INFORMATION REPORT

TO: Mayor and Members General Issues Committee	**WARD(S) AFFECTED:** CITY WIDE
COMMITTEE DATE: December 5, 2012	
SUBJECT/REPORT NO: Vision 2020 Sustainability Indicators Report 2012 (CM12019) (City Wide)	
SUBMITTED BY: Chris Murray City Manager	**PREPARED BY:** Heather Donison 905 546-2424 ext 1276
SIGNATURE:	

Council Direction:

Vision 2020 – the community vision for a sustainable Hamilton was first developed and adopted in 1992 and has been renewed by the community every five years. City Council re-adopted Vision 2020 in 2003.

Information:

This Information Report presents the Vision 2020 Sustainability Indicators Report 2012 and next steps for Vision 2020. The 2012 Vision 2020 Indicators Report is included in Appendix A.

Background

Vision 2020 was adopted by Hamilton City Council in 1992 as a vision of a strong, healthy, sustainable Hamilton that is shared by citizens, City Council, businesses and organizations. Vision 2020 accepts that it is critical to consider all three of the economic, social, and environmental effects our decisions have, because a decision in one area can affect the progress in other areas.

This community vision has served as a foundation for a significant range of community initiatives based on the 14 theme areas of the plan. Significant progress has been made in implementing Vision 2020 since its adoption in 1992, which has been measured through a set of indicators. Progress updates on the indicators were undertaken annually from 1995 to 1999 and again in 2003, 2004 and, most recently, in 2008. In 2012, in collaboration with community partners, the Vision 2020 sustainability indicators were updated and are the subject of this report.

2012 Indicators Report

Several modifications have been made for the 2012 update. The indicators have been reviewed and revised to utilize current data that better reflects the goals and community priorities in each theme area. This process was overseen by the Evaluation and Learning Committee of the Roundtable for Poverty Reduction and the Vital Signs Advisory Committee and compiled and analyzed by Jeff Wingard, McMaster University.

Wherever possible, indicators have been selected to reflect city-wide and neighbourhood trends. As the Hamilton Spectator's *Code Red*, the Hamilton Community Foundation's *Vital Signs* and the Social Planning and Research Council's *Neighbourhood Profiles* have found, quality of life varies a great deal across our neighbourhoods. The Vision 2020 progress update has endeavored to capture that variation.

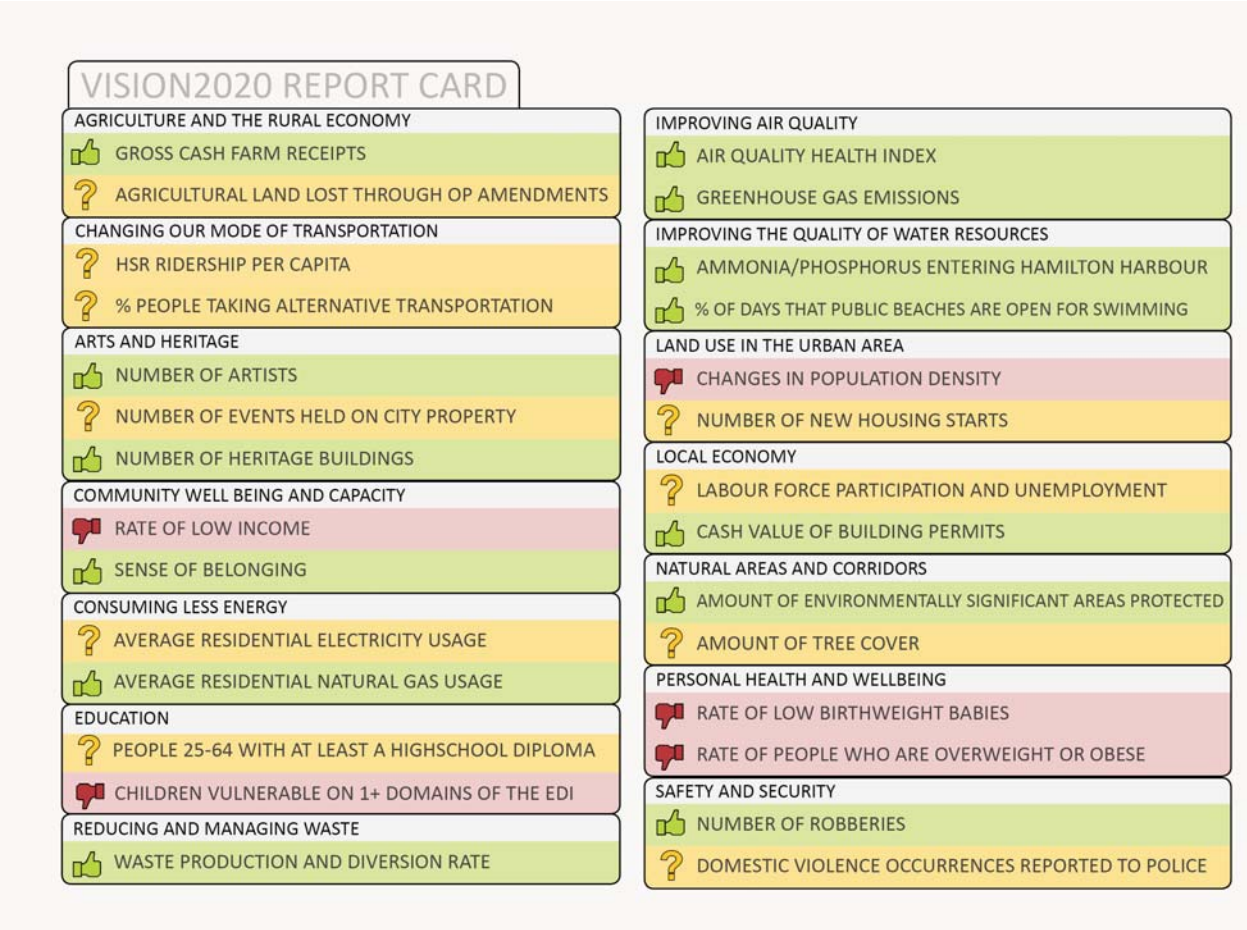
Overall Findings

Progress for each of the 28 indicators was assessed on progress from the Sustainability Indicators 2008 report, according to one of three statements: making progress, hard to say; or needs improvement and the 2012 results are summarized in Table 1. The progress of the sustainability indicators for each of the 14 theme areas is provided in Table 2 and in full detail in the full report attached as Appendix A.

Table 1: Summary of 2012 Sustainability Indicators

Indicator Status	Number of Indicators	
	2008	**2012**
👍 Making progress / heading in the right direction	12	13
? Hard to say	9	10
👎 Needs improvements	7	5

Table 2 - Vision 2020 Progress: Summary of Indicators for 2012



The Executive Summary of the report identifies emerging patterns around progress – and lack of it, with respect to the Vision 2020 principles as well as draws the following conclusions from the information:

- Progress on the environmental indicators is “particularly strong” and this sector shows the most consistent progress
- There continues to be tension in balancing social, economic and environmental outcomes in decision-making and planning
- Changing modes of transportation and reducing energy consumption have seen little change over the last 10 years and therefore warrant continued emphasis and attention
- The results confirm there are serious challenges around the social and economic well-being of Hamilton residents.
- Results show that the City’s efforts to make the Hamilton the best place to raise a child are appropriate and necessary.

Next steps

Vision 2020 was created 20 years ago through extensive community consultation. It has provided an overarching policy framework, a goal to strive for over time and process whereby the City and citizens co-operate, which is reflected in the indicator progress results. It has been reviewed and updated through a number of processes over the last 20 years. The last community consultation was in 2003.

The City of Hamilton's 2012-2015 Strategic Plan includes the following objective to develop a new community vision based on the principles of sustainability:

> Strategic Objective 1.6 (iii)
> *A new Community Vision that will form the basis for future strategic plans, re-visiting the role of Vision 2020 and looking toward overall sustainability (financial, economic, social and environmental).*

Given the progress that has been made as a result of having Vision 2020, plans are currently being developed for a visioning process in 2013 thru 2014 that will extend the planning horizon beyond 2020 and expand the sustainability framework from three bottom lines (Social, Economic, and Environmental) to include Natural, Physical, Economic, Human, Social and Cultural considerations.

Starting in 2013, the community will be engaged to develop a single plan that captures the vision and means for transformation. The outcome will be a vision that is clear and succinct, expressed in a single sentence capturing the future that the city aspires to. It will be supported by a handful of statements that summarise the desired impact on key aspects of the city. To make the vision deliverable, a set of quantified objectives against which progress can be measured are vital. Together these statements will be something that everyone involved in the city can understand, agree to and promote.

The process will help to bring the community together in a shared vision on "What Hamilton will look like in 2050"? Looking further into the future helps to guide decisions and plans along the way and involving all members of the community allows individuals and organizations to take their own actions toward reaching this shared vision for Hamilton.

The Vision 2020 Sustainable Indicators Report 2012 will help to inform the community discussion and visioning and provide a baseline for future monitoring. However, additional indicators that reflect the objectives of the newly developed community vision and a time frame for regular indicator updates will be developed once the new community vision is adopted.

The public consultation will be launched in Q2 of 2013 and completed within approximately 18 months. Detailed plans for the public process will be provided to Council prior to the launch. The visioning process will be completed prior to the next municipal election. The new community vision can then inform the next Corporate

Strategic Plan under the new council, as well as other City of Hamilton planning processes.

VISION 2020
HAMILTON

Vision 2020
Sustainability Indicators Report 2012

Acknowledgments

The author would like to thank the following individuals and groups for their assistance in the production of this report:

City of Hamilton staff Heather Donison, Paul Johnson and Colin McMullan of the Vision 2020 and Neighbourhood Action Team for their supervision and guidance;

the Evaluation and Learning Committee and Vital Signs Advisory Committee, chaired by Dr. Leila Ryan, who guided the development of the indicators and assisted with the analysis for this Vision 2020 update;

Dr. James Dunn and Hilary Gibson-Wood from McMaster University for their assistance in establishing the research framework and analysis of findings; and

the many organizations and city staff who submitted information for this report.

A special thank you to City of Hamilton staff Angela Monaco and Richard Paolo from the Planning and Development Department, and Chris Borst, Early Years Research Team, for their assistance in creating the GIS maps in this report.

VISION 2020
HAMILTON

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Executive summary

Vision 2020 was adopted by Hamilton City Council in 1992 as a vision of a strong, healthy, sustainable Hamilton that is shared by citizens, City Council, businesses and organizations. Vision 2020 accepts that it is critical to consider all three of the economic, social, and environmental effects our decisions have, because a decision in one area can affect the progress in other areas.

Since its adoption in 1992, a progress update on Vision 2020 indicators has been undertaken annually from 1995 to 1999 and again in 2003, 2004 and, most recently, in 2008.

Several modifications have been made for the 2012 update.

The indicators have been reviewed and revised to utilize current data that better reflects the goals and community priorities in each theme area. This process was overseen by the Evaluation and Learning Committee of the Roundtable for Poverty Reduction and the Vital Signs Advisory Committee.

Wherever possible, indicators have been selected to reflect city-wide and neighbourhood trends[1]. As the Hamilton Spectator's *Code Red*, the Hamilton Community Foundation's *Vital Signs* and the Social Planning and Research Council's *Neighbourhood Profiles* have found, quality of life varies a great deal across our neighbourhoods. Vision 2020 progress updates should endeavor to capture that variation.

This report presents the theme areas, goals and indicators of Vision 2020. Progress is assessed using the following statements:

Making progress: Compared to the most recent report or the Vision 2020 time frame, the indicator is heading in the right direction.

Hard to say: The indicator is neither improving nor declining, and/or there is variation between neighbourhoods or sub-populations.

Needs improvement: The indicator is worsening since the last report or there is a downward trend over the Vision 2020 time frame.

The Vision 2020 "report card" on the next page summarizes the findings of this report by theme area.

[1] Unless otherwise noted, "neighbourhoods" in this document are defined as City of Hamilton "planning neighbourhoods."

VISION2020 REPORT CARD

AGRICULTURE AND THE RURAL ECONOMY
- GROSS CASH FARM RECEIPTS
- AGRICULTURAL LAND LOST THROUGH OP AMENDMENTS

CHANGING OUR MODE OF TRANSPORTATION
- HSR RIDERSHIP PER CAPITA
- % PEOPLE TAKING ALTERNATIVE TRANSPORTATION

ARTS AND HERITAGE
- NUMBER OF ARTISTS
- NUMBER OF EVENTS HELD ON CITY PROPERTY
- NUMBER OF HERITAGE BUILDINGS

COMMUNITY WELL BEING AND CAPACITY
- RATE OF LOW INCOME
- SENSE OF BELONGING

CONSUMING LESS ENERGY
- AVERAGE RESIDENTIAL ELECTRICITY USAGE
- AVERAGE RESIDENTIAL NATURAL GAS USAGE

EDUCATION
- PEOPLE 25-64 WITH AT LEAST A HIGHSCHOOL DIPLOMA
- CHILDREN VULNERABLE ON 1+ DOMAINS OF THE EDI

REDUCING AND MANAGING WASTE
- WASTE PRODUCTION AND DIVERSION RATE

IMPROVING AIR QUALITY
- AIR QUALITY HEALTH INDEX
- GREENHOUSE GAS EMISSIONS

IMPROVING THE QUALITY OF WATER RESOURCES
- AMMONIA/PHOSPHORUS ENTERING HAMILTON HARBOUR
- % OF DAYS THAT PUBLIC BEACHES ARE OPEN FOR SWIMMING

LAND USE IN THE URBAN AREA
- CHANGES IN POPULATION DENSITY
- NUMBER OF NEW HOUSING STARTS

LOCAL ECONOMY
- LABOUR FORCE PARTICIPATION AND UNEMPLOYMENT
- CASH VALUE OF BUILDING PERMITS

NATURAL AREAS AND CORRIDORS
- AMOUNT OF ENVIRONMENTALLY SIGNIFICANT AREAS PROTECTED
- AMOUNT OF TREE COVER

PERSONAL HEALTH AND WELLBEING
- RATE OF LOW BIRTHWEIGHT BABIES
- RATE OF PEOPLE WHO ARE OVERWEIGHT OR OBESE

SAFETY AND SECURITY
- NUMBER OF ROBBERIES
- DOMESTIC VIOLENCE OCCURRENCES REPORTED TO POLICE

executive summary continued...

The overall findings of this analysis show that there has been progress made on about one-half (13/28) of the indicators since the Sustainability Indicators 2008 report. About one-third of the indicators fall into the "hard to say" category, with five indicators needing improvement.

If we return to the four principles that Vision 2020 was founded on, we can see some patterns emerge with regard to progress – and lack of it.

Fullfillment of human needs for peace, clean air and water, food, shelter, education, arts, culture and useful and satisfying employment.

This report shows clear and continued progress in many of these areas, particularly clean air and water, but also in the burgeoning arts sector with its increasing number of artists and heritage buildings, as well as employment and unemployment rates that are returning to (and even exceeding) pre-recession levels. In terms of education, the overall number of Hamiltonians who are graduating from high school is increasing, but this report finds that these results are split along neighbourhood lines.

Maintenance of ecological integrity through careful stewardship, rehabilitation, reduction in wastes and protection of diverse and important natural species and systems.

Indicators that measure this principle consistently show strong progress. The steady increase in protected environmentally significant areas, coupled with continued improvements in waste diversion and early results for tree cover improvement have demonstrated steps forward over the past four years.

Provision for self-determination through public involvement in the definition and development of local solutions to environmental and developmental problems.

Indicators for this principle show mixed results. On the one hand, there is progress to build on: Hamiltonians have a sense of belonging to their communities that is among the highest of any city in Canada. The progress that has been identified for the first two principles, particularly in the environmental sector, has required local solutions to be developed and has relied on public involvement and engagement.

On the other hand, the findings of this report also show that wide disparities exist between Hamiltonians that hold us back as a community and limit the ability of some to be involved. Indicators show differences along neighbourhood lines as well as between sub-populations of Hamiltonians, be they recent immigrants, lone parents, survivors of abuse or children.

Achievement of equity with the fairest possible sharing of limited resources among contemporaries and between our generation and that of our descendants.

...executive summary continued

Indicators that look at measures of equity show the most challenges. There are wide differences between neighbourhoods in rates of low income, low birth weights, variance among school readiness for children, high school graduation rates and domestic violence occurrences. Significant effort will be required if we are to satisfy this principle.

In addition to reviewing progress on the principles of Vision 2020, there are some additional conclusions we can draw from the information.

1) Progress on many of the environmental indicators is particularly strong. With improvements to air quality, reductions in greenhouse gas emissions, increases in protected land, improved water quality (both discharges into the harbour and days the beaches are open for swimming), and declining amounts of waste being sent to landfills, this sector shows the most consistent progress.

2) There continues to be a tension between environmental, social and economic effects for decision-making and planning. Vision 2020 presents a framework for planning that requires balanced decision-making so that all three outcomes – environmental, social and economic – are considered. It is clear from this report that there are still significant tensions in trying to strike that balance. Whether it is achieving increased density in the city, finding ways to increase the number of new housing starts in already developed areas as opposed to greenfields, consuming less energy, or potentially re-designating large amounts of agricultural land for employment lands, the struggle to balance these three outcomes is still very relevant today.

