

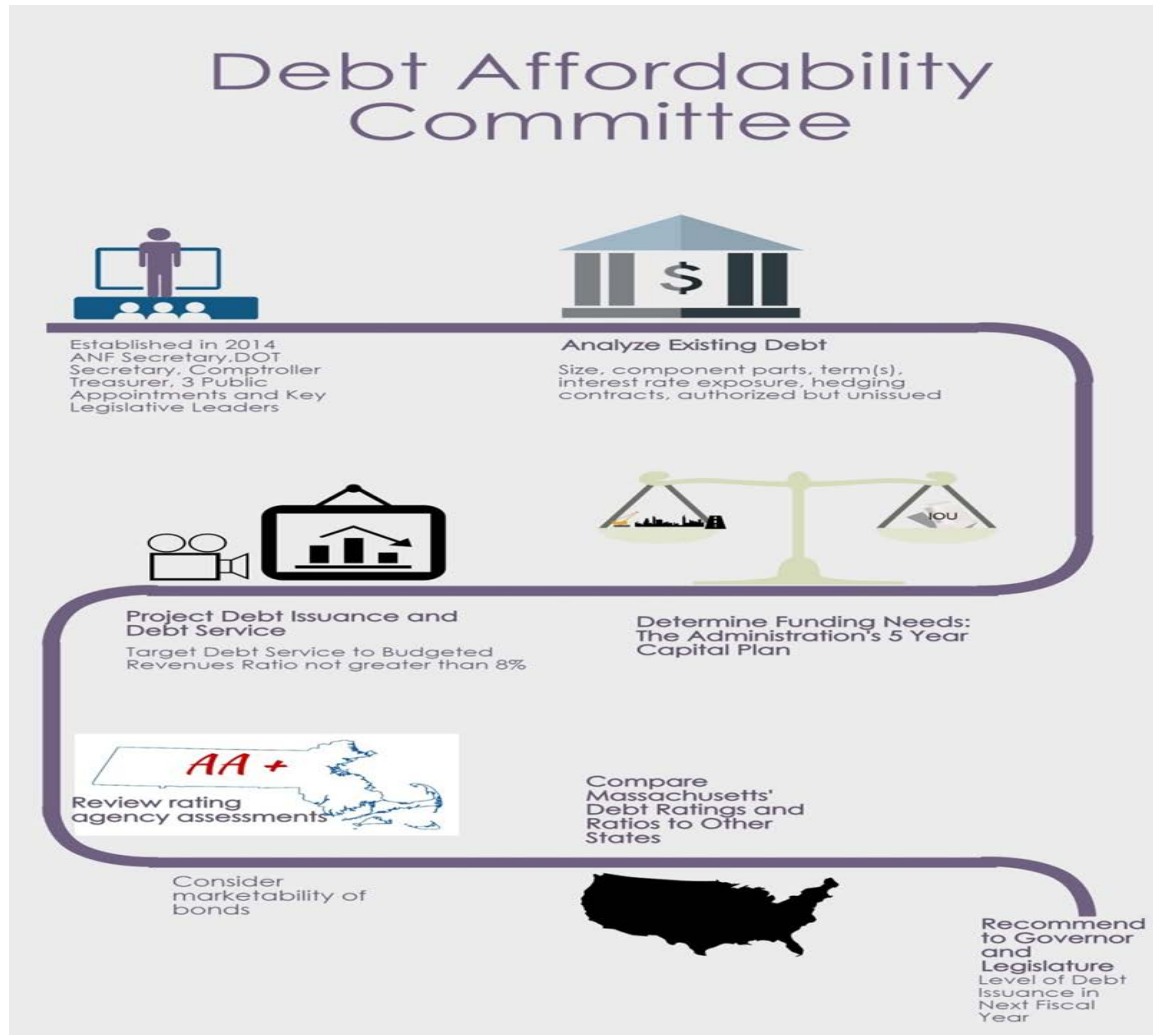


Debt Affordability Committee

**Recommendation
Attachment**
December 11th, 2017

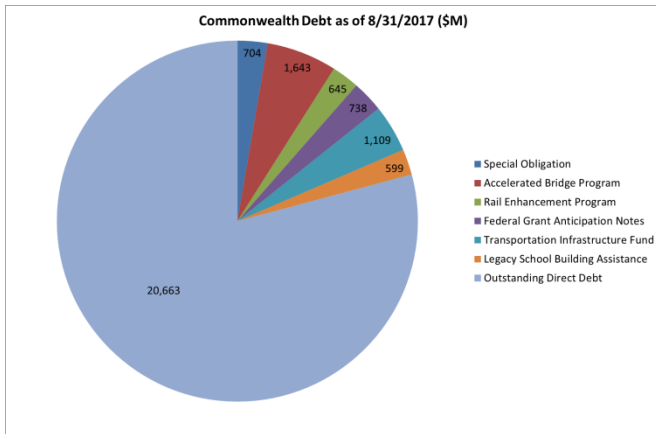


Debt Affordability Committee

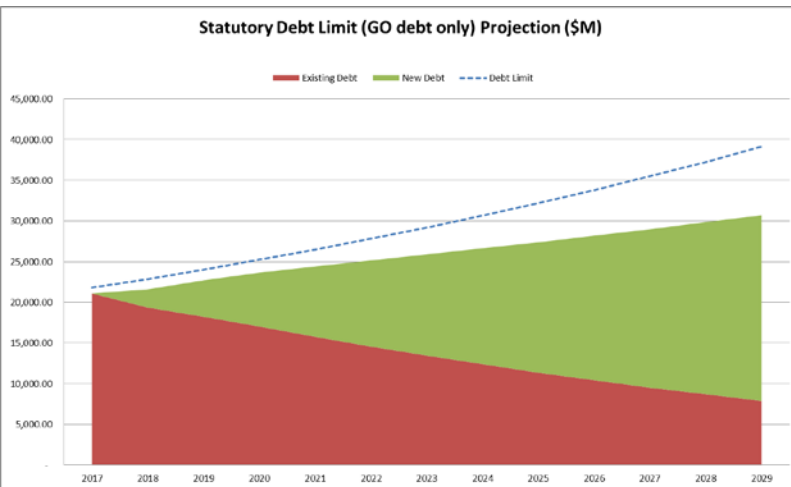




Statutory Debt Limit



Source: Information Statement



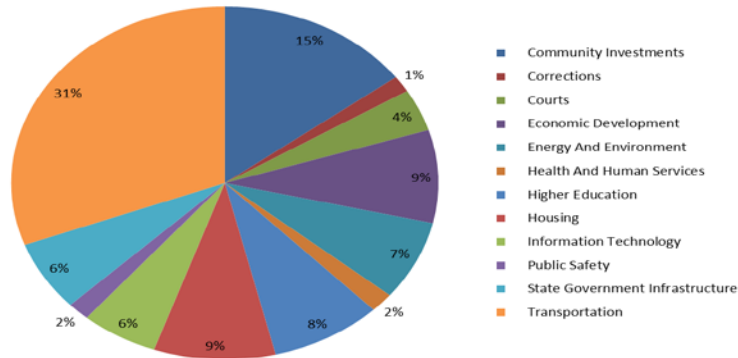
Source: Executive Office of Administration and Finance

- Statutory debt limit established under M.G.L. Ch. 29, §60A is set each year as the limit for the previous fiscal year's, increased by 5%
- Statutory debt limit for FY18 is \$22.9B and for FY19 is \$24.0B
- Statutory debt limit applies only to direct debt pledging the full faith and credit of the Commonwealth, as described in the statute
- As of August 31, 2017, the Commonwealth had \$26.1 B of outstanding debt, of which \$20.6B was direct debt subject to the statutory debt limit
- Under the current issuance plan, approximately \$21.6B of outstanding direct debt subject to the statutory debt limit is projected to be outstanding by June 30, 2018 and approximately \$22.7 B of outstanding debt by June 30, 2019
- Under this projection, the statutory debt limit is unlikely to constrain the capital plan in the next 10 years



