

Asset Management Outcomes

2016 Gas Tax Reporting

For the 2016 reporting year, the following questions have been developed to measure municipal sector's progress on Asset Management under the Federal Gas Tax Agreement.

If your municipality is selected for a compliance audit, you will be required to provide a copy of your asset management plan. The auditors will ensure that the comprehensiveness of your plan including the replacement cost calculation is in accordance with the information provided in the asset management outcome questionnaire.

Q1. Does your municipality have an asset management plan as of December 31, 2016?

- A. We have a plan that includes all core infrastructure assets
- B. We have a plan that includes some other assets in addition to core infrastructure assets
- C. We have a plan that includes all infrastructure assets
- D. We don't have a plan

Under the Federal Gas Tax Agreement, municipalities are required to develop and implement an asset management plan by Dec 31, 2016. The provincial requirement to date has focused on inclusion of core infrastructure only, which includes roads, bridges, water, wastewater, and stormwater infrastructure. One way for municipalities to demonstrate progress on asset management would be to incorporate more infrastructure assets in their plan.

An asset management plan is a strategic document that states how a group of assets will be managed over a period of time. The 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.

The plan may use any appropriate format, as long as it includes the information and analysis required to be in a plan as described in Ontario's "Building Together: Guide for Asset Management Plans".

Q2. How many years does your municipality's asset management plan cover? (The recommended period is at least 10 years.)

- A. 1 - 4 years
- B. 5 - 9 years
- C. 10 - 19 years
- D. 20 years or more

A municipal asset management plan should identify all future infrastructure investments that are required at least in the next 10 years.

Q3. Does your municipality own any tangible capital assets in the following functional categories of the Financial Information Return as of December 31, 2016? (All municipal tangible capital assets are reported in Schedule 51A of the FIR.)

Functional categories of FIR	Yes or No
General Government	Yes/No
Protection Services	Yes/No
Transportation Services	Yes/No
Environmental Services	Yes/No
Health Services	Yes/No
Social and Family Services	Yes/No
Social Housing	Yes/No
Recreation and Cultural Services	Yes/No
Planning and Development	Yes/No

Section 1.1 of the Federal Gas Tax Agreement defines infrastructure as municipal or regional, publicly or privately owned, tangible capital assets primarily for public use or benefit in Ontario. In Ontario, all municipalities report their tangible capital assets in Schedule 51A of their Financial Information Return (FIR).

To meet the asset management requirements of the Federal Gas Tax Agreement, municipalities must continuously improve existing asset management plans to include all Gas Tax eligible tangible capital assets reported in Schedule 51A of the FIR. AMO will not withhold Gas Tax funds as long as municipalities can demonstrate progress towards meeting the requirement.

As a Best Practice, AMO encourages municipalities to include all tangible capital assets in their plan even if they are not eligible for Gas Tax funding. It will help municipalities realize the most value from the asset management planning exercise in terms of resources and decision-making.

Additionally, the structure of your assets inventory in your asset management planning system should ideally be consistent with your functional classification or asset hierarchy in the FIR. Please refer to the instructions provided by Ministry of Municipal Affairs to review the functional infrastructure categories of the FIR:

2015 FIR Instructions from MMA

Q4. Does your municipality own any tangible capital assets that are eligible for federal Gas Tax funding in the following functional categories of the FIR?

General Government	Yes/No
Protection Services	Yes/No
Transportation Services	Yes/No
Environmental Services	Yes/No
Health Services	Yes/No
Social and Family Services	Yes/No
Social Housing	Yes/No
Recreation and Cultural Services	Yes/No
Planning and Development	Yes/No

Federal Gas Tax funds can be invested in 16 eligible infrastructure project categories: local roads and bridges, public transit, water, wastewater, solid waste, community energy systems, recreation, culture, sport, tourism, broadband connectivity, local and regional airports, disaster mitigation, brownfield redevelopment, short-line rail and short-sea shipping.

Note that two major infrastructure categories that are not eligible for funding are social housing and healthcare infrastructure. Also, municipal vehicles other than transit vehicles and waste trucks are not eligible. Please visit the Gas Tax Community to see detailed information on the types of eligible infrastructure projects.

Q5. Does your municipal asset management plan include all your tangible capital assets reported under the following functional categories of the FIR?

General Government	Yes/No/WIP
Protection Services	Yes/No/WIP
Transportation Services	Yes/No/WIP
Environmental Services	Yes/No/WIP
Health Services	Yes/No/WIP
Social and Family Services	Yes/No/WIP
Social Housing	Yes/No/WIP
Recreation and Cultural Services	Yes/No/WIP
Planning and Development	Yes/No/WIP

We are assuming that all tangible capital assets reported in your FIR are owned and managed by your municipality. So all of them should be part of your asset management planning process in order to keep them in a state of good repair.

Q6. What is the current replacement cost of all tangible capital assets reported in Schedule 51A of the FIR? (Note that Schedule 51A does not have the replacement cost of your tangible capital assets. Calculating this amount is part of your asset management planning process.)

Please provide replacement cost of all your tangible capital assets that are reported in Schedule 51A of the FIR regardless of whether they are part of your existing asset management plan or not.