3) Several of the indicators have shown very little change over the past decade. In particular, the indicators for Changing our Mode of Transportation have remained at very similar levels over the past 10 to 15 years. While both the overall ridership numbers for HSR and the percentage of people taking transit, walking or biking to work have not decreased, they also have not improved as many had hoped they would. Similarly, consuming less energy remains largely dependent on weather patterns to determine use. Our society's increasing reliance on power, coupled with energy cost volatility, mean these areas warrant continued emphasis and attention.

4) Some serious challenges are identified throughout this report that focus on the social and economic well-being of the people of Hamilton. Disparities in income, serious challenges around health, including rising rates of overweight and obesity, and increasing numbers of domestic violence occurrences are threatening the well-being of many Hamiltonians.

5) Finally, there are some important findings around Hamilton's children. Low levels of school readiness in some neighbourhoods, high levels of child poverty, higher rates of low birth weight babies in some neighbourhoods, and variation in high school completion demonstrate that Hamilton's efforts to make the city the best place to raise a child are both necessary and warranted.

Introduction

Vision 2020 was adopted by Hamilton City Council in 1992 as a vision of a strong, healthy, sustainable Hamilton that is shared by citizens, City Council, businesses and organizations. Vision 2020 accepts that it is critical to consider all three of the economic, social, and environmental effects our decisions have, because a decision in one area can affect the progress of other areas.

Vision 2020 is based on four main principles:

1) Fulfillment of human needs for peace, clean air and water, food, shelter, education, arts, culture, and useful and satisfying employment;

2) Maintenance of ecological integrity through careful stewardship, rehabilitation, reduction in wastes and protection of diverse and important natural species and systems;

3) Provision for self-determination through public involvement in the definition and development of local solutions to environmental and development problems; and,

4) Achievement of equity with the fairest possible sharing of limited resources among contemporaries and between our generation and that of our descendants.

Out of these principles, 14 key theme areas were defined to focus the actions of the Vision. Specific goals were set in these areas to guide the city towards integrating environmental, social and economic well-being. Within each theme area, indicators were selected to measure progress or lack of progress.

Since its adoption in 1992, a progress update on Vision 2020 indicators has been undertaken annually from 1995 to 1999 and again in 2003, 2004 and, most recently, in 2008.

For this update, several modifications have been made:

In a process that was overseen by the Evaluation and Learning Committee of the Roundtable for Poverty Reduction and Vital Signs Advisory Committee, the indicators that were used for each theme area were reviewed and revised to utilize up-to-date data that better reflects the goals and community priorities.

Where it was possible, indicators were selected that could reflect not only city-wide trends, but neighbourhood trends as well[2]. As recent reports such as the Hamilton Spectator's *Code Red*, the Hamilton Community Foundation's *Vital Signs*, and the Social Planning and Research Council's *Neighbourhood Profiles* have found, quality of life varies a great deal across our neighbourhoods, and Vision 2020 progress updates should endeavor to capture that variation.

Vision 2020 has a unique framework for addressing sustainability in our community. There are other reports

[2] Unless otherwise noted, "neighbourhoods" in this document are defined as City of Hamilton "planning neighbourhoods."

...introduction continued

and resources that examine the quality of life and municipal performance in Hamilton such as the Ontario Municipal Benchmarking Initiative, the Municipal Performance Measurement Program and Hamilton's *Vital Signs*. The goal of this update is not to replace any of these reports or resources but to focus on the sustainability principles set out in Vision 2020.

The following report sets out the goals and indicators for each theme area, and reviews the trends for each indicator. Following this review, progress or lack of progress is assessed using the following statements:

Making progress: Compared to the most recent report or over the Vision 2020 time frame, the indicator is heading in the right direction.

Hard to say: The indicator is neither improving nor declining, and/or there is variation between neighbourhoods or sub-populations.

Needs improvement: The indicator is worsening since the last report or there is a downward trend over the Vision 2020 time frame.

Each section includes additional sources, where readers can obtain more detailed information. The electronic version of the report contains hyperlinks.

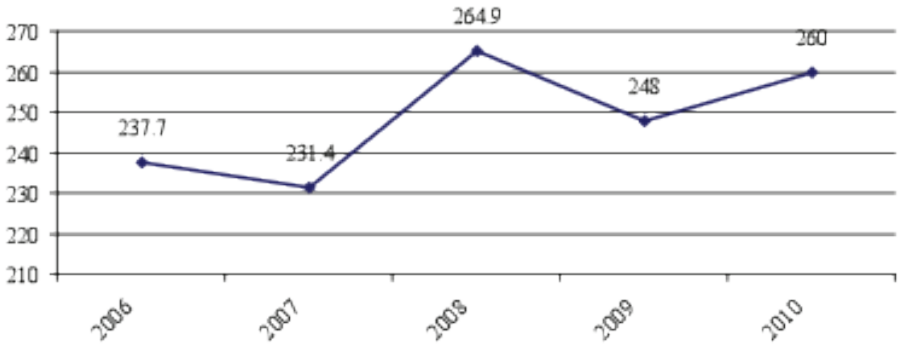
Agriculture and the rural economy

Indicator #1: Gross farm receipts

Gross farm receipts measure the gross revenue of farms from the sale of products (livestock and crops), and from direct program payments to producers. They do not include operating expenses or other costs related to producing those products. Gross farm receipts provide us with an overall snapshot of the agricultural and rural farm market. According to the 2006 census, Hamilton has 975 farms. Of these, 75% are 53 hectares or less, 19% are between 53 and 161 hectares, and only 6% are over 161 hectares.

As the following table shows, gross farm receipts increased by 9.4% between 2006, when they totaled $237.7 million, and 2010, when they were $260.0 million.

Figure 1: Gross Farm Receipts, City of Hamilton (in $ millions, unadjusted)



Source: Ontario Ministry of Agriculture, Food, and Rural Affairs

GOALS

To ensure Hamilton has healthy soil and water from which to produce food for our community.

To ensure sufficient land is available to grow food for future generations.

To increase the availability of appropriate farm labour.

To make agriculture a viable economic activity in the City of Hamilton.

To improve understanding of agriculture concerns by urban dwellers, newcomers to rural areas and local governments.

To ensure Hamilton is a community of people educated with regard to agriculture and healthy, sustainable food production and consumption patterns.

...agriculture and the rural economy continued

How are we doing?

Gross farm receipts

Making progress.

Overall farm receipts have increased by 9% over the last five years. While there is clear year-to-year variation with this indicator, it is headed in the right direction.

Loss of agricultural land

Hard to say.

With OP amendments holding steady near zero since 2007, this indicator is headed in the right direction. The City of Hamilton's potential development of the airport-related employment lands will re-designate over 800 hectares, which will have a negative impact on this indicator.

The largest commodities in Hamilton in 2010 were:

- floriculture, nursery and sod: $72 million (28%)
- mushrooms: $46 million (18%), and
- poultry: $39 million (15%)

Hamilton's commodities are different from province-wide results, where the top three commodities were dairy (17.3%), fruits and vegetables (13.4%) and soybeans (11.1%). Interestingly, Hamilton's largest agricultural commodity is not food but floriculture, nursery and sod. The second and third largest commodities are grown or raised in buildings, not traditionally farmed on open land.

Gross farm receipts vary greatly by farm. Just over one-quarter of farms (260) reported less than $10,000 in gross farm receipts, while 18 farms reported receipts of between $1 million and $2 million and 19 farms reported receipts of over $2 million.

Indicator #2: Agricultural land lost due to Official Plan amendments

It is important to track agricultural land designated for other uses as this provides an indication of a permanent loss of agricultural capacity. The amendments are tracked based on the date they were approved, not the date that the applications were initiated. In some cases, land that is re-designated may not immediately be taken out of agricultural production.

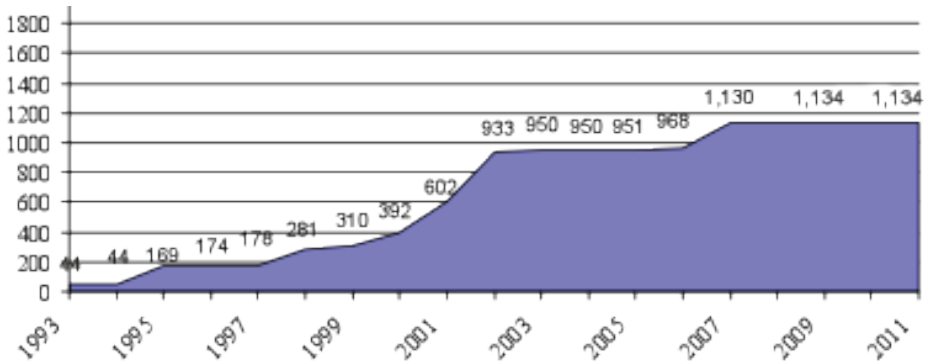
The provincial government placed a freeze on urban development on rural and

agriculture and the rural economy continued...

agricultural lands effective December 2003. This freeze was lifted in 2005 with the adoption of the Greenbelt Plan. The provincial policy statement adopted later in 2005 permits urban boundary expansions only after a comprehensive municipal review is completed and a set of strict criteria are met. One criterion is to prove that there are no remaining opportunities for growth through intensification, redevelopment and existing designated growth areas within the existing urban boundary.

As the chart below shows, from 2008 to 2011 only four hectares of agricultural land have been re-designated. These four were in Jerseyville and were changed so that the Jerseyville boundary would match that of the Rural Hamilton Official Plan that was approved by Council in 2006. Although there has been only minor loss of agricultural land since 2008, the City of Hamilton's plans for urban boundary expansion are expected to result in over 800 hectares being re-designated from agricultural to employment lands for the Airport Employment Growth District.

Figure 2: Cumulative agricultural land redesignated with Official Plan Amendment (hectares), 1993 – 2011



Source: Planning and Economic Development, City of Hamilton

Additional info & resources

Ontario Ministry of Municipal Affairs and Housing, Greenbelt Plan

Ontario Ministry of Agriculture, Food, and Rural Affairs

City of Hamilton, Planning and Economic Development, Rural Hamilton Official Plan

Arts and heritage

GOALS

To achieve community-wide awareness and participation in the arts and our natural and cultural heritage.

To ensure artists in all disciplines have opportunities in order to develop and share their art with the community.

To ensure arts and heritage organizations are financially vital and effective in serving the community.

To celebrate and preserve the diversity of our natural and cultural heritage and recognize the contribution of First Nations people.

Indicator #1: Number of artists

This indicator looks at the number of artists who live in Hamilton. The term "artist" is often defined as including nine occupations[3]:

- actors and comedians,
- artisans and craftspersons,
- authors and writers,
- conductors, composers and arrangers,
- dancers,
- musicians and singers,
- other performers,
- painters, sculptors and other visual artists, and
- producers, directors, choreographers and related occupations.

In 2006 (the most recent information available), there were 1,680 artists living in Hamilton. This is 0.6% of the labour force and is similar to provincial and national averages. The number of artists in Hamilton has increased by 22% in the last 15 years, faster than the overall labour force[4]. In 2001, Hamilton ranked 45th of Canada's largest 92 cities in terms of overall concentration of artists[5].

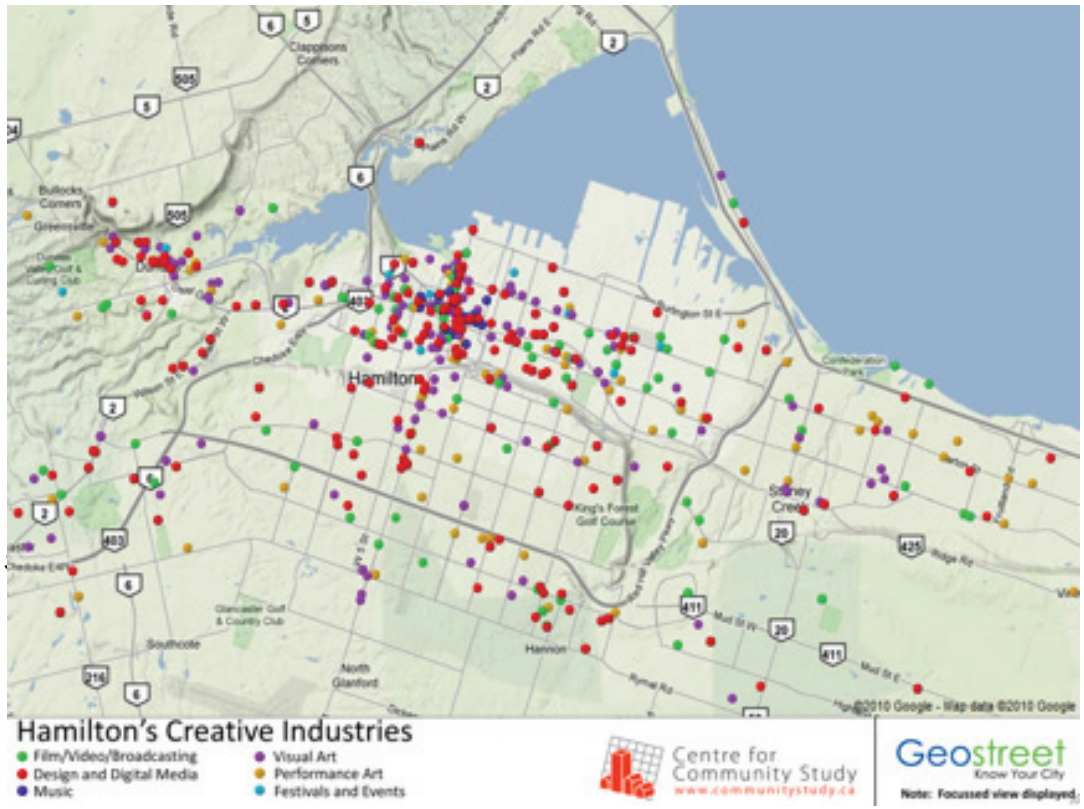
By neighbourhood. In an analysis of national data from the 2001 census, local arts researcher Kelly Hill identified the neighbourhoods across Canada with the highest concentration of artists. While Montreal and Toronto had the neighbourhoods with the highest concentrations – above 5% of the neighbourhood labour force – Hamilton had two areas that were twice the national average of 0.8%: north-central Hamilton at 1.9% (all postal codes beginning with L8R), and west-central Hamilton at 1.6% (all postal codes beginning with L8P)[6].

3 Hill Strategies Research Inc, 2006. Artists in Canada.
4 Hamilton Vital Signs. Arts and Culture.
5 Hill Strategies Research Inc. 2006. Artists in Large Canadian Cities.
6 Hill Strategies Research Inc. 2005. Artists by Neighbourhood in Canada. See Community Well-being and Capacity Theme Area for a map of Hamilton postal codes.

arts and heritage continued...

The Centre for Community Study recently published a map pinpointing the locations of Hamilton's creative industries[7]. This map indicates that while there are creative industries distributed throughout the City of Hamilton, there are several discernable clusters: downtown Hamilton, the Upper James corridor and Dundas.

Figure 3: Creative industries by geography, City of Hamilton, 2009



Source: Centre for Community Study, 2009

[7] **Centre for Community Study 2012.** Hamilton's Creative Industries.

How are we doing?

Number of artists

Making progress.

The number of artists has increased by 22% over the Vision 2020 time frame and is growing faster than the overall labour force. There are several downtown neighbourhoods in Hamilton that have twice the national average of artists.

Events on City property

Hard to say.

This is the first year that information on community-wide events has been available. Future updates will be able to report on the trends.

Number of heritage buildings

Making progress.

The number of individual heritage properties has increased over the last decade. The number of heritage districts has held steady over that time, while the number of properties within those districts has increased.

Additional info & resources

City of Hamilton, Culture Division & Heritage Planning

Centre for Community Study, information on Hamilton's creative industries

Love Your City: Hamilton's Cultural Policy & Plan

Hamilton Arts Council

Hill Strategies, arts research

Indicator #2: Number of community and City events held on City property

This indicator examines the number of outdoor events that were held in 2011 on City of Hamilton properties. This indicator is not intended to capture all events that occur across the city. It is, however, an important indicator because it is a way of measuring cultural vibrancy across Hamilton. This is a new indicator and will be used as a baseline for future reports.

In 2011, there were 138 arts and culture events held outdoors on City property by community groups and organizations. These ranged from large events such as the Festival of Friends, Supercrawl, the Dundas Cactus Festival, the Hamilton Santa Claus Parade, the National Aboriginal Day Festival and the Winona Peach Festival to a wide variety of smaller events held by community groups and organizations.

Indicator #3: Number of heritage buildings

This indicator reports on the number of heritage buildings that are either within heritage conservation districts or have received individual heritage designation. Individual designation of a property is usually based on its architectural and historical significance. District designation takes into account an area's historical significance, social history, patterns of use and interaction with surrounding space.
In 2010 there were 241 individual heritage properties in Hamilton – an increase of 12% from 2000. In 2010 there were 358 properties that were within Hamilton's seven heritage conservation districts compared to 343 in 2000. No new heritage districts were added, so the increase in properties is due to property severances and new construction within the districts[8].

