

## Quarterly Statistical Summaries

2017 Second Quarter: April - June

TABLE OF CONTENTS	PAGE NUMBER
<b>About the Quarterly Statistical Summaries</b>	<b>1</b>
<b>Highlights</b>	<b>2</b>
<b>Municipal Market Trade Summary</b>	
Total Par Amount Traded	3
Total Number of Trades	4
<b>Most Actively Traded Municipal Securities</b>	
Top 50 Most Active Securities by Par Amount	5
Top 50 Most Active Securities by Number of Trades	6
Top 50 Most Active Fixed Rate Securities by Par Amount	7
Top 50 Most Active Fixed Rate Securities by Number of Trades	8
Top 50 Most Active Variable Rate Securities by Par Amount	9
<b>Municipal Market Trades by Trade Type</b>	
Average Daily Par Amount by Trade Size	10
Average Daily Number of Trades by Trade Size	11
<b>Municipal Fixed Rate Securities - Par Amount Traded and Number of Trades</b>	
Summary - Average Daily Par Amount	12
Summary - Average Daily Number of Trades	13
Source of Repayment – Average Daily Par Amount and Number of Trades	14
Tax Status – Average Daily Par Amount and Number of Trades	15
Sector – Average Daily Par Amount and Number of Trades	16
<b>Municipal Variable Rate Securities - Par Amount Traded and Number of Trades</b>	
Variable Rate Demand Obligations Trade Type and Size – Average Daily Par Amount	17
Variable Rate Demand Obligations Trade Type and Size – Average Number of Trades	18
Auction Rate Securities Trade Type and Size – Average Daily Par Amount	19
Auction Rate Securities Trade Type and Size	20
<b>Municipal Market Coupon Distributions</b>	
Customer Trade and Size of Tax Exempt, Fixed Rate Securities	21
<b>Municipal Market Variable Securities Rate Resets</b>	
Variable Rate Demand Obligations Rate Resets by Type	22
Auction Rate Securities Rate Resets by Type	23
<b>Municipal Market Disclosures</b>	
Continuing Disclosure Submissions	24
<b>Definitions of Terms Used</b>	<b>25</b>

## About the Quarterly Statistical Summaries

The MSRB's quarterly statistical summaries include aggregate municipal market information for the most recent quarter and cover different types of municipal issues, trades and interest rate resets. The MSRB publishes this information to regularly update certain data published annually in the MSRB Fact Book with the goal of providing market participants with historical statistics that can be further analyzed, studied and reviewed.

The quarterly summaries reflect aggregate trading activity at the end of each trading day as submitted to the MSRB's Real-Time Transaction Reporting System (RTRS).<sup>1</sup> The MSRB obtains some information on the characteristics of securities traded from Standard & Poor's Financial Services LLC and CUSIP databases furnished by the CUSIP Service Bureau.<sup>2</sup> Additionally, the quarterly data includes the number of interest rate resets for variable rate demand obligations and auction rate securities, as well as the statistics related to continuing disclosure documents received through the MSRB's Electronic Municipal Market Access (EMMA<sup>®</sup>) website.

For additional data on municipal trading activity, interest rate resets, and continuing and primary market disclosures, please see the MSRB's 2016 Fact Book or visit the EMMA website at [emma.msrb.org](http://emma.msrb.org).

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<sup>1</sup> As described in an MSRB Rule G-14 interpretive notice from January 2, 2008 (Reporting of Transactions in Certain Special Trading Situations), some transactions are subject to special conditions indicating that they are not a typical arms-length transaction and possibly a misleading indicator of the market value of a security. These transactions may be excluded from the MSRB's transparency products, including data disseminated through EMMA, but may be included in this report.

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## Highlights

### Municipal Market Trade Summary

Par amount traded in the municipal securities market totaled \$739.8 billion in 2017:Q2, down 9.6 percent from the \$818.2 billion traded in 2016:Q2. Total number of trades increased to 2.53 million trades, up 7.9 percent from the 2.34 million trades in 2016:Q2.

### Most Actively Traded Municipal Securities

A Gulf Opportunity Zone Bond from the Industrial Development Board of the Parish of East Baton Rouge, Louisiana, Inc. was the most actively traded security in terms of par with \$3.4 billion traded in 2017:Q2. A general obligation bond from the Commonwealth of Puerto Rico had the most activity with 1,682 trades in 2017:Q2.

### Municipal Market Trades by Trade Type

Customer buying activity decreased to an average daily par amount of \$6.02 billion in 2017:Q2, compared to \$6.44 billion in the same period last year. The average daily number of trades of customer purchases totaled 15,899 in 2017:Q2, compared to 14,484 trades in 2016:Q2.

