

What are Assets?

Assets are infrastructure and real property that serve a community and are intended to be maintained to a specified level of service by the continuing maintenance and replacement of its components. Typical assets are:

- Land
- Property and buildings used for such functions as education, health, government offices, correctional facilities and community centres
- Transportation networks
- Water utilities (water supply, wastewater and storm water systems)
- Flood control systems such as dykes and levees
- Energy supply systems (electricity transmission, generation, distribution and storage)
- Parks and recreation facilities
- Telecommunication networks
- Ports and port facilities such as wharves, docks, cranes, etc
- Information technology and systems

What is asset management?

Asset Management refers to systems that monitor and maintain things of value. Assets have a service value--in this case, the physical infrastructure that serves a community. They also have a financial value--assets cost money to acquire. Financial value is transient; selling physical assets will increase financial assets and investing into physical assets will reduce financial assets. When to sell or invest is one of the many questions a proper asset management strategy must address. The most basic asset management questions that need answering are:

- What do you have?
- What is it worth?
- What is its condition?
- What is its remaining service life, i.e. how long will it last?
- What is the cost of the deferred maintenance i.e. what haven't you been fixing?
- What will you fix first?

Asset Management systems are the processes used to answer these questions so that the owner can cost-effectively develop, operate, maintain, upgrade and dispose of assets over time.

Decisions that show the impact of good asset management include:

- Undertaking regularly scheduled maintenance of equipment (e.g. changing filters), buildings (e.g. painting), roads (e.g. grading), etc to ensure that the asset lasts as intended. If it is not maintained, there will be reduced service value and it will need to be replaced, which is more expensive.
- Redeveloping under-used land or selling/leasing surplus land so that it can be put to use in the local economy will generate more revenue for the community and increase financial value for the community.

Objectives of asset management

The objective of asset management is to meet a required level of service, in the most cost-effective manner, through the management of assets for present and future customers. This objective is accomplished through lifecycle asset management and portfolio management. Lifecycle asset management encompasses all practices associated with physical infrastructure and property so that decisions are made based on the lowest long-term cost rather than short-term savings. Portfolio management involves managing groups of assets to maximize value and investment for the entire portfolio of assets rather than individual or single groups of assets.

Asset Management Drivers and Benefits

The physical assets of a community, property and infrastructure such as roads, water, sanitary systems, electricity and power stations, telecommunications facilities, buildings, and parks, comprise the majority of the local government's investment and funds. Major resources are invested in the acquisition of these assets, yet often their continuing benefit and functionality are not attended to, thereby hurting level of service to the citizenry and wasting the initial investment. Implementing Asset Management best practices benefits the community and the central government in many ways:

- Economic sustainability is strongly enhanced by reduced cost to deliver services.
- Social equity and benefits are realized because the community has more resources to provide services and amenities.
- Environmental sustainability and reliance is stronger because resources are conserved and more attention is given to long term solutions rather than short term affordability or convenience; moreover, proper valuation of environmental assets, such as lakes, rivers and groundwater allow land and other assets to retain value.
- Citizens enjoy more dependable service levels without unexpected failures and indefinite interruptions.
- The financial viability of the local government is enhanced because future costs are anticipated and reserves set aside.
- The transparency of government is enhanced which leads to better communication with the public and grows citizen trust and confidence. and
- Communication is more effective with rate payers, elected officials, financial rating organizations and regulatory agencies because plans and results are documented and shared.

As cities and the central government better manage their scarce resources, so the country is able to attract more global capital and investment - all because of better management of local government assets.

Overview

This Diagnostic Tool comprises three parts:

Part 1 is a self-assessment, completed prior to an onsite interview with local government officials and staff. This section is to be forwarded to the selected local government prior to the visit by UN-DESA staff.

Part 2 is an verification and validation of Part 1 and is completed during and after the onsite interviews by the assessing team.

Part 3 is an evaluation of Part 1 and Part 2 and is to be completed after the onsite interviews by the assessor. It should result in a menu of optional interventions that local authorities should consider to improve their asset management practices.

Asset Categories

There are three main categories of physical assets identified in this self-assessment. They are:

Land	Infrastructure	Buildings
None	Cemeteries	Cultural (e.g. museums)
Surplus/ Available for	Energy Supply (generation and distribution)	Educational (e.g. schools, universities, libraries)
Unoccupied/ Available for	Parks & public spaces	Emergency Services (e.g. fire, police)
Public markets	Road Network (including sidewalks/pavements, traffic signals, signage)	Government Offices
	Solid waste collection and disposal	Housing
	Transportation Networks (e.g. airports, bus terminals, railways)	Judicial (e.g., jails, courts)
	Wastewater Utilities (including collection and treatment)	Health (e.g. hospitals, clinics)
	Water Utilities (including treatment and distribution)	Recreational Facilities
	Port facilities (e.g. wharves, docks, cranes, etc)	
	Flood protection (e.g. dykes, levees, etc)	

Not all of these assets will be managed by every local government. Some may not exist and some may be managed by national authorities. Whilst primarily intended for subnational asset management, this questionnaire can also be applied to assets/services typically found at the sub-national level but are managed at the national level in some countries.

