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Rating Agencies, What Are They Looking For From Municipalities To Improve Their Rating

Massachusetts Collectors & Treasurers Association Conference

NICHOLAS LEHMAN, AVP-ANALYST

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Agenda

1. Moody's 2017 Local Government Outlook
2. Massachusetts Credit Trend – Tax Base Growth
3. Overview of Primary Rating Factors

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Moody’s 2017 Local Government Sector Outlook

Local Governments

NEGATIVE ← STABLE → POSITIVE

NEGATIVE

What could change outlook to negative

- Property tax revenue growth of 1%-2%
- Increase in long-term liabilities and fixed costs outpace revenue growth
- A significant increase in the number of local governments with compounding challenges exacerbating credit deterioration

STABLE

- Property tax revenue **growth of 3%-5%**
- Generally strong legal ability to maintain structurally balanced operations through raising revenues and cutting expenditures
- Stable, healthy reserves highlight strong management and provide flexibility

POSITIVE

What could change outlook to positive

- Continued strong property tax revenue growth of 4%-5%
- Stabilization of fixed costs
- Maintenance of healthy reserves
- Alleviation of pension pressures

Because our outlooks represent our forward-looking view on credit conditions that factor into our ratings, a negative (positive) outlook suggests that negative (positive) rating actions are more likely on average. However, the outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of the rating outlooks of issuers in the country or sector, but rather our assessment of the main direction of credit fundamentals within the country, region or sector.

Strong Tax Revenues and Healthy Reserves Drive Stability for Most Local Governments

Key credit themes

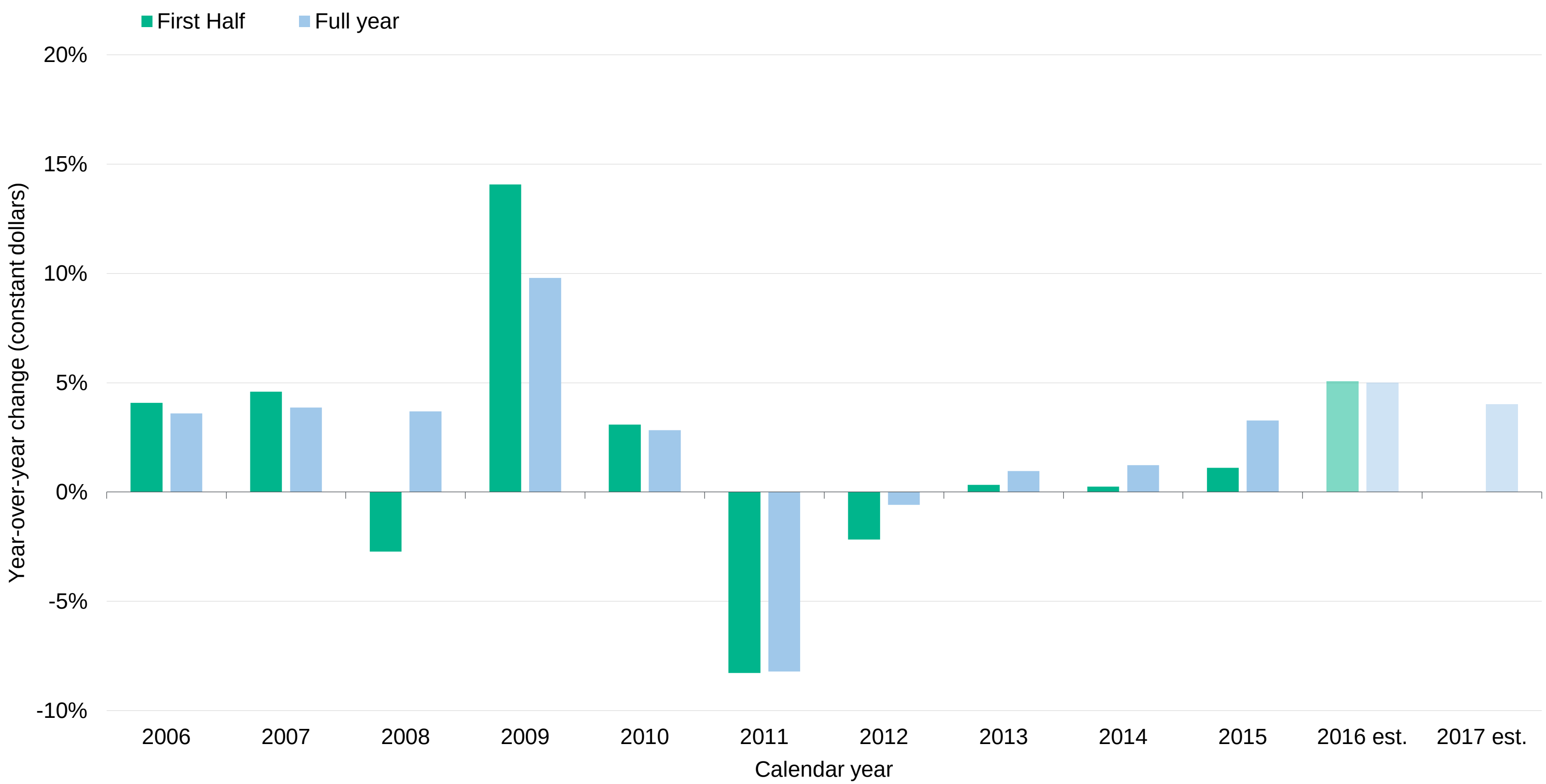
» **Property taxes, the bedrock of local governments, are healthy.** A combination of property value growth and tax rate increases drove solid revenue growth in 2016. We expect these factors will continue to support revenue growth of 3%-5% in 2017.

