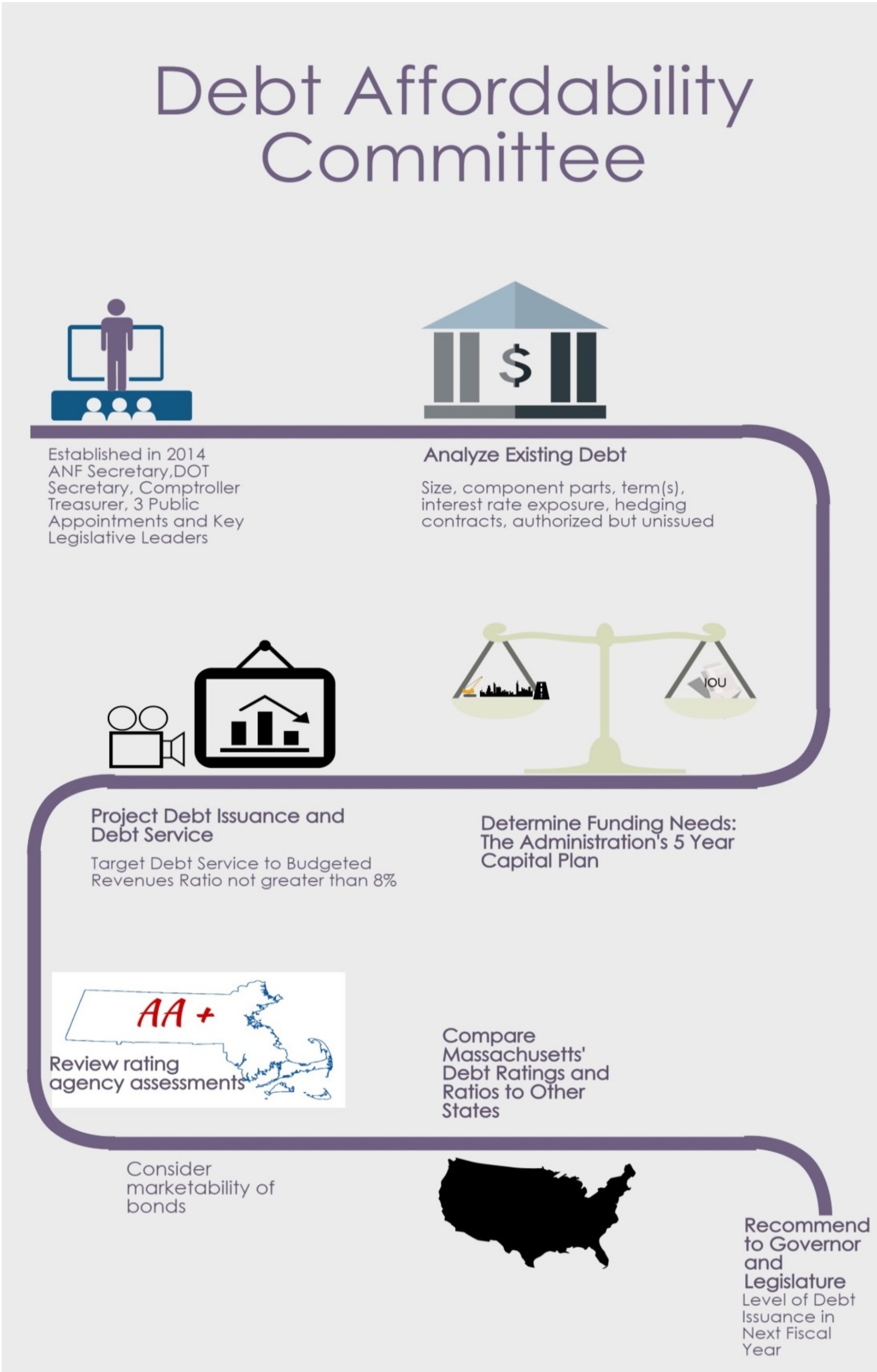
Debt Affordability Committee

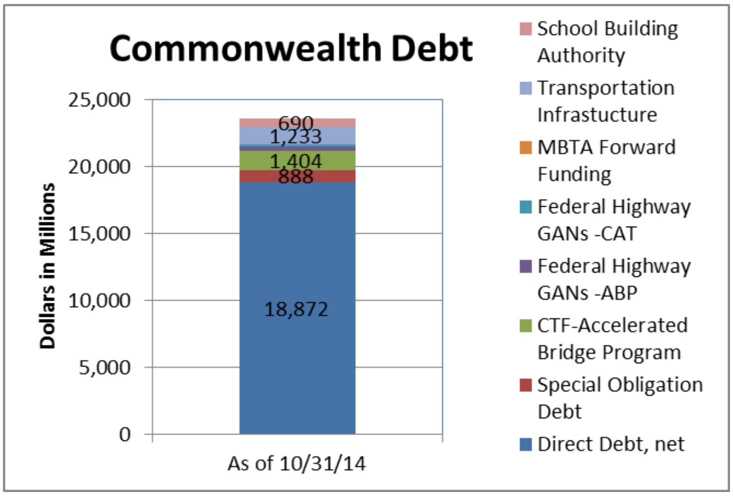
Attachment to Recommendation

December 15, 2014

Debt Affordability Committee



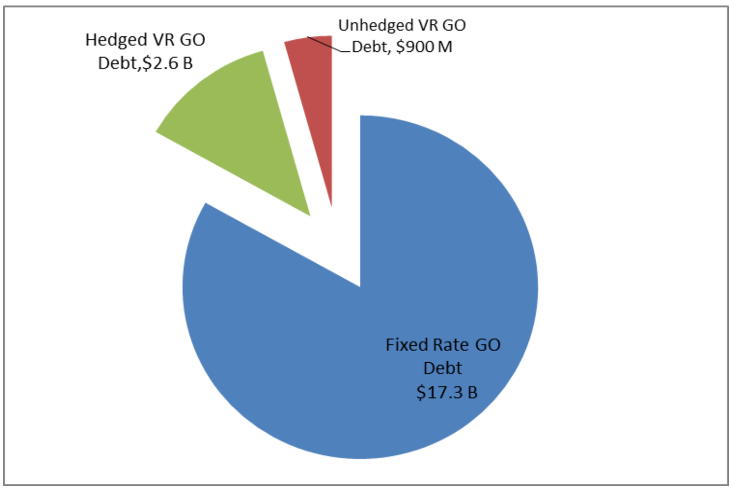
Examine Size & Structure of Debt



Source: Information Statement dated November 7, 2014

(000s)	Outstanding Principal
Statutory Debt as of June 30, 2014	17,421,210
Bond Cap Debt Issuance-FY15	2,125,000
Non Bond Cap and Build Mass Bonds Debt Issuance- FY15	669,000
FY15 GO Principal Repayment (as of 6/30/14)	(1,437,428)
Projected Debt as of June 30, 2015	18,777,782
Bond Cap Debt Issuance-FY16	2,250,000
Non Bond Cap and Build Mass Bonds Debt Issuance-FY16	558,544
FY16GO Principal Repayment (as of 6/30/14) plus FY15 Issuance Repay	(1,577,272)
Projected Debt as of June 30, 2016	20,009,054