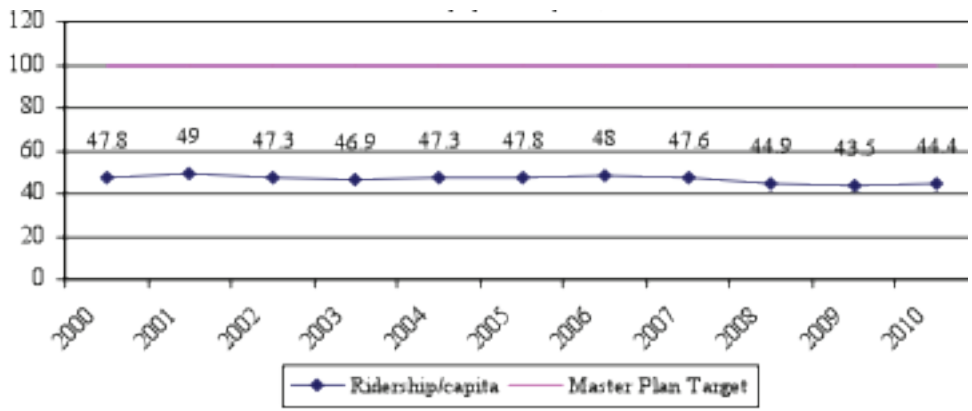
[8] Cited in Vital Signs 2011, Arts and Culture.

Changing our mode of transportation

Indicator #1: Transit ridership per capita

Measuring our use of public transit is important because it provides information on how our transportation choices are changing. Transit helps reduce single-occupant car trips that result in emissions that are harmful to human health, plants and the natural environment. Transit also makes more efficient use of road systems, which are expensive to both maintain and expand to accommodate increased traffic volume. More efficient use of roads means fewer new roads being built. New road construction can negatively affect water quality and ecosystems if large areas of the watershed are altered and paved.

Figure 4: Transit ridership per capita in Hamilton, 2000 – 2010



*Source: **Municipal Performance Measurement Program,** City of Hamilton, 2011*

GOALS

To develop an integrated, sustainable transportation system for people, goods and services that is environmentally friendly, affordable, efficient, convenient, safe and accessible.

To encourage a shift in personal lifestyle and behaviour towards transportation choices that enhance personal health and fitness, save money and have the lowest environmental cost.

...changing our mode of transportation continued

How are we doing?

Transit ridership per capita

Hard to say.

While this indicator shows a decline over time, most of this decline is due to an expansion of service rather than decreasing ridership, which has held steady over the past decade. There will have to be significant changes to meet the Master Plan target of 100 rides per capita.

Labour force taking transit, cycling and walking to work

Hard to say.

The percentage of people getting to work by transit, walking, or biking has stayed very steady over the last fifteen years. Some neighbourhoods have much higher rates of transit use than others, and women are more likely to use transit, walk or cycle to work than men.

Figure 4 shows transit ridership per capita has decreased slightly over the past three years to 44.4 rides per capita in 2010 from 47.6 rides per capita in 2007. This decrease is due to the increase in service area and potential ridership that resulted when new routes serving the Waterdown, Elfrida and Rymal areas were added, rather than a decline in actual passengers. The total ridership increased slightly over the last three years, from 21,087,000 in 2007 to 21,226,000 in 2010.

When compared to other Ontario cities, Hamilton has higher than average ridership per capita and is ranked fourth among Ontario's largest 11 cities, behind Toronto, Ottawa and London.

The Hamilton Transportation Master Plan contains a target of 100 rides per capita per year by 2031.

One of the determining factors of the use of public transportation is the frequency and availability of routes in neighbourhoods. The following table comes from the Human Service Planning Playbook **Technical Report #4.** It identifies the number of HSR bus routes and number of stops by city ward. Ward 2 has twice the number of routes than other wards, but a similar number of stops to Wards 7 and 8. With only one or two routes, Wards 11, 14 and 15 have the fewest routes and stops.

Figure 5: Number of HSR routes and stops by Ward, 2008

Ward	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Routes	9	23	8	8	9	8	11	8	8	3	2	8	4	1	1	33
Stops	286	378	243	278	196	247	360	347	156	73	16	172	108	3	27	2,936

Source: City of Hamilton, 2011, **Technical Report #4**

changing our mode of transportation continued...

Indicator #2: Percentage of the labour force using transit, biking or walking to work

This indicator looks at the percentage of working Hamiltonians who use alternative transportation to get to their place of work. This indicator comes from the census, so updates are available every five years and information is available by neighbourhood.

In 2006, 15.7% of working Hamiltonians reported using transit, a bicycle or walking to get to work – a slight increase from the 15.0% who reported this behaviour in 2001 but similar to 1996 when the rate was 15.4%.

There is a wide variation in this indicator depending on where people live and their gender. Women make up 58% of the total who take transit, bike or walk to work. Almost 13,000 (12,805) women reported taking transit to work, compared to 8,855 men.

Work-related transportation choices also vary dramatically by neighbourhood, with downtown neighbourhoods reporting higher rates of alternative transportation use. The Stinson, Stipley and Beasley neighbourhoods, for example, are at or above 30% of residents biking, walking or taking transit to work. The Ralston neighbourhood on the central west mountain is close to the city average at 15%. Some neighbourhoods in the outlying areas of Hamilton have 5% or fewer reporting that they use transit, walk and cycle to work.

Additional info & resources

City of Hamilton, Transportation Master Plan

Hamilton Street Railway Company

Transportation Tomorrow survey
This report is published every five years as a cooperative effort between local and provincial governments. It has in-depth information regarding trends in transportation.

Community well-being and capacity building

GOALS

To enable participation by all citizens and communities in government decisions and in the development of cultural, educational and health and social services.

To ensure public activities and decisions at all levels of government are coordinated, efficient, effective and easily accessible to all citizens.

To develop our economic, social and physical environments so as to enable the participation of all citizens and communities in local and regional community life.

To develop cultural institutions, public facilities, parks and open space that inspire community pride and sense of place.

To build and develop the capacity of individuals, community organizations, the private and non-profit sectors to be self-reliant.

Indicator #1: Rate of low income

Measuring the rate of low income is an important measure of the overall well-being of the community. Living below the poverty line can reduce one's ability to take part in community and civic life, and there is a substantial amount of research that shows that communities with less poverty are healthier. There is also a great deal of variation in who is poor: some neighbourhoods are poorer than others, and some groups of people have higher poverty rates. These inequities further divide our citizens.

Overall results. The most commonly used measure of low income in Hamilton is Statistics Canada's low income cut-off (LICO)[9], which is available every five years based on the census. Using this measure, the overall rate of low income for Hamilton improved to 18.1% in 2005 from 19.8% in 2000 – when it was tied with Toronto for the highest rate in Ontario – and 21.9% in 1995. In 1990, the rate of low income was 17.4%. Data for 2010 is expected to be available in August 2013.

The Hamilton Community Foundation's *Vital Signs* looked at more recent trends in low income using the low income measure (LIM), which measures the number of people with less than half of the local median income. The LIM is available annually and is based on people's income tax returns. In 2009, 19% of all Hamiltonians had incomes below the low income measure, a slight increase from 2006, when 18% were below the LIM. The rate for children living below the LIM in 2009 was 26%.

[9] For more information on how the low income cutoff is calculated, visit Statistics Canada's website.

community well-being and capacity building continued...

By neighbourhood. As various reports have shown[10], Hamilton neighbourhoods vary dramatically in rates of low income. For 2009, we are able to look at rates of low income by forward sortation area, or FSA (the first three letters of postal codes). Figure 6 shows that there were two FSAs where less than 10% of the residents lived below the LIM, while there were two areas where over 40% of residents were below the LIM. Rates of low income increased for all FSAs between 2006 and 2009.

Figure 6: FSAs by rate of low income, 2009

	under 10% low income	10 - 19% low income	20 - 29% low income	30 - 39% low income	>40% low income
# of FSAs	2	12	8.3%	13.6%	1.9%

Source: *Hamilton Vital Signs*

[10] ***Vital Signs*** **(Hamilton Community Foundation),** ***Code Red*** **(The Hamilton Spectator),** ***Neighbourhood Profiles*** **(Social Planning and Research Council).**

How are we doing?

Rate of low income

Needs improvement.

While the overall poverty rate steadily decreased between 1996 and 2006, it rose between 2006 and 2009, and there are significant disparities between neighbourhoods and sub-populations within Hamilton. With rates of poverty above 25% for children under six and double the city average for Aboriginal people, female lone parents and recent immigrants, this area needs improvement.

Sense of belonging

Making progress.

The percentage of Hamiltonians who have a strong or somewhat strong sense of belonging has increased over the last ten years and is one of the highest rates among Canadian cities.

...community well-being and capacity building continued

Additional info & resources

Hamilton's *Vital Signs*

Social Planning and Research Council of Hamilton

Hamilton Roundtable for Poverty Reduction

By sub-population. There is wide variation between groups of people in our community when it comes to rates of low income. The following table shows rates of low income (based on the 2006 LICO) and the disparities that exist.

Figure 7: Rate of low income by sub-population, 2006

Sub-population	Rate of low income (2006 LICO)
Hamilton	18.1%
Recent immigrants	51%
Female lone parents	39%
Aboriginal people[11]	39%
Visible minorities	34%
Children under 6	26%
Seniors	17%
Couples	9%

Source: Social Planning and Research Council of Hamilton, 2009, ***Incomes and Poverty in Hamilton***

[11] This data is based on the 2006 census. Aboriginal people have historically been under-counted on the census. This number should therefore be considered a low estimate and interpreted with caution.

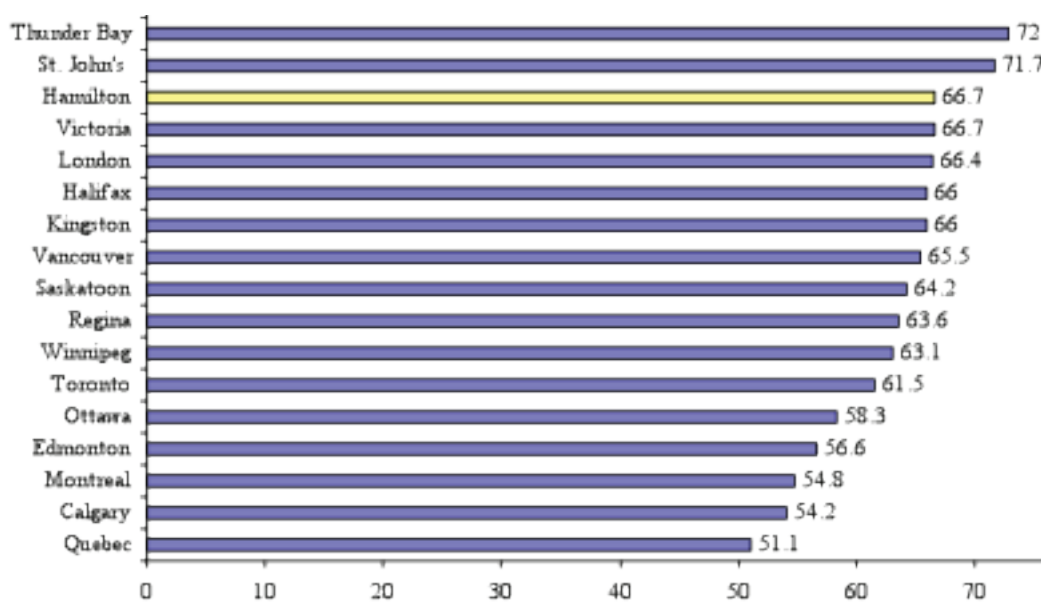
community well-being and capacity building continued...

Indicator #2: Sense of belonging

A second measure of community well-being is how connected people are to their neighbourhoods and communities. The Canadian Community Health Survey measures people's sense of belonging every two years and is able to give city-wide results. For 2009–10, 67% of Hamiltonians reported a "strong" or "somewhat strong" sense of belonging to their local community. This was an increase from 65% in 2007–8 and up from 59% in 2001.

As *Vital Signs* reported, Hamilton's census metropolitan area ranked third out of Canada's 17 largest metropolitan areas in percentage of people reporting a strong or somewhat strong sense of community, behind Thunder Bay, Ontario (73%) and St. John's, Newfoundland (72%).

Figure 8: Percentage reporting "somewhat strong" and "very strong" sense of belonging to local community, 2009 – 2010



Source: Kitchen, P. and Williams, A. (2012).

Consuming less energy

GOAL

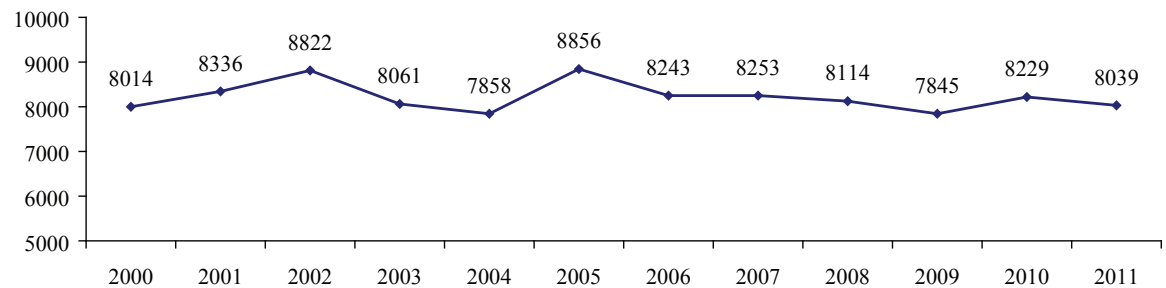
To reduce the consumption of non-renewable energy and eliminate the excessive and wasteful use of energy.

Indicator #1: Average residential electricity consumption

Every time we use energy we are burning fossil fuels such as gas, oil and coal and sending pollutants and greenhouse gases into the air. The use of fossil fuels to power our furnaces and vehicles contributes to smog and climate change. This indicator measures the average annual electricity consumption for residential accounts across the city in kilowatt/hours/year. Residential use of electricity accounts for approximately one-third of all use, with commercial and industrial use making up the remaining two-thirds[12]. Reduction in overall consumption is the goal for Vision 2020.

The following chart shows the average residential electricity use per account in Hamilton has stayed at approximately the same level for the last ten years.

Figure 9: Average residential electricity consumption (kWh)



Source: Horizon Utilities

[12] GTA Clean Air Online. Cited in Vision 2020 Update 2007.

consuming less energy continued...

Indicator #2: Average residential natural gas consumption

Natural gas is an important source of residential energy use[13]. Natural gas burns more cleanly and efficiently than other fossil fuels. It does, however, contribute to greenhouse gas emissions, and the target should be reduction of use to accomplish the goals of Vision 2020. This is a new indicator for Vision 2020.

[13] Residential gas usage accounted for 27% of all natural gas usage in Hamilton in 2010. Commercial usage accounted for 23% and industrial usage accounted for 50%. Industrial usage increased by 9% from 2009 to 2010.

How are we doing?

Electricity consumption

Hard to say.

Electricity use has stayed at the same level over the past decade. Over the past three years, a higher percentage of our electricity is being generated from burning natural gas rather than coal.

Natural gas consumption

Making progress.

Residential natural gas usage has decreased by 9% over the past three years. Usage varies depending on the area of Hamilton by as much as 30%, but usage has decreased across all communities.

...consuming less energy continued

Additional info & resources

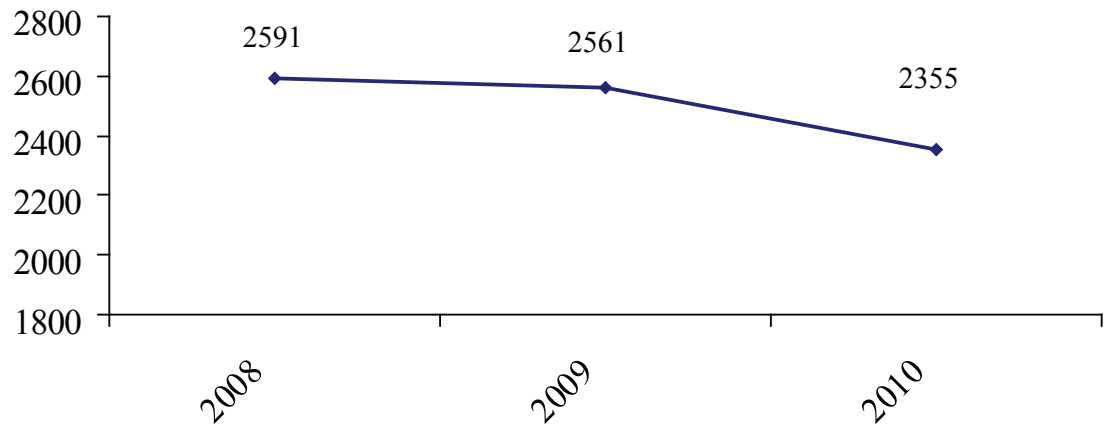
Horizon Utilities

Union Gas

Clean Air Hamilton

The following chart shows that residential use of natural gas has decreased by 9% over the last three years to 2,355 m^3/account in 2010 from 2,591 m^3/account in 2008. Union Gas reports that this reduction could be due to changing weather patterns (i.e. colder or warmer winters) and increasing efficiency of appliances and technologies.

Figure 10: Residential natural gas usage in Hamilton (m^3 per account)



Source: Union Gas, special request

Residential gas consumption varies within different parts of the City of Hamilton. Union Gas tracks usage by former municipality (and Waterdown) as shown in the table on the next page.

consuming less energy continued...

