WESTERN AUSTRALIAN
TREASURY CORPORATION

Local Government Authority Sustainability Model

June 2020

Background

Western Australian Treasury Corporation (**WATC**) has developed a financial model to help Local Government Authorities (**LGAs**) evaluate their solvency and sustainability. The model provides LGAs with the ability to assess how adjustments to current rating structures and planned capital expenditure programs might impact an LGA's financial position over a 10-year horizon.

The model takes an LGA's long-term financial plan (**LTFP**) as a starting point to identify its forecast trajectory of financial performance over a 10-year period. It then provides an LGA with the capability to adjust key financial "levers" in order to assess long term solvency and sustainability:

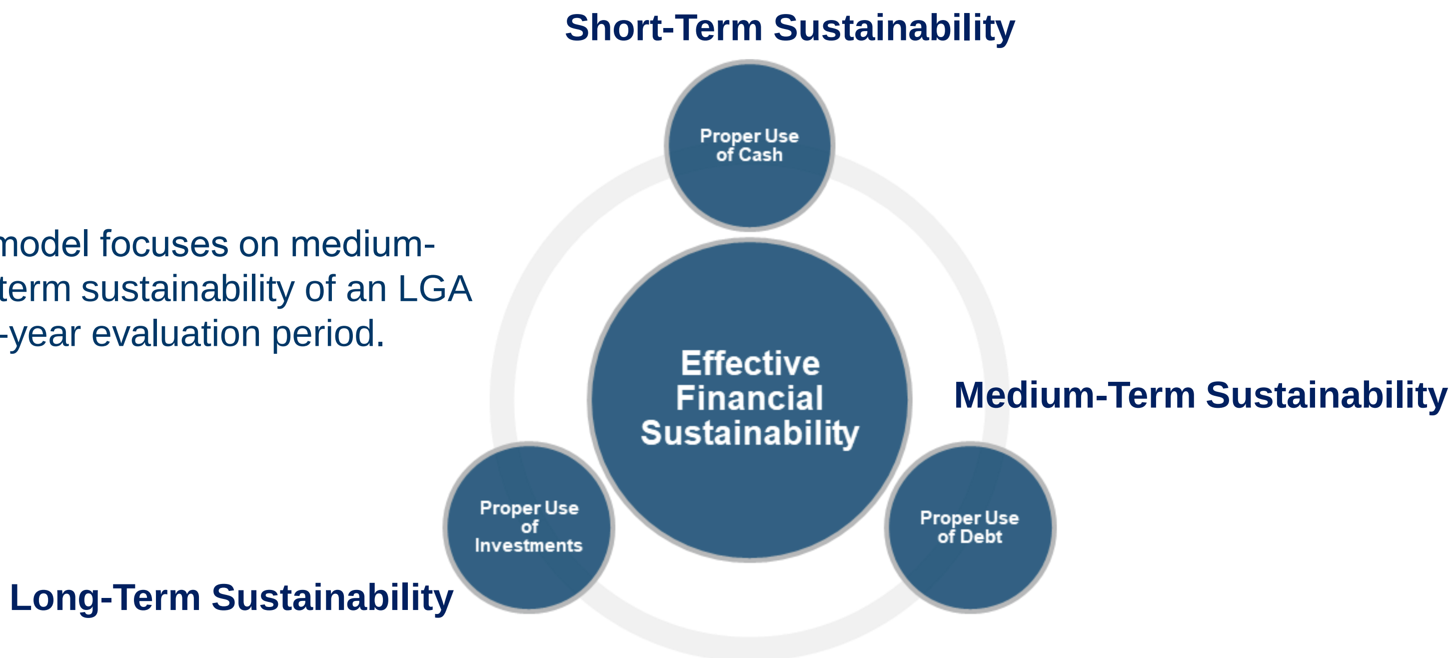
1. Adjustments to rating structures
2. Adjustments to capital expenditure (capex) programs:
    - Renewal capex
    - Improvement capex
3. Access to debt funding

An LGA's operating expenses are assumed to already be optimised over the duration of its 10-year LTFP – however the impact of changes to operating expenses can also be assessed via the model.

