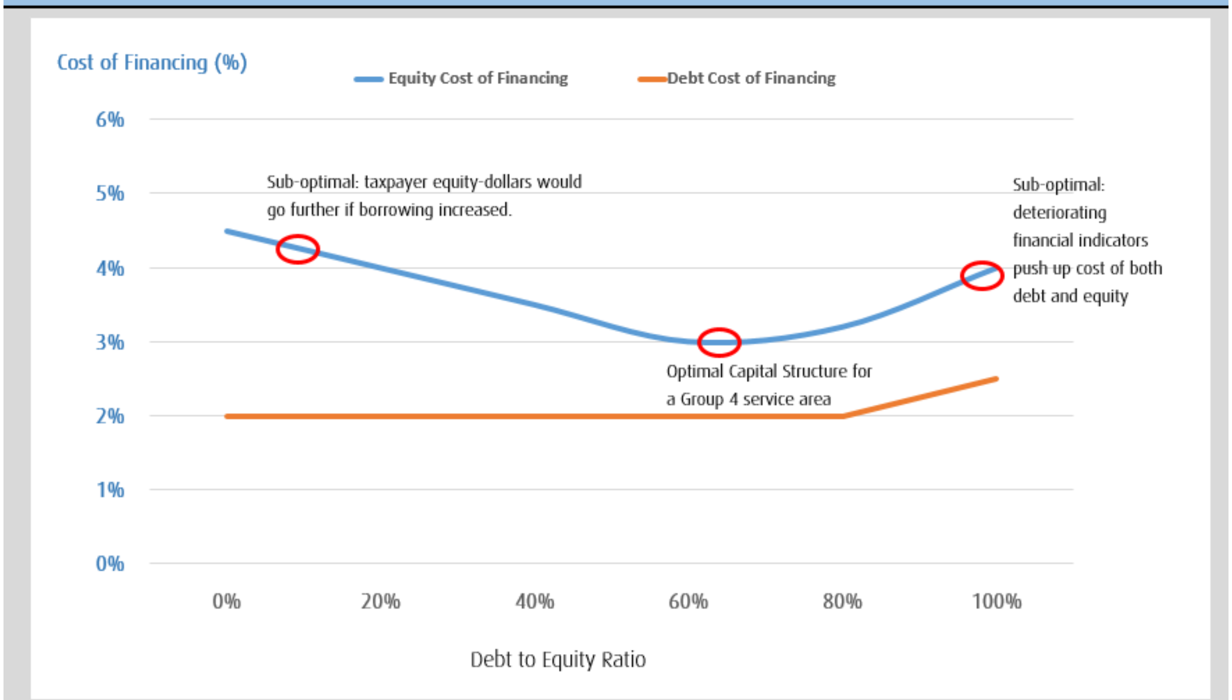
Making a difference...together

Appendix C: Corporate Finance Concepts

Corporate Finance – Optimal Debt to Equity

Capital investments in infrastructure to deliver on community needs drive cash flow requirements in excess of the ability to pay or raise money to pay up front in many cases. An optimal blend of debt and reserves is designed to meet community demand today while matching cash flow with the use of assets over time. Graphic 1 illustrates how blending cost of debt financing (orange line) with cost of a taxpayer-raised financing (blue line) reduces overall cost of financing. However, blending too much debt can cause costs to rise.

The Trade-Off Theory of capital structure requires balancing the benefits of debt financing (don't need to save everything to spend today) versus the cost of financial distress from too much leverage (deteriorating credit score, risk of insolvency etc)



What are capital reserves?

Capital Reserves are established by bylaw and statute. Once established, these reserves can only be used for the purpose they were established for unless the funds are no longer required (purpose ceases to exist) or when funds are used for inter-service borrowing. Each bylaw references funding sources as either surplus/operating transfer but the bylaws do not address ‘how’ to determine optimal funding levels.

