

American Hospital Association  
American Public Gas Association  
American Public Power Association  
Council of Infrastructure Financing Authorities  
Education Finance Council  
Government Finance Officers Association  
International City/County Management Association  
International Municipal Lawyers Association  
Large Public Power Council  
National Association of Counties  
National Association of Health and Higher Education Facilities Authorities  
National Association of Local Housing Finance Agencies  
National Association of State Auditors, Comptrollers and Treasurers  
National League of Cities  
U.S. Conference of Mayors

July 24, 2015

Mr. Robert de V. Frierson, Secretary  
Board of Governors of the Federal Reserve System  
20th Street and Constitution Avenue, NW  
Washington, DC 20051

Dear Secretary de V. Frierson:

**RE: Liquidity Coverage Ratio: Treatment of U.S. Municipal Securities as High-Quality Liquid Assets  
[Docket No. R-1514]**

We appreciate the opportunity to provide comment to the Board of Governors of the Federal Reserve System (Federal Reserve) on the proposed rule released in May 2015, which seeks to amend the 2014 Liquidity Coverage Ratio rule approved by the Federal Reserve, the Federal Deposit Insurance Corporation and the Office of the Comptroller of Currency, to include some U.S. municipal securities as high-quality liquid assets (HQLA). The organizations listed above represent state and local governments and public sector entities (PSEs) who issue municipal bonds and are extremely grateful for the Federal Reserve's acknowledgement of the liquidity features of municipal securities, and the need to ensure that investment grade municipal securities are included as HQLA under the LCR rule.

The core concern of the membership of our organizations with respect to the LCR rule is that the rule's failure to classify municipal securities as HQLA will increase borrowing costs for state and local governments and PSEs to finance public purpose projects, as banks will likely demand higher interest rates on yields on the purchase of municipal bonds during times of national economic stress, or even forgo the purchase of municipal securities. The resulting cost impacts on debt issuance for state and local governments, PSEs and taxpayers could be significant.

With respect to the Federal Reserve's proposed criteria for inclusion of certain municipal securities as level 2B liquid assets, and limitations on a Board-regulated institution's inclusion of these securities, our organizations would like to offer the following comments:

### **General Obligation Municipal Securities vs. Revenue Bonds**

As we discussed in our January 31, 2014 letter to federal regulators on the LCR rule, municipal securities behave similarly to HQLA investment categories Level 2A and 2B outlined in the 2014 LCR rule, demonstrating equally limited price volatility, high trading volumes and deep and stable funding markets. As such we were pleased to see the inclusion of general obligation (GO) municipal securities as Level 2B HQLA under the proposal. However we do not believe it is appropriate for the proposal to exclude all revenue obligations from this classification. While some revenue obligations are structured so that repayment is dependent on the revenues from a single underlying project (project-backed), the vast majority of revenue bonds repay investors from a larger pool of revenues, such as system-wide revenues of an entity, rather than from revenue derived from a single underlying project.

Some examples of these include tax-backed and utility-backed revenue bonds or pool of loan assets. In 2014 there were 2,210 of these tax and utility-backed revenue bonds issued, supporting water & sewer, power, public transit, roads and bridges, hospitals and schools and housing and telecommunications<sup>1</sup>. This is compared to only 22 project-backed revenue bonds that were used to finance stadiums and sports complexes last year<sup>2</sup>. Another example of highly rated and liquid revenue bonds are student loan revenue bonds which are backed by a high number of student loans. These bonds typically come to market with at least a 'AA' rating from two nationally recognized rating agencies, and are very liquid in the market. Similarly, the use of broad revenue pledges and obligated groups in some health and education financings derive repayment from all of the revenues of the hospital system or university rather than the limited revenues attributable to the financed project. For example, the new library is repaid from all of the revenues of the university and the new outpatient surgery center is repaid from all of the revenues of the hospital system.