Source: Executive Office for Administration and Finance

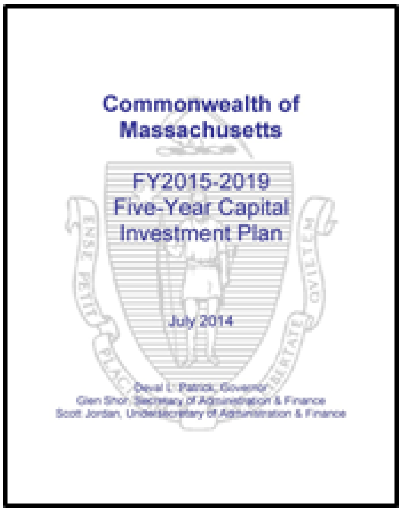


Source: Information Statement dated November 7, 2014

Key Conclusions:

- The Commonwealth had $18.9B of direct debt outstanding as of 10/31/14 and $23.6B of total debt outstanding.
- Statutory Debt is expected to increase to approximately $20.0B by June 30, 2016. The Statutory Debt Limit for Fiscal Year 2016 is $20.7B.
- The Committee finds that issuance beyond FY16 may be constrained by the Statutory Debt Limit.
- As of 10/31/14 all but $900 M of general obligation ("G.O.") debt was either fixed rate or hedged. As part of the Asset Liability Management Program initiated in 2014, Treasury intends to issue more unhedged variable rate debt to match variable rate assets.
- A balance of over $20B of authorized but unissued debt is expected to remain throughout FY15 and FY16.

