevelopment within Waterloo. This plan makes developers focus on the core and the inner city, consequently mitigating urban expansion. It forced developers to pay more attention to the inner city and in return benefit the municipality. Since it is promoting intensification, the PPS has helped the region achieve Smart Growth and made more developers aware of the matter. The region felt that a policy was not needed to get the ball rolling on Brownfield redevelopment, but it did help attract developers to this type of expansion. Generally speaking both the policy and Waterloo were working on this type of development at the same time because the region realized that something needed to be done with their abandoned and underutilized Brownfields.

7.2.7 Public Opposition To Waterloo’s Brownfield Redevelopment Policy:

Although there hasn’t necessarily been a lot of public opposition in Waterloo in the face of the planner, there has been some public concern about Brownfield redevelopment. Most of the public appears to welcome Brownfield redevelopment as it cleans up the neighborhood and brings income into the city, but there are concerns such as increased traffic in the redevelopment area due to the upsurge in intensity. However, the municipality itself does not have to go through public meetings when this type of development occurs, but the developers do, therefore, the experience from a developer compared to a planner will be completely different.
7.2.8 Waterloo Brownfield Redevelopment Policy: Advantages and Disadvantages

When discussing the advantages and disadvantages of Brownfield redevelopment there were several common themes among the Region. The disadvantage of course being the time it takes to develop these types of properties. For example, an MOE review period can take up to one year and this can put the development in circles. Additionally the time and money spent on these projects, as all developers wish there was a faster easier way to get their money back. An advantage of the program is the fact that the region is always available to help the developers throughout all the stages of the application process until the development can begin.

By discussing the advantages and disadvantages it helped the region determine some of the changes they would like to see in the Brownfield policy/CIP. The main changes were an increase in incentives for sustainable soil management. This would further mitigate any future contaminates on the soil and avoid any leaking into the water system. Furthermore, there was discussion of having strict criteria that each development was required to meet. This would hopefully lead to better developments. For example, the region could reduce remediation if the developer meets the specified criteria, i.e. LEAD certified. By having specified criteria it would be hoped that the regions Brownfield developments are more advanced leading to improved developments.

7.3. Developer Perspectives
Although there were not a lot of responses on the developer Key Informant Interviews due to liability and legal cases with research and other interviews there are some developer experiences that need to be discussed in order to inform, compare and hopefully drive change for these developments. Generally developers who use this type of property develop the site into a mix-use, for example housing, i.e. residential apartments and townhouses mixed in the retail or commercial developments.

7.3.1. On the Main Hurdles

Of course the main hurdle any developer faces when it comes to this type of development is the risk of time versus money. For example in a development that was carried out by Reid’s Heritage Homes an RSC was completed and it included a Phase 2 ESA, which they found to be a barrier to the development, especially if they did not receive any financial incentives for the development. Hence that is why finances will always fall under a disadvantage for Brownfield redevelopment unless something is done in order to change that. Furthermore, there are no incentives for the cleanup work that must take place; this puts an even greater financial burden on the developers. These properties are high-risk sites to finance and are even more risky because you never know what you are dealing with until you get your shovel in the ground. On the other hand, the developer can purchase the land for a cheap price, which is an incentive to build on these properties.

7.3.2 On Brownfield Redevelopment Incentives:

In order to overcome some of the obstacles of Brownfield redevelopment the developers are able to apply and receive incentives for the properties. The main
incentives that the developers find work the best are of course any incentives that they receive up front, which only occurs as of right now in the region of Waterloo with the Development Charge Credit and within the city of Hamilton, who most cities look towards for Brownfield improvement ideas. Therefore, it is important for municipalities to look to other cities for ideas on how they can improve their Brownfield policies in order to attract developers. Most developers would like to see some change to the policies as they feel they are generally too strict and there is too much red tape for them to cross and be able to ensure the developments success.