Part 1 - Asset Management Self Assessment: Cover Sheet

Please complete the blank sections on this form.

Country:	
Local Government Municipality/Jurisdiction:	
DAYTIME Population:	
NIGHTTIME Population:	
Person Submitting Assessment:	
Title:	
E-mail:	
Telephone:	
Date completed:	

Asset Management Assessment Participants: (Individuals involved in asset management)

Name	Title	Asset Management roles/responsibilities

Part 1 - Asset Management Self-Assessment: Overall Context

Instructions

Please answer in the context of needs, challenges and change pressures that impact or involve physical infrastructure and real property used by the local government to serve its community. Do not be concerned if some of the questions are not applicable or you are unsure how to answer them as they will be discussed during the onsite interview.

Instructions		
Please answer in the context of needs, challenges and change pressures that impact or involve physical infrastructure and real property used by the local government to serve its community. Do not be concerned if some of the questions are not applicable or you are unsure how to answer them as they will be discussed during the onsite interview.		
Questions		
1. Please list three major local government economic, environmental and community development challenges you are facing.		
2. Briefly describe the principal goals your local government has set for the next 3-5 years.		
3. Please indicate which of the following main physical assets are in your local government's inventory (circle all that apply).		
Land	Buildings	Infrastructure
None	None	None
Surplus/ Available for disposal	Cultural (e.g. museums)	Cemeteries
Unoccupied/ Available for use	Educational (e.g. schools, universities, libraries)	Energy Supply (generation and distribution)
Public markets	Emergency Services (e.g. fire, police)	Street lighting
	Government Offices	Parks & public spaces
	Housing	Road Network (including sidewalks/pavements, traffic signals, signage)
	Judicial (e.g., jails, courts)	Solid waste collection and disposal
	Health (e.g. hospitals, clinics)	Transportation Network (e.g. airports, bus terminals, railways)
	Public lavatories	Wastewater Utilities (including sanitary and storm water collection and treatment)
	Recreational Facilities	Water Utilities (including treatment and distribution)
		Port facilities (e.g. wharves, docks, terminals, etc)
		Flood protection (e.g. storm water retention ponds, dykes, levees, etc)
	Other (e.g. monuments)	Other
4. What is the most Critical Asset that you are managing (a critical asset is an individual asset that is critical to the agency for the delivery of its services and has high consequences in case of failure or loss)?		
5. How does the performance of your critical assets affect the delivery of services in your local government? E.g. Poor roads affect the ability to deliver goods to market and thus have an economic impact.		
6. Who manages the different classes of physical assets in your city? What assets are managed locally and what assets are managed at a higher level (e.g. district or nationally)?		

7. Who is involved in asset acquisition, operations and maintenance and the disposal of assets? Is there a documented decision making process? If so, please provide a copy.
8. Have you had any external review of your asset management practices or plans previously? If so, what was the outcome?
9. Briefly describe any asset management improvement initiatives currently in progress, or already planned for the next year (e.g. implement a GIS, improve inventory data, etc).
10. Please list the major national laws, regulations and policies that govern how you manage your assets.
11. Where do you need the most support/help to improve? How can we help you?

Part 2 - Onsite Assessment

Part 2 examines specific best practices of asset management:

These questions are best administered during onsite interviews. The assessor will ask the local government to describe in detail its current practices managing physical infrastructure and real estate (land, buildings). The questions are organized under the topics of “Understanding and Defining Requirements”, “Lifecycle Decision-making”, and “Asset Management Enablers”. These questions also apply to assets/services typically found at the sub-national level but are delivered at the national level in some countries.

They are intended to be answered by staff in departments with the following responsibilities:

- Planning
- Development
- Finance
- Engineering & Works
- Community Development
- Technical Services

Instructions to Interviewees

Please answer the following questions as best you can. It is not unusual for a local government to be more focused on a few categories of assets than the others. If this is the case, please respond for an asset that best reflects your greatest level of effort for one or more assets. Also, feel free to add comments and clarification on how different assets are managed, or specific approaches your local government uses to manage its infrastructure and properties.

Do not be concerned if several of the questions are not applicable or you are unsure how to answer them as you will have the opportunity to discuss your responses when meeting with the assessors.