» **Stable, healthy reserves highlight strong management and provide flexibility.** An ongoing commitment to align revenues and expenditures supports stable financial performance and healthy reserve levels across the sector.

» **Growing balance sheet liabilities and fixed costs continue to pressure operations but remain manageable for most.** Pensions are the sector's fastest growing long-term liability. Local governments will focus on balancing rising fixed costs with infrastructure demands and essential services. Stable to improving revenue trends will keep these costs manageable for most over the near term.

» **Despite overall stability across the sector, compounding pressures are deteriorating credit quality for a small group.** Most local governments face one or two credit challenges. However, a modest but growing portion of the sector is experiencing a confluence of challenges, often including revenue stagnation combined with fixed cost growth, leading to a trend of credit deterioration.

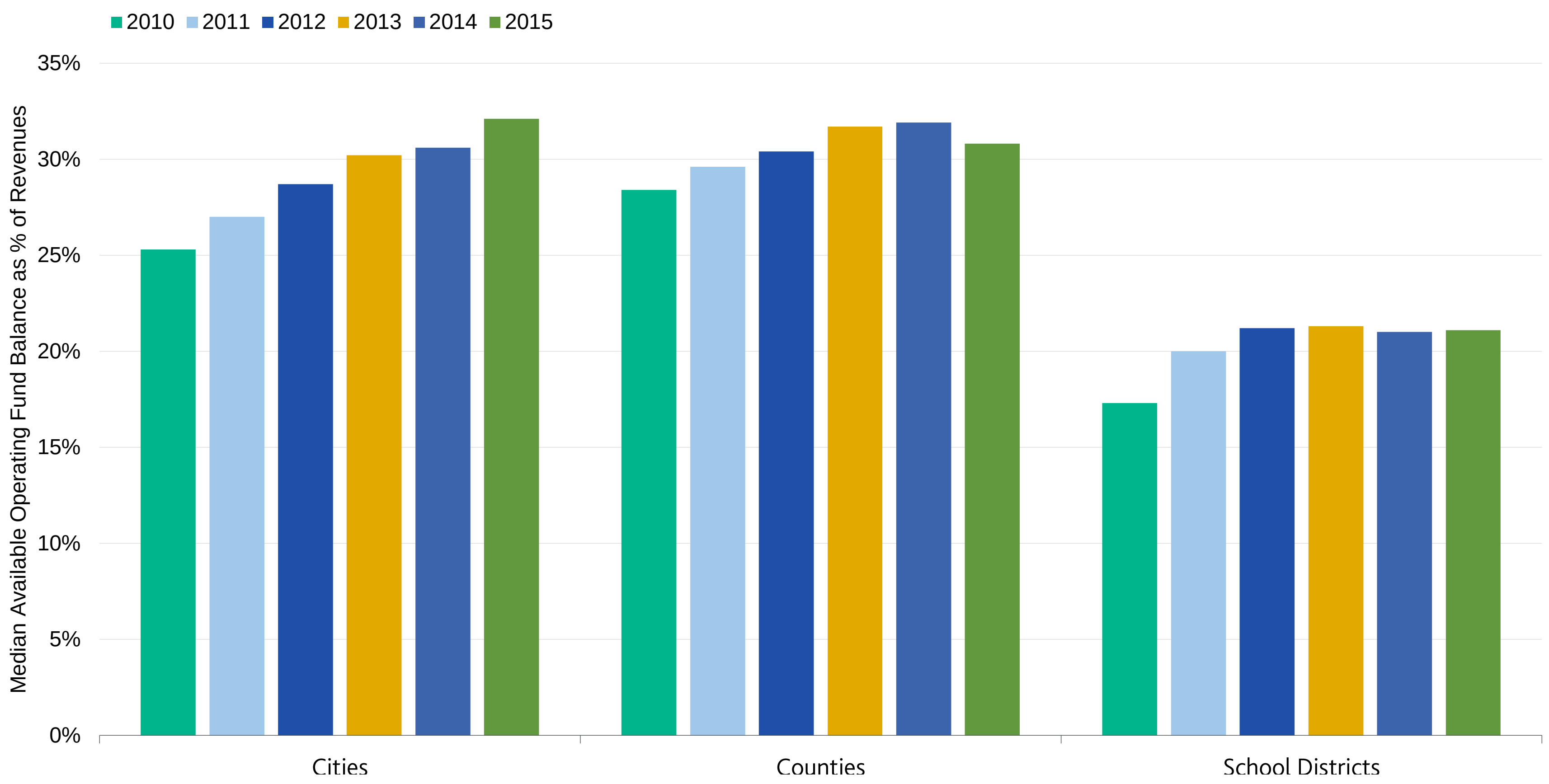
Property Taxes, the Bedrock of Local Governments, are Healthy



Note: Full year 2016 and 2017 estimated.