Review Capital Funding Needs

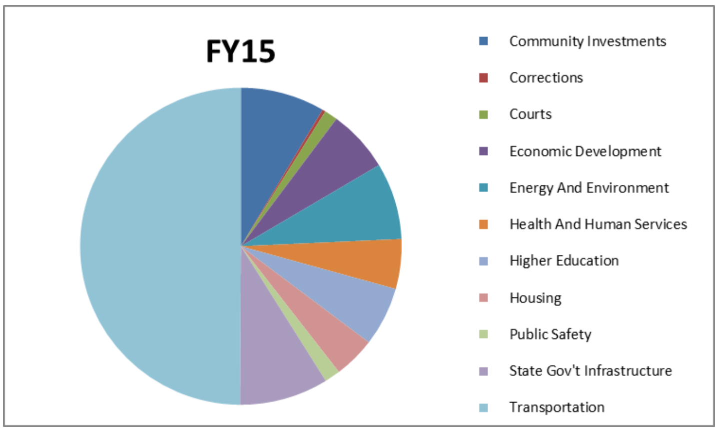

Commonwealth of Massachusetts

FY2015-2019 Five-Year Capital Investment Plan

July 2014

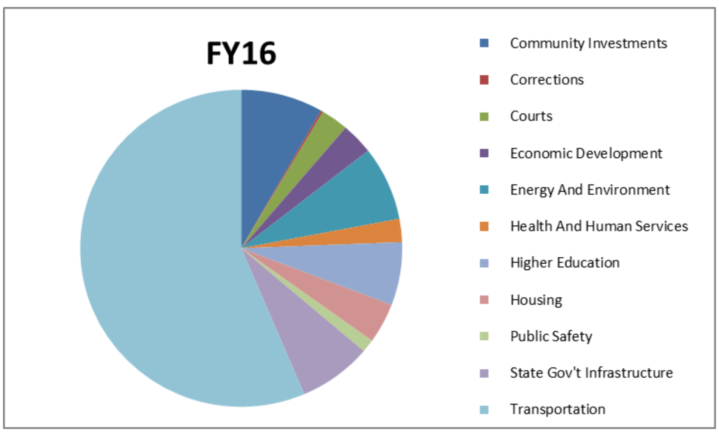
Deval L. Patrick, Governor
Glen Shor, Secretary of Administration & Finance
Scott Jordan, Undersecretary of Administration & Finance

Fiscal 2015 Capital Spending by Investment Category



Source: Executive Office for Administration and Finance

Fiscal 2016 Capital Spending by Investment Category



Source: Executive Office for Administration and Finance

Key Conclusions:

- The Commonwealth plans to spend over $4.0B in FY16 on capital projects, funded in part with debt. All funding sources includes Bond Cap, Non-Bond Cap, Operating Funds, Federal Funds, Trust Funds and Other Funds.

	FY15	FY16
Community Investments	$ 383,706,117	$ 347,142,609
Corrections	$ 14,485,000	$ 9,200,000
Courts	$ 60,067,114	$ 115,423,187
Economic Development	$ 285,450,000	$ 135,178,326
Energy And Environment	$ 353,572,645	$ 317,754,214
Health And Human Services	$ 229,580,873	$ 99,165,809
Higher Education	$ 272,136,156	$ 270,325,000
Housing	$ 190,500,484	$ 172,156,965
Public Safety	$ 71,013,242	$ 55,485,424
State Gov't Infrastructure	$ 405,042,377	$ 309,328,670
Transportation	$ 2,256,239,089	$ 2,368,775,862
Total Capital Spending All Funding Sources	$ 4,521,793,098	$ 4,199,936,067

- The Committee concluded that projected debt maturities and duration are appropriately matched to the useful life of the assets the debt funds.