One example of a traditional revenue bond issuer is the Sacramento Municipal Utility District (SMUD), which serves as the electricity provider for Sacramento, CA. SMUD issues revenue bonds to finance power plants, transmission lines and other infrastructure requirements. The repayment of SMUD bonds is guaranteed by a parity-lien pledge of SMUD's system wide revenues, after the payment of operating and maintenance expenses. The SMUD governing board has autonomous rate setting authority, and covenants in its bond indenture to set rates sufficient to pay all debt service obligations. This system-wide revenue pledge is very typical for public power, water and other municipal essential service providers, and as such ensures price stability and liquidity of the revenue bonds issued by these entities during times of fiscal stress.

For example using the 30-day calendar period of April 21 – May 20 2009, during which there was a high level of market volatility, a SMUD revenue bond issued in May of 2008 saw secondary market pricing fluctuate only slightly from 97.57 to 101.213, which is only a 3.7 percent change in market price<sup>3</sup>. This is well below the Federal Reserve's proposed benchmark for Board-regulated institutions, which would

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<sup>1</sup> Thomson Reuters SDC.

<sup>2</sup> Ibid.

<sup>3</sup> Bloomberg Municipal Evaluations.

require that the market price of an investment-grade security being held by the institution declines by no more than 20 percent during a 30 calendar-day period of significant stress.

Our organizations propose that the Federal Reserve classify tax-backed and utility-backed revenue bonds as level 2A or 2B liquid assets under the proposed rule based on high credit quality and low price volatility of these securities.

### **Limitation on the Inclusion of GO Municipal Securities with the Same CUSIP Number**

The proposal's restriction of holdings of an individual CUSIP of a GO municipal security for the purposes of HQLA to no more than 25 percent of the fair value of the aggregate outstanding amount of the individual CUSIP overlooks important characteristics of municipal security issuance practices. Municipal issuers tend to use multiple serial maturities rather than bullet maturities, i.e. principal is paid in each year the bonds are outstanding rather than only at the final maturity. For this reason, a 25-year municipal bond issue often has 25 CUSIPs, not one CUSIP. In addition, constitutional, statutory and technical restrictions may require separate bond series for different purposes, such as new money and refunding issues. To provide a sense of scope, as of July 2015 there are 1,244 individual CUSIPs in the State of Washington's \$18.4 billion portfolio of GO bonds.

However, the number of CUSIPs does not erode the liquidity in a particular credit or negatively impact the price stability of municipal securities. Above certain minimum size thresholds, institutional investors are generally indifferent among individual CUSIPs. Rather they are focused on the issuer's credit and the security's coupon, maturity and call features. For example, a detailed review of trading data from EMMA over the past year demonstrates that State of Washington GO bonds with maturities of approximately ten years, identical 5% coupons and similar call dates – but different CUSIPs – trade at similar prices both in absolute terms and relative to benchmark yield curves (See Appendix A). There are 40 different individual CUSIPs for about \$800 million WA GO bonds maturing in 2030 and another 51 individual CUSIPs for the same credit maturing in 2025. As any single CUSIP comprises a relatively small portion of the outstanding bonds with similar pricing inputs, the sale or all or a large portion of a single CUSIP is unlikely to face liquidity constraints, "move the market" or result in materially adverse pricing for that trade.

Traders and investors can easily price a specific CUSIP relative to trades in other CUSIPs with similar characteristics. The municipal market's institutional and retail investor base are deeply familiar with the sizeable number of CUSIPs involved with a municipal issuer and utilize benchmarks, such as the Muni Market Data-Line high-grade curve, to assess and compare individual CUSIPs of similar maturities and call features of a given issuer. Such benchmarks allow large groups of CUSIPs to be priced quickly and accurately and trade simultaneously as markets rise and fall.

