Moody's
INVESTORS SERVICE

Moody's Local Government Ratings

NJ League of Municipalities 2016

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Agenda

1. Moody's 2016 Local Government Sector Outlook
2. State's Credit Quality
3. What Goes into a Moody's Rating?
4. General Obligation Methodology
5. Bond Anticipation Note Methodology

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Moody's 2016 Local Government Sector Outlook

Local government sector outlook remains stable for 2016

NEGATIVE ← STABLE → POSITIVE

What could change outlook to negative

- » A return to economic recession
- » Property tax levies revert back to negative growth rates, leading to declines in fund balance levels
- » Rising pension and fixed costs significantly challenge local government budgets

STABLE

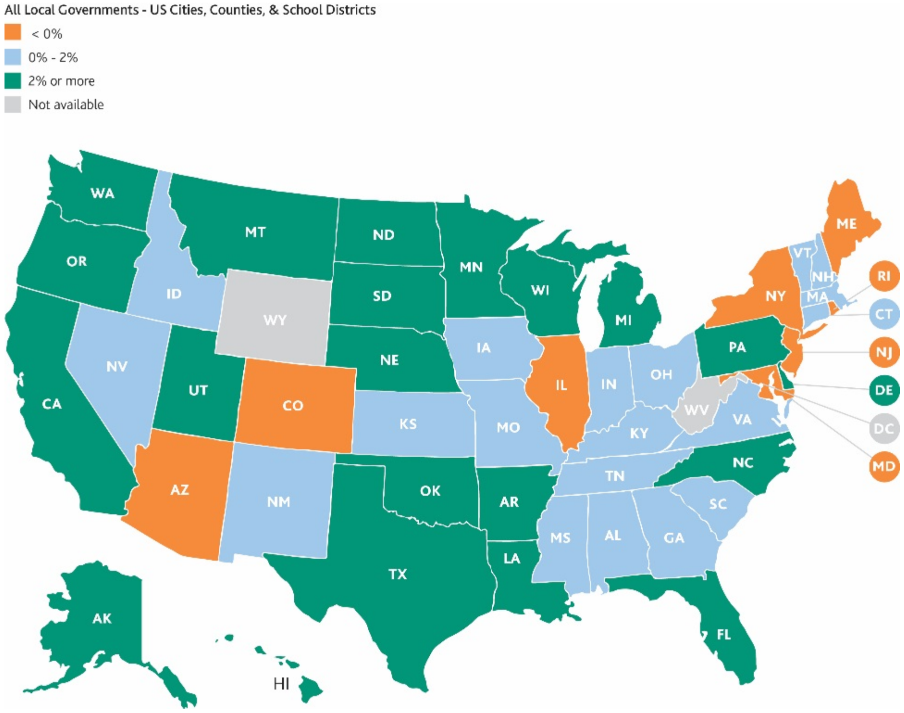
- » Property tax revenues on a modest growth trajectory
- » Strong to moderate institutional frameworks support operating stability
- » Pension leverage will continue to grow and is a long-term drag on the sector
- » State/sector pressure persists, but is not reflective of the sector overall

What could change outlook to positive

- » Robust economic growth contributed to accelerated property tax revenue growth, operating surpluses, and improved financial positions
- » Wide-scale pension and employee health care reform mitigating long-term liabilities

Tax bases are recovering, albeit unevenly

Median 1-year FV percent change for rated local governments by state (2013-14)



Source: Moody's Investors Service

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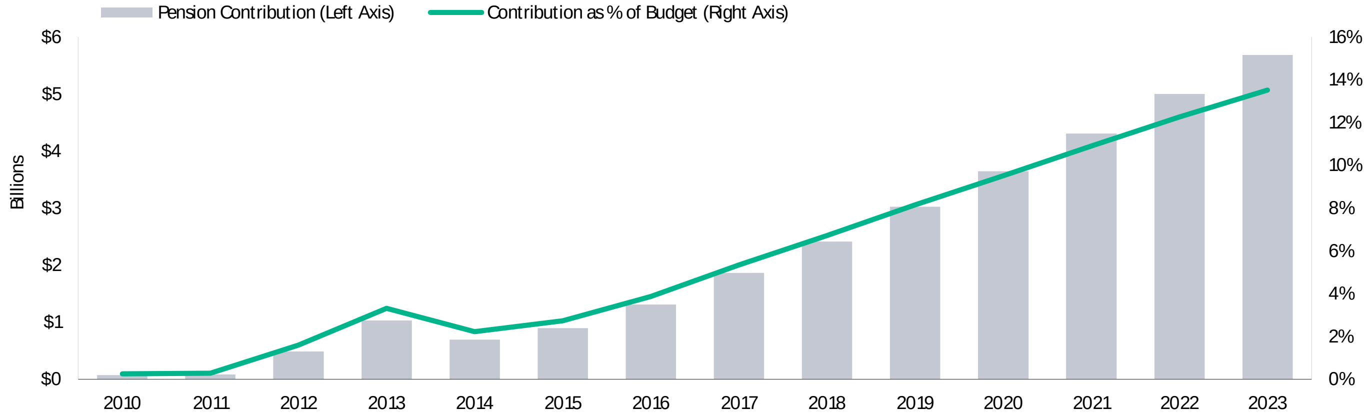
Recent Developments in NJ

State Credit Quality Driven by Pensions

- New Jersey's General Obligation Rating is A2 negative
- A2 rating drivers:
  - Very high debt position, including large unfunded pension liability, with high fixed costs
  - Stable, but weak financial position; low liquidity and high structural imbalance
  - Recently stabilized, diversified economy with wealthy tax base
  - Strong executive authority to cut budget
- Negative outlook: Economic and financial position are fragile, and vulnerable to national economic trends. Finances will weaken and debt rise as the state tries to absorb its pension liabilities.
- Factors that could lead to a downgrade:
  - Inability to continue making incremental 1/10th pension contributions
  - Increased structural imbalance and reduced liquidity levels
  - Significant increase in unfunded pension liabilities

