

## BDO Advisory Services

# Using Reserves and Reserve Fund Strategies to meet your challenging needs ahead!

*AMCTO, ON October 20, 2016*

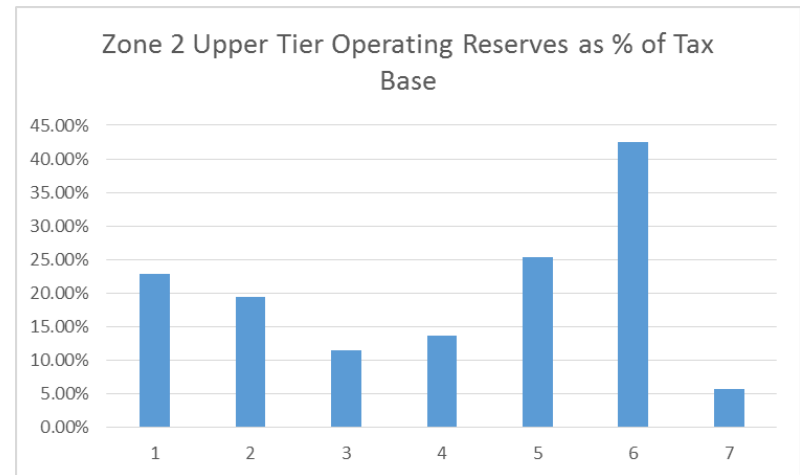
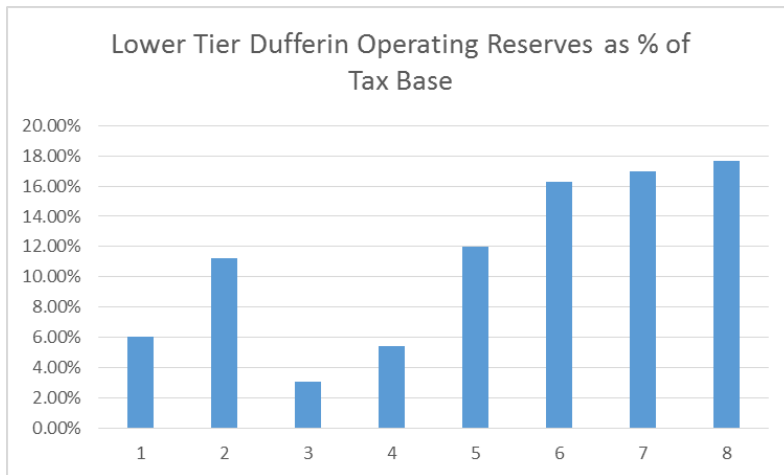
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# Benchmarking

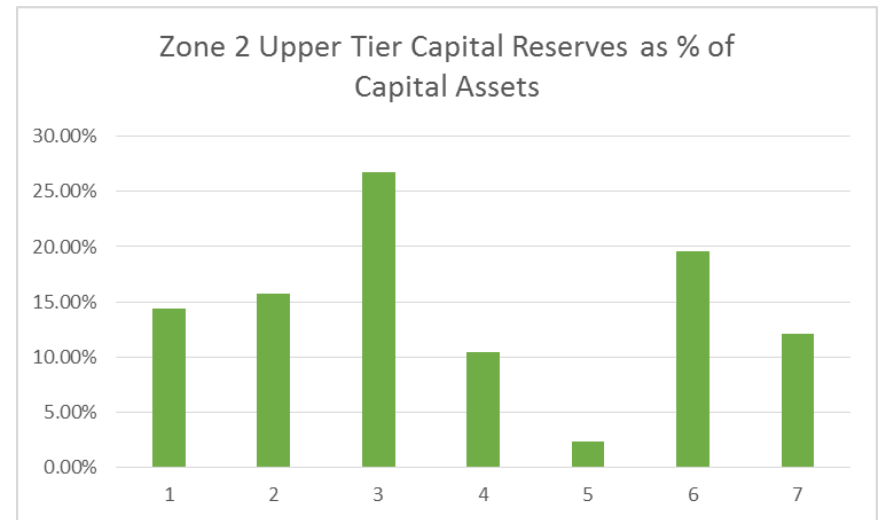
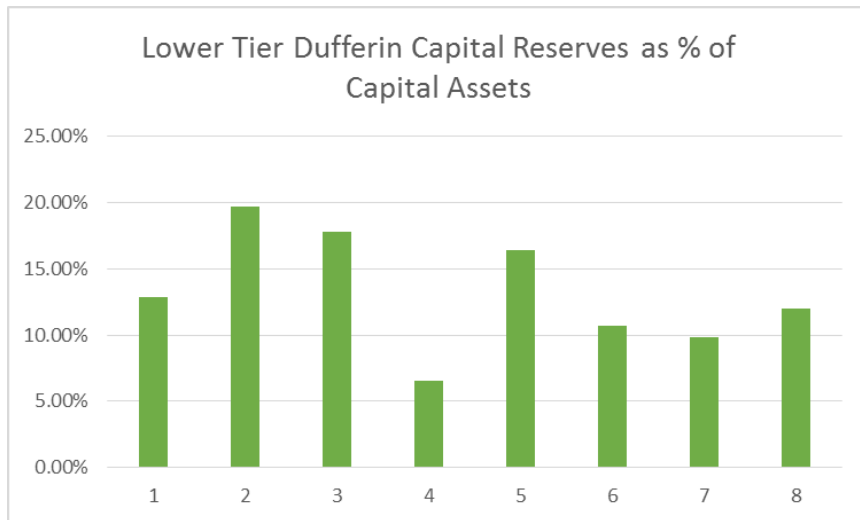
# Operating Reserves Ratio