Figure 11: Residential natural gas usage by community

Community	2010		2009		2008	
	# customers	average annual m^3	# customers	average annual m^3	# customers	average annual m^3
Ancaster	11,166	2,681	10,602	2,874	10,347	3,020
Dundas	7,474	2,417	7,407	2,670	7,328	2,676
Flamborough	1,787	2,848	1,740	3,075	1,718	3,030
Glanbrook	6,870	1,968	6,535	2,160	6,308	2,130
Hamilton	92,032	2,358	91,462	2,563	90,911	2,591
Stoney Creek	19,543	2,251	19,244	2,431	18,866	2,464
Waterdown	5,297	2,239	5,036	2,552	5,020	2,482
Total	**144,169**	**2,355**	**142,026**	**2,561**	**140,498**	**2,591**

Source: Union Gas, special request

While all communities showed a decrease from 2008 to 2010, the highest residential natural gas usage was consistently in Ancaster and Flamborough, which were 14 to 20% above the Hamilton average, while Glanbrook used the least natural gas at 16% below the city's average. These differences likely reflect the size of the homes in these areas.

Education

GOAL

To raise and sustain necessary levels of literacy and education and foster a climate that supports lifelong learning.

Indicator #1: Percentage of people who have at least a high school graduation diploma (25–64 years old)

In today's changing job market and economy, a high school education is increasingly important as a bare minimum to secure an adequate standard of living. This indicator looks at the number of working-age people with at least a high school graduation diploma or equivalent.

In Hamilton in 2006, 84.3% of people aged 25-64 had at least a high school graduation diploma. The percentage is higher for the younger members of this group: 90% of people aged 25 to 34 years old had at least a high school diploma[14].

The total population over 15 years of age in the Hamilton CMA (which includes Burlington and Grimsby) with at least a high school diploma increased to 80% in 2010, up from 73% in the year 2000[15].

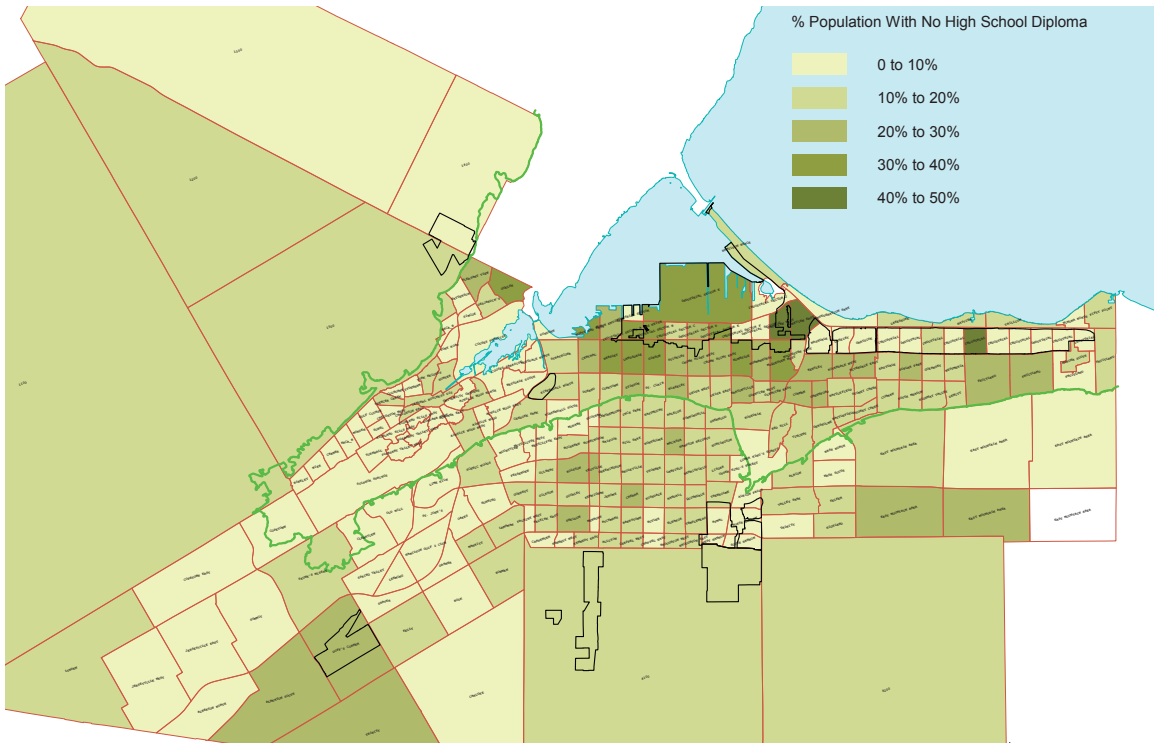
Almost one-fifth (19.9%) of working-age Hamiltonians had a university certificate, diploma or degree in 2006. The rate was higher for the younger members of this group; 25.3% of those who were 25 to 34 years old had a certificate, diploma or degree[16].

[14] Statistics Canada, 2006 census, Community Profiles.
[15] Hamilton Vital Signs, 2011 Learning.
[16] Statistics Canada, 2006 Census, Community Profiles.

education continued...

By neighbourhood. As the following map shows, the proportion of people aged 25 to 64 with no high school diploma is much higher in certain parts of Hamilton, with seven neighbourhoods having over 30% of residents with no high school diploma[17]. In contrast, there are three neighbourhoods where 100% of working age people have a high school diploma.

Figure 12: Percentage of Hamiltonians with no high school diploma, 2006



Source: Statistics Canada, 2006 census

[17] **Planning neighbourhoods with less than 200 people of working age were excluded.**

How are we doing?

High school diploma

Hard to say.

The results for education are split along neighbourhood lines. There have been overall improvements in the number of people with high school diplomas, but these rates vary dramatically among neighbourhoods.

Vulnerable children

Needs improvement.

One in four children are vulnerable on one or more domains of the EDI and this has changed little since 2002. Disparities between neighbourhoods are remarkable, with some neighbourhoods having low rates of vulnerability while in others, over half of children are vulnerable on one or more domains of the EDI.

...education continued

Additional info & resources

Hamilton-Wentworth District School Board

Hamilton-Wentworth Catholic District School Board

City of Hamilton, Social Development and Early Childhood Division

Government of Ontario, Ministry of Education

Hamilton *Vital Signs*

The Hamilton Spectator's *Code Red* series showed that Hamilton's high school drop-out rates per 1,000 students vary from over 20% in six census tracts to less than 2% in six other census tracts[18], a difference of ten times.

Indicator #2: Percentage of children vulnerable on at least one domain of the Early Development Instrument

The Early Development Instrument is used to measure child development across five areas:

- physical health and well-being,
- social competence,
- emotional maturity,
- language and cognitive development, and
- communication skills and general knowledge.

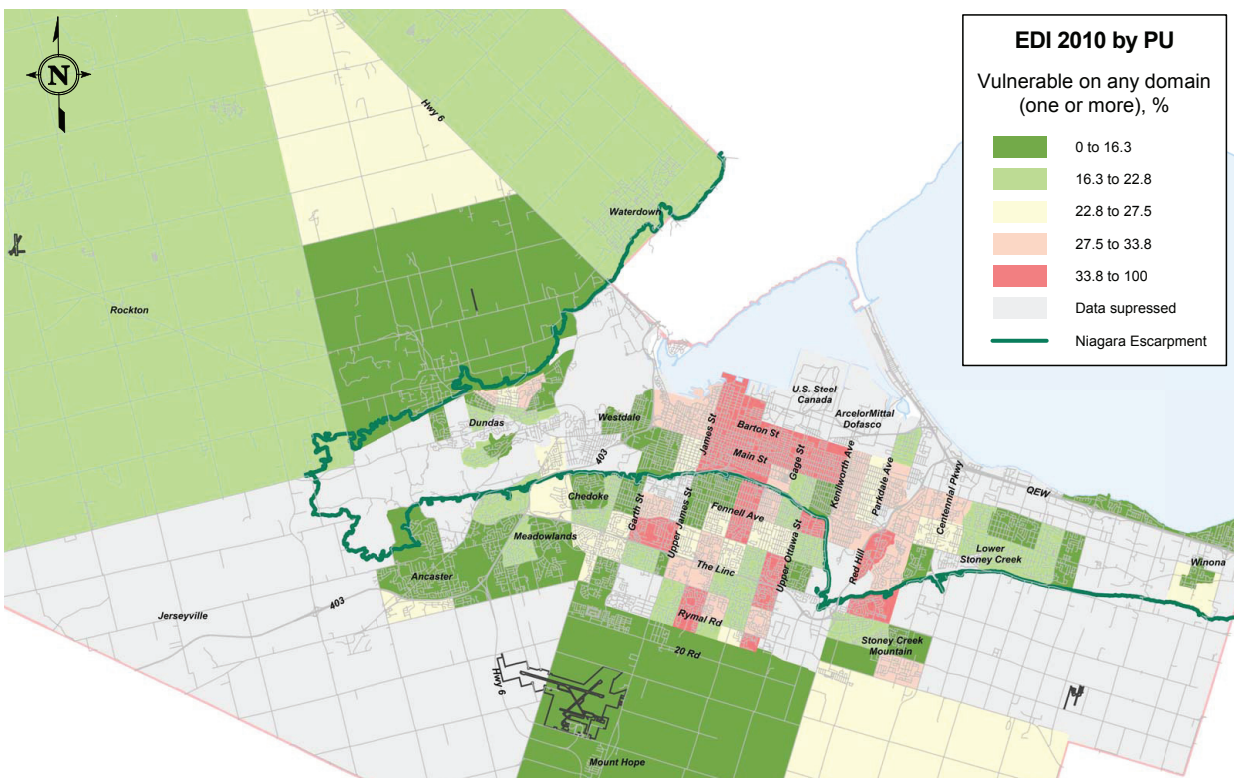
Research has shown that higher rates of child development have strong links to school performance, standardized test performance and graduation rates. In 2010, just over one quarter (26.4%) of senior kindergarten students in Hamilton were vulnerable in one or more of these areas. This level has been steady since measurement started in 2002.

[18] **Hamilton Spectator, *Code Red.***

education continued...

By neighbourhood. Vulnerability in one or more of the areas also varies by neighbourhood. In some of the lower city neighbourhoods, over 50% of the children are vulnerable. In neighbourhoods with the lowest rates of vulnerability, approximately 10% of children are vulnerable in one or more areas[19].

Figure 13: Percentage of children who are vulnerable on at least one domain of the EDI by Planning Unit (PU), 2010



Source: City of Hamilton, Community Services, Social Development and Early Childhood Services

[19] **Hamilton Community Foundation (2011), *Vital Signs*, Learning.**

Improving air quality

GOALS

To ensure the City of Hamilton has the best air quality of any major urban area in Ontario.

The original goal was to reduce greenhouse gas emissions 20% from 1990 levels. This target has been updated to a 10% reduction from 2006 levels by 2012 and 20% reduction from 2006 levels by 2020.

Indicator #1: Air Quality Health Index values

The Air Quality Health Index (AQHI) is a relatively new measure from Environment Canada that measures the air quality in relation to people's health on a scale from 1 to 10. The higher the number, the greater the health risk associated with the air quality. When the amount of air pollution is very high, the number will be reported as 10+.

The AQHI is calculated based on the relative risks of a combination of common air pollutants which are known to harm human health. These pollutants include:

- ozone (O_3) at ground level,
- particulate matter ($PM_{2.5}$/PM_{10}) and
- nitrogen dioxide (NO_2).

The AQHI index values are grouped into the following health risk categories:

- 1–3 Low health risk
- 4–6 Moderate health risk
- 7–10 High health risk
- 10 + Very high health risk

The Air Quality Health Index provides information to allow individuals to modify their behaviour to reduce the short-term health risks associated with air pollution. As such, it does not capture the chronic health outcomes associated with air pollution, which accounts for the "significant majority" of health risk. The Air Quality Health Index formulation may be revised with the advancement of the latest scientific understanding in this area.

improving air quality continued...

In Hamilton, the Air Quality Health Index is measured hourly at three Ministry of the Environment monitoring stations: downtown, west Hamilton, and on the Hamilton Mountain. While the AQHI has only recently been measured, Ministry of the Environment staff were able to retroactively calculate the number of hours each station was at or above a particular air quality level[20]. Information from the downtown and Mountain stations show clear decreases, particularly with the number of hours above 7, over the last four years.

Figure 14: Hours of elevated health risk due to air quality, 2004 – 2011

Station	2004	2005	2006	2007	2008	2009	2010	2011
DOWNTOWN								
# hours at moderate health risk (AQHI of 4 – 6)	1,212	1,902	1,413	1,491	1,208	611	943	837
# of hours at high health risk (7+)	54	97	25	46	27	0	0	3
MOUNTAIN								
# of hours at moderate health risk	--	--	--	1,079	791	333	587	530
# of hours at high health risk	--	--	--	37	28	0	1	1
WEST END								
# of hours at moderate health risk	--	--	--	--	--	--	--	560
# of hours at high health risk	--	--	--	--	--	--	--	0

Source: Ministry of the Environment, special request, March 2012. NOTE: one year = 8,760 hours

[20] Blank cells indicate that particulate matter was not measured at that station in that year. Particulate matter is one of the pollutants included in the AQHI calculation.

...improving air quality continued

How are we doing?

AQHI values

Making progress.

The Air Quality Health Index shows clear decreases over the last four years in the number of hours at or above level 7. Levels of most air pollutants are steadily decreasing. We need to pay attention to rising levels of some air pollutants and determine air pollution levels in more neighbourhoods.

Greenhouse gas emissions

Making progress.

Our greenhouse gas emissions are decreasing. The local target for greenhouse gas emission reductions from 2005 levels for the City of Hamilton has been met. Over the past three years there were decreases across all sectors: industrial, steel, residential and commercial. To maintain emission reductions will require continued focus and effort.

Overall pollutants. As Clean Air Hamilton has reported, overall levels of air pollutants, measured at the Ministry of the Environment's downtown monitoring station, have decreased steadily over the last 20 years and have shown the following reductions:

- over 40% in total suspended particulate (TSP) levels
- 33% in inhalable particulate matter (PM_{10})
- 34% in respirable particulate matter ($PM_{2.5}$)
- 41% in nitrogen dioxide (NO_2)
- 50% in sulphur dioxide (SO_2)
- 99% in total reduced sulphur odours
- 69% in benzene
- 55% in PAH (benzo[a]pyrene)

On the other hand, ground-level ozone (one of the key ingredients in summer smog) has shown the opposite trend, increasing between 10% and 30% across southwestern Ontario over the past decade. This pollutant comes primarily from coal-fired power plants and vehicles and much of it comes from the US Midwest. Other pollutants are on the rise, including benzene and benzo[a]pyrene[21].

Vision 2020's goal regarding air pollution is to have the best air quality of any city in Ontario. As a part of its annual report, Clean Air Hamilton compares a number of Ontario cities in terms of level of four different pollutants: fine particulate matter ($PM_{2.5}$), ground-level ozone, sulfur dioxide (SO_2), and nitrogen dioxide (NO_2). Ground-level ozone and nitrogen dioxide pose the most serious health risks. The following two charts compare Hamilton's level of ozone and nitrogen dioxide with six other Ontario cities.

[21] **Hamilton Air Monitoring Network,** Annual Air Quality Report 2010.

improving air quality continued...

Figure 15: 20-year trend for ground-level ozone

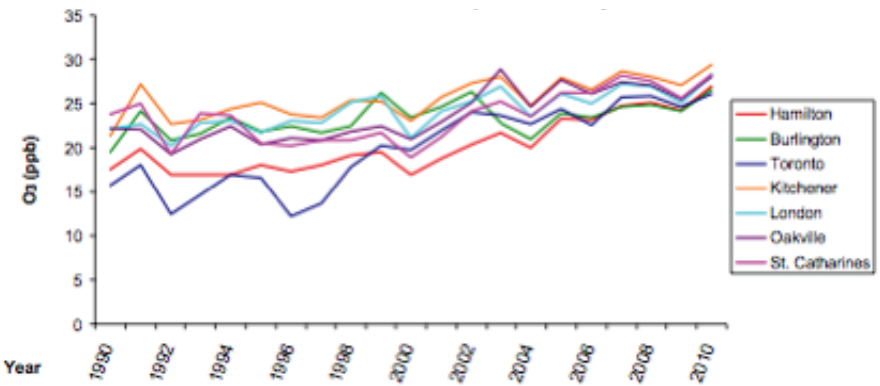
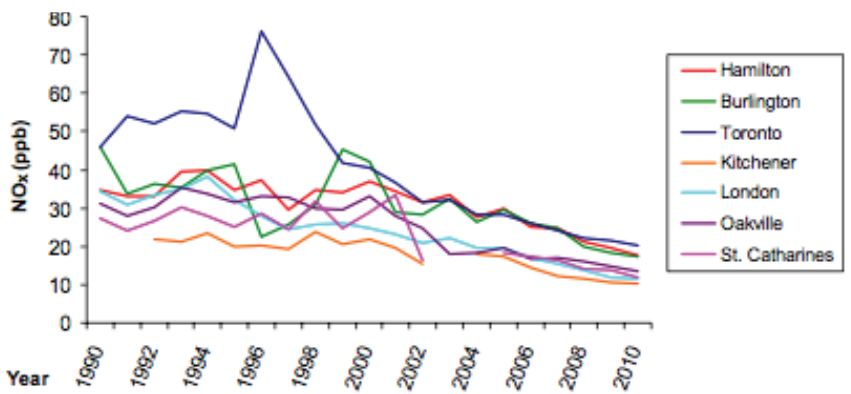


Figure 16: 20-year trend for NO_2



Source: Clean Air Hamilton, Progress Report 2010

While more detail on individual pollutants is available from Clean Air Hamilton, these charts show that Hamilton has similar levels of ground level ozone and NO_2 to other Ontario cities.

