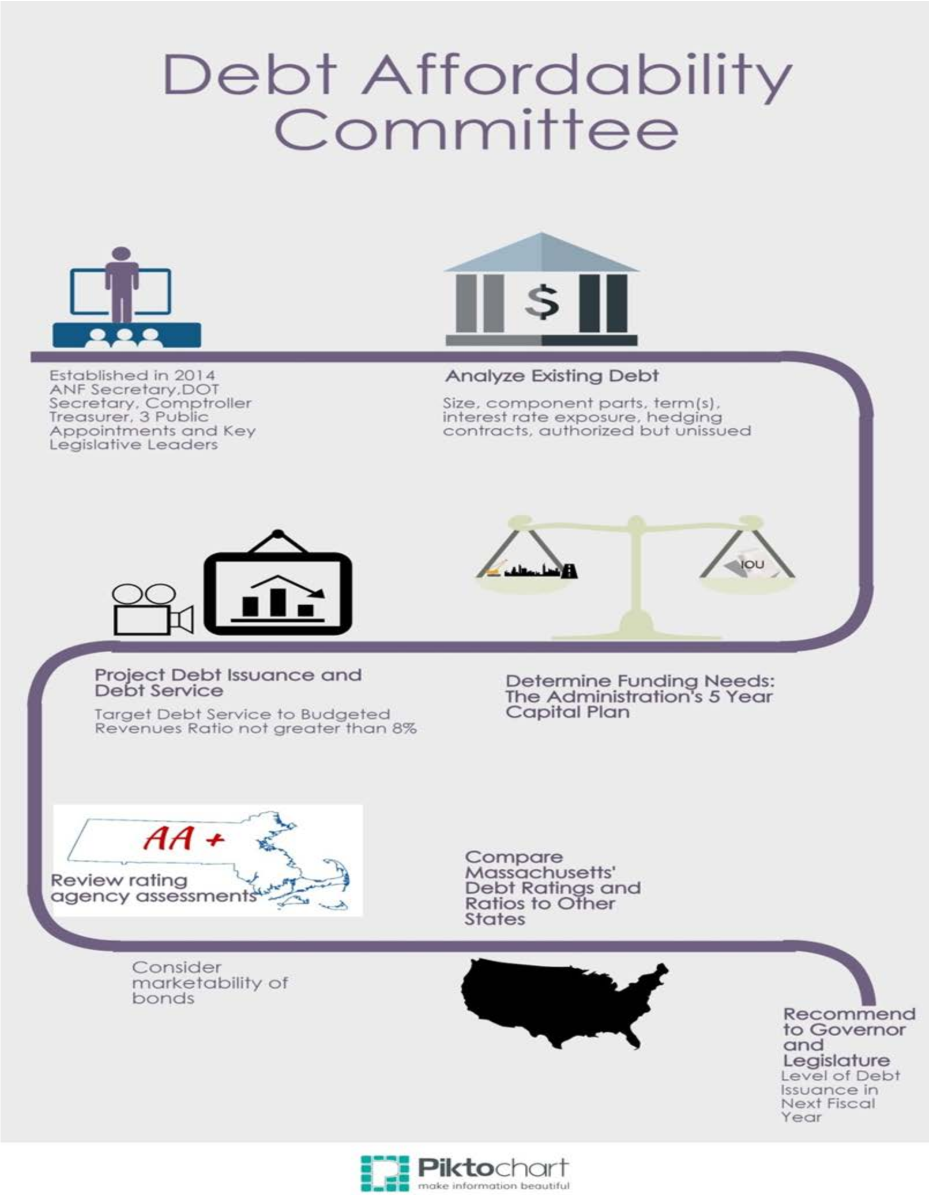
The Commonwealth of Massachusetts

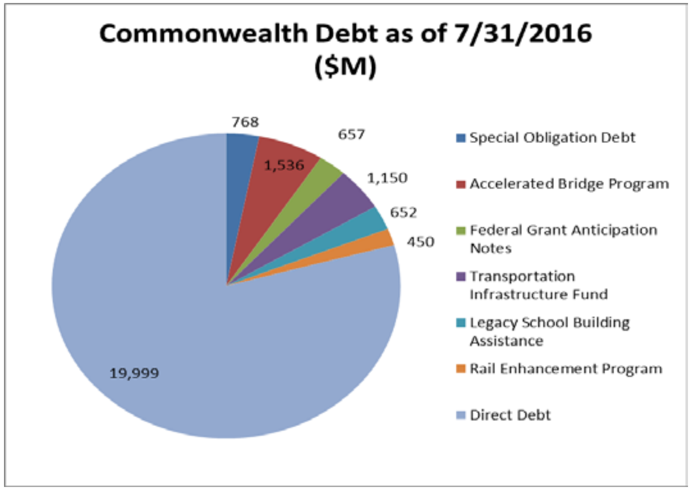
Debt Affordability Committee Recommendation