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Question	Section	Questions	What does this mean/example?	Answers
Understanding and Defining Requirements				
1	Asset Inventory Data	What asset inventory information does the local government collect (e.g. location, size, type, material, cost, etc), how is it classified and how does the local government ensure the information is accurate, consistent and usable?	<p>Basic building and land information to be collected:</p> <ul style="list-style-type: none"> • Street address & Cadaster number • Current use(s) • Total floor/land and associated areas • Construction material (e.g. wood, concrete, steel, etc.) • Year of construction <p>Basic infrastructure information to be collected:</p> <ul style="list-style-type: none"> • Municipality/Region • Type of asset (e.g. water, wastewater, power, etc) • Identification number • Size/capacity (e.g. diameter, height, volume, flow, etc) • Total Length (pipes, transmission lines, roads, etc) • Construction material (e.g. cast iron, steel, wood, etc.) • Year of construction <p>More advanced information</p> <ul style="list-style-type: none"> • Condition • Current occupancy (i.e. % of usable space occupied) • Inspection date • Construction cost • Annual depreciation amount • Depreciated book value • Combined estimated market value of building & land site • Annual operating and maintenance costs • GIS / digital map of location • Associated assets e.g. manholes, pumping stations, etc 	
2	Asset Performance	How does the local government measure and manage the condition and performance of its assets? Are the records updated and if so, when?	<p>Asset performance information (condition, use, and suitability or meeting customer needs) supports good decision-making and allows a local government to estimate how much longer an asset will be of service (remaining service life). E.g.</p> <p>Condition Rating/Description</p> <p>1 - Excellent: Asset is like new, fully operable, well maintained and performs at or above current standards. No further action needed.</p> <p>2 - Good: Asset is well maintained but showing some signs of wear. Full performance is delivered. Mostly maintenance is planned and preventive in nature. Minor repairs may be needed.</p> <p>3 - Moderate: Asset is functional but showing normal signs of wear due to age. Many have minor failures or reduced efficiency with increased need for maintenance and/or operating costs.</p> <p>4 - Fair: Asset functions but needs high level of maintenance to remain operational. Major deterioration in performance expected in near term. Rehabilitation needed.</p> <p>5 - Failing: Effective service life exceeded and excessive maintenance costs. High risk of failure. Immediate replacement or rehabilitation needed.</p>	
3	Levels of Service	How does your local government determine an appropriate level of service for the services it delivers to its customers? How does it ensure that asset performance meets those service levels?	<p>Assets provide a service to the local community. Definition of expected level of service is based on some form of performance measurement that is defined by:</p> <ul style="list-style-type: none"> o Analysis of legal requirements – legislation determines what must be provided o Survey of customers' expectations <p>E.g. levels of service for a water system could include:</p> <ul style="list-style-type: none"> - "X" breaks per 100 km of watermain per year are acceptable; - watermain breaks will be repaired within "X" hours of initiation of repair, 95% of the time; - customer complaints will be responded to within 24 hours; - meeting of all regulatory requirements. <p>OR</p> <ul style="list-style-type: none"> - water will be piped to all houses in urban areas with a population of X - community water points will be provided every 300 metres - water will be provided by community wells 	

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Question	Section	Questions	What does this mean/example?	Answers
4	Forecasting Demand	How does your local government forecast demand for its services and the impact this demand will have on its assets? How reliable are the methods that are used?	<p>Demand is a measure of how much customers use the services provided by the assets, e.g. clean water supply or sewage disposal over time. The ability to consistently predict demand helps a local government plan ahead and meet that demand, or manage the impact and consequence (risk) of not meeting it.</p> <p>e.g. use of historical trends, maps, number and type of development permits, funding grants applied for, etc. all to help answer the following:</p> <p>Where will the community grow? How much will it grow by and when? Will existing meet the demand? Will there be enough money to expand the asset or build new to meet demand or increase levels of service to meet the demands of the citizens?</p>	

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Question	Section	Questions	What does this mean/example?	Answers
Lifecycle Decision Making				
5	Decision Making	How does your local government go about making decisions on the replacement, refurbishment or disposal of existing assets or investment in new ones?	<p>An asset must be in working order to deliver the level of service desired. If the asset fails, the ability to deliver the desired level of service may be compromised. An asset that has a major impact on the ability to meet the LOS would be considered more critical to the system than an asset whose failure would not have a significant impact on the LOS. Establishing and using a consistent decision-making process is very important to help make decisions on what assets take priority. Cost/benefit analysis can be used to determine when to replace, refurbish or renew investment. e.g. cost of activity, change in condition or performance rating, risk, value of the asset, usage, depreciated value of the asset may all be used as a trigger to determine if refurbishment or replacement is needed.</p> <p>e.g. Risk-based decision making considerations:</p> <ul style="list-style-type: none"> - Cost of Repair: If the asset can be repaired easily and without a tremendous cost, then there is a lower consequence. If the cost of repair is higher, then the consequence of the failure is also greater. - Environmental Costs Related to the Failure: Some types of asset failures can cause environmental impacts. The costs related to these impacts may not always be easy to assess in monetary terms. However, some attempt should be made to establish some type of monetary value to the environmental consequences. An example of an environmental cost related to a failure would be a sewer pipe that leaked sewage into a waterway or onto land. A value, either monetarily or qualitatively, would need to be placed on this type of consequence. - Reduction in Level of Service: The assets must be in working order to deliver the level of service desired by the water system and its customers. If the assets fail, the ability to deliver the desired level of service may be compromised. An asset that has a major impact on the ability to meet the LOS would be considered more critical to the system than an asset whose failure would not have a significant impact on the LOS. <p>The factors discussed above can be taken together in assessing the consequence of failure. The rating scale should be kept simple, e.g. rating from 1 to 5. The next step is to multiply the ranking of likelihood with the ranking of consequence of failure, obtaining the final score of asset's criticality to create a matrix.</p>	
6	Operational Planning	How does the local government plan and manage its assets to keep assets in service and meet local needs?	<p>A major asset management challenge is finding the appropriate balance between planned maintenance (inspections and scheduled maintenance etc.) and unplanned or reactive maintenance (arising from unexpected failures). Examples of documented processes and procedures that should be in place include: maintenance, cost and budget management, health and safety management, and security of the assets. E.g.</p> <p>Condition Rating/Maintenance Level</p> <ul style="list-style-type: none"> 1 - Excellent: Normal preventive maintenance 2 - Good: Normal preventive maintenance/minor repairs 3 - Moderate: Normal preventive maintenance/major repairs 4 - Fair: Major repair/rehabilitation 5 - Failing: Replace 	

