## Asset Management IQ

(For each question, choose the answer that most accurately describes your situation and circle your score in the box next to that answer.)

#### Section I: General Asset Management

A. Is Asset Management terminology understood throughout the organization?

Score	Explanation of Scoring
0	No one within the organization understands Asset Management terminology nor
	has any knowledge of Asset Management concepts.
1	One person within the organization understands Asset Management concepts and
	terminology.
2	Less than 50% of the organization's personnel (key people within the organization)
	understand Asset Management concepts and terminology.
3	More than 50% of the organization's personnel understand Asset Management
	concepts and terminology.
4	All <sup>1</sup> of the organization's personnel understand Asset Management concepts and
	terminology.
5	Throughout the entire organization personnel would be able to state what Asset
	Management is and understand Asset Management concepts and terminology.
1 <sub>^1</sub>	refers to greater than 90% of the organization's personnel

<sup>1</sup>All refers to greater than 90% of the organization's personnel

#### B. Does the organization have a clearly defined Asset Management Plan?

Score	Explanation of Scoring
0	The organization does not have a written Asset Management Plan nor a concept of
	what the plan would include.
1	The organization has a concept of the plan but has not written the plan.
2	The organization has written less than 50% (portions) of the plan.
3	The organization has written more than 50% (a draft) of the plan.
4	The organization has a written plan but has not distributed it within the
	organization.
5	The organization has a written plan and it is distributed throughout the
	organization.

C. Is Asset Management fully embraced by the elected officials or governing body of the organization?

Score	Explanation of Scoring
0	The governing body opposes Asset Management.
1	The governing body does not understand Asset Management, but is not opposing it.
2	The governing body is aware of Asset Management, but not yet ready to provide support.
3	The governing body supports Asset Management in general but has not mandated it for the organization in any way.
4	The governing body has passed a resolution or has otherwise mandated Asset Management. The governing body provides some support for the organization's Asset Management efforts, but has not provided sufficient funding for Asset Management and/or is not yet making decisions using Asset Management principals.
5	The governing body has passed a resolution or has otherwise mandated Asset Management. The governing body fully supports the organizations Asset Management efforts including providing the funding for Asset Management and making decisions using Asset Management principals.

D. Does the organization have a strategy for communicating the Asset Management strategy throughout the organization?

Score	Explanation of Scoring
0	The organization has no strategy for communicating Asset Managment throughout
	the organization.
1	The organization has some ideas for communicating Asset Management but has not
	documented or implemented any of them.
2	The organization has a written strategy and has implemented less than 50% of the
	communication strategies.
3	The organization has a written strategy and has implemented more than 50% of the
	communication strategies.
4	The organization has a written communication strategy to share information with all
	levels of staff and it is fully implemented.
5	The organization has a written communication strategy to share information with all
	levels of staff, it is fully implemented and feedback has been received.

E. Does the organization have an overarching goal or mission statement for Asset Management?

Score	Explanation of Scoring
0	The organization does not have an overarching goal or mission statement.
1	The organization recognizes the need for an overarching goal or mission statement
	but has not yet begun working on it.
2	The organization is working on an overarching goal or mission statement.
3	The organization has an overarching goal or mission statement for Asset
	Management that is accepted by the governing body, but it Is not known at all levels
	of the organization, and is not clearly communicated to the public.
4	The organization has an overarching goal or mission statement for Asset
	Management that is accepted by the governing body, and is known at all levels of
	the organization, but it is not clearly communicated to the public.
5	The organization has an overarching goal or mission statement for Asset
	Management that is accepted by the governing body, known at all levels of the
	organization, and is clearly communicated to the public.