12/15/2016

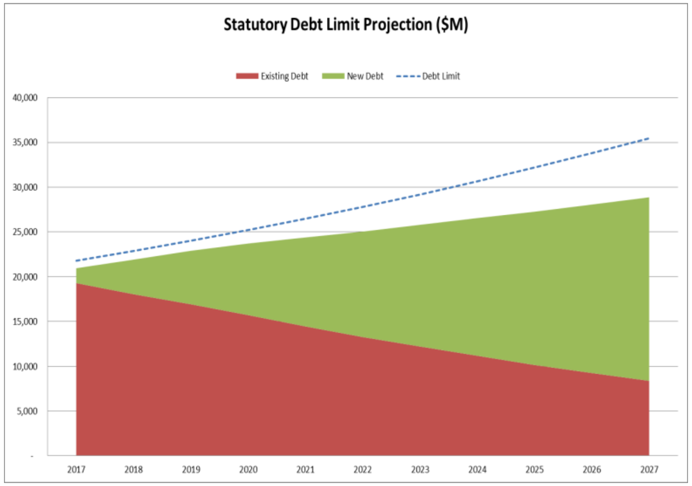
Debt Affordability Committee



Commonwealth Debt and Debt Limit



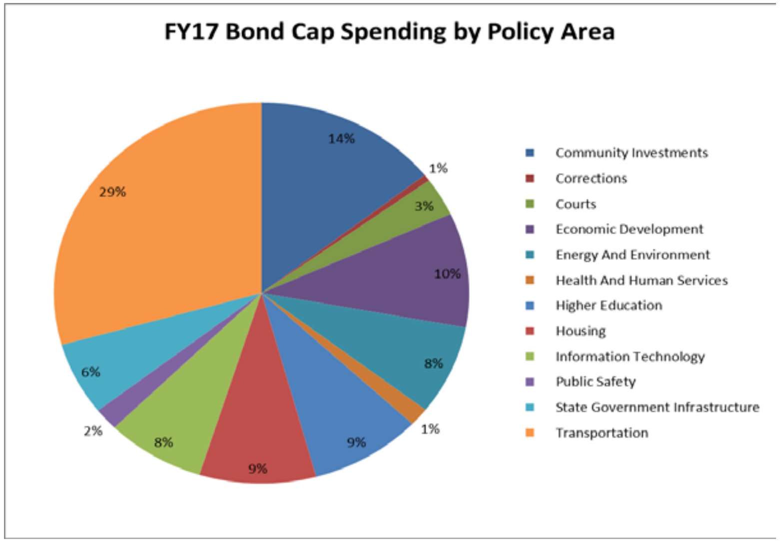
Source: August 25, 2016 Information Statement



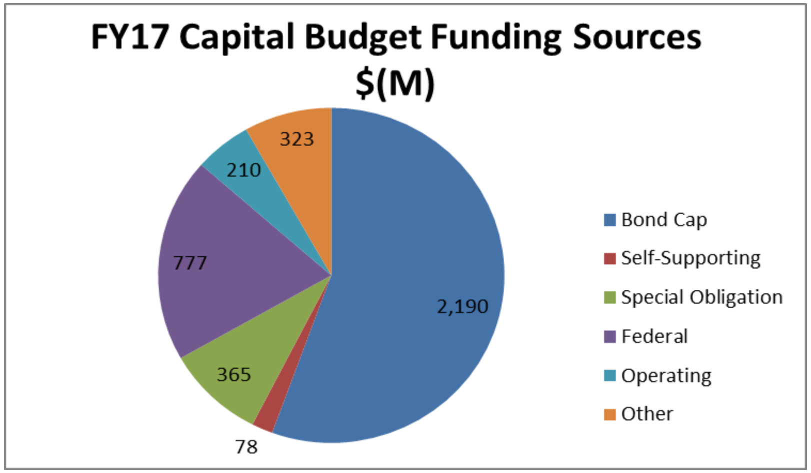
Source: Executive Office of Administration and Finance

