

JULY 2005

## HOW HAMILTON WORKS: Commuting, Transit, and Employment Trends

Statistics Canada released a report dealing with work and commuting trends in census metropolitan areas (CMAs) from 1996 to 2001. The report<sup>1</sup> identified many interesting trends that are occurring across all 25 CMAs in Canada as well as presenting a more in depth analysis of trends in the larger Canadian CMAs. Using the Statistics Canada report, along with supplemental data, this Urban Insights bulletin identifies trends that are specific to the Hamilton CMA (includes Burlington and Grimsby) and puts them into the broader Canadian context to help inform an understanding of these issues in the community.

### Commuting

#### Commuting Mode

In 2001, the favoured mode of transport for commuters was the private vehicle. Over 78% of Hamilton workers either drove or were a passenger in a vehicle, while only 8% used public transit. These figures are higher and lower respectively as compared to the national CMA average:

#### Mode of Transport for Travel to Work, 2001

	Driver	Passenger	Public Transit	Walk	Bicycle	Other
Hamilton	78.2	7.1	8.0	5.1	0.9	0.7
All CMAs	70.8	6.6	14.8	5.7	1.3	0.8

Source: Heisz and LaRoche-Cote, p. 48

#### Commuting Time

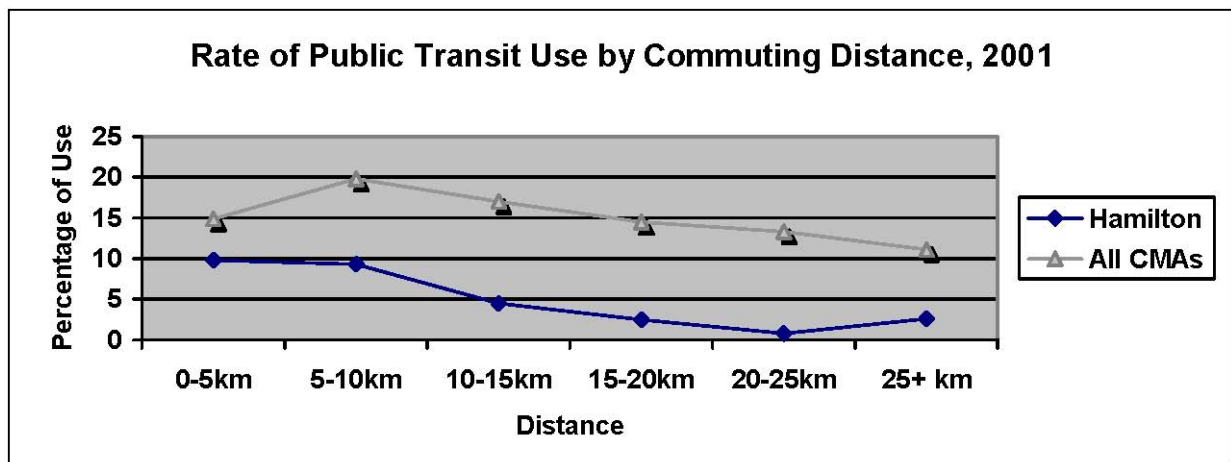
The distance Canadians commute roughly corresponds to the size of the community they live in: The larger the city, the longer the commute. In 2001, the average commute distance for Hamiltonians was 7.4 km, below the national average of all CMAs which was 9.6 km.<sup>2</sup> Additionally, almost 70% of Hamilton commuters travelled 0-15km to work, illustrating a good level urban autonomy given Hamilton's close proximity to the Greater Toronto Area.<sup>3</sup>

### Mode of Commuting by Commuting Distance, 2001

Commuting distance (residence to job)	Hamilton		All CMAs	
	Public Transit	Driver & Passenger %	Public Transit	Driver & Passenger %
0-5 km	9.8	72.2	14.9	65.3
5-10km	9.3	88.2	19.8	77.7
10-15km	4.5	93.7	17.0	81.7
15-20km	2.5	96.3	14.5	84.4
20-25km	0.8	98.4	13.3	85.7
25+ km	2.6	93.7	11.1	85.1

Source: Heisz and LaRochelle-Cote, p. 49, Table A1-A8 in Statistics Canada – Catalogue No. 89-613-MIE

Nationally, a longer commuting distance from residence to job typically results in the higher use of a car for commuting. The majority of public transit commutes are between 0-15km. In Hamilton, public transit commutes are somewhat shorter with the majority of trips being 0-10km. In addition, Hamiltonians tend to choose driving over transit at a much higher rate than the national CMA average.



