

Lessons for Canada's Steel-city

Policies to encourage new economic growth and programs to support former industrial workers in Akron, Allentown and Hamilton



Supervised Research Project Report
Submitted in partial fulfilment of the requirement of Master of Urban Planning degree

Submitted by: Jill Merriman

Supervised by: Prof. Mario Polèse

School of Urban Planning
McGill University
(September, 2011)

Abstract

Older industrial cities in North America have faced challenges over the last fifty years, as the western economy has shifted from production-based to service-oriented. Many jobs in these communities were lost to the modernization of industrial production or were relocated to areas with cheaper labour. Cities in the American rust belt, as well as southern Ontario and Quebec, have attempted to attract new businesses and people through a variety of means, including tax incentives, grants, city re-branding and business incubation. Programs also exist in these regions to assist laid off industrial workers. This report explores a number of mid-sized older industrial cities, with a focus on Akron, Allentown and Hamilton. These three cities are compared with each other, and to a number of similar sized cities, in terms of a number of economic and social health indicators. Programs and policies that are likely contributing to each city's relative success or failure are also explored. The effects and scope of deindustrialization were very different in America and Canada, as was the response to the challenges it imposed. Hamilton can learn from some of the more firm-based and entrepreneurial-supportive policies in place in American cities, while Akron and Allentown should take note of Hamilton's worker-based support systems and brownfield redevelopment program.

Plusieurs anciennes villes industrielles en Amérique du Nord ont fait face à des défis au cours des 50 dernières années lorsque une économie axée sur la production est devenue basée sur les services. De nombreux emplois dans ces communautés ont été perdus grâce à la modernisation de la production industrielle ou ont été réinstallés dans des zones avec une main-d'œuvre moins dispendieuse. Les villes dans la « ceinture de la rouille » américaine, ainsi que le sud de l'Ontario et le Québec, ont tenté d'attirer de nouvelles entreprises et de personnes par plusieurs moyens, y compris des incitations fiscales, des subventions et l'incubation d'entreprises. Il existe aussi des programmes dans ces régions pour aider les travailleurs industriels mis à pied. Ce rapport explore un certain nombre d'anciennes villes industrielles, avec une emphase sur Akron, Allentown et Hamilton. Ces trois villes sont comparées les unes aux autres, ensuite avec quelques villes de taille similaire, en observant des indicateurs de santé économique et sociale. Les programmes et politiques qui auraient une tendance à contribuer à la réussite ou l'échec de chaque ville sont également explorés. Les effets et la portée de la désindustrialisation étaient très différentes en Amérique et au Canada, ainsi que la réponse aux défis qu'elle a imposée. Hamilton pourrait apprendre en observant les politiques de soutien entrepreneuriales en place dans les villes américaines, tandis que Akron et Allentown devraient prendre en note les systèmes de soutien pour les travailleurs et le programme de réaménagement des friches industrielles que l'on trouve à Hamilton.

Acknowledgements

I would like to thank my colleagues and the professors at the McGill School of Urban Planning for a challenging and rewarding two years of study. In particular, I would like to thank my *Made in Montreal* teammates Alex Carruthers and Steve Charters, who are great friends, travel buddies, editors and sounding boards; and who were instrumental in this research process.

A huge thank you to my supervisor Mario Polèse for all of his comments and direction throughout this process. Quick turnaround on drafts, combined with meaningful and direct comments were much appreciated. I would also like to thank my second reader Lisa Bornstein for her thorough reading of this paper and very helpful comments; as well as for her general support and encouragement over the last two years.

I would like to thank my family for all of their love and support. Lastly, I would like all of the great friends I have made here in Montreal, as they have helped make these last two years some of the best so far.

Table of Contents

1 Introduction	4
2 Methodology	7
2.1 Why Hamilton?.....	8
2.2 Why Akron?.....	8
2.3 Why Allentown?.....	8
2.4 Methods.....	9
3 Experiences of Deindustrialization in Canadian and American Cities.....	10
3.1 Canadian and American Experience.....	10
3.1.1 Economic Diversity.....	10
3.1.2 Free Trade.....	11
3.1.3 Unionization.....	12
3.1.4 Traditional Economic Development Tools.....	12
3.1.5 Competition between States and Provinces.....	13
3.1.6 Competition within Provinces and States.....	14
3.1.7 Amalgamation.....	15
3.1.8 Culture and Community.....	16
3.1.9 Wage Expectations.....	18
3.1.10 Race Relations.....	18
3.2 Legacy of Pollution.....	19
3.2.1 Steel Industry.....	20
3.3 The Changing Landscape of Canadian Labour.....	21
3.3.1 Lost Earnings.....	22
4 Comparing Older Mid-sized Industrial Cities	24
5 American Case Studies: Akron and Allentown.....	30
5.1 Akron: A brief history.....	30
5.2 Akron: Assets, Policies and Signs of Recovery	32
5.3 Akron: Policies to Encourage New Development.....	33
5.3.1 Industrial Parks.....	33
5.3.2 Joint Economic Development Districts.....	34
5.3.3 Loans and Grants.....	36
5.3.4 Tax Incentives.....	37
5.4 Akron: Programs for Former Industrial Workers.....	38
5.4.1 Ohio State-run Programs.....	39
5.5 Akron: Signs of Recovery.....	39
5.6 Allentown: A Brief History.....	41
5.7 Allentown: Assets, Policies and Signs of Recovery.....	43
5.8 Allentown: Policies to Encourage New Development.....	44
5.8.1 Redevelopment Authority.....	44
5.8.2 Enterprise Zones.....	45
5.8.3 Regional Cooperation.....	46
5.9 Allentown: Programs for Former Industrial Workers.....	46
5.9.1 PA Career Link Lehigh Valley.....	47
5.9.2 Ben Franklin Technology Partners.....	47
5.9.3 Access to Venture Capital.....	47

5.9.4 Other Potential Explanations for Allentown's Success	48
6 Canadian Case Study: Hamilton	50
6.1 Hamilton: A Brief History.....	50
6.1.1 Hamilton's Older Industrial Areas.....	50
6.1.2 Hamilton Housing for the Industrial Worker.....	51
6.1.3 Hamilton Employment.....	51
6.1.4 Former Municipality of Hamilton and the New Hamilton.....	52
6.1.5 Vacancy, Blight and Unemployment.....	53
6.2 Hamilton: Assets and Key Industries.....	53
6.2.1 Hamilton Assets.....	54
6.2.2 Hamilton Key Industries.....	55
6.3 Hamilton: Policies to Encourage New Development	55
6.3.1 ERASE	56
6.3.2 Invest in Hamilton.....	57
6.3.3 Downtown and BIA Programs.....	57
6.4 Hamilton: Programs for Former Industrial Workers	58
6.4.1 Adjustment Advisory Program.....	59
6.4.2 Hamilton Jobs Action Centre.....	59
6.4.3 Ontario Government Second Career.....	60
6.4.4 Hamilton Training and Advisory Board.....	61
6.4.5 Workers-focused Support	61
7 Lessons and Discussion.....	63
7.1 Policy Comparisons	63
7.2 What Can Hamilton learn from Akron?.....	69
7.3 What Can Hamilton Learn from Allentown?.....	70
7.4 What Can U.S. Cities learn from Hamilton?.....	71
8 Conclusions.....	72
9 References.....	75

List of Figures

Figure 1: Sample of earning for Canadian male workers with high-seniority displaced in 1989.....	22
Figure 2 : Sample of earning for Canadian male workers with high-seniority displaced in 1997.....	23
Figure 3: Population of Selected Metro Regions, 1990 & 2006.....	24
Figure 4: Population of Selected Cities, 1990 & 2006.....	25
Figure 5: Increasing and decreasing population 2001-2006, Hamilton, by census tract.....	26
Figure 6: Unemployment and Poverty, selected metro regions and national averages 2005-2009.....	27
Figure 7: Percent Employment by Industry, selected metro regions, 2005-2009.....	29
Figure 8: Akron and Regional Context.....	30
Figure 9: Location of Akron city-sponsored industrial parks.....	34
Figure 10: Akron JEDDs.....	35
Figure 11: Akron MSA vs National Averages, 1980-2007.....	40
Figure 12: Akron MSA and City selected characteristics, 2005-2009.....	40
Figure 13: Allentown and Regional Context.....	42
Figure 14: Allentown Region Enterprise Zones.....	45
Figure 15: Allentown City vs Allentown-Bethlehem-Easton MSA.....	46
Figure 16: Bayfront industrial area and downtown Hamilton.....	50
Figure 17: Lister Block, during and before restoration.....	54
Figure 18: Gore Park.....	55

List of Tables

Table 1: City and Metro Growth Rates, 1991-2006.....	25
Table 2: Metro Ranking on a Variety of Indicators.....	28
Table 3: Akron Industrial Parks.....	34
Table 4: Loans and Grant for Akron Development.....	36
Table 5: Akron Tax Credits.....	37
Table 6: ERASE Funding Options.....	56
Table 7: Hamilton Incentives.....	58
Table 8: HJAC Workshops and Participation Rates.....	60
Table 9: Key policy instruments for regional job retention and creation.....	63
Table 10: Key policy instruments for downtown areas.....	65
Table 11: Key policies for addressing underutilized land.....	66
Table 12: Key programs supporting entrepreneurs.....	67
Table 13: Key programs to support former industrial workers.....	68

1 Introduction

Global shifts in the trade, production and transport of goods over the last forty or more years have dramatically affected the local economies of many North American cities that were once dependent on their manufacturing sectors. These traditional manufacturing centres have experienced population decline and have lost businesses of all kinds, and as a result now struggle with high unemployment and blight. The effects of such a large-scale loss of employment were felt most acutely across the Great Lakes region both in large cities, such as Cleveland and Detroit, as well as in smaller cities, such as Windsor and Youngstown. The decline of the manufacturing sector in these cities has prompted many municipal and regional governments to re-evaluate their economic development policies. The approaches to combating the loss of industry have varied from city to city, as has their ability to recover economically and socially. Size, geographic location, diversity of economic activity, spatial layout and position within larger regional markets are contributing factors to a city's relative success or failure, but these factors are largely predetermined. What policy approaches can municipal governments take to revitalize the economies of older industrial cities? In explaining this broader issue, this report focuses on the following questions:

How successful have older industrial cities been at reemploying former industrial workers and attracting new people and businesses? and What, specifically, can Hamilton, Ontario, learn from the successes or failures of these various policies and programs?

This report explores the overall health of these cities, as examined by a number of economic and social indicators. Policies reviewed are those put forth by each municipality in an attempt to retain regional jobs; support business expansion and development; address issues of blight and abandonment; encourage entrepreneurs; and support former industrial workers. Policies range financial support to land acquisition; and worker training to business incubation. This report is intended to be part of a larger compendium of related research on the status of contemporary urban manufacturing and the planning response to it¹.

Older industrial cities were the job centres of the American Mid-Atlantic and Midwest², southern Ontario and Quebec, attracting workers from the rural countryside and from abroad. However,

1 Related research was completed by Alex Carruthers and Stephen Charters

2 The Mid-Atlantic region is comprised of the following American states: Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, Washington D.C., West Virginia. The Midwest includes: Indiana, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin.

increases in industrial efficiency and the globalization of labour markets in the mid-to-late 20th century meant that fewer workers were needed and that cheaper workers could be found in other regions and countries. Factory downsizing, relocation, and closure devastated many communities. Some regions, like steel-based Pittsburgh and Chicago, were hard hit in the 1980s, while others, like auto-based Southern Ontario, did not experience the full effects of job losses until the economic downturn of 2008-2010. Decreasing job prospects in these regions led to a declining population, therefore a smaller tax base with fewer consumers, and in some cases a self-reinforcing cycle of disinvestment. Many of the most dramatic cases will not be discussed in this report, places such as Detroit and East St. Louis, where population losses are most staggering. Instead the focus will be on the cities of Hamilton, Ontario, Allentown, Pennsylvania, and Akron, Ohio. These are medium-sized cities with populations under 1 million located within 120 km of larger urban centres with populations greater than 2 million. Allentown and Hamilton are traditional steel towns, while Akron's manufacturing base was plastics and rubber. Hamilton's location in Canada meant that the fate of the city, and its manufacturing sector, was very different. In many cases economic trends affecting the United States did not affect Canada until a number of years later. Furthermore, state and provincial controls and interventions had very different effects on urban areas within each country.

Though many older industrial cities have lost population and relative national importance, they remain an essential part of their regional economies and are collectively home to millions of people and jobs. The historic and cultural importance of these cities cannot be understated, nor can their many assets be ignored. Older industrial cities also contain a wealth of historic buildings, which if not overtaken by blight or abandonment, are important to the cultural history of the community. Older industrial cities contain historic transportation infrastructure, often including extensive port and rail facilities. In addition to having a number of physical assets, older industrial cities also have a wealth of human capital, with highly skilled and highly educated people living and working in these cities. However, it is important to note that these highly skilled and educated people are more mobile than other segments of the population and will often leave cities for other places with more opportunity. Under employment in older industrial cities is often due to a labour mismatch where the jobs of skilled workers have migrated and the new jobs available do not match the skill sets of local residents.

In sum, the structural shifts of the global economy over the last forty years have drastically affected the way we live, work, and communicate in North America. The manufacturing sector has shrunk in older industrial cities, new jobs have emerged in the finance, service provision and

information sectors; however many of the workers from the industrial sector are unable to find jobs in this *new economy*³ that fit their skills or wage expectations. Many traditional manufacturing cities are struggling with population loss, high vacancy rates, blight, abandonment, and crime. These cities are finding it difficult to maintain existing businesses as well as attract new ones. Varying strategies have been put in place in these older industrial cities as a means of attracting new businesses and populations or in some cases to “right size” the city and plan for a future with a declining population. Strategies have also been put in place to bring in business that fits the skills of existing workers, or programs to retrain workers so that their skills match the region's job market. The successes of these programs have been varied, they differ in cost and results are often difficult to measure.

3 The term *New Economy* refers to the general shift away from a production-based North American economy to a service-based economy. A 1983 cover story of *Time* magazine used the term to explain the shift from traditional manufacturing to high-tech industry. *Business Week* is credited most often with coining the term and its now wide-spread usage.

2 Methodology

This report focuses on the principal cities⁴ of older industrial regions and the strategies these cities and regions have adopted to re-employ workers, encourage entrepreneurial activity and attract new business⁵. These policies range from tax incentives to employment retraining programs. The success of municipal and regional policy will be measured via indicators that represent the social and economic health of a city⁶, namely population growth, unemployment rates, poverty levels, median household income, and education levels. Population growth implies that the city is gaining new residents, suggesting that it is an attractive place to live, whether because of a favourable job market, affordable housing or other factors; this base indicator signals that a city is in good shape⁷. Unemployment rates are a clear indicator of the job prospects in a metro region and these will be compared to national rates in order to account for large-scale economic shifts such as the economic downturn of 2008-2010. The poverty level, or more accurately the percentage of the population living below the poverty line, is a good indicator of the social health of a city; this factor accounts for situations where the population may not be in decline or the unemployment rate may not be high, but people are still struggling. Median household income is another indicator of the overall economic health of a city and its population. Education levels are the final factor that will be considered in determining the social and economic health of these cities. Low education levels are an indication that the future of a city is not secure (Glaeser, 2005; Bradbury, 2002).

The first portion of this report reviews the literature of the economic challenges of older industrial cities with specific attention to the differences in Canadian and American deindustrialization. The second part of this report reviews policies and programs in two U.S. cities, Allentown and Akron. The third portion focuses on Hamilton, its current programs and policies, current social and economic trends and what the city can learn from the successes or failures of policies implemented in Akron and Allentown. Initial reviews and comparisons of the cities will illustrate similarities and differences in

4 Principal city refers to the largest municipality within the region

5 Cities are not stand alone entities, as they are part of larger economic regions. Cities are defined by historic borders, which are somewhat arbitrary, as economies are not confined within municipal boundaries. Much of this report focuses on employment and since people do not necessarily work in the same municipality that they live in, it would be difficult to discuss a city without also discussing its metro area.

6 Some of these factors mean different things at the metro level than at the city level, however all are indicators of either healthy economic conditions or healthy social conditions. Further explanation of these indicators as they relate to the metro or city level will be explored in Section 4.

7 Slowed decline or population stabilization is also considered favourably, as it takes time for the results of policies and programs to translate into change.

terms of historical, economic, social, and political considerations. The national and regional location of each city is influential in terms of geography, but also in terms of the role that higher political powers play at the municipal level.

2.1 Why Hamilton?

Hamilton is Canada's traditional steel producing city, with a 2006 population of just over 500,000⁸ within a metro region of just under 700,000 and within an hour's drive of Toronto, Canada's largest city with a population of 2.5 million. Hamilton has shed many manufacturing jobs through the modernization of its steel production facilities and the general decline in southern Ontario's manufacturing sector. Plant downsizing and the continued decline in the Ontario manufacturing sector pose serious challenges for the city and its residents. Furthermore, the legacy of industrial development has left the city with a number of highly contaminated sites, including much of the city's waterfront. The city can potentially learn from the successes and failures of the policies of other older industrial cities and regions.

2.2 Why Akron?

Akron, Ohio is a city of just over 200,000 in a metro region of just over 700,000. Similar to Hamilton, this city is part of a larger interconnected regional network⁹. Akron was once known as the “Rubber Capital of the World”, when four out of five of the biggest tire makers in the world were headquartered there. The restructuring and globalization of the rubber and plastics industry deeply affected the City of Akron, which lost many industrial jobs in the 1980s and 1990s. Although manufacturing still plays a strong role in Akron, the economy is much more diversified now than it was at the end of the 20th century. Akron has outperformed other similar sized cities in Ohio in terms of economic and social health. Policies and programs will be explored in order to see what, if anything, might be applicable to Hamilton.

2.3 Why Allentown?

Allentown, Pennsylvania was part of a traditional steel-producing region, home to the country's second largest steel company, Bethlehem Steel. The Allentown-Bethlehem-Easton region is fairing

⁸ Hamilton was amalgamated in 2001 with surrounding municipalities, the 2006 population of the former city of Hamilton is 329,770 .

⁹ Network includes Cleveland, Canton and Youngstown

better than many older industrial regions with lower unemployment rates than many areas of comparable size. Allentown still has a healthy manufacturing sector, employing more than fifteen percent of its labour force. The comparative success of this city will be examined in greater detail to see if policies or programs being implemented in Allentown could inform decisions in Hamilton.

Neither Akron nor Allentown are among America's lowest performing mid-sized industrial regions. In fact, Allentown performs better than many comparable metro regions. It was assumed that a certain amount of this relative success could be attributed to programs and policies implemented in the region's principal city. Other metros containing cities such as Gary, IN, were not chosen, as deep-seated social issues and a long history of racial conflict would have made comparisons with Hamilton difficult.

2.4 Methods

Case studies and policy analysis in this report entailed the review of policy documents and secondary sources. Publicly available information distributed by each case study city was consulted, as were any available outside reports that evaluated policies¹⁰. Data utilized in Section 4 was retrieved from Statistics Canada and the United States Census Bureau. Census data on the selected economic and social indicators are used to compare the three case study cities to each other and to a number of similar sized U.S. industrial metros. In Section 7, programs and policies with similar goals are compared across a number of categories including: funding sources, focus, timing, partner organization, financial impact and scope. This section allows the reader to compare similar programs from each city with respect to a various criteria.

¹⁰ Outside evaluation of policies were rare (some of these policies were only recently enacted; and mid-sized cities are less likely to be the subject of study)

3 Experiences of Deindustrialization in Canadian and American Cities

The shift to more efficient industrial production combined with more globalized trade, has been difficult for communities in North America's manufacturing heartland. Job losses in the manufacturing sector over the last 40 years have been staggering. The economic and social affects of deindustrialization still present challenges to people, cities and regions. This literature review provides background information on the history of North American deindustrialization and the key differences between American and Canadian industrial regions.

3.1 Canadian and American Experience

Differences in the history, economics, and larger political and cultural frameworks between Canada and the United States have contributed to the current economic and social conditions in the two countries. The U.S. is a much larger economy and its governments have, in general, been less interventionist. Furthermore, the concentration of urban poverty and segregation, by both class and race, are much more prevalent in American cities. These variations, and others, also determine the range of strategies that may be implemented at the municipal level to improve social and economic conditions. Topics included in this discussion are: economic diversity, unionization, traditional economic development tools, competition between states, competition within states, amalgamation, culture and community, wage expectations and race relations.

3.1.1 Economic Diversity

Economic diversity is often seen to be a driving force behind the success of many cities in the *new economy*. Numerous studies have confirmed the findings of McLaughlin (1930) that cities with employment overly concentrated in one sector are less able to deal with natural fluctuations in business cycles and have difficulty responding to unpredictable economic conditions, such as recessions. Malizia and Ke (1993) confirmed these findings in their study of American Metropolitan Statistical Areas (MSAs), illustrating that increased industrial diversity leads to lower rates of unemployment and more stability in employment¹¹. Cities that experienced the steepest job losses in the most recent

11 Other authors who's work supports the theory that greater economic diversity breeds successful cities include: Cho & McDougall, 1978; Kort, 1981; Sherwood-Call, 1990; and Wagner & Deller, 1998.

economic crisis were those where employment was overly concentrated in one area. For example, Flint, Michigan, in 1980 had more than 50 percent employment in the manufacturing sector and of that 81 percent was concentrated in the motor vehicles and equipment sector (Jacobs, 2009). Job losses associated with the restructuring of the American auto industry have driven unemployment rates to above 15 percent in Flint. Ontario was, in general, much more diversified than neighbouring Michigan; with only 25 percent of employment concentrated in manufacturing, compared with 37 percent in Michigan (Jacobs, 2009). Michigan lost 218,000 jobs between 2000 and 2005, more than any of the other Great Lakes states¹² (Wial & Friedhoff, 2006). From 1980 to 2006, all four of Ontario's largest cities (Toronto, Ottawa, Hamilton and London) saw growth in population and jobs, while in Michigan, only Grand Rapids, one of the state's more diversified cities, saw growth in jobs or population (Jacobs, 2009).