...improving air quality continued

Health outcomes. Current research now allows us to look at the health impacts of individual pollutants. This research shows that some pollutants are more dangerous to human health than others. For example, higher carbon monoxide (CO) levels are much more likely to have negative health effects than sulphur dioxide (SO_2). A forthcoming report from Clean Air Hamilton estimates the annual number of non-traumatic deaths due to current levels of individual pollutants. It finds that in 2005 (the most recent information available) an estimated 196 deaths were attributable to air pollution. Of these, almost 70 deaths were estimated to be attributable to ground level ozone, 50 deaths to nitrogen dioxide and 30 deaths to particulate matter ($PM_{2.5}$ and PM_{10}). When looking at admissions to hospital for non-morbid events, such as cardiovascular and respiratory problems, nitrogen dioxide had the greatest negative impact.

By neighbourhood. The air pollution monitoring stations in Hamilton that provide these data are operated by the Ministry of the Environment in downtown Hamilton, on the Mountain and in west Hamilton. There are 17 additional air monitoring stations in the industrial area of Hamilton that are operated by the Hamilton Air Monitoring Network.

Clean Air Hamilton and Rotek Environmental are developing mobile monitoring capacity: a van outfitted with a number of air pollution monitors that can be driven to specific locations and used to detect air quality issues. The mobile monitoring van is equipped with a GPS. In 2008, air quality data from 11 different neighbourhoods were collected. All eleven neighbourhoods showed some degree of health risk due to air pollution, particularly along major traffic corridors, including Highway 403, Centennial Parkway, the QEW and the Burlington Skyway Bridge[22].

Indicator #2: Greenhouse gas emissions

Measuring greenhouse gas emissions is important because these emissions lead to long-term sustained changes in the earth's climate, known as climate change. The City of Hamilton is a leader in Canada in its efforts to reduce greenhouse gas emissions, measure emission levels, set targets for reductions and, most recently, adopt a Climate Change Charter (for more information, visit **Climate Change Hamilton**).

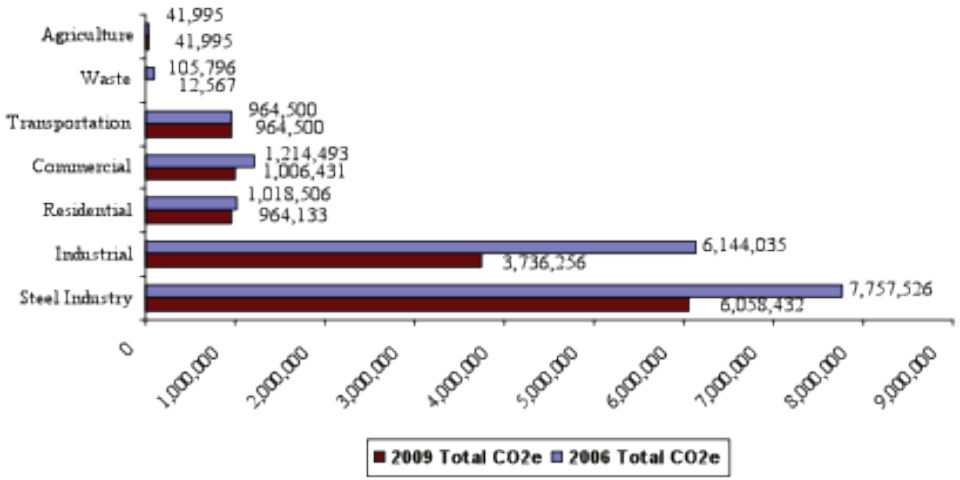
[22] **Full report available from Clean Air Hamilton Mobile Monitoring.**

improving air quality continued...

Overall emissions in Hamilton. Current estimates indicate that overall greenhouse gas emissions for the City of Hamilton have fallen by 26% since 2006, from an estimated 17.4 million tonnes to 12.9 million tonnes, thus exceeding the 20% reduction target from 2006 levels. The primary reasons for these reductions are the 2008–9 slowdown of the economy, improved energy efficiencies, capturing methane gas at the Glanbrook landfill site and the Province's actions to phase out coal in Ontario's energy mixture[23].

As the following figure shows, there were greenhouse gas reductions in the following sectors: residential (5%), commercial (17%), industrial (39%) and the steel industry (22%).

Figure 17: Changes in community emissions, 2006 – 2009



Source: Clean Air Hamilton

[23] City of Hamilton, Planning and Economic Development Department. Report October 11, 2011: 2010 Climate Change Actions. Report # PED11149.

Additional info & resources

Clean Air Hamilton

Government of Ontario, Ministry of the Environment

Environment Canada's Air Quality Health Index

Hamilton Air Monitoring Network

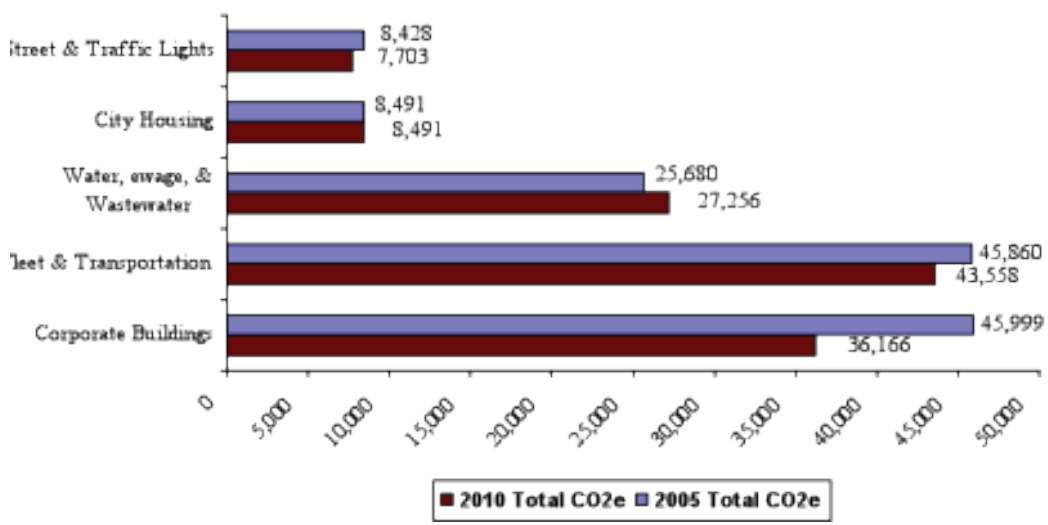
City of Hamilton, Climate Change Actions

Hamilton Climate Change Champions

...improving air quality continued

Emissions reductions by the City of Hamilton. Greenhouse gas emissions from the Corporation of the City of Hamilton make up approximately 1% of total emissions in the City of Hamilton. Between 2006 and 2010 these emissions decreased by 9%. The City has set a target of a 10% reduction from 2006 levels by the end of 2012 and a 20% reduction by 2020. As the following figure shows, these reductions were made through increased energy efficiency in corporate buildings and fleets.

Figure 18: Changes in emissions from the Corporation of the City of Hamilton, 2005 – 2010



Source: Clean Air Hamilton

Improving the quality of water resources

Indicator #1: Loading of contaminants (ammonia and phosphorous) to Hamilton Harbour

The amount of ammonia and phosphorous that enters Hamilton Harbour (also called "loading") is a good way to measure contamination. It is important to monitor ammonia levels since excess levels of nitrogen, which is contained in ammonia, will result in increased growth of algae which can reduce plant and animal life in the harbour. Ammonia itself is also toxic to fish when it is above recommended concentrations. While ammonia can come from various sources[24], this indicator looks at loading from the city's largest wastewater treatment plant.

The Lake Ontario ecosystem needs a certain amount of phosphorous to remain productive and provide food for aquatic life. However, lake levels of phosphorous are currently much higher than levels that would exist naturally. As is the case with ammonia, this excess promotes growth of algae. While phosphorous comes from sources that are similar to sources of ammonia, this indicator only looks at discharges from the city's largest wastewater treatment plant.

The Hamilton Harbour Remedial Action Plan has identified the following targets:

Ammonia:	Initial target: 2270 kg/day	Final target: 530 kg/day
Phosphorous:	Initial target: 140 kg/day	Final target: 60 kg/day

[24] Primarily municipal wastewater treatment plants, combined sewer overflows and local industries.

GOALS

To ensure the water quality in streams, Cootes Paradise, Hamilton Harbour, Lake Ontario and other surface bodies is generally good, that the water is clean and clear and that swimming is a safe activity.

To identify and virtually eliminate sources of potential chemical contamination.

To reduce the municipal water use by households and businesses.

To restore adequate habitat for fish and birds so that populations are healthy and productive.

To ensure the quality of groundwater throughout the city is suitable for drinking and is a source of pure recharge for surface waters.

To ensure that water quality is not affected by run-off and sedimentation due to changes in the landscape.

To make the Lake Ontario and Hamilton Harbour waterfronts accessible, safe and attractive for recreation.

How are we doing?

Ammonia and phosphorous

Making progress.

While we have not reached the final Remedial Action Plan targets, both ammonia and phosphorous loadings into the harbour have decreased by substantial amounts over the past four years.

Days beaches open for swimming

Making progress.

The three Lake Ontario beaches are open more days each year than the Remedial Action Plan target, which is 80% of days open between Victoria Day and Labour Day. Pier 4 beach exceeded the 80% threshold for the second time in three years. Bayfront Beach remains well below the Remedial Action Plan target.

Figure 19: Ammonia loadings 1993– 2011

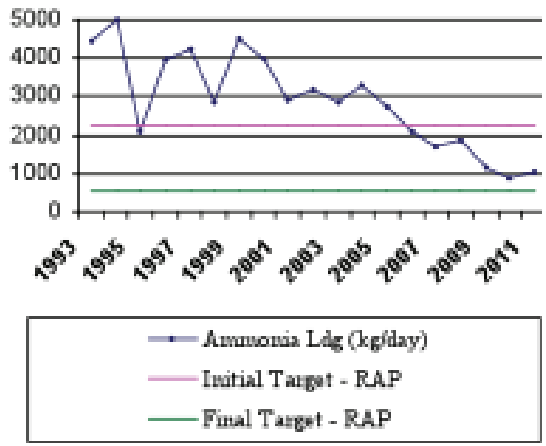
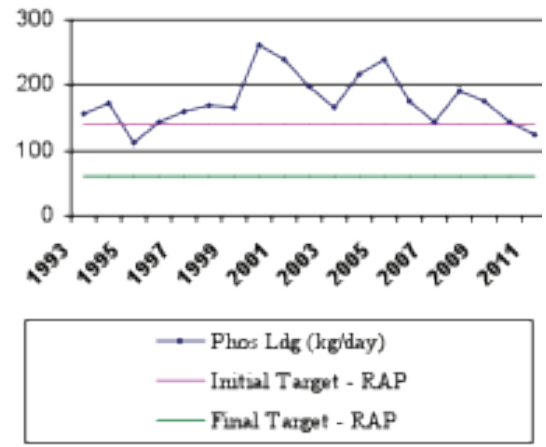


Figure 20: Phosphorus loadings 1993– 2011



Source: City of Hamilton, Public Works, Water and Wastewater Division

improving the quality of water resources continued...

Figures 19 and 20 show that ammonia loading of the harbour has continued to decline: the 2011 level is down 39% from the 2007 level, and down 74% from the 2000 level. It is still nearly double the final target level of 530 kg/day identified in the Hamilton Harbour Remedial Action Plan.

The loading of phosphorous has shown a 14% decline since 2007 and a 53% decline since the year 2000. Similar to ammonia levels, phosphorous remains at double the final Remedial Action Plan target level.

Indicator #2: Percentage of days beaches are open for swimming

The percentage of days that public beaches are open for swimming is important to track because it provides information on the quality of life in our community as well as the health of our local environment. Clean water and increasing tourism and recreation activities along Hamilton Harbour are Vision 2020 goals. These quality of life issues also influence the Local Economy goal to attract and retain a skilled workforce.

This indicator looks at the percentage of days between Victoria Day and Labour Day that beaches are open for swimming based on levels of bacteria. The Hamilton Harbour Remedial Action Plan has identified a target of 80% of days where it is safe to swim in the harbour.

The following chart presents information on two groups of public beaches:

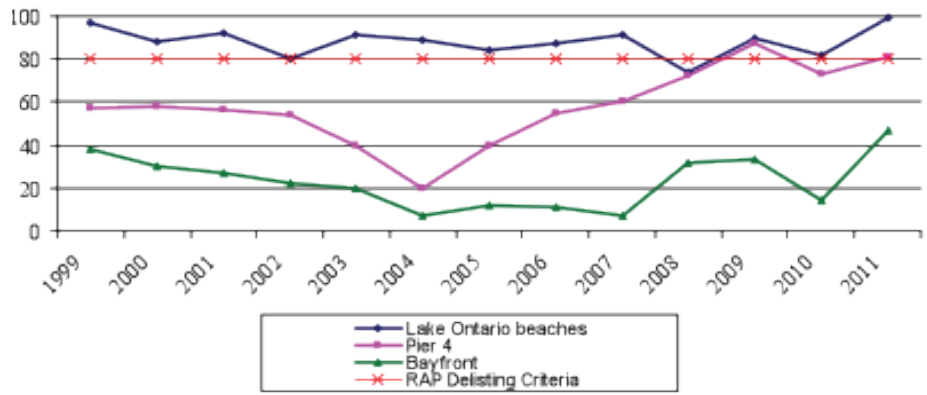
Lake Ontario beaches: Beach Boulevard, Van Wagner's and Confederation Park, which were open for swimming on 99% of days in 2011;

Hamilton Harbour beaches: Pier 4 and Bayfront. Pier 4 was open for swimming 81% of days in 2011, while Bayfront beach was open on 47% of days.

The chart does not include conservation area beaches at Christie, Binbrook and Valens – these beaches were open for swimming on 95% of days in 2011.

improving the quality of water resources continued...

Figure 21: Percentage days beaches open for swimming, 1999 – 2011



Source: City of Hamilton Public Health Services

The three Lake Ontario beaches have remained above the 80% threshold for the last decade, with the exception of 2008. Pier 4 has shown drastic improvement since bird exclusion measures were installed in 2005 to prevent geese from being on or near the beach. The Bayfront beach, while improving in 2011, was only open 47% of days, well below the target of 80% of days open.

Additional info & resources

City of Hamilton, Public Works, Water and Wastewater Division

City of Hamilton, Public Health Services Department. Information Report, November 28, 2011

Bay Area Restoration Council

Hamilton Harbour Remedial Action Plan

Government of Ontario, Ministry of the Environment

Environment Canada, Freshwater

Land use in the urban area

GOALS

To curb urban sprawl and suburban encroachment onto rural and agricultural lands.

To encourage development that makes efficient and economical use of infrastructure and services.

To minimize the environmental, social and financial costs of new development to the residents of the City of Hamilton.

To preserve our natural and historical heritage.

To redevelop Hamilton's central core as the city centre.

To reduce commuting distances.

To use alternative modes of movement, such as walking, bicycling, and public transit, everyday.

Indicator #1: Population density

Vision 2020 and sustainability principles direct that growth should occur in already developed areas within the city. This indicator looks at where Hamilton's population growth is taking place to see if we are meeting this goal.