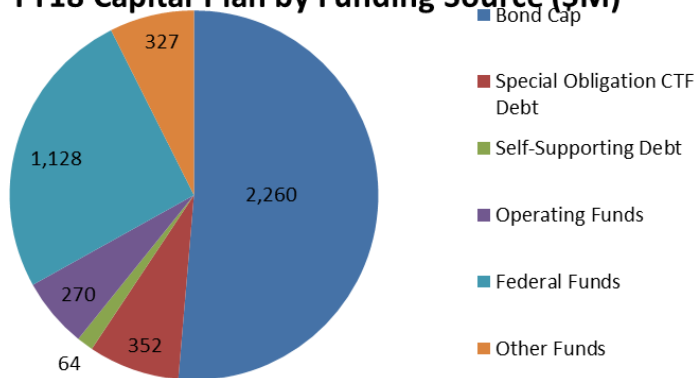
Capital Funding Sources and Uses

FY18 Bond Cap Spending by Policy Area



Source: FY18 Capital Plan

FY18 Capital Plan by Funding Source (\$M)



Source: FY18 Capital Plan as Published

- The Commonwealth's FY18 Capital Plan includes \$4.401B of funding from all sources, of which \$2.675B is expected to be financed by Commonwealth borrowing
- The Capital Plan is used to support infrastructure and capital investments statewide, to benefit the public, various agencies throughout state government, and various cities and towns and other governmental units through grant programs and direct investment
- While the Committee only makes recommendations regarding bond cap-funded capital spending, the affordability analysis considers all types of Commonwealth debt

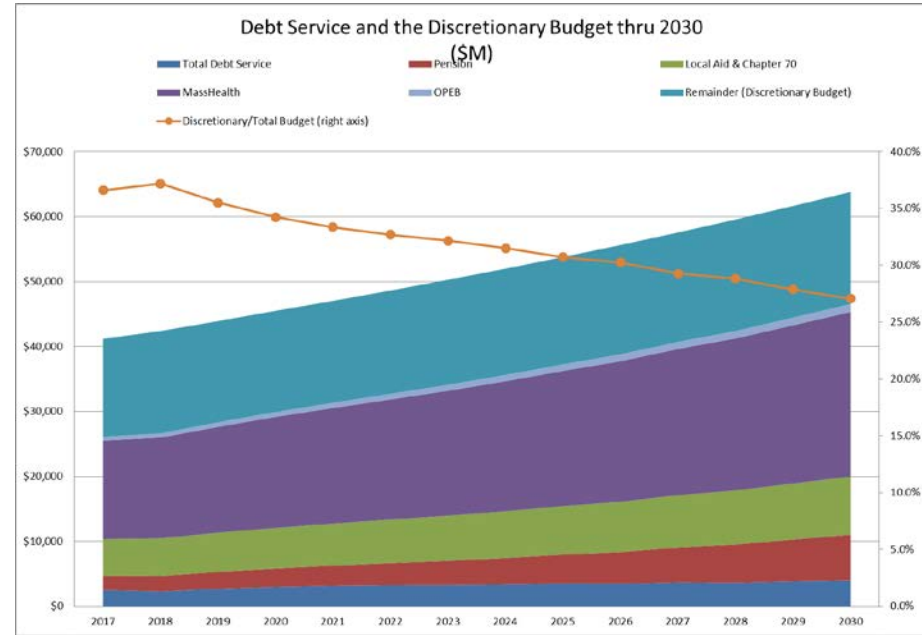
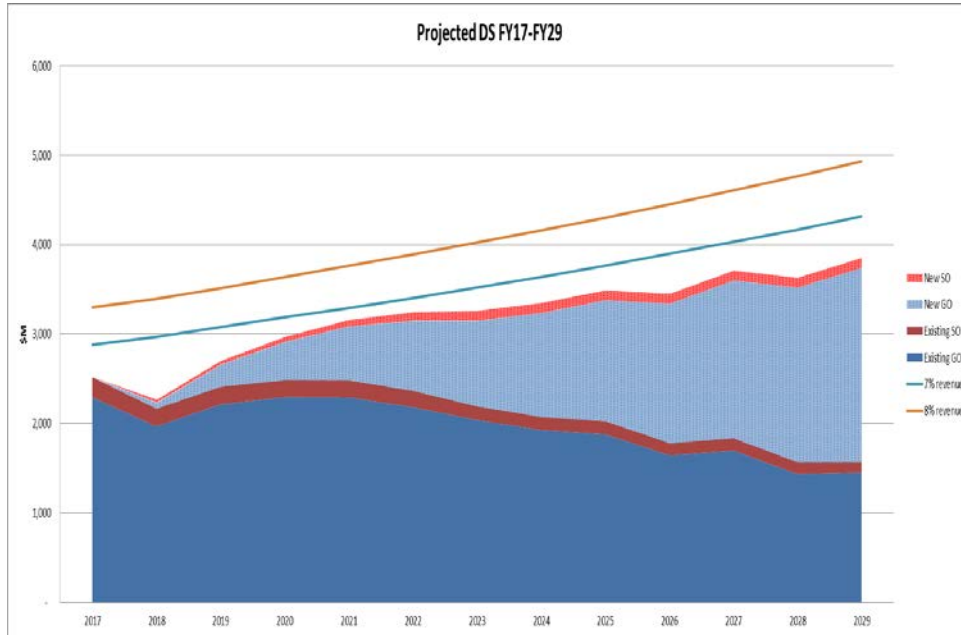