- Data from the 2015 FIRs
- All reserve and reserve fund amounts from schedule 60 of the FIR were used
- Reserves included in operating reserves include working funds, contingencies, sick leave, insurance, WSIB, tax rate stabilization, winter control, recreation programs, library, museums, cultural services and planning
- Percentage of operating reserves to total tax revenue from schedule 10 of the FIR



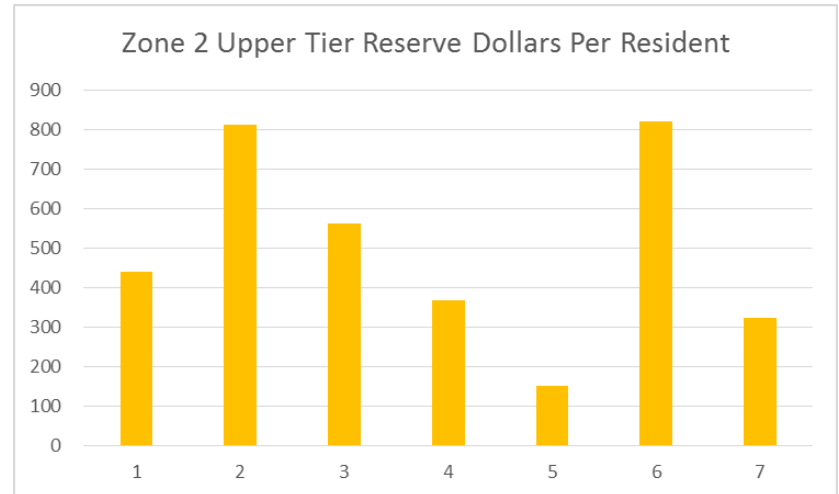
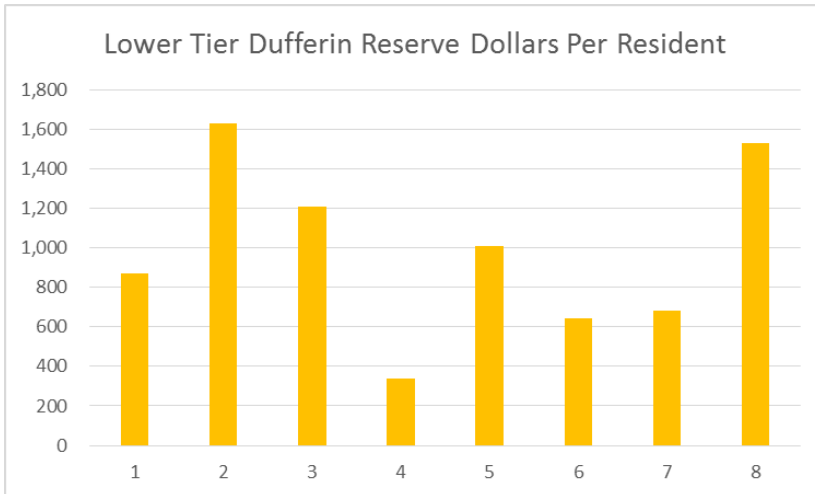
# Capital Reserves Benchmarking

- Data from the 2015 FIRs
- All reserves not included in operating assumed to be capital
- Compared total capital reserves to net book value of capital assets from schedule 70 on the FIR