Limiting a Board-regulated institution's holdings of an individual CUSIP of a municipal security for the purposes of HQLA to no more than 25 percent of the fair value of the aggregate outstanding amount of the individual CUSIP would reduce the appetite of these investors to buy municipal securities. For example, the State of Washington recently issued \$1.4 billion in GO bonds in two sales in January and February of this year. The sale included seven separate series of new money and refunding bonds and the competitive sales were spread over two dates because of the overall size. Exactly 100 CUSIPs were created in total for the seven series, and all were general obligation bonds. The largest par amount for an individual CUSIP was approximately \$35 million. Restricting HQLA holdings to 25 percent of the total for this issuance would have meant that the largest holding of a single maturity could be only \$8 million.

Such a restrictive limitation would have the effect of unnecessarily limiting the amount of securities that could qualify for HQLA, as well as dissuading many Board-regulated institutions from buying such a small portion of a municipal securities issuance.

### **Limitation on Inclusion of GO Municipal Securities Based on Average Daily Trading Volume**

We understand the Federal Reserve's concern for the need for HQLAs to retain their liquidity features without a loss of value and to maintain high trading volumes during times of fiscal stress. However, trading volume is not in isolation a reliable indicator of future liquidity for municipal securities. Highly rated municipal securities tend to trade less frequently than many other issuers because these bonds are considered core holdings of large institutional investors. As such, they experience lower trading volumes during more stable financial periods than they do during periods of fiscal stress. During these times municipal securities are typically the first considered for sale because of their attractiveness to potential investors.

As we mentioned in our January 31, 2014 letter to federal regulators regarding the condition that high trading volume is a requirement for HQLA, the municipal market trades as a percentage of the total outstanding market is nearly at the same volume as corporate and GSE bonds, securities classified as HQLA under the 2014 LCR rule. According to SIFMA data<sup>4</sup>, the municipal market trades 0.31 percent of its total outstanding par every day, compared to the corporate bond market trades of 0.20 percent per day and the GSE bond market trades of 0.33 percent per day.

With respect to the Federal Reserve's proposed benchmark for Board-regulated institutions requiring that the market price of an investment-grade security being held by the institution declines by no more than 20 percent during a 30 calendar-day period of significant stress, it is worth noting that the according to the MMA Median 30-year dataset, within a 20-trading day (i.e. one calendar month), the data has not posted a price decline of greater than -20.0 percent. The largest losing period was between September 15 and October 15, 2008; when the data showed a -13.297 percent decline. The price decline was equivalent to a 99 basis point increase in the MMA Median 30-year yield. The largest price gain was 11.49 percent, for a 20-day period ending mid-January 2009. The MMA Median Benchmark represents a survey of leading investment firms who evaluate and provide MMA their yields for maturities for a benchmark AAA state GO curve on a daily basis. A description is found at [www.mma-research.com](http://www.mma-research.com).

Limiting the amount of municipal securities a bank could include as HQLA to two times the average daily trading volume, as measured over the previous four quarters, of all bonds issued by that public sector entity would also unnecessarily limit the amount of securities that could qualify for HQLA.

### **Five Percent Limitation on Amount of GO Municipal Securities**

The five percent limitation on the amount of municipal securities that a Board-regulated institution could include in its HQLA holdings would also needlessly restrict the amount of investment grade municipal securities that can be classified as HQLA, and would further dissuade Board-regulated institutions from holding municipal securities during times of fiscal stress. Again, we believe that such constraints would increase debt issuance costs for state and local governments and PSEs.

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<sup>4</sup> SIFMA's Outstanding U.S. Bond Market Debt.

## **Limitation on Obligations of Financial Sector Entities and Consolidated Subsidiaries**

The proposal's limitation on the exclusion of municipal securities that are obligations of a financial sector entity or a consolidated subsidiary of a financial sector entity is curious, as this would prevent inclusion of investment-grade municipal securities that could otherwise be classified as HQLA solely because the security is insured. Highly liquid, investment grade municipal securities with low price volatility should be classified as HQLA regardless of whether or not they are insured.

