

Overview: Public infrastructure in rural Ontario

Vol. 7, No. 8, 2020

Highlights

- **Most rural municipalities have public infrastructure, such as roads (all municipalities), culture, recreation or sports facilities (97%), bridges (92%) and stormwater facilities (89%).**

Why look at public infrastructure?

Public infrastructure (roads, bridges, etc.) is a public policy issue because some facilities are approaching the end of their useful life and population expansion in some areas is causing a demand for additional public infrastructure. There is ongoing debate over the revenue streams for funding infrastructure and the ensuing maintenance costs. Municipal governments, both regional and lower tier, own much of the public infrastructure that make communities function. In Ontario, an unending stream of programs, negotiations and advocacy surrounds the terms of fiscal transfers between the orders of government for infrastructure. The Association of Municipalities of Ontario argues that there is a fiscal gap between the capacity of the local tax base to provide revenue and the monies needed to maintain and build needed infrastructure.

<https://www.amo.on.ca/AMO-Content/Backgrounders/2017/AMOPolicyHighlights.aspx>

Canada's Core Public Infrastructure Survey¹ was conducted by Statistics Canada in 2017 in order "to collect 2016 statistical information on the inventory, condition, performance and asset management strategies of core public infrastructure assets" owned or leased by each level of government in Canada.

The purpose of this Fact Sheet is to present an overview of public infrastructure among incorporated towns and incorporated municipalities (hereafter "municipalities") (see Box 1) in rural Ontario. Subsequent Fact Sheets will

¹ Statistics Canada. (bi-annual) **Canada's Core Public Infrastructure Survey** (Ottawa: Statistics Canada, Surveys and Statistical Programs) (<http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=1256357>) and Infrastructure Canada. (2019) **Canadian Infrastructure Report Card 2019: Monitoring the State of Canada's Core Public Infrastructure** (Ottawa: Infrastructure Canada) (<http://canadianinfrastructure.ca/downloads/canadian-infrastructure-report-card-2019.pdf>).

show the situation for each type of public infrastructure, such as roads, bridges, etc.

Findings

Among municipalities in rural and small town (RST) areas (defined in Box 1),

- All have some road infrastructure;
- 97% have a culture, recreation or sports facility;
- 92% have one or more bridges;
- 89% have a stormwater facility;
- 77% have a solid waste facility;
- 73% have a potable water facility;
- 70% have a waste water facility
- 11% have public transit; and
- 4% have social housing (Table 1).

Box 1: Municipalities

"Municipalities" in Canada's Core Public Infrastructure Survey (CCPIS) refer to incorporated towns / cities and incorporated municipalities. The Statistics Canada terminology is "census subdivisions" (CSDs)." The focus of this Fact Sheet is the data for CSDs.

The CCPIS also enumerates the public infrastructure owned or leased by regional governments and by the provincial government. Counties serving rural regions are included as regional governments in the CCPIS. These data are included in the first column of our tables and thus the difference between the first column and the column for all CSDs represents the data for regional governments and for the provincial government.

"Lower-tier" municipalities (i.e., CSDs) are classified by population size within "**Larger Urban Centres**" (LUCs) and within "**Rural and Small Town (RST)**" areas", as defined by du Plessis *et al.* (2001). Specifically, LUCs comprise Census Metropolitan Areas (CMAs) (with a population of 100,000 and over) and Census Agglomerations (CAs) (with a population of 10,000 to 99,999) and each includes neighbouring towns and municipalities where 50+% of employed residents commute to the CMA or CA. RST areas comprise all municipalities outside CMAs and CAs.

The data for each respondent to the survey (municipality, regional government, provincial department) are available from Statistics Canada, upon request (Statistics Canada, 2019).

References:

- du Plessis, Valerie, Roland Beshiri, Ray D. Bollman and Heather Clemenson. (2001) "Definitions of Rural." **Rural and Small Town Canada Analysis Bulletin** Vol. 3, No. 3, (Ottawa: Statistics Canada, Cat. No. 21-006-XIE) (<http://www5.statcan.gc.ca/olc-olc/action?objId=21-006-X&objType=2&lang=en&limit=0>).
- Statistics Canada. (2019) "Canada's Core Public Infrastructure Survey: Micro data, 2016," **The Daily** (Ottawa: Statistics Canada, Catalogue no. 11-001, November 7) (<https://www150.statcan.gc.ca/n1/daily-quotidien/191107/dq191107g-eng.htm>).

Among municipalities within each of LUCs and RST areas, municipalities with a larger population size are more likely to have each public infrastructure asset (Table 1).

For most types of assets, municipalities in LUCs and RST areas were (about) equally likely to have a documented asset management plan (Table² A2) and they had similar schedules to update their asset management plans (Tables A3 and A4). Spreadsheets were the most popular type of information system for asset management – used by 64% of RST municipalities and 78% of LUC municipalities followed by off-the-shelf asset management software and paper records (Table A5). Many municipalities are factoring climate change into their decision-making processes for core

infrastructure assets. For municipalities with a population of 30,000 or over within LUCs, 71% consider climate change for decision-making regarding assets dealing with stormwater facilities (Table A6). However, at the time of the survey, a consideration of climate change was not a factor considered in the decision-making for any infrastructure asset for 44% of RST municipalities and 35% of the municipalities within LUCs.