Source: US Census Bureau, Bureau of Labor Statistics, Moody's Investors Service Estimates

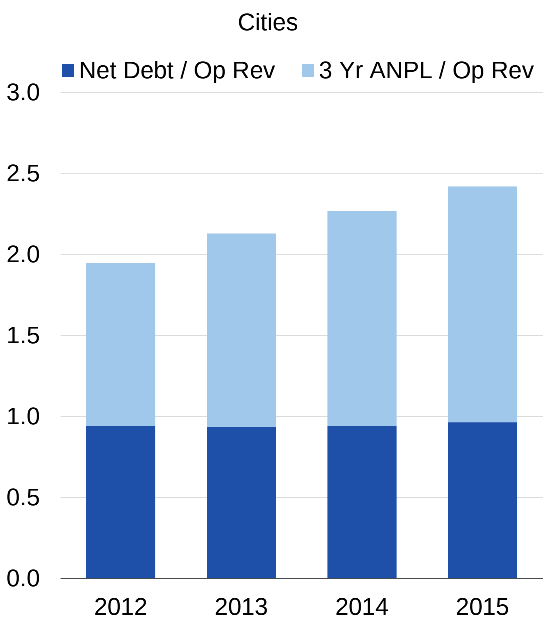
Stable, Healthy Reserves Highlight Strong Management and Provide Flexibility

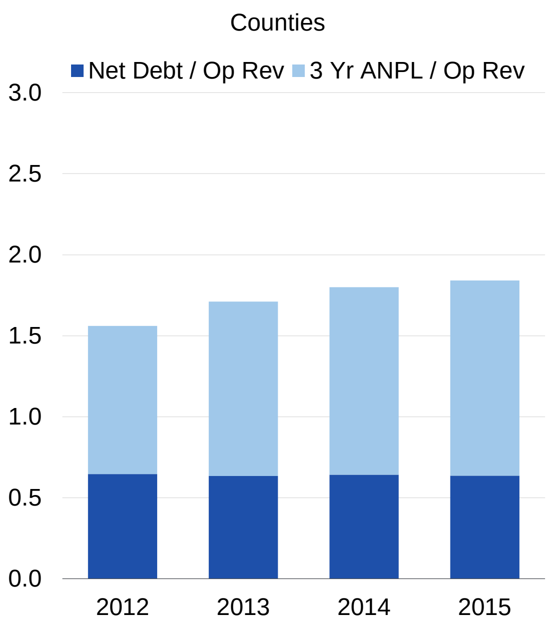


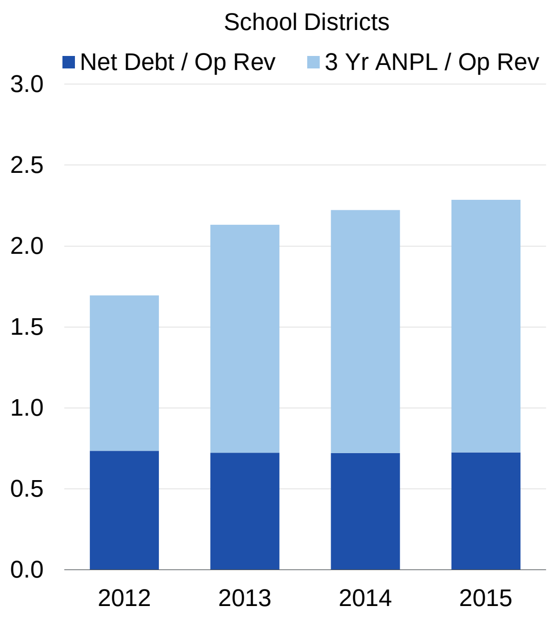
Source: Moody's Investors Service

Pensions Driving Growth in Long Term Liabilities

Median direct debt and median three-year adjusted net pension liability (ANPL) to operating revenues







Source: Moody's Investors Service

Compounding Pressures are Deteriorating Credit Quality for Small Group

- In contrast to most governments, a growing minority of credits are facing a confluence of negative factors
- Often have less margin or appetite to increase taxes further and weaker positions to weather the next recession.