Improving but Still Weak

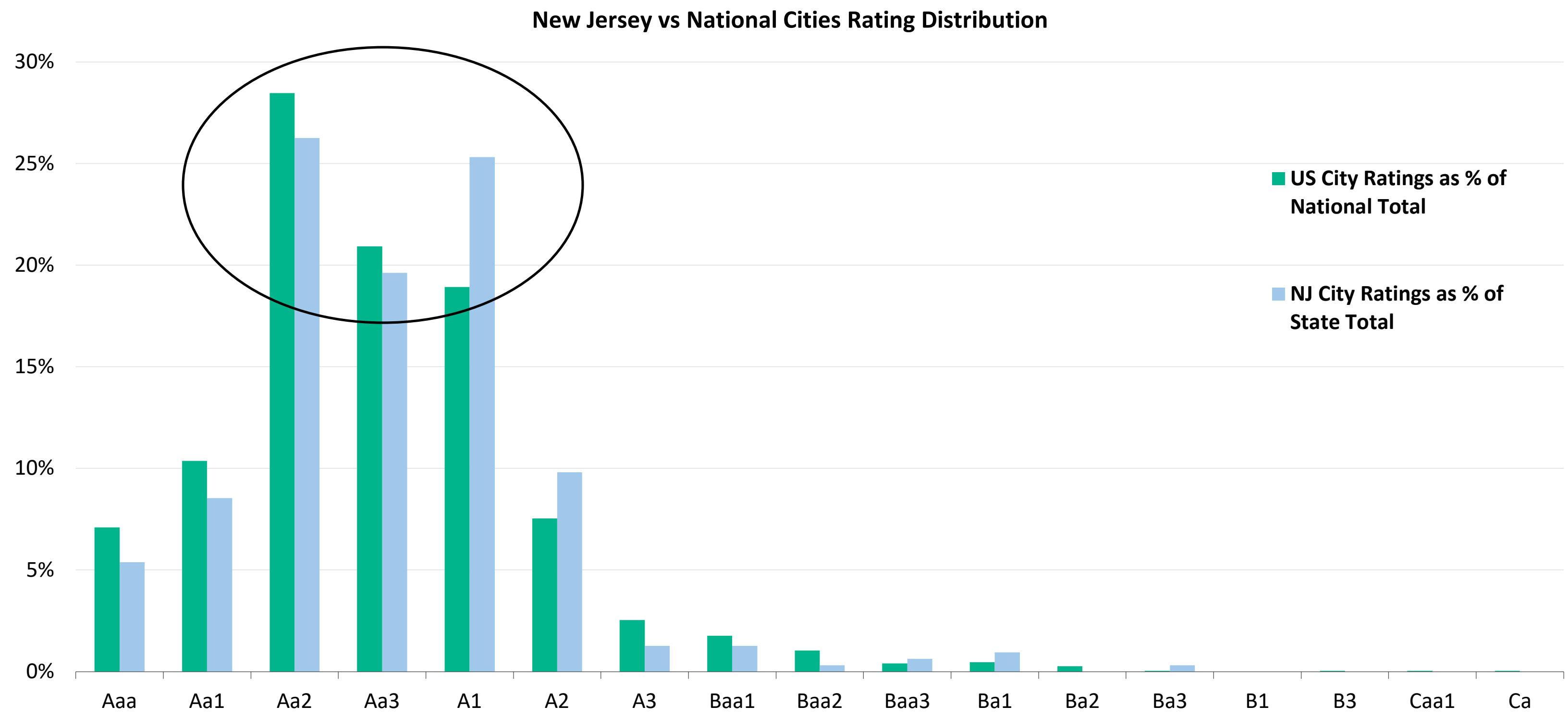
- Improved economic performance after a long, protracted recovery
- Improved but weak financial position
  - More conservative revenue estimates lead to a FY15 surplus
  - Liquidity increased to 3.8% of revenues from 2.5%, but remains below average
  - Large 9% structural imbalance due to pension underfunding
- Key challenge will be absorbing rapidly growing pension contributions:



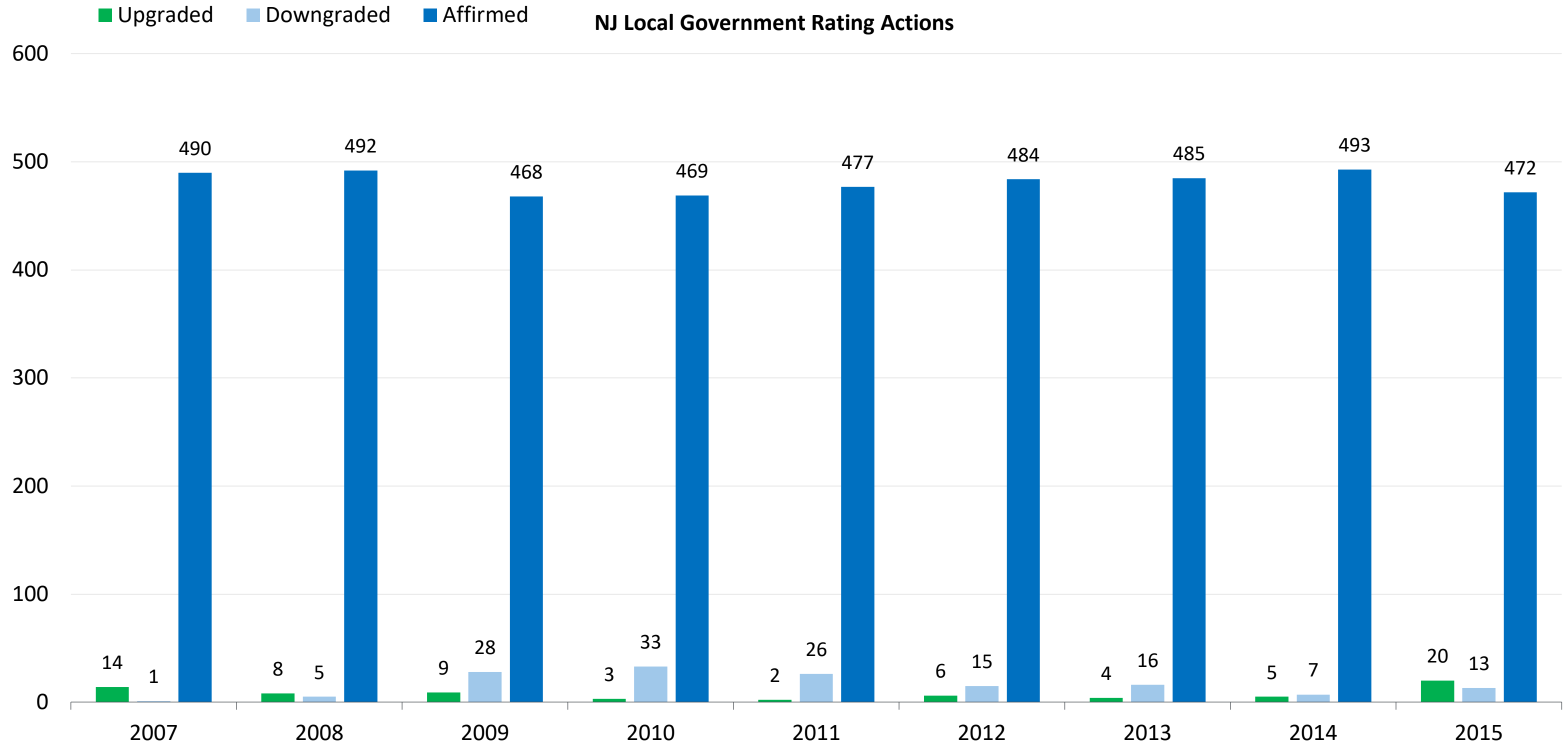
- Will require 3.2% - 4% revenue growth and very restrained discretionary spending