Financial Sustainability - Overview

Three elements combine to gauge the effective financial sustainability of an LGA:

WATC's model focuses on medium- and long-term sustainability of an LGA over a 10-year evaluation period.



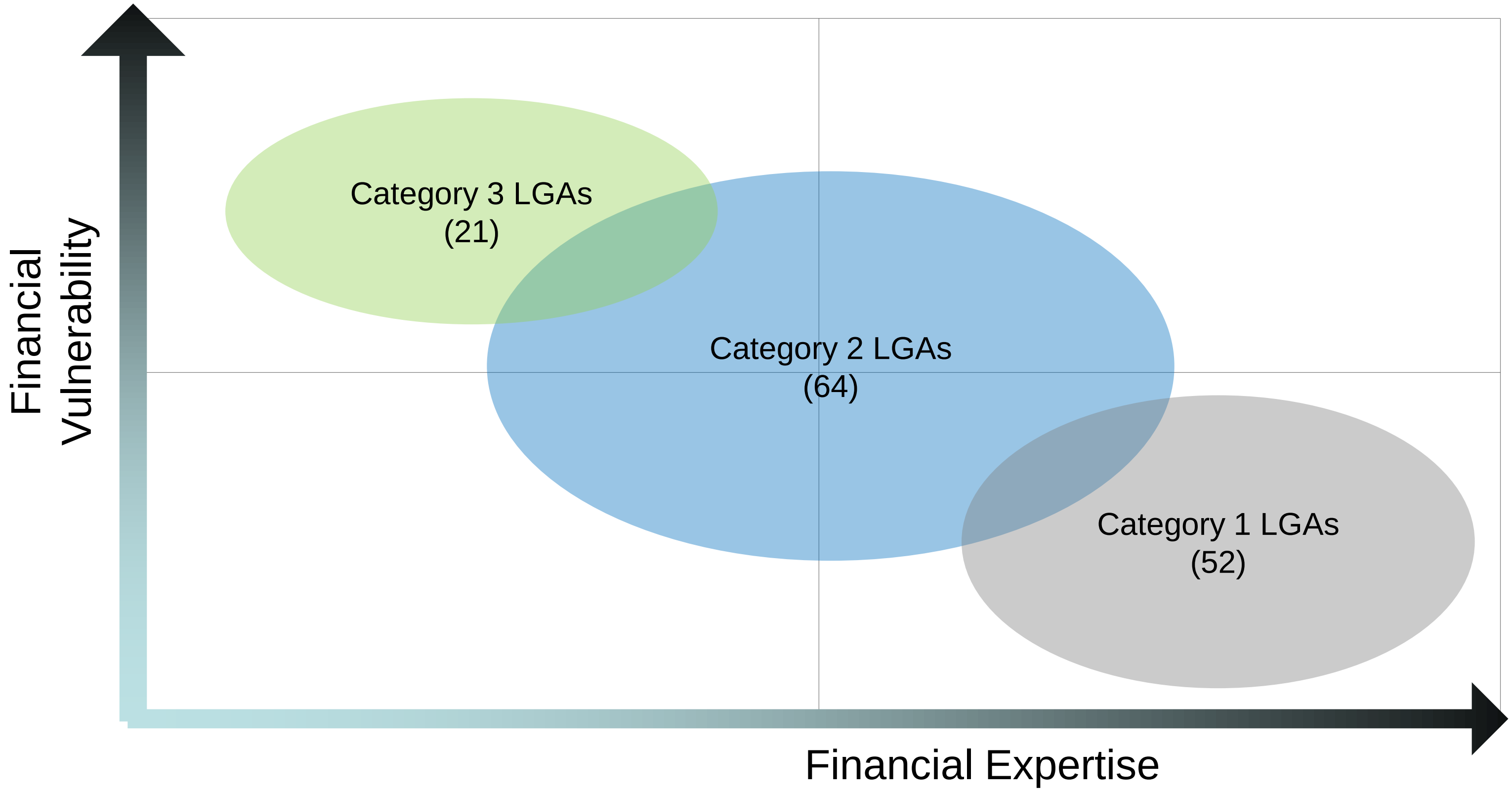
A central tenant for an LGA's long term sustainability is the need to ensure that:

- Cash inflows (primarily supported by property rates income) are sufficient to fund operating expenses, capital expenditure programs and scheduled debt service obligations; and
- Its planned capital expenditure is adequate to fund the scheduled renewal of its asset base (for which depreciation can be used as a proxy).