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Question	Section	Questions	What does this mean/example?	Answers
7	Capital Planning	How does the local government plan and prioritise investment in upgrading or acquiring/purchasing new assets?	<p>Capital investment is typically needed to address community growth or changes, or to renew of existing assets to maintain service levels. Since this can be expensive, agencies need to plan for the cost of long term asset needs. Capital Investment Plan items can include: major rehabilitation, system expansion, technology, new assets. The Capital Investment Plan is a medium-term financial planning instrument and typically done every three to five years, essentially coinciding with the national regulations on medium-term expenditure planning.</p> <p>This type of plan would identify anticipated public infrastructure and investment projects, as well as a financing approach. It should cover as much critical assets as possible (Water & Sewerage, Streets & Roads, Sidewalks, Buildings, Street Lights and Fleet assets). A capital investment plan would describe:</p> <ul style="list-style-type: none"> • The city's policies and financial abilities to manage the investment needs associated with its spatial development and built environment; • Identified priority areas/strategic themes and investment requirements • Arrangements for coordinated decision making • CIP outcomes • Projects vs. Programs as well as a general investment schedule • Risk Management <p>Again, a priority system can be used as well cost/benefit analysis. E.g. What will the investment cost? How much will it improve service? What are the benefits (reduced travel time, fewer accidents?) What are the risks?</p> <p>e.g. Investment priority = 50% asset lifecycle cost + 30% condition/suitability + 20% risk</p> <p>If a formal cost-benefit analysis is applied for project prioritization, it should be based on a discounting technique and specify economic NPV and IRR. For this, CBA should define: which items to include (relevance); computing the value of the items (shadow prices and spillover effects); and arriving at a conclusion that provides informed advice to the decision-maker (constraints).</p>	
8	Financial Planning	How does your local government project revenues and expenses, and plan for the funding of its future expenditure and asset-related costs?	<p>Assets can bring revenue such as lease payments, user fees, or sale proceeds. Potential revenue sources, operating and maintenance costs, and capital expenditure needs must be identified. A municipal strategic financial plan (SFP) should include</p> <ul style="list-style-type: none"> • Key financial policies (for financial management, tax, general revenue, development charges, asset management, debt and surplus management, etc.). Key financial policies might include goals or guidelines for critical fiscal management metrics, such as the percentage of the annual budget to be committed to capital improvements, metrics to limit the size of annual debt service, and limits on total outstanding debt. • A fiscal capacity assessment, in which the city estimates future revenues, future operating expenditures, and the amount of funds available to transfer to capital reserves. Sources of funds for a city's capital plan might include own-source revenues (or "pay as you go" capital reserves); grants or transfers from other levels of government; grants from external sources; and long-term debt (for example, general obligation bonds backed by the full faith and credit of the issuing government) as well as external finance from the private sector through PPPs. • Financial strategies that aim at minimizing the gap between the fiscal capacity and the projected operating and capital expenditures for increasing funding for asset maintenance, renewal and acquisition. • Financial indicators as a means of reporting the city's financial condition as determined by the financial forecast. <p>Revenues and expenditures can be projected using historical revenues/costs, demand, experience, industry trends, etc. An annual budgeting activity takes place to reflect the SFP in municipal annual budgets.</p> <p>e.g. It cost \$100/m2 to replace a roof in 2015, inflation has been 3%/year so we adjust this cost to \$116/m2 to estimate the cost of replacement in 2020 [\$100 x (1+0.04)⁵]</p> <p>We received \$200,000 in user fees/permit revenue in 2017, but revenue has decreased by 2% per year for the last three years. We will have to increase fees or find other sources of income to continue with the same level of service or reduce the level of service.</p>	

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Question				
	Section	Questions	What does this mean/example?	Answers
9	Sustainability	How does your local government incorporate principles of sustainability into managing its assets?	Sustainability includes economic, social and environmental factors. Assets must be financially sustainable i.e. affordable; they must be socially sustainable i.e. equally benefit all citizens; and they must be environmentally sustainable i.e. they will preserve or improve the quality of the natural environment and will not destroy it e.g. well water – usage is controlled so that it will not exceed capacity otherwise the well will run dry; cisterns are used to store water in the rainy seasons for use in dry seasons	