Thank you very much for the opportunity to comment on this important rulemaking. Public policy and national interests implemented at the state and local levels through debt financing benefit the country as a whole by ensuring our citizens have essential infrastructure to provide for education, health care, roads, bridges, water delivery systems, transportation systems, public power, affordable housing and public safety. We hope that you will consider this and our comments contained in this letter as you evaluate next steps on this proposal.

Sincerely,

American Hospital Association, Mike Rock, 202-626-2325  
American Public Gas Association, Dave Schryver, 202-464-0835  
American Public Power Association, John Godfrey, 202-467-2929  
Council of Infrastructure Financing Authorities, Rick Farrell, 202-547-1866  
Education Finance Council, Debra Chromy, 202-955-5510  
Government Finance Officers Association, Dustin McDonald, 202-393-0208  
International City/County Management Association, Elizabeth Kellar, 202-962-3611  
International Municipal Lawyers Association, Chuck Thompson, 202-742-1016  
Large Public Power Council, Noreen Roche-Carter, 916-732-6509  
National Association of Counties, Mike Belarmino, 202-942-4254  
National Association of Health and Higher Education Facilities Authorities, Chuck Samuels, 202-434-7211  
National Association of Local Housing Finance Agencies, Jason Boehlert, 202-367-1225  
National Association of State Auditors, Comptrollers and Treasurers, Cornelia Chebinou, 202-624-5451  
National League of Cities, Carolyn Coleman, 202-626-3023  
U.S. Conference of Mayors, Larry Jones, 202-861-6709

Cc: Jacob Lew, Secretary of the Treasury, Chair, Financial Stability Oversight Council  
Robert E. Feldman, Executive Secretary  
Thomas J. Curry, Comptroller of the Currency

**APPENDIX A**

*State of Washington General Obligation Bonds  
Liquidity Analysis: Trading by CUSIP*

July 21, 2015



# State of Washington General Obligation Bonds Liquidity Analysis: Trading by CUSIP

*July 21, 2015*



# Executive Summary

- The State of Washington (the “State”) has prepared additional analysis to address concerns expressed by Federal Reserve Board staff on July 14, 2015 regarding possible “concentration risk” associated with individual municipal bond CUSIPs.
- This data addresses the concern that a secondary market sale of all or a large portion of a single CUSIP could materially and adversely lower the price for that security.
- Key points:
  - *The most critical pricing inputs for valuing all State of Washington general obligation bonds are: maturity, coupon and the call date.*
  - *A detailed review of trading data demonstrates that State of Washington GO bonds with maturities of approximately 10 years, identical 5% coupons and similar call dates – but different CUSIPs - trade at similar prices both in absolute terms and relative to benchmark yield curves.*
  - *Concerns regarding holdings of all or a large portion of an individual CUSIP are not supported by the review of market data.*
- The analysis clearly supports removing the 25% restriction on the proportion of an individual investment grade general obligation bond CUSIP that can be counted as Level 2B HQLA.