3.1.2 Free Trade

Prior to the signing of the 1988 Free Trade Agreement (FTA) and the 1994 North American Free Trade Agreement (NAFTA), many American companies had smaller branch plant operations located in Canada to serve the relatively small domestic market. Following the trade liberalization, many of these companies closed Canadian operations and served the Canadian market via their more efficient and larger American-based plants¹³ (Gertler, 1995). In some cases, plants remained open and services were streamlined to create more specialized product lines; Canadian-made goods were then shipped to the entire North American Market (Gertler, 1995). Japanese firms, as well as some Canadian-owned firms, also often relocated to the U.S., enticed by the proximity to larger markets, and lower operating costs.

However, the net effect of trade liberalization favoured Canada, as it gave the country improved access to the much larger American market. Harris (2006) provides an extensive literature review outlining the positive effects of NAFTA for the Canadian economy. His main arguments are: improved economic efficiency, increased competition, greater variety in goods, and increased productivity (Harris, 2006). NAFTA was economically positive for the country, but had temporarily negative effects on certain communities where significant numbers of jobs were eliminated due to plant closures or firm relocation.

12 Illinois, Indiana, New York, Ohio, Pennsylvania, and Wisconsin are the other six states. More than one-third of all American manufacturing job losses between 2000 and 2005 occurred in these states (Wial & Friedhoff, 2006)

13 Campbell Soup, for example, reduced the number of Canadian plants from 11 in 1985 to 4 by 1991 (Gertler, 1995)

3.1.3 Unionization

Unionization rates are much higher in Canada than in the United States. In the 1950s and 1960s rates of unionization in the two countries were comparable, however by the mid-1980s the rate of unionization in Canada was 41.6 percent, nearly double the U.S. rate (High, 2003). Unionized workers are generally better paid and have better working conditions than non-union workers.¹⁴ High rates of unionization meant that manufacturing jobs were likely to be well-paid and provide relatively secure work for those with minimal formal education. Unionization in the United States is also much more regionally varied, with higher rates in the traditional manufacturing regions of the Mid-Atlantic and Midwest and much lower rates in the southern states (High, 2003).

The culture created in a region where a large proportion of jobs are located within one highly unionized, well-paid industry like steel production, automobile assembly, or mining, is unique. This culture made it extremely difficult for these traditional working class communities to recover after plant closures and massive layoffs. In heavily unionized towns, such as single-industry or resource towns, the labour market was male dominated and union values were a part of more than just the work place. Local politics in these places were also influenced by these values (Hayter, 2000). Strong union bargaining also ensured these regions had relatively high incomes. Youth job expectations were centred around the dominant employers. Many of these single industry, or resource-based, regions did not support a culture of local entrepreneurialism or diversification. The allure of well-paid, highly specialized work with benefits did not inspire new business creation (Hayter, 2000).

3.1.4 Traditional Economic Development Tools

Cities and states have been using business incentives for centuries as a way to attract investment and businesses. Justifications for state-wide tax incentives include shielding businesses from competition, rescuing failing firms, protection from losing business to other states, as well as attracting outside firms and new businesses (Buss, 2001). Further justification for business incentives is the argument that business investment will lead to new jobs, which will increase the local demand for goods and services and will therefore lead to further economic growth (Peters & Fisher, 2004). Economic growth also increases public revenues, which allows municipalities to improve public services or decrease tax rates (Peters & Fisher, 2004). Some states view tax incentives as “free money” as it is usually revenues forgone, rather than cash paid out, and these incentives are often underwritten

¹⁴ According to the U.S. Department of Labour in 2007 American unionized workers made on average \$4 more per hour than their non-unionized counterparts, \$23.96 vs \$19.14 (U.S. Department of Labour, 2008).

by the federal government (Buss, 2001). The failure of such tools is difficult to prove, making tax incentive programs a popular tool for policy makers. If these programs are unsuccessful in spurring investment or creating jobs, the failure can be attributed to larger economic forces, market forces or corporate mismanagement. Since programs are rarely evaluated, failures and successes are rarely identified (Buss, 2001). Marston (1985) argues that economic development of this type does little to decrease overall rates of unemployment, as business incentives attract new comers to areas but do not assist those already living in a region, especially those most in need of employment. However others disagree and argue that there is usually a lag between job creation and in-migration, allowing local workers and unemployed persons to move up the occupational ladder or to re-enter the workforce (Bartik, 1991).

Programs that target specific geographic areas in hopes of improving conditions for local residents are not necessarily successful, as firms located in specific “enterprise zones” attract workers from metropolitan labour markets, not just local markets (Peters & Fisher, 2002). The local employment gains of designating a distressed area as an enterprise zone are not proven. Boarnet and Bogart (1996) in their New Jersey-based study, argue that enterprise zones in that state were ineffective; finding no increase in employment or property values. Dabney (1991) argues that the incentives offered in enterprise zones do not often offset the disadvantages of locating in an under-performing area. Peters and Fisher (2004) argue that part of the problem is that policy makers believe that the course of their state or local economies can be influenced through incentives and subsidies to a much larger degree than evidence suggests. Tax revenue lost through incentive programs often mean that governments cannot afford to spend on education and infrastructure, two areas essential to future and sustained economic growth (Peters & Fisher, 2004).

3.1.5 Competition between States and Provinces

The position of American cities within larger state and national frameworks is very different than that of Canadian cities within provincial and national contexts. In Canada there was, and is, much less competition between cities and provinces to attract businesses. In the U.S., inter-state competition was fierce; many industrial plants closed in the Northeast and Midwest and relocated to southern states. Much of this relocation was due, in part, to the high cost of labour in the northern parts of the country, where strong unions ensured that workers were well-compensated. Many southern states have “right to work” legislation, which limits the power of unions (High, 2003). Amendments to the *National Labour*

Relations Act in 1947¹⁵ allowed states to pass so-called right-to-work laws outlawing the *union shop*, a contract provision that required all employees to contribute financially to their union, whether they voted for unionization or not (Moore, 1998). Since then, unions and employees have battled continuously in state legislatures for the repeal of right-to-work laws. A significant number of states adopted these laws in the late 1940s and 1950s and by the late 1990s twenty-one states had right-to-work laws (Moore, 1998). These laws likely contributed to the migration of many manufacturing operations to the southern states from their original locations in the union-friendly Northeastern and Midwestern states. The Canadian context is different, as no Canadian province has right-to-work laws comparable to those in the U.S. (High, 2003).

3.1.6 Competition within Provinces and States

Many American states, such as Michigan, implemented development policies that favoured private-led development and suburban growth. The Ontario government took a more interventionist approach, emphasizing sub-regional development and support for strong central cities (Jacobs, 2009). In Michigan, decades of competition within the state resulted in counties poaching companies from each other through grants, loans and tax abatement. One such case involved a 12-year, \$80 million tax abatement by the community of Auburn Hills to lure Chrysler's world headquarters from Highland Park (Jacobs, 2009). Highland Park is a small city with high poverty rates, geographically surrounded by Detroit, that had been producing automobiles since 1910 when Henry Ford opened the plant that would house his first auto assembly line (Jacobs, 2009).

Ontario does not allow for this type of inter-city competition. The province, through the *Municipal Act* (1962), prohibits the use of municipal property tax abatement (Jacobs, 2009). Although this Act has not altogether eliminated competition between regions, it has made it much less severe when compared to many American states (Jacobs, 2009). Additionally, the *Ontario Planning Act* ensures that municipalities complete comprehensive plans that must be in accordance with provincial planning goals and are reviewed on an ongoing basis (Jacobs, 2009). Furthermore, the Ontario Municipal Board (OMB) is a quasi-judicial provincial review body which has the power to overturn land use decisions made within the province.¹⁶

Canadian cities are much less autonomous than their American counterparts in political, legal and fiscal terms (Garber & Imbroscio, 1996). Local governments in Canada are not permitted to

¹⁵ The amendments are also known as the *Taft-Hartley Act*

¹⁶ The OMB is an independent tribunal that hears applications and appeal on land use planning, development charges, land expropriation, municipal finance, and other issues assigned to the board by the province (Ontario, 2010b).

compete freely with one another, as they lack the fiscal capacity and authority. Anti-competition legislation and rules against specific incentive programs protect Canadian communities from the luring away of firms which has traditionally been common in the U.S. (Garber & Imbroscio, 1996). American cities are more autonomous entities and rely less on state control. This autonomy has both positive and negative effects on American cities. The turn around time from an idea to a policy and programming can occur much faster in American cities, as higher-tier governmental approval is not always needed. However, many American cities face extensive fiscal challenges and must often fend for themselves. This often leads to increased competition between cities and the use of tax incentives and other unproven tactics which may increase the severity of fiscal shortfalls. Ontario's top-down planning approach makes it difficult for cities to compete with each other and helps to assure their fiscal stability.

3.1.7 Amalgamation

The Province of Ontario, in an attempt to streamline municipal services and cut costs, legislated the amalgamation of many Ontario cities with their surrounding suburbs to create “megacities”. This amalgamation process occurred in the late 1990s and early 2000s in Hamilton, Toronto, and Ottawa. The City of Toronto, for example, grew from a population of 653,734 in 1996 to a population of 2.4 million people through its amalgamation in 1998 with the six surrounding municipalities (Statistics Canada, 2007). The City of Hamilton was merged with its surrounding regions in 2001 and grew from a population of 322,352 in 1996 to a population of 490,268 in 2001 (Mayo, Patterson & Jaffray, 2009). The amalgamation of these cities created opportunities and challenges in terms of service provision and governance. Provincial goals, such as decreasing the number of government officials, eliminating duplication, and reducing confusion between lower-tier municipalities and metro regions with respect to responsibilities, were likely achieved (McInnis, 2000). However, new challenges associated with governing such large and diverse regions have emerged. Additionally, during this amalgamation process many provincially delivered services became the responsibility of the municipalities, often without accompanying taxation powers. Some argue that this process has slowed suburban migration and a potential hollowing out of the urban core (Jacobs, 2009). While others, such as former Toronto Mayor John Sewell, argue that amalgamation has increased costs and rendered local government dysfunctional, as inner city and outer city council members rarely agree (Sewell, 2009). Legislated city amalgamation will likely never occur in the U.S.

3.1.8 Culture and Community

Canadian and American community experiences of deindustrialization and the restructuring of the manufacturing sector are very different. The “rust belt mythology”¹⁷ never really took hold in Canada the way it did in the U.S. (High, 2003). The Canadian media rarely, if ever, applied the term to Canada (High, 2003). Part of the reason for the variance in collective experience between the two countries was that plant closures were much more prevalent in the U.S. than in Canada, where layoffs were more often due to plant modernization (High, 2003). The increased prevalence of plant closures in the U.S. was likely due to the scale of industry as well as the allure of cheaper and less unionized labour in the southern states. Canada did not have a region similar to the U.S. South, where labour and energy costs were substantially cheaper. Canada's economic and political centre remained in Ontario and although some wealth and population moved westward, the economic strength of Alberta would not be realized for a few decades¹⁸. American plant closures often occurred swiftly and left little time for a community response, resulting in collective feelings of disillusionment and loss (High, 2003).

The differences in both the scale of plant closures and the response by unions, and politicians in the the two countries can be explained by a number of factors. High, in his 2003 book *Industrial Sunset: The Making of North America's Rust Belt, 1969-1984*, explores the responses by various stakeholders to plant closures, shutdowns and mass layoffs. The low Canadian dollar meant that goods manufactured in Canada were much cheaper than those made in the U.S., so Canadian exports to the U.S. remained high (High, 2003). Other factors included an increase in Canadian nationalism, especially with respect to the infiltration of large American corporations.¹⁹ Public pressure in Canada eventually led to federal government legislation that required companies to notify their employees prior to plant shutdowns and required them to pay severance to all workers who had been employed for more than five years (High, 2003). At the same time, the government made changes to the national Unemployment Insurance (UI) program and nearly doubled the maximum UI benefits (High, 2003). Provincial governments followed suit, Ontario mandated companies to provide advanced notice to

17 Rust Belt Mythology – The American media began referring to the Great Lakes states as the *Rust Bowl* in the early 1980s, by 1984 the term had been changed to *Rust Belt* (High, 2003)

18 Ontario became a “have not” province for the first time in 2009, when the province began receiving national equalization payments. Ontario joined Quebec, Manitoba and the Atlantic Provinces as a recipient of federal equalization payments. These federal transfers were designed to assist the provinces in providing health, education and welfare to their residents. (Donald, 2005).

19 Plant closures and the beginnings of deindustrialization were taking place at the same time as the debate surrounding bilateral trade agreements between the U.S. and Canada. Talks between President Reagan and Prime Minister Mulroney began in September, 1985 and the 1988 Free Trade Agreement laid the ground work for what would eventually become the North American Free Trade Agreement

employees prior to mass layoffs (High, 2003). Collective national resistance to plant closures in Canada did not stop companies from closing plants or laying off workers, but the wide spread political opposition did slow the pace (High, 2003). The American response to plant closures was more local and community based, rather than national, so it did not translate into a national political response.

Deindustrializing communities are vulnerable to more than just employment losses. A loss of identity often occurs as the city and its residents seek to define their role after the decline of industry (O'Hare, 2003). For example, residents of Gary, Indiana, saw their once proud “black-metropolis”²⁰ transformed into a crime-ridden and unsafe city, as portrayed by the national media. Gary was created by U.S. Steel between 1906 and 1909, when the company purchased thousands of acres of mostly uninhabited land and turned it into one of the largest steel-producing centres in the world. The company built a city for steel workers adjacent to the mill and named it after its chairman Elbert H. Gary (O'Hare, 2003). During the restructuring of the American steel industry, U.S. Steel closed smaller steel mills in the Gary area but did not shut down the large Gary Works steel mill. In 1986, it designated the Gary Works as its corporate flagship and upgraded the mill (O'Hare, 2003). Through the modernization of the mill, production increased and jobs decreased from 20,000 to 7,500 (O'Hare, 2003). Modernization has a very different effect on a community than plant closures do. Many people are still employed in the industry and there is rarely the large-scale community organizing and rallying, as seen in other cities.

With the loss of so many jobs in Gary, unemployment and underemployment became a chronic problem and when the poverty rates rose so did crime. The city also struggled fiscally, as U.S. had often supplied 40 percent of the city's tax base (O'Hara, 2003). A lack of incoming tax revenue meant that Gary was unable to fund many of its social programs, likely contribution to the increasing crime rates. In 1993, the city was named the “Murder Capital” of America with 109 homicides (O'Hara, 2003). The city was written off by outsiders and much of the national media as crime ridden and dangerous. Much of the city's collective identity was shaped by race, labour and steel, so when the steel industry contracted much of the city's internal identity was lost and they had only the national image to fall back on (O'Hara, 2003). Gary is currently struggling to reinvent itself, overcome its legacy of racial conflict and industrial contraction.

The majority of unemployed or underemployed workers in older industrial cities can be described as *dislocated* or *displaced* workers. These individuals have not lost their jobs due to job

²⁰ In 1956, *Ebony* magazine declared Gary the top city for African American. Gary was the first U.S. city to elect a black mayor, Richard Gordon Hatcher in 1967 (O'Hara, 2003). For more information on Gary, see Dorson, 1981; Greer, 1979.

performance or cyclical changes in employment, but as the result of structural economic change (Schore & Atkin, 1992). In order to deal with the adjustment to unemployment and to re-enter the workforce, dislocated workers often require training, job searching support and counselling. Many former industrial workers have worked at the same company for a number of years and are unequipped with skills required to find work in a new field. Finding new work can be particularly difficult for older workers as they often lack skills suited to emerging industries, have low educational attainment, are less willing to relocate, and face discrimination based on age (Klassen & Fraser, 2011).

3.1.9 Wage Expectations

Much of the work in primary metals, mining, plastics and industrial activity was physically demanding, sometimes dangerous, and often unhealthy. Workers in these industries were well-compensated for the risks that they took and the skills that they had acquired. Strong unions had helped secure relatively high wages for workers in these industries. American steel workers, for example, in 1970 were making remarkably higher wages than the average wage-earner with the same level of education in their state. In 1970, in the seven states with the highest employment in primary metals²¹, 22 percent of steel workers, compared with only 14 percent of all workers, had less than eight years of schooling. Only 4.9 percent of steel workers had college degrees, compared with 13 percent of all workers in those seven states (Black, McKinnish, & Sanders, 2003). In 1969, the median earnings of steel workers was higher than other workers with the same level of education for all levels of education in those seven states: \$7,849 compared with \$4,649 for less than eight years of schooling, \$8,049 compared with \$5,249 for workers with a high school diploma, and \$12,549 compared with \$8,449 for those with a college degree (Black, McKinnish, & Sanders, 2003). With the collapse of the steel industry, workers in the primary metals sector witnessed a drastic decrease in total earnings. Since this industry was highly concentrated in certain locations, the effects on communities were staggering (Carrington and Zaman, 1994; Jacobson, LaLonde & Sullivan, 1993).

3.1.10 Race Relations

Canadian cities did not experience the bitter and sometimes violent racial clashes seen in American cities. Decades of middle-class exodus and a declining industrial sector meant that by 1970 many American cities were highly segregated and increasingly impoverished (Vey, 2007). So-called “white flight” contributed to the hollowing out of central cities as many white residents moved to the

²¹ Seven states include: Alabama, California, Indiana, Illinois, Michigan, New York, Ohio, and Pennsylvania

suburbs and the poorer African-American population remained in the city's downtown areas (South & Deane, 1993; Massey & Rothwell, 2009; Hirsch, 1983). Suburban taxes were also lower, and services better, adding to the appeal for middle-class Americans to leave cities (Vey, 2007; Frey, 1979). American federal public housing policy from the 1970s to the mid-1990s only helped in segregating the country's poor residents. Publicly-owned and subsidized housing projects were mainly concentrated in poor urban communities and largely housed low-income, minority residents (Massey & Kanaiaupuni, 1993; Schill & Wachter, 1995)

3.2 Legacy of Pollution

Cities which had heavy industry as their economic base face a number of challenges as they move forwards in the *new economy*. Heavy industrial activity leaves a legacy of environmental degradation on the land, air and water. Contaminants from industry can remain in water and soil for many years and can pose serious health hazards to people residing near former industrial lands. In addition to adversely affecting the health of people and the environment, a history of heavy industrial activity can also deter potential investment for the reuse of a site. The cost of cleaning up contaminated sites can be extremely expensive and in many cases these costs are at least partially absorbed by the municipality. In many cases brownfield sites are left unused due to the high cost of remediation.

As a response to the high levels of pollution in the Great Lakes, Canada and the United States signed the 1972 *Great Lakes Water Quality Agreement* (IJC, 2011). This signalled the beginning of a concerted effort by the two countries to control pollution in the Great Lakes and clean up waste waters from communities and industry. In 1987, the two countries signed a protocol reporting on the progress of the agreement with a promise to review the *Remedial Action Plans* in forty-three *Areas of Concern*. Many of these areas of concern are located near industrial activity or former sites of industrial activity (IJC, 2011).

Heavy industry towns also face challenges when re-purposing older industrial sites because of the spatial pattern exhibited by these sites. Smaller manufacturing facilities, such as textile factories or electronics assembly plants, are frequently re-purposed for newer smaller manufacturing activity, office space, or residential development. However, it is often more challenging to re-purpose a large-scale steel mill or automobile assembly plant. These heavy industrial spaces are not as centrally located as smaller factories, such as textile mills, and are more difficult to redevelop because of their less adaptable physical infrastructure.

3.2.1 Steel Industry

The steel industry provides a good example to illustrate the migration and modernization of manufacturing that occurred in American industry in the latter half of the 20th century. The large U.S. steel companies faced difficult challenges in the 1970s. Highly unionized workforces made it difficult to modernize plants and usher in more efficient production techniques (Crandall, 2002). In fact, no large U.S. Steel company built a new plant after the mid-1960s or new blast furnace after 1979²² (Crandall, 2002). American steel plants introduced after the 1970s, were built by smaller companies and used more efficient electric furnaces. Additionally, these plants were built far away from the traditional union towns and cities of the Mid-Atlantic and Midwestern United States (Crandall, 2002). The large integrated steel mills of Ohio, Pennsylvania, New York, and Illinois were unable to compete with these new mini mills. Many of the places hardest hit with the decline of steel were regions with large integrated steel plants.

All mini mills were built with easy access to interstate highways, none in a major urban area and none within the Mid-Atlantic region. Mini mills produced steel using new “thin slab casting”, allowing these plants to produce steel that cost 25 percent less than steel produced at the integrated steel plants (Crandall, 2002). In addition to the modernization of the steel industry, the demand for steel decreased as rail was no longer the main mode of North American transportation (Crandall, 2002). Over a 10-year period in the late 1970s and early 1980s, 269,000 U.S. Steel workers lost their well-paid union jobs (High, 2003). Plant closings in 1977 alone displaced 40,000 workers (High, 2003). The U.S. steel industry employed 650,000 workers in the 1960s and now employs just 180,000 workers with a similar overall output of steel product (Crandall, 2002). These numbers are good for business but bad for steel-based communities.

The steel industry in Canada was relatively profitable up to the early 1980s due to the natural advantages of easy access to cheap raw materials and energy, as well as a relatively secure domestic market²³ (Livingstone, 1993). The Canadian steel industry also used a more conservative approach, matching production output to meet average-demand, rather than peak-demand for domestic product (Livingstone, 1993). The sustained profitability of the industry encouraged Canadian steel companies to implement new technologies and to modernize plants in order to compete with industries in Japan and Western Europe (Livingstone, 1993). These capital investments allowed Canadian steel producers

22 The newest North American integrated steel mill, built in 1980, is located in Nanticoke, Ontario, and run by U.S. Steel Canada. This mill includes a blast furnace, as well as modern hot strip mill production. (U.S. Steel Canada, 2007).

