

**Canada's Core Public
Infrastructure Survey, 2016**

Road Assets

CSA00001

This organization does not own or lease this asset.

CONFIDENTIAL once completed.

Si vous préférez recevoir ce document en français,
veuillez nous appeler au numéro sans frais suivant :

**This information is collected under the authority of the *Statistics Act*, Revised Statutes of Canada, 1985, Chapter S-19.
COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIREMENT UNDER THIS ACT.**

The purpose of this survey

Statistics Canada is undertaking this survey to provide useful statistical information on the stock, condition, performance and asset management strategies of Canada's core public infrastructure assets owned or leased by the various levels of government and Indigenous entities.

The information compiled by this survey will be used by analysts and policy-makers to better understand the current condition of Canada's core infrastructure. This will enable all levels of government to develop policies to support the efforts in improving Canada's core public infrastructure and help monitor and report progress on achievement of desired outcomes. Your information may also be used by Statistics Canada for other statistical and research purposes.

Confidentiality

Statistics Canada is prohibited by law from releasing any information it collects which could identify any person, business, or organization, unless consent has been given by the respondent or as permitted by the *Statistics Act*. Statistics Canada will use the information from this survey for statistical purposes.

Data-sharing agreements

To reduce respondent burden, Statistics Canada has entered into data-sharing agreements with provincial and territorial statistical agencies and other government organizations, which have agreed to keep the data confidential and use them only for statistical purposes. Statistics Canada will only share data from this survey with those organizations that have demonstrated a requirement to use the data.

Section 11 of the *Statistics Act* provides for the sharing of information with provincial and territorial statistical agencies that meet certain conditions. These agencies must have the legislative authority to collect the same information, on a mandatory basis, and the legislation must provide substantially the same provisions for confidentiality and penalties for disclosure of confidential information as the *Statistics Act*. Because these agencies have the legal authority to compel businesses to provide the same information, consent is not requested and businesses may not object to the sharing of the data.

For this survey, there are **Section 11** agreements with the provincial and territorial statistical agencies of Newfoundland and Labrador, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon. The shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

Section 12 of the *Statistics Act* provides for the sharing of information with federal, provincial or territorial government organizations. Under **Section 12**, you may refuse to share your information with any of these organizations by writing a letter of objection to the Chief Statistician and returning it with the completed questionnaire. Please specify the organizations with which you do not want to share your data.

For this survey, there are **Section 12** agreements with the statistical agencies of Prince Edward Island, Northwest Territories and Nunavut, as well as with Infrastructure Canada.

For agreements with provincial and territorial government organizations, the shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

Record linkages

To enhance the data from this survey, Statistics Canada may combine it with information from other surveys or from administrative sources.

Further Information

If you require assistance regarding this survey, please contact Statistics Canada by telephone at

Statistics Canada advises you that there could be a risk of disclosure during facsimile or e-mail. However, upon receipt, Statistics Canada will provide the guaranteed level of protection afforded to all information collected under the authority of the *Statistics Act*.

Who should complete this questionnaire?

Canada's Core Public Infrastructure Survey should be coordinated by the organization's asset manager who will ensure that each asset specific questionnaire is completed by its respective manager.

Please return the questionnaire within 21 days.

Please mail the completed questionnaire in the enclosed envelope or fax it to Statistics Canada at 1-888-883-7999.

If you are unable to complete within 21 days **OR** if you need help, call us at

Statistics Canada, Operations and Integration Division, 150 Tunney's Pasture Driveway, Ottawa, Ontario K1A 0T6

Visit our website, www.statcan.gc.ca



Reporting instructions

- Please print in ink.
- Please report for reference year 2016.
- **Report** dollar amounts in **Canadian dollars**.
- **Exclude** sales tax.
- Percentages should be rounded to whole numbers.
- When precise figures are not available, please provide your best estimates.

Information for Survey Participants

Canada's core public infrastructure can vary within each municipality in Canada as a result of size of population, geographic location and overall economic condition. Canada's core public infrastructure survey will be measuring the following key components within the municipality: asset ownership; asset management planning; overall condition of core public asset infrastructure and overall performance of these core public assets.

Organization refers to municipal, regional, provincial, federal government or Indigenous entities (such as a Band council) who own a core public infrastructure.

Own refers to assets owned by your organization as well as assets leased by your organization through a capital lease agreement.

Asset ownership

Road assets include all paved and unpaved urban and rural roads: highways; arterial roads; collector roads; local roads; lanes; and alleys; and sidewalks owned by your organization or leased by your organization through a capital lease agreement.

Exclude transit exclusive right of ways.

Unpaved roads include any road surface that is unsealed, such as gravel roads or dirt roads owned by your organization.

