

AssetSMART

A Tool to Take Stock of Your Community's Capacity to Manage its Assets

What is AssetSMART?

AssetSMART is a tool that local governments can use to assess their capacity to manage their assets. This tool has been designed to help local governments:

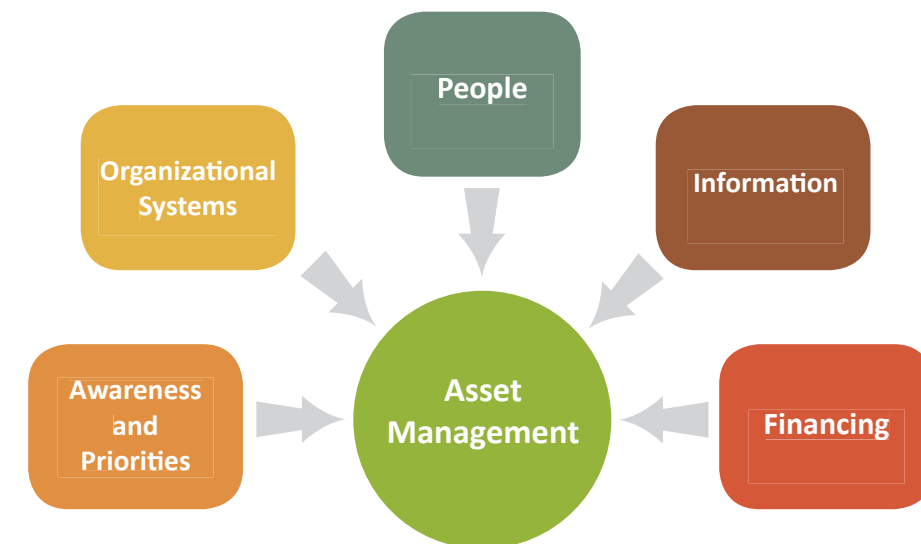
- ◇ Evaluate their asset management capacity in a wide range of areas
- ◇ Identify particular areas of strength and areas for improvement
- ◇ Establish priorities
- ◇ Build awareness of the many dimensions of asset management
- ◇ Generate productive discussion across departments
- ◇ Measure progress over time
- ◇ Benchmark against other communities
- ◇ Set short-, mid-, and long-term objectives in specific areas

Which communities should use this tool?

AssetSMART has been specifically designed to reflect the unique challenges that local governments face in managing their assets. This tool is intended to be used by any local government, of any size, and at any stage of implementing an asset management program. Whether your community is in the initial or advanced stages of asset management, AssetSMART can help your organization take stock of where it is today and plan for the future.

The Five Core Capacities for Asset Management

Managing a community's assets is a multi-dimensional challenge that requires the integration of people, resources, and information from across an organization's various units (e.g., engineering, planning, finance, and operations). Because the scope of asset management is broad, this tool assesses management capacity in five core areas.



Date _____

Name _____

Organizational Unit _____

Assessment prepared for which assets? _____

(e.g., water, sanitary sewer, drainage, roads, and facilities)

Using AssetSMART

Step 1 Decide Which Assets to Assess

The first step is to decide which assets (e.g., water, sanitary sewer, drainage, transportation, and buildings) to focus on. Some communities may choose to assess their capacity to manage only one asset class, whereas other communities may choose to assess their capacity to manage all of their assets.

If a local government wishes to assess its capacity to manage more than one asset class, the self-assessment matrix should be completed separately for each asset class. The awareness and priorities capacities, however, will apply to the organization as a whole and are relevant to all asset classes.

Step 2 Assess Current Capacity

For each of the rows, choose the cell that most closely describes your organization's capacity today (simply check the appropriate box). If you feel that your organization falls between two cells, choose the line between the two cells. Add comments as needed in the adjacent column.

The assessment matrix is organized into the five core capacity areas (rows), and by capacity level (columns). Capacity increases from left to right as follows:

- Level ① Very low capacity
- Level ② Fair capacity
- Level ③ Good capacity
- Level ④ High capacity

Step 3 Identify Desired Capacity

For each of the rows, choose the cell that most closely describes the level of capacity that you would like your organization to have in the future. You may want to indicate desired capacities for a given timeframe, as your organization may have different short-, mid-, and long-term objectives.

Defining "desired capacity levels" will likely be more difficult than identifying "current capacity levels", and will require organization-

wide discussion to establish attainable objectives. It is not suggested that all communities aim for Level ④ capacity on all components – targets will need to reflect the specific circumstances of each community.

Who should fill in the self-assessment?