23 Relatively secure meaning that, at the time, transportation costs to Canada deterred offshore competition.

to export an increasing amount of product to the U.S. and employment in the Canadian steel industry continued to grow until the late 1970s (Livingstone, 1993). However the modernization of Canada's steel industry meant that less workers were required to produce comparable amounts of steel and as the modern demand for steel is not increasing, the workforce contracted by a significant amount.

The steel story in Canada, and Hamilton in particular, is more similar to that of Gary, Indiana, where steel mills modernized rather than closed. The two main steel employers in Hamilton are Stelco and Dofasco. Stelco retained much of its experienced workforce at the Hamilton Hilton Works Steel plant by issuing lay off notices with the promise of a potential recall. In this manner, management created a reserve of experienced workers that it could call on as labour demand fluctuated. Between 1981 and 1992 over 8,000 lay off notices were issued to Hilton Works employees (Luxton and Corman, 2001). Lay off with potential for recall meant that many workers had to make the choice between looking for new employment, often at a much lower wage, or waiting and hoping for a recall (Luxton & Corman, 2001). Stelco also frequently contracted work to smaller companies instead of using their own unionized employees, as non-unionized contract workers were hired at much lower wages than Stelco employees (Luxton & Corman, 2001). Many of these contract workers were laid off Stelco employees. In 1982 alone 4,400 jobs were eliminated, amounting to 35 percent of the hourly-rated workforce (Luxton & Corman, 2001).

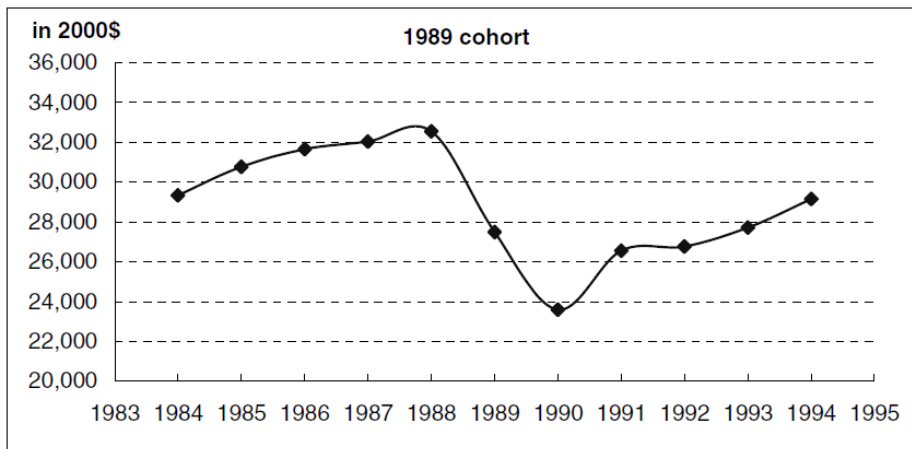
3.3 The Changing Landscape of Canadian Labour

The nature of employment has changed significantly in Canada over the course of the last forty years. There has been an increase in the percentage of workers engaged in part-time employment as well as service sector employment. The percentage of part time labour has increased from 12 percent of the labour force in 1976 to 18 percent in 2006 (Livingstone & Raykov, 2009). The number of workers has increased drastically over this time period as large numbers of women entered the workforce and families are now much more likely to have two income earners, rather than one (Livingstone & Raykov, 2009). Many of these part-time workers, more than one-third, would like full-time jobs, but are involuntarily working part-time. The proportion of this type of worker is almost three times as high as it was in 1976 (Livingstone & Raykov, 2009). Since the 1960s, the majority of Canadian workers have been employed in the service sector and only three-quarters have full-time permanent positions (Livingstone & Raykov, 2009).

3.3.1 Lost Earnings

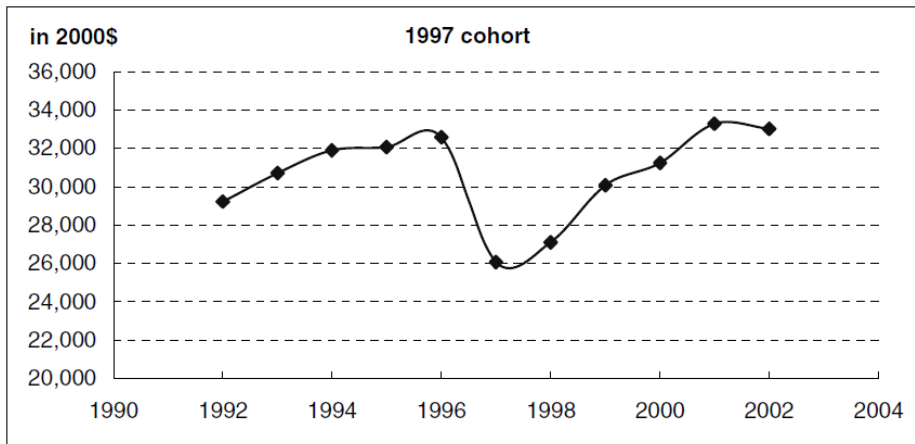
Morissette, Zhang, & Frenette (2007), in their longitudinal study of displaced Canadian workers, found that in each year from 1988 to 2002 between 23,000 and 44,000 male workers aged 35 to 49 were displaced due to firm closures. Between 45,000 and 90,000 were displaced due to mass layoffs and plant closures. For women of the same age group between 11,000 and 18,000 were displaced due to firm closures. For all employees aged 25 to 49, an average of approximately 110,000 were displaced every year due to plant closings and mass layoffs during the 1988 to 2002 period (Morissette, Zhang, and Frenette, 2007). This study illustrated that earning losses were more substantial for high-seniority workers, with male workers experiencing long-term earning losses that represented between 18 and 35 percent of their pre-displacement earnings. For women with high-seniority, losses were similar at 24 to 35 percent of pre-displacement earnings (Morissette, Zhang, & Frenette, 2007). Similar studies were undertaken in the U.S., where findings were comparable to those of Morissette, Zhang, and Frenette (Jacobson, LaLonde and Sullivan, 1993; Ruhm, 1991; Stevens, 1997).

Figure 1: Sample of earning for Canadian male workers with high-seniority displaced in 1989



Source: Statistics Canada, Morissette, Zhang, and Frenette, 2007

Figure 2 : Sample of earning for Canadian male workers with high-seniority displaced in 1997



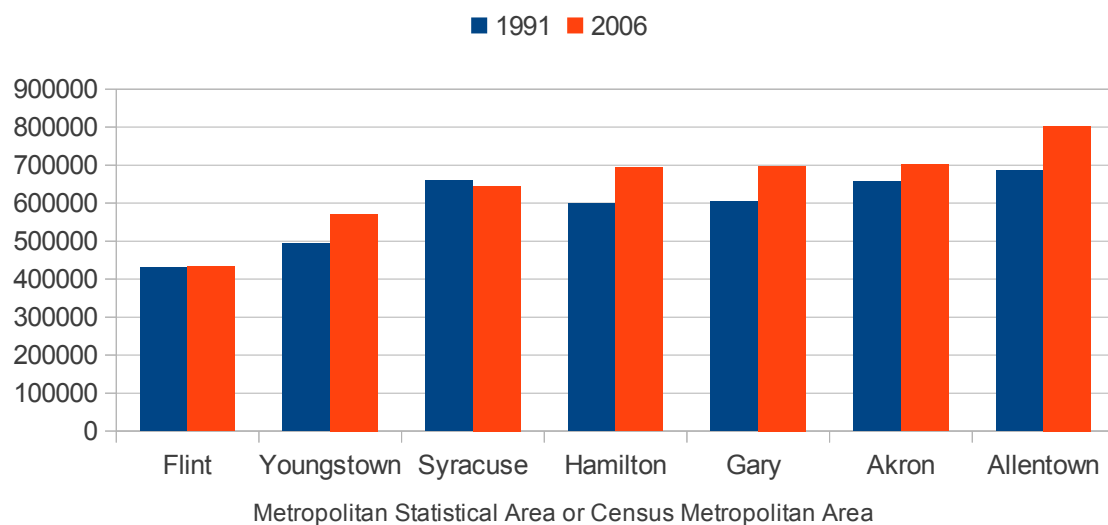
Source: Statistics Canada, Morissette, Zhang, and Frenette, 2007

Figures 1 and 2, shown above, outline some of Morissette, Zhang, and Frenette's findings, which illustrate the loss of earnings of male workers with high seniority displaced at two different times. Five years after displacement, workers who were laid off in 1989 had not returned to previous earning levels.

4 Comparing Older Mid-sized Industrial Cities

In order to place the three case studies in context, the following section will look in greater detail at the metropolitan regional statistics of seven older industrial areas in Indiana, Michigan, New York, Ohio, Ontario and Pennsylvania, to see how they compare on a number of social and economic indicators. Data on a number of mid-sized North American metros were compiled in order to determine how well these metropolitan areas are currently doing in terms of employment, education and population. Selected Metropolitan Statistical Areas (MSAs) include Youngstown-Warren-Boardman, Flint, Akron, Hamilton, Allentown-Bethlehem-Easton, Syracuse, and Gary. These metro regions all have populations between 400,000 and 900,000 and principal city populations under 350,000.

Figure 3: Population of Selected Metro Regions, 1990 & 2006



Source: Statistics Canada; U.S. Census Bureau

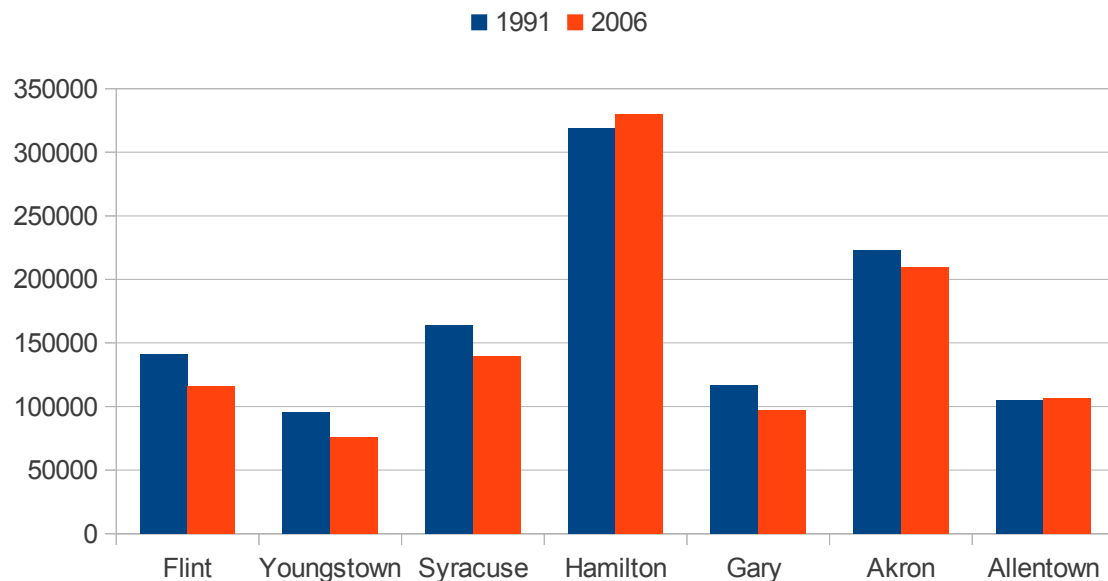
When regions are compared at the metro level their populations are similar in size (Figure 3). All of the metropolitan regions, except Syracuse, have grown in population over the last decade, although Flint only grew by 0.5 percent (Table 1).

Table 1: City and Metro Growth Rates, 1991-2006

Place	City Growth Rate (%)	Metro Growth Rate (%)
Akron	-7.1	6.5
Allentown	2.6	17
Flint	-20.8	0.5
Gary	-18.0	15.4
Hamilton	3.5	15.5
Syracuse	-15.4	-2.2
Youngstown	-20.7	0.5

Source: Statistics Canada; U.S. Census Bureau

Figure 4: Population of Selected Cities, 1990 & 2006



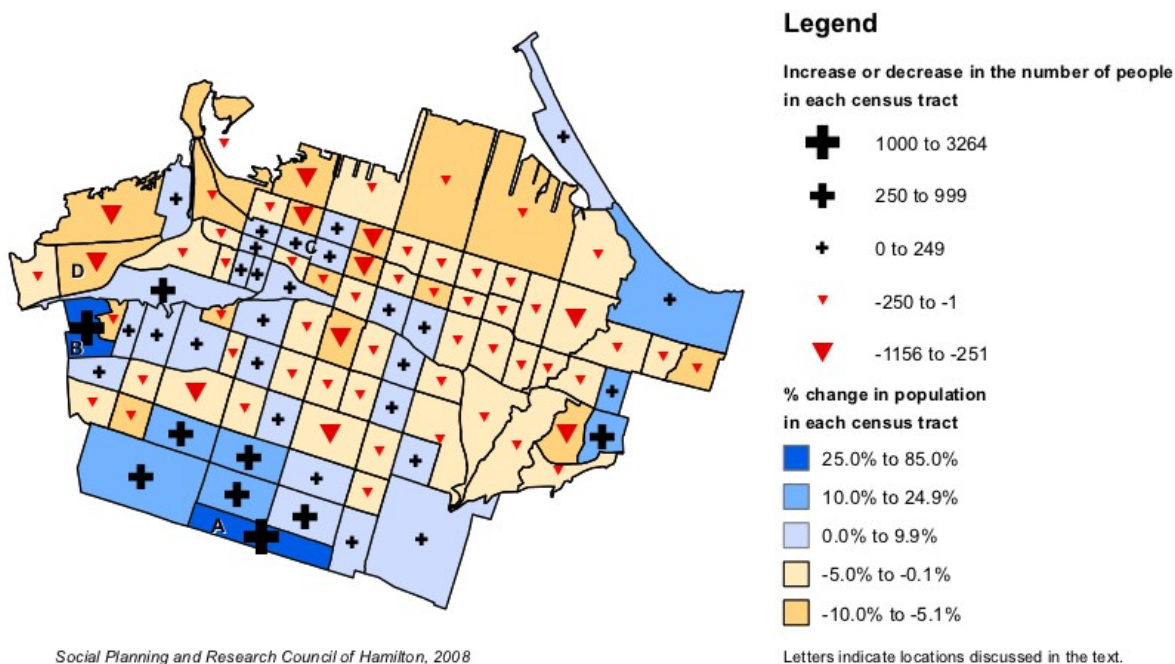
Source: Statistics Canada; U.S. Census Bureau

However, the populations of the principal cities within these regions are varied when compared at the city level (Figure 4). Cities are often delineated by historical borders and do not necessarily reflect the actual employment or movement of a population. Hamilton appears to be much larger than the other cities. This is because the city includes traditional suburban land as well as the urban core, covering a much larger area with a less dense population²⁴. All of these principal cities have declined

²⁴ In this figure the former municipality of Hamilton is used, rather than the new City of Hamilton

in population, with the exception of Hamilton and Allentown, where the latter added just under 3000 people. Hamilton may have grown in population, but growth was not uniform and many neighbourhoods lost population (Figure 5). Census tracks with the highest population losses over the five-year period are located in the downtown core of Hamilton.

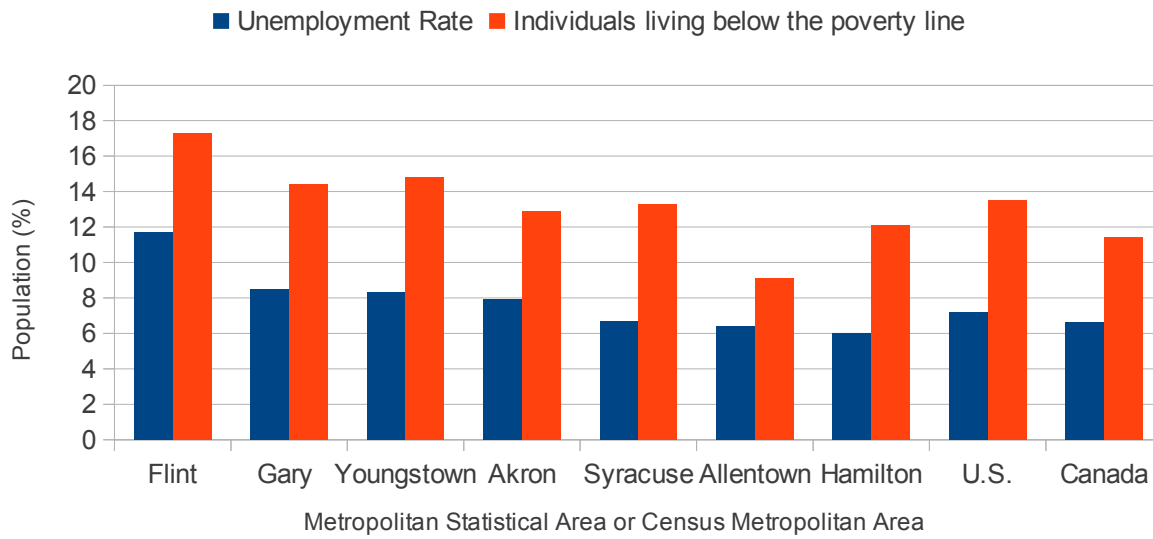
Figure 5: Increasing and decreasing population 2001-2006, Hamilton, by census tract



Source: Social Planning and Research Council of Hamilton, 2008

In addition to population losses, downtown areas also have higher rates of unemployment. Flint, Youngstown, Gary and Akron all have higher unemployment rates than the national average, while Hamilton, Syracuse, Allentown have lower than average unemployment rates (Figure 6). Poverty rates in the metros follow the same pattern, with Flint having the highest rate of individuals living below the poverty line at 17.3 percent. Akron, Youngstown and Gary all fall below 15 percent and above the national average of 13.5 percent individuals in poverty. Hamilton, Allentown, and Syracuse all fall below national poverty rate averages, with Allentown having the lowest rate of 9.1 percent (Figure 6).

Figure 6: Unemployment and Poverty, selected metro regions and national averages 2005-2009



Source: Statistics Canada 2006 Census, U.S. Census Bureau 2009 American Community Survey

Higher rates of joblessness in communities leads are associated with increased levels of poverty and a wide-range of other social issues. Concentrated joblessness can contribute to higher rates of crime, decreasing school attendance and educational attainment, an increased reliance on city services, and an increase in rates of homelessness. Many studies have illustrated the link between urban poverty and crime (Ludwig, Duncan, & Hirschfield, 2001; Kasarda, 1993; Hsieh & Pugh, 1993; Hajnal, 1995). The unemployment rate is an important indication of a community's health and future success, both economically and socially. It is important to note that Canada, has lower averages of both individuals living below the poverty line and unemployment rates than the U.S..

Table 2: Metro Ranking on a Variety of Indicators

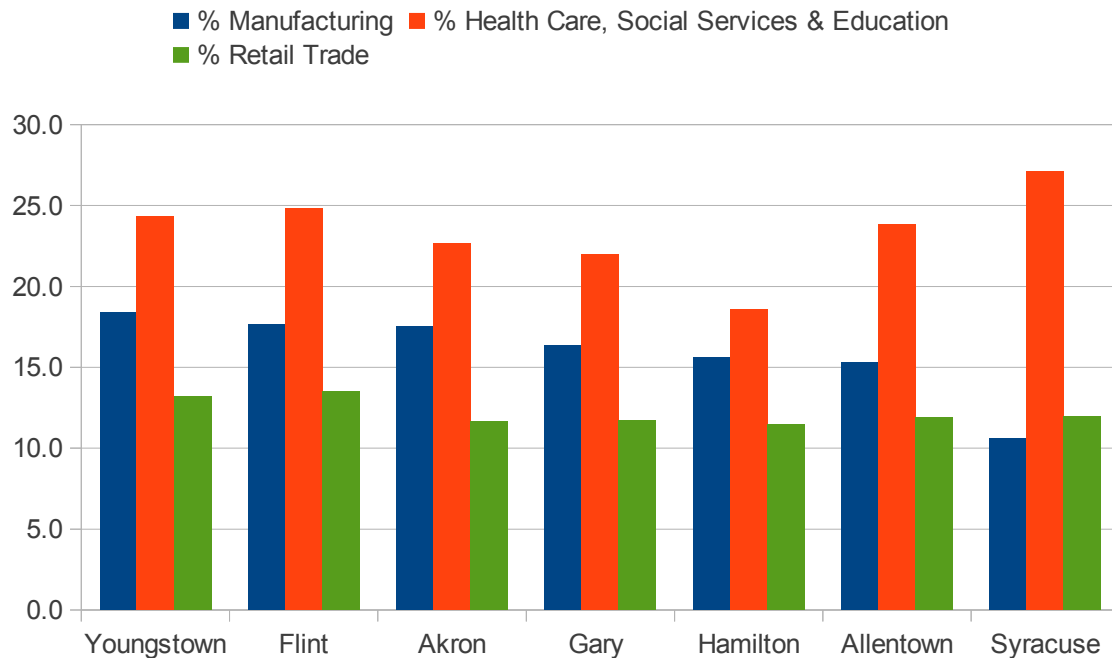
	Allentown	Akron	Flint	Gary	Hamilton	Syracuse	Youngstown
% Unemployment	6.4	7.9	11.7	8.5	6.0	6.7	8.3
% High School Education	86.5	89.5	87.5	86.7	86.5	88.3	86.3
% Bachelor's Degree	25.6	27.7	18.8	19.4	22.4	26.6	18
% Below Poverty Line	7.4	8.4	12.2	10.2	12.1	10.5	10.6
Median HH Income	\$56,982	\$48,338	\$44,376	\$51,142	\$60,567	\$49,300	\$41,040
% Vacant Housing	7.4	8.4	12.2	10.2	4.6	10.4	10.6

Source: Statistics Canada 2006 Census, U.S. Census Borough

Hamilton ranks the highest of the seven cities in terms of median income, lowest percentage of vacant housing and lowest levels of unemployment (Table 2). Akron was the highest ranking metro in both educational indicators, which is a potential precursor of the future success of the region. Flint and Youngstown are the lowest ranking metros on all indicators. Meanwhile, Allentown is the highest ranking American metro on all indicators except educational levels.