Weak economic trends

- Falling property values
- Poor demographic and employment trends
- Low wealth levels
- Limited economic or industrial development prospects

Revenue and reserve challenges

- Tax caps or other legal limits on revenue raising
- Anti-tax sentiment, high rates or demographic profile eroding political willingness to raise rates
- Heavy reliance on state aid and vulnerability to cuts
- Declining, limited or no reserves
- Weak revenue trends

Expenditure pressures

- Limited legal ability to cut expenditures
- Rising fixed costs
- Few expenditure cuts available
- Deteriorating infrastructure with acute need to invest
- States shifting costs to local governments

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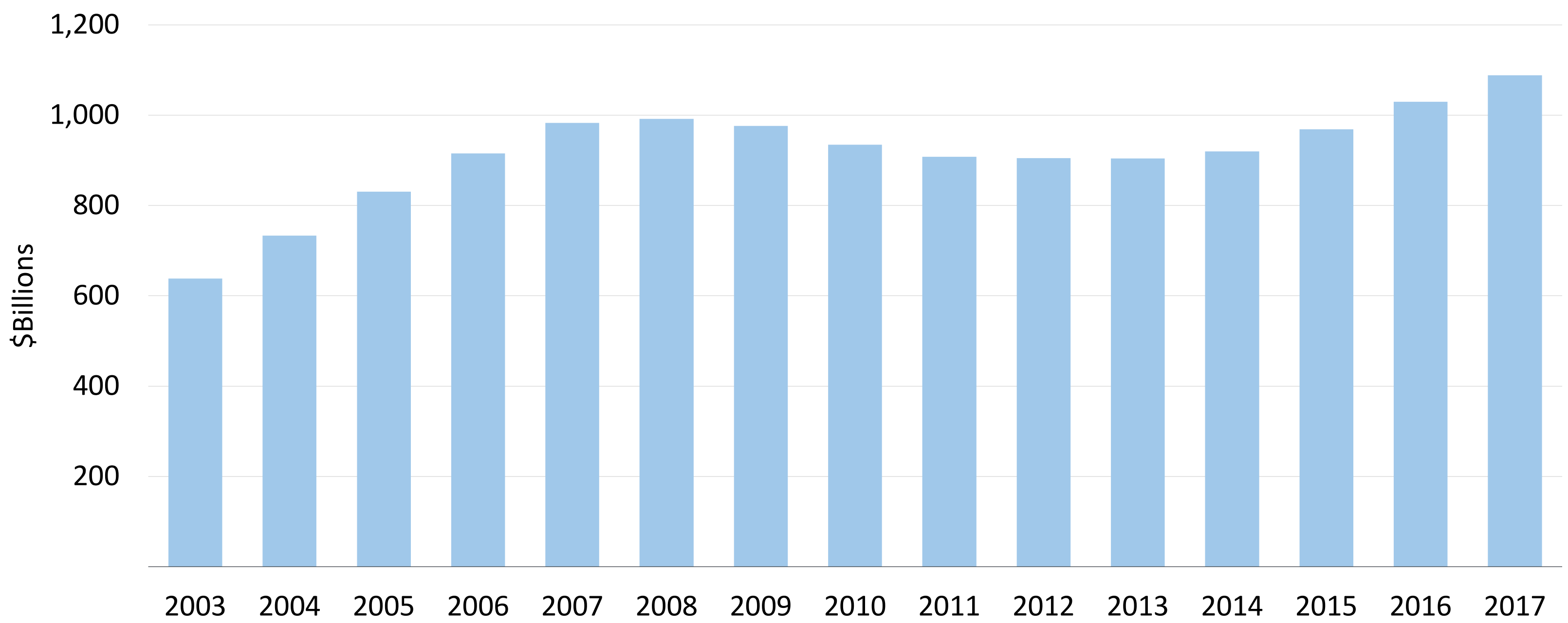
Massachusetts Credit Trends: Tax Base Growth

Higher Assessed Values Are Credit Positive

- The recession and home price depreciation reduced total assessed value by an average 3% per year from 2009 through 2011, stabilizing in 2012 and 2013.
- Since 2014, total assessed value has grown moderately, including a healthy 6% in both 2016 and 2017, exceeding 1 trillion for the first time in history.

Exhibit: Massachusetts Local Governments' Aggregate Assessed Value



Source: Massachusetts Department of Revenue's Division of Local Services and Municipal Databank

Top Increases and Decreases in MA LG's AV, 2016-17

Top 10 Increases in Assessed Value			Top 10 Decreases in Assessed Value		
Municipality	**Change**	**General Obligation Rating**	**Municipality**	**Change**	**General Obligation Rating**
Cambridge	14%	Aaa	**Tolland**	-4%	unrated
Chelsea	14%	unrated	**Sheffield**	-3%	unrated
Somerville	13%	Aa2	**Windsor**	-3%	unrated
Malden	13%	Aa3	**Lanesborough**	-2%	A1
Hubbardston	13%	unrated	**Northfield**	-2%	unrated
Boston	12%	Aaa	**Holland**	-2%	unrated
Medford	11%	Aa3	**Whately**	-2%	unrated
East Brookfield	11%	unrated	**Cummington**	-2%	unrated
Randolph	11%	unrated	**Buckland**	-1%	unrated
Kingston	10%	Aa2	**Wenham**	-1%	unrated