7.3.3 On the Impacts of Provincial Legislation:

Although the PPS sets the standard for the municipality, most developers do not follow the changes closely and only follow the municipalities’ changes, therefore the municipality legislation has promoted the interest in downtown Brownfield redevelopment. However, it is important for the municipality to educate the developers on the matter and in return it is important for the developers to educate the community, so that there is less opposition for the development. For example, if the public knew and understood the project then they may be less opposed to the development of the property.

7.4 Main Differences between Planner vs. Developer Perspectives

A major difference between Planner and Developer experiences is when asked what the greatest difference between developing on a Brownfield compared to Greenfield is. Developers answer this question with the obvious answer speaking of financial burdens. For example many who have done Brownfield redevelopment now
know that all of their costs are generally going to be doubled once they start to dig in
the ground. It is surprising that many developers say that community involvement is a
major significance between developing on Brownfields compared to Greenfields. In the
majority of developer’s experiences they find the surrounding communities to be more
resistant to a proposed development in an existing infrastructure and would rather see
the vacant property left abandoned. This appears to be because they are concerned
about the contaminants becoming airborne, or infiltrating the groundwater system or
the increase in traffic in the surrounding area due to a new development. Developers
involved generally find there to be five times more community involvement compared
to Greenfield development. These consultations include meetings that do not involve
the planning department, which is why the planner department is unaware of the public
opposition and consultation that occurs with these types of developments.

8.0 Comparative Analysis and Lessons Learned:

In conclusion the cities of Guelph and Waterloo have very similar steps when it
comes to the development of Brownfields, however there are some differences in the
application process and the requirements. As an RSC is always needed for any
Brownfield redevelopment within the Region of Waterloo, where it may not always be
necessary within the city of Guelph. Furthermore, it is interested to note that the Region
of Waterloo has an overall Brownfield redevelopment process and then is specifically
notes each city within the region, i.e. Kitchener and Cambridge. However the City of
Guelph does not appear to include Wellington County within its Brownfield
redevelopment initiatives.
8.1. Common Themes:

A common theme between both municipalities is the need for financial incentives for the proponents as this type of development is risky, costly and time consuming. Without these incentives there would be no “little guys” developing on Brownfields and it would be left up to big companies to develop them instead. However even though there are incentives currently in place, it would be nice for both the municipality and the developers to have access to better incentives. For example, there is only one incentive in Waterloo that you get before the development is complete and in Guelph there are no incentives that you get before the development is complete. Therefore, it is recommended that both municipalities and any other municipality that is trying to encourage Brownfield redevelopment should look towards the city of Hamilton for some ideas on how they can better their incentives. Developers, such as Reid’s Heritage Homes who have developed in numerous municipalities agree that Hamilton has the best incentive programs and that it would be easier if more municipalities had similar incentive programs.

8.2. Suggested Incentives:

The following are the programs that are offered through Hamilton for both owners and developers in order to revitalize the cities Brownfield and heritage buildings. In order to create these incentives the municipality created the Brownfields/ERASE Program. This program is intended to “erase” Brownfields by offering financial assistance in order to remediate and ensure the land is now economically productive (City of Hamilton, 2007). The incentives offered under the program are as follows:
<table>
<thead>
<tr>
<th>Incentive Program</th>
<th>Program Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ERASE Study Grant Program (SGP):</strong></td>
<td>For this grant the city will pay up to half of the cost of the Phase 1 and/or 2 ESA. Therefore, the grant can be used during the remediation process and can be in the amount of $25,000 (City of Hamilton, 2007).</td>
</tr>
<tr>
<td><strong>ERASE Redevelopment Grant Program (RGP):</strong></td>
<td>These grants are only eligible for a specific project area. This grant can cover the costs of: demolition, remediation and construction of the site. However, this grant is only offered to sites were the redeveloped property value increased the property tax revenue. The grant is given to the developer once the developer is complete and can be 80% of the increase in tax revenue and it is given annually for up to ten years (City of Hamilton, 2007).</td>
</tr>
<tr>
<td><strong>ERASE Education Tax Assistance Program (TAP):</strong></td>
<td>This grant will freeze the education tax portion on the property that is being developed.</td>
</tr>
<tr>
<td><strong>Downtown/West Harbourfront Remediation Loan Program (RLP):</strong></td>
<td>This incentive program is also only for projects being redeveloped in the specified locations downtown Hamilton. The incentive provides financial assistance through a low interest loan equal to 80% of the cost of revitalizing the property, to a maximum of $400,000. This loan is to act as a bridge until the owner receives the Property Improvement Grant and/or the ERASE Redevelopment Grant (City of Hamilton, 2007).</td>
</tr>
<tr>
<td><strong>ERASE Municipal Acquisition and Partnership Program (MAPP):</strong></td>
<td>This program is used to further Hamilton’s Brownfield redevelopment leadership, as this incentive is for pilot programs with the private sector that help improve Brownfield clean up that involve innovative tools and technologies for revitalization.</td>
</tr>
<tr>
<td><strong>ERASE Development Charge Reduction Program:</strong></td>
<td>Once the proponent is approved for this incentive, they may choose whether to put the costs towards the environmental remediation of the property against development charges payable for that property, if this is chosen, the price of the remediation will be applied against</td>
</tr>
</tbody>
</table>
the development charges payable and will be deducted from the eligible costs under the ERASE program (City of Hamilton, 2007).