Paved roads include any road surface that is sealed in some manner such as portland cement concrete, asphalt concrete, chipseal, and other hard or sealed surface owned by your organization.

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Inventory and physical assessment of road assets

1. Please indicate if your organization owned the following road network assets as of December 31, 2016?

			Yes	No
Road assets				
Highways	C5B01101	1	<input type="radio"/>	<input type="radio"/>
Arterial roads	C5B01102	1	<input type="radio"/>	<input type="radio"/>
Collector roads	C5B01103	1	<input type="radio"/>	<input type="radio"/>
Local roads	C5B01104	1	<input type="radio"/>	<input type="radio"/>
Lanes and alleys	C5B01105	1	<input type="radio"/>	<input type="radio"/>
Other				
Sidewalks	C5B01106	1	<input type="radio"/>	<input type="radio"/>

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2a. In 2016, what was the total length in kilometres of your organization's road network?

Report the length of road network in terms of 2-lane equivalent kilometres, where one kilometre of a four-lane highway is counted as two kilometres.

If you do not own or lease an asset listed below, please check **Does not apply**.

Please report in kilometres.

	Total length in kilometres	Does not apply
Road assets		
Highways	C5B02101 <input type="text"/> km	C5B02201 <input type="checkbox"/>
Arterial roads	C5B02102 <input type="text"/> km	C5B02202 <input type="checkbox"/>
Collector roads	C5B02103 <input type="text"/> km	C5B02203 <input type="checkbox"/>
Local roads	C5B02104 <input type="text"/> km	C5B02204 <input type="checkbox"/>
Lanes and alleys	C5B02105 <input type="text"/> km	C5B02205 <input type="checkbox"/>
Other		
Sidewalks (please indicate in linear km)	C5B02106 <input type="text"/> km	C5B02206 <input type="checkbox"/>

2b. In 2016, what was the total length in kilometres of your organization's paved and unpaved road network?

Unpaved roads include any road surface that is unsealed, such as gravel roads or dirt roads owned by your organization.

Paved roads include any road surface that is sealed in some manner such as portland cement concrete, asphalt concrete, chipseal, and other hard or sealed surface owned by your organization.

Report the length of road network in terms of 2-lane equivalent kilometres, where one kilometre of a four-lane highway is counted as two kilometres.

If you do not own or lease an asset listed below, please check **Does not apply**.

Please report in kilometres.

	Total length in kilometres	Does not apply
Unpaved roads	C5B02107 <input type="text"/> km	C5B02207 <input type="checkbox"/>
Paved roads	C5B02108 <input type="text"/> km	C5B02208 <input type="checkbox"/>

3. As of December 31, 2016, indicate the kilometers distribution of your organization's road assets inventory based on the year of completed construction.

Each selected asset for question 2 should have a kilometer distribution below.

	Year of completed construction						Do not know
	2016	2010 to 2015	2000 to 2009	1970 to 1999	1940 to 1969	Prior to 1940	
Kilometres							
Road assets							
Highways	C5003101	C5003201	C5003301	C5003401	C5003501	C5003601	C5003701
Arterial roads	C5003102	C5003202	C5003302	C5003402	C5003502	C5003602	C5003702
Collector roads	C5003103	C5003203	C5003303	C5003403	C5003503	C5003603	C5003703
Local roads	C5003104	C5003204	C5003304	C5003404	C5003504	C5003604	C5003704
Lanes and alleys	C5003105	C5003205	C5003305	C5003405	C5003505	C5003605	C5003705
Other							
Sidewalks	C5003106	C5003206	C5003306	C5003406	C5003506	C5003606	C5003706

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4. What is the condition assessment cycle for your road assets?

Condition assessment cycle: The period of time required to assess all the assets of a particular type owned by the organization as well as all of the assets of a particular type leased by the organization through a capital lease agreement.

Please select one condition assessment cycle per asset.

		Condition assessment cycle						
		1 year	2 years	3 to 5 years	5 to 10 years	More than 10 years	Does not apply	Do not know
Road assets								
Highways	C5D04101	01	02	03	04	05	06	07
Arterial roads	C5D04102	01	02	03	04	05	06	07
Collector roads	C5D04103	01	02	03	04	05	06	07
Local roads	C5D04104	01	02	03	04	05	06	07
Lanes and alleys	C5D04105	01	02	03	04	05	06	07
Other								
Sidewalks	C5D04106	01	02	03	04	05	06	07

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5. Please indicate the assessment tool used to complete the physical condition assessment of your organization's road assets in 2016.

Check all that apply for each road asset owned or leased by your organization.

Each selected asset in question 2 should have a physical condition assessment rating below.