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Question	Section	Questions	What does this mean/example?	Answers
Asset Management Enablers				
10	Asset Management Leadership and Teams	What is the level of local governmental awareness of and commitment to asset management? How is this reflected in existing local government structure and responsibilities?	Effective asset management requires a committed and coordinated effort across all sections of a local government. Asset management is most effective when roles are clearly defined and specifically allocated to people and teams. It is more than having policies and procedures, it is actively implementing them throughout the organisation. e.g. A simple structure may have an asset management 'champion' or dedicated AM position responsible to promote AM in the organisation, a more advance organisation will have AM a department responsible for directing and overseeing AM activities. AM responsibilities will be written into position descriptions.	
11	Asset Management Policy and Process	How does your local government ensure that its asset management policies and processes are appropriate and effective?	Asset Management policies and processes enable a local government to operate consistently and reliably, i.e. show that what was planned was delivered. The policies and practices should be appropriate, consistently applied and understood. e.g. undertaking satisfaction surveys, assets meet the needs of the stakeholders, internal audits & reviews	
12	Asset Management Information Systems	How does your local government meet the information needs of asset managers, customers and the community?	Asset information can be captured many ways. It can be electronic or paper-based. Asset management information systems enable a local government to capture, share and manage asset information efficiently and effectively. This information can then be analysed to help make decisions that support operations, budgeting, planning and asset management. System examples include: asset record books/logs, maps, spreadsheets, GIS, maintenance management systems	
13	Service Procurement	How does your local government procure asset-related services e.g. equipment parts, real estate appraisal, construction services for different assets? How does the local government exercise control over any outsourced asset management services?	Local governments need to consider the costs, benefits, risks and transparency of procuring outsourced services. Consistently used processes save the government money and build community confidence in the local officials. e.g. Services can be procured competitively, sole-sourced or from a list of qualified providers. Good control over outsourced activities includes regular inspections, good procurement regulations, a contract management team, etc	
14	Transparency	How does your local government ensure transparency in its management of assets?	Transparency is necessary to demonstrate that the local government is spending funds wisely, in a manner that benefits the public and is fair and open. This builds trust in the local government making the community attractive for more financial investment. Transparent procurement includes: <ul style="list-style-type: none"> • Open and competitive bidding on contracts • Clear scope of work or transaction details • Clear bid evaluation, tender and award criteria • Accountability of procurement officials • Public notice of name of person / entity who won contract and value 	

Part 3 - Evaluation


Instructions

The objectives of the evaluation are to determine local strengths and weaknesses, and areas of future interest for asset management coaching and education. The information gathered through the previous assessments will be combined into a concise summary (asset management profiles) of the information gained from the assessment. Each asset management profile will contain a “menu of options” for customized technical assistance on different aspects of asset management for each local authority. Local authorities will identify their priority areas for technical assistance based on these options to ensure buy-in and ownership of further technical assistance activities.

There are four awareness levels to the final assessment. These levels are designed to measure progress as a local government gradually increases management capabilities. Asset management maturity does not happen instantly; it takes many years and is relative to the organisation.

Aware (Level 1)	The municipality is aware of the need for asset management but has not been able to do so.
Basic (Level 2)	The municipality is aware of the need for asset management and has started to implement some of the activities.
Progressing (Level 3)	The municipality has implemented all of the asset management activities in at least one of the categories of assets.
Advanced (Level 4)	The municipality has implemented the asset management activities in all of the categories of assets under its jurisdiction.

The assessor should keep track of all interviewees in the sheet provided below. The first scoring sheet provides the assessor with the option of assigning a score ranging from 0-4 to account for a local government being somewhere between levels. E.g., a local government may not be aware of some elements of asset management such as levels of service, or may have heard of the term but not know what it means. In this instance, a score of '0' or '0.5' could be assigned by the assessor to that particular question. For example, if the most applicable answer for the local government is Level 1, the assessor should assign an 'X' in the box as shown.

Question	Level 1	Level 2	Level 3	Level 4
What asset-related information does the local government collect (e.g. location, size, type, material, cost, etc) and how does it ensure the information is accurate, consistent and usable?	The local government understands the need to collect asset data and may have started to collect it. 	Basic physical information (e.g. location, size, type) is recorded manually or electronically in a spread sheet. The date and time of collection, who it was collected by and how is also recorded.	Information is collected electronically. In addition to physical information, information including initial and replacement costs, approximate age, land value, etc is also gathered.	Complete and accurate data is available for all assets, including new assets. Data is easily accessible to all who require it. There is a high level of confidence in critical asset data.

The second scoring sheet provides requests the assessor to identify target scores that he/she feels are an appropriate target for the local government as well as recommended actions to achieve them. This sheet will be used to inform future coaching and educational support.