Affordability Analysis

- Affordability is estimated by measuring debt service spending as a percentage of budgeted revenue
- DAC developed a 30 year revenue and debt service projection model with assumptions as follows:
 - Individual growth rates for different revenue sources; cumulative projected revenue growth of approximately **3.5%**
 - Debt Issuance based on:
 - Projected level debt service for new issuance
 - 10 year term for 10% of issuance, 20-year term for 60% of issuance and 30 year term for 30% of issuance
 - 20 year interest rate 3.51%; 30 year interest rate 3.71%, both increasing 0.15% per year for 15 years (rates based on 3-year trailing average of the Bond Buyer 20-bond index)
 - Contract Assistance is included in debt service
 - Accelerated Bridge Program and Rail Enhancement Program
- DAC evaluated other measures in addition to debt service/revenue ratios, including discretionary spending and other long-term liabilities



Affordability Analysis, continued



Source: Executive Office for Administration and Finance

Source: Executive Office for Administration and Finance

Forecasted debt service to revenue was evaluated and falls within these important parameters

- Debt service as a percent of budgeted revenues is within 7.0% - 7.5% (DAC's recommended target)
- Debt service as a percent of budgeted revenues is < 8.0% (DAC's formal policy)
- Projected discretionary budget remains above 25% of budgeted revenues

Compare Debt Ratios of Peer States



	Debt to Personal Income	Debt Service to Personal Income	Debt Per Capita	Debt as % of GSP	Debt Service as % of GSP	Debt Service as % of Expenditures	Debt Service as % of Revenues
Connecticut	9.39%	1.05%	\$6,505.20	10.08%	1.12%	9.05%	9.66%
Maine	2.02%	0.32%	\$888.94	2.28%	0.36%	2.49%	2.51%
Maryland	3.65%	0.40%	\$2,121.66	3.83%	0.42%	3.85%	4.13%
Massachusetts	9.31%	0.66%	\$5,983.17	9.13%	0.65%	5.23%	5.45%
Minnesota	2.84%	0.36%	\$1,480.38	2.76%	0.35%	2.86%	2.83%
New Hampshire	1.60%	0.20%	\$896.98	1.73%	0.22%	2.59%	2.68%
New York	5.15%	0.49%	\$3,070.08	4.75%	0.45%	3.85%	3.85%
North Carolina	1.56%	0.21%	\$658.52	1.49%	0.20%	2.03%	1.98%
Ohio	2.44%	0.39%	\$1,086.72	2.28%	0.36%	3.41%	3.51%
Rhode Island	4.23%	0.38%	\$2,130.71	4.47%	0.40%	2.79%	2.96%
Vermont	2.14%	0.23%	\$1,067.79	2.43%	0.27%	1.31%	1.32%
Virginia	2.81%	0.16%	\$1,486.07	2.87%	0.16%	1.91%	2.01%