Many manufacturing jobs in these traditional industrial centres were lost in the late 20th century, yet all regions have retained a certain number of jobs in this sector and manufacturing still makes up a healthy proportion of their employment (Figure 7). The percentage of people employed by the manufacturing sector is higher than national averages in all seven metros. The prevalence of manufacturing jobs in these cities does not seem to play a role in the economic and social health of these cities; metros with high proportions of manufacturing employment are at both ends of the spectrum. The metropolitan region with the highest percentage of manufacturing jobs is Youngstown; where 18.4 percent of the jobs are in the manufacturing sector, more than double the national average. Also notable is the highest percentage of jobs in all cities is in the health care, education, and social services sectors.

Figure 7: Percent Employment by Industry, selected metro regions, 2005-2009



Source: Statistics Canada 2006 Census, U.S. Census Borough

Mid-sized older industrial cities are, in general, under-performing when compared with national averages for most of the selected economic and social indicators. Flint, Michigan, ranked lowest on the majority of indicators. Flint, as stated in Section 3, had a historic over-concentration of employment in the manufacturing sector and was disproportionately affected by job losses in the automotive industry. Flint's location within Michigan may also have contributed to its economic disadvantage, as this state had a high rates of inter-city competition. The highest ranking American metro is Allentown. Pennsylvania is a higher economic performer than Michigan and Allentown had a more diverse economy than many of the metros compared. The following section will further explore some of the reasons for Allentown's relative success.

5 American Case Studies: Akron and Allentown

Where do older industrial cities like Akron, Allentown, and Hamilton fit in a deindustrializing North America? What is going well and what can they learn from each other? Older industrial cities have assets that can be strengthened and expanded on, such as their pre-sprawl building stock, robust industrial architecture and dense urban layouts. Older urban cores are often able to support vibrant street life, profitable commercial activity and a variety of transit options. The following section outlines briefly the history of these two cities, as well as some of their assets and some of the policies being implemented to encourage investment, create a sustainable economic base and improve communities.

5.1 Akron: A brief history

Akron is located 65 km south of Cleveland and 180 km northwest of Pittsburgh and is part of the larger Northeast Ohio regional economy (Figure 8). Akron's metropolitan region is comprised of two counties, Summit and Portage, with a combined population of just over 700,000 (Ledebur & Taylor, 2008).

Figure 8: Akron and Regional Context



Source: Google Maps

Akron underwent a similar historical trajectory as did many older industrial cities. It was originally founded as a commercial centre along the Ohio Canal in the early 19th century and by 1850 Akron was home to one of the nation's busiest inland ports (Ledebur & Taylor, 2008). The American Civil War increased industrial development in the town and its population grew from 5,000 in 1865 to 13,000 by 1870 (Ledebur & Taylor, 2008). The latter half of the 19th century proved difficult for the town, as many industries lost out to more competitive locations and larger labour pools. However, Akron's fortunes improved greatly with the newly created and flourishing auto industry in the early 20th century (Ledebur & Taylor, 2008). Akron became home to the growing rubber industry and many rubber companies were able retrofit the numerous factories abandoned during the previous decade, rather than construct new ones (Knepper, 1981). These rubber companies were also able to take advantage of the cheap labour force comprised of unemployed industrial workers (Knepper, 1981). The city grew rapidly from 69,000 in 1910 to 208,000 in 1920 (Ledebur & Taylor, 2008). Akron weathered the difficult times of the Great Depression reasonable well and emerged in the war years as the "Rubber Capital of the World" (Ledebur & Taylor, 2008). The transition from war-related industrial production to peace time production was relatively smooth for the rubber industry, as many American goods were now transported by truck and the demand for private automobiles was growing (Ledebur & Taylor, 2008).

The American rubber industry's dominance was usurped by the introduction of the radial tire by the French company Michelin in the 1960s²⁵. Prior to the appearance of the radial tire on the market, four out of five of America's largest tire companies were headquartered in Akron. By the mid-1990s only Goodyear remained in the city (Sull, 2002). In 1980, more than 26,000 people were employed in Akron's plastics and rubber products manufacturing industry; by 1990 this number had fallen to 16,000, and by 2007 just 7,220 people were employed in these industries (Ledebur & Taylor, 2008).

Despite job losses, the historic concentration of the rubber industry in the city helped lay the ground work for advanced rubber-related industries and research in the polymer sector (Ledebur & Taylor, 2008). Ties between area businesses and the University of Akron have contributed to the region's importance in the research and development side of the industry. The University of Akron's polymer science and engineering program is ranked second in the country (Ledebur & Taylor, 2008). Goodyear has recently committed to a long-term stay in Akron and began construction on a new

25 By the 1973, all U.S. automobile manufacturers had standardized with the radial tire. Radial tires were more durable than traditional American-made tires, so demand decreased with the increased lifespan of tires. American companies were also at a disadvantage, as they had to upgrade production facilities in order to manufacture the new tires (Sull, 1999; Welch, 2006).

headquarters there in 2011 (CantonRep, 2011; MacKinnon, 2009).

The decline of the manufacturing industry also helped to diversify the region's economic base. In 1980, manufacturing accounted for 35 percent of all jobs and 41 percent of Akron MSA's gross regional product (Ledebur & Taylor, 2008). By 2007, these numbers had dropped to 16 percent of employment and 20 percent of gross regional product (Ledebur & Taylor, 2008). Now Akron is partially reliant on a growing health care sector to provide many regional jobs; the two largest single employers in the Akron MSA in 2010 were the Akron General Hospital and the Summa Health System²⁶ (Greater Akron Chamber of Commerce, 2010).

5.2 Akron: Assets, Policies and Signs of Recovery

As illustrated in Section 4, Akron has a highly educated population. The metro ranked highest on both selected educational indicators, with the highest percentage of high school graduates as well as the highest percentage of residents with a bachelor's degree. This is a good sign for the region, but as stated in Section 1, human capital is not a secure asset. A highly educated workforce is not likely to stay in an area where opportunities are limited or where social conditions are undesirable. If Akron is to capitalize on this positive attribute, economic opportunities must be present for this segment of the population.

The Akron region is home to two large public universities, Kent State University and the University of Akron, both of which are major research institutions. These two institutions have been actively involved in the economic development and future sustainability of the city for a number of years. Kent State University's *Economic Development and Strategic Partnership* works to establish partnerships between regional development organizations and the university's specialized centres and institutions (Ledebur & Taylor, 2008). Current partnerships include the Liquid Crystal Institute, the Nanostructured Materials Centre, the Employee Ownership Centre and the Urban Design Centre. The university also promotes technology-based economic development through its *Office of Technology Transfer and Economic Development* (Kent State University, 2011).

The University of Akron also plays a role in supporting local economic development in the city and region. The Akron Global Business Accelerator (AGBA) was created in partnership with the City of Akron, the State of Ohio, and the University of Akron. This initiative, originally called the Akron Industrial Business Incubator, is located in the former B.F. Goodrich tire manufacturing plant in

²⁶ The region's third largest employer is Kent State University, followed by Summit County, the Akron School District and Goodyear (Greater Akron Chamber of Commerce, 2011)

downtown Akron (Akron Global Business Accelerator, 2011). The AGBA promotes entrepreneurship in start-up manufacturing and technology businesses through the provision of management expertise, low-cost space and business support (Akron Global Business Accelerator, 2011). The facility occupies 200,000 square feet of space and is the largest industrial incubator in the state (Akron Global Business Accelerator, 2011).

As promising as these projects may sound, the university cannot carry the economy of the city or the region. Furthermore, these partnerships and business incubators do little to reemploy former industrial workers. The city and regional authorities, as well as non-profit organizations, are attempting to attract new business and reemploy former industrial workers through a variety of programs and policies.

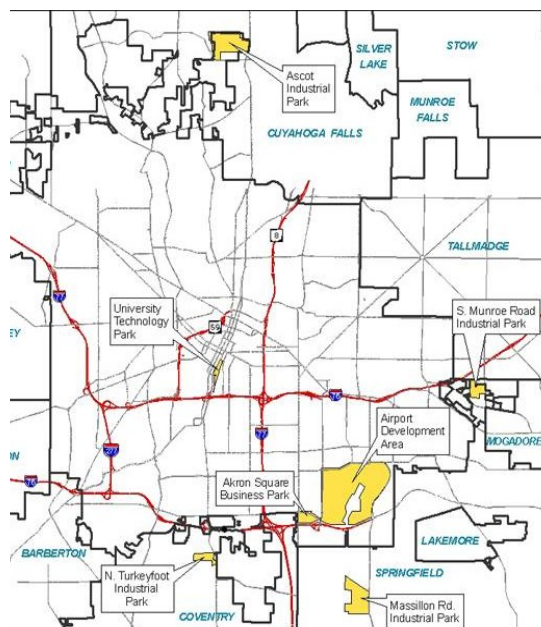
5.3 Akron: Policies to Encourage New Development

In addition to the Akron Global Business Accelerator and the various university partnerships, the city has a number of programs to support new business development. Akron has attempted to address the lack of developable land through the creation of industrial parks and joint economic development districts.

5.3.1 Industrial Parks

The City of Akron purchased available parcels of land and assembled them into a number of city sponsored industrial parks (Mayor's Office of Economic Development, Akron, n.d.). Akron has five industrial parks where the city is hoping to attract light industrial businesses and some office development (Figure 9; Table 3). Two of these parks are located in Joint Economic Development Districts, which will be explored further in the next section.

Figure 9: Location of Akron city-sponsored industrial parks



Source: Akron Mayor's Office of Economic Development, n.d.

Table 3: Akron Industrial Parks

Name	Description	Objectives
Ascot Industrial Park	200 acres, 52 acres currently available	Light industrial development
Massillon Road Industrial Park	98 acres, 56 acres currently available, located in the Akron-Springfield JEDD	Light industrial development
North Turkeyfoot Industrial Park	32.5 acres, 13 acres currently available, located in the Akron-Coventry JEDD	Light industrial development
South Munroe Road Industrial Park	54 acres, all currently available	Light industrial or office
White Pond Office Park	76 acres, 46 currently available	Office or commercial headquarters

Source: Akron Mayor's Office of Economic Development, n.d.

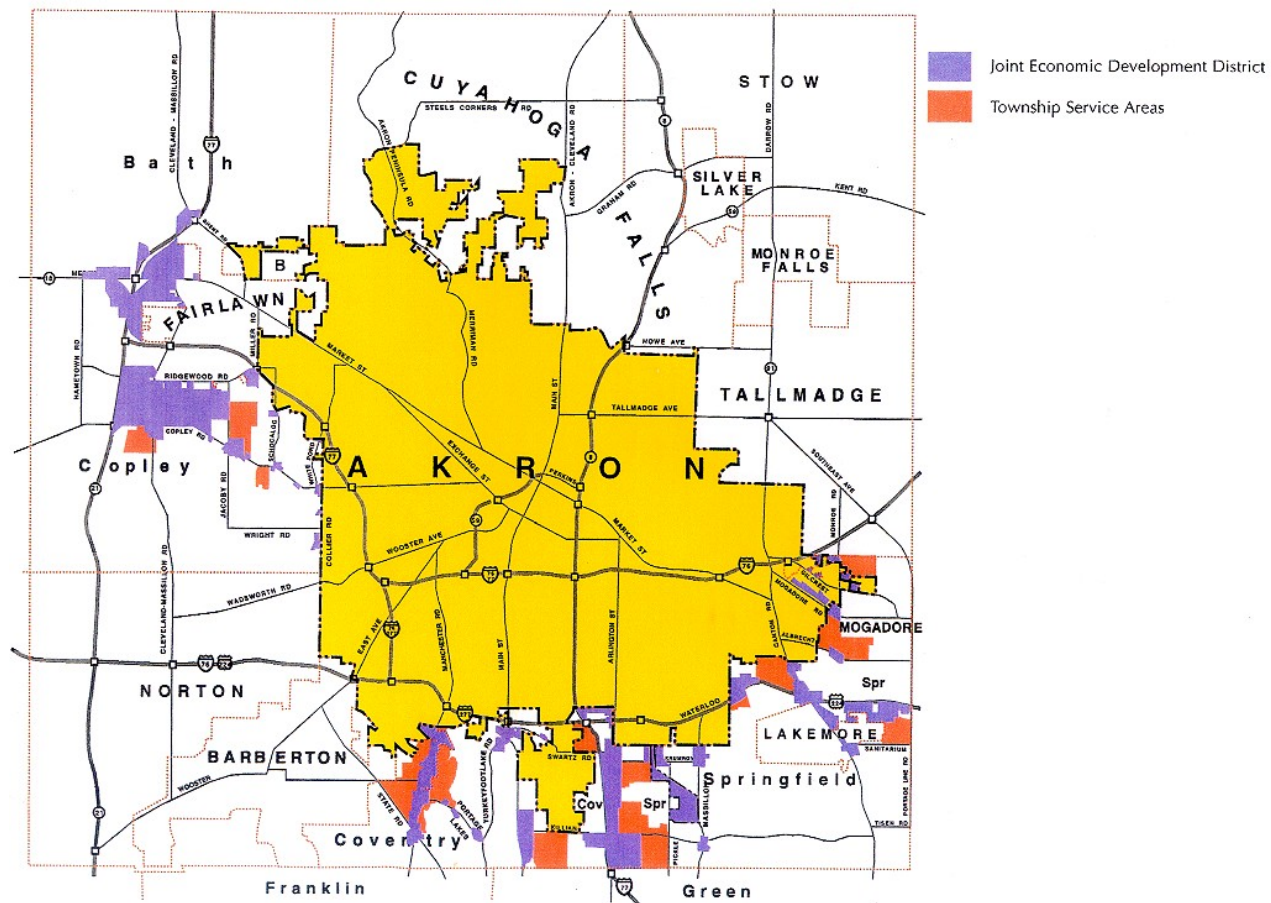
The City of Akron, through the creation of the industrial parks has attempted to gain control over the development of land within the city and its surrounding area (Table 3). By purchasing available land and designating its use as industrial or office space, the city has protected this land from development as residential space or low-density commercial activity. Much of this space is on the outskirts of the city limits, close to highways and removed from other non-complementary uses.

5.3.2 Joint Economic Development Districts

Ohio municipalities can create Joint Economic Development Districts (JEDDs); allowing neighbouring municipalities to cooperate in addressing decreasing tax-revenues, annexation pressures

and economic development. These contractual agreements differ among various jurisdictions and have been used within the state since 1993. Akron is currently engaged in a number of JEDDs with surrounding municipalities.

Figure 10: Akron JEDDs



Source: Akron Mayor's Office of Economic Development

Through these JEDDs, Akron has extended its water and sanitary sewer systems outside of its municipal boundaries in exchange for income-tax revenues on the JEDD land. Akron's JEDDs are zoned industrial, commercial, office or business.

JEDDs have likely helped to ensure that jobs remain in the Akron metro region. Although these job centres are located outside of the Akron's municipal boundaries, companies who locate in JEDDs will attract workers from within the city. The light industrial businesses that located within these zones are not likely to find their space requirements met within the city. Additionally, light industrial parks do not complement existing residential or local commercial uses within the city and these businesses often require easy access to highways. JEDDs allow companies to locate close to, but not within the city

limits.

The creation or retention of regionally-based jobs is certainly beneficial to a population, the city also retains the tax benefits from the JEDD zone. Akron's income tax revenues from JEDDs have increased from \$6.7 million in 1993 to \$16 million in 2008 (Hill, 2009). Although there are still vacancies in the JEDDs (Table 3), the number of businesses located within them has increased from 1,200 in 1993 to 2,100 in 2008 (Hill, 2009). However, if the cost of providing services to JEDDs zones is not properly accounted for in these taxes than the financial cost of these zones may be too high. The fact that these zones have been operating in Akron for more than 20 years, suggests that they have been relatively successful.

5.3.3 Loans and Grants

The City of Akron also has a number of grants and loans available to support development. Some of these programs are directed towards the downtown core, while others are city-wide.

Table 4: Loans and Grant for Akron Development

Program	Details	Maximum Funding
Downtown Development Loan Program	Low-interest loans for rehabilitation and expansion of downtown businesses	\$175,000
Enterprise Zone	Tax-exempt bonds to finance construction and improvement or acquisition of land, commercial or industrial	
Downtown Facade Improvement Grant	Matching grants for exterior improvements to downtown buildings	\$10 per square foot or \$15,000
Main Street Business Incentive Program	Matching grants for downtown retail businesses for half of the down payment or first-years rent, only applies to certain downtown streets	\$5,000

Source: Akron Mayor's Office of Economic Development

The above loans and grants are designed to improve the viability of the Akron's downtown core, or other targeted neighbourhoods. Loans and grants are directed at businesses within specific geographic areas and many programs apply to new businesses. Benefits of the the Enterprise Zone program are not offered to businesses such as gambling establishments, massage parlors, and businesses that sell alcohol for off-site consumption. The Main Street Business Incentive Program is geared specifically at retail-oriented businesses located within a very specific geographic area. The specific clauses on what types of businesses, located in which areas, assist the city in encouraging and supporting the types of businesses that it sees fit for the downtown. The restrictiveness of some of these

measures does not block the creation of new businesses or cause existing businesses to vacate the area, but rather gives bonuses to companies that fit the city's vision for the downtown.

5.3.4 Tax Incentives

Similar to many American cities, Akron offers a variety of tax credits as part of its economic development portfolio. Many of the tax incentives listed below are state-funded, so the City of Akron benefits from these programs without having to fund them.

Table 5: Akron Tax Credits

Program	Details	Terms
Tax Increment Financing	Service payments in lieu of property taxes, used to finance public infrastructure improvements	Up to 100% of real property taxes, exempted for up to 10 years
Manufacturer's Investment Tax Credit	Income tax credit for companies that purchase new or retooled machinery and equipment	13.5% on the cost of equipment, divided equally over 7 years
Job Creation Tax Credit	State tax incentive for business expansion and location in Ohio	7Up to 75% of corporate income tax for up to 10 years, must agree to create at least 25 new, full-time jobs within 3 years. Average wage of all employees must be at least 150% of the federal minimum wage
Export Tax Credit	Tax credits for Ohio-based companies that export services or products to international markets	Company must increase export sales and either Ohio payroll or Ohio capital expenditures. Based on the average increase in export sales tax, generally 10% credit of pre-tax profit from increase in export sales
Research and Development Tax Credit	Sales tax exemption for machinery and equipment used in research and development	Research can be "pure" (science, technology, experimentation) or "directed" (design, create or formulate new or better products, processes or equipment)
Brownfields Tax Credit	Brownfield Site Clean-up Tax Credit, state-administered program	10% of costs up to \$500,000
Working Opportunity Tax Credit	Federal income tax credit to encourage hiring of targeted groups of job seekers – Food stamp recipients, veterans, 18-24 year olds living in Akron's Enterprise Community, Disabled persons, ex-felon, etc.	40% of the new hire's first year salary up to \$6,000
Ohio Training Tax Credit Program	Tax credit to offset the costs of training current workers, credits may be used for training materials, travel and wages of trainer and trainees	Up to \$100,000 per year

Source: Akron Mayor's Office of Economic Development

Many American cities have similar loan and grant programs, so much of the reasoning behind

these programs is to insure the cities matches other cities. However, these programs are not likely to attract new business as they are available in most other cities. Downtown improvement programs are likely assisting existing businesses; as well as improving the appeal of the city in general.

With the exception of the JEDDs and industrial business parks, Akron's economic development policies and programs are similar to those of other American cities. These programs are unlikely to bring in new development, but are probably necessary in order to retain existing businesses and remain competitive with cities of with similar populations and geographical assets. Many of the programs in Akron are state funded, so the financial burden of supporting them does not fall to the city.

Through the JEDDs and the creation of the city-sponsored industrial parks, Akron is attempting to create and protect job-related spaces in and near the city. The city's current focus on light industrial business in these parks and retail-oriented businesses in the downtown core is likely a good short-term strategy. Former industrial workers will perhaps be able to find work in the light industrial sector, while supporting downtown retail and other small businesses will improve the city's core. A well-functioning downtown with an attractive retail sector may encourage people to move back downtown and encourage new business development. If the city's choice to support mainly light industrial business development does not work, the city still owns the land and can re-purpose it, attempt a new strategy for job creation, or sell the land in the future.

5.4 Akron: Programs for Former Industrial Workers

The State of Ohio has ninety local *One-Stop* offices, providing job search assistance, job training and other workforce-related services to Ohio residents. None of these centres are located in downtown Akron. Summit County's *Job Center* is located in north east of the city and brands itself as a “workforce mall” (The Job Center, n.d.). *The Job Center* houses more than fifteen workforce service providers including the state-funded One-Stop office and the Goodwill Employment Resource Center.

Although there are no specific programs for out of work industrial workers there is an organization, *Mature Services*²⁷, in Akron that specifically assists workers over the age of forty. In addition to other programs, *Mature Services* runs a senior employment centre which works to train and empower mature job seekers (Mature Services, n.d.).

²⁷ *Mature Services* is a non-profit organization that runs a number of programs and services to support older community members including: a senior employment centre, a volunteer placing service for seniors, and a number of support and counseling services for older adults.