Source: Heisz and LaRochelle-Cote, p. 49, Table A1-A8 in Statistics Canada – Catalogue No. 89-613-MIE

### Commuting Trends

Between 1996-2001, Hamilton saw a net decline in the percentage of workers who used public transit as a means to commute to work. This is in contrast to the other top 8 CMAs (by population), the majority of which saw an increase in the percentage of transit commuters.<sup>4</sup> One of the largest decreases in public transit use in Hamilton was for those commuters whose jobs are within 5km of the city centre, and the only increase was for those commuters whose jobs are within 10-20km of the city centre.<sup>5</sup>

## Characteristics of Commuters

Looking specifically at the two choices of driving (or being a passenger) and taking public transit reveals an interesting picture of commuting in Hamilton

### Mode of commuting by Age, 2001

Age	Hamilton		All CMAs	
	Public Transit %	Driver & Passenger %	Public Transit %	Driver & Passenger %
15-19	13.3	67.8	22.9	60.5
20-24	12.9	74.1	24.0	63.8
25-34	7.5	85.3	17.3	74.4
35-44	5.5	88.5	13.4	80.3
45-54	4.9	89.4	12.8	81
55-64	4.8	88.8	12.6	80.3
65+	4.9	84.6	12.5	77.1

Source: Heisz and LaRochelle-Cote, p. 49, Table A1-A8 in Statistics Canada – Catalogue No. 89-613-MIE

Those 24 years of age or less are most likely to use public transit, consistent with national trends. However, the percentage of those who use public transit across all age categories is about half of the national average suggesting that Hamiltonians are currently not transit users. Consequently, the percentage of those who are drivers across all age categories is higher than the national average.

### Mode of commuting by Income and Education Level, 2001

Income	Hamilton		All CMAs	
	Public Transit %	Driver & Passenger %	Public Transit %	Driver & Passenger %
0-25,000	19.4	62.6	28.2	55.2
25,000-50,000	10.8	78.4	19.1	70.9
50,000-75,000	5.4	87.1	13.6	79.4
75,000-100,000	4.9	89.8	12.2	82.2
100,000+	3.0	91.4	11.1	83.5
Education Level				
High School or less	4.3	88.7	15.1	75.8
University or more	9.1	80.8	17.3	74.1

Source: Heisz and LaRochelle-Cote, p. 49, Table A1-A8 in Statistics Canada – Catalogue No. 89-613-MIE

There is a positive correlation between income and whether someone drives to work. This is true in Hamilton and the national CMA average. However, the percentage of those in each age category who drive is significantly higher in Hamilton. In terms of public transit, there is a negative correlation between income and whether someone takes transit to work. However, the percentage of those in each age category who take transit is significantly less in Hamilton than for the national CMA average.

In addition, Hamilton goes against the trend in other cities when it comes to the effect of education level on choice of commuting mode. A much higher percentage of Hamiltonians with high school or less will drive to work as compared to the national CMA average. Also, almost double the percentage of university educated Hamiltonians use public transit as compared to citizens with high school or less.

### Mode of commuting by Immigration Status, 2001

	Hamilton		All CMAs	
Immigration Status	Public Transit	Driver & Passenger %	Public Transit	Driver & Passenger %
Canadian Born	6.8	84.8	13.5	77.7
Immigrant 0-10 years	15.9	72.9	31.8	60.2
Immigrant 10-20 years	9.7	82.7	22.6	71.5
Immigrant 20+ years	6.5	85.5	13.8	77.8