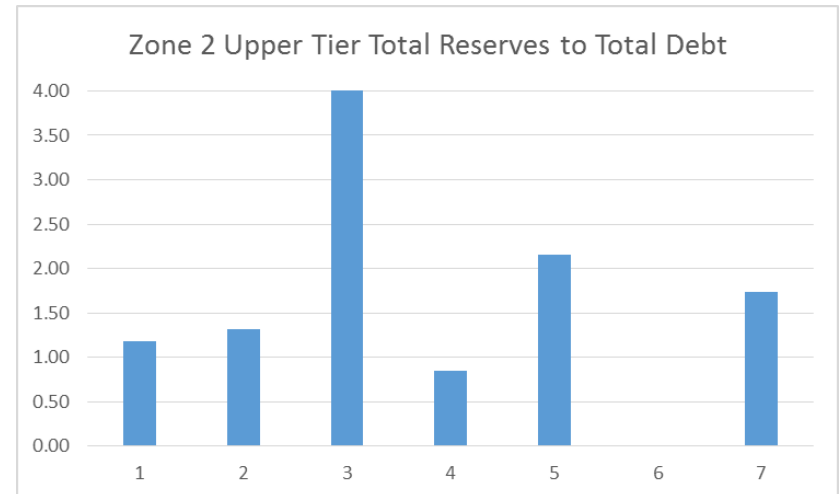
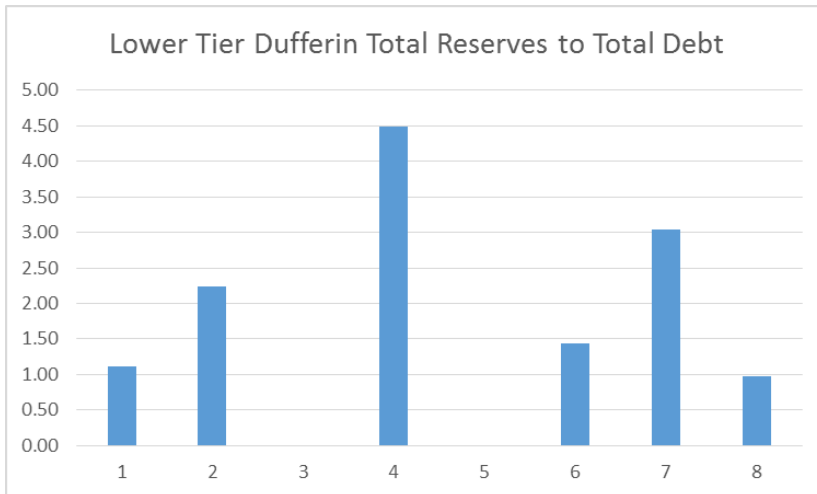
# Reserves per Resident Benchmarking

- Data from the 2015 FIRs
- Total reserve dollars per resident of the municipality based on population figures in the FIR



# Reserves to Debt Benchmarking

- Data from the 2015 FIRs
- Total reserve dollars per the FIR compared to temporary borrowing and long-term debt of the municipality from schedule 70 of the FIR
- Zero amounts are municipalities with no temporary borrowing or long-term debt