5.4.1 Ohio State-run Programs

The Ohio Department of Jobs and Family Services administers the *Dislocated Worker Program* to assist laid off workers in finding new jobs with comparable wages. The program provides training opportunities, job search and placement assistance, career counselling and other services (Ohio, 2010).

The above listed programs for laid off workers are not likely well known or easily accessible for many Ohio residents. In 2006, for example, only 8,145 individuals were served through the dislocated worker program in the State of Ohio and, of those, only 3,145 received intensive staff assistance or training (Honeck, 2008). In the same year, more than 77,000 Ohio workers ran out of unemployment benefits before finding jobs. Additionally, the State of Ohio does not have an extended unemployment compensation benefits program for workers who are in training.²⁸ Benefits for the majority of workers expire after six months, so many worker are reluctant to enter training programs, or may leave programs early when their benefits run out (Honeck, 2008).

Although Ohio-based programs exist for laid off workers in Akron, and throughout the state, their effectiveness is questionable. Some people will benefit from these programs, but the state-wide administration means that local needs may not always be met. The fact that unemployment benefits are cancelled six months after workers begin formalized training likely deters many from completing training programs, especially since training neither ensures employment, nor guarantees full time work with the potential for a benefits program.

5.5 Akron: Signs of Recovery

The Akron MSA performed below the national average between 1980 and 2007 in terms of the following criteria: employment, gross product, payroll and productivity (Ledebur & Taylor, 2008). During this time period, employment grew nationally by 52 percent, while only 32 percent in the Akron MSA; the same was true for gross product, which grew by 98 percent nationally and only 52 percent in Akron (Ledebur & Taylor, 2008). Many of these discrepancies can be attributed to the collapse of Akron's rubber industry, which occurred in the 1980s. However, economic conditions improved in the 2000s and the region grew at the same rate as the nation in terms of employment, gross product and productivity (Figure 11) (Ledebur & Taylor, 2008).

²⁸ Workers who are in the federal Trade Adjustment Assistance program are exempt from this rule

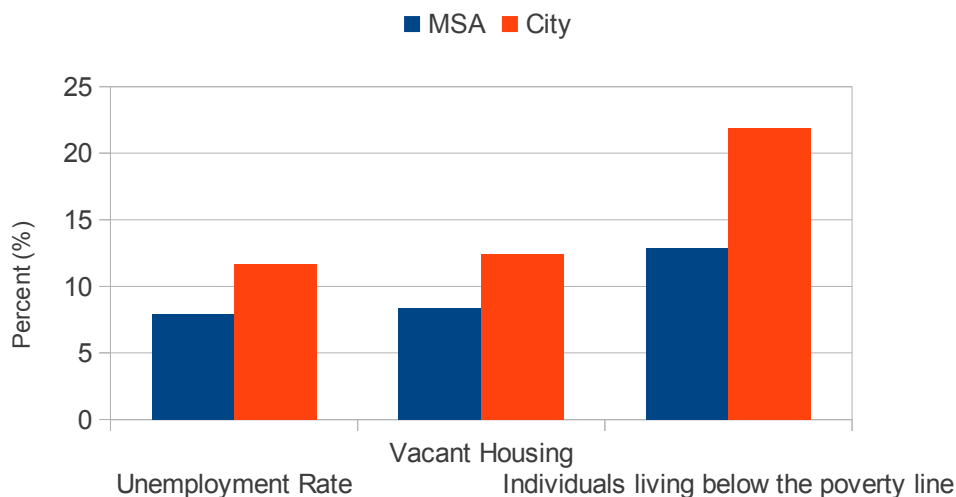
Figure 11: Akron MSA vs National Averages, 1980-2007



Source: (Ledebur & Taylor, 2008)

The economic stability of the region did not necessary translate to the residents of the city; data on personal and household income reveal that residents of the City of Akron are not doing as well as those living in the Akron MSA (Figure 12) (Ledebur & Taylor, 2008).

Figure 12: Akron MSA and City selected characteristics, 2005-2009



Source: U.S. Census Bureau

Poverty rates show a similar pattern, 17 percent of the city's residents were living below the

poverty line in 2000, compared with 12 percent in the MSA. Although economic conditions have improved within the City of Akron, the improvement has been slower than for those in the greater region (Ledebur & Taylor, 2008). Median household incomes are also much higher in the metro region than in the city: \$48,338 compared with \$34,952 (U.S. Census Bureau).

However, Akron has fared better than many comparable Ohio cities. The city witnessed less population loss, lower unemployment rates, lower levels of poverty and higher median incomes than Youngstown, Canton, and Cleveland (Ledebur & Taylor, 2008). Some attribute this relative advantage to the strength of the city's public school system, while others point to lower levels of racial conflict, or to a climate of innovation, where public and private sectors are investing in research and development (Ledebur & Taylor, 2008). When compared to older industrial metropolitan regions of a similar size, Akron has higher percentages of both high school and university graduates.²⁹ These higher than average rates of education in the region are likely to benefit the region in the future, however if many of these educated residents are unable to find work in the region, they are mobile enough to look elsewhere. Akron's ability to retain its educated workforce will be dependent on the type and quantity of jobs in the region.

Some of the Akron metro's economic recovery can be attributed, as well, to the evolution of the polymer sector. Although tires are no longer manufactured in Akron, the polymer sector is more diverse than it was fifty years ago. Polymers are used in plastics, packaging materials, building materials and a variety of other applications (Ledebur & Taylor, 2008). The region's early concentration in this sector combined with continued research have allowed it to remain an important sector. In addition to the polymer sector, the region has seen growth in health care and social services (59 percent increase since 1990), and wholesale trade (47 percent increase since 1990) (Ledebur & Taylor, 2008).

Regional cooperation is also a factor in the relative success of the MSA. The JEDDs have prevented substantial competition between the City of Akron and areas just outside of its boundaries. Through mutually beneficial JEDDs, Akron gains municipal revenue in exchange for service provision and jobs are retained or created in the region.

5.6 Allentown: A Brief History

Allentown is Pennsylvania's third largest city, located in the Lehigh Valley, just under 100 km north of Philadelphia and 140 km west of New York City (Figure 13).

²⁹ 89.5 percent of Akron's over-25 population has at least a high school diploma and 27.7 percent have at least a bachelor's degree. These percentages are higher than Syracuse, Flint, Gary, Hamilton, Allentown, and Youngstown.

Figure 13: Allentown and Regional Context



Source: Google Maps

The metropolitan area of Allentown-Bethlehem-Easton region grew substantially with the creation of the Lehigh Canal in 1829. This important regional transportation corridor was used to transport coal and other goods from Pittsburgh to New York City (Safford, 2004). A railroad, opened in 1846, became a major link between the east coast and the interior Great Lakes, and drastically decreased the importance of the canal (Safford, 2004). In 1857, a small steel mill was established in south Bethlehem. This mill was the first for the Bethlehem Steel Company, which would eventually grow to become the second largest steel producer in the United States (Safford, 2004). By the end of the First World War, steel companies were the largest employers in the Lehigh Valley, with 19 percent of total employment (Safford, 2004). There were also large cement companies, including Lehigh Portland Cement, a *Fortune 500* company for many years. Additionally, the Mack Truck Company moved their assembly plant from Brooklyn, New York to Allentown in 1901 (Safford, 2004). The population of Allentown grew rapidly from 25,228 in 1890, to 73,502 in 1920, and 109,000 in 1970 (Kromer, 2010). In addition to manufacturing, the city became a popular shopping destination.

However, with the move away from rail towards trucking and the increasing shift of manufacturing out of the American mid-Atlantic region post WWII, the economic landscape of Allentown changed. Steel-making in Allentown followed the same pattern as steel-making in the rest of the American rust belt and by 1983 half of Allentown's steel workers, 4000 people in total, had been laid off. Industrial parks were created in the suburbs to allow for easier access to the interstate and

competition from other states lured away many businesses. Mack Truck left Allentown in 1986 to open a new facility in South Carolina and 1,800 workers lost their jobs (Kromer, 2010).³⁰ Real estate pressures in Allentown and neighbouring New Jersey meant that high-wage earners in Allentown often commuted from upscale New Jersey suburbs; while lower-wage New Jersey workers would often commute from the more modest priced homes in Allentown (Kromer, 2010). Allentown lost its place as a regional shopping centre, as suburban growth meant that many of the products and stores once only available in the city were now also available in the suburbs (Kromer, 2010). The major department stores located on Allentown's main shopping street, Hamilton Street, closed down or relocated, leaving large unoccupied parcels in the downtown core.

Economic disinvestment in the city was fairly concentrated around Hamilton Street. Many residential neighbourhoods remained intact and Allentown did not witness the widespread housing vacancies seen in many other American cities (Kromer, 2010); rather problems arose with overcrowding and poor maintenance of occupied buildings. The City of Allentown still had many office buildings and white collar jobs in its core, but was not affected by long commute times or congestion, so many of these workers found residential accommodations in more vibrant and attractive neighbourhoods outside of downtown.

When compared with metros of similar size in the American Mid-atlantic and Midwest, Allentown-Bethlehem-Easton has lower unemployment rates, higher median income, lower rates of poverty and a lower percentage of vacant housing (Section 4). Allentown, unlike almost all older industrial American cities, did not lose a large proportion of its population during the last five decades. The city's population has remained relatively stable during this fifty-year period. The 1950 population of the city, 106,756, exceeded its 2000 population by just over 100 people (Kromer, 2010). This lack of population loss is unique within the rust belt and the State of Pennsylvania³¹.

5.7 Allentown: Assets, Policies and Signs of Recovery

The Allentown-Bethlehem-Easton MSA ranks higher on numerous indicators when compared with many mid-sized older industrial regions³². The unemployment rate in 2005-2009 averaged 6.4

30 Mack kept their corporate headquarters in Allentown until 2008, when that too was moved to South Carolina (Kromer, 2010).

31 Philadelphia lost half a million residents during this same time period, Camden lost almost 45,000, more than 40 percent of its population and Pittsburgh lost more than 45 percent of its population (Kromer, 2010).

32 Data on indicators is from the U.S. Census Bureau's American Community Survey Five-Year Estimates

percent; much lower than Flint, Youngstown-Warren, Gary, or Akron. Median household incomes in the Allentown metro were also highest of the American metros compared in this study³³. The rates of individuals and families living below the poverty line were lower in Allentown than in the other six American metros. The Allentown region has retained a 15.3 percent employment share in the manufacturing industry, slightly lower than some of the other metros, with Youngstown having the highest share at 18.4 percent (U.S. Census Bureau). Although the region is performing well on a number of indicators, the City of Allentown faces a number of community challenges such as higher rates of unemployment and poverty, as well as municipal challenges such as a limited amount of developable land. The following section outlines some of the regional and municipal programs currently underway in Allentown.

5.8 Allentown: Policies to Encourage New Development

Much of the support for development in Allentown is regionally-based and directed at the entire Lehigh Valley. The City of Allentown does however have a redevelopment authority that is responsible for addressing city-wide issues of blight and abandonment.

5.8.1 Redevelopment Authority

The Redevelopment Authority of the City of Allentown (RACA) undertakes an annual blighted property review process to condemn vacant properties which are deemed unfit for human habitation, dangerous or environmentally hazardous (Allentown, n.d.). If properties owners do not get their buildings up to code, eminent domain is used and RACA acquires the property. In 75 percent of cases, properties are brought into compliance, typically within a year, and taken off the list. In 2010, forty-one properties were listed as blighted in the City of Allentown, three of which were carried over from the previous year (Allentown, n.d.).

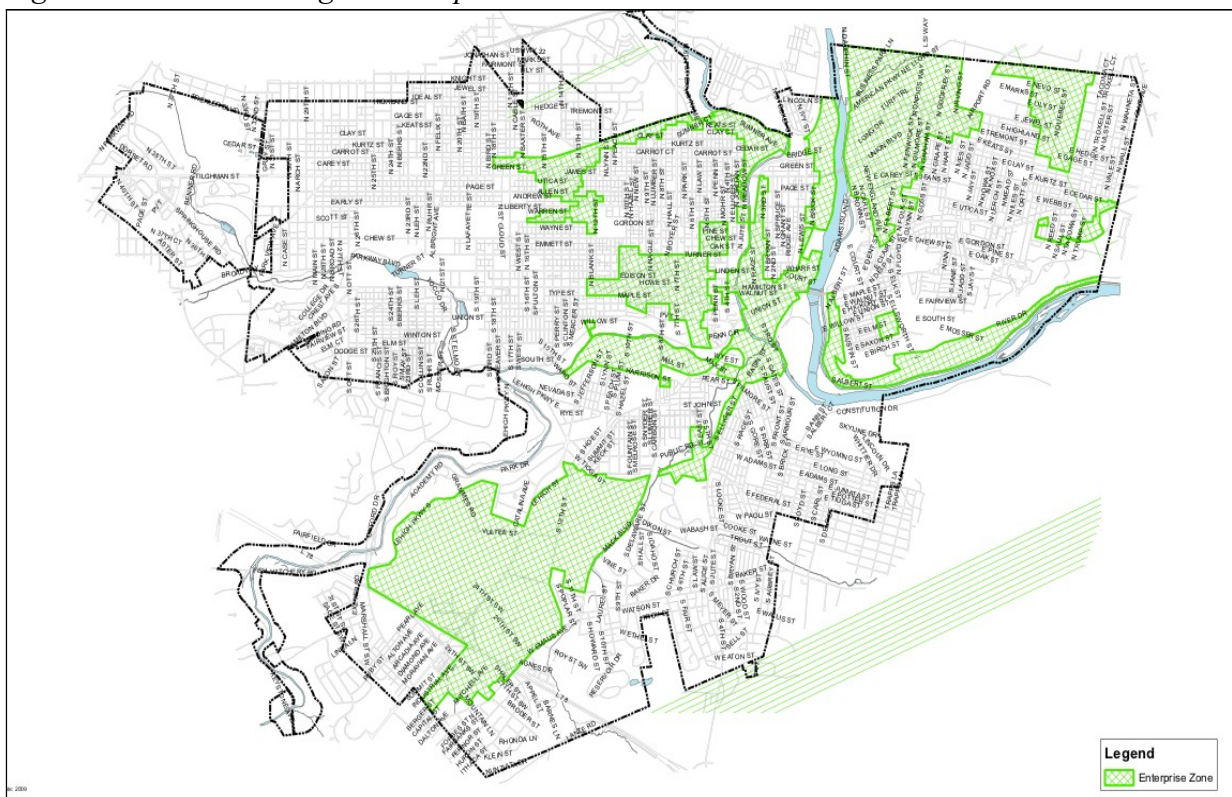
RACA is a good example of an effective municipal program in an older industrial city. Vacancy and blight decrease the attractiveness of cities and are linked to urban challenges such as crime. Buildings become more expensive to rehabilitate if they have not been properly maintained, and if left vacant long enough may not be salvageable at all. The RACA program is a prudent way of dealing with issues of abandonment and blight before they get too problematic. Allentown's relatively small size and the lack of sustained population decline, limited the scale of vacancies and abandonment.

33 Youngstown-Warren, Flint, Akron, Syracuse, and Gary are the five other American metros

5.8.2 Enterprise Zones

The City of Allentown, in cooperation with the Allentown Economic Development Corporation (AEDC),³⁴ has been utilizing the Pennsylvania Enterprise Zone program to access state funding for business assistance and expansion. The city has designated many areas as Enterprise Zones (Figure 14) (Allentown, 2009). The Enterprise Zone program is intended to promote job growth and to help municipalities take advantage of business expansion opportunities (Pennsylvania DECD, n.d.). Local governments, redevelopment authorities and non-profits are eligible to apply for Enterprise Zone designation. Enterprise Zones must demonstrate that they are financially disadvantaged, in conjunction with state-wide indicators. A variety of grants and loans are available within these zones for planning, analysis, or other related activities. Loans can also be awarded to private sector companies located within the zones. In most cases, grants are awarded to the non-profit or government authority; the government or organization then provides loans to companies located within the zone for projects such as business expansion or equipment upgrades (Pennsylvania DECD, n.d.).

Figure 14: Allentown Region Enterprise Zones



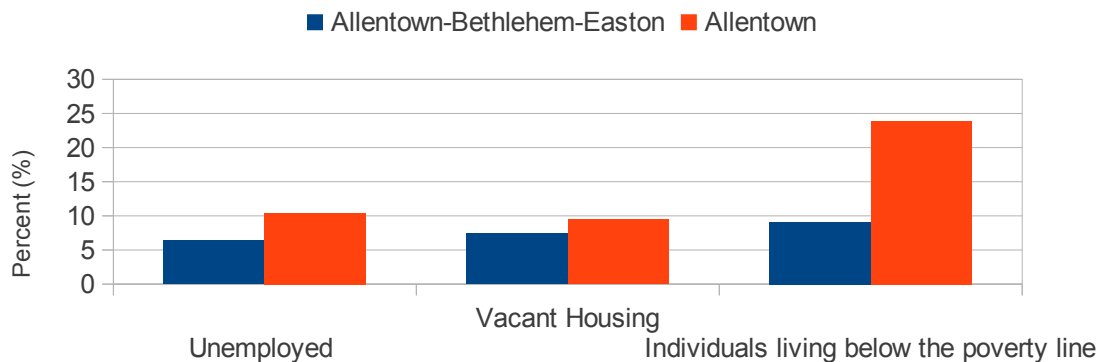
Source: Allentown Economic Development Corporation

³⁴ The Allentown Economic Development Corporation is a non-profit corporation, its mission is to encourage, identify and manage business projects that benefit Allentown and the Lehigh Valley.

5.8.3 Regional Cooperation

Much of the success of the Allentown-Bethlehem-Easton region can be attributed to regional coordination and planning. The Allentown-Bethlehem-Easton region formed the Lehigh Valley Economic Development Corporation to avoid competition between sites and ensure a collective plan for the entire Lehigh Valley. Many civic organizations were also united on a regional basis. Figure 15 outlines some of the differences between the City of Allentown and the Allentown-Bethlehem-Easton metro region. As in most American metro regions, the urban areas have a more marginalized population.

Figure 15: Allentown City vs Allentown-Bethlehem-Easton MSA



Source: US Census Bureau, 2005-2009 American Community Survey, five-year estimates

Regional planning and cooperation has helped the Allentown-Bethlehem-Easton metro remain relatively economically successful. This success has likely also helped the region's principal city, Allentown; as strong regional economic activity likely trickled down. However, more could be done to ensure that the social and economic conditions of Allentown city residents are improved.

5.9 Allentown: Programs for Former Industrial Workers

Allentown does not have programs specifically geared at assisting former industrial workers, but has generalized regional career centres such as PA Career Link. The region is also active in the business incubator and venture capital areas, which attempt to support home-grown businesses.

5.9.1 PA Career Link Lehigh Valley

PA CareerLink Lehigh Valley is a primarily state-funded career matching organization, serving the needs of Lehigh Valley job seekers and employers. Services are offered to job seekers in English and Spanish and include career exploration workshops, employment and labour information, resume assistance, and financial-aid for training and educational programs. Services for employers include job fairs, job matching, on-the-job training, company-specific recruitment strategies and information about tax credits, grants and incentives (PA CareerLink Lehigh Valley, 2011).

5.9.2 Ben Franklin Technology Partners

Ben Franklin Technology Partners is a technology-based economic development program operating in Pennsylvania. As part of this state-wide initiative, the Ben Franklin Business Incubator (BFBI) has been located in Bethlehem, at Lehigh University, since 1983 (Ben Franklin Partners, 2011). To date the incubator has graduated forty-eight successful early-stage technology companies and helped to create 4,500 jobs (Ben Franklin Partners, 2011). The incubator is expanding to a new 47,000 square foot facility in order to accommodate more companies and increased laboratory space (Ben Franklin Partners, 2011). Many companies that started at Ben Franklin have become successful and are engaged in giving back to the community. Two examples of successful companies to come out of the incubator are IQE and Orasure. The founding members of these locally-grown companies have sat on numerous boards of directors in the community, including the scientific advisory board of the Ben Franklin Partnership (Safford, 2009). The city is also home to a light manufacturing incubator, The Bridgeworks Enterprise Centre (BEC). The BEC rents space in its 45,000 square foot facility housed in a former Mack Truck Plant (Allentown Economic Development Corporation, n.d.).

5.9.3 Access to Venture Capital

A local culture of entrepreneurship has developed in the Allentown Region, much of which surrounds university partnerships, business incubators and access to venture capital. A local venture capital firm, Mid-Atlantic Venture Partners, was set up at the same time as the Ben Franklin Business Incubator. Much of the original capital for this firm came from locally prominent high-net-worth individuals and large regionally-based companies. Between 1990 and 2002, thirty-seven high-tech start-ups in the Allentown region received \$1.8 billion in venture capital investment and more than

twenty companies won Small Business Innovation Research (SBIR) awards³⁵ (Safford, 2009). Allentown's level of venture capital and small business innovation is much higher than that of similarly sized Youngstown, Ohio; where only \$125 million in venture capital was secured over the same time period and only three companies won SBIR awards (Safford, 2009).

5.9.4 Other Potential Explanations for Allentown's Success

Allentown still has a large proportion employment in the manufacturing sector, however the types of manufacturing industries in the region are different than what they were in the 1960s and 1970s. The region transitioned from a steel production centre to a more knowledge-based production economy. New production industries, such as electronics, instruments and speciality chemicals, replaced steel as the region's main industrial output. The metro also saw growth in its finance, insurance and real estate employment. In less successful industrial cities, such as Youngstown, manufacturing employment remains concentrated in traditional sectors (Safford, 2009). In the early 1970s, both Youngstown and Allentown had considerable percentages of their manufacturing employment in traditional sectors; with more than 75 percent of manufacturing concentrated in steel, automobiles, apparel and cement. However, over time Allentown's manufacturing employment share in these industries has decreased to less than the national average. In 2000, the percentage of Allentown manufacturing employment concentrated in these traditional sectors was less than 30 percent (Safford, 2009). That same year, more than 40 percent of Allentown's manufacturing employment was in electronics, instruments and speciality chemicals, up from just under 10 percent in 1970. Allentown's traditional manufacturing sector was replaced by more modern production sectors. Youngstown's manufacturing employment share in these newer industries remained relatively stable over the same thirty year period, at around 5 percent (Safford, 2009).

