



Building Healthy and Supportive Communities

A Glance at Public Transportation Use and Interest in Selected Areas of Waterloo Region



This is one report in a series that highlight key findings from a Statistics Canada survey of selected areas in Waterloo Region.

This report and others are available on the **Region of Waterloo Public Health** website:

www.region.waterloo.on.ca/ph
(Resources/Reports and Factsheets)

INTRODUCTION

Waterloo Region has a unique balance of urban and rural areas and as such, community sizes and characteristics (i.e. population density, land use, accessibility to services) vary considerably. Individuals choose their place of residence for a number of economic or social reasons. Research suggests that individuals migrate to rural settlement areas out of a desire for more space and to escape city noise and congestion, and that proximity to their job, school or amenities is not always a major factor in selection of neighbourhood (Fernandez, Brown, Marans, & Nassauer, 2005; Mitchell, 2003).

The location where one lives can affect commuting behaviour to work, school, and amenities. Sustainable transportation options, such as public transportation, may not be available in all areas and in many cases are not used when available.

On behalf of Region of Waterloo Public Health, Statistics Canada collected data to explore differences in community size and composition as they relate to certain aspects of health (Statistics Canada, 2007). Selected residents (n=644) were surveyed in areas of Waterloo Region chosen for varying degrees of urbanization in May 2007. In addition to asking about public transportation use, the survey asked residents about accessing amenities, their physical and mental health, how connected they feel to their community, and commuting patterns. Data collected from residents were adjusted to reflect the population size in the respective community. Results denoted by “^{ns}” are to be interpreted with caution because the sample size was not large enough to ensure precise estimates; results denoted by “--” were not suitable for release.

ABOUT THE SELECTED AREAS OF STUDY

Small urbanized rural areas (Ayr and Wellesley), larger urbanized rural areas (Elmira and New Hamburg) and two urban neighbourhoods (Fairfield and Willowdale neighbourhoods, Kitchener/Waterloo) were surveyed in this study. Table 1 illustrates the demographic characteristics of the selected areas.

Table 1. Demographic Characteristics of Selected Areas of Study, Waterloo Region, 2007

	Ayr and Wellesley	Elmira and New Hamburg	Fairfield and Willowdale
Total population	4,647	10,744	8,579
Age			
18-34	25% [§]	27%	32%
35-49	43%	32%	18%
50-64	21%	23%	22%
65 and over	12% ^{a§}	17% ^{b§}	28% ^{a,b§}
Household income			
Less than \$30,000	5% [§]	9% [§]	15% [§]
\$30,000 to \$54,000	16% [§]	23% [§]	30%
\$55,000 to \$84,000	29%	34%	30%
\$85,000 and over	50% ^{c,d}	35% ^c	25% ^{d§}
Children in the household	51% ^{e,f}	36% ^e	22% ^{f§}
Seniors only in the household	9% ^{g§}	12% ^h	22% ^{g,h§}
Residency less than five years	25% [§]	15% [§]	17%

^{a, b, c, ...} Represent statistically significant differences between two proportions (%) at $p < 0.10$, e.g. two proportions with an "a" next to them are statistically different from each other

Table 1 Highlights

- More residents of Fairfield and Willowdale neighbourhoods were aged 65 years and over (28%[§]) and were from seniors only households (22%[§]) as compared to Ayr and Wellesley, and Elmira and New Hamburg, respectively.
- More residents in Ayr and Wellesley had children in the household (51%) and had an annual income of \$85,000 or more (50%), as compared to Elmira and New Hamburg, and Fairfield and Willowdale neighbourhoods, respectively.

COMPARISON OF COMMUNITIES SURVEYED

Of the selected areas surveyed, public transportation is only available in Fairfield and Willowdale neighbourhoods. As such, questions surrounding current use of this system were only asked of these neighbourhoods. As the Region of Waterloo is exploring a rural transit strategy, the rural areas were asked about interest in potential services.

Use of Public Transit in Fairfield and Willowdale Neighbourhoods

- Thirty per cent of residents in Fairfield and Willowdale neighbourhoods reported using public transit.
- Of residents who did not use public transportation (70%), reasons for not using transit included:
 - Lack of need (70%);
 - Inconvenient routes (13%[§]); and
 - Other reasons (35%) (specific reasons are unavailable).

Table 2. Interest in potential Rural Transit Service in Selected Township Urban Areas, Waterloo Region, 2007

	Ayr and Wellesley
Likelihood of using potential public transit	
<i>Very likely</i>	15%
<i>Somewhat likely</i>	19%
<i>Neither likely nor unlikely</i>	--
<i>Somewhat unlikely</i>	5% [§]
<i>Very unlikely</i>	61%
Amount willing to pay per 1-way trip	
<i>Less than \$2</i>	7% [§]
<i>\$2 to \$5</i>	46%
<i>More than \$5</i>	20%
<i>Don't know</i>	27%
When residents would use potential public transit**	
<i>Rush hour</i>	22%
<i>Mid-day</i>	22%
<i>Evening</i>	17%
<i>Weekend</i>	26%
<i>Would not use</i>	60%
Desirable features of a potential rural transit system**	
<i>Schedule reliability</i>	25%
<i>Duration of trip into city</i>	7% [§]
<i>Accessibility</i>	13% [§]
<i>Park and ride</i>	4% [§]
<i>Other*</i>	82%

*Specific responses for "Other" are unavailable

**Residents were able to choose more than one option

Table 2 Highlights

- Of Ayr, Wellesley, Elmira, and New Hamburg residents surveyed, 34% indicated that they would be very likely or somewhat likely to use public transit if it were available to them.
- Almost half (46%) of the residents were willing to pay between \$2.00 and \$5.00 for a typical one-way trip.