Most NJ Cities are Highly Rated

- 316 Total NJ City Ratings (GO, GOLT, Issuer)
- Aa3 Median Rating for Both NJ and US Cities

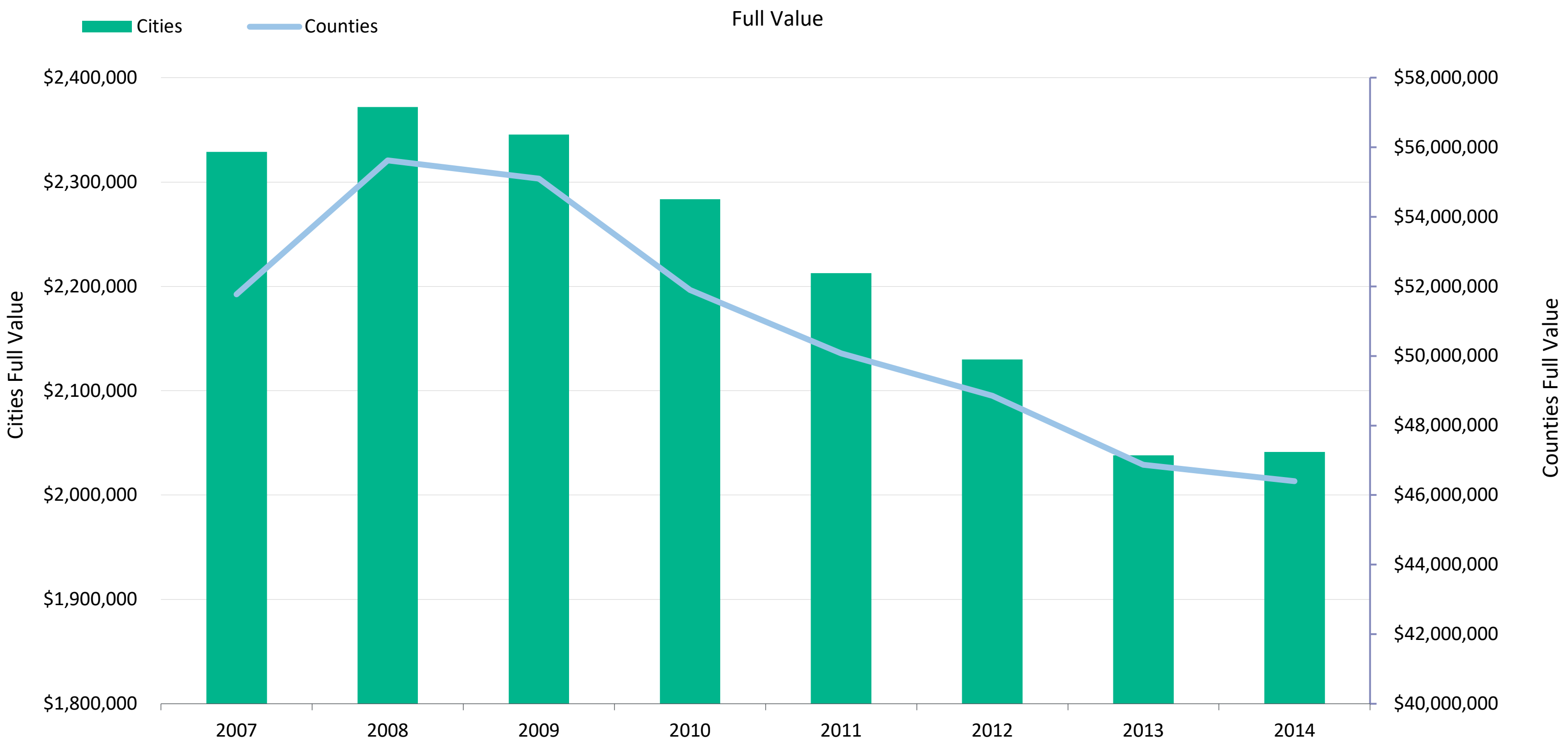


Improved State Economy and Budget Leads to Greater Stability at Local Level



The sharp increase in upgrades in 2015

Equalized Valuation for Rated Cities Stabilizing