Your Score for this section
Your cumulative score

#### Section II: Current State of the Assets

A. Does the organization have an asset inventory?

Score	Explanation of Scoring
0	There is no inventory of the assets of any kind.
1	There is a limited asset inventory with no plans to complete the inventory.
2	The organization is working towards a complete asset inventory with less than 50%
	of assets presently included.
3	The organization is working towards a complete asset inventory with more than
	50% of assets presently included.
4	There is a complete <sup>1</sup> asset inventory of the organization's assets and it is used
	throughout the organization. The asset inventory is not done in a hierarchical
	structure or the inventory does not include the basic minimum attributes for the
	majority of the assets - asset ID, asset name, location, condition, useful life,
	replacement value, energy usage (if any,) probability of failure rating, and
	consequence of failure rating.
5	There is a complete <sup>1</sup> asset inventory of the organization's assets and it is used
	throughout the organization. The asset inventory is done in a hierarchical structure.
	The asset inventory includes the following minimum attributes for the majority of
	the assets: asset ID, asset name, location, condition, useful life, replacement value,
	energy usage (if any,) probability of failure rating, and consequence of failure rating.

B. Does the organization have a map of asset locations?

Score	Explanation of Scoring
0	The organization does not have any type of map of asset locations.
1	The organization has some limited mapping with no plans to produce a complete systems map
2	The organization is working towards a complete map of the system with less than 50% of the current system presently mapped.
3	The organization is working towards a complete map of the system with more than 50% of the system presently mapped.
4	The organization has a comprehensive map of the entire system. It is not linked to the asset inventory data.
5	The organization has a comprehensive map of the entire system. It is in a GIS system that is linked to the asset inventory data.

C. Does the organization have a process for condition assessment?

Score	Explanation of Scoring
0	The organization has no process to assess the condition of the assets.
1	The organization has a process to assess the condition of the assets, but has not yet
	begun the process.
2	The organization has assessed the condition of less than 50% of the assets.
3	The organization has assessed the condition of more than 50% of the assets but has
	not recorded the information as part of the asset inventory.
4	The organization has assessed the condition of more than 50% of the assets and the
	condition results are recorded in the inventory system.
5	The organization has assessed the condition of every <sup>1</sup> asset in the inventory and has
	recorded these condition results along with the asset inventory.

<sup>1</sup>Every refers to greater than 90% of the assets

#### D. Does the organization have a means of estimating useful life?

Score	Explanation of Scoring
0	The organization has no means to estimate the useful life of assets.
1	The organization has developed a process to establish the useful life of the assets,
	but has not yet begun to use the process.
2	The organization has established the useful life of less than 50% of the assets.
3	The organization has established the useful life of more than 50% of the assets but
	has not recorded the information as part of the asset inventory.
4	The organization has established the useful life of more than 50% of the assets and
	has recorded the information as part of the asset inventory.
5	The organization has established the useful life of every <sup>1</sup> asset in the inventory and
	has recorded these results along with the asset inventory.

<sup>1</sup>Every refers to greater than 90% of the assets

E. Has the organization determined asset replacement values?

Score	Explanation of Scoring
0	The organization has not determined any asset replacement values.
1	The organization has developed an approach for determining replacement values but has not yet implemented it.
2	The organization has estimated the asset replacement values for less than 50% of the assets.
3	The organization has established the replacement value of more than 50% of the assets but has not recorded the information as part of the asset inventory.
4	The organization has established the replacement value of more than 50% of the assets and has recorded the information as part of the asset inventory.
5	The organization has established the replacement value of ever y <sup>1</sup> asset in the inventory and has recorded these results along with the asset inventory.

<sup>1</sup>Every refers to greater than 90% of the assets

Your Score for this section
Your cumulative score

#### Section III: Level of Service

A. Does the organization have a means of communicating to the customers, including communicating the goals of the Level of Service?

Score	Explanation of Scoring
0	The organization does not communicate with the customers.
1	The organization communicates through notices on billing statements, but does not
	inform the public of the Level of Service goals.
2	The organization has done surveys or sought public input about Asset Management
	in general, but has not informed the public of the Level of Service goals or progress
	towards meeting those goals.
3	The organization has a minimal program to inform customers of the Level of Service
	goals, but does not inform the public of progress towards meeting those goals.
4	The organization has an active program to inform customers of the Level of Service
	goals and progress towards meeting those goals, but has no feedback mechanism
	for the customers to provide information to the organization.
5	The organization has an active program to inform customers of the Level of Service
	goals and progress towards meeting those goals, and has a feedback mechanism for
	the customers to provide information to the organization.

B. Does the organization have clearly defined Level of Service goals and are they aligned with customer expectations/desires?