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Part 3 - Evaluation

Scoring
Assessors to complete after on-site visit

Question Section		Awareness				Comments
		Aware	Basic	Progressing	Advanced	
		1	2	3	4	
Understanding and Defining Requirements						
1	Asset Inventory Data	The local government understands the need to collect asset data and may have started to collect it.	Basic physical information (e.g. location, size, type) is recorded manually or electronically in a spread sheet. The date and time of collection, who it was collected by and how is also recorded.	Information is collected electronically. In addition to physical information, information such as replacement costs, approximate age, asset land value, etc is also gathered. Assets are classified by groups, classes, service provided, by holder or a combination thereof.	Complete and accurate data is available for all assets, including new assets. Data is easily accessible to all who require it. There is a high level of confidence in critical asset data. Valuation is based on market value or replacement cost.	
2	Asset Performance	Asset condition and performance are understood may not be quantified or documented.	Asset condition, use, and/or suitability data and information are gathered and used to monitor asset performance.	Condition and performance information is used to plan maintenance and renewals over the short term.	Condition and performance information is used to estimate future demand and long term needs.	
3	Levels of Service	The local government recognises the benefits of defining levels of service but they may not be documented or quantified.	Basic levels of service have been defined and agreed. Customer needs are understood for critical assets.	Levels of service and appropriate performance measures are in place covering a wide range of services for most assets. Customer needs are analysed.	The cost associated with meeting higher level of service is understood and used in financial planning.	
4	Forecasting Demand	Future demand is considered but may not be documented or quantified.	Estimates of future demand are based on staff experience and knowledge.	Estimates of future demand are documented based on historic trends and population growth estimates.	Estimates of future demand are used in asset management planning to best meet future needs.	

Question	Section	Awareness				Comments
		Aware	Basic	Progressing	Advanced	
		1	2	3	4	
Lifecycle Decision Making						
5	Decision Making	Asset management decisions are based largely on staff judgement and vary with the individual manager.	Formal decision making techniques (e.g. using cost/benefit analysis) are used by some managers.	Formal decision making techniques (e.g. using cost/benefit analysis) are used and consistently applied to major projects and programs.	Community planning and strategic priorities of the local and national government are incorporated into decision making and considered by all managers.	
6	Operational Planning	Operating and maintenance decisions are made by each individual manager on an as-needed basis.	Operating procedures are established and documented for critical assets and specific staff are assigned to manage the operations.	Operating procedures are established and documented for all major asset categories, with accountable staff in place.	Operating procedures are established, staff is assigned, and operations are tracked to ensure service levels are met.	
7	Capital Planning	Most capital investments are done on an as-need basis and funds are available.	Capital investment projects are identified during an annual budget process.	There is a schedule of the major proposed capital projects and associated costs for the next 3-5 years, based on staff judgement of future requirements.	There is a complete schedule of proposed capital projects for the next 3-5 years. A prioritisation framework is used to rank the importance of capital projects.	
8	Financial Planning	Financial resources are hard to identify and predict, and vary a lot from year to year so the current financial focus is on current operations rather than long term planning and asset values.	Financial planning is largely done through an annual budget process based on previous experience and broad assumptions about the future.	In addition to an annual budget, 3-5 year financial forecasts of asset revenue, costs and expenses are made.	Financial forecasts (3-5 years) are done based on well-reasoned assumptions/reliability factors. Managers know what resources they have available to operate and upgrade the assets under their control.	
9	Sustainability	The need for sustainable service delivery is understood by policy makers but may not be considered in decision making by local government staff.	The need for sustainable service delivery is understood by policy makers and local government staff consider it in decision making.	Policies are in place related to sustainable service delivery for critical assets, but decisions are not always consistent with the policies.	Sustainable practices are a high priority for both staff and policy makers. Policies adopted by local government are widely understood and provide clear direction on how the local government will achieve sustainable service delivery. Policies are a regular reference for guiding decisions.	

Question	Section	Awareness				Comments
		Aware	Basic	Progressing	Advanced	
		1	2	3	4	
Asset Management Enablers						
10	Asset Management Leadership and Teams	The local government recognises the benefits of an asset management function within the local government, but has yet to implement a structure to support it.	The local government recognises the benefits of an asset management function within the local government, and are working towards implementing a structure to support it.	Asset Management functions are performed by some departments and roles reflect asset management responsibilities, e.g. position descriptions and duties for operations staff.	There is ownership and support of asset management by local government leaders. Asset management responsibilities are co-ordinated across the organisation.	
11	Asset Management Policy and Process	The local government has an awareness of the need to formalise asset management policies and processes.	Policies and processes are in place for management of critical assets.	Asset Management Plans containing basic information on assets, service levels, planned works and financial forecasts (3-5 years), and future improvements are being developed.	Asset management policies, processes and plans are aligned to community needs, financial plans and resources.	
12	Asset Management Information Systems	Local government does not yet track asset information.	Asset information is tracked manually but the local government has the intention to use electronic means.	The asset management information system can record core asset data, e.g. size, material, location, age, etc. Asset information reports can be manually generated for various needs.	The asset management information system also captures performance data and enables some standardised electronic reporting. There may be a Spatial relationship capability (GIS).	
13	Service Procurement	Individual manager procures services based on their individual best judgement.	Standard processes are in place for procuring services across key departments.	Procurement policy in place. Competitive tendering practices are applied to some services.	Risks, benefits and costs of various outsourcing options have been considered and determined. Competitive tendering practices applied with integrity and accountability.	
14	Transparency	The local government is committed to transparency in its operations.	Some local government information is accessible to the public.	Local government information including decisions, audited financial statements, policies and processes, etc are accessible to the public but may not be current.	There is community involvement in decision making and consistent application of asset management policies and procedures. Local government information including decisions, audited financial statements, policies and processes, etc are current and easily accessible to the public.	