# CUSIP Structure of State of Washington General Obligation Debt



# CUSIP Structure of State of Washington GO Debt

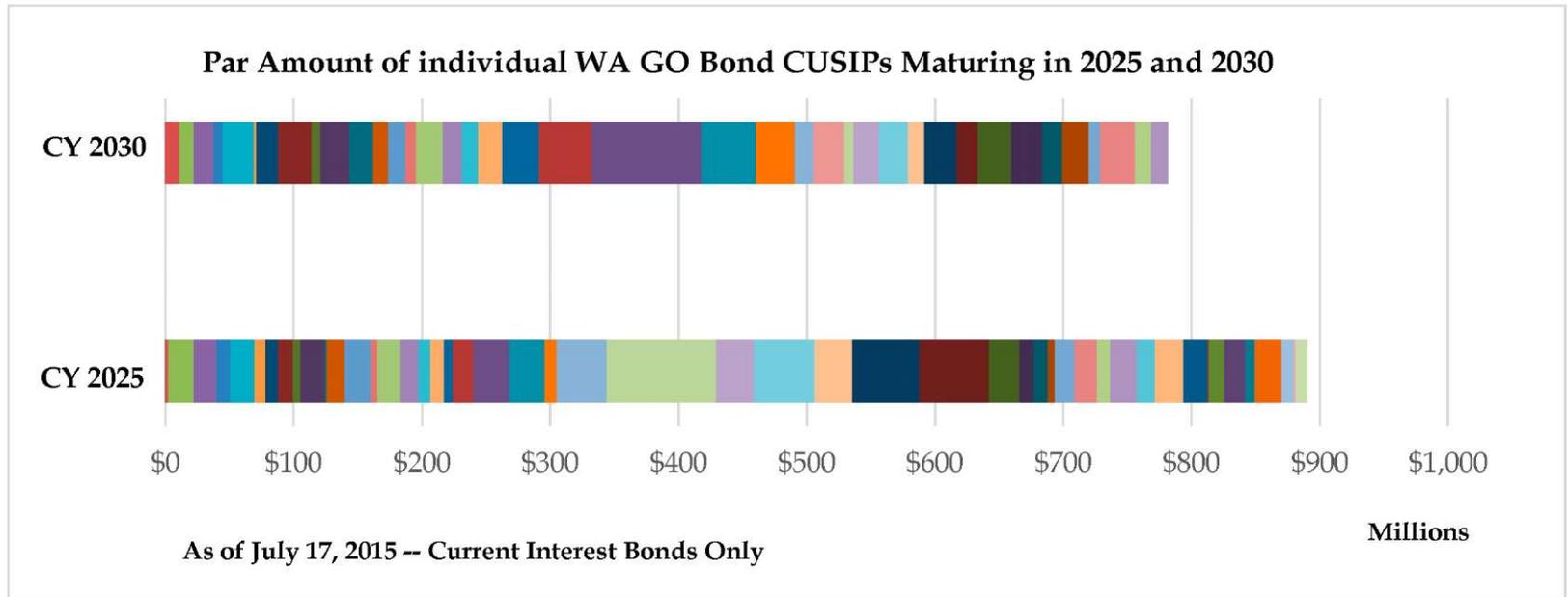
- State of Washington general obligation (WA GO) bonds CUSIP structure:
  - All WA GO Bonds are secured by the full faith, credit and taxing power of the State.
  - Tax-exempt, fixed-rate WA GO bonds include Various Purpose (VPGO) and Motor Vehicle Fuel Tax (MVFT/GO) Bonds which share six 6-digit base CUSIPs.
  - VPGO and MVFT/GO Bonds price identically, in both the primary and secondary markets
- Due to legal, tax and financial management factors, the State structures debt issues with “serial” maturity structures, rather than single “bullet” maturities.

WASHINGTON ST	-REF	R-E	ST	WA	Tax	FED TAX-EXEMPT	Type	COMP
Summary			Maturity	Amt(M)	Coupon	Price/Yield	Concession	CUSIP
Sale Date	01/21/15	Time 10:30	1)	07/15	470.0	5.000	0.300	93974DLH9
Amount	458,760,000.00		2)	07/18	13255.0	5.000	0.810	93974DLJ5
Manager	BANK OF AMERICA MERRILL		3)	07/19	31645.0	5.000	1.000	93974DLK2
Bond Type	GO ULT		4)	07/20	33380.0	5.000	1.200	93974DLL0
Dated Date	02/04/15		5)	07/21	35205.0	5.000	1.460	93974DLM8
1st Coupon	07/01/15		6)	07/22	37125.0	5.000	1.640	93974DLN6
			7)	07/23	21515.0	5.000	1.780	93974DLP1
Rating/Enhancement			8)	07/24	22620.0	5.000	1.900	93974DLQ9
Moody's	Aa1		9)	07/25	23770.0	5.000	1.990	93974DLR7
S&P	AA+		10)	07/26	25000.0	5.000	2.130	93974DLS5
Fitch	AA+		11)	07/27	26280.0	5.000	2.250	93974DLT3
Enhancement			12)	07/28	27630.0	5.000	2.340	93974DLU0
			13)	07/29	29035.0	5.000	2.400	93974DLV8
Schedules			14)	07/30	30530.0	5.000	2.500	93974DLW6
Prem Call			15)	07/31	32095.0	5.000	2.550	93974DLX4
Par Call	01/01/25		16)	07/32	33740.0	5.000	2.600	93974DLY2
			17)	07/33	35465.0	5.000	2.650	93974DLZ9
Other Info								
1st Settle	02/04/15 WI							
Form/Dep	BOOK-ENTRY,DTC							
Price Status	AWARDED							
Notes	DENOMS:- 5M/5M							