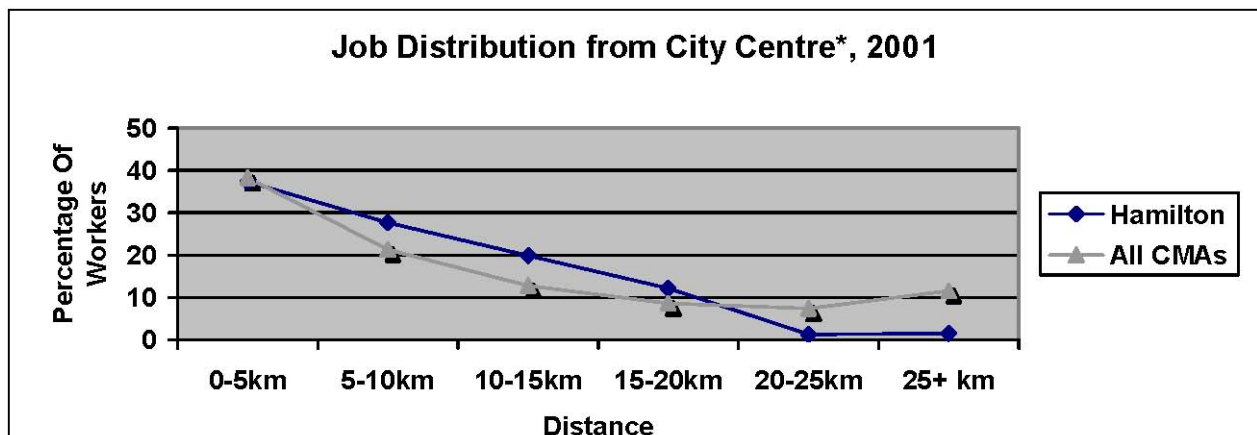
Source: Heisz and LaRochelle-Cote, p. 49, Table A1-A8 in Statistics Canada – Catalogue No. 89-613-MIE

Recent immigrants to Canada tend to be the group with the highest percentage of persons who take public transit to work. This trend holds true for Hamilton although at about half the level of the national CMA average. Also, a much higher percentage of Hamilton citizens across all immigrant categories driver to work as compared to the national CMA average.

## Employment

### Job Distribution

Hamilton's jobs distribution is generally similar to that of all 25 CMA in Canada. The majority of jobs are located within 5 km of the city centre and the percentage of jobs drops off as one moves further out. On the whole, Hamilton employment is more decentralized than the Canadian average. Still, 65% of Hamilton jobs are within 10 km of the city centre demonstrating a significant level of employment clustering around the central city.



\*City centre is defined as the census tract where the city hall of the core municipality is located.

Source: Heisz and LaRochelle-Cote, p. 13

## Change in job locations 1996-2001

From 1996 to 2001 there has generally been a net outflow of jobs from city centres across the country. However, the largest CMAs experienced job growth in their city centres as well as employment growth outside the centres. Of the top nine CMAs in Canada, only Hamilton, Winnipeg, and Quebec City saw city centre jobs decline. In Hamilton's case, this can be explained by a decrease in manufacturing jobs in the city centre, a trend virtually all CMAs experienced between 1996 and 2001.<sup>6</sup>

### Change in City Centre Jobs\* 1996-2001

CMA	Difference in Jobs 1996-2001
Toronto (Ont.)	72,700
Montréal (Que.) †	31,900
Vancouver (B.C.)	4,800
Ottawa - Hull (Ont./Que.)	11,900
Calgary (Alta.)	29,700
Edmonton (Alta.)	4,200
Québec (Que.)	-2,200
Winnipeg (Man.)	-3,300
Hamilton (Ont.)	-2,300

\*Defined as job 0-5km from the census tract where the city hall of the core municipality is located.