	1. Based on detailed inspection and analysis guidelines or procedures	2. Based on municipal representative based on working experience with asset	3. Using proxy information such as age of material, soil environment and estimated service life	4. Do not know
Road assets				
Highways	CSE05101 <input type="checkbox"/>	CSE05201 <input type="checkbox"/>	CSE05301 <input type="checkbox"/>	CSE05401 <input type="checkbox"/>
Arterial roads	CSE05102 <input type="checkbox"/>	CSE05202 <input type="checkbox"/>	CSE05302 <input type="checkbox"/>	CSE05402 <input type="checkbox"/>
Collector roads	CSE05103 <input type="checkbox"/>	CSE05203 <input type="checkbox"/>	CSE05303 <input type="checkbox"/>	CSE05403 <input type="checkbox"/>
Local roads	CSE05104 <input type="checkbox"/>	CSE05204 <input type="checkbox"/>	CSE05304 <input type="checkbox"/>	CSE05404 <input type="checkbox"/>
Lanes and alleys	CSE05105 <input type="checkbox"/>	CSE05205 <input type="checkbox"/>	CSE05305 <input type="checkbox"/>	CSE05405 <input type="checkbox"/>
Other				
Sidewalks	CSE05106 <input type="checkbox"/>	CSE05206 <input type="checkbox"/>	CSE05306 <input type="checkbox"/>	CSE05406 <input type="checkbox"/>

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**6. In 2016, what was the overall physical condition of your organization's road assets?
Please indicate the percentage distribution of your road assets by using the following condition rating scale.**

Very poor: The asset is unfit for sustained service. Near or beyond expected service life, widespread signs of advanced deterioration, some assets may be unusable.

Poor: Increasing potential of affecting service. The asset is approaching end of service life; condition below standard and a large portion of system exhibits significant deterioration.

Fair: The asset requires attention. The assets show signs of deterioration and some elements exhibit deficiencies.

Good: The asset is adequate. Acceptable, generally within mid stage of expected service life.

Very good: Asset is fit for the future. Well maintained, good condition, new or recently rehabilitated.

Each selected asset for question 2 should have a percent distribution below.

Each reporting asset must total to 100 %.

	Very poor	Poor	Fair	Good	Very good	Do not know	Total
	%						
Road assets							
Highways	C5F06101	C5F06201	C5F06301	C5F06401	C5F06501	C5F06601	100 %
Arterial roads	C5F06102	C5F06202	C5F06302	C5F06402	C5F06502	C5F06602	100 %
Collector roads	C5F06103	C5F06203	C5F06303	C5F06403	C5F06503	C5F06603	100 %
Local roads	C5F06104	C5F06204	C5F06304	C5F06404	C5F06504	C5F06604	100 %
Lanes and alleys	C5F06105	C5F06205	C5F06305	C5F06405	C5F06505	C5F06605	100 %
Other							
Sidewalks	C5F06106	C5F06206	C5F06306	C5F06406	C5F06506	C5F06606	100 %

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Asset management and performance

7. Does your organization have a road network asset management plan?

An **Asset Management Plan** defines how a group of assets is to be managed over a period of time. The asset management plan describes the characteristics and condition of infrastructure assets, the levels of service expected from them, planned actions to ensure the assets are providing the expected level of service, and financing strategies to implement the planned actions.

C5G07101

1 Yes

3 No → **Please go to question 9**

8. How often does your organization update the current road network asset management plan?

Mark one only.

C5G08101

- 1 Every year
- 2 Every two to four years
- 3 Every five years or more
- 4 Does not update
- 5 Other – please specify

C5G08205

- 6 Do not know

→ Go to question 10

9. When does your organization plan on implementing a road network asset management plan?

Mark one only.

C5G09101

- 1 In one year
- 2 In two to four years
- 3 In five years or more
- 4 Other – please specify

C5G09204

- 5 Do not plan to implement an asset management plan
- 6 Do not know

10. What type of asset management information system does your organization use to manage your road network assets?

Mark all that apply.

C5G10101

Custom asset management software

C5G10102

Off-the-shelf asset management software

C5G10103

Spreadsheet

C5G10104

Paper records

C5G10105

Other – please specify

C5G10205

C5G10106

No asset management information system

C5G10107

Do not know

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11. Does your organization own any tolled roads?

C5G11101

1 Yes

3 No

12. Does your organization plan on having any toll roads within the next five years?

C5G12101

1 Yes

3 No

Assets value and expenses of road assets

13. What is the 2016 estimated replacement value, required renewal budget, and actual renewal budget of road assets owned by your organization?

Estimated replacement value: the approximate cost at the present time required to replace an asset, including demolition costs.

Does not include land costs or overhead such as administration.