A daily average of \$418.6 million, or 6.9 percent of customer purchases of trades of \$100,000 or less, occurred in 2017:Q2, compared to \$381.1 million, or 5.9 percent of all customer purchases, in 2016:Q2.

### Municipal Market Variable Securities Rate Resets

The number of variable rate demand obligations rate resets declined to 106,095 in 2017:Q2, compared to the 120,724 rate resets in 2016:Q2.

The number of auction rate securities rate resets totaled 1,879 in 2017:Q2 compared to 2,190 resets in 2016:Q2.

### Municipal Market Disclosures

The number of continuing disclosure documents received by the MSRB totaled 38,243 in 2017:Q2, compared to 39,469 documents in the same period of 2016.

## Municipal Market Trade Summary

### Transaction Summary

Total par amount traded in \$ millions

	2017:Q2
<b>Total</b>	<b>739,843.9</b>

#### By Trade Type

Customer Bought	379,550.6
Customer Sold	229,904.7
Inter-Dealer	130,388.6

#### By Coupon Type

Fixed Rate	435,085.6
Variable Rate	236,318.2
Zero Coupon	24,781.9
Other <sup>1</sup>	43,658.3

#### By Source of Repayment

General Obligation	194,308.3
Revenue	479,640.5
Double Barrel	16,926.8
Other <sup>1</sup>	48,968.2

#### By Tax Status

Tax Exempt	624,279.9
Taxable	67,784.4
AMT	42,376.2
Other <sup>1</sup>	5,403.4

<sup>1</sup> Includes municipal commercial paper and issues that could not be categorized based on available data.

## Municipal Market Trade Summary

### Transaction Summary

Total number of trades

	<b>2017:Q2</b>
<b>Total</b>	<b>2,527,948</b>

#### By Trade Type

Customer Bought	1,001,639
Customer Sold	545,711
Inter-Dealer	980,598

#### By Coupon Type

Fixed Rate	2,378,490
Variable	68,198
Zero Coupon	77,168
Other <sup>1</sup>	4,092

#### By Source of Repayment

General Obligation	938,445
Revenue	1,500,949
Double Barrel	84,051
Other <sup>1</sup>	4,503

#### By Tax Status

Tax Exempt	2,320,817
Taxable	170,573
AMT	35,985
Other <sup>1</sup>	573

<sup>1</sup> Includes municipal commercial paper and issues that could not be categorized based on available data.