# CUSIP Structure of State of Washington GO Debt

- Given the serial structure of State general obligation debt, the State has a large number of individual CUSIPs outstanding
  - As of July 2015: \$18.4 billion WA GO bonds outstanding; 1,244 individual CUSIPs.
- However, many CUSIPs share similar coupons, maturities and call features. For example,
  - 40 different individual CUSIPs for about \$800 million fixed-rate, current interest WA GO bonds maturing in calendar year 2030
  - 51 different individual CUSIPs for about \$900 million fixed-rate, current interest WA GO bonds maturing in calendar year 2025





# CUSIP Trading Analysis



## CUSIP Trading Analysis: Approximately 10-Year Maturity WA GO Bonds

- Using EMMA data, the State analyzed the trades of 25 GO bond CUSIPs with maturities of approximately 10 years and similar pricing inputs for the State's most recent fiscal year (July 1, 2014 to June 30, 2015)
  - Identical credit and security (full faith, credit and taxing power of the State)
  - Maturing in about 10 years (between February 2024 and July 2026)
  - 5.00% coupons
  - Non-callable or first call dates between February 2024 and February 2025
  - Aggregate par amount of \$454,515,000
  - Trade size  $\geq$  \$250,000 to focus on institutional trades
- Largest individual CUSIP par is only 12% of total outstanding "similar" CUSIPs
- Average CUSIP par is only 4% of total outstanding "similar" CUSIPs

CUSIP	Par Amount	Initial Pricing Date	First Settlement Date	Maturity Date	Coupon	Call Date
93974DDH8	\$14,435,000	1/22/2014	2/5/2014	2/1/2025	5.00%	2/1/2024
93974DES3	\$9,085,000	1/22/2014	2/5/2014	2/1/2025	5.00%	2/1/2024
93974DET1	\$9,540,000	1/22/2014	2/5/2014	2/1/2026	5.00%	2/1/2024
93974DGW2	\$54,370,000	6/25/2014	7/9/2014	7/1/2025	5.00%	7/1/2024
93974DGX0	\$37,105,000	6/25/2014	7/9/2014	7/1/2026	5.00%	7/1/2024
93974DLR7	\$23,770,000	1/21/2015	2/4/2015	7/1/2025	5.00%	1/1/2025
93974DLS5	\$25,000,000	1/21/2015	2/4/2015	7/1/2026	5.00%	1/1/2025
93974DPB8	\$11,080,000	2/10/2015	3/4/2015	7/1/2025	5.00%	1/1/2025
93974DPC6	\$11,645,000	2/10/2015	3/4/2015	7/1/2026	5.00%	1/1/2025
93974DPS1	\$11,075,000	2/10/2015	3/4/2015	7/1/2025	5.00%	1/1/2025
93974DPT9	\$11,710,000	2/10/2015	3/4/2015	7/1/2026	5.00%	1/1/2025
93974DPW2	\$19,200,000	2/10/2015	3/4/2015	7/1/2026	5.00%	1/1/2025
93974DKS6	\$11,370,000	1/21/2015	2/4/2015	2/1/2026	5.00%	2/1/2025
93974DML9	\$6,825,000	1/21/2015	2/4/2015	2/1/2026	5.00%	2/1/2025
93974DDG0	\$13,745,000	1/21/2015	2/4/2015	2/1/2024	5.00%	Non-Call
93974DGH5	\$49,550,000	6/25/2014	7/9/2014	7/1/2024	5.00%	Non-Call
93974DGV4	\$51,660,000	6/25/2014	7/9/2014	7/1/2024	5.00%	Non-Call
93974DJL3	\$14,775,000	10/15/2014	11/6/2014	7/1/2024	5.00%	Non-Call
93974DKD9	\$1,600,000	10/15/2014	11/6/2014	7/1/2024	5.00%	Non-Call
93974DKQ0	\$10,310,000	1/21/2015	2/4/2015	2/1/2024	5.00%	Non-Call
93974DKR8	\$10,825,000	1/21/2015	2/4/2015	2/1/2025	5.00%	Non-Call
93974DLQ9	\$22,620,000	1/21/2015	2/4/2015	7/1/2024	5.00%	Non-Call
93974DMJ4	\$6,185,000	1/21/2015	2/4/2015	2/1/2024	5.00%	Non-Call
93974DMK1	\$6,495,000	1/21/2015	2/4/2015	2/1/2025	5.00%	Non-Call
93974DPA0	\$10,540,000	2/10/2015	3/4/2015	7/1/2024	5.00%	Non-Call