2016 required renewal budget: the budget required for rehabilitation, reconstruction, or replacement of the assets to bring rating of all assets to a rating of "good" within the 2016 reference year. These include any activities which increase the performance or capacity of existing fixed assets or significantly extend their previously expected service lives.

2016 actual renewal budget: the actual funds spent for the rehabilitation, reconstruction a replacement of the assets. These include any activities which increase the performance or capacity of existing fixed assets or significantly extend their previously expected service lives.

Required renewal budget and actual renewal budget does not include cost of regular maintenance and repairs. Maintenance and repairs: Ordinary maintenance and repairs of fixed assets are activities that owners or users of fixed assets are obliged to undertake periodically in order to be able to utilise assets over their expected service lives (they are current costs that cannot be avoided if the fixed assets are to continue to be used). Maintenance and repairs do not change the fixed asset or its performance, but simply maintain it in good working order or restore it to its previous condition in the event of a breakdown.

Each asset should correspond to question 2.

	2016		
	Estimated replacement value	Required renewal budget	Actual renewal budget
Thousands of dollars (000's)			
Road assets			
Highways	C5H13101 \$ _____,000	C5H13201 \$ _____,000	C5H13301 \$ _____,000
Arterial roads	C5H13102 \$ _____,000	C5H13202 \$ _____,000	C5H13302 \$ _____,000
Collector roads	C5H13103 \$ _____,000	C5H13203 \$ _____,000	C5H13303 \$ _____,000
Local roads	C5H13104 \$ _____,000	C5H13204 \$ _____,000	C5H13304 \$ _____,000
Lanes and alleys	C5H13105 \$ _____,000	C5H13205 \$ _____,000	C5H13305 \$ _____,000
Sidewalks	C5H13106 \$ _____,000	C5H13206 \$ _____,000	C5H13306 \$ _____,000

14. In 2016, what was the total value associated with new road assets owned by your organization?

New road assets include the value of new construction, acquisition of assets, and the value of donated assets.

		2016
		Thousands of dollars
Road assets	C5H14101	\$ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ,000

15. In 2016, what was the expected useful life (in years) of new road assets owned by your organization?

New road assets include new construction, acquisition of assets, and donated assets.

Expected useful life of an asset refers to the service life or the productive life of the asset at the time of its acquisition regardless of their lives reported for income tax purposes.

		Expected useful life (in years)
Road assets		
Highways	C5H15101	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Arterial roads	C5H15102	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Collector roads	C5H15103	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Local roads	C5H15104	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Lanes and alleys	C5H15105	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Other		
Sidewalks	C5H15106	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

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Glossary

Road assets include all paved and unpaved urban and rural roads: highways; arterial roads; collector roads; local roads; lanes; and alleys; and sidewalks owned by your organization or leased by your organization through a capital lease agreement. **Exclude** transit exclusive right of ways.

Unpaved roads include any road surface that is unsealed, such as gravel roads or dirt roads owned by your organization.

Paved roads include any road surface that is sealed in some manner such as portland cement concrete, asphalt concrete, chipseal, and other hard or sealed surface owned by your organization.

Condition assessment cycle: The period of time required to assess all the assets of a particular type owned by the organization as well as all of the assets of a particular type leased by the organization through a capital lease agreement.

Asset Management Plan: defines how a group of assets is to be managed over a period of time. The asset management plan describes the characteristics and condition of infrastructure assets, the levels of service expected from them, planned actions to ensure the assets are providing the expected level of service, and financing strategies to implement the planned actions.

Estimated replacement value: the approximate cost at the present time required to replace an asset, including demolition costs. **Does not include** land costs or overhead such as administration.

2016 required renewal budget: the budget required for rehabilitation, reconstruction, or replacement of the assets to bring rating of all assets to a rating of "good" within the 2016 reference year. These include any activities which increase the performance or capacity of existing fixed assets or significantly extend their previously expected service lives.

Does not include cost of regular maintenance and repairs.

2016 actual renewal budget: the actual funds spent for the rehabilitation, reconstruction a replacement of the assets. These include any activities which increase the performance or capacity of existing fixed assets or significantly extend their previously expected service lives. **Does not include** cost of regular maintenance and repairs.

Maintenance and repairs: Ordinary maintenance and repairs of fixed assets are activities that owners or users of fixed assets are obliged to undertake periodically in order to be able to utilise assets over their expected service lives (they are current costs that cannot be avoided if the fixed assets are to continue to be used). Maintenance and repairs do not change the fixed asset or its performance, but simply maintain it in good working order or restore it to its previous condition in the event of a breakdown.

Expected useful life of an asset refers to the service life or the productive life of the asset at the time of its acquisition regardless of their lives reported for income tax purposes.

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