Score	Explanation of Scoring
0	The organization does not have specific goals.
1	The organization has goals but they are not written.
2	The organization has some written goals but this process is not fully complete.
	Goals were not aligned with customer expectations/desires.
3	The organization has clearly defined, written goals for the organization. They are well-known throughout the organization. They were not aligned with customer
	expectations.
4	The organization has clearly defined, written goals for the organization. They are well-known throughout the organization. One or two goals were aligned with customer expectations.
5	The organization has clearly defined, written goals for the organization. They are well-known throughout the organization. All goals were aligned with customer expectations.

C. Does the organization meet current regulatory requirements and, if not, does it have a plan to meet these requirements in the future? Does the organization anticipate future regulatory requirements and their impact on operations and infrastructure needs?

Score	Explanation of Scoring
0	The organization does not meet current regulatory requirements and currently has
	no plan to meet them in the future.
1	The organization does not meet current regulatory requirements, but has a plan to
	in the future.
2	The organization meets current regulatory requirements or has a plan to meet these
	requirements and has just begun to investigate future regulatory requirements.
3	The organization meets current regulatory requirements or has a plan to meet these
	requirements and knows which and how future regulatory requirements are likely
	to impact the organization.
4	The organization meets current regulatory requirements or has implemented a plan
	to meet these requirements. The organization has a clear plan to address the
	infrastructure and operational impacts of future regulatory requirements.
5	The organization meets current regulatory requirements and has a clear plan to
	address the infrastructure and operational impacts of future regulatory
	requirements.

D. Does the organization measure progress towards meeting the goals of the Level of Service?

Score	Explanation of Scoring
0	The organization does not have specific goals.
1	The organization has a written set of Level of Service goals but does not measure
	progress towards meeting the goals.
2	The organization has a written set of Level of Service goals and measures progress
	towards the goals on an ad-hoc or non-routine basis.
3	The organization has a written set of Level of Service goals and measures progress
	towards goals on a defined, routine, periodic basis. There is no regular process to
	adjust the goals, make improvements or otherwise address the lack of meeting the
	goals.
4	The organization has a written set of Level of Service goals and measures progress
	towards goals on a defined, routine, periodic basis. There is a process in place to
	regularly adjust the goals, make improvements or otherwise address the lack of
	meeting the goals. The progress towards goals is not communicated to the
	governing body of the organization.
5	The organization has a written set of Level of Service goals and measures progress
	towards all goals on a defined, routine, periodic basis. The measurements are used
	to adjust goals, make improvements, and determine the progress of the
	organization. Progress towards goals is communicated to the governing body of the
	organization, who uses this information in decision-making processes.
5	towards all goals on a defined, routine, periodic basis. The measurements are used to adjust goals, make improvements, and determine the progress of the organization. Progress towards goals is communicated to the governing body of the

E. Does the organization analyze current and anticipated customer demands, including planning for future growth or population decline?

Score	Explanation of Scoring
0	The organization does not analyze current or anticipated customer demands.
1	The organization analyzes current demands but not anticipated demands.
2	The organization analyzes current and future demands, and uses the information to
	plan infrastructure investments to accommodate future growth or population
	decline. Planning is for less than a 5 year horizon.
3	The organization analyzes current and future demands, and uses the information to
	plan infrastructure investments to accommodate future growth or population
	decline. Planning is for a 5 to 9 year horizon.
4	The organization analyzes current and future demands, and uses the information to
	plan infrastructure investments to accommodate future growth or population
	decline. Planning is for a 10 – 19 year horizon.
5	The organization analyzes current and future demands, and uses the information to
	plan infrastructure investments to accommodate future growth or population
	decline. Planning is for a 20 year or longer horizon.