- Following consideration of the treatment of debt raised for non-bond cap self-supporting projects, it was concluded that this debt would be included in the projected debt service analysis and ratios. Self-supporting projects generate revenue or cost savings in excess of the cost of financing these projects.

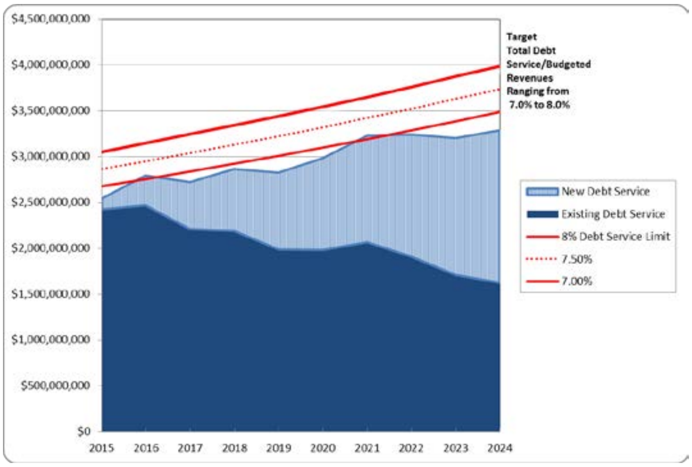
Assess Affordability of Debt Issuance

10 Year Projection of Debt Service to Budgeted Revenue

	Debt Service incl. Self-Supporting Project D.S.	Contract Assistance	Total D.S. and C.A.	Projected Revenues	Total D.S. and C.A. As a % of Revenues
2015	2,332,054,197	204,544,000	2,536,598,197	38,194,200,000	6.64%
2016	2,597,900,853	196,348,000	2,794,248,853	39,340,026,000	7.10%
2017	2,530,901,378	189,011,000	2,719,912,378	40,520,226,780	6.71%
2018	2,666,851,268	196,848,000	2,863,699,268	41,735,833,583	6.86%
2019	2,640,644,334	184,564,000	2,825,208,334	42,987,908,591	6.57%
2020	2,796,638,373	182,918,000	2,979,556,373	44,277,545,849	6.73%
2021	3,058,688,113	169,822,000	3,228,510,113	45,605,872,224	7.08%
2022	3,077,852,756	160,600,000	3,238,452,756	46,974,048,391	6.89%
2023	3,040,608,349	160,955,000	3,201,563,349	48,383,269,843	6.62%
2024	3,132,915,471	152,877,000	3,285,792,471	49,834,767,938	6.59%
2025	3,208,602,550	148,925,000	3,357,527,550	51,329,810,976	6.54%

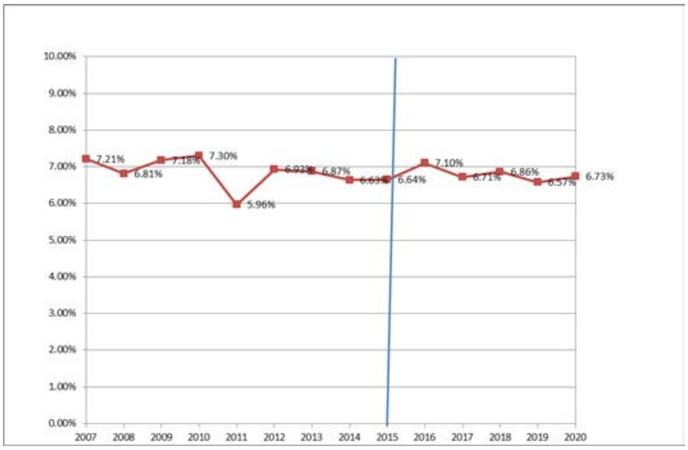
Source: Executive Office for Administration and Finance

10 Year Projection of Debt Service to Revenue Versus DAC Range



Source: Executive Office for Administration and Finance

Historic/ Projected Debt Service to Revenues



Source: Executive Office for Administration and Finance

Affordability Definition:

- For its deliberations, the Committee adopted a working definition of debt affordability as: "the ability to sustainably meet projected debt service within the budget without raising taxes to uncompetitive levels or negatively impacting critical public services."