\*Analysis based on EMMA's Price Discovery Tool and Trade Monitor functions



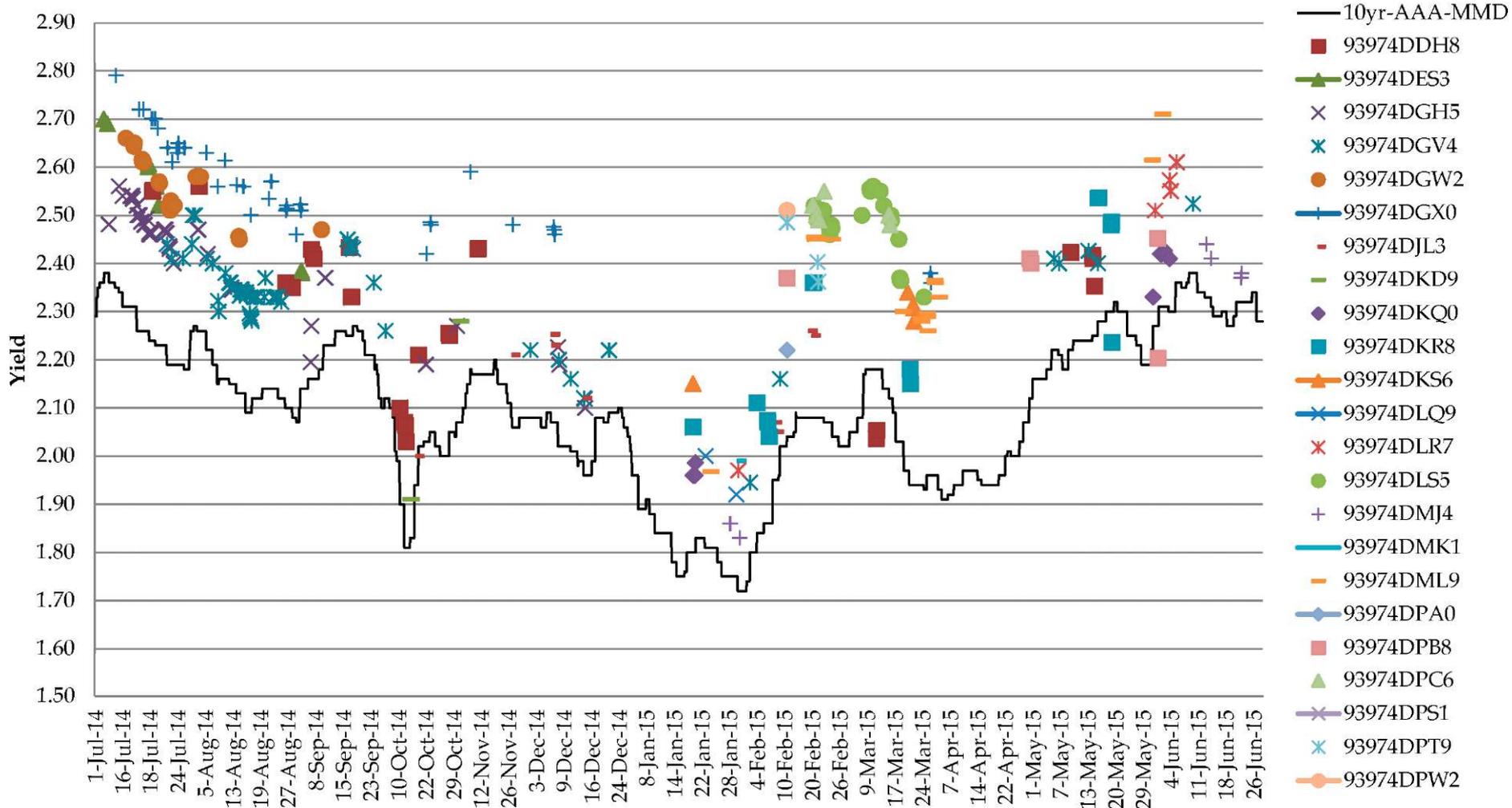
## CUSIP Trading Analysis: Approximately 10-Year Maturity WA GO Bonds