It is recommended that Guelph and Waterloo both examine these incentives in order to promote Brownfield redevelopment within their region.

8.3 Public Opposition Experiences

Additionally, another main issue but not different between municipalities but between planners and developers is the different experiences they go through when developing on these properties. Planners believe there is no opposition for Brownfield redevelopment, but developers argue there actually is community opposition. Therefore, it is important that both planners and developers communicate with each other in order to get on the same page and hopefully educate the public on the importance of Brownfield redevelopment and hopefully this will mitigate some or all of the opposition that developers receive.

Both municipalities are having similar experiences with Brownfield redevelopment, the following recommendations should be considered both municipalities and any other municipality looking to encourage Brownfield redevelopment within their region.

9.0. Recommendations:

Brownfield redevelopment enables Smart Growth through urban intensification. This reduces the demand on Greenfields, and allows green space and agricultural land to be left undeveloped. For every hectare of land developed on a Brownfield, it saves
4.5 hectares of green space, which is great for future generations and that is why the following recommendations should be taken into consideration (CIELAP, 2011).

Although there are numerous barriers to Brownfield redevelopment that still remain there have been many changes over the past seven years that the government of Ontario have conducted in order to address some of the uncertainties. However, there are still numerous challenges that remain that lead to developers and municipalities being reluctant to choose Brownfield redevelopment as opposed to Greenfield development, which leads to increased urban sprawl. Therefore, in order to ensure Brownfield redevelopment occurs it is important to address the concerns that both developers and municipalities have (CIELAP, 2011). The following are several suggestions that were found throughout research and the interview process:

- Ensure that there are some tax incentives for all properties within a municipality and not just in the area that covers the CIP
- Modify current property allocations and property taxation rules so that they do not effect Brownfields being more costly to develop than Greenfields and create more upfront tax incentives to encourage development
- Increase the area of the Greenbelt in order to address concerns about Leapfrogging, or implement a new legislation in order to mitigate the effects of Leapfrogging.
- Encourage partnerships between municipal governments and demonstrate development attentions through public subsidies to motivate private sector financing in Brownfield redevelopment.
Create a database of all Brownfield properties, whether they are being developed or they are still vacant, this will make potential developers aware of the properties. In order to succeed at this, the database must be available online.

Develop a regional methodology to restoration, such as the United Kingdom’s Brownfield land action plan, which monitor and endorse revitalization by examining the current supply of Brownfield land and its relation to regional development priorities. This would include establishing policies requiring it to be demonstrated that there is a lack of appropriate and vacant Brownfield properties for new developments before a municipality may allocate a Greenfield site for development. The United Kingdom has been using this approach for several years and it has encouraged Brownfield redevelopment, as those sites are looked at first before, any Greenfield site may be considered. However this would also need to include more incentives, as developers would be forced to develop on a Brownfield (CIELAP, 2011).