Interest in Potential Rural Public Transit

- A study by Region of Waterloo Public Health on Rural Health (2006), indicated that many subsets of the rural population "would welcome some sort of public transportation".
- Participants reported that a lack of public transportation had health implications such as isolation, car dependence, boredom, food access, and increasing the rift between rural and urban communities (Region of Waterloo Public Health, 2006).
- A survey conducted by Grand River Transit (GRT) of Elmira and Wellesley in 2007 also indicated some interest and support for a public transit service to these communities (Paradigm Transportation Solutions Limited, 2007).
- In the GRT survey, 40% to 50% of the respondents indicated that they would be highly supportive or somewhat supportive of a public transit service.
- Overall, 38% of respondents in the GRT survey indicated they would be willing to pay between \$2.00 and \$5.00 for a typical one-way trip.

SOCIAL DETERMINANTS

A wealth of evidence suggests that sociodemographic circumstances contribute to personal health behaviours. The following sociodemographic variables were measured: age, children in the household, education, gender, household income, length of residency, and seniors only household. Statistically significant relationships ($p < 0.10$) are reported where found.

Age

- Of those residents aged 18 to 34 years, 55% reported using public transportation, as compared to 22%^s or less of those in any of the other age groups of 35 years of age and older.

Education

- Of those residents who reported completing high school as their highest level of education, 36%^s reported using public transportation, as compared to 27%^s for those who had not completed high school, 27%^s for those who completed college or trade school, and 26%^s for those who completed university.

Gender

- Among male residents, 71% reported they were “very unlikely” to use potential public transportation service in their rural community, as compared with 52% of females.

Household Income

- Of those residents with an annual household income less than \$30,000, 26%^s reported that they would “very likely” use potential public transportation in their rural community, as compared to 17%^s with an income greater than \$85,000, 16%^s with an income between \$30,000 and \$54,999, and 10%^s with an annual household income between \$55,000 and \$84,999.

Seniors Only Household

- Seniors only households are households with no one under the age of 65. Twelve per cent^s of seniors only households reported using public transportation, as compared to 36% of those who do not live in households with seniors only. This result is of interest given that the most urban neighbourhoods of Fairfield and Willowdale, where transit would be most accessible, had the most senior residents.
 - Similarly, of seniors only households (households with no one under the age of 65), 12%^s reported their usual mode of transportation to work or school to be motor vehicle alone, as compared to 60% of households that were not seniors only. This may reflect that seniors’ transportation needs are more limited as compared to other age groups.
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IMPLICATIONS

- Less than one third of residents in the urban area surveyed reported using public transportation, despite availability of service. In these areas, young people are the most common users of public transportation service. One third of rural residents who do not currently have public transportation service in their area reported being likely or somewhat likely to use a potential rural transit service, echoing other research (Paradigm Transportation Solutions Limited, 2007; Region of Waterloo Public Health, 2006).
- Greater use of public transit is of significant benefit to residents of Waterloo Region as use of transit in Waterloo Region has been proven to significantly improve air quality. *iXpress*, an express route service in Waterloo Region, is currently responsible for the reduction of approximately 1.5 million kilometres of personal automobile trips per year, with an associated reduction of approximately 500 tonnes of greenhouse gas emissions (Hellinga & Cicuttin, 2007).
- The challenge with extensive automobile usage and associated environmental impacts will be compounded in Waterloo Region as a result of tremendous growth pressure. The population in Waterloo Region is predicted to grow by nearly 60%, from 456,000 in 2001 to 729,000 in 2031, and this is expected to greatly intensify impacts on transportation infrastructure, air quality, and greenhouse gas emission (Hellinga & Cicuttin, 2007).

The technical report, *Urbanization and Health within Waterloo Region: Survey Report* (Statistics Canada, 2007), can be obtained from the Region of Waterloo Public Health Resource Centre 519-883-2256 and website: www.region.waterloo.on.ca/ph (Resources/Reports and Fact Sheets).

Additional reports in this series glance at accessing amenities, commuting, community connectedness, and physical and mental health and are also available on the website.

For questions, please contact Health Determinants, Planning and Evaluation Division, at 519-883-2004.

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2. Hellinga, B., & Cicuttin, J. (2007). Impacts of a New Express Bus Service in Waterloo Region. Report submitted for the Transportation Association of Canada Annual Conference to be held October 14-17, 2007 in Saskatoon, Saskatchewan.
3. Mitchell, C.J.A. (2003). Making sense of counterurbanization. *Journal of Rural Studies*, 20, 15-34.
4. Paradigm Transportation Solutions Limited. (2007). Region of Waterloo Rural Community Transit Travel Survey Technical Report. Waterloo, ON.
5. Region of Waterloo Public Health. (2006). Rural Health: Focus on Service Access in Waterloo Region. Waterloo, ON.
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