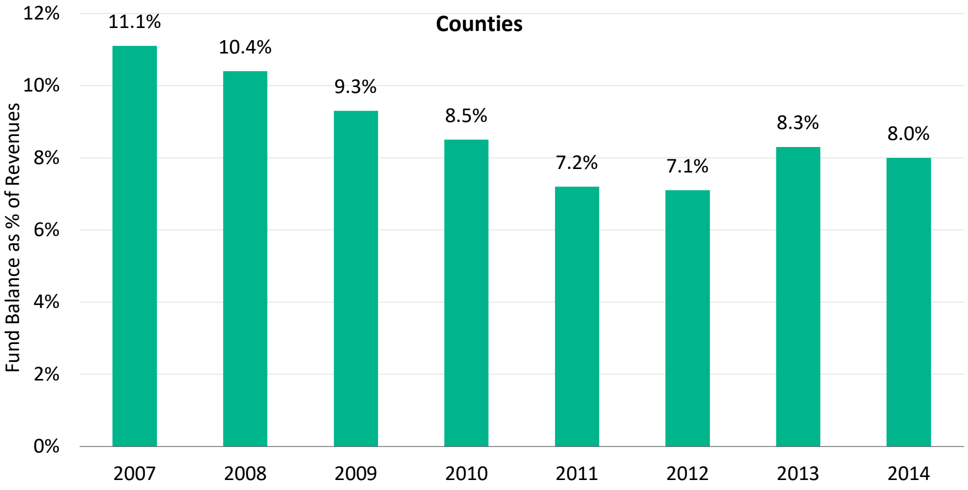


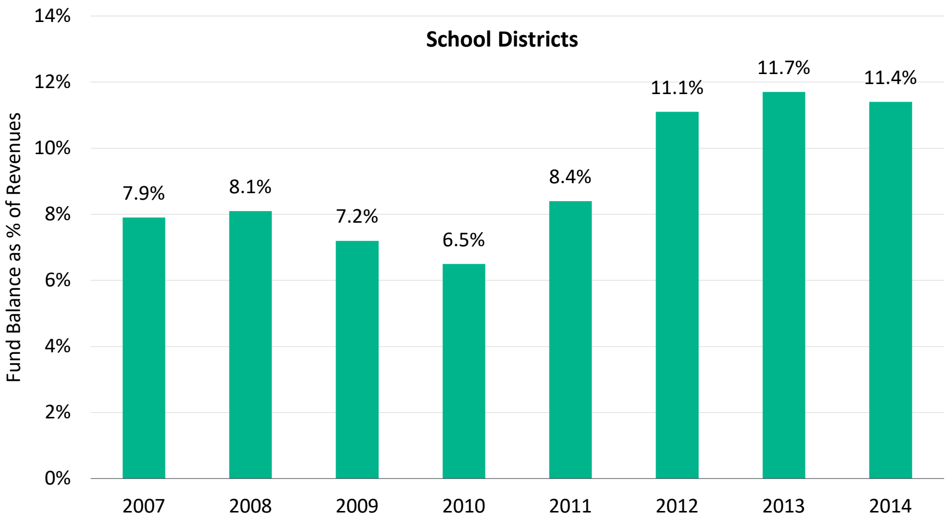
Source: Moody's Investors Service

Cities' Reported Current Fund Balance (Surplus) Trending Up

Source: Moody's Investors Service

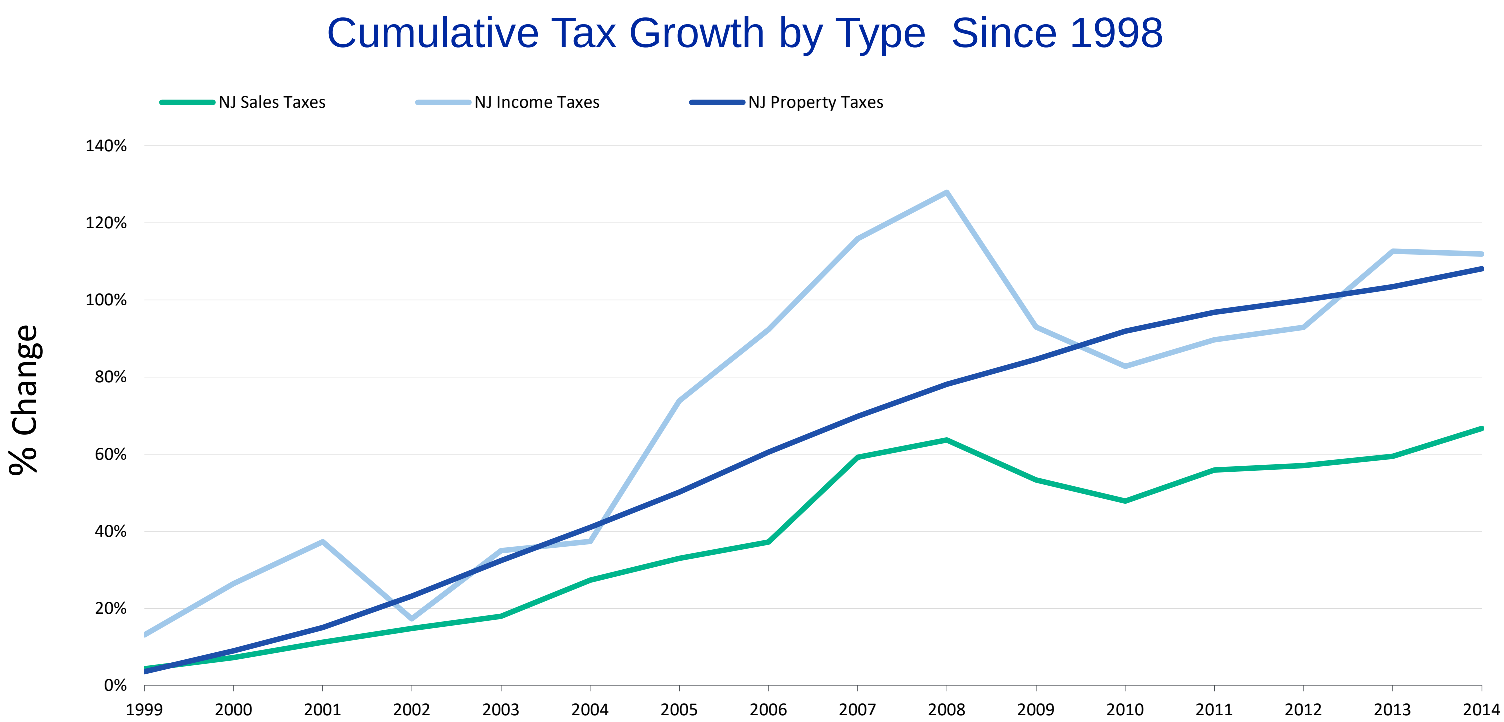
School District and County Fund Balances Stabilizing at Improved Levels