This would be the amount of funds required to re-build all your infrastructure today from scratch.

Q7. What is the current replacement cost of the tangible capital assets your municipality has included in its asset management plan?

Please provide the total replacement cost of all assets that are included in your most recent asset management plan.

We are assuming that all infrastructure assets that you own which are part of your asset management plan are above your capitalization threshold i.e. they are all reported as tangible capital assets in Schedule 51A of the FIR.

Q8. What percentage of infrastructure assets you own are included in your asset management plan?

It is auto-calculated as sum of current replacement cost of assets included in your asset management plan as a percentage of total replacement cost of all tangible capital assets reported in Schedule 51A of your FIR.

Q9. How does your municipality determine replacement cost of its tangible capital assets?

- A. Inflating historical costs
- B. Engineering Estimates
- C. Combination of the above

While engineering estimates provide more realistic replacement costs, most municipalities in Ontario have inflated the historical cost of their infrastructure assets using price indices to determine replacement costs.

Q10. How does your municipality primarily assign condition ratings to your infrastructure assets included in the plan?

- A. We use age-based condition based on amortization
- B. We rely on staff visual inspection
- C. We rely on engineering inspections

One of the factors in good asset management planning is the availability of accurate condition data on infrastructure assets. As a Best Practice, municipalities should put in place a monitoring and review regime for their assets condition and performance.

Engineering inspections are more reliable than visual inspections or age-based modeling. It involves the use of specialized condition monitoring systems to monitor key condition indicators of assets like temperature and vibration to help predict possible future failures.

AMO sponsored a research project in 2014 on state of the infrastructure for roads and bridges in 93 Ontario municipalities. Based on the results of the study, we know that assets that have condition assessment data are in general performing better than what their accounting age would otherwise suggest.

Q11. Does your municipality currently use your asset management plan to identify priority infrastructure projects?

- A. Yes
- B. No

As a Best Practice, municipal asset management plans should specify those infrastructure assets that have immediate rehabilitation or replacement needs including the cost and the timing of the required intervention/investment.

Q12. Does your municipality currently use a risk-based approach in your asset management plan to identify priority infrastructure projects?

- A. Yes
- B. No

If you own a lot of infrastructure and many assets are in poor condition, using condition-based approach alone does not tell which assets are the most important and urgent from a service delivery perspective.

Using a risk-based approach gives you a more structured and objective assessment of what is the most important and urgent need. As the key asset management objective of municipalities is the sustainable delivery of service to their residents, risk can be calculated as:

Asset Risk = Likelihood of Asset Failure x Service Consequence

Priority projects can be then identified by assigning different risk levels or scores to all of your infrastructure assets (for example, low, medium, high, critical, etc.).

ISO 31000 defines risk management as "a coordinated set of activities and methods that is used to direct an organization and control the many risks that can affect its ability to achieve its objectives". The asset management objective of a municipality is to provide sustainable levels of service to its residents.

Q13. Does your current asset management plan identify your municipality's annual infrastructure funding gap?

- A. Yes
- B. No

The annual infrastructure funding gap is the difference between available funding and the funding required to keep all infrastructure assets in a state of good repair.

Q14. Does your current asset management plan have a financial strategy?

- A. Yes
- B. No

A financial strategy identifies how future infrastructure investment activities will be funded on the basis of future revenue projections.

Having a financial strategy is critical for putting an asset management plan into action and to demonstrate that municipalities have made a concerted effort to integrate asset management planning with financial planning and budgeting and to make full use of all available infrastructure financing tools.

Q15. Does your current asset management plan identify infrastructure investments in the next 10 years according to your municipality's current and/or target levels of service?

- A. Yes
- B. No

Levels of service relates to the quality, quantity, reliability, responsiveness, environmental acceptability and costs related with the end use of the provision of infrastructure.

Levels of service are the least developed area of municipal asset management plans. Progress in asset management planning can be demonstrated by tying future infrastructure investments with current and/or target levels of service in line with the expectations and affordability of your residents.

The goal should be to provide the desired level of service at the lowest whole life cycle cost of an individual asset i.e. sum of all expenses associated with an asset including acquisition, operation, maintenance, refurbishment and renewal, and decommissioning and disposal.

Q16. Does your municipality have a strategic asset management policy?

- A. Yes
- B. No

A strategic asset management policy at a minimum specifies the asset management objectives and how they will be delivered, frequency of how often asset management plan will be updated, and how it aligns with other municipal policies and plans, and the role of staff and council in developing the plan. It should be approved by your council as gaining top level buy in for asset management is major step forward in demonstrating progress.

Note that the strategic asset management policy is a combination of asset management policy and asset management strategy. Some large urban municipalities in Ontario have developed both in addition to their asset management plan.

According to the ISO 55000, the international standard for asset management:

- *An asset management policy sets the asset management objectives, articulates senior management's commitment to asset management, provides top direction regarding expectations and mandatory requirements, and defines the key principles that underpin asset management in an organization.*
- *An asset management strategy defines what an organization intends to achieve from asset management activities and the timeline. It describes your long-term approach to asset management, specifies how your strategic objectives are translated into asset management objectives, the role of asset management strategy in supporting achievement of the asset management objectives, and the approach for developing an asset management plan.*