Source: Heisz and LaRochelle-Cote, p. 14

## Distribution of Jobs by Industry

In order to gain a sense of “what jobs are where”, it is useful to look at the distribution of jobs classified by the Statistics Canada categories of: Primary Goods and Construction, Manufacturing, Consumer services (retail trade and personal services), and Producer services (white collar, public service and business services industries).<sup>7</sup>

Overall, the centres of the largest Canadian CMAs tend to have significantly higher percentages of producer services jobs, than other categories.<sup>8</sup> In Hamilton, this pattern holds true:

### Percentage distribution of jobs by industry and by distance from City Centre, Hamilton, 2001

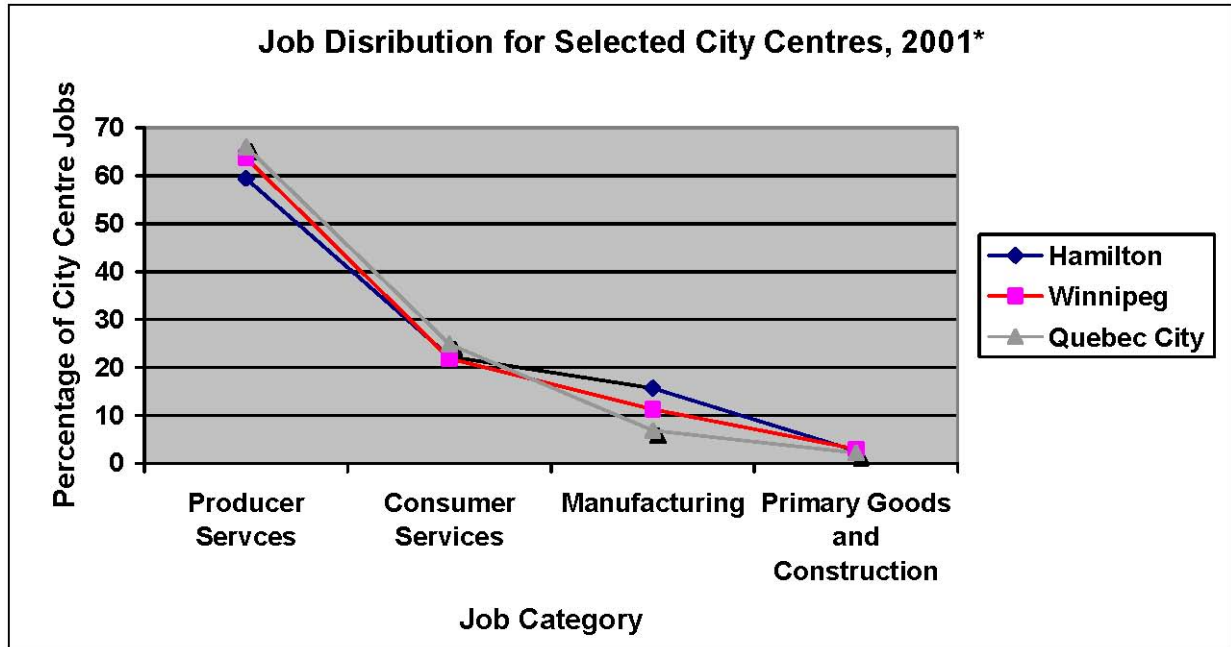
	Primary goods and Construction	Manufacturing	Consumer Services	Producer Services
0-5 km	2.6	15.7	22.3	59.4
5-10 km	5.9	22.3	33.5	38.3
10-15 km	4.7	19.2	31.6	44.5
15-20 km	5.4	39.5	17.6	37.5
20-25 km	19.4	14.7	36.0	29.9
25km+	9.3	8.9	29.9	52.0

\*City centre is defined as the census tract where the city hall of the core municipality is located.

Source: Table 2.1 in Statistics Canada – Catalogue No. 89-613-MIE, No. 007

## City Centre Job Characteristics

A comparison to Quebec City and Winnipeg, cities of similar population to Hamilton, provides some context for the distribution of jobs in Hamilton's city centre:



\*City centre is defined as the census tract where the city hall of the core municipality is located.

Source: Heisz and LaRochelle-Cote, p. 25, Table 2.1 in Statistics Canada – Catalogue No. 89-613-MIE, No. 007

Although there are many differences between Hamilton, Winnipeg, and Quebec City including the fact that the latter two are provincial capitals which would tend to have more government jobs, and Hamilton is next the GTA, all three cities have similar distribution of jobs by industry in the city centre.