Project Approach

Key:

	Category 1 LGAs	DLGSC + WALGA + LGPFP
	Category 2 LGAs	DLGSC + WALGA + LGPFP
	Category 3 LGAs	WATC



Process Overview

DLGSC & LGA
Overview & Insights

- Purpose & rationale
- Model goals & insights
- Use as a dynamic forecasting and communication tool

WATC
Model Customisation

- 4 years historic financials
- Existing WATC loan data
- Future interest rates
- CPI/WPI escalation rates

LGA
Model Inputs

- Property data sheet
- Rating Categories
- Current Rating Values
- CapEx timeline and prioritisation
- Non-operating grant timeline
- Attach copy of Long Term Financial Plan

DLGSC/WATC & LGA
Model Option Settings

Option settings:
- Property number growth
- Property value growth
- Rating value changes by category
- OpEx adjustments

Manipulation of model settings

LGA
Executive / Council Evaluation

Visualisation of impact of strategy options over 10 year timeline
- Asset sustainability
- Solvency
- Debt service capacity
- CapEx re-prioritization (if required)

WATC Approach

The WATC model utilises a step-by-step approach to assessing the solvency and sustainability of an LGA over the term of its 10-year long term strategic plan:

Step 1 - Obtain key LGA financial data inputs, including:

- Latest annual financial report
- Long-term financial plan (LTFP)
- Rates database
- Current rating structure
- Schedule of planned capital expenditure (categorised) – together with schedule of any related non-operating grants
- Existing asset depreciation schedule

Step 2 - Input data into model to determine Status Quo (the baseline forecast financial performance of the LGA over 10 years):

- Solvency - determine the forecast ending cumulative cash position
- Sustainability - determine the extent to which planned capital expenditure over the forecast period is aligned with the rate of depreciation of the LGA's asset base

WATC Approach (cont'd)

Step 3 – Evaluate the impact on solvency and sustainability of adjustments to:

- Current rating structure (changes to rating categories, rates, minimum thresholds, timing of changes)
- Anticipated changes over time to property numbers and average values
- Current capital expenditure profile (changes to priority and timing of capex projects)
- Measure impact of changes on selected key financial ratios that are indicative of an LGA's financial health

Step 4 – Should cash shortfalls emerge under the various Rates and Capex scenarios, determine the extent to which new debt funding can be used to close such funding gaps:

- Evaluate the impact of existing and incremental debt on the financial ratios (loan checks) which are indicative of an LGA's debt capacity;
- Any new debt used in the model is assumed to be drawn down via a 10-year fully amortising term loan facility

Step 5 - Compliance Checks

- Each combination of options is simultaneously assessed for compliance with LGA sustainability checks, WATC debt capacity checks and regulatory restraints.

Rates Scenarios

The model assesses the impact on rates revenue of multiple rate in the dollar scenarios over a 10-year forecast period.

Rates

Growth/(Decrease) on Rate in a Dollar - New Rating Period Options

Status Quo (CPI Growth)

		FY 2020	FY 2021	FY 2022	FY 2023
Residential	% p.a.	-	-	2.50%	2.50%
Commercial	% p.a.	-	-	2.50%	2.50%
Non Rateable	% p.a.	-	-	-	-
Gross Rental Value	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-

Moderate Growth

		FY 2020	FY 2021	FY 2022	FY 2023
Residential	% p.a.	-	-	4.00%	2.50%
Commercial	% p.a.	-	-	4.00%	2.50%
Non Rateable	% p.a.	-	-	-	-
Gross Rental Value	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-
Spare	% p.a.	-	-	-	-