Educate the public on Brownfield matters, so that there is less opposition for the developers to deal with. By educating the public they will understand the importance of Brownfield redevelopment and gain knowledge of the benefits this development includes.

Establish a center for investment. This would hopefully encourage brownfield incentive programs both offered by municipalities as well as by the private
sector. This recommendation is very important, as incentives are extremely important for Brownfield redevelopment. Going along with this recommendation, I would suggest that municipalities interested in increasing the types of incentives they have to look at the city of Hamilton in order to gain more knowledge of what else could be done in order to encourage development (CIELAP, 2011).

- However, in recent news with the scandal in Quebec and New Brunswick about a U.S. company coming in and “cleaning-up” the site and then not paying taxes, or fully remediating the site, and not meeting their promises, it is recommended that all municipalities put a legislation in to force so that once a company or a owner begins the remediation process they must fully clean the property. This will have to include written agreements and may go hand in hand with incentive programs, but it is important to have an agreement like this in place so something like the GIGI scandal doesn’t happen again. This scandal included the company taking $1 million in scrap metal and then they did not meet the remediation standards, stopped building and did not meet any of their promises. This is just one example of what the company has done, therefore, it is important to have agreements in place so that scandals do not happen and the developer pays the tax revenue (Sawa and McDonald, 2014).

The previous recommendations are just one-stepping stone in order to improve Brownfield redevelopment within the province of Ontario. These recommendations
would help Brownfield redevelopment within the municipalities, but there is always further research that needs to be analyzed.

10.0 Final Thoughts:

It seems easy to see that Brownfield redevelopment is becoming a popular trend, especially now that there are more stakeholders concerned about the environment. It examined the policies and experiences in other regions in order to gain a better understanding of common practices. This paper explored how Brownfield redevelopment occurs in different municipalities with a specific comparison between Guelph and Waterloo. It was concluded that the policies are fairly similar to each other with similar challenges that need to overcome. It is suggested that both of the regions and other municipalities look towards each other for experiences, especially towards Hamilton, as they are known to have some of the best incentive programs. Furthermore, it is important for these municipalities to look at other places, not just in Ontario, but elsewhere such as the United Kingdom, United States, and Europe in order promote and create new policies and incentives for Brownfield redevelopment and ensure the success of the programs. It is hoped that this research will help municipalities further their Brownfield redevelopment programs in order to maintain and promote their development.
Appendix A – Planner Interview Guide:

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Planner Interview Guide

A. Background Information:

1. You were involved as a planner for a Brownfield redevelopment. What exactly was the infrastructure being developed? (E.g. shopping mall, housing, commercial building, etc.)

2. How many years have you been involved in Brownfield redevelopment?

3. In your view and from your experience what are the benefits and disadvantages of redeveloping Brownfields?
   a. Benefits
   b. Disadvantages

B. Process of the Redevelopment:

1. Have you also been involved in Greenfield development? If so, for how many years?

2. From your experience and in your view what was the biggest difference between developing on a Brownfield compare to a Greenfield?
   a. Policy and application process
   b. Community Involvement
   c. Financing
   d. Other
   e. None
   Please explain the details.

3. What did you find the greatest hurdle to be when planning a Brownfield redevelopment?
   a. Liability
b. Regulations

c. Financial Constraints and Risks

d. Planning Approval Process

e. Market Conditions

C. Policy Questions:

1. Are the current Brownfield redevelopment policies and CIPs achieving their objectives?
   a. Encourage maximum use of existing municipal services
   b. Improving environmental and social conditions
   c. Support environmentally sustainable development
   d. Reduction in outward expansion
   e. Promoting the remediation, rehabilitation, adaptive reuse and overall improvement of private and public sector land and/or buildings
   f. Other

   Please explain.

2. What in your view are the strengths, weaknesses, opportunities and threats of the current application and approval process?