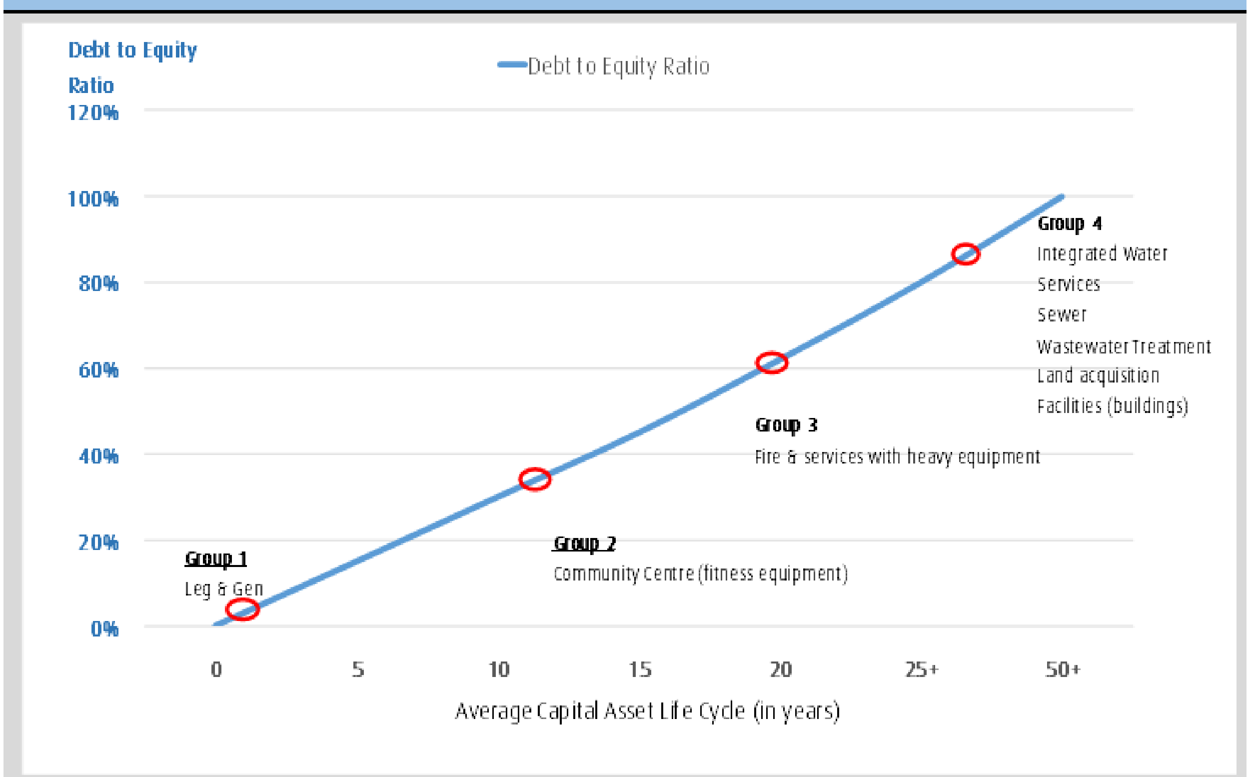
The historic CRD practice for setting capital reserve levels is driven by the annual financial planning conducted in each CRD service area. Capital reserve levels are set at the service level and approved through the annual budget and financial plan process and monitored on an ongoing basis for adequacy. Many are tied back to calculations involving estimates of asset life-cycle replacement.

For each service area, the overall capital reserve levels will be reviewed by comparing current accumulated amortization to the existing capital reserve balances. Inflation and replacement cost factors will be considered wherever possible. An optimal debt permissible level will be determined. Then the over- or under-funding of the capital reserve will be determined, providing opportunities to address misalignment. The results of this analysis will be used in the 2022 financial planning process.

How much debt is permissible for new purchases or replacement of major capital infrastructure and/or land?