Capex Scenarios

Each individual LGA capital expenditure project which is included in an LGA's 10-year long term strategic plan is classified as follows:

- By Category: (i) Property, Plant and Equipment or (ii) Infrastructure
- By Type: (i) Renewal capex or (ii) Improvement (new asset) capex
- By Priority: (i) Essential (ii) Desirable or (iii) Discretionary

WATC's model enables LGAs to assess the impact on both solvency and asset sustainability of capital expenditure programs which have been flexed by priority

Renewal Capex

Property, plant and equipment

**Enter amounts as negative values*

Priority	Inc.	Description	Type		10 Yr Total	FY 2020	FY 2021	FY 2022
Essential	Yes	Renewal Capex PP&E Project 1	Buildings	$	(906,486)	-	(43,470)	(349,440)
Essential	Yes	Renewal Capex PP&E Project 2	Buildings	$	(65,040)	(29,943)	(2,588)	-
Essential	Yes	Renewal Capex PP&E Project 3	Buildings	$	(794,200)	-	-	(192,010)
Essential	Yes	Renewal Capex PP&E Project 4	Buildings	$	(300,000)	(50,000)	(50,000)	-
Essential	Yes	Renewal Capex PP&E Project 5	Plant & Equipment	$	(941,362)	(85,477)	(87,186)	(88,930)
Essential	Yes	Renewal Capex PP&E Project 6	Plant & Equipment	$	(13,465)	(6,666)	(6,799)	-
Essential	Yes	Renewal Capex PP&E Project 7	Plant & Equipment	$	(39,443)	(3,582)	(3,653)	(3,726)
Essential	Yes	Renewal Capex PP&E Project 8	Plant & Equipment	$	(39,883)	(3,621)	(3,694)	(3,768)
Essential	Yes	Renewal Capex PP&E Project 9	Plant & Equipment	$	(39,443)	(3,582)	(3,653)	(3,726)
Essential	Yes	Renewal Capex PP&E Project 10	Plant & Equipment	$	(35,860)	(17,752)	(18,107)	-
Essential	Yes	Renewal Capex PP&E Project 11	Plant & Equipment	$	(340,246)	(30,895)	(31,513)	(32,143)
Essential	Yes	Renewal Capex PP&E Project 12	Plant & Equipment	$	(941,362)	(85,477)	(87,186)	(88,930)
Essential	Yes	Renewal Capex PP&E Project 13	Drainage	$	(13,250)	(1,203)	(1,227)	(1,252)
Essential	Yes	Renewal Capex PP&E Project 14	Drainage	$	(10,809)	(10,809)	-	-
Essential	Yes	Renewal Capex PP&E Project 15	Buildings	$	(143,949)	(13,071)	(13,332)	(13,599)
Discretionary	No	Renewal Capex PP&E Project 16	Buildings	$	(439,557)	(39,912)	(40,711)	(41,525)
Discretionary	No	Renewal Capex PP&E Project 17	Buildings	$	(21,296)	(1,934)	(1,972)	(2,012)
Discretionary	No	Renewal Capex PP&E Project 18	Buildings	$	(400,560)	(36,371)	(37,099)	(37,841)
Discretionary	No	Renewal Capex PP&E Project 19	Buildings	$	(138,036)	(12,534)	(12,784)	(13,040)
Essential	Yes	Renewal Capex PP&E Project 20	Buildings	$	(178,974)	(16,251)	(16,576)	(16,908)
Essential	Yes	Renewal Capex PP&E Project 21	Buildings	$	(78,041)	(7,086)	(7,228)	(7,372)
Essential	Yes	Renewal Capex PP&E Project 22	Buildings	$	(140,293)	(12,739)	(12,994)	(13,253)
Essential	Yes	Renewal Capex PP&E Project 23	Buildings	$	(428,085)	-	-	(52,500)
Essential	Yes	Renewal Capex PP&E Project 24	Buildings	$	(1,122,993)	(101,969)	(104,008)	(106,089)

Cash Flow Surplus (Shortfall)

Cash flows under each Rates and Capex scenario are then assessed:

- Cash flows are evaluated on an annual and cumulative basis after taking into consideration net operating performance, capex and scheduled debt service over the 10-year evaluation period.
- Where cash shortfalls emerge under the various Rates and Capex scenarios, the LGA's accessibility to new debt funding to close such funding gaps can be assessed.