	Your Score for this section
	Your cumulative score

#### Section IV: Assets Critical To Sustained Performance

A. Does the organization have a process to assess the probability of failure of assets?

Score	Explanation of Scoring
0	The organization has no process to assess the probability of failure of assets.
1	The organization has developed a process for establishing the probability of failure
	but has not yet begun to use it.
2	The organization has established the probability of failure for less than 50% of the
	assets.
3	The organization has established the probability of failure for more than 50% of the
	assets.
4	The organization has established the probability of failure for all <sup>1</sup> of the assets.
5	The organization has established the probability of failure for all <sup>1</sup> of the assets and
	uses the information in operating and managing the system.
1	

<sup>1</sup>All refers to greater than 90% of the assets

B. Does the organization have a process to assess the consequence of asset failure?

Score	Explanation of Scoring
0	The organization has no process to assess the consequence of failure of the assets.
1	The organization has developed a process for establishing the consequence of
	failure but has not yet begun to use it.
2	The organization has established the consequence of failure for less than 50% of the
	assets.
3	The organization has established the consequence of failure for more than 50% of
	the assets.
4	The organization has established the consequence of failure for all <sup>1</sup> of the assets.
5	The organization has established the consequence of failure for all <sup>1</sup> of the assets
	and uses the information in operating and managing the system.

<sup>1</sup>All refers to greater than 90% of the assets

C. Does the organization have a process to rank assets according to the likelihood and consequences of asset failure (i.e. according to "overall risk")?

Score	Explanation of Scoring
0	The organization has no process to rank assets according to overall risk.
1	The organization has some limited ranking of assets according to overall risk with no
	plans to put in place a system for ranking all assets.
2	The organization has developed a process to rank assets according to risk and is
	working towards ranking all assets with less than 50% of them presently ranked.
3	The organization has developed a process to rank assets according to risk and is
	working towards ranking all assets with more than 50% of them presently ranked.
4	The organization has ranked all <sup>1</sup> of the assets according to risk but is not yet using
	this information in the process of operating and managing the system
5	The organization has ranked al <sup>1</sup> I of the assets according to risk and using this
	information in operating and managing the system

<sup>1</sup>All refers to greater than 90% of the assets

# D. Do the likelihood and consequences of asset failure (i.e. the "overall risk") drive asset investment decisions?

Score	Explanation of Scoring
0	The organization does not use risk to drive investment decisions.
1	The organization is in the discussion stages regarding whether to use overall risk to
	drive asset investment decisions but has not yet started any activities in this area.
2	The organization is developing an approach in which risk will drive asset investment
	decisions.
3	The organization has completed development of a program for overall risk to drive
	asset investment decisions, but has not yet implemented it.
4	The organization has a plan for how overall risk drives asset investment decisions
	and it is implemented. The risk ranking only plays a small role in the asset
	investment decision-making process for the organization.
5	The organization has a plan for how overall risk drives asset investment decisions
	and it is implemented. The risk ranking process is fully integrated into the asset
	investment decision-making process and overall risk plays a key role in the process.

E. Does overall risk drive asset operation and maintenance (O&M) decisions?

Score	Explanation of Scoring
0	The concept of overall risk is not used to drive O&M decisions.
1	The organization is considering using overall risk to drive O&M decisions.
2	The organization is developing an approach in which risk will drive asset O&M decisions.
3	The organization has completed development of a program for overall risk to drive asset O&M decisions, but has not yet implemented it.
4	The organization has a plan for how overall risk drives asset O&M decisions and it is implemented. Not all decisions are yet based on this approach.
5	The organization has a plan for how overall risk drives asset O&M decisions and it is implemented. All decisions are based on this approach.

Your Score for this section
Your cumulative score

### Section V: Life Cycle Cost

A. Is the organization moving from reactive maintenance to planned or predictive maintenance?

Score	Explanation of Scoring
0	The organization does not assess reactive vs. planned maintenance in any way.
1	The organization is developing a process to track reactive versus planned
	maintenance.
2	The organization is currently implementing a process to track reactive versus
	planned maintenance.
3	The organization's reactive versus planned predictive maintenance is currently
	being tracked. There is insufficient data to determine if there have been any
	improvements.
4	The organization's reactive versus planned predictive maintenance is tracked.
	Improvement in the ratio of reactive to planned maintenance has occurred,
	however, it is not yet in line with the industry best practice of 80%
	planned/predictive maintenance and 20% reactive maintenance.
5	The organization's reactive versus planned predictive maintenance is tracked and it
	is in line with the industry best practice of 80% planned/predictive maintenance and
	20% reactive maintenance.