## Most Actively Traded Municipal Securities

### Top 50 Most Active Securities, 2017:Q2

By par amount

Rank	CUSIP <sup>1</sup>	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	-	8/1/2035	3,406.8	166
2	74529JAP0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	8/1/2054	2,300.2	263
3	402207AD6	GULF COAST INDL DEV AUTH TEX REV	-	11/1/2041	1,866.0	262
4	71884SAA8	PHOENIX ARIZ INDL DEV AUTH HEALTH CARE FACS REV	-	11/15/2052	1,753.7	105
5	13063C8Q6	CALIFORNIA ST	3.50	8/1/2027	1,586.2	606
6	130534XA3	CALIFORNIA POLLUTN CTL FING AUTH POLLUTN CTL REV	-	11/1/2026	1,526.9	159
7	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	12/1/2030	1,521.4	105
8	16876QBL2	CHILDRENS TR FD P R TOB SETTLEMENT REV	-	5/15/2057	1,481.0	47
9	533485BD9	LINCOLN CNTY WYO POLLUTN CTL REV	-	10/1/2044	1,319.2	50
10	13032UMN5	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	11/1/2044	1,281.0	540
11	533485BB3	LINCOLN CNTY WYO POLLUTN CTL REV	-	10/1/2044	1,271.2	68
12	452151LF8	ILLINOIS ST	5.10	6/1/2033	1,262.2	1,246
13	57582RLJ3	MASSACHUSETTS ST	4.00	9/1/2042	1,261.7	164
14	548351AC9	LOWER NECHES VALLEY AUTH TEX INDL DEV CORP REV	-	11/1/2038	1,237.2	130
15	643154DF1	NEW CANEY TEX INDPT SCH DIST	5.00	2/15/2047	1,163.2	119
16	54834RAC3	LOWER NECHES VALLEY AUTH TEX INDL DEV CORP EXEMPT FACS REV	-	2/1/2031	1,083.6	44
17	13062RG77	CALIFORNIA ST	-	5/1/2040	1,043.2	106
18	544351LB3	LOS ANGELES CALIF	5.00	6/28/2018	1,034.7	255
19	74926YY96	RBC MUN PRODS INC TR VARIOUS STS	-	12/17/2018	997.8	28
20	91425MDV6	UNIVERSITY DEL REV	-	11/1/2037	982.3	41
21	64966LCJ8	NEW YORK N Y	-	8/1/2038	980.3	194
22	64983M4P0	NEW YORK ST DORM AUTH REVS ST SUPPORTED DEBT	-	7/1/2031	979.5	113
23	130923BP9	CALIFORNIA STATEWIDE FING AUTH TOBACCO SETTLEMENT	-	6/1/2055	955.7	9
24	57582RMY9	MASSACHUSETTS ST	5.00	4/1/2047	953.1	223
25	544657HU6	LOS ANGELES CNTY CALIF	5.00	6/29/2018	931.4	304
26	01170PBX3	ALASKA HSG FIN CORP HOME MTG REV	-	12/1/2041	918.3	48
27	573202AY4	MARTIN CNTY FLA POLLUTN CTL REV	-	7/15/2022	890.9	134
28	64971QYH0	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	8/1/2039	884.6	136
29	8827236Y0	TEXAS ST	5.00	10/1/2030	873.4	52
30	13063A5Y6	CALIFORNIA ST	-	5/1/2034	861.5	44
31	91412GU94	UNIVERSITY CALIF REVS	3.06	7/1/2025	837.6	141
32	57586CV69	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	-	12/1/2037	823.4	110
33	64971WE63	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	2/1/2045	818.1	214
34	13032UMR6	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	11/1/2027	802.1	269
35	235035BJ0	DALLAS-FORT WORTH TEX INTL ARPT FAC IMPT CORP REV	-	5/1/2032	780.3	67
36	821697L23	SHELBY CNTY TENN HEALTH EDL & HSG FACS BRD REV	-	6/1/2042	779.7	58
37	45734TAH7	INLAND EMPIRE TOBACCO SECURITIZATION AUTH CALIF TOB SETTLEMENT REV	-	6/1/2057	740.0	4
38	13063BFR8	CALIFORNIA ST	7.63	3/1/2040	728.2	158
39	594751AM1	MICHIGAN TOB SETTLEMENT FIN AUTH TOB SETTLEMENT ASSET BACKED REV	-	6/1/2058	723.5	17
40	89602NCG7	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	-	11/1/2032	713.6	190
41	735222AH4	PORT PORT ARTHUR TEX NAV DIST POLLUTN CTL REV	-	10/1/2024	712.4	26
42	947648CF6	WEBER CNTY UTAH HOSP REV	-	2/15/2035	694.6	69
43	45734TAG9	INLAND EMPIRE TOBACCO SECURITIZATION AUTH CALIF TOB SETTLEMENT REV	-	6/1/2057	686.9	6
44	45203HYZ9	ILLINOIS FIN AUTH REV	-	12/1/2034	686.6	37
45	544351KJ7	LOS ANGELES CALIF	3.00	6/29/2017	685.8	207
46	60528ACA0	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	11/1/2035	679.1	78
47	903592AQ6	UINTA CNTY WYO POLLUTION CTL REV	-	8/15/2020	676.0	109
48	45200F6J3	ILLINOIS FIN AUTH REV	-	8/1/2044	675.9	55
49	130534XX3	CALIFORNIA POLLUTN CTL FING AUTH POLLUTN CTL REV	-	11/1/2026	673.6	80
50	467229AF7	JACKSON CNTY MISS PORT FAC REV	-	6/1/2023	658.5	121

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## Most Actively Traded Municipal Securities