- Affordability is estimated by measuring debt service as a percentage of revenue

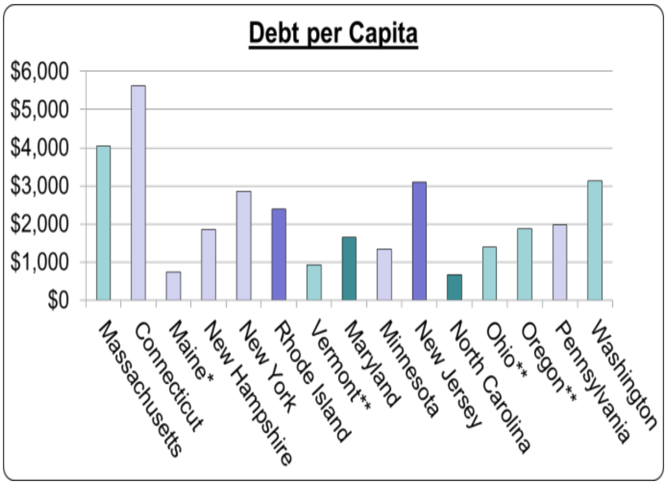
Framework for Analysis:

- DAC developed a 10 year revenue and debt service projection model with assumptions as follows:
  - Budgeted revenue growth 3%
  - Debt issuance based on 5-year Capital Plan thru FY19
  - Level debt service for new issuance
  - 20-year term for two thirds of issuance and 30 year term for one third of issuance
  - 20 year interest rate 4.25%; 30 year interest rate 4.50%

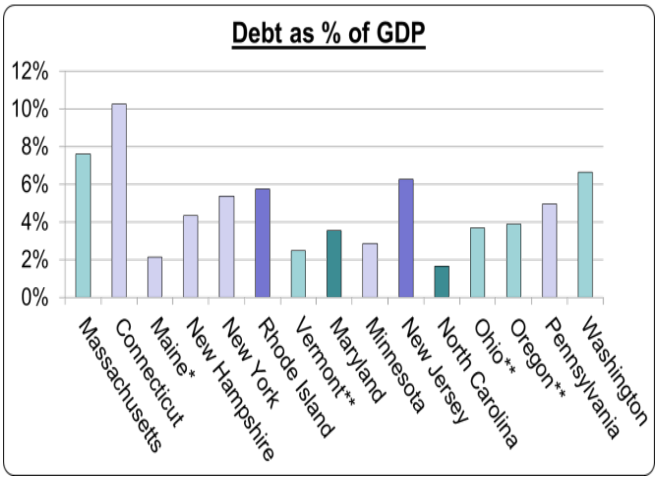
Conclusion:

- Forecasted debt service to revenue was evaluated and falls within three important parameters
  - The historical average
  - The Patrick Administration's policy not to exceed 8.0%.
  - DAC's recommended target of 7.0% - 7.5%.

Compare Debt Ratios of Peer States



Source: Treasurer's Office



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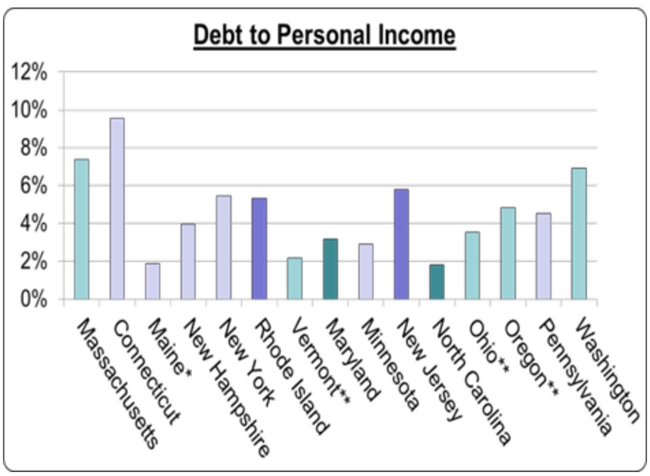


* Not included moral obligation debt at $4.5 B
** "Annual Debt Service" assumes the FY13 projection as footnoted as no debt service was listed for 2012

Source: Treasurer's Office

Key Conclusions:

- Compared to its peer group, Massachusetts has the second highest level of debt 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 other states issue at the county/municipality level which contributes to its debt ratios appearing higher than peer states.