B. Does the organization have a program to fully consider all aspects of Life Cycle Costing when making infrastructure investment decisions, including initial capital cost, operation and maintenance, repair, and disposal?

Score	Explanation of Scoring
0	The organization only considers capital cost when making infrastructure investment
	decisions.
1	The organization sometimes considers Life Cycle Costs when making infrastructure
	investment decisions. Doing so is not part of a standard process.
2	The organization is developing a process to consider Life Cycle Costs but has not yet
	implemented it
3	The organization has developed a process to fully consider all aspects of Life Cycle
	Costing and has tested it on a few asset investment decisions.
4	The organization is implementing a process to fully consider all <sup>1</sup> aspects of Life Cycle
	Costing on all <sup>1</sup> asset investment decisions. The process is not yet used for all <sup>1</sup>
	investment decisions.
5	All <sup>1</sup> asset investment decisions are made using a process that fully considers all <sup>1</sup>
	aspects of Life Cycle Costing

<sup>1</sup>All refers to greater than 90%

C. Does the organization have a long-term Capital Improvement Plan?

Score	Explanation of Scoring
0	The organization does not have a long-term Capital Improvement Plan.
1	The organization has a Capital Improvement Plan for the current year only.
2	The organization has a Capital Improvement Plan that covers less than5 years of future needs.
3	The organization has a long-term Capital Improvement Plan that covers 5 to 9 years of future needs.
4	The organization has a long-term Capital Improvement Plan that covers 10-19 years of future needs.
5	The organization has a long-term Capital Improvement Plan that covers 20 years or longer of future needs.

D. Does the organization have a validation<sup>1</sup> process for its capital projects that includes consideration of non-asset solutions as well as non-traditional approaches (i.e., green infrastructure, decentralized treatment, water conservation to reduce need for new sources)?

Score	Explanation of Scoring
0	The organization does not have a validation process and does not consider non-
	asset solutions nor non-traditional approaches.
1	The organization sometimes investigates non-asset solutions or non-traditional
	approaches when evaluating capital projects. Doing so is not part of a standard
	validation process.
2	The organization is developing a validation process for capital projects, but has not
	yet implemented it.
3	The organization has developed a validation process for capital projects including
	the consideration of non-asset solutions or non-traditional approaches when
	evaluating capital projects. The process has been tested on a few capital projects.
4	The organization is implementing a validation process that includes the
	consideration of non-asset solutions and non-traditional approaches. The validation
	process is not yet used for all capital projects.
5	All capital projects (or all projects greater than a set cost threshold) undergo a
	validation process that includes the consideration of non-asset solutions and non-
	traditional approaches.

<sup>1</sup>Validation means objectively looking at capital projects to determine if the proposed capital project is necessary, cost effective, and the appropriate solution. This process involves documenting potential operation and maintenance activities that could forestall the need for a capital project, examining a wide range of alternative approaches, and ensuring that the scope of the proposed project is appropriate.

E. Does the organization have a program to analyze the use of operation and maintenance processes to extend the life of the existing assets?

Score	Explanation of Scoring
0	The organization has no program to analyze the use of operation and maintenance
	processes to extend the life of the existing assets.
1	The organization is currently developing a program to analyze the use of operation
	and maintenance processes to extend the life of the assets.
2	The organization has a simple program to analyze the use of operation and
	maintenance processes to extend the life of existing assets. The organization has
	not yet used operation and maintenance practices to extend the life of assets.
3	The organization has a simple program to analyze the use of operation and
	maintenance processes to extend the life of existing assets. The organization has
	used operation and maintenance practices to extend the life of assets when
	appropriate.
4	The organization has a robust program to analyze the use of operation and
	maintenance processes to extend the life of existing assets. The organization has
	not yet used operation and maintenance practices to extend the life of assets.
5	The organization has a robust program to analyze the use of operation and
	maintenance processes to extend the life of existing assets. The organization has
	used operation and maintenance practices to extend the life of assets when
	appropriate.