Surplus/(Shortfall) by Year - Rating Option 2	Total	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Cashflow Available for CapEx, OpEx and Debt Service	41,894,589	2,901,913	3,614,179	4,063,715	3,578,936	3,728,738	4,170,932
Less: Debt Service	(6,021,668)	(760,724)	(615,280)	(610,597)	(596,547)	(455,786)	(737,308)
Plus: New Loans	-	-	-	-	-	-	-
Less: Project Opex	(50,000)	-	-	(50,000)	-	-	-
Cashflow Available for CapEx	35,822,921	2,141,189	2,998,899	3,403,118	2,982,389	3,272,952	3,433,625
Less: Capex	(35,050,793)	(1,837,330)	(5,499,068)	(4,728,616)	(5,487,026)	(5,243,168)	(3,883,022)
Surplus/(Shorfall)	772,128	303,859	(2,500,169)	(1,325,498)	(2,504,636)	(1,970,216)	(449,397)
Cumulative Surplus/(Shortfall) - Unrestricted		5,979,532	3,479,363	2,153,865	(350,772)	(2,320,988)	(2,770,385)
Cumulative Surplus/(Shortfall) - Total		9,772,370	7,272,201	5,946,703	3,442,066	1,471,850	1,022,453

Debt Considerations

For Rates and Capex scenarios which result in a cash shortfall in any given year, the model enables LGAs to consider whether access to incremental debt is a feasible approach to closing funding gaps

- LGAs are assumed to borrow exclusively from WATC in its capacity as the WA Government Borrowing Authority.
- WATC's borrowing risk evaluation consists of a two-step process:
  - Determination of a Business Risk Grade
  - Determination of a Financial Risk Grade
- The LGA model only enables an assessment of the extent to which WATC's Financial Risk Grade borrowing criteria may be satisfied for any quantum of new debt modelled

Satisfaction within the model of debt checks does **NOT** imply that access to a new WATC debt facility will be authorised:

- LGAs must continue to seek approval of any new debt facilities from WATC using established procedures

Compliance Checks

Checks determine the extent to which selected combinations of Rates, Capex or Debt options comply with regulatory requirements and/or sustainability metric tests:

Type	Name of Test	Description	Threshold
Rates Checks	Rate-in-a-dollar	New target rate not more that 2x differential rate	**<= 2.0x**
	Minimum Property	Minimum imposed on less than 50% of total (a) properties in district or (b) properties in category	**< 50%**
Sustainability Checks	Operating Surplus	Operating Revenue / Operating Expense	**> 0**
	Asset Sustainability	Capital Renewal & Replacement Expenditure / Depreciation Expense	**> 95%**
Debt Funding Checks	Net Debt	Net Debt / Operating Revenue	**< 60%**
	Debt Service Cover	Operating Surplus before Interest & Depreciation / Principal & Interest Payments	**> 2.5x**

Model outputs dynamically highlight such checks for any given scenario:

Rating Checks		**Sustainability Checks**		**Solvency Checks**	
Rate-in-a dollar Constraint	Minimum Property	Operating Surplus Ratio	Asset Sustainability	Net Debt	Debt Service Cover
OK	**OK**	**OK**	**Warning**	**OK**	**OK**