3. If you can propose just one change in the Brownfield redevelopment policy/CIP, what would it be?

4. If you can propose just one change in the Brownfield redevelopment application process, what would it be?

5. Do you find it useful that the Provincial Policy Statement supports Brownfield Redevelopment? For example, Section 1/7/1/ c states, “Long-term economic prosperity should be supported by promoting the redevelopment of Brownfield Sites”

   a. Do you find this helped gain support for Brownfield development?

   Please explain

6. The Growth Plan for the Greater Golden Horseshoe was created under the Places to Grow Plan, the policy aims at directing growth to built-up areas, requiring municipalities to develop intensification targets (Located Downtown).
a. Do you believe this specific policy has made it easier to plan for Brownfield redevelopment, as it identified both the downtown locations as places for intensification? Please explain.

b. Do you think a policy such as this was needed in order to “get the ball rolling” with Brownfield Redevelopment?

7. Since the Planning Act does not provide specific instructions as to when the Record of Site Condition (RSC), how do you determine when an RSC needs to be filed?
   a. To ensure environmental concerns are being addressed?
   b. Other
   Please explain.

8. After an RSC has been filed and the property has met the appropriate standards, the potential for environmental liability has been seen as a barrier to brownfield redevelopment? How do you think this barrier can be mitigated?

9. Do you think it is a problem that there does not appear to be any effort to develop a National Brownfield strategy?

D. Conclusions of the Redevelopment Initiatives you have been Involved with:

1. What were the results of the most recent Brownfield Redevelopment initiative you were involved with?

2. Was there any public opposition?
   a. If yes, to what aspects?
   b. If no, why do you think the process was smoother than most cases?

3. How successful was this development? Do you think it would have been more successful (i.e. easier to accomplish, more profitable, etc.) if it were developed on a Greenfield?

E. General Questions:

1. Do you think it is important to develop on Brownfields rather than Greenfields?

2. From your experience do residents welcome Brownfield redevelopment, or would prefer to see Greenfield development?
3. Do you have any other comments you would like to make on brownfield redevelopment? There might be important policy issues that I missed?

4. Any advice to planning students interested in specializing in brownfield development? Any skills they should develop? Any knowledge base?
Appendix B – Developer Interview Guide:

A. Background Information:

1. You were involved as a developer for a Brownfield Redevelopment project. What exactly was the infrastructure being developed? (e.g. shopping mall, housing, commercial store etc.)

2. Did you have to file a Record of Site Condition (RSC) for this particular development?
   a. Was a Phase 1 Environmental Site Assessment (ESA) completed or a Phase 2 ESA?

3. After an RSC has been filed and the property has met the appropriate standards, the potential for environmental liability has been seen as a barrier to brownfield redevelopment? How do you think this barrier can be mitigated?

4. How many years have you been involved in Brownfield redevelopment?

5. In your view and from your experience, what are the benefits and disadvantages of redeveloping Brownfields?
   a. Benefits:

   b. Disadvantage:

B. On the process of Brownfield Redevelopment:

1. Have you also been involved in Greenfield development? For how many years?

2. In your view and from experience, what is the most significant difference between developing on a Brownfield compared to a Greenfield?

   a. Policy and application process
b. Community involvement
c. Financing
d. Other
e. None
(If your answer is A to D above) Can you please explain?

3. As a developer what was the greatest hurdle when undertaking Brownfield redevelopment?

4. What in your view are the strengths, weaknesses, opportunities and threats of the approval process?

C. Incentive Programs:

1. Were you able to use of the provided Incentive Programs?
   a. Environmental Study Grant (ESG) Program
   b. Tax Assistance (TA) Program
   c. Tax Increment Based Grant (TIBG) Program
   d. Other?

2. Were there incentives that worked better compared to others?

3. What additional incentives do you think would make Brownfield redevelopment easier for
   a. Developers to implement such projects
   b. Communities to accept such projects

Please explain.

D. Policies relevant to brownfield redevelopment

1. As a developer do you think: the current Brownfield redevelopment policies and CIPs are achieving their objectives?
   a. Encourage maximum use of existing municipal services
   b. Improving environmental and social conditions
   c. Support environmentally sustainable development
   d. Reduction in outward expansion
   e. Promoting the remediation, rehabilitation, adaptive re0use and overall improvement of private and public sector land and/or buildings
f. Other

Please explain.

