1. What other studies or analyses should municipalities undertake which can help fund infrastructure and assist staff and council in making informed fiscal decisions regarding their capital assets?

**A. Full Cost Recovery Rate Studies:**
- Ensuring water, wastewater and stormwater rates are fully funding operating and capital costs. Municipalities should be incorporating annual contributions to reserve and reserve funds for the ultimate repair and replacement of existing infrastructure.
- Municipalities are required to prepare and provide a water financial plan in order to satisfy one of the five submission requirements for the purposes of obtaining a drinking water licence. The reporting requirements for a financial plan as defined by *Ontario Regulation 453/07* can be found at: [E-Laws - Ontario Regulation 453/07](https://www.e-laws.ontario.ca/regulations/453/).
- Other Fees Rate Setting Study – Full Cost Recovery Fees under the provisions of the *Planning Act*, the *Building Code Act* and the *Municipal Act, 2001*.
  - Full cost fees incorporate operating, maintenance, and contributions to reserve and reserve funds for the ultimate repair and replacement of existing facilities. [Town of Halton Hills](https://www.haltonhills.ca/)

**B. Development Charges Study:**
- Ensure DC rates are kept in line with municipal capital plans and growth targets.
- If development charges are not funding infrastructure to the full extent as allowed for under the *DCA* as a result of exemptions, phase-in policies, etc. – council should be aware of the revenue loss caused under these exemptions.

**C. Roads Needs Study:**
- Provides a municipality with an assessment of the road system to enable administrators to set its capital projects based on rated priorities. Generally the study includes an inventory of all maintained roads and structures (bridges and culverts). The study also provides information on estimated traffic volumes, construction cost estimates and construction needs.
- Consistent with the requirements outlined in *Ontario Regulation 104/97*, bridge and culvert inspections must be undertaken every two years.
- Minimum maintenance standards for municipal highways are outlined in *Ontario Regulation 239/02* and can be found at: [E-Laws - Ontario Regulation 239/02](https://www.e-laws.ontario.ca/regulations/239/).

2. How often should the Asset Management Plan be updated?

- Every 5 years at a minimum; or
- Where there has been a significant change in municipal asset holdings (e.g. municipality absorbs unplanned infrastructure).

3. What asset management elements should the capital budgets and forecasts evaluate?

- Ideally, each capital project could be evaluated in terms of the following, including but not limited to:
  a) gross and net project costs;
  b) timing and phasing;
c) funding sources;
d) growth-related components;
e) potential financing and debt servicing costs;
f) long-term costs, including operations, maintenance, and asset rehabilitation costs;
g) alternative service delivery and procurement options.

At a minimum, each capital project should identify point: a, b and c from above.

If a municipality has some of the components noted above, you should try phasing-in or integrating the additional elements over the short-to-medium term. Incorporating one additional item every budget is a possibility.

### 4. What measures can be put in place to regularly update the plan?

- Have council formally adopt a policy to update the plan (see Tip Sheet 1);
- Commit to regular internal data updates; and
- Have staff prepare annual reports detailing changes to key indicators - Example: asset conditions, reserve and reserve funds (see Tip Sheet 1).

### 5. What approaches have been successfully used to optimize the use of existing assets by implementing a range of engineering and non-engineering approaches? Some examples include:

- Implementing aggressive water conservation measures;
- Undertaking relining programs, cathodic protection measures, CCTV inspections (or other condition assessment reviews), and inflow and infiltration remedial work on existing pipe infrastructure; and
- Substituting, retrofitting and rehabilitation work for full replacement of an asset (more costly).