- As of 10/31/2016, the Commonwealth had $25.2 B of outstanding debt, of which $20.0 B was direct debt pledging the full faith and credit of the Commonwealth and subject to the debt limit.
- The debt limit for FY17 is $21.7 B and for FY18 is $22.9 B
- Under the current issuance plan, we project approximately $20.9 B of outstanding statutory debt by 6/30/2017 and approximately $21.9 B of outstanding debt by 6/30/2018
- Under this projection, the statutory debt limit is unlikely to constrain the capital plan
- Under current law, the Rail Enhancement Bonds backed by the Commonwealth Transportation Fund are now exempt from the statutory debt limit

Capital Funding Needs



Source: FY17 Capital Plan as Published



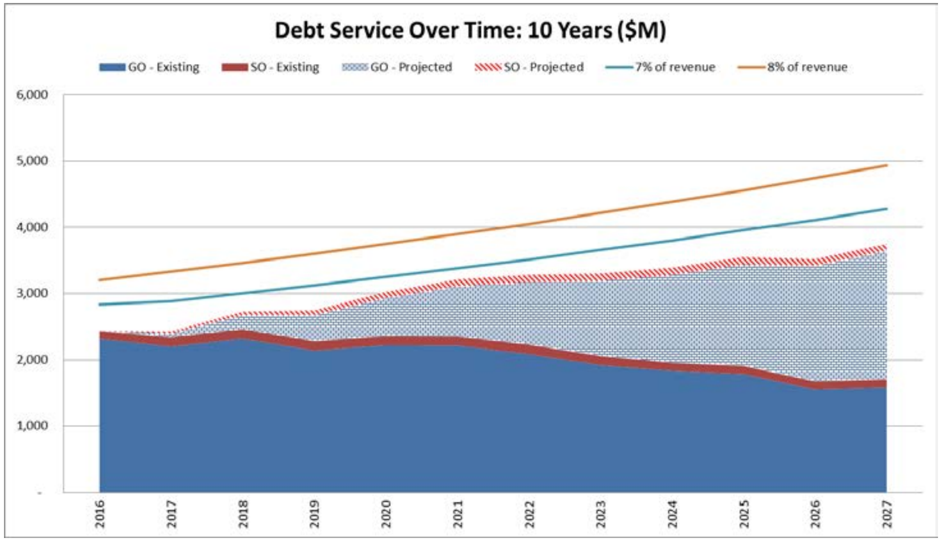
Source: FY17 Capital Plan as Published

- The Commonwealth's FY17 Capital Plan includes $3.942 B of spending from all sources, of which $2.632 B is to be funded by Commonwealth borrowing
- Borrowing is made up of General Obligation Bond Cap, Commonwealth Transportation Fund special obligation debt, and general obligation borrowing for projects that generate enough revenue or savings to cover the associated debt service
- While the Committee only makes recommendations regarding Bond Cap-funded spending, the affordability analysis considers all types of Commonwealth debt