Effectively managing a community's assets will require the participation of many individuals and groups from across the organization. At a minimum, personnel responsible for the following functions should be invited to participate in the self-assessment:

- ◇ Engineering (transportation, water, sanitary, stormwater)
- ◇ Facilities
- ◇ Parks and Recreation
- ◇ Operations
- ◇ Planning (current and long-range)
- ◇ Finance

How should the self-assessment be completed?

Local governments can opt to fill in the self-assessment in a number of ways, such as:

A group (whole organization)

Local governments may choose to complete the assessment together as a group in workshop format, to help ensure that all participants are on the same page. This approach can effectively build buy-in from the entire group, but may not highlight significant differences in understanding across the organization.

Individually

Alternatively, local governments may choose to ask each participant to complete the assessment independently, and then meet as a group to review the results. Providing respondents with the assessment prior to meeting as a group can help ensure that individual input is

fully explored, and bring to light any significant differences in understanding across the organization.

Business units

Other local governments may choose to complete the assessment first by business unit (e.g., engineering, planning, finance and operations), and then discuss the results as an entire organization.

Local governments will need to choose an approach that makes the most sense for their organization. However, it is recommended that local governments always include plenty of time for discussion about assessment results. **The discussion is the most valuable part of the exercise.** Local governments may also find it helpful to have an outside asset management expert facilitate the discussion. Involving an objective third-party can help ensure that issues are discussed fairly and comprehensively.

How can the assessment results be used?

Completing AssetSMART is an important first step in developing an asset management strategy. Next steps include:

Prioritizing gaps

For most local governments, it will not be reasonable to expect to build capacity in all areas at once. Local governments will need to choose which capacity gaps to address first. Some capacity gaps will be more significant than others. This will all depend on the local government's unique circumstances.

Developing implementation strategies

The next step will be to develop detailed implementation strategies to fill the most significant capacity gaps.

AssetSMART helps frame the discussion on prioritizing gaps and developing implementation plans, but it does not provide pre-packaged solutions. Local governments will need to look carefully at their specific circumstances, evaluate available options, and decide for themselves the best way forward.

Glossary

Asset

A physical component of a system that has value, enables services to be provided, and has an economic life of greater than 12 months.

Asset Management

Systematic and coordinated activities and practices through which an organization manages its assets, their associated performance, risks and expenditures over their life cycles.

Asset Management Plan

Document specifying activities and resources, responsibilities and timescales for implementing the asset management program.

Asset Management Program

A program to identify asset management needs, set up longer term financing means, and regularly schedule maintenance, rehabilitation and replacement works for the long term sustainability of the asset.

Asset Renewal

Works to upgrade, refurbish or replace existing facilities with facilities of equivalent capacity or performance capability.

GIS

Geographic Information System.

Infrastructure Deficit

A cumulative shortfall of required asset renewal.

Level of Service

The defined quality for the provision of a particular service. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental acceptability, and cost.

Life Cycle

The life of an asset, from the point when a need for it is first established, through its design, construction, acquisition, operation and any maintenance or renewal, to its disposal.

Life Cycle Cost

The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation, and disposal costs.

Local Government

Municipalities and regional districts.

Long-Term Financial Plan

Funds the long term investment plan.

Long-Term Investment Plan

A long-term multi-asset renewal plan (e.g. 20 years).

Maintenance

All actions necessary for retaining an asset as near as practicable to its original condition, but excluding rehabilitation or renewal.

Non-Utility Asset

An asset funded through taxes.

Primary Asset

For a given category of assets (e.g. water, sanitary, sewer, drainage, transportation, and buildings), the primary assets are those that make up the majority of the investment in the category. For example, for the category of watersystem assets, the pipes would be considered primary assets since a very large portion of the investment in the water system is for pipes.

Secondary Asset

For a given category of assets, the secondary assets are those other than the primary assets. For example, for the category of water system assets, the valves and hydrants would be considered secondary assets whereas the pipes are considered to be primary assets.

Utility Asset

An asset funded through rates.

Awareness and Priorities

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
1.1 Vision	Vision for asset management does not exist	Vision for asset management exists but is not clear	Vision for asset management exists, is somewhat clear but is not well communicated through the organization	Vision for asset management exists and is well communicated through the organization	
1.2 Understanding	The status of our community infrastructure is not well understood	The status of our community infrastructure is well understood by some key staff	The status of our community infrastructure is well understood by key staff, and is regularly communicated to elected representatives	The status of our community infrastructure is well understood by key staff, and is regularly communicated to elected representatives and the public	
1.3 Awareness	There is limited awareness of asset management among key staff	There is good awareness of asset management among some key staff	There is good awareness of asset management among key staff and elected officials.	There is good awareness of asset management among key staff, elected officials, and the public	

Awareness and Priorities (Cont'd)