- As shown in the graph on the following page, the trading data clearly show that these 25 CUSIPs for WA GO Bonds with maturities of approximately 10 years, 5% coupons and similar call dates trade at similar absolute prices and at similar spreads to benchmark curves
  - Virtually all pricing differentials on or about the same trading date are explained by differences in maturity or call feature
    - ✓ Longer maturities bear higher yields due to positively sloped yield curve
    - ✓ Approximately 10 bps higher per year from 2024 to 2026
- The relationship to the benchmark yield curve (AAA MMD) is consistent over time.
- Traders and investors can easily price a specific CUSIP relative to trades in other similar CUSIPs
- Investors in a specific CUSIP are able to quickly and accurately evaluate pricing for different CUSIPs with similar pricing inputs (coupons, maturities and call features)



# CUSIP Trading Analysis: Approximately 10-Year Maturity WA GO Bonds

## Yield by CUSIP: July 2014-June 2015 (Trades \$250,000+)





# Conclusion



## Conclusion

- The State of Washington (the “State”) has analyzed recent trade data from EMMA to address concerns expressed by Federal Reserve Board staff on July 14, 2015 regarding possible “concentration risk” associated with individual municipal bond CUSIPs.
- This data addresses the concern that a secondary market sale of all or a large portion of a single CUSIP could materially and adversely lower the price for that security.
- Key points:
  - *The most critical pricing inputs for valuing all State of Washington general obligation bonds are: maturity, coupon and the call date.*
  - *A detailed review of trading data demonstrates that State of Washington GO bonds with maturities of approximately 10 years, identical 5% coupons and similar call dates – but different CUSIPs - trade at similar prices both in absolute terms and relative to benchmark yield curves.*
  - *Concerns regarding holdings of all or a large portion of an individual CUSIP are not supported by the review of market data.*
  - *Any single CUSIP comprises a relatively small portion of the outstanding bonds with similar pricing inputs. For that reason, the sale of all or a large portion of a single CUSIP is unlikely to “move the market” or result in materially adverse pricing for that trade.*
- The analysis clearly supports removing the 25% restriction on the proportion of an individual investment grade general obligation bond CUSIP that can be counted as Level 2B HQLAs.