2. As a developer, what in your view are the strengths, weaknesses, opportunities and threats of the current application and approval process?

3. As a developer, if you can propose just one change in the Brownfield redevelopment policy/CIP, what would it be?

4. As a developer, if you can propose just one change in the Brownfield redevelopment application process, what would it be?

5. The Provincial Policy Statement supports Brownfield Redevelopment, for example, Section 1/7/1/ c states, “Long-term economic prosperity should be supported by promoting the redevelopment of Brownfield Sites”
   a. Do you find this helped gain support for Brownfield development? Please explain

6. The Growth Plan for the Greater Golden Horseshoe was created under the Places to Grow Plan, the policy aims at directing growth to built-up areas, requiring municipalities to develop intensification targets (Located Downtown Guelph and Uptown Waterloo).
   a. Do you believe this specific policy has made it easier to plan for Brownfield redevelopment, as it identified both the downtown locations as places for intensification? Please explain.
   b. Do you think a policy such as this was needed in order to “get the ball rolling” with Brownfield Redevelopment?

E. Conclusions of the Redevelopment Initiatives you have been Involved with:
1. Was there any public opposition?
   a. If yes, to what specific aspects
   b. If no, why do you think the process was smoother than most cases?

   Please explain.

2. How successful was this development? Do you think it would have been more successful (i.e. easier to accomplish, more profitable, etc.) if it were developed on a Greenfield?

3. Is this development considered to be environmentally sustainable (i.e. LEED certified)?

F. General Questions:

1. As a developer do you prefer Brownfield over Greenfield development or the other way around? Can you please explain?

2. Do you think it is important to develop on Brownfields compared to Greenfields?

3. Do you think can mitigate any negative impacts of/or sources of concern about Brownfield redevelopment? If so, how?

4. In your experience do residents welcome Brownfield redevelopment, or would they prefer to see Greenfield development?

5. Do you think it is a problem that there does not appear to be any present-day effort to develop a National Brownfield strategy?

6. Do you have any other comments you would like to make? I might have missed some important issues on Brownfield development
Appendix C – Brownfield Incentive Program Summary:

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Program Description</th>
<th>Recommended Program Duration</th>
</tr>
</thead>
</table>
| Environmental Study Grant (ESG) Program | -Grant equivalent to 50% of the cost of a Phase 2 environmental site assessment, designated substances and hazardous materials survey, remedial work plan or risk assessment  
-Maximum grant of $15,000 per environmental study  
-Maximum of 2 studies per property/project  
-Maximum total grant of $30,000 per property/project | -Approximately to the end of 2017 with option to extend up to approximately the end of 2023 |
| Tax Assistance (TA) Program           | -Cancellation of part or all of the municipal property taxes and education property taxes for up to 3 years  
-Cancellation of education property taxes is subject to approval by the Minister of Finance | -Approximately to the end of 2023                                                             |
| Tax Increment Based Grant (TIBG) Program | -Grant equivalent to 80% of the municipal property tax increment created by the project for up to 10 years after project completion | -Approximately to the end of 2023                                                             |

Program Variables to be monitored:

<table>
<thead>
<tr>
<th>Program</th>
<th>Variable</th>
</tr>
</thead>
</table>
| Environmental Study Grant (ESG) Program       | -Property location  
-Number of applications  
-Type of ESA (phase 2, remedial work plan, or risk assessment  
-Cost of study  
-$ amount of grant  
-Number of Grant Applications leading to TA applications, TIBG applications and/or actual |
<table>
<thead>
<tr>
<th>Environmental remediation and rehabilitation projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Time required to approve complete application</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th><strong>Tax Assistance (TA) Program</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Property location</strong></td>
</tr>
<tr>
<td>- Number of applications</td>
</tr>
<tr>
<td>- Increase in assessed value of participating properties</td>
</tr>
<tr>
<td>- Estimated and actual amount of municipal and education tax assistance provided</td>
</tr>
<tr>
<td>- Hectares/ acres of land remediated and redeveloped</td>
</tr>
<tr>
<td>- Industrial/commercial space rehabilitated or constructed</td>
</tr>
<tr>
<td>- Residential units rehabilitated or constructed</td>
</tr>
<tr>
<td>- $ value of private sector investment leveraged</td>
</tr>
<tr>
<td>- Jobs created/maintained</td>
</tr>
<tr>
<td>- Number of program defaults</td>
</tr>
<tr>
<td>- Time required to approve complete application</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Tax Increment Based Grant (TIBG) Program</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Property location</strong></td>
</tr>
<tr>
<td>- Number of applications</td>
</tr>
<tr>
<td>- Increase in assessed value or participating properties</td>
</tr>
<tr>
<td>- Increase in municipal and education property taxes of participating properties</td>
</tr>
<tr>
<td>- Estimated and actual amount of tax increment based grants provided</td>
</tr>
<tr>
<td>- Hectares/ acres of land remediated and redeveloped</td>
</tr>
<tr>
<td>- Industrial/commercial space rehabilitated or constructed</td>
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<td>- Residential units rehabilitated or constructed</td>
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<td>- $ Value of private sector investment leveraged</td>
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<td>- Time required to approve complete application</td>
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</table>

(City of Guelph, 2007).
<table>
<thead>
<tr>
<th>Program Name</th>
<th>Program Description</th>
<th>Eligibility Requirements</th>
</tr>
</thead>
</table>
| Joint Tax Increment    | Provides financial assistance to private sector developers to offset costs of remediating BF sites. A TIG is a grant equal to the full amount, or a portion of the amount that municipal property taxes increase after a property is reassessed. The TIG will commence in the first year following remediation, redevelopment of the property, and reassessment from MPAC. The tax increment does not include assessment. Applications will be accepted until September 2018. The TIG will commence on or after the approval of this CIP. | -The property must meet the definition of a remediated BF  
-The property must be located within the designated CIP area  
-The applicant must be the registered owner of the site or the approved assignee of the owner and must demonstrate clear title and responsibility for the land at the time the TIG is approved by City Council  
-The applicant/owner cannot be responsible for causing the on-site contamination that requires remediation  
-The remediation and redevelopment undertaken must result in a minimum increased property reassessment value of $100,000  
-The Phase 1 and Phase 2 Environmental Site Assessments must be completed by a “qualified person” as defined by Ontario Regulations 153/04 before a TIG application can be submitted  
-Redevelopment plans must meet all approved policy and must comply, to the extent required by Council and its delegate, with applicable design guidelines  
-The property must not be in tax arrears and |
Applications for the TIG Program must be made prior to the issuance of a building permit or redevelopment.

<table>
<thead>
<tr>
<th>Phase 2 ESA</th>
<th>Funding will cover 50% of the ESA</th>
<th>-Most have already completed a Phase 1 ESA</th>
</tr>
</thead>
</table>
| Regional Development Charge Exemption | Exemptions that help cover the cost of remediation | -Must be a Brownfield by definition  
-Owner must not be the owner who polluted the property  
-Must have paid up to date taxes |

(Region of Waterloo, 2010).
Appendix D – Potential Brownfield sites in Guelph’s Community Improvement Project Area: (Not a complete list)

(City of Guelph, 2008).
References:


Chester County Planning (no date). Redevelopment/Adaptive Reuse of Brownfield and Greyfield. Retrieved from http://www.landscapes2.org/ToolsLandscape/Pages/redevelopment.cfm


McCarthy, L (2002). The brownfield dual land-use policy challenge: reducing barriers to private redevelopment while connecting reuse to broader community goals. Land Use Policy 19, pg. 287-296


Wernstedt, K, Heberle, L and Anna Alberini, (2004). The Brownfield Phenomenon: much ado about something or the timing of the shrewd? Pg. 1-30