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
1.4 Priority	Asset management is not a priority	Asset management is a priority among some key staff	Asset management is a priority among key staff and elected officials	Asset management is a priority among key staff, elected officials, and the public	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
1.5 Leadership	Minimal or no leadership for asset management	Leadership exists for some assets	Leadership exists for all core assets	Leadership exists for all community assets	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

People

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
2.1 People Resources	Limited internal resources are available for asset management	Some internal resources are available for asset management, but additional internal and external resources are required	Adequate internal resources are available for asset management, but additional external resources are required	Required internal and external resources for asset management are in place	
2.2 Knowledge & Skills	Limited asset management knowledge and skills are in place	Fair asset management knowledge and skills are in place	Good asset management knowledge and skills are in place	Comprehensive asset management knowledge and skills are in place	
2.3 Cross-Functional Teams	No cross-functional team exists for asset management	A cross-functional team exists for asset management but meets infrequently	A cross-functional team exists for asset management and meets regularly	An effective cross-functional team exists for asset management, meets regularly, and makes decisions in a collaborative manner	

People (Cont'd)

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
2.4 Roles & Responsibilities	No roles and responsibilities for asset management are in place	Some roles for asset management are in place, but specific responsibilities are unclear	Clearly defined roles and responsibilities for asset management are in place for some staff	Clearly defined roles and responsibilities for asset management are in place for all staff	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
2.5 Knowledge Transfer	There is limited knowledge transfer; significant knowledge of assets exists in minds of key individuals only	Select knowledge of assets has been "downloaded" and documented from some staff	Select knowledge of assets has been "downloaded" and documented from all key <u>senior</u> staff	Select knowledge of assets has been "downloaded" and documented from <u>all</u> key staff	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Organizational Systems

Asset Management Policies and Plans

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
3.1 Asset Management Policy	No documented asset management policy is in place	Documented asset management policy exists but does not generally inform asset investment decisions	Documented asset management policy exists and informs asset investment decisions most of the time	Documented asset management policy is endorsed by elected representatives and informs asset investment decisions all the time	
3.2 Asset Management Plan	No documented asset management plan exists	Documented asset management plan exists but plan does not generally inform asset management activities	Documented asset management plan exists and informs asset management activities most of the time	Documented asset management plan exists, is widely communicated, and directs all asset management activities	
3.3 Long-Term Investment Plan	No long-term plan that includes asset renewal exists	Long-term plan that includes asset renewal exists for some primary assets	Long-term plan that includes asset renewal exists for most primary and some secondary assets	Long-term plan that includes asset renewal exists for all primary and most secondary assets	

Organizational Systems (Cont'd)

Asset Management Processes

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
3.4 Governance (Decision-Making)	No decision-making process exists to guide the overall asset management process	Decision-making processes are understood informally	Decision-making processes are defined, but decisions are not regularly made efficiently and effectively	Decision-making processes are clearly defined and decisions are typically made efficiently and effectively	
3.5 Level of Service	No process exists to establish level of service	A process, which considers customer expectations and associated costs, is in place to establish level of service for some primary assets	A documented process, which considers customer expectations and associated costs, is in place to establish level of service for most primary and some secondary assets	A documented process, which considers customer expectations and associated costs, is in place to establish level of service for all primary and most secondary assets	
3.6 Risk Classification	No process exists to classify risk	A process, which applies both consequence and likelihood of failure, is in place to classify risk for some primary assets	A documented process, which applies both consequence and likelihood of failure, is in place to classify risk for most primary and some secondary assets	A documented process, which applies both consequence and likelihood of failure, is in place to classify risk for all primary and most secondary assets	
3.7 Condition Assessment	No process exists to classify asset condition	A process, which involves periodic field investigation, exists to assess and classify condition for some primary assets	A documented process, which involves periodic field investigation, exists to assess and classify condition for most primary and some secondary assets	A documented process exists, which involves periodic field investigation, to assess and classify condition for all primary and most secondary assets	

Organizational Systems (Cont'd)

Asset Management Processes

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
3.8 Asset Performance	No process exists to classify asset performance	A process to collect key performance data exists to classify asset performance for some primary assets	A documented process to collect key performance data exists to classify asset performance for most primary and some secondary assets	A documented process to collect key performance data exists to classify asset performance for all primary and most secondary assets.	
3.9 Failure Tracking	No process exists to track asset failures and failure mode	A process exists to track asset failures and failure mode for some primary assets	A documented process exists to track asset failures and failure mode for most primary and some secondary assets	A documented process exists to track asset failures and failure mode for all primary and most secondary assets	
3.10 Remaining Useful Life	No process exists to estimate remaining useful life	A process, which considers asset condition and other available field data, exists to estimate remaining useful life for some primary assets	A documented process, which considers asset condition and other available field data, exists to estimate remaining useful life for most primary and some secondary assets	A documented process, which considers asset condition and other available field data, exists to estimate remaining useful life for all primary and most secondary assets	
3.11 Demand Forecasting	No process exists to estimate future service demands	A process exists to estimate future service demands for some primary assets	A documented process exists to estimate future service demands for most primary and some secondary assets	A documented process exists to estimate future service demands for all primary and most secondary asset	