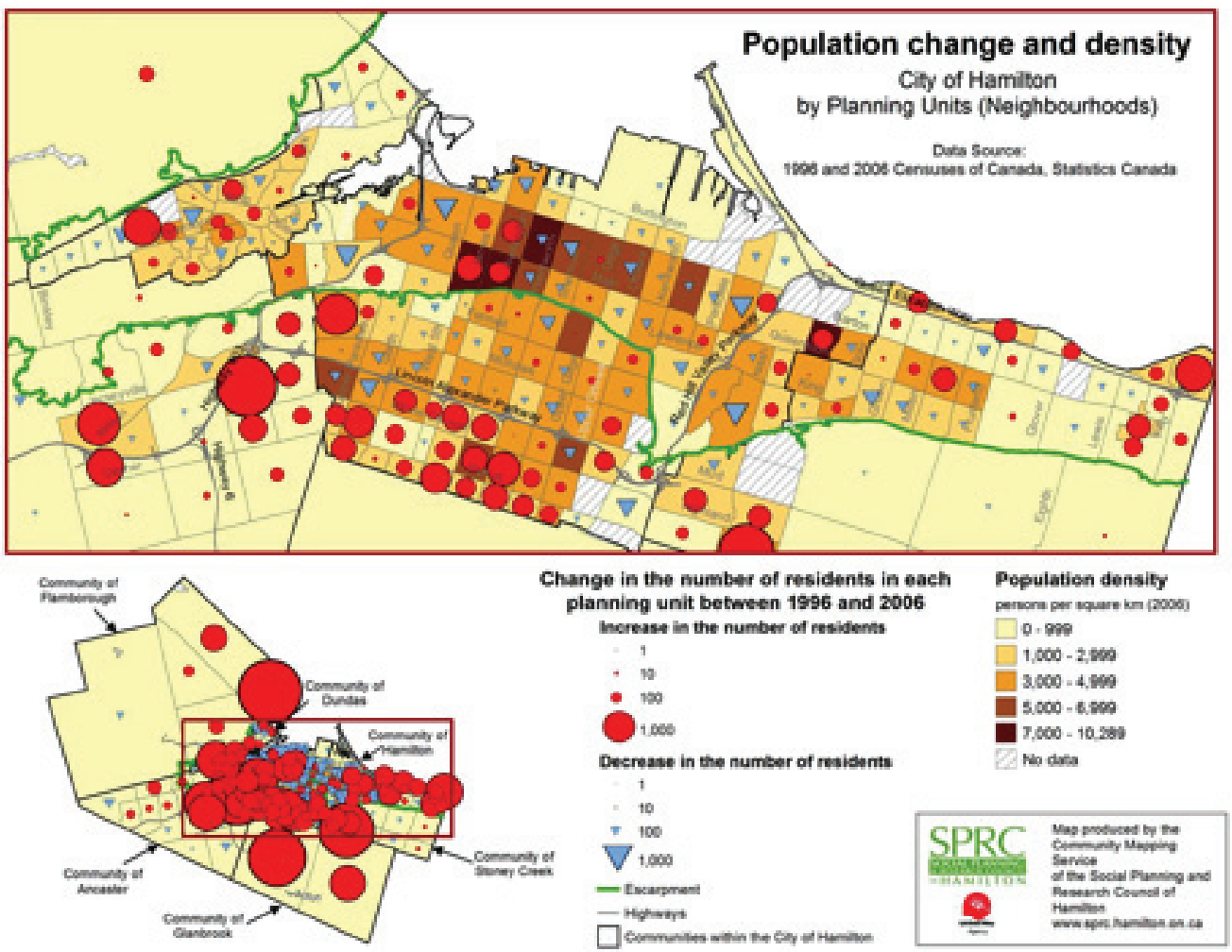
Hamilton's overall population grew by 3.1% from 2006 to 2011, to a total of 519,949 people. The population has grown 15% since 1991, when the population was 451,665. Hamilton covers 1,117.23 km^2, resulting in an overall density of 465.4 people/km^2 or 4.65 people/hectare.

Hamilton's density varies tremendously across the city. The more rural areas of Flamborough (440 km^2 or 39% of the entire city), and Glanbrook (278.4 km^2 or 25% of the entire city) cover a large area but have a much smaller population.

The following map shows that the majority of Hamilton's growth from 1996 to 2006 has occurred in the outlying and less dense neighbourhoods of Hamilton. The majority of lower city neighbourhoods are losing residents, while growth is concentrated along the edges of the city.

land use in the urban area continued...

Figure 22: Population change and density by neighbourhood, City of Hamilton, 1996 – 2006



Source: Social Planning and Research Council of Hamilton, Hamilton's Social Landscape, 2011.

...land use in the urban area continued

How are we doing?

Population density

Needs improvement.

This is a new indicator for Vision 2020, but the data from 1996 to 2006 shows growth patterns that are inconsistent with Vision 2020 principles: population growth around the edges of Hamilton and population decreases in the city centres.

New housing starts

Hard to say.

While the number of housing starts has remained consistent at between 1,500 and 2,300 units per year, over one-quarter of this growth is concentrated in five neighbourhoods. While the downtown area accounted for just over 5% of all new housing starts, multi-residential starts have increased by 91% over the last three years.

Many of the lower city neighbourhoods, four Mountain neighbourhoods and one in east Hamilton are above 5,000 people/km^2 or 50 persons/hectare, with the highest being the Durand neighbourhood, with a density of over 10,000 people/km^2, and the Riverdale West neighbourhood, with a density of 9,700 people/km^2. The following table shows the number of neighbourhoods that are in each category of density:

Figure 23: Population density in Hamilton

Density (people/km2)	0–500	500–1,000	1,000–3,000	3,000–5,000	5,000–10,000
Number of neighbour-hoods	74	8	72	57	13

Source: City of Hamilton, Planning and Economic Development Department

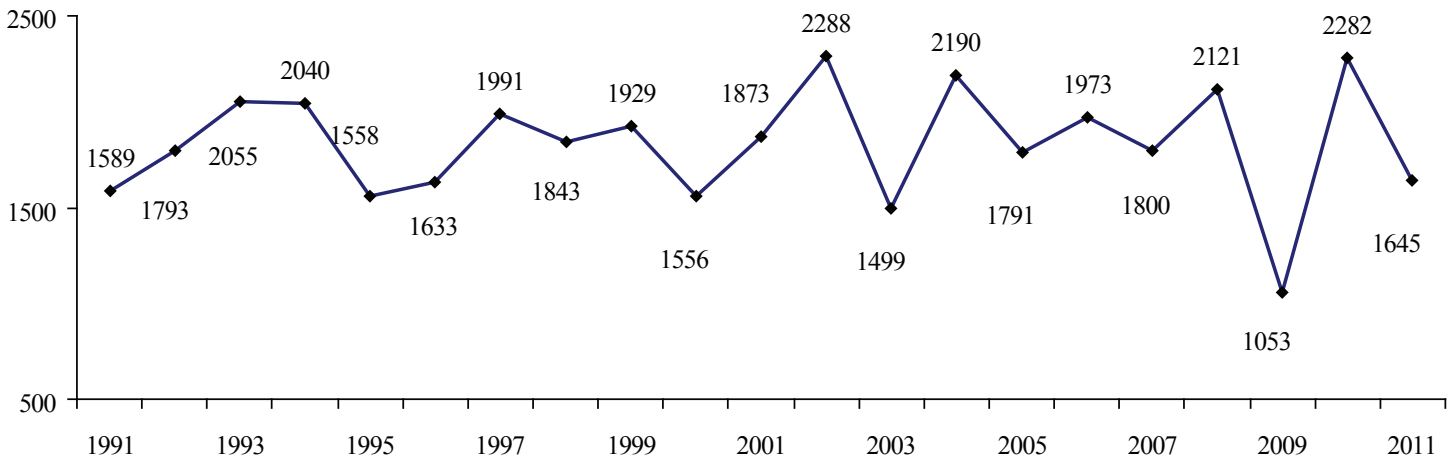
Indicator #2: New housing starts

New housing starts, which include conversions of properties to residential uses, are a leading indicator of a city's economy. For Vision 2020 and Hamilton's sustainability goals, not only does it matter if new housing is being built, but also where it is being built. Vision 2020's goals are clear about curbing urban sprawl and building where infrastructure currently exists.

land use in the urban area continued...

The following chart shows that the number of new housing starts for the City of Hamilton has fluctuated between 1,500 units and 2,300 units per year, with the exception of 2009 when there were only 1,053 starts – the lowest number of starts in over 30 years[25].

Figure 24: Housing starts, City of Hamilton



*Source: City of Hamilton, **Community Wellness Indicators**; City of Hamilton, **Keys to the Home***

Approximately two-thirds of all new housing starts for Hamilton are for detached, single unit housing, and approximately 90% of all housing starts are intended to be sold as owner-occupied housing as opposed to rental housing[26].

Figure 25 shows where new housing starts have occurred over the last ten years.

[25] City of Hamilton, 2003, Keys to the Home.
[26] City of Hamilton, 2003, Keys to the Home. Analysis based on new housing starts from 1991 to 2003.

...land use in the urban area continued

Figure 25: Location of new housing starts, City of Hamilton, 2001– 2011

Source: CMHC, Housing Start reports 2001 to 2011

land use in the urban area continued...

At 4,436 units, new housing starts in two neighbourhoods in Glanbrook have accounted for almost a quarter of the housing starts in the City of Hamilton. Three neighbourhoods had between 750 and 999 starts – one in Stoney Creek, one in Ancaster and one in Flamborough. When combined, these five neighbourhoods account for more than 28% of all housing starts in Hamilton over the last 10 years.

Downtown Hamilton – an area that is bounded by Queen Street, Wentworth Street, Barton Street and the Escarpment – is considered the city centre by Vision 2020 and includes Central, Beasley, Landsdale, Durand, Corktown and Stinson neighbourhoods. Downtown Hamilton accounted for 1,181 starts, or just over 5% of all housing starts.

In order to increase density and make the best use of infrastructure investment, multi-residential housing starts are a good indicator of progress. Multi-residential housing starts have increased to 42% of all housing starts in 2011 (or 695 units) from 35% of all starts in 2009 (364 units). This represents an increase of 91% in total number of multi-residential starts.

The following table presents the number of new housing starts by neighbourhood.

Figure 26: Number of housing starts by neighbourhood, 2001 – 2011

Number of new housing starts	<10	10-49	50-99	100-299	300-499	500-749	750-1,000	> 1,000
Number of neighbour-hoods	111	50	18	34	6	8	3	2

Source: City of Hamilton, Planning and Economic Development, special request

Additional info & resources

Canada Mortgage and Housing Corporation

Province of Ontario, Places to Grow

City of Hamilton, Land Use Planning, Ward Profiles

City of Hamilton, Planning and Economic Development, Building reports

Local economy

GOALS

To improve the ability of local businesses and organizations to compete both locally and globally and thus provide all citizens with an opportunity to have an income to meet, as a minimum, the necessities of life.

To increase the number of businesses and organizations that are non-polluting and those that actually produce quality of life products and services that control, reduce and prevent pollution.

To make Hamilton's labour force the best trained and adaptable in the world to ensure local business and organizations are competitive and innovative.

To eliminate all types of barriers to employment.

To promote Hamilton's environment as a desirable place to live and work.

Indicator #1: Rate of participation in the labour force

Measuring participation in the labour force is important because it provides information on how well the economy is functioning, and a healthy economy is necessary to achieve a sustainable community.

This indicator measures the percentage of the population over the age of 15 that is part of the labour force. In order to be considered part of the labour force, someone must be either employed or actively looking for work. People who are unemployed but are no longer looking for work are not counted as part of the labour force.

Figure 27 shows that the overall labour force participation rate for the Hamilton census metropolitan area (CMA), which includes Burlington and Grimsby, has consistently been between 64.3% and 69.3% since 1993. During the most recent recession there was a drop from participation rates of 67% in 2009 and 68% in 2010 to 65.5%. in 2011.

Figure 28 shows the unemployment rate, after peaking in 2009 at 9.1%, has recovered to a very competitive 6.3% for 2011. The number of people employed in the Hamilton CMA has continued to grow, reaching 390,800 in January 2012 – an increase from 378,000 in July 2011 and 371,000 in July 2010.

Overall participation numbers are for the total population ages 15+, which includes seniors and students. The charts also present data on people aged 25–54, or "prime working age", which shows much higher rates of labour force participation and lower unemployment rates than the total population.

local economy continued...

Figure 27: Hamilton CMA participation rates for ages 15+ and 25 – 54, 1987 – 2011

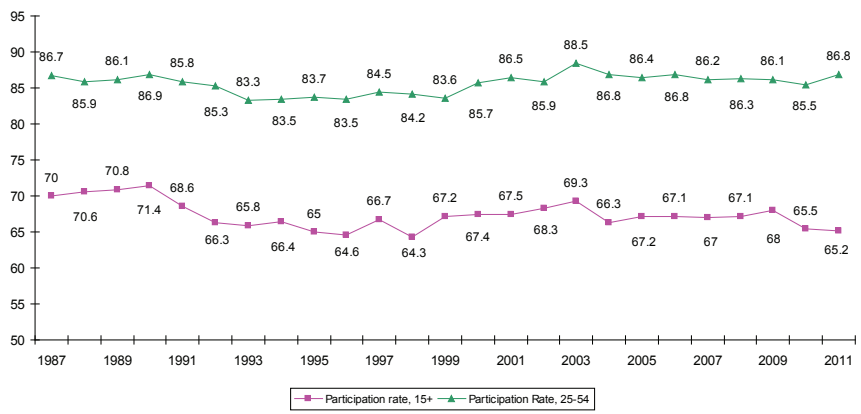
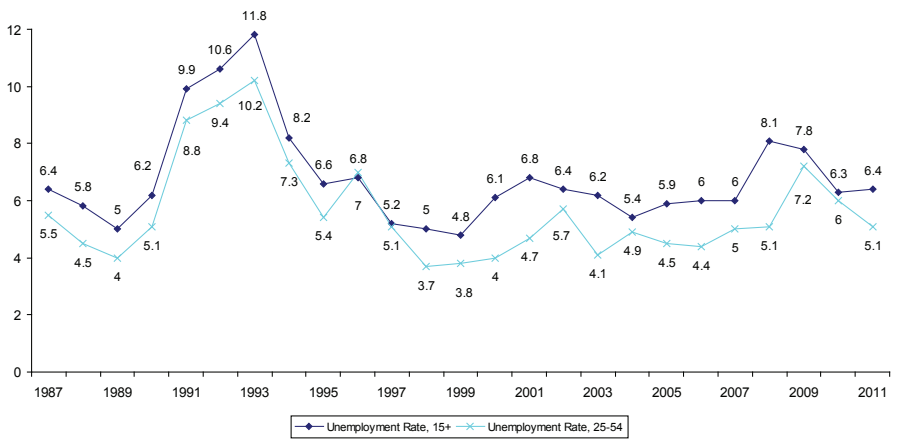


Figure 28: Hamilton CMA unemployment rates for ages 15+ and 25 – 54, 1987 – 2011



Source: Statistics Canada, Labour Force Information. Cansim Table: 282-0116

By neighbourhood. The most recent information about labour force participation rates and unemployment rates comes from the 2006 census. An update to this information is expected to be released in June 2013.

In 2006, and presumably today, Hamilton neighbourhoods vary greatly in labour force participation rates and unemployment rates. The following chart shows some of these disparities. In general, the neighbourhoods with the lowest participation rates tend to also have high numbers of seniors or retirement homes. Most Hamilton neighbourhoods had participation rates between 55% and 75%. There were, however, 19 neighbourhoods with rates below 55%, and five neighbourhoods below 50%.

How are we doing?

Labour force participation

Hard to say.

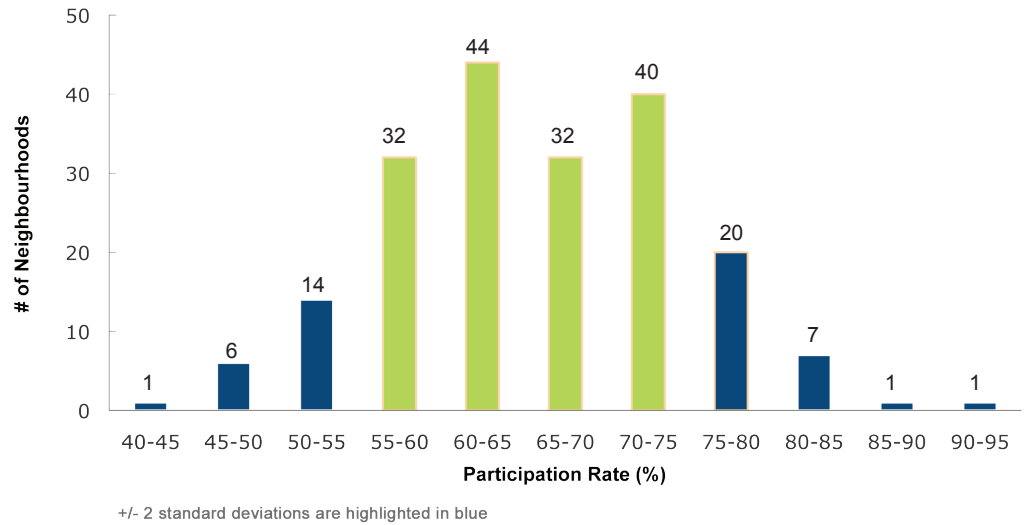
Since the last Vision 2020 update , the labour force participation rate has decreased from 67% to 65%. After spiking at 9.1% during the recession of 2009, the unemployment rate has declined to 6.3% and the number of people employed in Hamilton has exceeded pre-recession levels. There is significant variation between Hamilton neighbourhoods in both labour force participation rates and unemployment rates.

Building permits

Making progress.

The value of building permits has increased by 39% over the past decade.

Figure 29: Labour force participation rates by the number of Hamilton neighbourhoods, 2006



Source: Statistics Canada, 2006 Census. Data provided by the City of Hamilton.

Indicator #2: Building permits

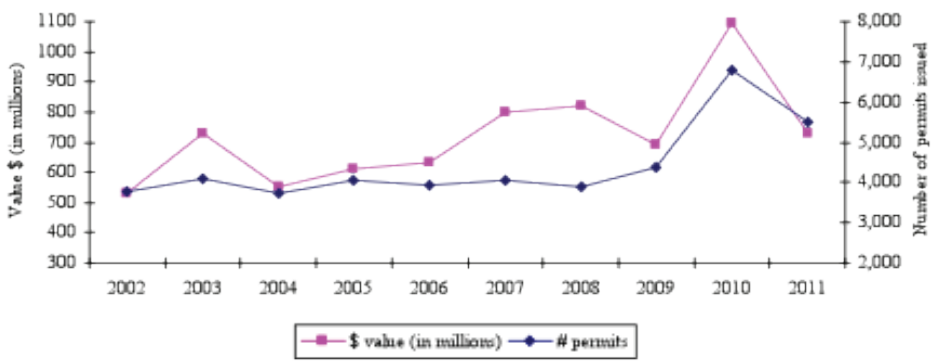
The overall value of building permits for a city is considered a "leading indicator" of the local economy. This indicator looks at the total value of building permits when they are granted. It includes residential, commercial, institutional/government and industrial permits. In 2011, residential permits accounted for 59% of permit value, while institutional/government accounted for 18%, commercial 17% and industrial 6%[27].