As a general rule, the longer the estimated useful life of a capital asset, a greater tolerance for debt is permitted:

Debt to equity ratio should be approximately matched to asset life, with consideration for inter-generational fiscal balance



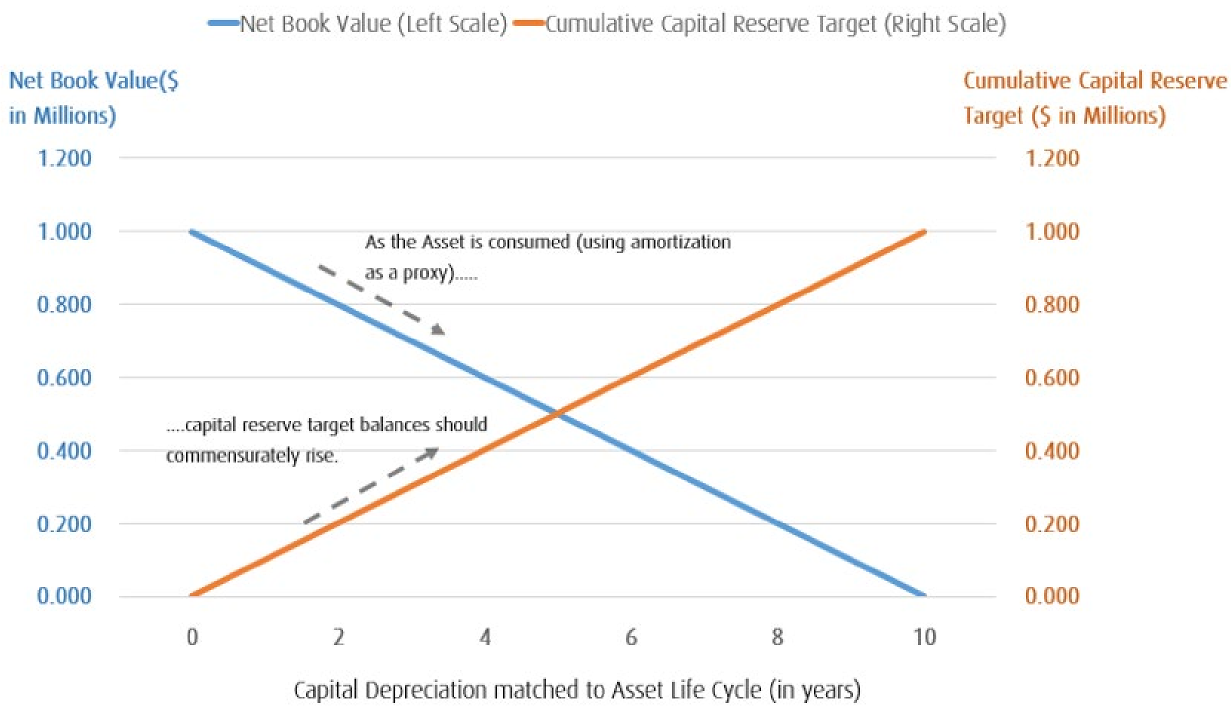
Capital reserves (savings) target levels are set once the level of permissible debt is established for the service area, as the two concepts are correlated. The more debt permissible, the less reserves require to be saved toward future replacement.

How is setting capital reserve targets approached?

Setting capital reserve levels are set assuming the current capital assets will need to be replaced in the future. Until asset management data becomes available, these guidelines recommend relying on accounting operational data and as the starting point.

Capital asset/infrastructure replacement patterns are often 'lumpy', meaning the asset is not fully used up, in an accounting sense, before it is replaced or enhanced. Hence an annual examination of estimated service life, replacement schedule (timing of cash flows) and existing debt is required to inform an optimal financing strategy. Each CRD service area will have a unique profile in this regard, preventing a formulaic approach from being developed.

Generally, as an asset depreciates, the capital reserves should be funded annually sufficient to meet the replacement need in the future, adjusting for permissible debt, replacement cost and inflation as additional factors informing target capital reserve balances.



Certain limits apply on the use of debt, revenue tolerance and financial health indicators are primary considerations.