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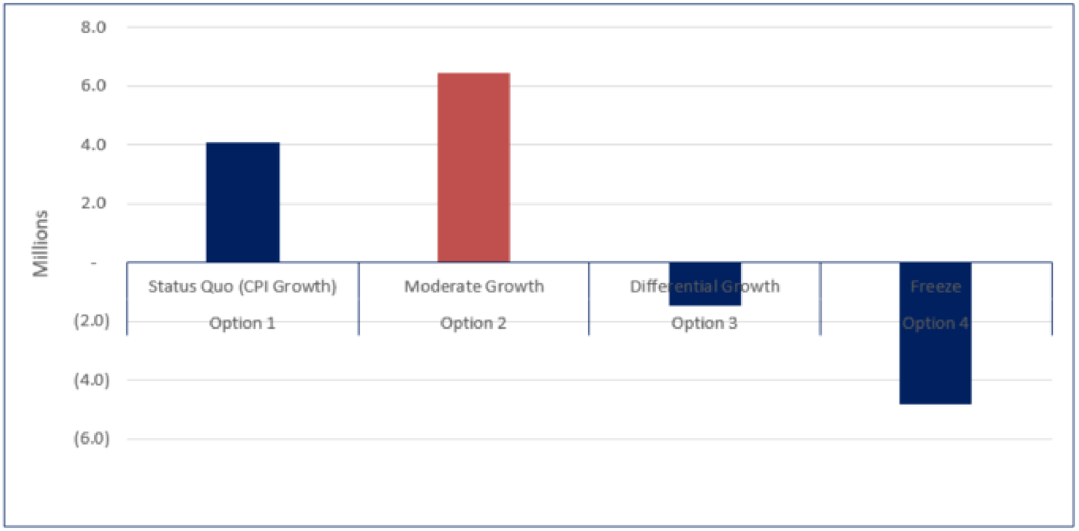
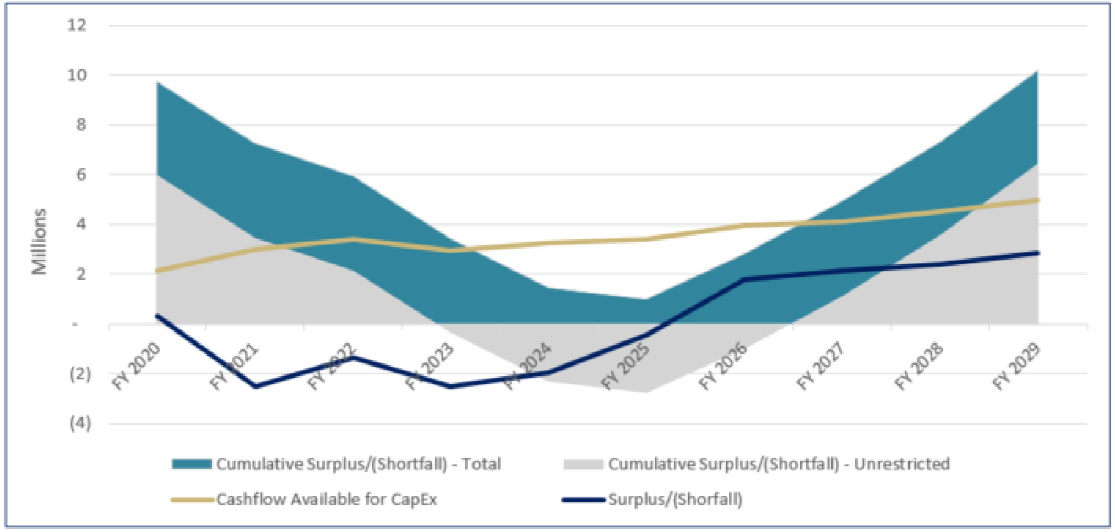
Example Outputs

The chart on the right illustrates the impact on cumulative cash flow for **All Rates Options** over the 10-year evaluation period under a **selected Capex** Scenario.

10 Yr Cumulative Surplus/(Shortfall) - All Rating Options



Surplus/(Shortfall) by Year - Option 2 (Selected Case - Moderate Growth)



The chart on the left shows the impact on year-on-year cash flow under the **Selected Rates Option** (Option 2) and selected Capex Option over the 10-year evaluation period.

While ending cash is positive, short-term recourse to debt funding support appears required if **Restricted Cash** (green shading) is **excluded**.