Allentown benefited from an early shift to diversify its manufacturing-base. This diversification, combined with research partnerships, has helped the manufacturing sector remain competitive. The region is also a good example of how supporting local entrepreneurial activity can contribute to a culture of business-to-business support. Local businesses that have been successful in the region have stayed and are continuing to support emerging businesses.

Allentown also provides an example of the potential effectiveness of regionally-coordinated

35 The SBIR program is a federally administered, competitive awards-based program that provides funding to small businesses engaged in R&D, funding is provided for start-up and development stages, as well as for the commercialization of the technology, product or service (U.S. Small Business Administration, n.d.)

economic development. Companies, civic organizations and governments are working at a regional level, avoiding inter-city competition and securing a relatively healthy job market. Clearly these groups will not always agree and it is likely that certain groups, communities, and interests are not taken into account; however the relative success that Allentown seems to be having, both at the regional and municipal level,³⁶ suggests that regional cooperation is working well in Allentown.

³⁶ Population losses in the City of Allentown have been almost non-existent in the city over the last fifty years, which is very rare in American cities, especially those in the Northeast and Midwest

6 Canadian Case Study: Hamilton

6.1 Hamilton: A Brief History

The City of Hamilton is located on Lake Ontario, 70 kilometres west of Toronto and 115 kilometres north-east of Buffalo. The city is a traditional manufacturing centre, with the busiest Great Lakes port in Canada and strategic rail and road linkages to significant American and Canadian markets.

6.1.1 Hamilton's Older Industrial Areas

Steel has been produced in the City of Hamilton since the early 1900s, when Stelco and Dofasco, Hamilton's major steel producers, located in the Bayfront Industrial Area (Figure 16). Bayfront's downtown location allowed these companies access to port and rail facilities (Hamilton, 2010). In the second half of the 20th century, with the growth of steel production and other related industries, the Bayfront Industrial Area grew to just over 3,000 acres. Much of this growth was the result of harbour infill³⁷.

Figure 16: Bayfront industrial area and downtown Hamilton



Source: Google Maps

³⁷ Three other, smaller, but important industrial areas were also developed: the North Hamilton Industrial Area (70 acres), the West Hamilton Industrial Area (250 acres) and the East Hamilton Industrial Area (65 acres) (Hamilton, 2010).

6.1.2 Hamilton Housing for the Industrial Worker

The City of Hamilton created a master plan in 1947 with the intention of separating industrial and residential activities through the city's first use of comprehensive zoning regulations (Cruikshank & Bouchier, 2004). Neighbourhoods were designated as sound, declining, blighted, or slum while other locations were identified as appropriate for the placement of light, heavy or obnoxious industries (Cruikshank & Bouchier, 2004). According to this plan, a number of neighbourhoods where industrial workers had been able to find affordable housing close to their places of work were labelled as non-existent or blighted (Cruikshank & Bouchier, 2004). In this plan, 26 percent of Hamilton's neighbourhoods were considered sound, 49 percent declining and 26 percent blighted (Cruikshank & Bouchier, 2004). According to planners at the time, some neighbourhoods were not recognizable as communities at all; even though hundreds of Eastern European and Italian factory workers were living in them (Cruikshank & Bouchier, 2004). Many neighbourhoods were rezoned as industrial, which caused property values to decrease. Industrial zoning also made it increasingly difficult for homeowners to maintain their houses, as banks ceased to provide loans for home improvements in the rezoned areas. As blight increased in the neighbourhoods and many residents left, the steel companies were able to purchase this increasingly affordable land and expand their operations (Cruikshank & Bouchier, 2004).

6.1.3 Hamilton Employment

Employment at Hamilton's two large steel companies peaked in the late 1970s at 30,000 people (Hamilton, 2010). By 1990 that number had dropped to 23,000 and by 2003 Stelco and Dofasco were employing just 12,500 people. Related industries also suffered job losses, as downsizing and closures occurred throughout the manufacturing sector. Pre-recession peak employment in the Hamilton Census Metropolitan Area (CMA) occurred in 1989, when 327,000 jobs were located in the area. Following the recession of the early 1990s, job numbers fell to a low of 284,000 in 1993, a decline of 13 percent (Hamilton, 2010). The unemployment rate rose from 5.1 percent in 1989 to 12 percent in 1993 (Hamilton, 2010).

Strong union agreements at manufacturing companies meant that seniority was a key determinant in who was laid off. The hardest hit by layoffs at Stelco in the 1980s were women and younger workers (Luxton & Corman, 2001). It was especially difficult for women to accumulate seniority at the steel mills, as none were hired before 1979 when a human rights ruling forced Stelco to

not discriminate based on sex (Luxton & Corman, 2001). Large-scale layoffs in the early 1980s, meant that by 1986 there were almost no Stelco workers under the age of twenty-five working at the company's largest plant (Luxton & Corman, 2001).

Employment in the city did recover, with post-recession job growth occurring and employment reaching 372,000 by 2004 (Hamilton, 2010). Since the mid-point of the decade employment numbers remained steady, with the 2009 employment numbers the same as 2004, following a slight decrease from 375,000 in 2008 (Hamilton, 2010). However, job losses in the primary metals sector have been significant, falling from 34,000 jobs in 1989 to 10,000 in 2008 (Hamilton, 2010). Other manufacturing sectors also witnessed job losses over this time period. Over the 25-year period from 1976 to 2001 Hamilton's population grew from 423,000 to 503,000, 19 percent, while the Province of Ontario grew from 8.6 million to 11.9 million, 39 percent (Centre for Spatial Economics, 2002). Much of the growth in the Hamilton region occurred in the former suburbs of the Hamilton-Wentworth region, rather than in the central city.

Hamilton's close proximity to Toronto presents challenges and opportunities for the city. With modern transportation networks and proposed improvements to the regional public transportation network, the city will be even easier to access. Close proximity to Toronto opens Hamilton residents to more employment opportunities, but perhaps limits the city's economic growth potential. Financial services and headquarters for large companies will remain in Toronto. Hamilton runs the risk of becoming another “bedroom” community for Toronto. The increasing cost of residential space in Toronto has made the city unaffordable for many people, some now consider Hamilton a viable alternative. Artists, who are often among the first signs of gentrification, have already increased their presence in Hamilton's downtown core, young Toronto professionals may soon follow.

6.1.4 Former Municipality of Hamilton and the New Hamilton

On January 1, 2001, the six municipalities of the Hamilton-Wentworth region were amalgamated. This amalgamated region is comprised of the following former municipalities: Dundas, Flamborough, Glanbrook, Hamilton, and Stoney Creek (Mayo, Patterson & Jaffray, 2009). The former City of Hamilton had a 2006 population of 329,770 people with a modest increase of 11,271 people since 1991 (Mayo, Patterson & Jaffray, 2009). The average annual growth rate of the community of Hamilton was the lowest of all the amalgamated communities in the new City of Hamilton. The median income in Hamilton was the lowest of all amalgamated regions in 1996, 2001 and 2006. The original

city had the highest percentage of residents living on a low income: 28 percent in 1996, 25 percent in 2001, and 23 percent in 2006. Stoney Creek had the next highest rate of low-income residents, with 13 percent in 1996 and 11 percent in 2001 and 2006 (Mayo, Patterson & Jaffray, 2009). Certain neighbourhoods within the former City of Hamilton are significantly more impoverished than others; some downtown neighbourhoods, such as the southern part of the Beasley neighbourhood, had 58 percent of the population living below the poverty line in 2006 (Mayo, Patterson & Jaffray, 2009). The amalgamated City of Hamilton is much better off than the historic central city, which adheres to the social and economic trends seen in other traditional manufacturing centres.

6.1.5 Vacancy, Blight and Unemployment

The majority of jobs lost in the recession of the 1990s were in the manufacturing sector, most of which were high-wage jobs held by men. Many of those laid off from manufacturing jobs were never able to find work again in well-paying stable industries, as jobs that make up the new Hamilton economy are often temporary, low-wage, service sector jobs (Mayo & Fraser, 2009). The City of Hamilton was hit hard by this most recent economic downturn, with a 67 percent increase in the number of unemployed persons between 2008 and 2009 (Mayo, Patterson & Jaffray, 2009). The number of employed persons shrank from 379,600 to 374,700 between 2008 and 2009 (Mayo, Patterson & Jaffray, 2009).

As business activity and employment in Hamilton's older industrial areas decreased, many buildings became blighted and abandoned. It is estimated that hundreds of properties in the Bayfront Industrial Area are vacant and underused (Hamilton, 2010). Issues with inadequate security mean that many of these properties are subject to trespassing and vandalism, which increases public safety concerns (Hamilton, 2010). In 2007, the city retained outside consultants to complete a Historical Land Use Inventory (HLUI). This GIS-based inventory became an important resource in the implementation of a brownfield redevelopment program. The study area for the HLUI included 131,000 individual properties, 91 of which were identified as "true" brownfield sites as these were vacant, and 1,386 were identified as having potential contamination based on historical use (Hamilton, 2010).

6.2 Hamilton: Assets and Key Industries

Hamilton has lost many jobs through the modernization of steel mills, as well as the general downturn in Ontario's manufacturing sector, and has struggled with the recent job losses associated with the economic downturn of 2008-2010.

6.2.1 Hamilton Assets

Hamilton had been a regionally important city for over a century and reached the 100,000 population mark before 1920. This early growth means that the city contains many historic buildings in and near the downtown core, such as the historic Lister Block; which after a decade long campaign by local community organizers is currently being restored (Figure 17). The six-storey retail building was built in 1923 and is the city's oldest surviving retail and office complex (Hamilton, 2011).

Figure 17: Lister Block, during and before restoration



Source: Right (Author, August 2011), Left (Google Streetview)

The redevelopment of the Lister Block is part of the city's larger *King William Streetscape Master Plan*. This plan, adopted by council in 2002, identifies spaces and priority areas for specific streetscape treatment in an attempt to enhance the character of Downtown Hamilton (Hamilton, 2011). Other recently completed downtown projects include the 2011 renovation of the historic Hamilton Farmer's Market (1837), which has been at its current location since 1980; as well as the redesign of the adjacent Hamilton Public Library (Hamilton, 2011). Gore Park, one of downtown Hamilton's historic parks, is also slated for redevelopment (Figure 18).

Figure 18: Gore Park



Source: Google Streetview

6.2.2 Hamilton Key Industries

The city's current economic development strategy is based on six key sectors: advanced manufacturing, agri-business and food processing, clean technology, creative industries, goods movement, and life sciences. Advanced manufacturing combines information technology, microelectronics and new organizational practices to manufacture goods (Hamilton, 2010). Following the establishment of Ontario's *Feed-in Tariff Program*³⁸, the city and local businesses are working to expand Hamilton's green manufacturing sector (Hamilton, 2010). Two key industries identified by the city are power generation, and water and wastewater technologies. Many of the above listed key industries have the potential to reemploy industrial workers, although not at historic levels of employment as these newer industries require less direct production workers.

6.3 Hamilton: Policies to Encourage New Development

The city has created a number of financial incentives in order to attract new businesses and investment to Hamilton. These programs are directed at businesses located in specific geographic areas of the city.

38 The *Feed-in Tariff* program involves guaranteed pricing for producers of renewable energy. Applicable energy sources include: biomass, biogas, landfill gas, on-shore wind, solar photovoltaic and waterpower (Ontario Power Authority, 2010). This program was enabled by the *Green Energy Act* (2009).

6.3.1 ERASE

Hamilton is attempting to ensure that the negative environmental legacy of its industrial past does not hinder its future growth. One way in which the city is addressing this issue is through the Hamilton ERASE (Environmental Remediation and Site Enhancement) program, which provides funding for the remediation of brownfield sites (Table 6). The *Environmental Remediation and Site Enhancement Community Improvement Plan* was adopted by Hamilton City Council in April, 2001³⁹. The ERASE program's goals are to replace underutilized, contaminated, and abandoned properties with productive land uses. Through this program, Hamilton is hoping to retain and expand employment opportunities, increase tax revenues, reduce urban sprawl and improve the quality of urban areas (Hamilton, 2010). Brownfield sites pose higher initial costs to developers when compared with greenfield sites⁴⁰, therefore many aspects of the ERASE program are financial incentives in the form of grants, tax incentives, loans, and opportunities for private-public partnerships (Hamilton, 2010).

Table 6: ERASE Funding Options

Program	Details	Funding maximum
ERASE Study Grant Program	Matching grants for up to half the cost of a Phase II and/or Phase III Environmental Site Assessment ⁴¹	\$15,000 per study, maximum \$20,000 per property
ERASE Redevelopment Grant Program	Financial relief for completed brownfield redevelopment projects, including the cost of remediation, environmental studies, demolition, site construction and improvement	Only eligible if redevelopment increases property taxes, grant is 80% of the increase in municipal property tax paid annually for up to ten years
ERASE Municipal Acquisition and Partnership Program	City property acquisition, investment and involvement in pilot projects with the private sector to clean and redevelop brownfield sites. Pilot projects can showcase innovative remediation tools and technologies.	Monetary support not specified.
Downtown/West Harbourfront Remediation Loan Program	Designed to stimulate residential and commercial development on properties requiring remediation. Low interest loan, owners will likely receive ERASE grants upon project completion	Loans are for 75% of the remediation costs up to a maximum of \$100,000 per project or property

Source: City of Hamilton – ERASE Community Improvement Plan

It is often difficult to convince developers to choose a brownfield site over a greenfield without financial incentives, as the cost of site assessment, remediation, and other associated processes can be a

39 At the time of the program's inception it covered a specific geographic area of the city which only included historic industrial areas and in 2005 it was expanded to include the city's entire urbanized area.

40 A cost comparison of brownfield vs. greenfield development in the City of Hamilton estimated that Brownfield development would be between 14 and 33 percent more expensive than greenfield development, depending on the level of contamination (Hamilton, 2010).

41 Environmental Site Assessments are required by the Province of Ontario for large-scale projects which have the potential to significantly affect the environment (Ontario, 2010)

serious deterrent (Hamilton, 2010). The ERASE program is administered at the municipal level, meaning that funding is provided by the city rather than the province. Municipal policy makers are assuming that the benefits of these programs outweigh the costs. The Study Grant program contributes to the cost of environmental assessments in the hopes that development will create jobs and new tax benefits for the city. The relatively small cost of the Study Grant program, \$15,000 to \$20,000 per project, is likely outweighed by the benefits associated with future jobs, new investment and tax revenues. The Redevelopment Grant program provides tax relief on the increase of municipal property tax, so the city loses new revenues, but does not lose existing revenues. The Municipal Acquisition and Partnership Program is fairly vague in its description and it is unclear what types of projects would be eligible for funding and at what amounts.

6.3.2 Invest in Hamilton

As part of the city's plan to attract new business to the city, the Hamilton Economic Development Corporation administers the website www.InvestInHamilton.ca, which includes a listing of land and buildings in the city that are available for lease or purchase. This directory includes the location and relevant characteristics of the site, as well as statistical information on the surrounding neighbourhood. Properties on this listing are divided by type: agricultural, commercial, industrial, investment, or office (Hamilton Economic Development Office, 2011). A service that allows potential investors to see what properties and land are available is a positive tool, likely to speed up the process of ushering in new businesses. Listing of available properties is a small measure that many cities are now incorporating on their economic development websites.

6.3.3 Downtown and BIA Programs

The city also offers financial incentives for the development and redevelopment of downtown properties and those located in the city's Business Improvement Areas (BIAs) (Table 7).

Table 7: Hamilton Incentives

Program	Details	Funding
Commercial Property Improvement Grant	Funding for facade and entryway improvements to owners of commercial properties located in a BIA	Matching grants \$400 per linear foot of street frontage up to \$25,000
Downtown Property Improvement Grant	Development or redevelopment of residential or commercial land and buildings in the Downtown Hamilton Community Improvement Project Area	Five-year grant for some of the cost of increases in the property taxes. Up to 100% of the increase in year 1, up to 80% in year 2, up to 60% in year three, up to 40% in year 4, and up to 20% in year 5
Hamilton Downtown Multi-Residential Property Investment Program	Financial assistance for projects that are predominantly residential in the Downtown Hamilton Community Improvement Project Area	
Commercial Corridor Housing Loan and Grant Program	Financial assistance for residential development in commercial corridors, BIAs, and downtown Hamilton	
Downtown Office Tenancy Assistance Program	Low interest loan to building owner or tenants to improve office buildings in the Downtown Hamilton Community Improvement Project Area	Funding dependent on square footage and terms of lease or owner-occupied status, maximum of \$450,000
Heritage Property Grant Program	Financial assistance for structural or stability work needed to conserve or restore a historic property	

The above listed programs (Table 7) are mostly geared at bringing in new downtown development or supporting existing businesses, different from American programs designed to draw businesses away from other communities. These programs will not directly support new development, but rather provide funding to existing building owners to improve their properties. However, as the downtown improves it will become more attractive to new businesses and may help spur development. The downtown core, especially James street, a main commercial corridor, has witnessed new development in the last five years. A number of new businesses related to the city's growing cultural community have opened on this street⁴².

6.4 Hamilton: Programs for Former Industrial Workers

Hamilton is in transition and it is unclear what future activities might fuel the economy. Some older industrial cities, such as Pittsburgh, have almost entirely abandoned industrial production and have instead focused on the *new economy*. It will take time to see how successful this approach will be. Hamilton has retained much of its industrial activity through the modernization of steel production

⁴² A field visit in the summer 2011 revealed a number of new galleries, bars, cafes, and restaurants on James St. North. This stretch of the street hosts a monthly “art crawl” where galleries open their doors to the public.

facilities, however many industrial workers in the steel and other sectors have lost their jobs. Local organizations and various levels of government have attempted to assist laid off Hamiltonians in finding rewarding and financially sustainable work. In some cases, higher-tiers of government funded lower-tier governments and non-profit organizations so that local needs could be addressed, rather than putting forth one-size-fits-all provincial or federal programs.

6.4.1 Adjustment Advisory Program

The Adjustment Advisory Program (AAP) is an Ontario-administered program designed to assist communities and individuals dealing with company downsizing or plant closures (Ontario, 2011a). The AAP provides services through three channels: employee or displaced worker adjustment, community adjustment and sectoral adjustment. The AAP assists displaced workers through *adjustment committees*, which include workers, management and unions. These committees supply job search assistance, vocational and educational counselling, information on training, financial counselling and personal support. *Community adjustment committees* are larger in scale and bring together services for laid off workers in communities where many companies have been downsizing or closing. *Sectoral adjustment committees* involve partnerships between industry associations, employee associations, unions and employers. These committees are formed to identify sector-wide needs and goals and to explore industry-wide strategic planning. Ontario residents who are affected by downsizing or layoffs where fifty or more employees have lost their jobs can participate in the Displaced Worker Adjustment (Ontario, 2011a).

6.4.2 Hamilton Jobs Action Centre

The Hamilton Jobs Action Centre (HJAC) was created in 2009 to respond to the increasing numbers of unemployed workers in Hamilton. This centre supports workers in cases where less than fifty job losses have been reported, filling the gap to support those not covered by the AAP. The HJAC was created through a partnership between the United Way of Burlington and Greater Hamilton, the Ontario Ministry of Training, Colleges, and Universities, and the Social Planning and Research Council (SPRC) (Klassen & Fraser, 2011). The HJAC assists workers by: providing skills and knowledge needed for reemployment, directing workers to new vocational or training avenues, and ensuring that workers and their families receive the support they need during their time of unemployment (Klassen & Fraser, 2011). The HJAC also provides short-term employment related workshops; as of October 2010, 270 clients had participated in these workshops, representing about 40 percent of HJAC's clients (see

Table 8).

Table 8: HJAC Workshops and Participation Rates

Course Name	Number of Clients Who Completed Course
Forklift	227
First Aid	233
WHMIS	140
Safe Food Handling	180
Smart Serve	67
Transportation of Dangerous Goods	100
Overhead Crane	86
Fall Protection	96
Confined Spaces	16
Job Workshop	40
Interviewing Skills	18
Computer	30

Source: Klassen & Fraser, 2011

In 2011, the SPRC published a report outlining the effectiveness of the HJAC in its mission to support laid off workers. Data for this report were based on client surveys and interviews, staff interviews and employer interviews. More than half of the 652 clients that visited the HJAC, and 61 percent of clients who completed training at the centre, have since found work (Klassen & Fraser, 2011). Interviews with clients revealed that there were an abundance of jobs on offer, but clients were rarely called back for interviews. Clients cited: limited qualifications, experience and age as possible reasons for not getting called back (Klassen & Fraser, 2011). Interviews with staff suggested the four main challenges that clients faced were a lack of computer skills, age, education and transportation (Klassen & Fraser, 2011). This organization is serving a small portion of the population and attempting to fill the gap left by the regulations associated with the AAP program.

6.4.3 Ontario Government Second Career

Although much provincial assistance came in the form of funding for local organizations, one current program, *Second Career Ontario*, gives direct financial assistance to those out of work, providing up to \$28,000 in funding for tuition and other expenses (Ontario, 2011b). The program also provides career counselling. Criteria for the program is that the layoff occurred after January 1, 2005 and that the candidate is unemployed or underemployed. Ontario's Second Career program was launched in 2008 with a three-year goal of assisting 20,000 laid-off workers. It exceeded that goal in

half that time (Ontario, 2011b). According to the Province of Ontario, 61 percent of those who participated in the *Second Career* program found work within three months⁴³ (Ontario, 2011b).