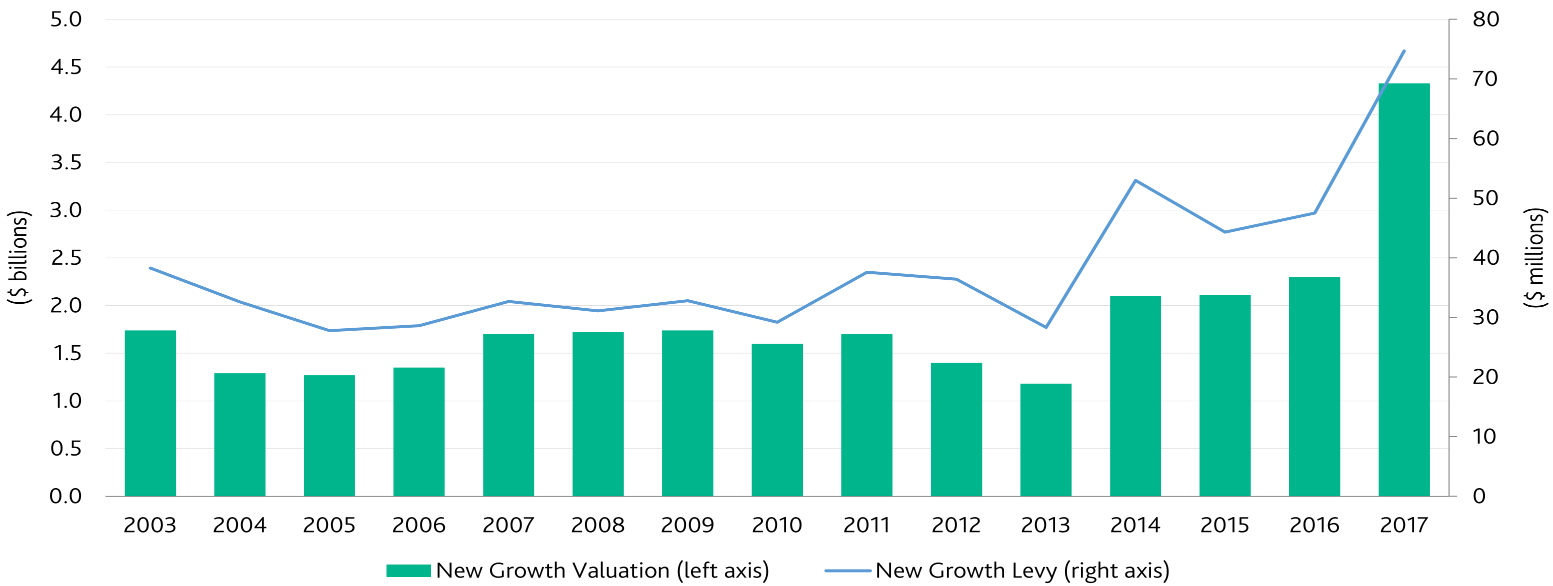
Source: Massachusetts Department of Revenues' Division of Local Services and Municipal Databank

- Not all cities' and towns' AV returned to pre-recession levels. Some 58% are still below their 2008 assessed value.
- Municipalities with more than $1 billion in value left to recover from pre-recession peaks include Brockton, Fall River, New Bedford and Taunton, all in the southeast region.

Boston's Strong Growth Has Positive Affect on Region

Exhibit: The Boston Tax Base Annual New Growth Valuation and Tax Levy

New growth valuation increased by 88% from FY16 to FY17; Tax levy associated with new growth increased by 57%.



Source: City of Boston

- Boston provided almost a quarter of the $18.2 billion in total new growth across all Massachusetts municipalities. The strong contribution is a reflection of Boston's significant economic development initiatives in recent years and its importance to the regional economy.

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Primary Rating Factors

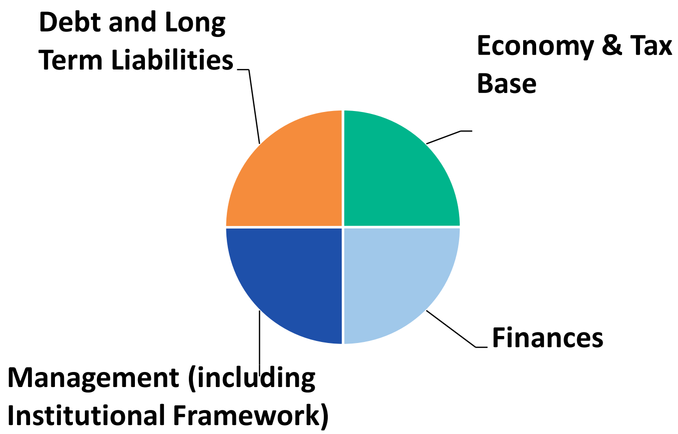
Four Primary Rating Factors*

Rating analysis includes

- » Rating is decided based on individual credit review of entity
- » Rating factors fall into four major categories
- » Both qualitative and quantitative analysis is involved
- » Legal structure of security also plays a role in rating

* This sections illustration is a general overview, please review the respective rating agencies appendix for detailed information on rating factors and their weightings.

