

AM Library

FAQ

1. What is AM?
 - Please see the following short 9 minute video: [Big Picture](#).
 - Asset management planning is the process of making the best possible decisions regarding the building, operating, maintaining, renewing, replacing and disposing of infrastructure assets
 - The objective is to maximize benefits, manage risk, and provide satisfactory levels of service to the public in a sustainable manner.
 - Proactive maintenance to prolong the life of an asset
2. Why is AM important?
 - Because it takes a long-term perspective, good asset management can maximize the benefits provided by infrastructure. It also affords the opportunity to achieve cost savings by spotting deterioration early on and taking action to rehabilitate or renew the asset
 - Infrastructure investments are vital to strengthening the economy, creating jobs and building strong communities in which residents enjoy a high quality of life.
 - Asset management planning will allow needs to be prioritized over wants. It will help ensure that investments are made at the right time to minimize future repair and rehabilitation costs and maintain municipal assets.
3. What are the priorities?
 - Maintaining roads, bridges, water, wastewater and social housing should be a top priority.
4. How are Ontario municipalities doing in AM?
 - There is more work to be done. Research undertaken in 2012 by the Ministry of Municipal Affairs and Housing suggests that fewer than 40 per cent of Ontario municipalities have a long-term asset management plan in place for their capital assets.
5. What is the design-build-finance-maintain model?
 - It incorporates the Alternative Financing and Procurement model with private sector also responsible for maintenance.
6. Challenges
 - a. Managing a portfolio of largely existing assets that cannot economically be replaced, but must be maintained and in many cases see their economic lives extended
 - b. From an engineer's perspective, understanding the implications of practical asset life extension within today's design codes, which encourage minimum spare capacity
 - c. The inability to detect deterioration that is not yet visible, or obscured
 - d. Failure to address some deterioration from being more economically repaired through regular maintenance, before it becomes visible, especially if the costs of down-time and other consequential impacts are taken into account
 - e. That certain deterioration could lead to catastrophic rather than progressive failures.

- f. Economic challenges as it becomes increasingly difficult to fund maintenance in a period of stunted economic growth
 - g. Shortages of critical skills e.g. in older technologies, to effectively maintain older assets
7. What are the important principles to be set at the commissioning stage of a project?
- Documenting lifecycle-based considerations to justify materials and equipment selection based on service life requirements, in-service climatic conditions and forms of construction
 - Identifying critical construction steps which have potential to put long-term performance at risk
 - Network or systems design involving multiple stakeholders with a complementary range of knowledge and expertise
 - Providing “infrastructure Lifecycle” Management Plans as part of design output
 - Favouring output/performance-based principles when procuring maintenance
8. How to extend asset useful life?
- Restricting demand
 - Restoring existing capacity
 - Adding local capacity
 - Adding network capacity
9. How much is capital cost compared to full life cycle cost?
- When looking at infrastructure assets, the capital costs can be as little as 20% of the full life cycle costs.
 - 20% initial capital cost, 40% operating cost, 35% maintenance cost, 5% disposal cost