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Example Outputs

The table below illustrates the impact on ending cumulative cash under various Rating scenarios.

Surplus/(Shortfall) Summary

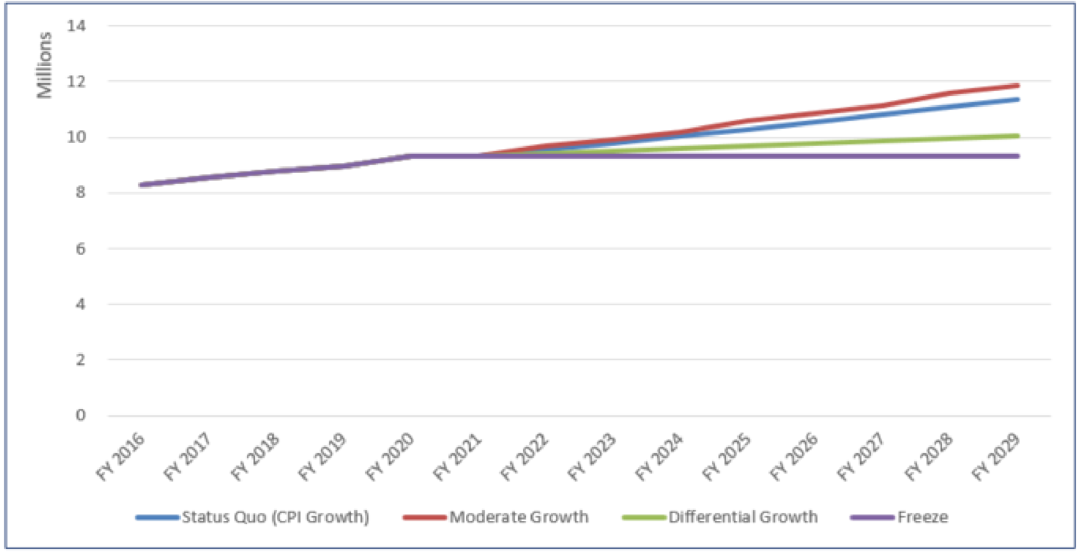
10 Yr Surplus/(Shortfall) - By Rating Option				
	Option 1 Status Quo (CPI Growth)	**Option 2** Moderate Growth	**Option 3** Differential Growth	**Option 4** Freeze
Cashflow Available for CapEx, OpEx and Debt Service	39,532,241	41,894,589	33,971,245	30,634,044
Less: Debt Service	(6,021,668)	(6,021,668)	(6,021,668)	(6,021,668)
Plus: New Loans	-	-	-	-
Less: Project Opex	(50,000)	(50,000)	(50,000)	(50,000)
Cashflow Available for CapEx	33,460,573	35,822,921	27,899,577	24,562,375
Less: Capex	(35,050,793)	(35,050,793)	(35,050,793)	(35,050,793)
Surplus/(Shorfall)	(1,590,220)	772,128	(7,151,216)	(10,488,418)
Cumulative Surplus/(Shortfall)	7,878,291	10,240,639	2,317,295	(1,019,907)