Source: Moody's Investors Service

NJ Local Property Taxes Have Proven Durable



- Property tax revenue growth is fairly predictable.
- The state has had several years of revenue shortfalls because of difficulties in projecting income tax growth

Source: U.S Census Bureau

State Pension Pressures Creates Uncertainty for Locals

- There is no statutory requirement to maintain separation of assets
- State asserts that all local government contributions will continue to be calculated on a statutory accounting basis
- Governmental Accounting Standards Board Statement 67 consolidates local and state assets
  - Funding Ratios (July 2015 CAFR):
    - Local PERS (73%) and PFRS (77%)
    - State PERS (41%) and PFRS (44%)
    - GASB 67 PERS (38%) and PFRS (53%)
- Consolidation under GASB may indicate the future ability to shift costs down onto locals should the state segment run out of assets.
- Proposed pension reform could shift pension and OPEB responsibility onto school districts. Savings from health benefit reforms are intended to cover the cost

Locals Face Their Own Pension Problems

- Required annual pension contributions are less than needed to ensure pension liabilities don't grow further
  - Under GASB 68, the FY 2014 local PERS contribution is 57% of what is actually needed
  - If the local portion is calculated separately from the state, the FY 2014 contribution is 88%
- 2016 investment performance (-3% YTD) could result in losses, driving the contribution requirements up in 2017 and 2018
- Rising post employment health benefit costs creates a significant expenditure pressure

3 Moody's Ratings and Rating Process

Moody's Public Finance Ratings

» The mission of the US Public Finance Group is to provide **reliable and independent opinions** about the credit risk of states, cities, school districts, governmental authorities, and other US municipal borrowers.

» We publish our opinions in the form of ratings, which rank debt issuers based on their relative credit quality.

» We complement our ratings with written research that explains our analysis and makes our rating rationales transparent.

» We constantly strive to strengthen the quality, transparency, and independence of our credit ratings

Moody's Rating Scale

Global Long-Term Rating Scale

Aaa	Obligations rated Aaa are judged to be of the highest quality, subject to the lowest level of credit risk.
Aa	Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.
A	Obligations rated A are judged to be upper-medium grade and are subject to low credit risk.
Baa	Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.
Ba	Obligations rated Ba are judged to be speculative and are subject to substantial credit risk.
B	Obligations rated B are considered speculative and are subject to high credit risk.
Caa	Obligations rated Caa are judged to be speculative of poor standing and are subject to very high credit risk.
Ca	Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.
C	Obligations rated C are the lowest rated and are typically in default, with little prospect for recovery of principal or interest.

Note: Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category. Additionally, a "(hyb)" indicator is appended to all ratings of hybrid securities issued by banks, insurers, finance companies, and securities firms.*

Note: For more information on long-term ratings assigned to obligations in default, please see the definition "Long-Term

Below investment grade (Ba or lower) does not necessarily indicate expected default

Moody's Issuer Guide

Six steps of the rating process:

1. Assignment of a lead analyst
2. Methodology
3. Analysis
4. Discussion with Moody's
5. Committee review process
6. Publication of the final rating report

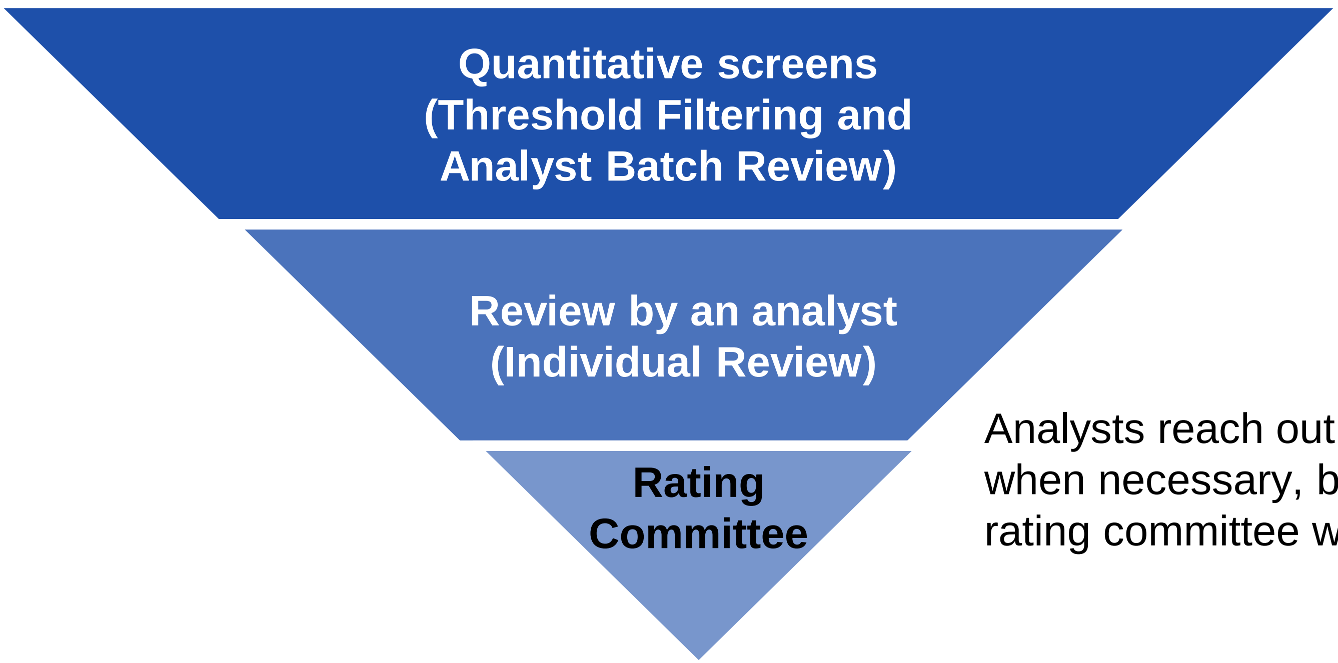
The 6-Step Rating Process

Step 1: Assignment → **Step 2: Methodology** → **Step 3: Analysis** → **Step 4: Discussions** → **Step 5: Committee** → **Step 6: Publication**