### Top 50 Most Active Securities, 2017:Q2

By number of trades

Rank	CUSIP <sup>1</sup>	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74514LB89	PUERTO RICO COMWLTH	5.00	7/1/2041	255.2	1,682
2	44420RBF6	HUDSON YDS INFRASTRUCTURE CORP N Y SECOND INDENTURE REV	4.00	2/15/2044	573.0	1,652
3	20772J6W7	CONNECTICUT ST	4.00	4/15/2037	156.1	1,356
4	745160RC7	PUERTO RICO COMWLTH AQUEDUCT & SWR AUTH REV	5.25	7/1/2042	323.3	1,312
5	452151LF8	ILLINOIS ST	5.10	6/1/2033	1,262.2	1,246
6	59447TMQ3	MICHIGAN FIN AUTH REV	4.00	11/15/2046	125.2	1,055
7	20772J6R8	CONNECTICUT ST	3.50	4/15/2031	81.0	1,053
8	49126KKG5	KENTUCKY ECONOMIC DEV FIN AUTH HOSP REV	4.00	6/1/2045	162.2	1,027
9	368497HQ9	GEISINGER AUTH PA HEALTH SYS REV	4.00	2/15/2047	354.8	1,011
10	745235R37	PUERTO RICO PUB BLDGS AUTH REV GTD	5.25	7/1/2042	130.7	1,005
11	64972GMU5	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	3.00	6/15/2046	72.0	984
12	64971W4W7	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	3.50	2/1/2038	131.0	915
13	407272V59	HAMILTON CNTY OHIO HOSP FACS REV	4.25	8/15/2047	94.3	897
14	5742182R3	MARYLAND ST HEALTH & HIGHER EDL FACS AUTH REV	4.00	5/15/2047	264.1	891
15	745190DH8	PUERTO RICO COMWLTH HWY & TRANSN AUTH TRANSN REV	4.75	7/1/2038	50.0	858
16	902562CK1	UAB MEDICINE FIN AUTH ALA REV	4.00	9/1/2047	125.1	841
17	74514LB63	PUERTO RICO COMWLTH	5.13	7/1/2037	95.4	799
18	556589HJ1	MADISON ALA WTR & WASTEWTR BRD WTR & SWR REV	3.75	12/1/2047	72.1	770
19	59259N7F4	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	3.13	11/15/2033	114.6	768
20	373385AS2	GEORGIA ST	3.00	2/1/2034	75.2	750
21	6461396W0	NEW JERSEY ST TPK AUTH TPK REV	3.50	1/1/2036	71.9	745
22	745160QC8	PUERTO RICO COMWLTH AQUEDUCT & SWR AUTH REV	5.13	7/1/2047	65.0	728
23	645790KJ4	NEW JERSEY HEALTH CARE FACS FING AUTH REV	4.00	7/1/2052	87.1	727
24	646136XT3	NEW JERSEY ST TRANSN TR FD AUTH	6.10	12/15/2028	100.2	715
25	452152KQ3	ILLINOIS ST	5.75	1/1/2037	36.1	699
26	64971W7F1	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	3.25	5/1/2043	97.9	697
27	44420PAC8	HUDSON YDS INFRASTRUCTURE CORP N Y REV	5.00	2/15/2047	51.2	690
28	44420PAA2	HUDSON YDS INFRASTRUCTURE CORP N Y REV	4.50	2/15/2047	102.0	668
29	74514LD20	PUERTO RICO COMWLTH	5.00	7/1/2035	73.4	667
30	546399CM6	LOUISIANA PUB FACS AUTH REV	4.00	5/15/2042	217.2	665
31	650010AD3	NEW YORK ST TWY AUTH GEN REV JR INDBT OBLIGS	5.00	5/1/2019	246.8	644
32	44420RBB5	HUDSON YDS INFRASTRUCTURE CORP N Y SECOND INDENTURE REV	3.50	2/15/2038	84.3	636
33	647370HW8	NEW MEXICO ST HOSP EQUIP LN COUNCIL HOSP REV	4.00	8/1/2046	82.4	633
34	64971W5D8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	3.63	2/1/2045	95.1	630
35	646136U66	NEW JERSEY ST TRANSN TR FD AUTH	4.25	6/15/2044	21.8	630
36	645790KH8	NEW JERSEY HEALTH CARE FACS FING AUTH REV	4.00	7/1/2047	78.1	624
37	59447TMP5	MICHIGAN FIN AUTH REV	3.25	11/15/2042	44.7	622
38	452152BM2	ILLINOIS ST	6.63	2/1/2035	116.1	618
39	74529JAC9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	6.05	8/1/2036	278.7	614
40	837151JG5	SOUTH CAROLINA ST PUB SVC AUTH REV	5.00	12/1/2048	60.9	607
41	13063C8Q6	CALIFORNIA ST	3.50	8/1/2027	1,586.2	606
42	245913MM7	DELAWARE CNTY PA AUTH REV	4.00	7/1/2037	46.6	603
43	74526QKX9	PUERTO RICO ELEC PWR AUTH PWR REV	5.00	7/1/2037	41.5	603
44	13032UNH7	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	8/15/2049	123.7	590
45	745160RR4	PUERTO RICO COMWLTH AQUEDUCT & SWR AUTH REV	5.00	7/1/2033	210.9	579
46	6.4614E+36	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/2042	40.4	565
47	796334AS9	SAN ANTONIO TEX PUB FACS CORP LEASE REV	4.00	9/15/2042	187.5	561
48	51856ACR4	LAUDERHILL FLA	3.75	1/1/2042	54.3	559
49	902562BX4	UAB MEDICINE FIN AUTH ALA REV	3.75	9/1/2042	80.0	557
50	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/2029	317.5	556