Part 3 - Evaluation

Scoring
Assessors to complete after

Question Section		Assessors to complete these four columns (K to O) during on site visits				
		Assessor Score	Target Score	Reason for scores	Evidence to support score	Recommended interventions
Understanding and Defining						
1	Asset Inventory Data					
2	Asset Performance					
3	Levels of Service					
4	Forecasting Demand					

Question Section		Assessors to complete these four columns (K to O) during on site visits				
		Assessor Score	Target Score	Reason for scores	Evidence to support score	Recommended interventions
Lifecycle Decision Making						
5	Decision Making					
6	Operational Planning					
7	Capital Planning					
8	Financial Planning					
9	Sustainability					

Question Section		Assessors to complete these four columns (K to O) during on site visits				
		Assessor Score	Target Score	Reason for scores	Evidence to support score	Recommended interventions
Asset Management Enabler						
10	Asset Management Leadership and Teams					
11	Asset Management Policy and Process					
12	Asset Management Information Systems					
13	Service Procurement					
14	Transparency					

**A Diagnostic Tool to
Assess Asset Management Needs of Local Governments
in the Least Developed Countries (LDCs)**

Part 2 Summary of Results

Question	Summary of Results	Current Score	Appropriate Target	Difference
1	Asset Inventory Data	0	0	0
2	Asset Performance	0	0	0
3	Levels of Service	0	0	0
4	Forecasting Demand	0	0	0
5	Decision Making	0	0	0
6	Operational Planning	0	0	0
7	Capital Planning	0	0	0
8	Financial Planning	0	0	0
9	Sustainability	0	0	0
10	Asset Management Leadership and Teams	0	0	0
11	Asset Management Policy and Process	0	0	0
12	Asset Management Information Systems	0	0	0
13	Service Procurement	0	0	0
14	Transparency	0	0	0
	Overall score	0	0	0

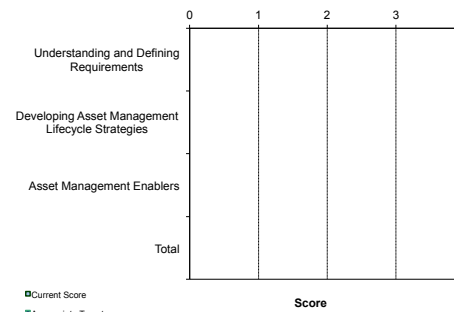
Summary Results

Understanding and Defining Requirements	0	0	0
Developing Asset Management Lifecycle Strategies	0	0	0
Asset Management Enablers	0	0	0
Total	0	0	0

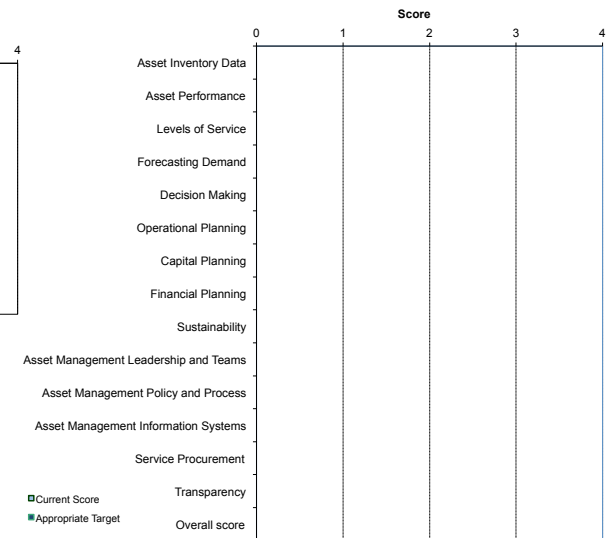
% Variance from Target

#DIV/0!