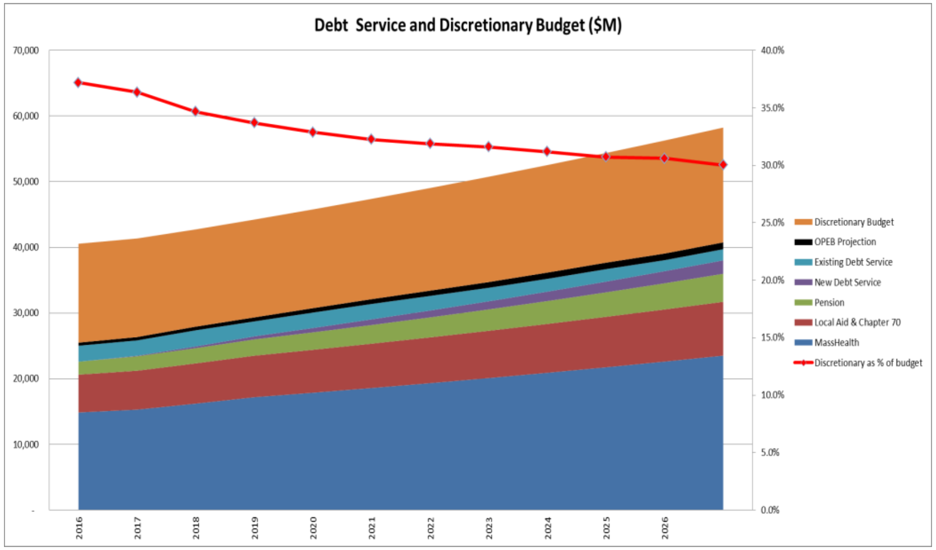
Affordability Analysis

- Affordability us 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:
  - o Budgeted revenue growth of 3.5%
  - o Debt Issuance based on:
    - o Level debt service for new issuance
    - o 10 year term for 10% of issuance, 20-year term for 60% of issuance and 30 year term for 30% of issuance
    - o 20 year interest rate 3.5%; 30 year interest rate 4.00%, but both increasing 0.1% a year for 15 years
  - o Contract Assistance included in debt service
- DAC evaluated other measures in addition to debt service/revenue ratios, including discretionary spending

Affordability Analysis



Source: Executive Office for Administration and Finance



Source: Executive Office for Administration and Finance

Conclusion:

- 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

STATES FOR COMPARISON	Debt to Personal Income	Debt Service to Personal Income	Debt per Capita	Debt as % of GDP	Debt Service as % of GDP	Debt Srvc. as % of Expenditures	Debt Srvc. as % of Revenues
Connecticut	8.68%	0.95%	$5,630	8.70%	0.95%	8.41%	8.90%
Maine*	0.30%	0.30%	$120	0.31%	0.31%	2.19%	2.27%
Maryland	3.46%	0.36%	$1,875	3.49%	0.37%	3.52%	3.82%
MASSACHUSETTS	**5.66%**	**0.70%**	**$3,324**	**5.28%**	**0.65%**	**5.54%**	**5.80%**
Minnesota	3.23%	0.40%	$1,581	2.99%	0.37%	3.26%	3.16%
New Hampshire	3.78%	0.20%	$1,994	3.99%	0.21%	2.70%	2.91%
New York	3.81%	0.48%	$2,119	3.27%	0.41%	3.91%	3.91%
North Carolina	1.99%	0.23%	$778	1.76%	0.20%	2.12%	2.12%
Ohio**	3.21%	0.25%	$1,356	2.96%	0.23%	2.99%	2.89%
Rhode Island	4.83%	0.59%	$2,334	4.87%	0.59%	4.46%	4.77%
Vermont**	2.04%	0.25%	$948	2.19%	0.26%	2.28%	1.99%
Virginia	1.40%	0.20%	$705	1.37%	0.19%	2.54%	2.58%

Source: Treasurer's Office

- 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

Rating Agencies' Criteria

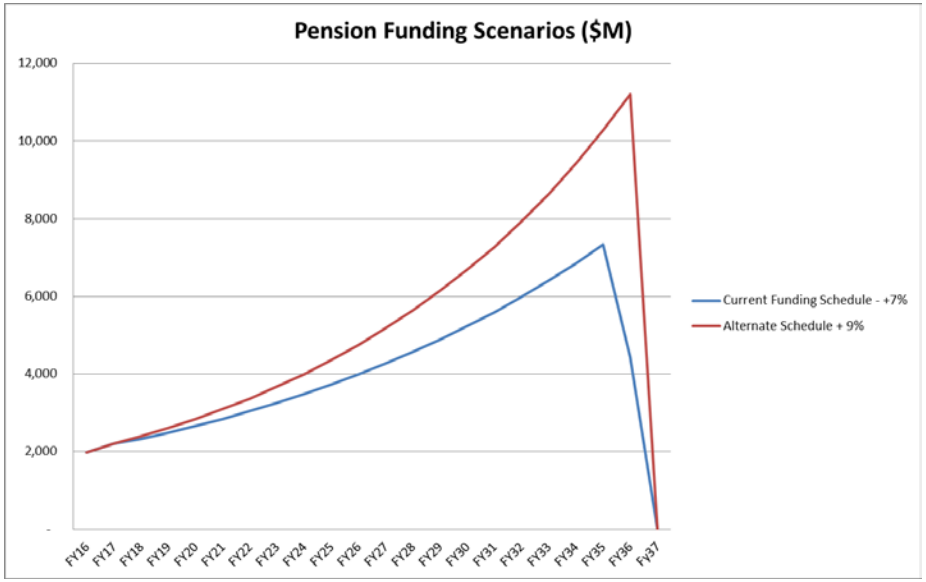
- From Fitch's November 23, 2016 report:
  - "Massachusetts' 'AA+' IDR reflects its considerable economic resources, strong budget controls and a record of careful financial management."
  - "The Commonwealth carries a long-term liability burden that is well above average for a U.S. state but remains a moderate burden on resources."
  - The rating is sensitive to shifts in fundamental credit characteristics including Massachusetts' consistent commitment to strong financial management practices.
- From Moody's November 19, 2016 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, with $21.8 billion in outstanding general obligation bonds and $38.0 billion in total net tax-supported debt"