Organizational Systems (Cont'd)

Asset Management Processes

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
3.12 Information and Data Maintenance	No process exists to incorporate new information	A process exists to incorporate new information, but the turnaround time is often too long	A documented process exists to incorporate new information, but improvement in turnaround time is desired	A documented process exists to incorporate new information in a timely manner	
3.13 Lifecycle Management - Engineering and Construction	No process exists to inform decisions related to the design, construction, and commissioning of assets	A process exists to inform decisions related to the design, construction, and commissioning of assets	A documented process exists to inform decisions related to the design, construction, and commissioning for most primary and some secondary assets	A documented process exists to inform decisions related to the design, construction, and commissioning for all primary and most secondary assets	
3.14 Lifecycle Management - Operation and Maintenance	No process exists to inform decisions related to the operation and maintenance of assets	A process exists to inform decisions related to the operation and maintenance of primary assets	A documented process exists to inform decisions related to the operation and maintenance of most primary and some secondary assets	A documented process exists to inform decisions related to operation and maintenance of all primary and most secondary assets	

Information

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
4.1 Spatial Inventory	Spatial inventory is neither complete nor accurate	Spatial inventory is complete and accurate for some primary assets	Spatial inventory is complete and accurate for most primary and some secondary assets	Spatial inventory is complete and accurate for all primary and most secondary assets	
4.2 Basic Attribute Data	No complete or accurate basic attribute data exists	A database, which contains complete and accurate basic attribute data, exists for some primary assets	A database, which contains complete and accurate basic attribute data, exists for most primary and some secondary assets	A database, which contains complete and accurate basic attribute data, exists for all primary and most secondary assets	
4.3 Condition Data	No long-term capital plan that includes asset renewal exists	Long-term capital plan that includes asset renewal exists for some primary assets	Long-term capital plan that includes asset renewal exists for most primary and some secondary assets	Long-term capital plan that includes asset renewal exists for all primary and most secondary assets	

Information

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
4.4 Performance, Failure, and Risk Data	No performance, failure, or risk database exists	A database - which contains available performance, failure, and risk data - exists for some primary assets	A database - which contains available performance, failure, and risk data - exists for most primary and some secondary assets	A database - which contains available performance, failure, and risk data - exists for all primary and most secondary assets	
4.5 Replacement Value	Replacement value data is incomplete for most assets or does not exist	A database, which contains complete and accurate replacement value data, exists for some primary assets	A database, which contains complete and accurate replacement value data, exists for most primary and some secondary assets	A database, which contains complete and accurate replacement value data, exists for all primary and most secondary assets	
4.6 Data Integration	An integrated database does not exist	Some available asset data exists in an integrated database, which links all information through a unique asset ID	Most available asset data exists in an integrated database, which links all information through a unique asset ID	All available asset data exists in an integrated database, which links all information through a unique asset ID	
4.7 Information Technology	Limited technology is in place to support asset management	Some technology in place, but there is a clear need for additional technology to support asset management	Adequate technology in place to support asset management	Advanced technology in place to support asset management	

Funding

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
5.1 Financial Plans	No long-term financial plan exists	A long-term financial plan exists but infrastructure deficit continues to grow	A long-term financial plan exists and infrastructure deficit remains at current level	A long-term financial plan exists and infrastructure deficit is reducing	
5.2 Funding of Non-Utility Assets	Financing approaches do not fund long-term asset renewal	Financing approaches only partially fund long-term asset renewal	Financing approaches fund most long-term asset renewal	Financing approaches fully fund all long-term asset renewal	
5.3 Funding of Utility Assets	User rates and charges do not fund long-term asset renewal	User rates and charges only partially fund long-term asset renewal	User rates and charges fund most long-term asset renewal	User rates and charges fully fund long-term asset renewal	

Funding (Cont'd)

	① VERY LOW CAPACITY	② FAIR CAPACITY	③ GOOD CAPACITY	④ HIGH CAPACITY	Notes
5.4 Reserve Funds	No dedicated reserve funds are established for asset renewal	Minimal dedicated reserves exist for asset renewal	Moderate dedicated reserves exist for asset renewal	Sufficient dedicated reserves exist for asset renewal	
5.5 Annual Budgeting	Annual budget is not typically based on financial plan	Annual budget is partially based on financial plan due to a lot of changing priorities	Annual budget is predominantly based on financial plan due to few changing priorities	Annual budget is completely based on financial plan with no changing priorities	