Four Primary Credit Factors



Tax Base & Economy

The strength and resilience of the local economy plays an essential role in debt repayment.

» Tax Base Size – Equalized or Full Value of the Municipality

» Equalized / Full Value Per Capita

» Median Family Income as % of U.S. Median

» Other Considerations Include:

  » New growth or development that could add to the tax roll

  » Tax base composition – residential, commercial, industrial

  » Institutional presence: tax exempt properties like universities or government entities that provide stability

  » Regional economic center

  » Economic concentration

  » Outsized unemployment or poverty levels

  » Unusually high residential wealth

Finances

A local government's fiscal position determines its cushion against the unexpected, its ability to meet existing financial obligations, and its flexibility to adjust to new ones.

- Fund Balance as a % of revenues or expenditures
- Historic trend of Fund Balance
- Cash Balance as a % of revenues or expenditures
- Historic trend of cash balance
- Other Considerations Include:
  - Enterprise risk
  - Unusually volatile revenue structure
  - Unused levy capacity

Debt and Long Term Liabilities

The treatment of debt and long-term liabilities seeks to scale the magnitude of a local government's debt obligations relative to its resources and its operations.

- Debt to Equalized Value
- Debt to Revenues
- Net Pension Liability to Equalized Value
- Net Pension Liability to Revenues
- Other Considerations Include:
  - History of missed debt service payments
  - Unusual debt structure
  - Pension full funding dates
  - OPEB liability
  - Unusually high or low annual fixed costs as % of expenditures

Management

Both a local government's legal structure and the practical environment in which it operates influence the ability to maintain a balanced budget, fund services, and continue tapping resources from the local economy.

- Institutional Framework:
  - Measures the municipality's legal ability to match revenues with expenditures based on its constitutionally and legislatively conferred powers and responsibilities of the local government entity.
- 5-Year Operating History
  - Measures the five-year average of the ratio of operating revenues to operating expenditures.
  - Focusing on recurring operations and accounting for one-time revenues and expenditures
- Other Considerations Include:
  - State oversight or support
  - Unusually strong or weak budget management or planning
  - Formal policies

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Nicholas Lehman
Assistant Vice President/Analyst
617-535-7694
nicholas.lehman@moodys.com

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APPENDIX:

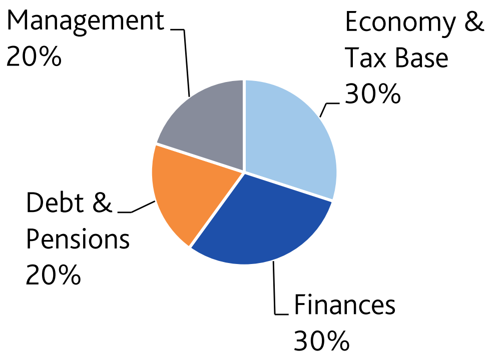
Moody's US Local Government General Obligation Debt Methodology

Moody's Local Govt. General Obligation (GO) Debt Rating Methodology

Rating analysis includes

- Rating is decided based on individual credit review
- Rating factors fall into four major categories
- Both qualitative and quantitative analysis is involved
- Legal structure of security also plays a role in rating

Four Primary Credit Factors



General Obligation Scorecard

Purpose and Use of the Scorecard:

- The scorecard acts as a starting point for a more thorough and individualistic analysis
- Captures the key considerations that correspond to particular rating categories
- Not an exhaustive list of factors that we consider in every local government rating
- Each subfactor is a quantitative metric that are scored an initial grid