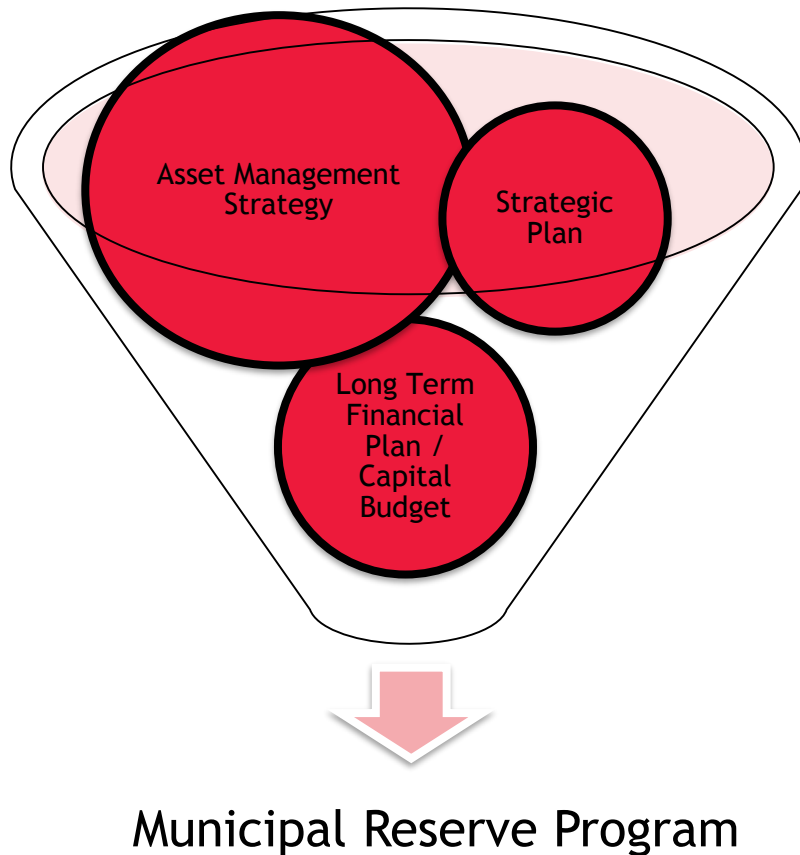




# Reserve Program Elements

- Definitions
- Financial Model
- Documentation
- Communications

# Linking your Municipal Reserve Program



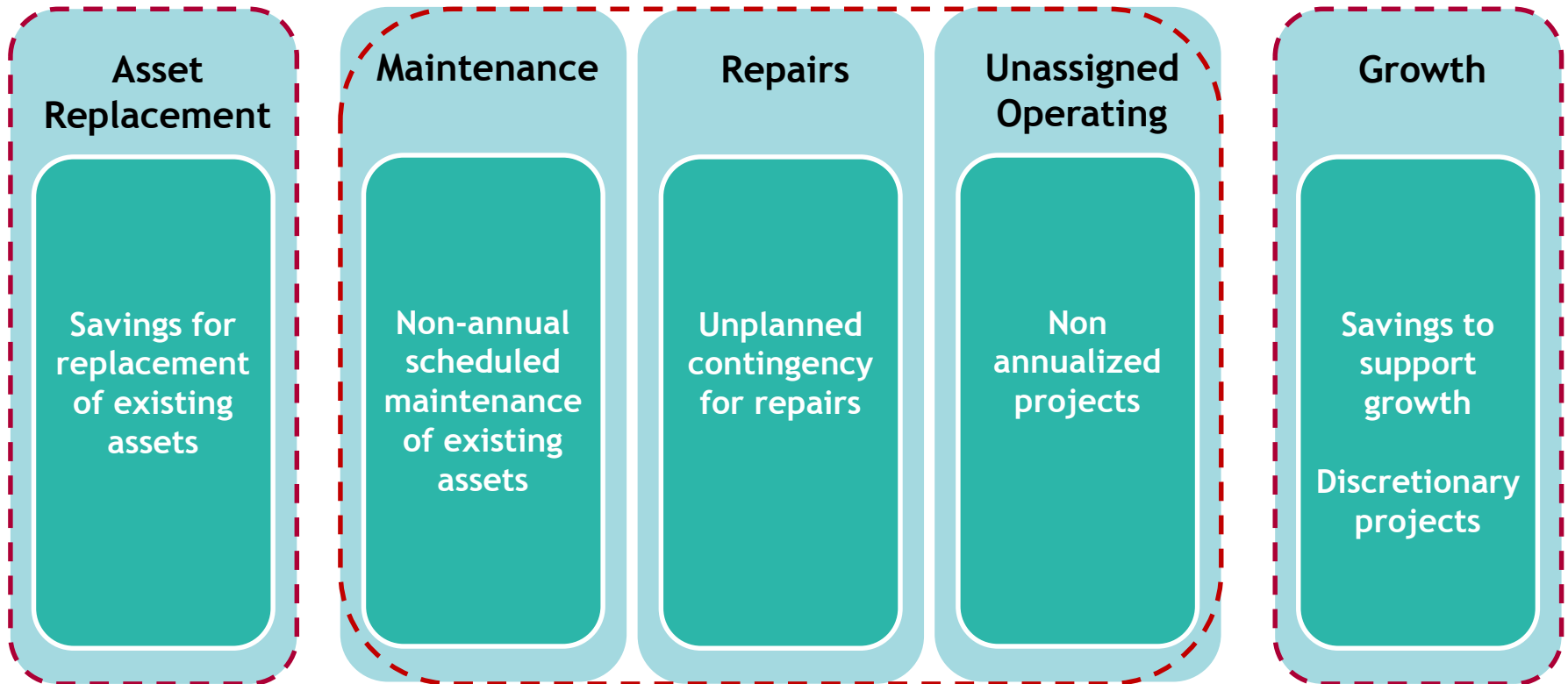
- Reserve program is a small component of the asset management strategy/plan of any municipality
- It must consider asset conditions, expected level of service, strategic planning, forecasted growth, policy directions, long-term financial and capital budgeting plans etc...



# Linking Asset Management Strategy & Reserve Funding

Traditionally looked at as Capital and Operating.

Redefine based on segregating cash uses.