### Job Distribution by Skill Level and by Distance of Job from the City Centre\*, Hamilton, 2001

	Managerial Skills	University Skills	College Skills	Lower Skills
0-5 km	8.3	21.4	28.6	41.7
5-10 km	9.3	11.6	28.9	50.1
10-15 km	11.0	11.4	27.1	50.4
15-20 km	11.5	9.6	28.0	51.0
20-25 km	9.8	8.4	27.8	54.0
25km+	7.1	16.3	27.1	49.5

\*City centre is defined as the census tract where the city hall of the core municipality is located.

Source: Table 2.5 in Statistics Canada – Catalogue No. 89-613-MIE, No. 007

Consistent with other large Canadian CMAs, lower skilled jobs in Hamilton tend to be dominant in every geographical zone and jobs requiring college skills make up about the same percentage of jobs in each zone. University jobs are found in the highest percentage closest to the city centre. A comparison of skill level in city centre jobs with other CMAs, gives some more context for Hamilton's situation:

### Job Distribution by Skill Level of City Centre Jobs\*, Selected CMAs, 2001

	Managerial Skills	University Skills	College Skills	Lower Skills
Quebec	8.9	23.0	29.7	38.3
Montreal	12.0	24.2	26.3	37.5
Ottawa-Hull	14.3	29.7	24.2	31.9
Toronto	15.4	27.8	24.2	32.6
Winnipeg	10	18	25.5	46.5
Calgary	13.3	22.3	27.6	36.8
Edmonton	10.5	25.1	27.0	37.4
Hamilton	8.3	21.4	28.6	41.7
Vancouver	13.1	22.0	25.9	39.0

\*City centre is defined as the census tract where the city hall of the core municipality is located.

Source: Heisz and LaRoche-Cote, p. 29, Table 2.5 in Statistics Canada – Catalogue No. 89-613-MIE, No. 007

Of the top 9 CMAs (by population), Hamilton has the lowest percentage of managerial skilled jobs in its city centre, and has the second lowest percentage of university skilled jobs. Conversely, next to Quebec City, Hamilton has one of the highest percentages of college skilled jobs in its city centre. Additionally, along with Winnipeg, Hamilton has one of the highest percentages of lower skilled jobs in its city centre.

### Average Earnings by Distance of Job from City Centre\*, Hamilton, 2001

	Average Annual Earnings
0-5 km	45,100
5-10 km	43,700
10-15 km	43,000
15-20 km	47,600
20-25 km	41,500
25km+	36,900

\*City centre is defined as the census tract where the city hall of the core municipality is located.

Table 2.2 in Statistics Canada – Catalogue No. 89-613-MIE, No. 007

In 2001, the highest average earnings could be found 15-20km from Hamilton's city centre. However, the second highest average earnings were in the city centre itself. Compared to other major Canadian CMAs, Hamilton's city centre average earnings are among the lowest:

### Average Earnings in City Centres\*, Selected CMAs, 2001

	Average Annual Earnings
Toronto	63,400
Calgary	55,700
Ottawa-Hull	51,600
Vancouver	51,300
Montreal	47,400
Edmonton	45,700
Hamilton	45,100
Quebec	41,000
Winnipeg	40,000

\*City centre is defined as the census tract where the city hall of the core municipality is located.

Source: Heisz and LaRoche-Cote, p. 27, Table 2.2 in Statistics Canada – Catalogue No. 89-613-MIE, No. 007

## Statistical Summary

The analysis of Hamilton data has yielded some interesting observations about the community:

- Hamiltonians on average commute less distance than the national CMA average.
- A much higher percentage of Hamilton commuters drive to work as compared to the national CMA average. Additionally, a much smaller percentage of Hamilton commuters take public transit to work as compared to the national CMA average.
- In contrast to the national CMA average, the percentage of highly educated Hamiltonians who take public transit to work is more than double that for those with high school or less education.
- The bulk of Hamilton public transit commutes are between 5-10km, shorter than the national CMA average.
- While there is a significant cluster of employment in the city centre, Hamilton has a more decentralized job distribution than the average of all 25 CMAs in Canada.
- There has been a shift of jobs from the city centre, and virtually all of these lost jobs have been in the manufacturing sector.
- The most prevalent type of employment in the city centre of Hamilton are producer services jobs.
- Of the top 9 CMAs (by population), Hamilton has one of the lowest percentages of university skilled jobs in its city centre and one of the lowest average earning levels.