Assignment	Methodology	Analysis	Discussions	Committee	Publication
The rating process starts with the assignment of a Lead Analyst	The Lead Analyst identifies the appropriate methodology	The Lead Analyst gathers information and begins to analyze the credit	The Lead Analyst holds a credit discussion with the Issuer (in-person/ conference call)	The Lead Analyst develops a recommendation and presents it to a committee of senior analysts	The Lead Analyst informs the marketplace of any rating actions by publishing a report

US PFG Monitoring Framework

» We review every rating at least annually to maintain accuracy
» Surveillance process involves multiple screens
» Most ratings are deemed appropriate through the various filtering steps
  – However, some do proceed to a rating committee for possible rating action



Analysts reach out to issuers when necessary, but always if rating committee will be held.

US PFG Monitoring Framework

- For credits that go to a committee, the rating process is the same for new sales and surveillance
- We have one combined group responsible for new sales and surveillance
- Analysts reach out to issuers for additional information when necessary and will always contact the issuer if a credit could go to a rating committee.
- Financial advisors, auditors, bond counsels, etc. are welcome to participate in the surveillance process and the Lead Analyst will confirm if an issuer is working with an FA.

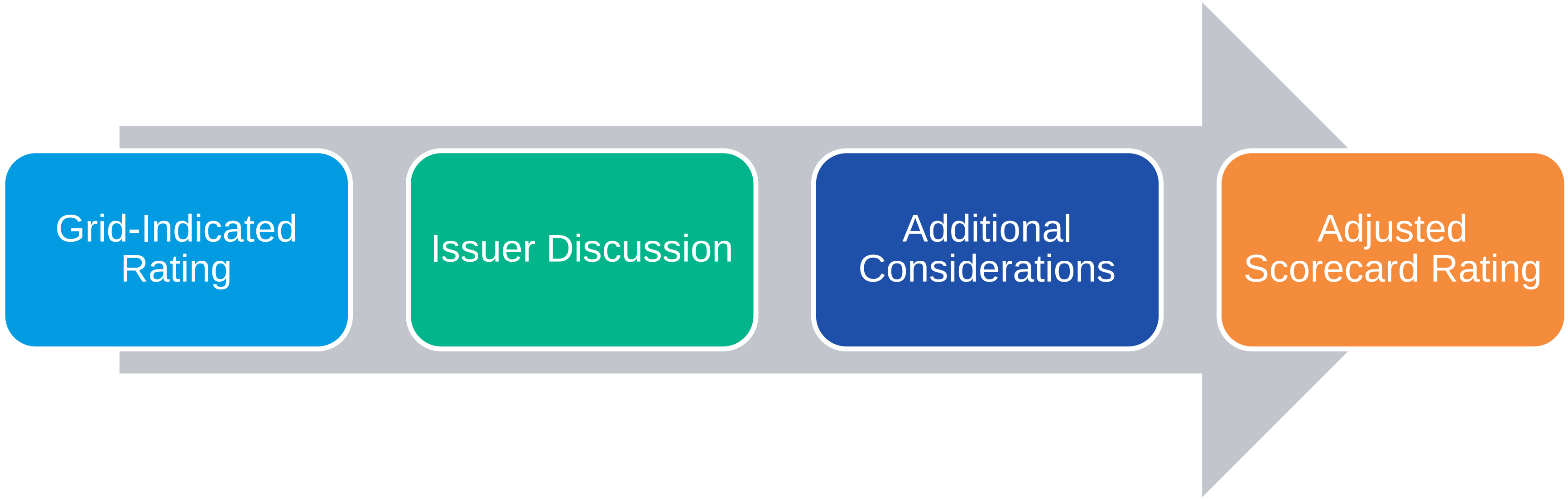
4 General Obligation Methodology

General Obligation (GO) 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

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

GO Scorecard

GO Scorecard and Methodology incorporate 4 fundamental rating factors

Economy/Tax Base	Finances	Management	Debt/Pensions
30%	30%	20%	20%

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

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 – Exceptionally high wealth levels