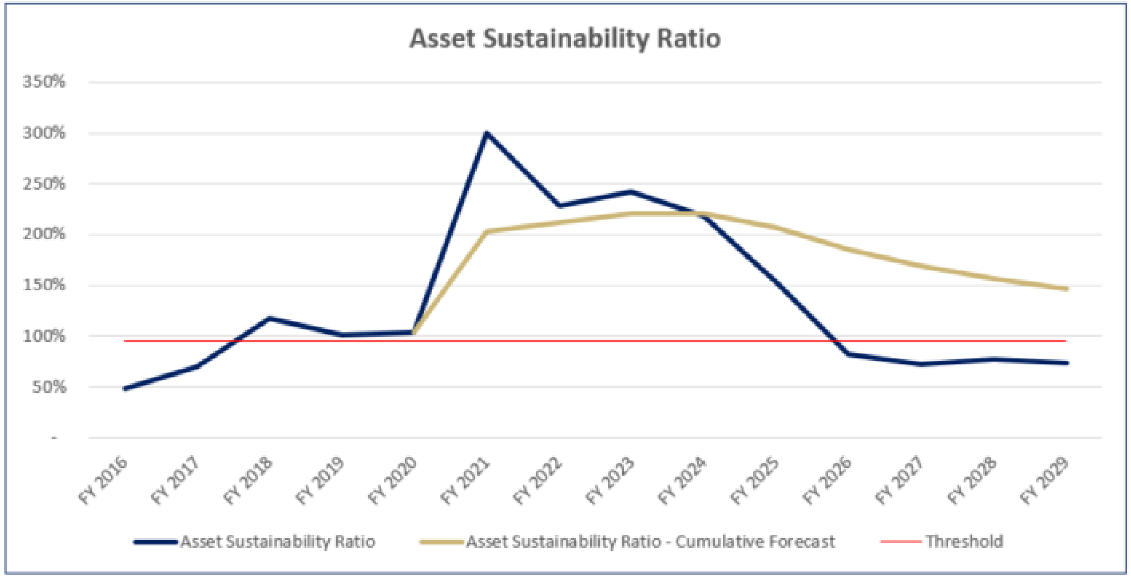
Example Outputs

The chart on the right illustrates the impact on annual rates revenue of the various Rates scenarios.

The chart summarises the annual variance between each scenario.

Scenarios shown exclude CPI escalation (this can be turned on/off).





The chart on the left illustrates the impact on the LGA's annual and cumulative asset sustainability ratio of the selected Rates and CapEx scenarios.

Conclusions

WATC's model evaluates the impact on the LGA's cash position of alternative rating and capital expenditure scenarios on:

- Solvency – as measured by its forecast cumulative ending cash position
- Sustainability – as measured by the extent to which planned capital expenditure over the forecast period is aligned with the cumulative depreciation over the period of its asset base

Key outputs:

- **The consequences on solvency and asset sustainability of maintaining Status Quo**

- **The impact on cash flow and asset sustainability of adopting different rating and/or capex approaches**

- **Debt capacity under each scenario, and the potential ability to address short term solvency issues via access to incremental debt**

Important Information

Disclaimer

Any opinions, judgements, conclusions, forecasts, predictions or estimations contained in this advice are made in reliance on information provided to the Western Australian Treasury Corporation (WATC) which WATC believes to be reliable. WATC, however, cannot guarantee the accuracy of that information. Thus, any recommendations are made in good faith but they must be carefully considered because they are provided only to assist you with any decisions which you make.

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Historical data

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Appendix

Appendix 1 - Modelling Considerations

The WATC model utilises the following assumptions:

- Increases in the number of properties will not change the average area per property or average value per property (except for CPI);
- All new property growth comes from Crown land (i.e. does not deplete rates income from other rating categories);
- Depreciation is set to a (user defined) asset life expectancy:
  - Different life expectancy settings used for Property Plant & Equipment and Infrastructure asset classes
- For the purposes of modeling:
  - Interest earned on any surplus is ignored;
  - Unless specified otherwise:
    - historic non-rates income items and non-salary expense items are assumed to escalate at CPI
    - Salary expense items are assumed to escalate at WPI
  - Restricted Cash Reserves are held constant at historic values across the evaluation period.

Appendix 2 - Rates Compliance Considerations

The Local Government Act 1995 Part 6 Financial Management (Rates and service charges Division 6) imposes two conditions in the setting of rates:

- **Differential general rates** "In imposing a differential general rate a local government is not to, without the approval of the Minister, impose a differential general rate which is more than twice the lowest differential general rate imposed by it." (6.33 (3)).

- **Minimum payment** ".. the local government is to ensure the general minimum payment is to be a general minimum is imposed on not less than –
  a) 50% of the total number of separately rated properties in the district; or
  b) 50% of the number of properties in each category…" (6.35 (3)).

The above conditions have been incorporated as Rating Compliance Checks in WATC's model to determine the extent to which any selected rates option is compliant.