Projects that are recurring on an annualized basis - are not funded from reserves, but to be considered in annual operating budgets - net zero impact on annual budgets.

# Linking strategic planning & your asset management strategy

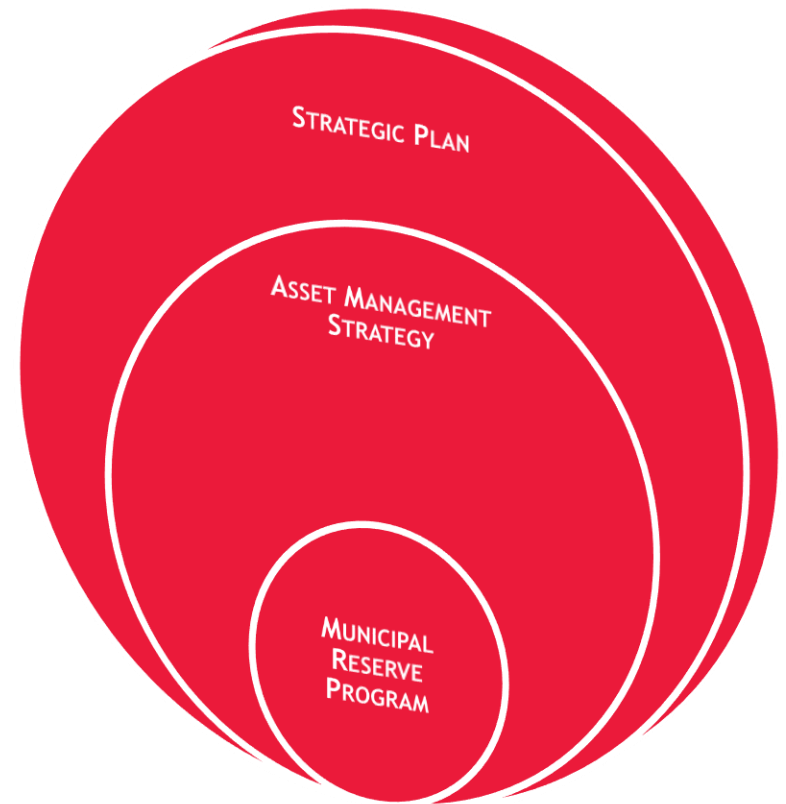


- Start your financial assessments early within your Strategic Planning initiatives.
- Develop financial models and scenario analyses to help determine reserve funds.
  - Development of a financial model to assist with long term planning of capital assets
  - Integration with Asset Management Plan and key strategic objectives of the municipality.
  - Scenario analyses on funding of assets, asset gentrification, revenue options (e.g., taxes, debt, etc.)

- A strategic and proactive approach that places a premium on data, information, collaboration and interdisciplinary management.
- A comprehensive long-term view of infrastructure performance and cost.
- An explicit, visible and transparent approach that requires effective communication among all stakeholders.

# Why make these links?

- Allows for better decision making regarding resource allocation.
- Leads to more effective communication with ratepayers, elected officials, financial rating organizations and regulatory agencies.
- Provides consistent levels of service to the public.
- Better management of risk to the municipality.
- Allows for more effective financial planning.
- Reduces lifecycle costs.
- Leads to more efficient data management.
- Facilitates the establishment and subsequent implementation of policy objectives and the related measurement of performance.
- Avoids problems and potential crises.
- Results in positive institutional change.