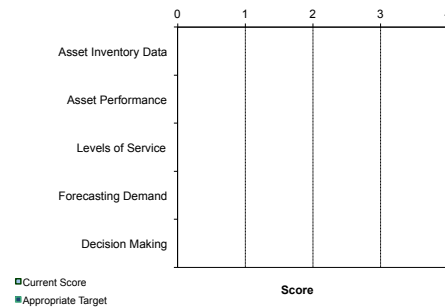
Summary Results



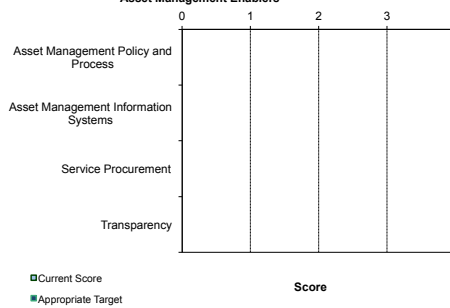
Overall results

**Understanding and Defining Requirements**

Understanding and Defining Requirements

**Asset Management Enablers**

Asset Management Enablers

**Developing Asset Management Lifecycle Strategies**

Developing Asset Management Lifecycle Strategies



UN-DESA/UNCDF Municipal Asset Management Review

CONTACT AND REFERENCE MATERIAL

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The AMAP writing guide has been developed by Linda Newton and Marilee Utter, in collaboration with Daniel Platz and David Jackson, for the United Nations Department of Economic and Social Affairs (UN-DESA) and UNCDF for use by the UN in support of its specific resolution 69/313 of 15 July 2015 known as the Addis Ababa Action Agenda which commits to "scaling up international cooperation to strengthen capacities of municipalities and other local authorities" as well as "to support cities and local authorities of developing countries, particularly in least developed countries and small island developing States."

For inquiries, please contact Daniel Platz (UN-DESA Project Coordinator) at platz@un.org.

Numerous assessment tools were reviewed as part of the research into suitable models for use in Least Developed Countries, including:

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Federation of Canadian Municipalities. 2005. *National Guide to Sustainable Municipal Infrastructure (InfraGuide), Decision Making and Investment Planning Part 7 - Managing Infrastructure Assets*.
Federation of Canadian Municipalities. 2017. *Asset Management Readiness Scale*. Municipal Asset Management Program <https://fcm.ca/home/programs/municipal-asset-management-program/funding-mamp.htm#applyMAMP> (last accessed 6 November 2017).
Institute of Asset Management. 2015. *The Self-Assessment Methodology Plus. Version 2.0*. IAM. June 2015. <https://theiam.org/products-and-services/Self-Assessment-Methodology> (last accessed 10 October 2015).
International Organisation for Standardization (ISO). 2014(E). ISO 55000:2014 - Asset Management. ISO.
IPWEA. 2011. *International Infrastructure Management Manual (IIMM)* 2011. Institute of Public Works
IPWEA. 2015. *International Infrastructure Management Manual (IIMM)* 2015. Institute of Public Works
Kaganova, O. 2015. *A Self-Assessment and Benchmarking Tool for Local Governments*. National Opinion Research Center. University of Chicago.
New Zealand Treasury Department. 2017. *Asset Management Maturity Assessment*. <http://www.treasury.govt.nz/statesector/investmentmanagement/review/icr/information/assetmgmt>

Part 3 Interviews

Warm Up Questions

What are the most important principles asset management should be guided by?

What is your biggest asset need?

Where are you allocating most of your resources today?

Please tell me about your city and how your government is organized.

As you think about your city and the needs of the people you serve, what are the deficits in facilities and services that you would most like to address?

Probing Questions

What are three things that you are doing well?

What two things you would like to change?

What are your top three priorities?

Do your government buildings serve you well? Adequately?

How public is the data on your asset investment decisions? Do you publish reports?

What is the link between local and national government for asset management?

How public is the data on real estate property sales and leases? How do you use this data in making your decisions about properties?

Do your physical planners work with your asset managers and financial managers to coordinate the sustainability goals into asset investments?

How does the local government interface with the public on asset management planning and investment decisions?

Do you use competitive processes when you are procuring services or assets such as real estate?

Do you have adequate parks, recreation and community facilities?

Follow Up Questions

Where do you need the most support/help to improve? How can we help you?

Where would you like to go?

What are the barriers?

When you make asset investment decisions (like road repairs, utility upgrades, community facilities, parks, etc.) how much do you consider the social needs of the residents in that areas?

When you make asset expansion decisions (like new roads, utility systems, community facilities, parks, etc.) how much do you consider the environmental impact of that investment? Does the cost of sprawl concern you?

Population	Less than 10,000
	10,000 - 30,000
	30,000 – 100,000
	100,000 – 500,000
	500,000 – 1,000,000
	1,000,000 – 5,000,000
	5,000,000 – 10,000,000
	More than 10,000,000

Asset Category	Buildings
	Land
	Infrastructure

Asset Type	Buildings	Land	Infrastructure
	None	None	None
	Cultural (e.g. museums)	Surplus/Available for disposal	Cemeteries
	Educational (e.g. schools, universities, libraries)	Unoccupied/ Available for use	Energy Supply (generation and distribution)
	Emergency Services (e.g. fire, police)		Lighting
	Government Offices		Parks & public spaces
	Housing		Road Network (including sidewalks/pavements, traffic signals, signage)
	Judicial (e.g., jails, courts)		Solid waste collection and disposal
	Medical (E.g. hospitals, clinics)		Transportation Network (e.g. airports, bus terminals, railways)
	Public lavatories		Wastewater Utilities (including collection and treatment)
	Recreational Facilities		Water Utilities (including treatment and distribution)
	Other (e.g. monuments)		Other