Summary

Most rural municipalities (outside areas of 10+K) have public infrastructure such as roads (all municipalities), culture, recreation or sports facilities (97%), bridges (92%) and stormwater facilities (89%). By contrast public transit and social housing assets are more prevalent among the larger municipalities within Census Metropolitan Areas or Census Agglomerations. Solid waste facilities are more prevalent in the smaller population size municipalities likely because they also may have less population density.

Table 1. Number of organizations that own each type of public infrastructure asset, Ontario, 2016

Type of core infrastructure asset	All organizations (provincial, regional, municipal) that own core infrastructure assets	All lower-tier municipalities with owned (or leased) assets	Infrastructure assets owned (or leased) by lower-tier municipalities (census subdivisions ¹)							All census subdivisions (included in survey)
			Census subdivisions ¹ (CSDs) within Larger Urban Centres (i.e., within Census Metropolitan Areas and Census Agglomerations)				Census subdivisions ¹ (CSDs) within Rural and Small Town Areas (i.e., outside Census Metropolitan Areas and outside Census Agglomerations)			
			CSDs with population 30,000 or more	CSDs with population of 5,000 to 29,999	CSDs with population 1 to 4,999	All CSDs in Larger Urban Centres (subtotal)	CSDs with population of 5,000 and over	CSDs with population of 1,000 to 4,999	All CSDs in Rural and Small Town Areas with population of 1,000 or more (subtotal)	
Number of organizations										
	367	337	59	68	21	148	95	94	189	337
Number of organizations that own (or lease) each type of public infrastructure asset										
Public transit	82	76	36	19	1	56	13	F	20	76
Potable water	255	246	46	55	7	108	77	62	138	246
Stormwater	328	307	59	64	15	138	92	77	169	307
Wastewater	251	241	48	52	8	108	72	62	133	241
Solid waste	245	230	35	31	19	84	64	81	146	230
Roads	367	337	59	68	21	148	95	94	189	337
Bridges and tunnels	344	314	59	61	20	140	91	83	174	314
Social and affordable housing	49	28	19	2	0	21	4	F	7	28
Culture, recreation and sports facilities	350	330	59	68	20	147	94	89	183	330
Number of organizations that own each type of public infrastructure asset as a percent of the total number of organizations										
Public transit	22	23	61	28	5	38	14	F	11	23
Potable water	69	73	78	81	33	73	81	66	73	73
Stormwater	89	91	100	94	71	93	97	82	89	91
Wastewater	68	72	81	76	38	73	76	66	70	72
Solid waste	67	68	59	46	90	57	67	86	77	68
Roads	100	100	100	100	100	100	100	100	100	100
Bridges and tunnels	94	93	100	90	95	95	96	88	92	93
Social and affordable housing	13	8	32	3	0	14	4	F	4	8
Culture, recreation and sports facilities	95	98	100	100	95	99	99	95	97	98

1. Municipalities in the Core Public Infrastructure Survey have been identified using the concept of a census subdivision (CSD). A CSD is the general term for incorporated towns and municipalities (as determined by provincial/territorial legislation) or areas treated as municipal equivalents for statistical purposes (e.g., Indian reserves, Indian settlements and unorganized territories). Municipal status is defined by laws in effect in each province and territory in Canada. A CSD is classified as urban (**Larger Urban Centre**) if it falls within a Census Metropolitan Area (CMA) or Census Agglomeration (CA) and is classified as rural otherwise. CMAs have a total population of 100,000 or more (with 50,000 or more in the core) and includes all neighbouring towns and municipalities where 50+% or more of the workforce commutes into the core. CAs have a core population of 10,000 or more and includes all neighbouring towns or municipalities where 50+% of the workforce commutes into the urban core. Rural CSDs (**Rural and Small Town Areas**) have no population centres over 10,000 and have less than 50% of employed individuals who commute to a CMA or CA for work. Excluded are 140 Indian Reserves (comprising 64 thousand residents) and 84 census subdivisions within rural and small town areas with a population of 1 to 999 inhabitants (comprising 43 thousand residents).

Source: Statistics Canada, Core Public Infrastructure Survey, 2016, Tables 34-10-0260-01 and 34-10-0261-01.

² Tables labelled with an “A” are available in the accompanying “Appendix Tables: Canada’s Core Public Infrastructure Survey, 2016.”

The Rural Ontario Institute gratefully acknowledges the work of Ray Bollman in preparing this edition of [Focus on Rural Ontario](#). Questions on data sources can be directed to RayD.Bollman@sasktel.net. Any comments or discussions can be directed to NRageltie@RuralOntarioInstitute.ca