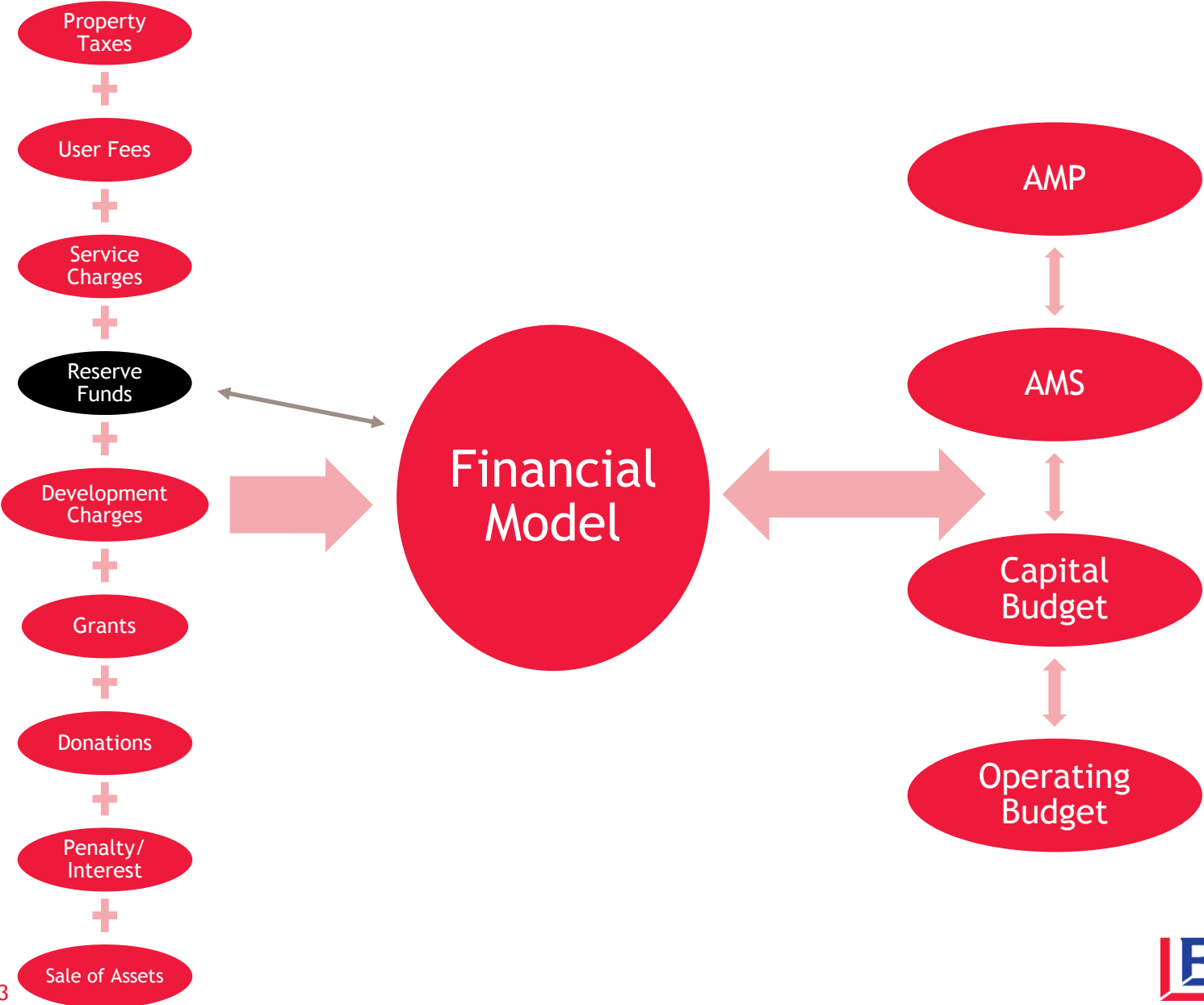
# Determining your Reserve Funding through your Financial Model (AMP/AMS)

- Establish a financial plan and model to support municipal infrastructure/service needs.
- Incorporate debt elements, perform sensitivity analyses, determine the most optimal debt for the municipality in a given scenario.
- Determine the optimal level of debt vs. equity available for the municipality in funding its capital infrastructure assets including scenario analyses.
  - (e.g., varying scenarios to determine optimal debt/funding sources; request for funding amount based best on revenue/funding options for the township, financial sustainability of the municipality as it relates to asset replacement or repair, etc.)
- Assessment of existing processes and systems and identification.

## These should link to:

- Council goals and strategies
- Community service expectations
- Growth and demand projections
- Asset life-cycle management
- Operating and maintenance programs
- Annual and long term financial planning

# Sources of Funds



# Options & Sensitivity Analyses

Option analysis should be done to determine the optimal mix of funding sources for the municipality. It should be long term and tie into the long-term financial plan and asset management plan of the municipality. These can include:

- ❖ Data, Inputs, Sensitivities
- ❖ Historical financial information (e.g. revenues, operating costs)
- ❖ Projections (e.g. future revenues, operating costs, capital expenditures)
- ❖ Externalities (e.g. congestion, encroachment on natural habitats)
- ❖ Outputs
- ❖ Implied NPV/IRR
- ❖ NPV, Indices (CPI) and other financial factors
- ❖ Summary information
- ❖ Reasonability tests and sensitivity analysis
- ❖ Supporting schedules
- ❖ Toll rate/user fees/taxes/subsidies
- ❖ Capital expenditures
- ❖ Granularity | Use of averages, accuracy
- ❖ Risk Factors | Condition, capacity, functionality
- ❖ Funding / Borrowing / Debt

# Data Sources

In order to build an effective model it must be aligned with the information gathered in each :

- Assessment of the state of local infrastructure
- Establishment of expected levels of service
- The development of an Asset management strategy