[27] City of Hamilton, Summary of Building and Conversion, December 2011.

local economy continued...

The following figures show that the value of building permits in Hamilton has trended upward over the past decade[28]. The 2002 to 2004 average was $603 million and the 2009 to 2011 average was $840 million – an increase of 39%.

Figure 30: Value of building permits by year (millions of $), City of Hamilton, 2002 – 2011



Source: City of Hamilton, ***Monthly Building Reports***

Figure 31: Number and value of building permits by year (millions of $), City of Hamilton, 2002 – 2011

Year	Number of permits issued	Cash value ($ millions)
2002	3,779	531.5
2003	4,100	726.9
2004	3,745	551.5
2005	4,063	610.2
2006	3,924	633.9
2007	4,045	801.7
2008	3,885	818.5
2009	4,360	692.4
2010	6,782	1,096.3
2011	5,484	731.0

Source: City of Hamilton, ***Monthly Building Reports***

[28] **City of Hamilton, Monthly Building Reports. For a monthly analysis of building permits, see the City of Hamilton's Community Wellness Indicators.**

...local economy continued

Additional info & resources

Statistics Canada, Labour Force Survey

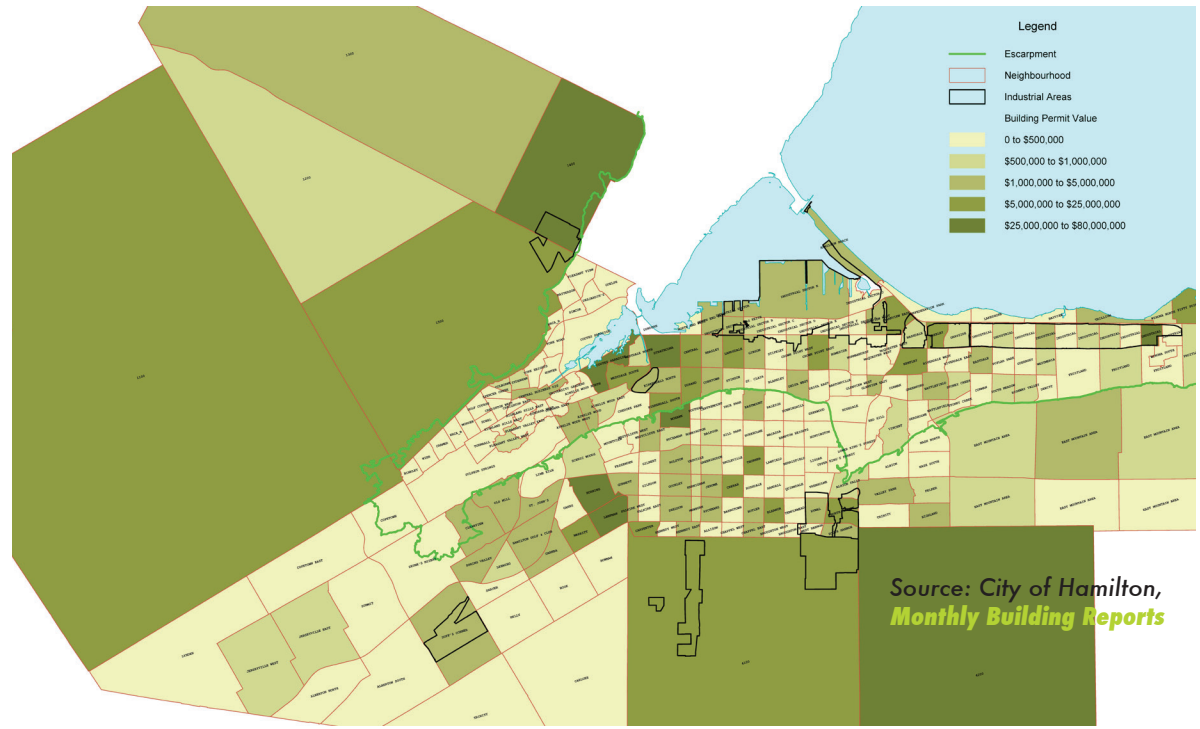
City of Hamilton, Community Wellness Indicators

City of Hamilton, Economic Development Department, Invest in Hamilton

Workforce Planning Hamilton

By neighbourhood. Figure 32 shows that building permits are distributed very unequally across Hamilton: over 50% of neighbourhoods had total building permits of less than $500,000 while eight neighbourhoods had total permits of over $25 million, accounting for 49% of total permit activity. These eight neighbourhoods were located around Mohawk College, McMaster University, the Ancaster Meadowlands, one industrial neighbourhood in the North End, Waterdown and Binbrook. Binbrook had the highest total of any planning neighbourhood, with $75,950,000 in permits.

Figure 32: Building permit value ($), City of Hamilton, 2011



*Source: City of Hamilton, **Monthly Building Reports***

Natural areas and corridors

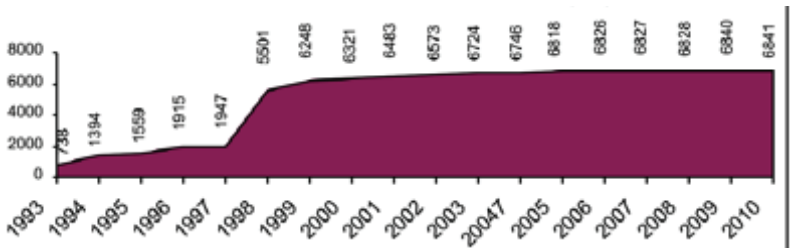
Indicator #1: Cumulative area of naturally significant areas protected

Environmentally significant areas (ESAs) are natural areas that have been identified as significant and worthy of protection based on three criteria: ecology, hydrology and geology. Over 20% of the city (23,000 hectares) has been identified as environmentally significant and many of these areas are privately owned. Private land stewardship is one way to protect ESAs.

This indicator measures the cumulative area of ESAs that have been protected, either by private stewardship or under agreements in the watershed areas of the Hamilton Conservation Authority, Conservation Halton, Niagara Peninsula Conservation Authority and Grand River Conservation Authority, since these agencies are committed to environmental stewardship.

As the following chart shows, the number of hectares of ESAs protected has continued to increase. Since 2006, an additional 14.6 hectares have been protected. This means that approximately 30% of ESAs in Hamilton are protected through stewardship agreements.

Figure 33: Cumulative area of ESAs protected (hectares)



Source: Vision 2020 Update 2007, Hamilton Conservation Authority, Conservation Halton, Grand River Conservation Authority, Niagara Peninsula Conservation Authority

GOAL

To develop and protect a system of interconnected natural areas that provides for the growth and development of native plants and wildlife and, where appropriate, provides access for all citizens of the City of Hamilton.

Additional info & resources

Hamilton Conservation Authority

Conservation Halton

How are we doing?

ESAs protected

Making progress.

The number of environmentally sensitive areas has increased over the past four years, albeit at a slower rate than previous reports.

Tree cover

Hard to say.

This is the first year for this indicator. Future reports will be able to compare changes to this baseline information.

Indicator #2: Percentage tree cover

This indicator looks at the amount of tree cover or canopy across the City of Hamilton. It is a new indicator for Vision 2020, and made possible largely because of new technology that allows for analysis at the neighbourhood level. Tree coverage is an important variable for understanding our natural areas and corridors. Trees improve habitats and air quality and reduce temperatures.

The overall tree coverage for the City of Hamilton is 21%. This varies greatly across the city; areas like the Dundas Valley Conservation Area have over 90% tree coverage while many of the more industrial areas in Hamilton are well below 10%.

Figure 34: Percentage Tree Cover by Number of Neighbourhoods

	0 - 9.9%	10 – 19.9%	20 – 39.9%	40 – 59.9%	Over 60%
# of neighbourhoods	54	99	54	21	4

Personal health and well-being

Indicator #1: Number of low birth weight babies per 1,000 live births

This indicator tracks the percentage of live births each year in the city weighing less than 2,500 grams compared to the total number of live births. Low birth weight can be associated with higher rates of developmental problems, long term health problems and learning disabilities. This indicator reflects both the reproductive health of the population, since the overall health of the mother and her environment affect birth weight, and the effectiveness of a society's reproductive technology.

As Figure 35 shows, Hamilton's overall rate of low birth weight babies has been relatively stable since 1997 but above the target rate of 4%.

In 2008, 6.1% of babies born in Hamilton had a low birth weight. This is similar to Ontario overall, where 6.3% of babies had a low birth weight. The low birth weight has fluctuated between 1986 and 2008, ranging from a low of 4.9% in 2001 to a high of 6.8% in 2004 and 2005.

Twins or triplets are more likely to be low birth weight – the low birth weight rate for full-term single babies is 1.4% compared with 6.1% of all babies. Maternal age may also affect the low birth weigh rate. In 2006, 7.2% of babies born to mothers 35-39 years of age and 9.8% of babies born to mothers 40 years of age and older had a low birth weight in Hamilton. In comparison, just under 6% of babies born to Hamilton mothers 34 years of age and younger had a low birth weight.

GOALS

To provide adequate and appropriate health care for all citizens.

To increase the number of years of good health for all citizens by reducing illness, disability and premature deaths.

To promote health and prevent disease and injury.

To improve personal health status.

To develop a caring community that gives support and opportunity to all its members.

To reduce the number of families living in poverty.

To develop the social and physical environments to create a barrier-free community that allows all citizens to participate fully in community life.

How are we doing?

Low birth weight

Needs improvement.

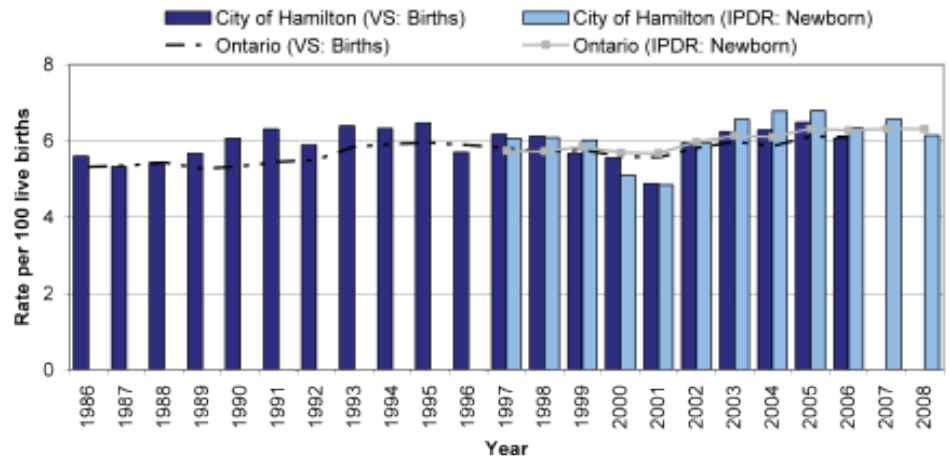
The number of low birth weight babies varies substantially by neighbourhood and is not decreasing.

Overweight and obese

Needs improvement.

The percentage of adults who are overweight or obese has increased over the last decade, and is significantly higher than the provincial average.

Figure 35: Low birth weight rate (weighing less than 2500g[29])



Source: Vital Statistics: Births and inpatient discharges, Ontario Ministry of Health and Long-Term Care. IntelliHEALTH ONTARIO, August, 2009. NOTE: VS: Vital Statistics; IPDR: Hospital Inpatient Discharge Record

By neighbourhood. The City's Public Health Department has found that low birth weight varies by geographic location. Between 2004 and 2008 low birth weight ranged from a low of 4.8% in some areas of the city to a high of 9.0% in other areas.

The Hamilton Spectator series, *BORN*, recently showed that of the 18 neighbourhoods in the City of Hamilton with the highest rate of low birth weight babies, all 18 were in the former City of Hamilton and 14 of them were located in the lower city. While Hamilton's overall average is 6.1%, *BORN* identified 11 Hamilton neighbourhoods with rates over 10% using data from 2006–2010. One neighbourhood had a rate of over 15%[30].

[29] Excludes births weighing less than 500g because classification of these births as live or still births varies over time.
[30] Hamilton Spectator, *BORN*, November 26, 2011.

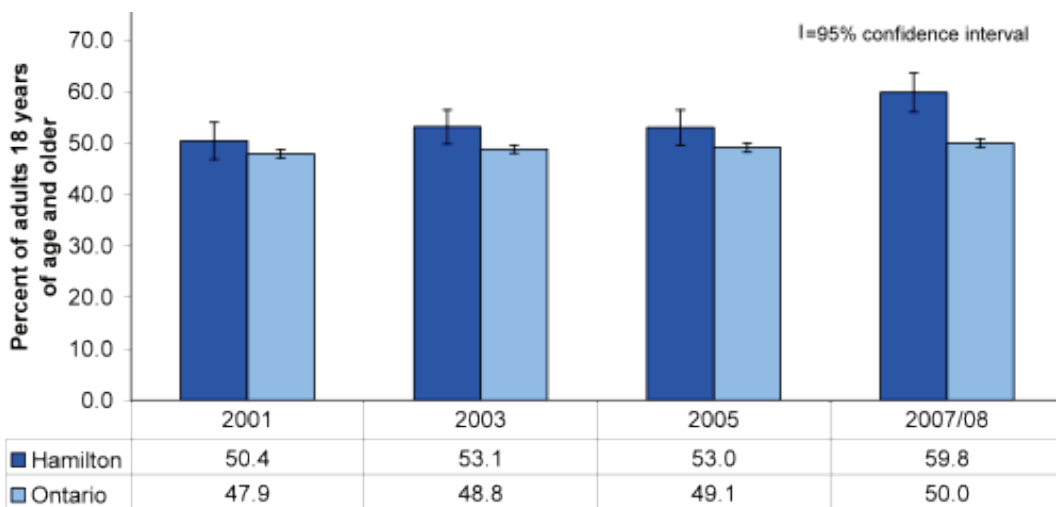
personal health and well-being continued...

Indicator #2: Percentage of the population overweight or obese

This indicator tracks the number of people who are overweight or obese based on their self-reported height and weight. Height and weight are then converted into a body mass index (BMI)[31]. A BMI of between 25 and 29.9 is considered overweight, while an index of over 30 is considered obese.

As the following chart shows, the percentage of Hamiltonians over the age of 18 who are overweight or obese has increased since 2001. In 2007/8, 59.8% of Hamilton adults were overweight or obese, significantly higher than the Ontario rate of 50.0%.

Figure 36: Percent of adults 18 years and older who are overweight or obese[32], City of Hamilton and Ontario, 2001 – 2008



	2001	2003	2005	2007/08
Hamilton	50.4	53.1	53.0	59.8
Ontario	47.9	48.8	49.1	50.0

Source: Canadian Community Health Survey 2007-8, Ontario Ministry of Health and Long-term Care

[31] To calculate body mass index, weight (in kilograms) is divided by height (in metres). The result is then squared.

[32] Based on self-reported height and weight. Excludes pregnant and breastfeeding women and people shorter than 3' and taller than 6' 11"

...personal health and well-being continued

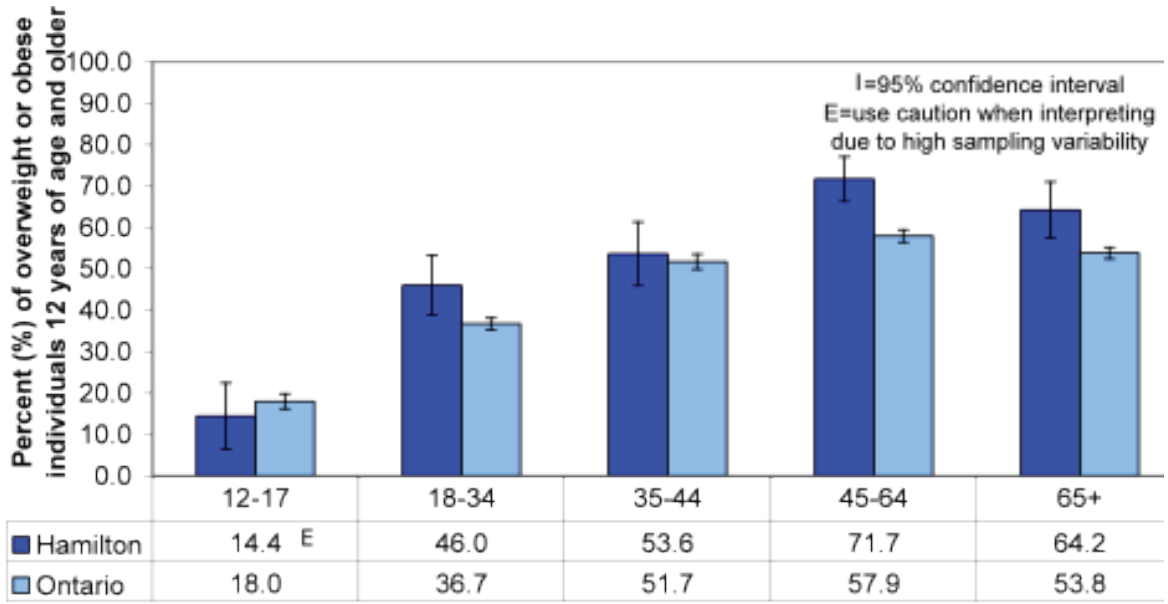
Additional info & resources

City of Hamilton, **Public Health Services**

The Hamilton Spectator, ***BORN***

Province of Ontario, **Ministry of Health**

Figure 37: Percent 12 years and older who are overweight or obese[37], City of Hamilton and Ontario, 2001 - 2008



	12-17	18-34	35-44	45-64	65+
Hamilton	14.4 E	46.0	53.6	71.7	64.2
Ontario	18.0	36.7	51.7	57.9	53.8

Source: Canadian Community Health Survey 2007-8, Ontario Ministry of Health and Long-term Care

Figure 37 shows that while Hamilton adolescents have similar rates of being overweight and obese to provincial averages (14.4%), they are significantly less likely to be overweight or obese than Hamilton adults. Hamilton's rates of being overweight and obese are significantly higher than provincial averages for the age ranges 18–34, 45–64 and 65+.