- Massachusetts has the second highest level of debt among peer states, based upon the ratios of debt per capita, debt as a percentage of GDP and debt to personal income
- Massachusetts issues debt at the state level that many other states issue at the county/municipality level, which contributes to its debt ratios appearing higher than peer states
- Massachusetts' strong economy allows it sustain relatively more debt than some other states, though the high level of fixed obligations can constrain other spending

Source: Treasurer's Office



Rating Agencies' Criteria

- From Fitch's October 5, 2017 report:
 - "Massachusetts' 'AA+' IDR reflects its considerable economic resources, strong budget controls and a record of careful financial management."
 - "The Commonwealth carries a long-term liability burden that is well above average for a U.S. state but remains a moderate burden on resources."
 - "The rating is sensitive to shifts in fundamental credit characteristics including Massachusetts' consistent commitment to strong financial management practices, including... actively managing its relatively high long term liability position"
- From Moody's October 5, 2017 Report:
 - "The outlook for Massachusetts is stable, reflecting its satisfactory reserve levels and efforts to regain structural budget balance."
 - "Increased leveraging of the commonwealth's resources to pay debt service or further erosion in pension funding ratios" could cause a ratings downgrade
 - "The commonwealth has a high but well-managed debt burden, \$40.8 billion in total net tax-supported debt, composed primarily of GO bonds (56%)"
- From S&Ps October 12, 2017 Report:
 - "Strong financial, debt, and budget management policies, including annualized formal debt affordability statements, and multiyear capital investment planning"
 - Offsetting factors include high debt, pension, and other postemployment benefit (OPEB) liabilities

Key Conclusions

- Fitch Rates Massachusetts bonds AA+ with **stable** outlook
- Moody's rates the G.O. debt at Aa1 with a **stable** outlook.
- S&P rates the G.O. debt at AA with a **stable** outlook
- Maintaining high credit ratings is an important factor in obtaining low cost debt financing and marketability of bonds
- Managing the Commonwealth's fixed obligations, including debt service, is critical to maintaining current ratings



Other Factors for Consideration: Revenue Growth

Growth Rate Projections of Selected Economic Variables (*)

	FY2018		Average in the next 5 Fys		Average in the next 10 Fys	
	MA	US	MA	US	MA	US
Real Gross Domestic Product	2.6%	2.5%	2.1%	2.2%	2.1%	2.1%
Wage & Salary	4.0%	4.4%	4.7%	4.7%	4.2%	4.3%
Employment	1.3%	1.4%	0.7%	0.9%	0.6%	0.7%
S&P500	N.A.	10.5%	N.A.	3.9%	N.A.	4.7%
Retail Sales	4.2%	3.4%	4.1%	4.1%	4.1%	3.5%
Corporate Profits	N.A.	5.9%	N.A.	5.1%	N.A.	5.2%
Unemployment Rate	4.1%	4.2%	4.1%	4.3%	4.5%	4.7%
Interest Rate(Bank Prime Rate)	N.A.	4.4%	N.A.	6.0%	N.A.	6.3%
Consumer Price Index	1.7%	1.7%	2.6%	2.5%	2.6%	2.4%

(*) Averages of Forecasts made by Moody's Analytics and IHS Markit.

For 5 year average, IHS' projections cover only FY19-FY22 due to unavailable data beyond FY22.

