

PART 2 – WEAVING THE PIECES

Decision Making Tools

The asset management process requires a community to make a variety of decisions that will shape the future of the community. Questions such as, “What needs to be done?” and, “When do we need to do it?” are important decisions for a community to make. To answer these questions and others, there are four decision making tools that a community can use. These tools include business case analysis, structured decision making, scenario analysis and risk-based prioritization.

When using these tools, decision makers should consider the following community documents in informing their decisions:

- Community Vision, Goals and Objectives
- Policies
- Levels of Service: Technical and Customer
- Community Risk Tolerance
- Asset Criticality
- Prioritization Process
- Budgeting

Business Case Analysis

Developing a business case is at the centre of decision making. A robust business case is crucial to making the right investment decisions for a community. A business cases clearly set the boundaries for what the project hopes to achieve and how it intends to do so. The objective of the business case is to articulate purpose, define success criteria, and encourage accountability.

A business case analysis is not a one size fits all tool and should be built to match the scope of the project being proposed. The goal is to objectively analyse a potential initiative against a community’s strategy and risk appetite and aid in the decision-making process.

Structured Decision-making Techniques

Structured decision making is an approach for careful and organized analysis of community decisions. It allows a community to make decisions based on clearly articulated fundamental objectives, recognizing the role of making unbiased decisions, dealing explicitly with uncertainty, and responding transparently to societal values in decision making. The seven-step process is outlined below.



Scenario Analysis

Scenario analysis is a process of examining and evaluating possible events that could take place in the future by considering various feasible results or outcomes. It presents several alternative future developments based on the outcomes of each scenario. Understanding the future outcomes can allow decision makers to identify opportunities that they could start working toward today.

Developing an innovative plan for action is one thing; assessing whether or not it will actually work is quite another. One of the benefits of scenario analysis is that it allows communities to present a number of potential outcomes related to the comprehensive community plan and use public engagement to help drive the decision-making process in an open and clearly communicated manner.

Scenario analysis in risk management can help forward-thinking communities to evaluate the extent to which known risks could develop into larger problems in the future. It can also give communities an idea of how the development of new infrastructure might impact operations and strategy. With better, more comprehensive information available, decision makers can be proactive and make less biased decisions and think critically about important challenges facing their community.

Risk-based Prioritization

A risk analysis may identify a number of risks that appear to be of similar importance. When too many risks are clustered at or about the same level, a method is needed to prioritize risk responses and where to apply limited resources. The decision-making process should be tied to comprehensive community plan and maximize the use of available resources. Risk-based prioritization considers the following:

- What would be the immediate and future impact to the community?
- What is the likelihood of the risk materializing, and could it occur more than once?
- Would the risk cause a cascading effect resulting in multiple risks occurring?

Getting specific answers to these questions, allows the decision maker to make an informed decision on the priority of the risks and the actions and resources that should be allocated to managing the risks.

Additional Resources

Developing a business case: <https://www2.gov.bc.ca/gov/content/governments/services-for-government/bc-bid-resources/how-to-buy-services/procurement-process/plan/business-case>

Decision making Infraguide:

<https://fcm.ca/sites/default/files/documents/resources/guide/infraguide-planning-defining-municipal-infrastructure-needs-mamp.pdf>

Community Lifecycle Infrastructure Costing:

<https://www2.gov.bc.ca/gov/content/governments/local-governments/planning-land-use/local-government-planning/community-lifecycle-infrastructure-costing>

Deep Dive into Decision Making: <https://hbr.org/2013/11/deciding-how-to-decide>