Your Score for this section
Your cumulative score

#### Section VI: Financing

A. Does the organization maintain reserve funds/accounts?

Score	Explanation of Scoring
0	The organization maintains no reserve accounts.
1	The organization maintains one reserve account but it is not adequately funded.
2	The organization maintains one reserve account and it is adequately funded for the
	purpose for which it was established.
3	The organization maintains 2 reserve accounts (or a reserve account that satisfies 2
	needs) and the reserve accounts are adequately funded.
4	The organization maintains 3 reserve accounts (or a reserve account that satisfies 3
	needs) and the reserve accounts are adequately funded.
5	The organization maintains reserve accounts for: repairs and replacement,
	emergencies, debt repayment, and cash reserves. All accounts are adequately
	funded and monies are used from the funds as required.

B. Does the organization target its rates and other revenue streams to adequately fund all long term costs, including both operations and maintenance (O&M) and capital investment/capital debt needs?

Score	Explanation of Scoring
0	The organization's rates and other revenue streams are not set based on anticipated
	expenses.
1	The organization's rate structure and other revenue streams are set to cover
	ongoing operation and maintenance expenses, but do not take other expenses into
	account.
2	The organization's rate structure and other revenue streams are set to cover
	ongoing operation and maintenance expenses, as well as some extra revenue that is
	used for reserves and/or capital projects. The extent of revenue that is above O&M
	expenses is not tied to specific goals for funding reserves or capital projects.
3	The organization's rate structure and other revenue streams are set to cover
	ongoing operation and maintenance expenses, as well as a targeted amount above
	that for funding reserves or capital projects. The target is not based on an
	assessment of long term asset investment needs.
4	The organization's rate structure and other revenue streams are set to cover
	ongoing operation and maintenance expenses, as well as a targeted amount above
	that for funding reserves or capital projects. The target is based on an assessment
	of asset investment needs for the next 5 years or less.
5	The organization's rate structure and other revenue streams are set to cover
	ongoing operation and maintenance expenses, as well as a targeted amount above
	that for funding reserves or capital projects. The target is based on an assessment
	of asset investment needs longer than the next 5 years.

C. Does the organization have a plan to fund capital improvements for the long term?

Score	Explanation of Scoring
0	The organization has no plan to fund capital improvements over the long term.
1	The organization recognizes the need for a plan to fund long term capital
	improvements, but has not yet begun to work on it.
2	The organization is working on a plan to fund long term capital improvements, but it
	is not complete.
3	The organization has a plan that considers funding needed for capital improvements
	over the next 5 to 9 years. The plan includes all sources of funding necessary.
4	The organization has a plan that considers funding needed for capital improvements
	over the next 10 to 19 years. The plan includes all sources of funding necessary.
5	The organization has a plan that considers funding needed for capital improvements
	over 20 years or more. The plan includes all sources of funding necessary.

D. Is investment in assets prioritized based on overall business risk?

Score	Explanation of Scoring
0	Investments in assets are not based on overall business risk.
1	The organization recognizes the need to make asset investments based on overall business risk, but has not yet begun to develop a process to implement this process.
2	The organization is developing a process to make asset investments based on overall business risk.
3	Some asset investments are prioritized based on the overall business risk to the organization.
4	The majority of asset investments are prioritized based on the overall business risk to the organization.
5	All asset investments are prioritized based on the overall business risk to the organization.

E. Does the organization provide a program for disadvantaged customers so that adequate rates are possible?

Score	Explanation of Scoring
0	The organization does not provide any programs for disadvantaged customers.
1	The organization is conducting an analysis to determine the need for a
	disadvantaged customer program.
2	The organization has completed an analysis of the need for a disadvantaged
	program but has not developed the program.
3	The organization is in the process of developing a program for disadvantaged
	customers.
4	The organization has a program to provide for disadvantaged customers, but it has
	not yet been communicated to the customers.
5	The organization has a program to provide for disadvantaged customers, customers
	are fully aware of the program, and the organization provides outreach to help
	customers take advantage of the program.

Your Score for this section
Your cumulative score

## Asset Management IQ Score Summary Utility Name\_\_\_\_\_

Date	Asset Management IQ Score							Person Completing	Comments
	I	Ш	Ш	IV	V	VI	Total		