For 10 year averages, only Moody's projections are used

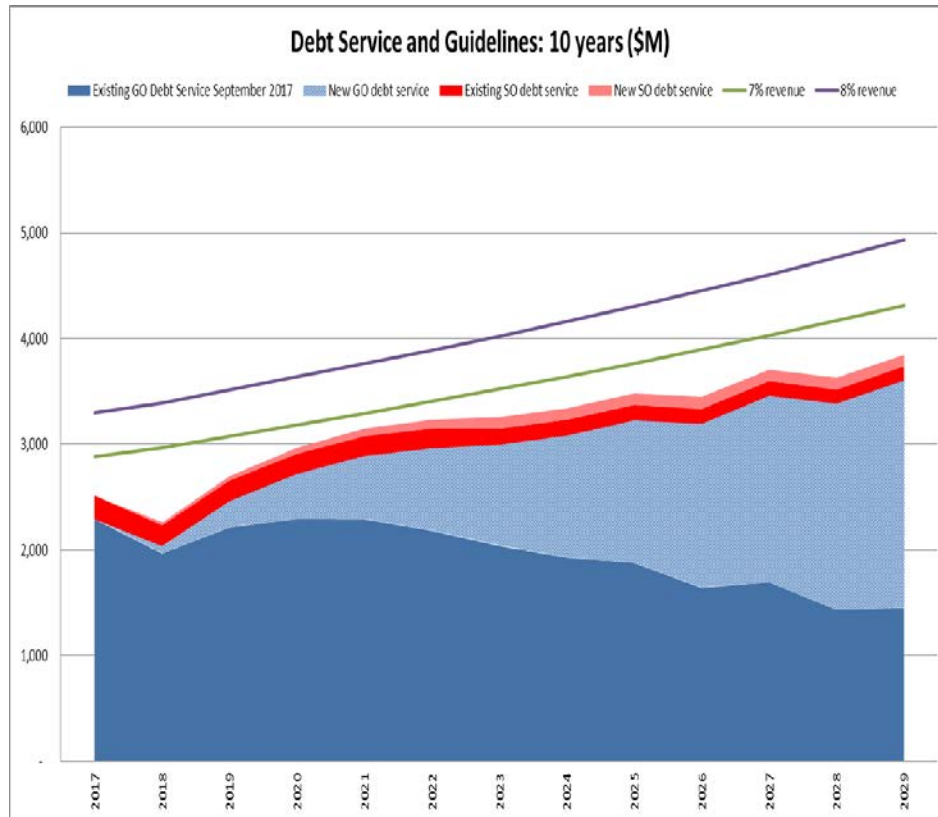
N.A. Not available

- The Debt Affordability Committee re-examined the assumptions around revenue growth, seeking to benchmark growth to externally-validated factors
 - After reviewing correlations between economic variables and revenue performance, the committee adopted the following revenue growth rates for the debt affordability model, based on economic forecasts
- These can be reviewed and updated based on revised forecasts and revenue performance

Revenue Source	Benchmark	FY18 DAC Assumption	Moody's & IHS Average Projected Growth	10 year trailing Revenue Performance
Income Tax	10 year Wage and Salary Growth	3.25%	4.2%	3.0%
Sales Tax	10 year wage and salary growth - 1 %		3.2%	2.0%
Corporate	10 year corporate profit growth rate - 1%		4.2%	0.3%
Excise & Other	10 year employment growth %		0.6%	2.1%
Departmental Revenue	population growth (assumes no change in fees)		1.0%	6.4%
Federal Revenue	tied to MassHealth growth		5%; 4% after FY20	5.8%



Recommendation



Source: Executive Office of Administration and Finance

Recommendation:

- Debt Affordability Committee estimates that an increase of the bond cap of approximately **\$80M** over the FY18 level, for a total issuance of **\$2.34B** may be prudently authorized in FY19
- This recommendation balances demand for state infrastructure investment with recognition that increasing fixed obligations may limit fiscal flexibility in the future
- The Committee has determined that this level of debt issuance falls within targeted debt service to revenue ratio levels