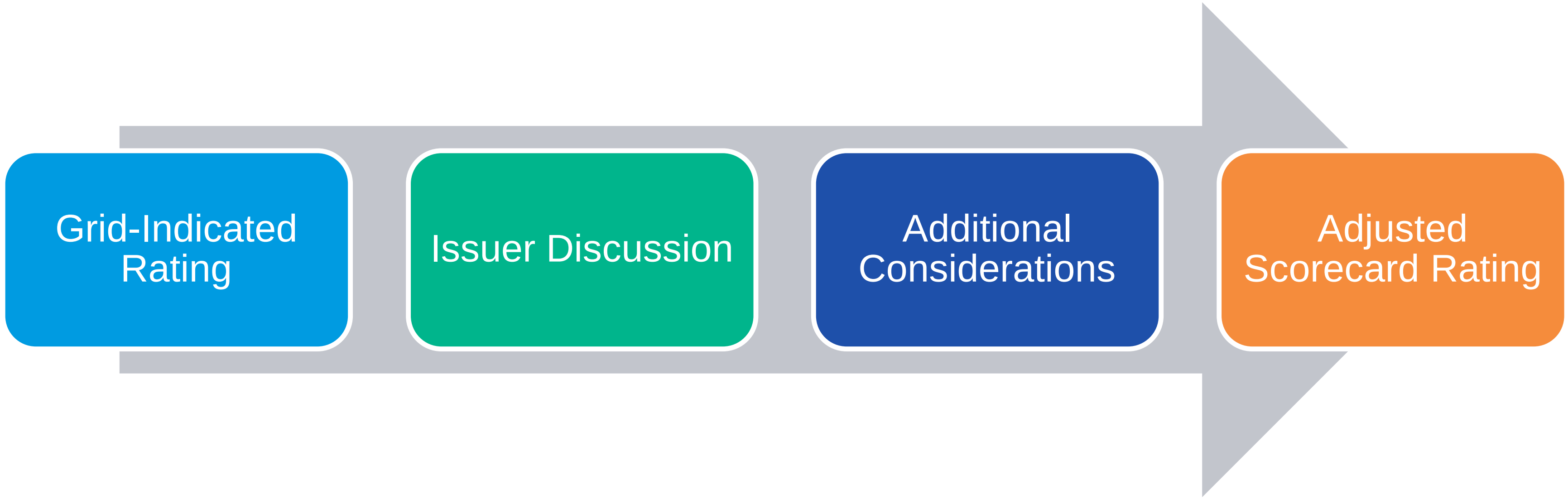
GO Scorecard Grid – Factors, Sub-factors and Weights

Factors & Sub-Factors	Weights
Factor 1: Economy/Tax Base	**30%**
Full Value (market value of taxable property)	10%
Full Value per Capita	10%
Median Family Income	10%
Factor 2: Finances	**30%**
Fund Balance as % of Operating Revenue	10%
5-Year Dollar Change in Fund Balance as % of Revenues	5%
Cash Balance as % of Revenues	10%
5-Year Dollar Change in Cash Balance as % of Revenues	5%
Factor 3: Management	**20%**
Institutional Framework	10%
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures	10%
Factor 4: Debt/Pensions	**20%**
Net Direct Debt / Full Value	5%
Net Direct Debt / Operating Revenue	5%
3-Year Average of Moody’s Adjusted Net Pension Liability / Full Value	5%
3-Year Average of Moody’s Adjusted Net Pension Liability / Operating Revenues	5%

Grid-Indicated Rating

» The weighted average of quantitative scores will determine a raw score that maps to Moody’s rating scale

Additional Information Can Lead to Adjusted Scorecard Ratings



- Issuer discussions will inform whether there are any additional considerations → the adjusted scorecard rating
- Rating committee ultimately determines the adjusted “below-the-line adjustments” based on information provided by the issuer
- The final rating may differ from the adjusted scorecard rating

Scorecard Factor 1: Economy/Tax Base – 30%

	Very Strong	*Strong*	*Moderate*	*Weak*	*Poor*	*Very Poor*	
	Aaa	**Aa**	**A**	**Baa**	**Ba**	**B & Below**	**Weight**
ECONOMY/TAX BASE (30%)							
Tax Base Size: Full Value	> $12B	$12B ≥ n > $1.4B	$1.4B ≥ n > $240M	$240M ≥ n > $120M	$120M ≥ n > $60M	≤ $60M	10%
Full Value Per Capita	> $150,000	$150,000 ≥ n > $65,000	$65,000 ≥ n > $35,000	$35,000 ≥ n > $20,000	$20,000 ≥ n > $10,000	≤ $10,000	10%
Socioeconomic Indices: MFI	> 150% of US median	150% to 90% of US median	90% to 75% of US median	75% to 50% of US median	50% to 40% of US median	≤ 40% of US median	10%

Possible Adjustments

» Up – Presence of university, state capital

» Up – Community is a regional economic center

» Up – Exceptionally high wealth levels

» Up – Expected future development with specific construction completion dates and projected increases in property taxes.

» Down – Expected decline in assessed valuation due to corporate closure or tax appeals