Consider Rating Agencies' Criteria

Excerpt from Moody's Report dated 10/16/14

SUMMARY RATING RATIONALE

Massachusetts' Aa1 general obligation rating reflects its strong financial management practices and its demonstrated willingness to balance its budget when necessary through spending cuts, revenue increases and use of reserves; a large education and health care sector that generates high wages and helps to bolster employment; state debt levels that are among the highest in the nation; and large unfunded pension liabilities. The outlook is stable.

STRENGTHS

-- Strong financial management practices, particularly a willingness to promptly identify and close budget gaps through expenditure reductions, revenue increases and overall prudent use of reserves

-- Budget reserves that provide an adequate cushion to another downturn and the commonwealth's commitment to maintain them at healthy levels

-- An economic base characterized by high wealth and high levels of educational attainment that has provided a degree of stability to the commonwealth's employment situation

CHALLENGES

-- State debt ratios that are among the nation's highest and large unfunded pension liabilities based on Moody's adjusted figures

-- Large health care and other social services costs that drive the budget and ongoing spending pressure related to the statewide transportation system

-- Managing the burden on the state budget of growing pension contributions as the commonwealth seeks to address its unfunded pension liability

Excerpt from S&P's Report dated 10/17/14

Summary:

Massachusetts; General Obligation

Credit Profile		
US$360.0 mil cons loan 2015 (Massdirect Nts) ser 1-10 due 07/01/2025		
Long Term Rating	AA+/Stable	New
US$150.0 mil cons loan 2014 (Massdirect Nts) ser 10-15 due 12/01/2024		
Long Term Rating	AA+/Stable	New

Rationale

Standard & Poor's Ratings Services has assigned its 'AA+' rating and stable outlook to Massachusetts' $150 million general obligation (GO) bonds consolidated loan of 2014 (MassDirect Notes), series 10-15, and $360 million GO bonds consolidated loan of 2015 (MassDirect Notes), series 1-10.

Factors supporting the 'AA+' rating include what we view as Massachusetts':

- Strong budget performance, with timely monitoring of revenues and expenditures and swift action when needed to make adjustments, with a focus on structural solutions to budget balance;
- Ongoing progress in improving financial, debt, and budget management, including formalized policies relating to debt affordability, as well as multiyear capital investment and financial planning, which are key improvements from a credit standpoint;
- Healthy budget stabilization fund (BSF) balance, which has been key to managing budget volatility;
- High wealth and income levels; and
- Deep and diverse economy, which continues to experience steady economic recovery.

Standard & Poor's believes the commonwealth's high debt burden and significant unfunded pension and other postemployment benefit (OPEB) liabilities are offsetting considerations to the current rating. While we view Massachusetts' total postretirement liabilities as relatively high, we believe the commonwealth has been actively managing these liabilities with a focus on cost control and reform in recent years.

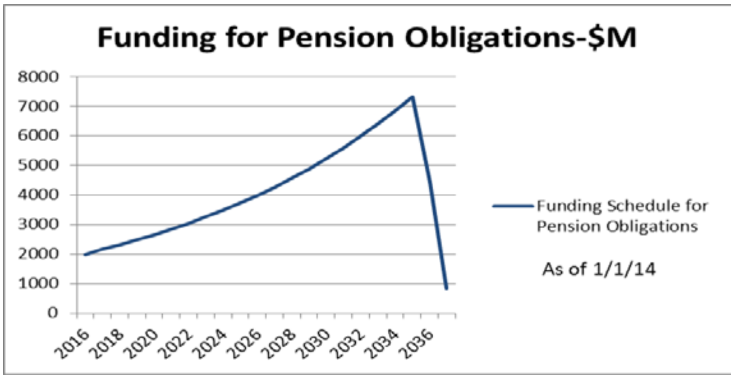
Key Conclusions:

- Moody's rates the Commonwealth's G.O. debt at Aa1. See: Moody's 10/16/14 Report
- Standard & Poor's rates the G.O. debt at AA+ with stable outlook. See: Standard & Poor's 10/17/14 Report
- Maintaining these high credit ratings is an important factor in obtaining low cost debt financing and marketability of bonds