The Ontario Skills Development Program is another option for laid off workers. This program is geared at those who are currently receiving Employment Insurance, whose primary barrier to employment is a lack of marketable skills, and where training is determined to be the best way for these individuals to secure employment (Ontario, 2007). Ontario Skills Development is different than Second Career, as this program is not intended to support a career change, but rather to support individuals in obtaining enough skills to secure sustainable employment (Ontario, 2007).

6.4.4 Hamilton Training and Advisory Board

The Hamilton Training and Advisory Board (HTAB) is a local community planning organization, working to find solutions to labour market issues. HTAB's board of directors is comprised of members from a wide range of groups including: business, labour, education and training, and social equity groups (HTAB, 2010). Every year, HTAB collaborates on a number of projects and partnerships, and produces a report on the trends, opportunities, and priorities in Hamilton's labour market. The four projects outlined for the 2011/2012 year were: goods movement labour market research, skills assessment and consultation with the manufacturing sector, youth attraction and retention strategy, and immigrant attraction and retention resources (HTAB, 2010). HTAB also produces information packets such as *Move On Up*, a 2006 booklet showcasing careers in Hamilton's goods movement cluster. This booklet introduced a number of jobs requiring various levels of education and training in the marine, air, road and rail transportation industries. *Move On Up* also outlined the future career prospects, necessary training, typical employers and job requirements for the featured career paths (HTAB, 2006). Material such as the *Move On Up* booklet can be used by individuals and smaller organizations to disseminate information on potential career paths in growing industries.

6.4.5 Workers-focused Support

In sum, Ontario, Hamilton and a number of local non-profit organizations, at a scale unlike that encountered in the U.S. cities studied, are attempting to provide support to former industrial workers. In many cases, information for former industrial workers regarding available services and programs is not obvious to those most effected, especially in contexts where smaller numbers of people are laid off, or small firms close. The Ontario Second Careers program is likely more attractive to younger workers,

43 Note: This is a province-wide statistic and it does not indicate what type of job (minimum wage, part-time, contract, etc.)

who might find it easier, than older workers, to return to school.

Hamilton's approach to supporting former industrial workers is more socially-oriented, rather than market-based. Many American programs attempt to attract industrial firms that will provide jobs, while the Hamilton approach is more focused on the individual worker. Hamilton's approach is not necessarily better or worse, but is certainly more congruent with traditional Canadian governing style. In general Canadian programming is more socially-oriented and involves more government intervention, while American approaches are more market-based and entrepreneurial.

7 Lessons and Discussion

Akron ranks higher than similarly sized metros in terms of educational attainment, but below on all other indicators. Allentown ranks higher than similar sized American industrial metros on all selected indicators, with the exception of educational attainment. Policies at the municipal and regional levels have likely contributed to Allentown's relative success. Hamilton, as a Canadian city has the advantages of a strong social safety net and, at times, an interventionist government. However, as employment in Hamilton was heavily concentrated in the manufacturing sector, the city has been hit hard by the restructuring of modern industrial production. The following section categorizes policies in the three cities and quantifies, where possible, their potential for success.

7.1 Policy Comparisons

Table 9: Key policy instruments for regional job retention and creation

	Akron	Allentown	Hamilton
Policy Instrument	Joint Economic Development Districts	Lehigh Valley Economic Development Corporation	Invest in Hamilton
Financial Component	Agreement to trade service provision for municipal taxes	No financial agreement	No financial agreement
Long-term/ Short-term	Long-term	Long-term	Short-term
Cooperative / Competitive	Cooperative	Internally Cooperative (within the region), outwardly competitive (with other regions/states)	Competitive (with other regions)
Partners	City, neighbouring municipality, state	City, region, neighbouring municipalities	City
Strengths	City receives tax revenues from JEDD land, jobs remain in the region	Regional cooperation discourages competition between local municipalities	Provides information to potential investors about available property, more information than similar sites: property tax rates, demographic information, specific property availability
Weaknesses	City must extend water and wastewater infrastructure, does not guarantee firms will locate here	Partnership not binding, does not prevent competition from regions outside of the Lehigh Valley	Offers no financial incentives

As outlined in Table 9, the three approaches to regional job retention and creation very

considerably. Through JEDDs and business park creation, Akron has taken the most expensive and direct route to job creation and retention (see Section 5.3 for more detail). Akron lacked developable land suited for industrial use and JEDDs allows for the retention and expansion of regional industrial jobs. This policy approach is a risky, as the availability of land for business development does not ensure firms will locate there. Many of the JEDDs and other city-sponsored industrial parks currently have high vacancy rates. Akron's plan for job creation and retention is a long-term investment that may never result in a return on investment. However, if the land acquisition plan is successful in the long-term, Akron will have protected a substantial amount of land from residential or less employment-intensive uses.

Allentown is unique in its regional approach to development (further explained in Section 5.8). This regional cooperation has likely played a role in the metro's relative success, as seen in Section 4. The Lehigh Valley Economic Development Corporation, as a larger multi-municipal entity, can combine its resources and offer larger grants and loans to businesses located within the region. Regional economic planning deters competition from within the region and helps to ensure a collective vision for all municipalities involved. The Lehigh Valley has diversified through this approach and will likely continue to plan in a regionally-cooperative manner. Certain municipalities within the Lehigh Valley will disproportionately benefit from the location of firms and population, as taxes are collected and distributed by municipalities and not the region. The costs of service delivery will also vary within the region, so some municipalities may be more fiscally challenged than others. However, employment sheds are regional, so new development and investment will positively affect all municipalities in the Lehigh Valley.

Hamilton is a much larger and more spatially diverse city than Allentown or Akron. The city does not face challenges relating to a lack of developable land and it contains a number of sites appropriate for industrial uses. Hamilton is concentrating on information dissemination, rather than land acquisition or regional planning (refer to Section 6.3 for more detail). This approach is more passive than Akron's and less of a financial risk. The information provided by the city to potential investors is useful, as it will allow firms to find the *best* location within the city. However, this approach is unlikely to entice new firms to locate in Hamilton if they were not already considering the city.

Table 10: Key policy instruments for downtown areas

	Akron	Allentown	Hamilton
Policy Instrument	Grants and loans for property improvement, business expansion, new commercial development	Enterprise zones – access to grants and loans for property improvement, business expansion,	Grants and loans for property improvement; residential development; commercial development
Funding Organization	City	State	City
Long-term/ Short-term	Short term	7 years, long-term	Short-term
Cooperative or Competitive	Competitive	Competitive	Competitive
Partners	City, state	City, state, local economic development corporation	City
Strengths	Variety of programs: property improvement, business expansion, new development	Revolving loan fund – means long term financing, a variety of funding options	Variety of programs: property improvement, business expansion, new development
Weaknesses	Funding not secure in the long term	Success of enterprise zones not proven (Section 3.1.4)	Directed at all types of development, funding not secure in the long term

All three cities have similar approaches to encouraging development in their downtown cores. Each city offers a variety of loans and grants for existing business expansion and property improvement; as well as those that support new business development. Where the three cities differ, is in the delivery of these programs. Programs in Hamilton and Akron are funded and administered by the city. Allentown receives state funding, that is later administered by a local organization. Allentown Enterprise Zone funding is allocated on an annual basis for a seven-year period, typically \$50,000 per year. This funding is then distributed by the organization to businesses located or locating within the zone. Some of the money is placed in a revolving loan fund, meaning that future financing for the loan program is relatively secure. Hamilton also differs from the other two cities in that funding is provided for downtown residential development as well as commercial development. This difference reveals a more open approach to development, but may mean that residential development takes precedence over employment-related development.

Table 11: Key policies for addressing underutilized land

	Akron	Allentown	Hamilton
Program	Brownfields Tax Credit	Annual blighted property review	ERASE
Administrative body	State of Ohio	Redevelopment Authority of the City of Allentown (RACA)	City of Hamilton
Funding Organization	State	City	City, Canadian Municipalities (FCM) Green Municipal Funds
Tools	Tax credit	Property inventory, eminent domain	Grants, loans, tax incentives
Financing amount	10% of costs up to \$100,000	No financing provided	Program dependant: \$15,000-\$20,000 for environmental assessment; up to 80% of property tax increase; up to 75% of remediation costs (max \$100,000)
Scope	State wide	41 properties listed as blighted in 2010	Program is applicable to properties located anywhere within the city's urbanized area. 91 vacant brownfield sites, 1386 potentially contaminated sites (2007 land review)
Strengths	No cost to municipality	Annual review of properties, city acquires property if owners are non-compliant, power to use eminent domain	Encourages brownfield development, assistance provided for environmental site analysis
Weaknesses	State-administered (not specific to Akron)	Does not provide incentives for brownfield development, geared only at blight and abandonment	Properties not reviewed on an annual basis, large area

Ohio's Brownfield Site Clean-up Tax Credit is a state-administered program that provides funding for the remediation of brownfield sites. This program is available throughout the state, so it will not specifically direct investment to Akron. The City of Akron provides information about this program on its economic development website, but perhaps a city-specific program could supplement this program. Akron, unlike the other two cities, has not inventoried its brownfield sites. The city is likely to have a number of brownfield sites where development could be more actively encouraged.

RACA's annual blighted property review process not only identifies problematic properties, it also has the power to acquire non-compliant properties. RACA's use of eminent domain to take possession of these properties allows Allentown to directly address issues of blight. In most cases,

owners comply with building codes and improve their properties within a year of notification.

ERASE is the most likely of the three programs to spur development of brownfield sites. The program offers a number of incentives to potential developers for all stages of development, including the crucial site-assessment stage. ERASE does include tax breaks, but these incentives differ from traditional programs, as the tax relief is only offered on a portion of the increase in property tax rather than a full tax break. The redevelopment of brownfield sites benefit cities in terms of job creation, removal of blight, increased productive use and an increase in property tax revenues. An evaluation of ERASE by the Canadian Mortgage and Housing Corporation (CMHC) found that in its first two years the program contributed to the remediation and redevelopment of 27 acres of brownfield lands, the creation of 93 new residential units, and the construction or refurbishment of over 300,000 sq. ft. of industrial or commercial space (CHMC, 2005).

Table 12: Key programs supporting entrepreneurs

	Akron	Allentown	Hamilton
Program / Organization	Akron Global Business Accelerator	Ben Franklin Technology Partners	Hamilton Training and Advisory Board
Funding partners	City, state	Federal, state, angel investors	Province
Firm-based / Worker-based	Firm-based	Firm-based	Both
Industry specific / General	Industry specific – mainly technology-based, but also other non-food, non-retail companies	Industry specific – technology-based	General – labour market information on trends and opportunities
Success rate	48 current tenants listed	4,500 jobs created, 48 new businesses	
Strengths	Supports entrepreneurs, creates new home-grown businesses	Supports entrepreneurs, creates new home-grown businesses	Based on current trends
Weaknesses	Not likely to help workers who lack skills, education or a certain level of financial security	Not likely to help workers who lack skills, education or a certain level of financial security	Unclear if information is used by workers

The American cities both have large-scale, relatively successful technology-based business incubators. The Ben Franklin Technology Partners program, in Allentown, is part of a larger network of Pennsylvania-based incubators. This organization has access to a larger funding base than its Akron counterpart; with support from federal agencies and angel investors. The Akron accelerator is funded only through the State of Ohio and the City of Akron, so has smaller fiscal capacity. Hamilton has a

city-based technology incubator, but it is no where near as successful as those in Allentown or Akron. It was not explored in detail in this report, so the HTAB is compared in this section instead.

Hamilton is providing information on general labour market trends through the HTAB. The HTAB is not focused on supporting entrepreneurship, but rather on employment in general. Many of its publications are geared at less educated workers, laid off workers, or young workers. Information is provided by the HTAB on growing employment industries in Hamilton; and what skills, training or education is needed to access these types of jobs.

Table 13: Key programs to support former industrial workers

	Akron	Allentown	Hamilton
Program / Organization	Dislocated Worker Program	PA Career Link Lehigh Valley	Hamilton Jobs Action Centre
Funding partners	State	State	Province, United Way, Social Planning and Research Council of Hamilton
Firm-based / Worker-based	Worker-based	Worker-based / firm-based (offers some job fairs, company-specific recruitment, training)	Worker-based
Industry specific / General	Laid off workers	General – open to anyone living in the region	Specific – geared at workers laid off in small batches
Success Rate/Scope	8,145 clients in 2006, 3,145 received intensive staff assistance	Unknown	50% of clients and 61% of clients who took training courses have found work
Strengths		Open to everyone, also serves firms: worker training, job fairs, recruitment	Mobile, based on demand, flexible, success measured (feedback on program from clients and staff taken into consideration)
Weaknesses	Visibility, state-administered	Does not specifically target industrial workers	Difficult to find workers in these cases

Allentown and Akron have generalized, state-funded, organizations working to assist potential workers (The Job Centre, in Akron, and PA Career Link, in Allentown). These organizations are set up for unemployed, or underemployed, individuals from the region and are not geared specifically at industrial workers. Ontario and Ohio have provincially funded programs specifically aimed at laid off workers. Ontario's AAP program is tied to provincial regulations (Section 6.4). Firms must notify the province when 50 or more people will lose their jobs and in these cases AAP programs are delivered. The HJAC follows a similar model, but attempts to assist workers in cases where less than 50 people

are laid off. Both the AAP and the HJAC are industry specific and involve partnerships between unions and other industry stakeholders to offer support to laid off workers. The Ontario programs are more likely to reach laid off workers as they seek workers out in a more proactive manner. Comparable programs in Ohio are not mandated by the state and affected workers are not actively contacted.

7.2 What Can Hamilton learn from Akron?

Akron has strong partnerships with its two major public universities, Kent State University and The University of Akron. Hamilton is home to McMaster University, a large research-oriented university, as well as Mohawk College. The university and the college could perhaps increase their presence in downtown Hamilton. Neither Mohawk nor McMaster have main campuses in the downtown core. Mohawk is located on the Hamilton Mountain, to the south of downtown and McMaster is located to the west of downtown in one of the province's first planned suburbs, Westdale⁴⁴. An increased downtown presence by both or either of these institutions would certainly improve the safety and commercial viability of the downtown core. In April 2011, McMaster University was negotiating with the city over the purchase of a downtown building to open a \$60 million family medicine training centre and clinic⁴⁵ (Hemsworth & O'Reilly, 2011).

The University of Akron has played an important role in investing in the city's downtown. In 2000, the university introduced the "New Landscape for Learning", a campus expansion that has constructed eleven new buildings and thirty acres of green space (Ledebur & Taylor, 2008). The university has drastically increased its presence in downtown Akron, where it was once separated by rail tracks and is now integrated into the central city. While some have questioned whether this rapid expansion has helped or hindered Akron, it is clear that local businesses will benefit from the added foot traffic; and that renovations to older buildings may not have happened as quickly if left to the private sector.

Akron has been proactive in controlling the type of development that is taking place in the city and the surrounding region through the creation of industrial parks and the use of JEDDs. The city has purchased available land to ensure that it is designated as employment space. Akron has attempted to ensure that jobs remain in the region and that there is space for future industrial growth. With the

44 McMaster currently employs a small number people at its sole downtown location, which includes a number of administrative departments.

45 Some members of the community are opposed to this sale as McMaster would likely demolish the existing Board of Education building, a 1960's structure which is part of the city's more recent architecture

increasing pressure of expensive real estate in neighbouring Toronto and plans for improved transit linkages with neighbouring regions, Hamilton could take steps to ensure that it does not become a bedroom community for Toronto. The protection of job space, through the creation of industrial parks or other designated non-residential zones, is one measure that the city could explore. Though in Hamilton land availability is not a problem, so the approach to protecting land for employment would be very different than it was in Akron. Hamilton is a larger, more spatially diverse, region than Akron and it does not have a lack of developable space. Land acquisition or the trading of municipal services for tax revenues are not options that Hamilton has to, or will ever have to, consider. The optimization of municipal land to best suit the current and future needs of Hamilton's population and economy, mean that policies like the ERASE program or those that support downtown revitalization are pertinent.

7.3 What Can Hamilton Learn from Allentown?

Allentown is similar to many American cities in that the downtown core is much more impoverished than the surrounding region. Much of Allentown's economic stability, despite its impoverished downtown, can be attributed to the success of home-grown businesses and community engagement with the business community. Many successful companies in Allentown were early high-tech sector companies, or those that adapted early to the changing economy, such as Pennsylvania Power and Light or Air Products and Chemical. The Ben Franklin Partners Incubator has done much to assist and support entrepreneurship in the region. Economic leaders in Allentown remain engaged, supporting new entrepreneurs and committing to remaining local (Safford, 2009). The commitment by local business leaders to the Lehigh Valley can perhaps be attributed to the support they received from local organizations in their early stages. In order to increase the participation of economic leaders in Hamilton, the city could be more proactive in offering positions on various advisory boards and organizations to local business leaders. Involvement in these local organizations would create stronger connections between business leaders and strengthen their ties to the community.

Hamilton's downtown core and surrounding areas are more impoverished than the region as a whole. Hamilton, as an amalgamated area, has the political ability to slow or reverse the process of the hollowing out of its central city. Although, the city has the advantage of being able to spread funding for social services to the entire region, this does not mean it will always occur. The community elects members of council from throughout the region and the diversity of their constituencies means that funding does not necessarily go where it is needed most. Suburban concerns are often pitted against

urban ones. It is often difficult to convince suburban constituents and counsellors of the economic and social importance of a strong downtown core.

Hamilton would benefit from a program similar to the one run by RACA, in Allentown, to deal with property abandonment. Hamilton currently does not have a comprehensive means of tracking abandoned buildings and holding owners accountable for their maintenance. Hamilton's blight problem, much like Allentown's, is not unmanageable. Abandoned and neglected properties exist, but on a scale which can be more effectively managed if reexamined on an annual basis.

7.4 What Can U.S. Cities learn from Hamilton?

In terms of programs and policies to support new development, Hamilton's ERASE program is an example of a comprehensive approach to brownfield development. The program, outlined in Section 6.3.1, could be adapted to work in most U.S. cities. This plan was a response to the relatively slow pace at which brownfield development was occurring in the city. Assistance provided through this program is available as early as the site-assessment phase and continues until after completion of the project. Assistance with the environmental assessment portion of brownfield projects ensures that potential investors will not be deterred from sites where the levels of contamination are unknown. Supporting brownfield, rather than greenfield development, means that new development will often be located in areas of the city close to downtown or close to other industrial activity. Large former industrial sites can offer the spatial requirements necessary for new industrial activity. Programs that encourage brownfield redevelopment are especially prudent for cities where spatial availability is limited, such as Akron.

Allentown and Akron should take note of the programs and policies in place in Hamilton to support former industrial workers. Hamilton is attempting to support these individuals and communities through specific worker-focused programs. In cases where many workers are laid off or a large firm closes, the province ensures that committees are set up to address some of the effects that large-scale layoffs have on individuals, communities and industries. These AAP committees, outlined in section 6.4.1, work with individuals to retrain or secure new employment; work to address larger community issues; and work with industries to improve efficiencies and create new partnerships. As stated earlier, the provincially coordinated program is more likely to reach workers than general job assistance programs or centres. Allentown and Akron could benefit from worker-focused programming.

8 Conclusions

As illustrated in Section 3, the Canadian and American experiences of deindustrialization are very different. Canadian political tradition and structure means that governments are, in general, more interventionist and top-down in their approach. Cities in Canada are “creatures of the provinces” and, as a result, lack both fiscal tools and decision making power used in by their American counterparts. This lack of autonomy has protected Canadian cities from the negative affects of inter-city competition, seen frequently in the United States.

Plant closures and shutdowns occurred at a much larger scale in the American rust belt, than in Canada. The response by government and workers to industrial restructuring was also divergent in the two countries. Canadian collective worker action led to federal and provincial government reaction, including legislative measures and a reconfiguration of unemployment insurance programs. Laid off industrial workers in both countries found it difficult to re-enter the workforce, especially with jobs at a comparable earning levels to previous production-related employment. In addition to the challenges associated with concentrated job losses, industrial regions in both countries struggle with the physical legacy of industrial production. Industry's departure left many cities with contaminated sites and large-scale industrial infrastructure that is often difficult to convert to new uses. Some industrial cities have enacted policies to speed up the development of these sites and to replace jobs that were once located there.

In section 4, seven industrial metros were compared with respect to the following indicators: unemployment rates, persons living below the poverty line, percentage of population with at least a high school degree, percentage of population with at least a bachelor's degree, median household income, and percentage of vacant houses. Many of these regions fell below the national average, some, such as Flint, fell well below the national average. Deindustrialization has left many cities struggling to reinvent themselves after decades of relying on industry for economic stability and cultural identity. Cities such as Allentown, were quick to diversify their economies and attract new industries; manufacturing-based or otherwise. While other cities, such as Flint or Gary, are still searching for new economic engines and positive collective identities.

Hamilton's relatively high ranking on many selected indicators is partially due to its location in Canada. The policy tools that can be used by municipalities in the two countries are different in scope.

The American market-based approach has encouraged competition between and within states, while the Canadian approach has been more socially-oriented. Canadian provinces have been much more interventionist, and in most Canadian jurisdictions it is illegal to offer certain development incentives.

Mid-sized industrial cities can learn much from each other, and in many cases successful policies and programs can be adapted to local contexts. Akron's creation of future employment zones through land acquisition is an approach of potential interest to Hamilton (Section 5.3). City-owned property can be more easily controlled than land left to market forces. However, Hamilton does not have Akron's limited land availability, so the city should instead concentrate on land optimization. The potential costly gamble that Akron is taking in acquiring land is not necessary in Hamilton. The city should instead attempt to encourage development of brownfields and downtown properties. The ERASE program is a positive example of existing policy that can help the city reach goals of land optimization and job creation.