» Down – Economic concentration

» Down -- Outsized unemployment or poverty levels

Scorecard Factor 2: Finances – 30%

	Very Strong	*Strong*	*Moderate*	*Weak*	*Poor*	*Very Poor*	
	Aaa	**Aa**	**A**	**Baa**	**Ba**	**B & Below**	**Weight**
FINANCES (30%)							
Fund Balance as % of Revenues	➢ 30% > 25% for School Districts (SD)	30% ≥ n > 15% 25% ≥ n > 10% for SD	15% ≥ n > 5% 10% ≥ n > 2.5% for SD	5% ≥ n > 0% 2.5% ≥ n > 0% for SD	0% ≥ n > -2.5% 0% ≥ n > -2.5% for SD	≤ -2.5% ≤ -2.5% for SD	10%
5-Year Dollar Change in Fund Balance as % of Revenues	> 25%	25% ≥ n > 10%	10% ≥ n > 0%	0% ≥ n > -10%	-10% ≥ n > -18%	≤ -18.%	5%
Cash Balance as % of Revenues	> 25%> 10% for School Districts (SD)	25% ≥ n > 10% 10% ≥ n > 5% for SD	10% ≥ n > 5% 5% ≥ n > 2.5% for SD	5.0% ≥ n > 0% 2.5% ≥ n > 0% for SD	0% ≥ n > -2.5% 0% ≥ n > -2.5% for SD	≤ -2.5% ≤ -2.5% for SD	10%
5-Year Dollar Change in Cash Balance as % of Revenues	> 25%	25% ≥ n > 10.0%	10% ≥ n > 0%	0% ≥ n > -10%	-10% ≥ n > -18%	≤ -18%	5%

Possible Adjustments

» Up – Additional, borrowable liquidity/reserves outside of the main operating fund(s)

» Down – Reliance on uncertain state aid or other economically sensitive revenue streams

» Down – Enterprise risk

Scorecard Factor 3: Management – 20%

	Very Strong	*Strong*	*Moderate*	*Weak*	*Poor*	*Very Poor*	
	Aaa	**Aa**	**A**	**Baa**	**Ba**	**B & Below**	**Weight**
MANAGEMENT (20%)							
Institutional Framework	Very strong legal ability to match resources with spending	Strong legal ability to match resources with spending	Moderate legal ability to match resources with spending	Limited legal ability to match resources with spending	Poor legal ability to match resources with spending	Very poor or no legal ability to match resources with spending	10%
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures	> 1.05x	1.05x ≥ n > 1.02x	1.02x ≥ n > 0.98x	0.98x ≥ n > 0.95x	0.95x ≥ n > 0.92x	≤ 0.92x	10%

Possible Adjustments

» Down – Reliance on cash flow borrowing

» Up/down – State oversight or support

» Up – Ability and willingness to make adjustments beyond what is captured in grid

» Up – Thoughtful plan for restoring structural operating balance and/or replenishing reserves

» Up – Active monitoring of budget performance

» Up – Formal financial policies

» Up – History of conservative budgeting

Management: Plans and Policies to Ensure Financial Flexibility is Maintained

- **Formal policies**
  - Fund balance target policy
    - (fund balance will be X% of budget)
  - Budgeting policies
    - (timeline for budget process)
  - Debt affordability policies
    - (debt as % of tax base)

- **Multi-year planning**
  - Multi-year forecast operating revenues and expenditures
  - Multi-year capital improvement plan
  - Planning for a range of scenarios

Policies and plans provide assurance that current financial position will be maintained or even improved

Management: Conservative Budgeting

- **Property Taxes**
  - Willingness to raise property tax levy
  - Conservative assumptions for uncollected taxes
  - Reserve for tax appeals
  - Using general economic factors to project revenues (e.g. building permit activity, vacancy rates)
- **Conservative estimates for vulnerable revenues**
  - Hotel tax, new PILOTs, real estate transfer fees
  - Building permit fees, interest income
- **State Aid**
  - Less dependence on state aid
  - Flexibility to make midyear adjustments
- **Expenditures**
  - Strong understanding of budget assumptions
  - Fluency with expenditure flexibility
  - Predictability of contractual agreements helps
- **Red flags of aggressive budgeting:**
  - History of one-shots
  - Increased cash-flow borrowing

Scorecard Factor 4: Debt/Pensions – 20%

	Very Strong	*Strong*	*Moderate*	*Weak*	*Poor*	*Very Poor*	
	Aaa	**Aa**	**A**	**Baa**	**Ba**	**B & Below**	**Weight**
DEBT/PENSIONS (20%)							
Net Direct Debt / Full Value	< 0.75%	0.75% ≤ n < 1.75%	1.75% ≤ n < 4%	4% ≤ n < 10%	10% ≤ n < 15%	> 15%	5%
Net Direct Debt / Operating Revenues	< 0.33x	0.33x ≤ n < 0.67x	0.67x ≤ n < 3x	3x ≤ n < 5x	5x ≤ n < 7x	> 7x	5%
3-Year Average of Moody's Adjusted Net Pension Liability / Full Value	< 0.9%	0.9% ≤ n < 2.1%	2.1% ≤ n < 4.8%	4.8% ≤ n < 12%	12% ≤ n < 18%	> 18%	5%
3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues	< 0.4x	0.4x ≤ n < 0.8x	0.8x ≤ n < 3.6x	3.6x ≤ n < 6x	6x ≤ n < 8.4x	> 8.4x	5%

Possible Adjustments

- Up/Down – Unusually strong/weak security features
- Down - Unusual risk posed by debt structure
- Down – Large OPEB liability
- Down – History of missed debt service payments
- Up/Down – Unusually high or low fixed costs as a % expenditures

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