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

» Up – Community a regional economic center

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

Scorecard Factor 2: Finances – 30%

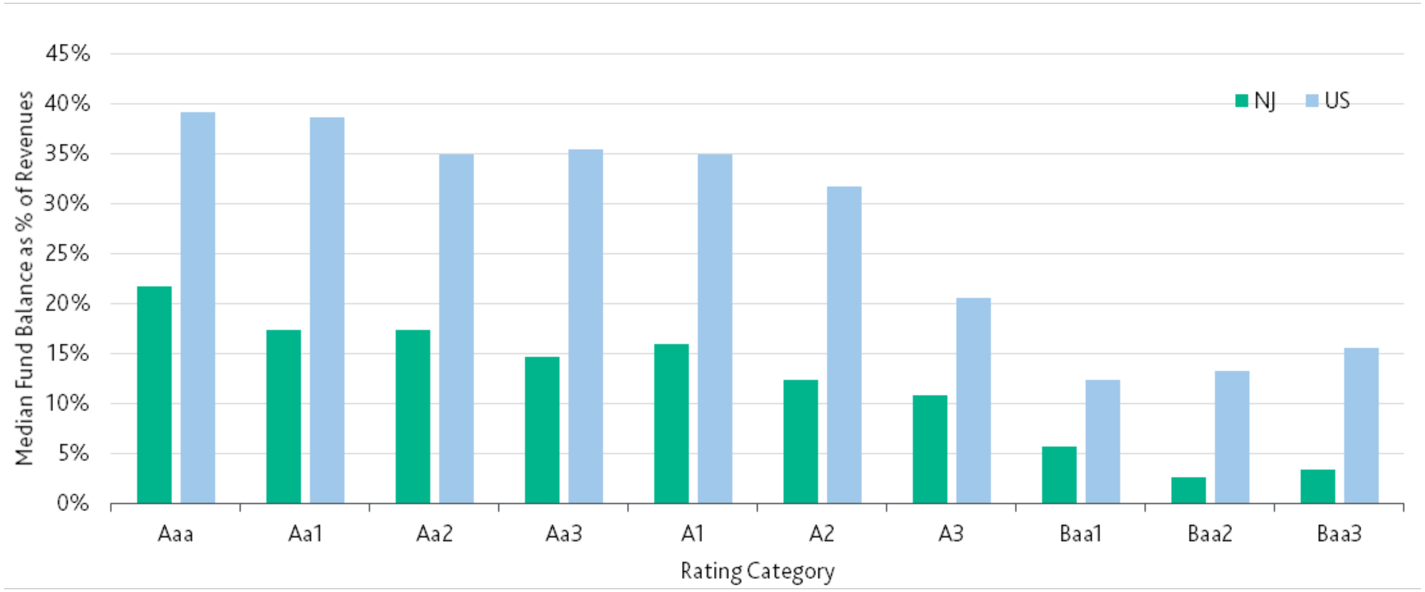
	Very Strong	*Strong*	*Moderate*	*Weak*	*Poor*	*Very Poor*	
	Aaa	**Aa**	**A**	**Baa**	**Ba**	**B & Below**	**Weight**
FINANCES (30%)							
Fund Balance as % of Revenues	> 30.0%> 25.0% for School Districts	30.0% ≥ n > 15.0%25.0% ≥ n > 10.0% for SD	15.0% ≥ n > 5.0%10.0% ≥ n > 2.5% for SD	5.0% ≥ n > 0.0%2.5% ≥ n > 0.0% for SD	0.0% ≥ n > -2.5%0.0% ≥ n > -2.5% for SD	≤ -2.5%≤ -2.5% for SD	10%
5-Year Dollar Change in Fund Balance as % of Revenues	> 25.0%	25.0% ≥ n > 10.0%	10.0% ≥ n > 0.0%	0.0% ≥ n > -10.0%	-10.0% ≥ n > -18.0%	≤ -18.0%	5%
Cash Balance as % of Revenues	> 25.0%> 10.0% for School Districts	25.0% ≥ n > 10.0%10.0% ≥ n > 5.0% for SD	10.0% ≥ n > 5.0%5.0% ≥ n > 2.5% for SD	5.0% ≥ n > 0.0%2.5% ≥ n > 0.0% for SD	0.0% ≥ n > -2.5%0.0% ≥ n > -2.5% for SD	≤ -2.5%≤ -2.5% for SD	10%
5-Year Dollar Change in Cash Balance as % of Revenues	> 25.0%	25.0% ≥ n > 10.0%	10.0% ≥ n > 0.0%	0.0% ≥ n > -10.0%	-10.0% ≥ n > -18.0%	≤ -18.0%	5%

Possible Adjustments

» Up – Additional, borrowable liquidity outside of the current fund

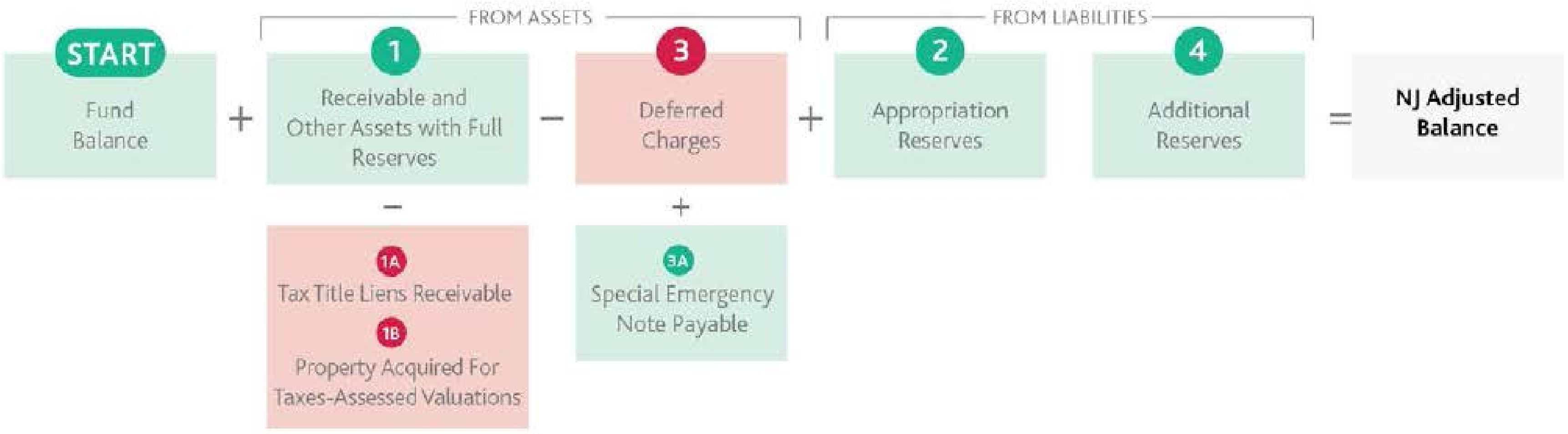
» Down – Reliance on uncertain state aid

Scorecard Factor 2: Finances – Fund Balance (10%)



- NJ Statutory Accounting usually results in smaller FB than under GAAP
- We adjust NJ statutory fund balance to be more comparable with GAAP