## ILLUSTRATIVE EXAMPLE

ASSET TYPE	AGE	CONDITION
Water Distribution	PSAB Records, Master Plans, CAD Drawings	Maintenance, Repair Records
Sanitary Sewer	PSAB Records, Master Plans, CAD Drawings	Maintenance, Repair Records, CCTV Inspections
Storm Sewer	PSAB Records, Master Plans, CAD Drawings	Maintenance, Repair Records, CCTV Inspections
<b>ROADS</b>		
Roads (Surface and Bed)	PSAB, GIS, Road Needs Study, CAD Drawings	Right-of-Way Video Log / Visual Inspection / PCI
Bridges (Bridges and Large Culverts)	PSAB, GIS, OSIM	OSIM Reports
Sidewalks	PSAB, GIS, Visual Field Inspection	Right-of-Way Video Log / Visual Inspection
<b>BUILDINGS</b>		
Sub-Systems	PSAB, Master Plans, Insurance, ...	Master Plans, Maintenance, Repair Records
Internal Equipment (Pumps, Valves)	PSAB, CAD drawings, Insurance, ...	Master Plans, Maintenance, Repair Records

# Data Integrity

Analysis of the data quality and suitability to support reserve policy for:

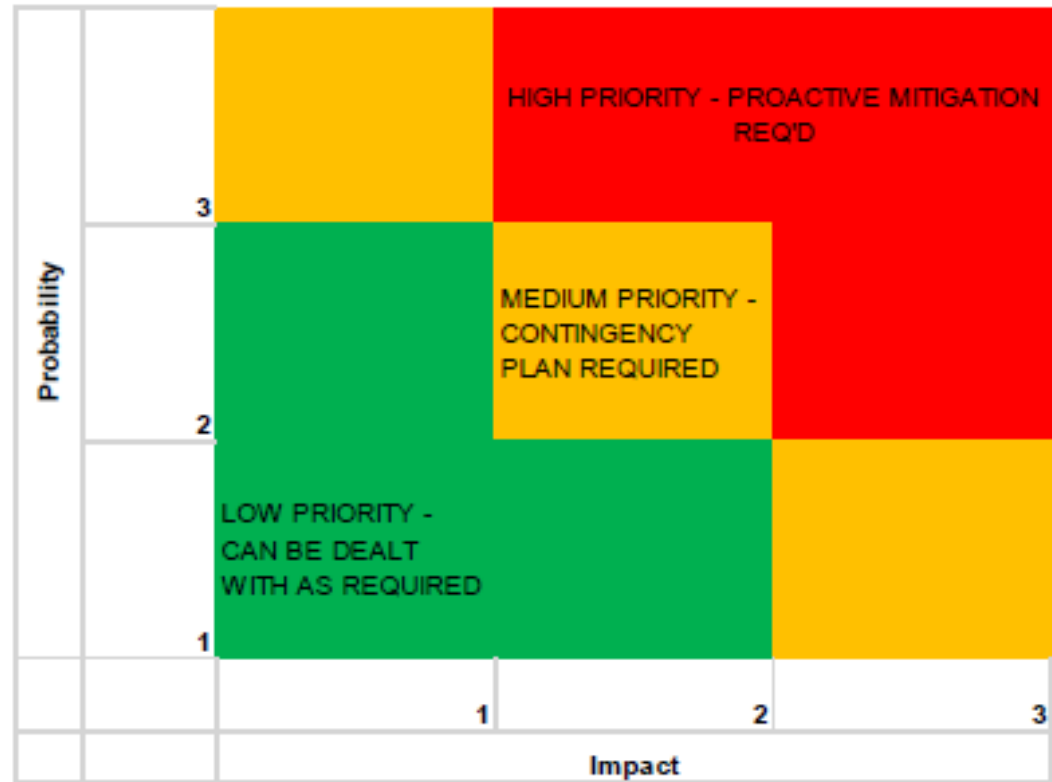
- Completeness - assess with sampling of assets in inventory appearing in TCA data
- Currency - when was the data entered? Updated?
- Accuracy - compare with other asset reports and information