## Conclusions

If Hamilton is to succeed and prosper in the coming decades it will need to pay attention to the picture revealed by these employment and commuting trends. While some may point to the data as evidence of a city becoming a suburban-like bedroom community, similar to other municipalities in the GTA, there is certainly strong evidence of a city in transition. Current development and investment choices will have significant implications of the future path of the city.

It is clear that Hamilton is a car oriented city, far more so than many may have thought. In addition, public transit is becoming a less popular option for commuters. The location of employment nodes has an impact on these trends, as some areas are not as readily accessible or efficiently serviced by public transit. Thus, the creation of employment and residential nodes on the city periphery will only exacerbate the trend towards increased car use for commuting. Conversely, a concentration of civic efforts on the employment cluster that exists near the city centre would help counter the developing trends.

Two important implications of the current trends are the effect on downtown renewal and ability of Hamilton to develop and attract a knowledge-based economy. The two are tied together as witnessed by other successful North American cities that boast vibrant downtowns, which are attractive to those individuals who make up an important segment of a knowledge-based economy, the so-called “Creative Class”. In addition, vibrant downtowns tend to have jobs that draw a highly educated workforce and offer higher salaries. An important part of the infrastructure of a vibrant central city is efficient and modern public transit.

In the Hamilton context, the foundation exists for future success. Almost 70% of Hamilton commuters traveled 0-15km to work in 2001, which shows a good level of urban autonomy from the GTA. There is a significant employment node in the city centre that offers a large percentage of higher paid producer services jobs and average incomes in the downtown are among the highest in the city. However, a comparison to other major Canadian CMAs, demonstrates that Hamilton has some distance to go. Not only do other city centres offer a higher percentage of jobs that are attractive to university graduates, but average annual earnings are greater in other downtowns.

Moving forward, the potential exists to reverse some of these trends. The economic node around McMaster University, including the new research facilities being developed at the Innovation Park, represent a tremendous opportunity to modernize Hamilton’s economy, and have that contribute to downtown renewal. The accelerated success of this west-end economic cluster should be a civic priority. This could include linking the McMaster node to downtown, through higher-order transit (e.g. LRT) to facilitate seamless and efficient people movement involved in these knowledge-based businesses. This type of investment would build upon the current strengths in local public transit use illustrated by the data: the higher than normal rates of use for those who are university educated and that fact that shorter commute trips tend to be more prevalent. An investment of this significance in the Hamilton Street Railway would have the effect of invigorating and modernizing the local transit system, while encouraging the establishment of more associated knowledge-based employment in the downtown.

Steps such as these would begin to address the employment and commuting trends facing Hamilton. If left unchecked by an absence of leadership, or worse, exacerbated by poor leadership, the current trends will render Hamilton a satellite GTA community unable to effectively compete in the knowledge-based economy. However, local potential exists giving Hamilton an opportunity to emerge from its current period of transition as a municipality with a solid foundation for future prosperity.

## References

<sup>1</sup> Heisz, Andrew and Sabastien LaRochelle-Cote, Work and Commuting in Census Metropolitan Areas, 1996-2001, Statistics Canada, Ottawa, 2005. le-Cote, Work and Commuting in Census Metropolitan Areas, 1996-2001, Ottawa, 2005, p. 15. 8 Ibid, p. 25.

<sup>2</sup> Ibid, p. 17.

<sup>3</sup> Ibid, p. 47.

<sup>4</sup> Ibid., p. 52.

<sup>5,6</sup> Table 3.6 in Statistics Canada – Catalogue No. 89-613-MIE, No. 007, June 2005 Heisz, Andrew and Sabastien LaRochel  
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<sup>7</sup> Ibid, p. 20.

The Centre for Community Study (CCS) is a Hamilton-based, non-profit research group specializing in local public-policy issues providing research and services to government, foundations, and the private sector. The CCS offers expertise in a variety of areas including: Urban trends and analysis; Community renewal strategies; Media analysis; Policy design; Organizational and strategic planning. For more information go to [www.communitystudy.ca](http://www.communitystudy.ca)