Akron has benefited from strong ties with its universities. An increased downtown presence of McMaster University in Hamilton would benefit the city. University student and staff presence downtown would increase both the safety and commercial viability of the downtown core. However, putting too much emphasis on the ability of the university to improve development opportunities is a mistake. The increased downtown presence of the university is only one means of improving the downtown, yet care must be taken to ensure that the university does push out other viable downtown uses.

Allentown is an older industrial city which, at least at the metro level, has fared much better than similarly sized industrial regions. Although steel was an important part of the historic economy, other industrial activities were also present in Allentown. Perhaps the relative diversity of economic activity meant that layoffs were more staggered and workers were able to find work in other industrial sectors. The economic diversity of the region may also have contributed to a more supportive culture for entrepreneurship. The high level of regional coordination within the Lehigh Valley is notable. The region was also faster at transitioning from old industries to new ones, as noted in Section 5.9.4.

The ERASE program is supporting development in Hamilton's former industrial areas. This program encourages brownfield development, a more positive form of development than greenfield development. Reclaiming underused or vacant land adds municipal property taxes, and can increase public safety and decrease blight. The ERASE program could be adapted for use in other industrial

cities⁴⁶. ERASE, combined with a program like Allentown's RACA, would provide a city with a range of tools for supporting brownfield development, while effectively combating issues of vacancy and blight.

Reemploying former industrial workers in meaningful, well-paying jobs in an economy with limited production jobs is one of the most challenging current tasks for older industrial cities. Many of these workers must overcome obstacles to employment such as: low education levels, age discrimination, and a lack of computer skills. Hamilton, with support from Ontario, is proving to be more effective than Allentown or Akron in providing support to former industrial workers.

North American manufacturing will never again look the way it did in the 1960s. Industrial cities are learning to adapt to the realities of the new North American economy. These municipalities should avoid traditional economic development tools, as they are harmful to long-term fiscal stability. Encouraging brownfield redevelopment through a comprehensive planning process involving vacant land inventories and realistic financial incentives is a good long term policy measure. Programs that support laid off industrial workers are a temporary measure needed to ease the transition to the new economy. Unemployment is harmful to individuals and communities, not to mention expensive for governments. Investing in these potential workers, through retraining and skills development programs, is an economically sound decision. It will take time, but it seem as though Akron, Allentown and Hamilton have the combined policies and programs to rebound from the complex process of deindustrialization.

46 Canadian cities such as Guelph, Brantford and Edmonton have used ERASE as a template, or general example for similar programs (CMHC, 2005).

9 References

- Akron Mayor's Office of Economic Development. (n.d.). Development Opportunities. Retrieved from <http://www.ci.akron.oh.us/ed/development/Default.htm>
- Allentown (2009). Allentown 2020 – City of Allentown Comprehensive Plan. Retrieved from <http://www.allentownpa.gov/Government/DepartmentsBureaus/PlanningandZoning/CommunityPlanning/tabid/125/Default.aspx>
- Allentown (n.d.). Blighted Property Review Process. Retrieved from <http://www.allentownpa.gov/Government/AuthoritiesBoardsCommissions/RedevelopmentAuthority/BlightedPropertyProcess/tabid/330/Default.aspx>
- Allentown Economic Development Corporation (n.d.). Allentown's Enterprise Zones. Retrieved from <http://www.allentownedc.com/enterprisezone.html>
- Bartik, T.J. (1991). *Who Benefits from State and Local Economic Development Policies?* Kalamazoo, MI: W. E. Upjohn Institute for Employment Research Press.
- Ben Franklin Partners (2011). Ben Franklin TechVentures Names to Inc. Website's Top-10 List. Retrieved from <http://nep.benfranklin.org/bftp-news/ben-franklin-techventures-named-to-inc-websites-top-10-list>
- Black, D.A., McKinnish, T.G. & Sanders, S.G. (2003). Does the availability of high-wage jobs for low-skilled men affect welfare expenditures? Evidence from shocks to the steel and coal industries. *Journal of Public Economics*, 87 (9-10), 1921-1942.
- Boarnet, M.G. & Bogart, W.T. (1996). Enterprise Zones and Employment: Evidence from New Jersey. *Journal of Urban Economics*, 40, 198-215.
- Bradbury, K.L. (2002). Education and Wages in the 1980s and 1990s: Are all groups moving up together? *New England Economic Review, Federal Reserve Bank of Boston*
- Buss, T.F. (2001). The Effect of State Tax Incentives on Economic Growth and Firm Location Decisions: An Overview of the Literature. *Economic Development Quarterly*, 15(1), 90-105.
- Canadian Mortgage and Housing Corporation (CMHC), (2005). Brownfield Redevelopment for Housing in Canada: Case Studies: Environmental Remediation and Site Enhancement (ERASE) Community Improvement Plan (CIP) Initiative, Hamilton, Ontario.
- CantonRep.com (2011, April 18). Goodyear breaks ground on new headquarters in Akron. Retrieved from <http://www.cantonrep.com/news/x1225330314/Goodyear-breaks-ground-on-new-headquarters-in-Akron>
- Carrington, W.J., & Zaman, A. (1994). Interindustry Variation in the Costs of Job Displacement. *Journal of Labor Economics*, 12(2), 243–275.
- Chiricos, T.G. (1987). Rates of Crime and Unemployment: An Analysis of Aggregate Research Evidence. *Social Problems*, 34(2), 187-212.
- Cho, D.W., & McDougall, G. S. (1978). Regional cyclical patterns and structure, 1954-1975. *Economic Geography*, 54, 66-74.

- Cobb S, & Kasl, S. (1977). Termination: the Consequences of Job Loss. *Cincinnati: National Institute for Safety and Health*, 77-224.
- Crandall, R. W. (2002). The Migration of U.S. Manufacturing and Its Impact on the Buffalo Metropolitan Area. Brookings Institution. Retrieved from http://www.brookings.edu/~media/Files/rc/papers/2002/0606business_crandall/20020622.pdf
- Cruikshank, K. & Bouchier, N.B. (2004). Blighted Areas and Obnoxious Industries: Constructing environmental inequality on an industrial waterfront, Hamilton, Ontario 1890-1960. *Environmental History*, 9(3), 464-496.
- Dabney, D. (1991). Do enterprise Zone Incentives Affect Business Location decisions? *Economic Development Quarterly*, 5, 464-496.
- Dorson, R.M. (1981). *Land of the Millrats*. Cambridge: Harvard University Press.
- Garber, J.A. & Imbroscio, D. L. (1995). The Myth of the North American City Reconsidered: Local Constitutional Regimes in Canada and the United States . *Urban Affairs Review*, 31, 595-624.
- Gertler, M. S. (1995). Groping Towards Reflexivity: Responding to industrial change in Ontario. In P. Cooke (Ed.), *The Rise of the Rustbelt* (103-124). New York: St. Martin's Press.
- Glaeser, E.L. (2005). Smart Growth: Education, Skilled Workers, & the Future of Cold-Weather Cities. *Policy Briefs, PB-2005-1*, April 27, 2005. Rappaport Institute for Greater Boston, Taubman Center for State and Local Government.
- Glaeser, E.L. & Gyourko, J. (2005). Urban Decline and Durable Housing. *Journal of Political Economy*, 113(2), 345-375.
- Greater Akron Chamber of Commerce. (2010). 25 Largest Employers for Medina, Portage & Summit Counties. Retrieved from http://www.greaterakronchamber.org/cms/resource_library/files/b2a47731960fa03a/index.html
- Greer, E. (1979). *Big Steel: Black Politics and Corporate Power in Gary, Indiana*. New York: Monthly Press Review.
- Hajnal, Z.L. (1995). The Nature of Concentrated Urban Poverty in Canada and the United States. *The Canadian Journal of Sociology*, 20(4), 497-528.
- Hamilton (2006). Hamilton Advanced Manufacturing Industry Profile. Retrieved from <http://www.investinhamilton.ca/why-hamilton/advanced-manufacturing.html>
- Hamilton (2010). Hamilton ERASE Community Improvement Plan.
- Hamilton (2011). King William Streetscape Master Plan. Retrieved from <http://www.hamilton.ca/CityDepartments/PlanningEcDev/Divisions/Planning/CommunityPlanning/UrbanDesign/PastProjects/KingWilliamStreetscape.htm>
- Hamilton (2011). Hamilton Farmers' Market. Retrieved from http://www.hamilton.ca/CultureandRecreation/Arts_Culture_And_Museums/HamiltonFarmersMarket/
- Hamilton Economic Development Office (2007). Quick Facts. Retrieved from <http://www.investinhamilton.ca/why-hamilton/quick-facts-2/>

- Hamilton Economic Development Office (2011). Property Search. Retrieved from <http://www.investinhamilton.ca/property-search/>
- Hamilton Training and Advisory Board (HTAB), (2006). Move On Up: Career Profiles from the Goods Movement Cluster in Hamilton.
- Hamilton Training and Advisory Board (HTAB), (2010). About Us. Retrieved from <http://htab.ca/about>
- Harris, R.G. (2006). The Economic Impact of the Canada-U.S. FTA and NAFTA Agreements for Canada: A Review of the Evidence. in J.M. Curtis & A. Sydor (Eds). *Nafta@10*
- Hayter, R. (2000). "Single Industry Resource Towns". In E. Sheppard & T. J. Barnes (Eds). *A Companion to Economic Geography* (290-308). Oxford: Blackwell Publishers.
- Hemsworth, W. & O'Reilly, N. (2011, April 2). New Momentum for McMaster Centre Downtown". *The Hamilton Spectator*. Retrieved from <http://www.thespec.com/news/local/article/510865--new-momentum-for-mcmaster-centre-downtown>
- High, S. (2003). *Industrial Sunset: The Making of North America's Rust Belt, 1969-1984*. Toronto: University of Toronto Press.
- Hill, J.M. (1978). *The Social and Psychological Impact of Unemployment: a Pilot Study*. London: Tavistock Institute of Human Relations.
- Hill, E. (2009). Does a Mayor Make a Difference in a City's Economic Performance? The case of Akron, Ohio. [Unpublished Paper]. *Building Resilient Regions Network*
- Hirsch, A.R. (1983). *Making the Second Ghetto: Race and housing in Chicago, 1940-1960*. New York: Cambridge University Press
- Honeck, J. (2008). Meeting the Challenge: Improving dislocated worker services in Ohio *Policy Matters Ohio*.
- Hsieh, C.C. & Pugh, M. D. (1993). Poverty, Income Inequality, and Violent Crime: A Meta-Analysis of Recent Aggregate Data Studies. *Criminal Justice Review*, 18, 182-202.
- International Joint Commission (IJC) (2011). Who We Are. Retrieved from http://www.ijc.org/en/background/ijc_cmi_nature.htm.
- Jacobs, A.J. (2009). The Impacts of Variations in Development Context on Employment Growth: A Comparison of Central Cities in Michigan and Ontario, 1980-2006. *Economic Development Quarterly*, 23(4), 351-371.
- Jacobson, L.S., LaLonde, R.J., & Sullivan, D.G. (1993). Earnings Losses of Displaced Workers. *American Economic Review*, 83(4), 685-709.
- Kasarda, J.D. (1993). Inner-City Concentrated Poverty and Neighborhood Distress: 1970 to 1990. *Housing Policy Debate*, 4(3), 253-301.
- Kent State University (2011). Office of Technology Transfer and Economic Development. Retrieved from www.kent.edu/research/otted.index.cfm
- Klassen, C. & Fraser, M. (2011). Supporting Laid Off Workers in Hamilton: The Value of Employment Training at the Hamilton Jobs Action Centre. *The Social Planning and Research Council of Hamilton*, Retrieved from <http://www.sprc.hamilton.on.ca/Reports.php>

- Kort, J. R. (1981). Regional economic instability and industrial diversification in the U.S. *Land Economics*, 57, 596-608.
- Kromer, J. (2010). *Fixing Broken Cities: The implementation of urban development strategies*. New York: Routledge.
- Ledebur L. & Taylor, J. (2008). A Restoring Prosperity Case Study: Akron Ohio. *Brookings Institution*. Retrieved from http://www.brookings.edu/papers/2008/0917_akron_taylor_ledebur.aspx
- Livingstone D.W. (1993). Working at Stelco: “Retaylor” Production Relations in the Eighties. in J. Corman, M. Luxton, D.W. Livingstone, & W. Seccombe (Eds). *Recasting Steel Labour, The Stelco Story* (13-54). Halifax: Fernwood Publishing.
- Livingstone D.W. & Raykov, M. (2009). Education and Jobs Survey Profile 1: National Trends in Employment Conditions, Job Requirements, Workers' Learning and Matching, 1983-2004. In D.W. Livingstone (Ed.). *Education and Jobs Exploring the Gaps* (67-102). Toronto: University of Toronto Press.
- Ludwig, J., Duncan, G.J. & Hirschfield, P. (2001). Urban Poverty and Juvenile Crime: Evidence from a randomized housing-mobility experiment. *The Quarterly Journal of Economics*, 116 (2), 655-679.
- Luxton, M. & Corman, J. (2001). *Getting by in Hard Times – Gendered Labour at Home and on the Job*. Toronto: University of Toronto Press.
- MacKinnon, J. (2009, April 7). Goodyear says it will stay in Akron for the long run. *Beacon Journal* Retrieved from <http://www.ohio.com/news/goodyear-says-it-will-stay-in-akron-for-long-run-1.122883>.
- Malizia, E.E. and S. Ke. (1993). The Influence of Economic Diversity on Unemployment and Stability. *Journal of Regional Science*, 33(2), 221-235.
- Mallach, A. (2010). Facing the Urban Challenge: Re imagining Land Use in America's Distressed Older Cities, The Federal Policy Role. Brookings Institution. Retrieved from http://www.brookings.edu/papers/2010/0518_shrinking_cities_mallach.aspx
- Marston, S. (1985). Two Views of the Geographic Distribution of Unemployment”. *Quarterly Journal of Economics*, 100, 57-79.
- Massey, D.S. & Kanaiaupuni, S.M. (1993). Public Housing and the Concentration of Poverty. *Social Science Quarterly*, 74 (1), 109-122.
- Massey, D.S. & Rothwell, J. (2009). The Changing Bases of Segregation in the United States. *The ANNALS of the American Academy of Political and Social Science*, 629 (1), 74-90.
- Mature Services (n.d.). About Mature Services, Inc. Retrieved from <http://www.matureservices.org/about.php>
- Mayo, S. & Fraser, M. (2009). Incomes and Poverty in Hamilton. *Social Planning and Research Council of Hamilton (SPRC)*. Retrieved from <http://www.sprc.hamilton.on.ca/Reports/pdf/Incomes-and-Poverty-Report-final-May-2009.pdf>

- Mayo, S., Patterson, A & Jaffray, D. (2009). Community Profiles: Hamilton. *Social Planning and Research Council of Hamilton (SPRC)*. Retrieved from <http://www.sprc.hamilton.on.ca/Reports/pdf/Hamilton-Update-FINAL.pdf>
- Mayor's Office of Economic Development, Akron. (n.d.) Development Opportunities – Industrial/Office Parks. Retrieved from <http://www.ci.akron.oh.us/ed/development/Default.htm>
- McInnis, R. (2000). The Toronto Amalgamation: Looking Back, Moving Ahead. Speech by Roda McInnis Contractor, Director, Amalgamation Office, City of Toronto. Delivered at Greater Toronto Area (GTA) Forum, September 14, 2000.
- McLaughlin, G.E. (1930). Industrial Diversification in American Cities. *The Quarterly Journal of Economics*, 45(1), 131-149.
- McMaster University (2011). Fast Facts About McMaster. Retrieved from http://www.mcmaster.ca/opr/html/opr/fast_facts/main/about.html
- Moore, J. (1998). The Determinants and Effects of Right-To-Work Laws: A Review of the Recent Literature. *Journal of Labor Research*, 19(3), 445-469.
- Morissette, R., Zhang, X. & Frenette, M (2007). Earnings Losses of Displaced Workers: Canadian Evidence from a Large Administrative Database on Firm Closures and Mass Layoffs. *Analytical Studies Branch Research Paper Series*. Statistics Canada
- O'Hara, S.P. (2003). Envisioning the Steel City – The Legend and Legacy of Gary, Indiana. in J. Cowie & J. Heathcott (Eds). *Beyond the Ruins, The Meanings of Deindustrialization* (219-236). Ithica: Cornell University Press.
- Ontario (2007). Ontario Skills Development Program Update Service Delivery Network.
- Ontario (2010a). Environmental Assessment Processes. Retrieved from http://www.ene.gov.on.ca/environment/en/industry/assessment_and_approvals_environmental_assessments/STDPROD_075715.html
- Ontario (2010b). Ontario Municipal Board Information. Retrieved from http://www.omb.gov.on.ca/english/OMBInformation/OMB_Mandate.html.
- Ontario (2011a). Adjustment Advisory Program. Retrieved from <http://www.tcu.gov.on.ca/eng/employees/aap.html>
- Ontario (2011b). Questions about the status of Second Career. Retrieved from <http://www.tcu.gov.on.ca/eng/secondcareer/qna.html#display>
- Ontario Power Authority. (2010). What is the Feed-in Tariff Program? Retrieved from <http://fit.powerauthority.on.ca/what-feed-tariff-program>
- PA CareerLink Lehigh Valley (2011). Core Services. Retrieved from <http://www.careerlinklehighvalley.org/AboutUs/Services.aspx>
- Pennsylvania Department of Community Economic Development (Pennsylvania DECD) (n.d.). Enterprise Zone Program. Retrieved from <http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/enterprise-zone-program>
- Peters, A. & Fisher, P. (2004). The Failures of Economic Development Incentives. *Journal of the American Planning Association*, 70(1), 27-37.

- Peters, A., & Fisher, P. (2002). State Enterprise Zone Programs: Have they worked? Kalamazoo, MI: W.E. Upjohn Institute for Employment Research Press.
- Ruhm, C.J. (1991). Are Workers Permanently Scarred by Job Displacements. *The American Economic Review*, 81(1), 319-324.
- Safford, S. (2004). Why the Garden Club Couldn't Save Youngstown: Civic Infrastructure and Mobilization in Economic Crisis. *IPC Working Paper Series, MIT Working Paper*.
- Safford, S. (2009). *Why the Garden Club Couldn't Save Youngstown: The Transformation of the Rustbelt*. Cambridge, Massachusetts: Harvard University Press.
- Sewell, J. (2009). *The Shape of the Suburbs – Understanding Toronto's Sprawl*. Toronto: University of Toronto Press.
- Schill, M.H. & Wachter, S.M. (1995). The Spatial Bias of Federal Housing Law and Policy: Concentrated Poverty in Urban America. *University of Pennsylvania Law Review*, 143 (5), 1285-1342
- Schore, L. & Atkin, J (1992). The Role of Social Support in Dislocated Worker Programs in the United States. *European Journal of Public Health*, 2, 87-95.
- Sherwood-Call, C. (1990). Assessing regional economic stability: A portfolio approach. *Economic Review* (Federal Reserve Bank of San Francisco), 17-26.
- South, S.J. & Deane, G.D. (1993). Race and Residential Mobility: Individual Determinants and Structural Constraints. *Social Forces*, 72 (1), 149-167.
- Stevens, A.H. (1997). Persistent Effects of Job Displacement: The Importance of Multiple Job Losses. *Journal of Labor Economics*, 15(1), 165-188.
- Sull, D.N. (1999). The Dynamics of Standing Still: Firestone Tire & Rubber and the Radial Revolution. *The Business History Review*, 73(3), 430-464.
- Sull, D.N. (2002). From Community of Innovation to Community of Inertia: The rise and fall of the U.S. Tire Industry. [Unpublished Paper]. Presented at the XIII Congress of the International Economic History Association, Buenos Aires, Argentina, July, 2002. Available from: <http://eh.net/XIIICongress/Papers/Sull.pdf>
- Tiffany D. (1970). *The Unemployed: a Social-Psychological Portrait*. Englewood Cliffs, NJ: Prentice Hall.
- The Job Centre (n.d.). About Us, Who We Are & What We Do. Retrieved August 3, 2011 from <http://www.thejobcenter.biz/about-us>
- United States Department of Labor (2008). National Compensation Survey: Occupational Earnings in the United States, 2007 . Retrieved from http://www.bls.gov/ncs/ncswage2007.htm#Wage_Tables
- U.S. Small Business Administration (n.d.). The SBIR Program. Retrieved from <http://www.sbir.gov/about/about-sbir>
- U.S. Steel Canada (2007). Lake Erie Works: Profile. Retrieved from <http://www.lakeeriesteel.com/lakeeriesteel/corporate.asp>

- Vey, J.S. (2007). Restoring Prosperity: The State Role in Revitalizing America's Older Industrial Cities. *Brookings Institution Metropolitan Policy Program*. Retrieved August 6, 2011 from http://www.brookings.edu/reports/2007/05metropolitanpolicy_vey.aspx
- Wagner, J. E., & Deller, S.C. (1998). Measuring the effects of economic diversity on growth and stability. *Land Economics*, 74, 541-56.
- Welch, T. (2006, May 4). A Tale of Two Tires: A case for radial tires on your classic car. *Bloomberg Businessweek*. Retrieved from http://www.businessweek.com/autos/content/may2006/bw20060504_512529.htm
- Wells, J. (2011, March 9). Spring tease in Gore Park. *The Hamilton Spectator*. Retrieved from <http://www.thespec.com/news/local/article/498556--spring-tease-in-gore-park>
- Wial, H & Friedhoff, A. (2006). Bearing the Brunt: Manufacturing Job Loss in the Great Lakes Region, 1995-2005. *Brookings, Metropolitan Economy Initiative*.
- Quigley, J. (1998). Urban Diversity and Economic Growth. *Journal of Economic Perspective*, 12(2), 127-138.