Adjusted New Jersey Fund Balance



- Steps to Moody's Adjusted NJ Fund balance
  - Begin with reported fund balance
  - Add back certain receivables with full reserves
  - Minus deferred charges, net of special emergency notes payable
  - Add back appropriation reserves
  - Add additional operating reserves

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

- 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
- Down – Reliance on cash flow borrowing

Plans and Policies to Ensure Financial Flexibility is Maintained

- **Formal policies**
  - Fund balance target policy
    - (fund balance will be X% of budget)
  - Surplus appropriation policy
    - (will only appropriate what can be replenished)
  - Budgeting policies
    - (timeline for budget process)
  - Debt affordability policies
    - (debt as % of tax base)

- **Multi-year planning**
  - Multi-year forecast revenues and expenditures
  - Early budgeting process
  - Planning for a range of scenarios
  - Framing current and future capital and operating decisions
  - Practiced more frequently by counties

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

D. Conservative Budgeting

- **Property Taxes**
  - Willingness to raise property tax levy
  - Conservative reserve for uncollected taxes
  - Reserve for tax appeals
  - Use of revaluations to prevent future tax appeals
  - Using general economic factors to project revenues
    - 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 deferred charges
  - 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 – pension or OPEB reserve

» Down – contingent liability with limited plans for budgeting payment if guarantee invoked

GO Scorecard – Adjustment/Notching Factors

Adjustments/Notching Factors

Description	Direction
Economy/Tax Base	
Institutional presence	up
Regional economic center	up
Economic concentration	down
Outsized unemployment or poverty levels	down
Other analyst adjustment to Economy/Tax Base factor (specify)	up/down
Finances	
Outsized contingent liability risk	down
Unusually volatile revenue structure	down
Other analyst adjustment to Finances factor (specify)	up/down
Management	
State oversight or support	up/down
Unusually strong or weak budgetary management and planning	up/down
Other analyst adjustment to Management factor (specify)	up/down
Debt/Pensions	
Unusually strong or weak security features	up/down
Unusual risk posed by debt/pension structure	down
History of missed debt service payments	down
Other analyst adjustment to Debt/Pensions factor (specify)	up/down
Other	
Credit event/trend not yet reflected in existing data sets	up/down

5 Bond Anticipation Note Methodology

BAN Scorecard

OBLIGOR:

	MIG 1	MIG 2	MIG 3	SG	Input	Weight	Score
LT Rating Min Threshold	A2	Baa1	Baa3	Ba1 and below			
LONG-TERM CREDIT QUALITY							
Long-Term Rating	Aaa-Aa3	A1-A3	Baa1-Baa3	Below investment grade	Aa2	40%	1.50
REFINANCING RISK							
Takeout management (15%)	**Very strong management planning** includes fully developed alternatives, including identification of process and expected cooperation of necessary parties, such as local banks and underwriters	**Moderate management planning** includes specific plans for alternatives, but does not include identification of process and necessary parties to implement	**Limited management planning** includes consideration of alternatives, but without specifics regarding implementation	No realistic alternative plans identified or considered	MIG 1	15%	1.50
Timing of takeout - historical track record and/or plan (15%)	Plan to price/sell **30 days or more** prior to maturity	Plan to price/sell **15 to 29 days** prior to maturity	Plan to price/sell **five to 14 days** prior to maturity	Plan to price/sell **less than five days** prior to maturity	MIG 1	15%	1.50
LIQUIDITY ANALSYSIS							
Liquidity coverage for debt service on and prior to BAN maturity date	Projected liquidity provides **at least 80% coverage** for all BANs, cash-flow notes and bullet maturities and self-liquidity supported putable debt maturing on and sixty days prior to maturity date	Projected liquidity provides **between 80% and 50% coverage** for all BANs, cash-flow notes and bullet maturities and self-liquidity supported putable debt maturing on and sixty days prior to maturity date	Projected liquidity provides **between 50% and 10% coverage** for all BANs, cash-flow notes and bullet maturities and self-liquidity supported putable debt maturing on and sixty days prior to maturity date	Projected liquidity provides **less than 10% coverage** for all BANs, cash-flow notes and bullet maturities and self-liquidity supported putable debt maturing on and sixty days prior to maturity date	100%	30%	1.00
LIQUIDITY RANGES:	100-80	80-50	50-10	10 to 0			
						Total Score	1.35
						Unadjusted Rating	MIG 1

Scorecard Notching

OBLIGOR:	0

Rating Grid

Factor	*Score*
Long-Term Credit Quality	0.60
Refinancing Risk	0.45
Liquidity Analsysis	0.30
Grid Score	1.35
Grid Rating	MIG 1

Other Considerations

Factor	*adjustment*	picklist options
Market Presence (+):		
High (State or state-related agency and other major cities; eg LA, NYC, Chicago)	0.00	up to 1
Moderate (Larger municipalities with diverse economices; eg state capitals)	0.00	up to .5
Benefits from external 3rd party support rated A3 or higher	0.00	up to .5
FREQUENT ISSUER		
more than 1 sale in each of last 5 years	0.00	up to 1
1 or more sales in 3 of the last 5 years	0.00	up to .5
MARKET ACCESS DIFFICULTIES		
One time event	0.00	down to -.5
Multiple events over last 5 years	0.00	down to -1
LIMITATIONS/CONTINGENCIES TO ISSUING TAKEOUT FINANCING		
Notes are expected to be refinanced with notes that do not benefit from a security pledge (one indication of this is that the notes being rated do not benefit from a security)	0.00	down to -.5
Requires additional third party authorization	0.00	down to -1
Takeout financing + planned parity debt issuance prior to maturity exceeds debt limit	0.00	down to -1
Non-essential project with potential for cost overruns or loss of political support	0.00	down to -3
Revenue growth required for takeout financing to meet rate covenant or additional bonds test	0.00	down to -3
Essential project with completion risk	0.00	down to -1
Total Adjustments	0.00	
Adjusted Score	1.35	
Adjusted Rating	MIG 1	

Comments

MOODY'S
INVESTORS SERVICE

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