Key Conclusions

- Fitch Rates Massachussets bonds AA+ with **stable outlook**.
- Moody's rates the G.O. debt at Aa1 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



Source: Executive Office for Administrationand Finance

Fixed obligations are growing faster than budgeted revenues:

- Current pension funding schedule increases 7% a year FY18 through FY36
- Pension funding schedule will be adjusted based on updated 1/1/16 actuarial valuation, which increased liability by over $8 B from 1/1/13 valuation.

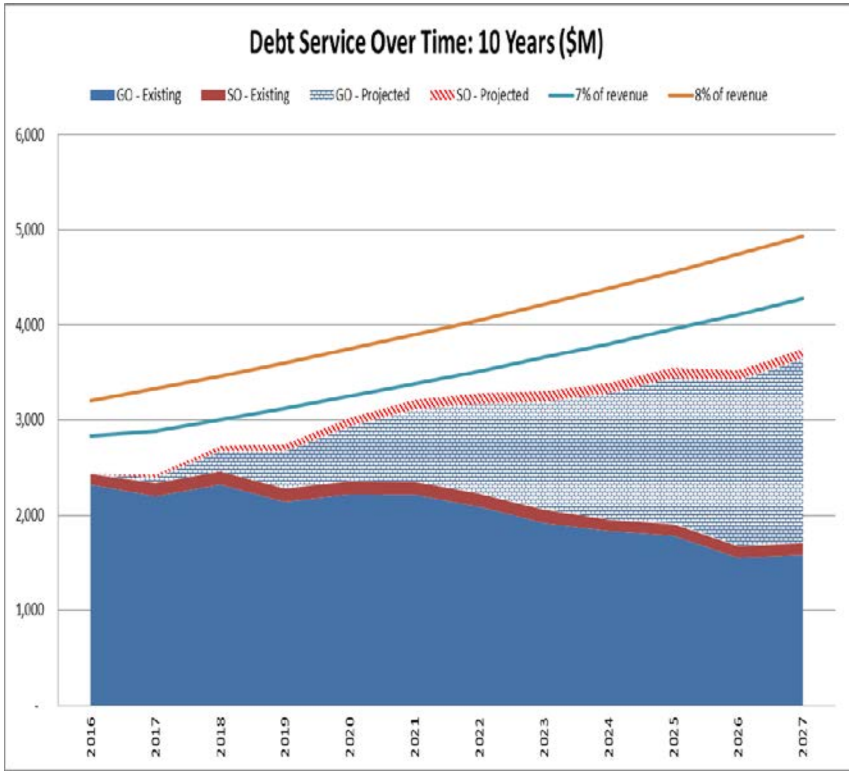
OPEB Liability

	2016
Results in millions	**4.50% Discount rate**
Liability	$17,082.9
Assets	$760.4
Unfunded Liability	$16,322.5

Source: Comptroller

- Other Post Employment Benefits/Retiree Health Care (OPEB) represent a $16.3 B unfunded liability and are not substantially prefunded
  - Benefit payouts projected to increase from $460 M FY16 to $950 M FY24

Recommendation



Recommendation:

- The Debt Affordability Committee estimates that an increase of the bond cap to $2.26 B may be prudently authorized in FY18
- This recommendation balances demand for state infrastructure investment with recognition that increasing fixed obligations may limit fiscal flexibility in the future
- The Committee finds that this level of debt issuance falls within targeted debt service to revenue ratio levels