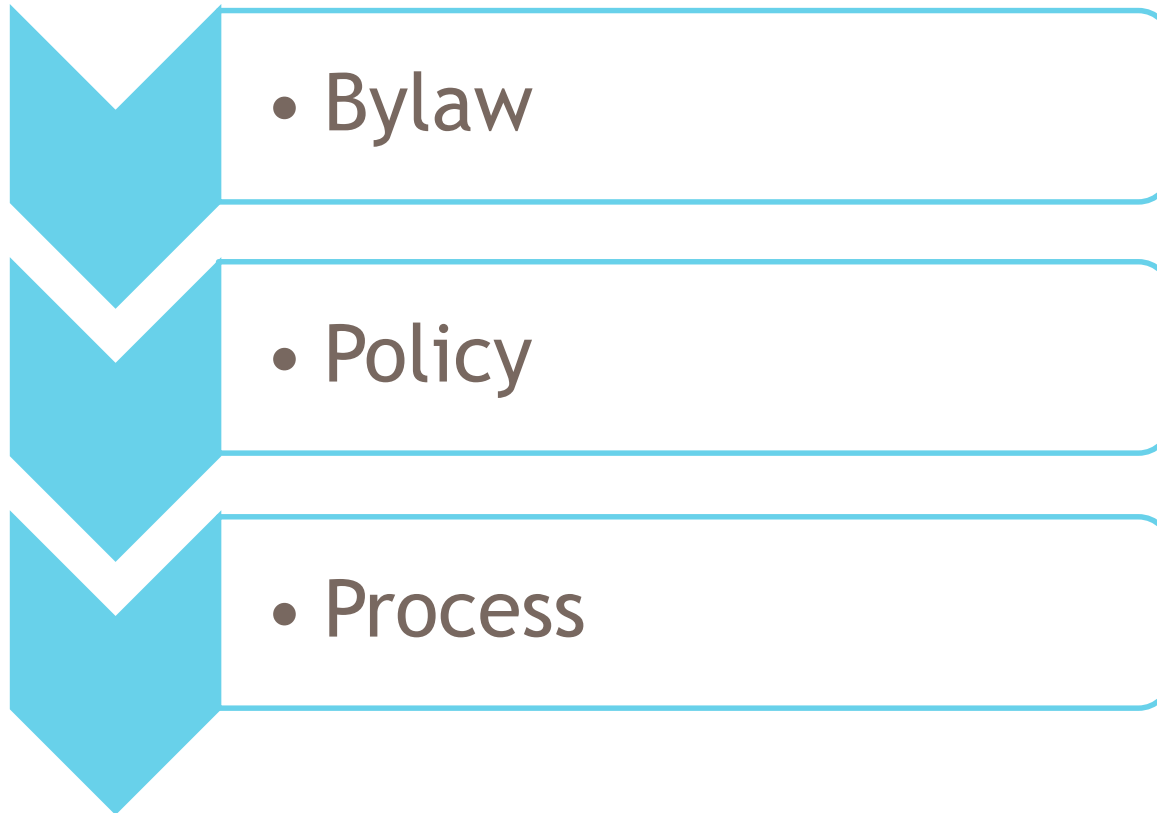
# Risk Management

Examples:

- ❖ Weather may have an impact on lifespan
- ❖ Demographics may have an impact on functionality
- ❖ Economy may have an impact on replacement values



# Documentation



# Documentation

- Review current bylaws regarding reserves
- Current amounts may be tied to specific uses
- May not be aligned with asset types
- Some may be currently over or under funded
- New bylaws or amendments may be required
- Draft policies and procedures
- Draft roles and responsibilities
- Have a risk management approach

# Bylaws

- Review current bylaws regarding reserves
- Current amounts may be tied to specific uses
- May not be aligned with asset types
- Some may be currently over or under funded
- New bylaws or amendments may be required

# Processes and Procedures

- Tells us how to calculate annually
  - Generates specific numbers
- Roles and responsibilities of administration
- Risk Management

# Communication with Stakeholders

- Public
- Council
- Administration
  - ❖ Department Heads, Asset owners, Finance
- ❖ Benefits
  - Stability and predictability, Resilience, Continuity of service levels, Efficiency
- ❖ Risks and Impact of doing nothing
  - Asset failure, Decreased service level, Public safety, Higher costs
- ❖ Pay as you go philosophy
  - This is not to be left for future generations!

# Key Messages

## ❖ Benefits

- Stability and predictability
- Resilience
- Continuity of service levels
- Efficiency

## ❖ Risks and Impact of doing nothing

- Asset failure
- Decreased service levels
- Public safety
- Higher costs

## ❖ Pay as you go philosophy

- This is not to be left for future generations!

# Summary



# Reserve Approach

## Understand your current environment

- Definitions
- Data Integrity
- Bylaws
- Policies
- Processes

## Model the assets

- Types
- Values
- Ages
- Life spans

# Reserve Approach - Continued

## Document

- Reserve Model
- Bylaws
- Policy
- Process

## Involve the right people - Communicate

- Council
- Asset Managers
- Finance
- Public

# Questions?

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