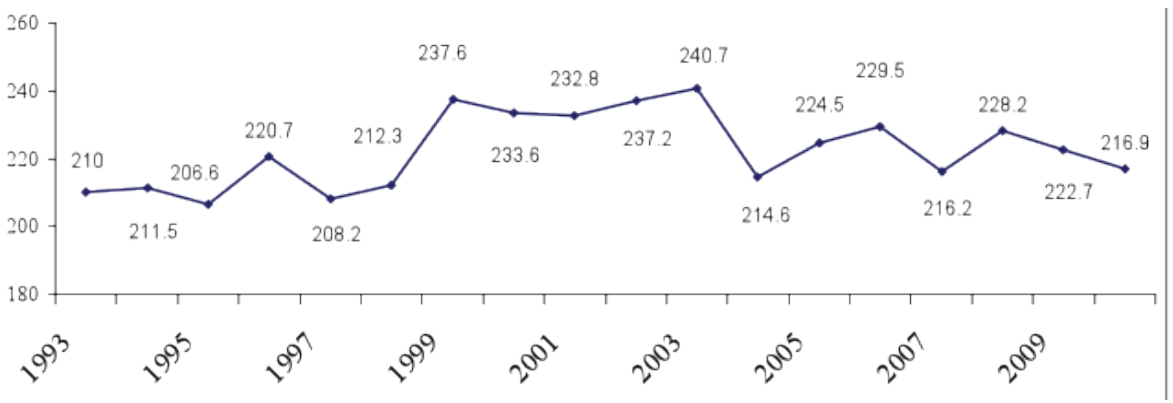
Reducing and managing waste

Indicator #1: Residential waste generated and waste diversion rate

This indicator tracks the total amount of waste generated by Hamilton residents, including waste that is to be recycled, composted or otherwise diverted from landfill. The target for this theme area is to reduce the overall amount of waste produced and then divert more of the waste that remains from landfill.

The following graph reports the total amount of waste produced in tonnes since 1993. It shows there has been progress made on this indicator since the early 2000s, when the total tonnes of waste diverted and disposed exceeded 235,000 tonnes annually. The current levels are more similar to, but slightly above, the levels of the mid-1990s.

Figure 38: Tonnes of waste produced in the City of Hamilton (in 000s)



Source: Vision 2020 Update 2007, MPMP Hamilton Reporting 2011

GOALS

To reduce the amount of waste generated by residents, businesses and government in the city.

To virtually eliminate hazardous waste in the City of Hamilton.

To safely and responsibly manage waste.

...reducing and managing waste continued

How are we doing?

Waste produced and diverted

Making progress.

The diversion rate is increasing. While we have not reached the 65% target set by City Council, the steady increases indicate we're making progress. Additionally, the declining rates of overall waste production and disposal are encouraging.

It is also important to track the amount of waste that is diverted from landfill, primarily through recycling or Hamilton's green cart program for organic waste. Since 2001, the percentage of waste diverted from landfill has steadily increased. In 2010, 49% of waste was diverted from landfill compared to 47% in 2009 and only 18% in 2001. Prior to 2003, non-recyclable waste was incinerated at the Solid Waste Reduction Unit (SWARU).

The following chart shows that the percentage of waste that is recycled has increased over the last decade. In 2002, 13% of waste was recycled while in 2010, 22% was recycled. Composting of waste has increased even more, from 6% in 2002 to 24% in 2010. When combined, these efforts have decreased the amount of waste that is disposed of in landfills from well over 200,000 tonnes in 2002 to just over 105,000 tonnes in 2010.

Hamilton City Council set an aggressive target of 65% waste diversion. While Hamilton continues to divert more waste from landfill, we are falling short of the target set by Council.

reducing and managing waste continued...

Figure 39: Waste produced and diverted, City of Hamilton, 1993 – 2010

Year	Total waste	% to landfill	% to SWARU	% composted	% recycled	Other diverted	Rate of diversion[33]
1993	209,994	42	49	0	9	--	9
1994	211,525	44	47	0	9	--	9
1995	206,625	46	45	0	9	--	9
1996	220,650	35	55	1	10	--	10
1997	208,235	24	61	2	12	--	15
1998	212,675	26	60	3	11	--	14
1999	237,610	24	61	2	12	--	14
2000	233,579	26	57	3	14	--	17
2001	232,768	26	56	5	13	--	18
2002	237,213	29	51	6	13	2	21
2003	240,725	77	0	6	17	0	24
2004	214,600	71	0	11	17	1	28
2005	224,500	70	0	11	18	1	30
2006	229,500	60	0	18	20	2	40
2007	216,200	58	0	20	20	2	42
2008	228,200	56	0	22	20	2	44
2009	222,700	53	0	24	21	3	47
2010	216,850	51	0	27	22	1	49

Source: City of Hamilton, Public Works, Waste Management

[33] **Rate of diversion does not include waste that was sent to SWARU for incineration. SWARU was closed permanently in December 2002.**

Additional info & resources

City of Hamilton Waste Management Annual Reports

City of Hamilton Solid Waste Management Master Plan

Safety and security

GOALS

To develop the social and physical environments that allow all citizens to participate fully and safely in our community, schools and workplaces.

To have effective plans that identify, reduce and manage risks.

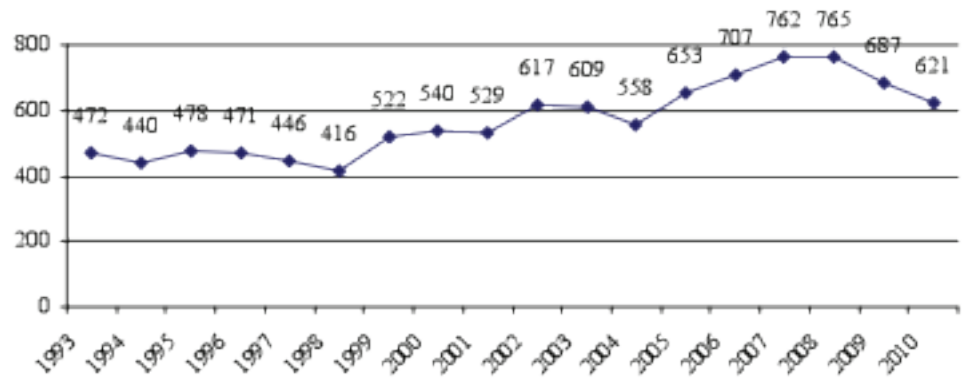
To prevent violence and abuse in our community.

Indicator #1: Number of robberies

A non-violent environment is integral to achieving the goals of Vision 2020. Safety is important to the overall health of the community as well as individual perceptions of quality of life. This indicator measures the total number of robberies in the community and, while it is not necessarily representative of all types of crime, it was chosen by a community process to be a good indicator for overall community safety. Robberies are thefts involving physical violence, threat of violence or use of arms.

The overall violent crime rate and property crime rates have both been decreasing since 1998, by 31% and 18% respectively. As the chart below shows, over the last two years robberies have declined by 18% to 621 from the peak of 765 robberies in 2008.

Figure 40: Number of robberies, City of Hamilton, 1993 - 2010



Source: Hamilton Police Services, Annual Reports 2008-2010. Vision 2020 Sustainability Indicators 2008

safety and security continued...

Indicator #2: Total occurrences of domestic violence reported to the police

Domestic violence is a form of violence that affects many couples and families across our community and cuts across social, economic and cultural groups. It includes physical, sexual and psychological abuse in an intimate relationship. While violence and abuse victims can be men or women, Hamilton Police Services reports that the overwhelming majority of violence involves men abusing women[34].

Obtaining accurate information about the total number of incidents of domestic violence is very difficult due to a lack of reporting. Some research has shown that reporting of violent abuse is likely below 25%, and could be much lower[35]. As the following figure shows, the number of occurrences of domestic violence in Hamilton reported to police has increased by over 70% since 2007. The number of people charged as a result of these occurrences has increased 24% over the same time frame.

[34] Hamilton Police Services, Domestic Violence.

[35] Statistics Canada, Family Violence in Canada, 2010.

How are we doing?

Number of robberies

Making progress.

The number of robberies has declined by 18% over the last four years and overall crime rates have decreased over the Vision 2020 time frame.

Domestic violence reported

Needs improvement.

With an increase in occurrences of over 70% in the last four years, the domestic violence trend is clearly headed in the wrong direction.

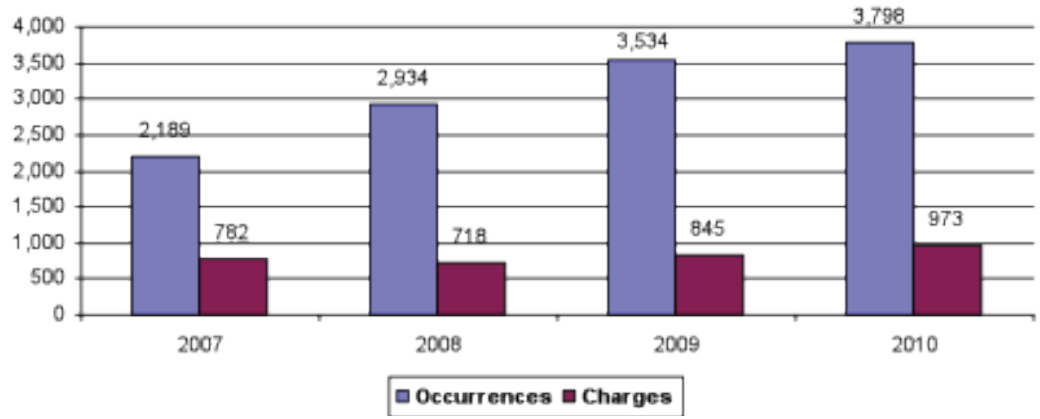
Additional info & resources

Hamilton Police Services, Annual Reports

Statistics Canada, Family Violence in Canada

Woman Abuse Working Group

Figure 41: Domestic violence occurrences and charges, City of Hamilton, 2007 - 2010



Conclusion

This report has examined the 14 theme areas of Vision 2020 by presenting trends for each of the 28 indicators. The overall findings of this analysis show that there has been progress made on approximately half of the indicators since the Sustainability Indicators 2008 report. About one-third of the indicators fell into the "hard to say" category, with six indicators needing improvement.

If we return to the four principles that Vision 2020 was founded on, we can see some patterns emerge with regard to progress and lack of progress.

Fullfillment of human needs for peace, clean air and water, food, shelter, education, arts, culture, and useful and satisfying employment.

This report showed clear and continued progress in many of these areas, particularly clean air and water, but also in the burgeoning arts sector with its increasing number of artists and heritage buildings, as well as employment and unemployment rates that are returning to – and even exceeding – pre-recession levels. In terms of education, the overall number of Hamiltonians who are graduating from high school is increasing, but this report found that these results are split along neighbourhood lines.

Maintenance of ecological integrity through careful stewardship, rehabilitation, reduction in wastes and protection of diverse and important natural species and systems.

Indicators that measured this principle consistently showed strong progress. The steady increase in protected environmentally significant areas coupled with continued improvement in waste diversion and early results of tree cover measurement have demonstrated steps forward over the past four years.

Provision for self-determination through public involvement in the definition and development of local solutions to environmental and developmental problems.

Indicators for this principle showed mixed results. On the one hand, there is progress to build on: Hamiltonians have a sense of belonging to their communities that is among the highest of any city in Canada. The progress that is identified above, particularly in the environmental sector, has required local solutions to be developed and has relied on public involvement and engagement.

On the other hand, this report also showed that wide disparities exist between Hamiltonians that hold us back as a community and limit the ability of some in the city to be involved. Indicators showed divides along neighbourhood lines as well as between sub-populations of Hamiltonians, be they recent immigrants, lone parents, survivors of abuse or children.

...conclusion continued

Achievement of equity with the fairest possible sharing of limited resources among contemporaries and between our generation and that of our descendants.

Indicators that looked at measures of equity showed the most challenges. Wide differences in rates of low income, low birth weights across neighbourhoods, variance among school readiness for children, neighbourhood differences in high school graduation rates, and increasing domestic violence occurrences all require improvement if we are to be consistent with this principle.

In addition to reviewing progress on the principles of Vision 2020, there are some additional conclusions we can draw from the information.

Progress on many of the environmental indicators was particularly strong. With improvements to air quality, reductions in greenhouse gas emissions, increasingly protected land, improved water quality (both discharges into the harbour, and days the beaches are open for swimming) and declining amounts of waste being sent to landfills, this sector showed the most consistent progress.

There continues to be a tension between environmental, social, and economic effects for decision-making and planning. Vision 2020 presents a framework for planning that requires balanced decision-making so that all three outcomes – environmental, social and economic – are considered. It is clear from this report that there are still significant tensions in trying to strike that balance. Whether it is achieving increased density in the city, finding ways to increase the number of new housing starts in already developed areas as opposed to greenfields, consuming less energy, or potentially re-designating large amounts of agricultural land for employment lands, the struggle to balance these three outcomes is still very relevant today.

Several of the indicators have shown very little change over the past decade. In particular, the indicators for Changing our Mode of Transportation have remained at very similar levels over the past ten to fifteen years. While both the overall ridership numbers for the HSR and the percentage of people taking transit, walking or biking to work have not decreased, they also have not improved as many had hoped they would. Similarly, consuming less energy remains largely dependent on weather patterns to determine use. With our society's increasing reliance on power – both hydro and gas – these areas warrant continued emphasis and attention.

There were some serious challenges identified throughout this report that focus on the social and economic well-being of the people of Hamilton. With disparities in income, increasing numbers of domestic violence occurrences and serious challenges around health, including rising rates of overweight and obesity, the well-being of many Hamiltonians is threatened.

conclusion continued...

Finally, there were some common findings around Hamilton's children. In some neighbourhoods, indicators show low levels of school readiness, high levels of child poverty, higher rates of low birth weight babies, and variation in high school completion. This demonstrates that Hamilton's focus on its children – becoming the best place to raise a child – is necessary, warranted and needs to continue.

References

Centre for Community Study, 2012. Hamilton's Creative Industries. Accessed Feb 2012.

City of Hamilton. Community Wellness Indicators. Accessed March 2012.

City of Hamilton. Monthly Building Reports. Accessed Feb 2012.

City of Hamilton. Our Community Culture, Developing a Cultural Community Plan. Accessed Feb 2012.

City of Hamilton. Waste Management Annual Reports. Accessed March 2012.

City of Hamilton. Solid Waste Management Master Plan. Accessed March 2012.

City of Hamilton. Transportation Master Plan. Accessed Feb 2012.

City of Hamilton, 2003. Keys to the Home: A Housing Strategy for Hamilton. Accessed March 2012.

City of Hamilton, 2008. Vision 2020: Sustainability Indicators Report. Accessed March 2012.

City of Hamilton, 2008. Vision 2020: Indicators Report Card. Accessed March 2012.

City of Hamilton, 2011. Planning and Economic Development, Report: 2010 Climate Change Actions, PED 11149, Date: October 11, 2011.

City of Hamilton, 2011. Public Health Services Department. Days Beaches Open, Information Report, November 28, 2011

City of Hamilton, 2011. Municipal Performance Measurement Program Update. Accessed Feb 2012.

Hamilton Air Monitoring Network, 2010. Annual Air Quality Report 2010. Accessed Feb 2012.

Hamilton Community Foundation, 2010. Vital Signs. Accessed March 2012.

Hamilton Community Foundation, 2011. Vital Signs. Accessed March 2012.

Hamilton Police Services, 2008-2010. Annual Reports. Accessed March 2012.

Hamilton Spectator, 2010. Code Red. Accessed March 2012.

references continued...

Hamilton Spectator, 2011. BORN. Accessed March 2012.

Hill Strategies Research Inc., 2005. Artists by Neighbourhood in Canada. Statistical Insights on the Arts: Issue 4 (2). Accessed Feb 2012.

Hill Strategies Research Inc., 2006. Artists in Large Canadian Cities. Accessed Feb 2012.

Kitchen, P. and Williams, A., 2012. Sense of community belonging and health in Canada: A Regional Analysis. Social Indicators Research: Volume 107(1), pp. 103 – 126

Social Planning and Research Council, 2009. Incomes and Poverty in Hamilton. Accessed Feb 2012.

Social Planning and Research Council of Hamilton, 2012. Neighbourhood Profiles. Accessed March 2012.

Statistics Canada, 2006 Census. Community and Census Tract Profiles. Accessed Feb 2012.