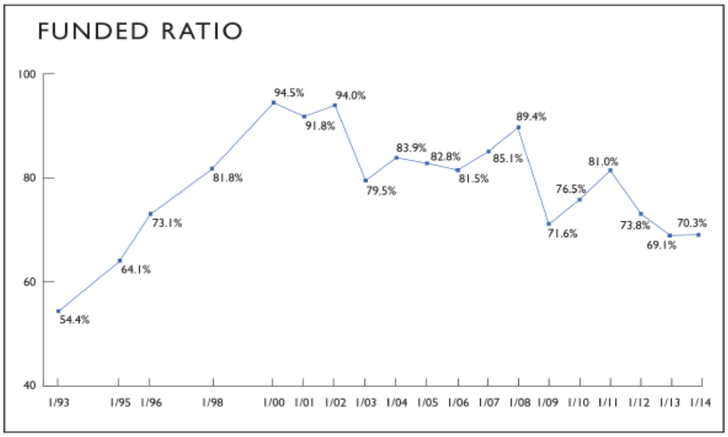
Other Factors for Consideration

Source: Office of Controller except 2015, Executive Office For Administration and Finance

Approved funding schedule as of 1/14/14



Source: Public Employee Retirement Administration Commission



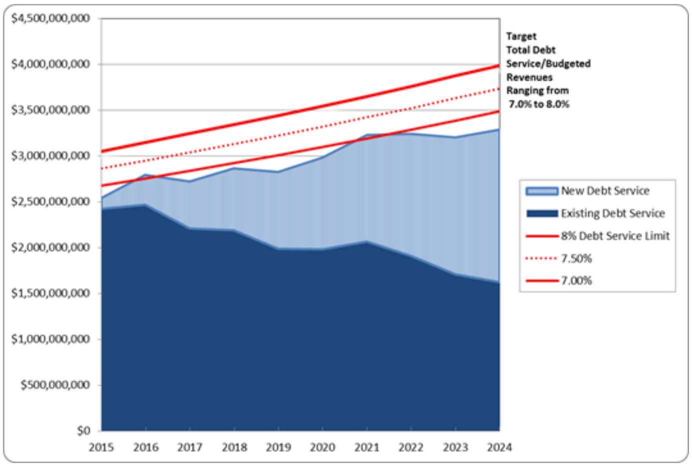
Source: Public Employee Retirement Administration Commission

Other Factors for Consideration:

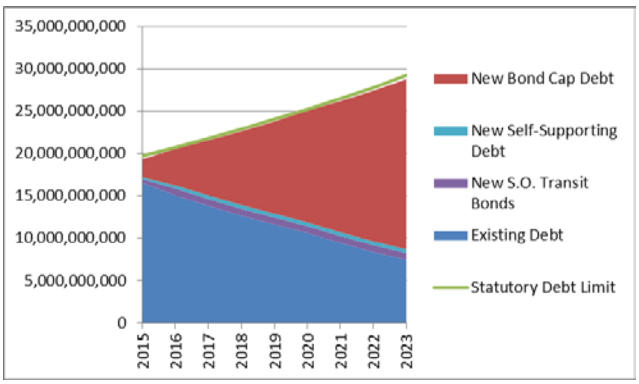
- The Commonwealth Stabilization Fund enhances the credit quality of the Commonwealth. Net withdrawals from the Stabilization Fund, unless in periods of economic downturn, are viewed negatively by rating agencies and the investor community.
- Other key positive credit factors include strong fiscal management and transparency.
- In addition to debt, the Commonwealth has other long-term liabilities related to Other Post Employment Benefits ("OPEB") and Pension Obligations. These other long-term liabilities compete with debt service for share of the operating budget and negatively affect the Commonwealth's credit.

Recommendation

Debt Service to Revenue Ratio with FY16
$2.25 B of Bond Cap Debt Issuance



Source: Executive Office for Administration and Finance



Source: Executive Office for Administration and Finance

Recommendation:

- The Debt Affordability Committee finds that the Bond Cap proposed in the Administration's FY15-FY19 Capital Investment Plan for FY16 of $2.25B is affordable.
- The Committee finds that this level of debt issuance falls within targeted debt service to revenue ratio levels.
- Future analysis should take into account other long-term liabilities such as pension obligations and OPEB.