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## Most Actively Traded Municipal Securities

### Top 50 Most Active Fixed Rate<sup>1</sup> Securities, 2017:Q2

By par amount

Rank	CUSIP <sup>2</sup>	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	13063C8Q6	CALIFORNIA ST	3.50	8/1/2027	1,586.2	606
2	13032UMN5	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	11/1/2044	1,281.0	540
3	452151LF8	ILLINOIS ST	5.10	6/1/2033	1,262.2	1,246
4	57582RLJ3	MASSACHUSETTS ST	4.00	9/1/2042	1,261.7	164
5	643154DF1	NEW CANEY TEX INDPT SCH DIST	5.00	2/15/2047	1,163.2	119
6	544351LB3	LOS ANGELES CALIF	5.00	6/28/2018	1,034.7	255
7	57582RMY9	MASSACHUSETTS ST	5.00	4/1/2047	953.1	223
8	544657HU6	LOS ANGELES CNTY CALIF	5.00	6/29/2018	931.4	304
9	8827236Y0	TEXAS ST	5.00	10/1/2030	873.4	52
10	91412GU94	UNIVERSITY CALIF REVS	3.06	7/1/2025	837.6	141
11	13032UMR6	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	11/1/2027	802.1	269
12	13063BFR8	CALIFORNIA ST	7.63	3/1/2040	728.2	158
13	544351KJ7	LOS ANGELES CALIF	3.00	6/29/2017	685.8	207
14	64971W5B2	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	5.00	2/1/2043	651.9	297
15	60636APP2	MISSOURI ST HEALTH & EDL FACS AUTH EDL FACS REV	3.65	8/15/2057	638.1	99
16	74446HAD1	PUBLIC FIN AUTH WIS LTD OBLIG PILOT REV	7.00	12/1/2050	628.8	69
17	57582RNF9	MASSACHUSETTS ST	5.00	4/1/2047	625.3	45
18	13063DAD0	CALIFORNIA ST	2.37	4/1/2022	595.3	243
19	44420RBF6	HUDSON YDS INFRASTRUCTURE CORP N Y SECOND INDENTURE REV	4.00	2/15/2044	573.0	1,652
20	977100GH3	WISCONSIN ST GEN FD ANNUAL APPROPRIATION REV	3.15	5/1/2027	572.6	223
21	44420RBE9	HUDSON YDS INFRASTRUCTURE CORP N Y SECOND INDENTURE REV	5.00	2/15/2042	562.2	223
22	13063A5G5	CALIFORNIA ST	7.55	4/1/2039	534.9	535
23	544525WJ3	LOS ANGELES CALIF DEPT WTR & PWR WTRWKS REV	5.00	7/1/2044	527.0	116
24	915217WT6	UNIVERSITY VA UNIV REVS	5.00	4/1/2044	522.5	48
25	73358WF82	PORT AUTH N Y & N J	4.23	10/15/2057	522.5	84
26	13063A7D0	CALIFORNIA ST	7.30	10/1/2039	514.3	175
27	341271AB0	FLORIDA ST BRD ADMIN FIN CORP REV	2.64	7/1/2021	512.4	354
28	13063C8R4	CALIFORNIA ST	5.00	8/1/2028	507.3	162
29	451434BX1	IDAHO ST	4.00	6/29/2018	500.8	51
30	118217AU2	BUCKEYE OHIO TOB SETTLEMENT FING AUTH	5.88	6/1/2047	493.7	422
31	915217WU3	UNIVERSITY VA UNIV REVS	5.00	4/1/2046	483.2	58
32	13063C8T0	CALIFORNIA ST	5.00	8/1/2030	474.3	118
33	5446465P3	LOS ANGELES CALIF UNI SCH DIST	5.00	7/1/2026	468.5	160
34	13032UMP0	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	11/1/2047	456.9	119
35	769110CR6	RIVERSIDE CNTY CALIF	2.00	6/29/2018	390.8	138
36	888808DF6	TOBACCO SETTLEMENT FING CORP N J	5.00	6/1/2041	382.4	459
37	74514LE86	PUERTO RICO COMWLTH	8.00	7/1/2035	373.9	295
38	2322655V6	CUYAHOGA CNTY OHIO HOSP REV	5.50	2/15/2057	362.3	124
39	13063A4Y7	CALIFORNIA ST	6.00	4/1/2038	357.9	364
40	368497HQ9	GEISINGER AUTH PA HEALTH SYS REV	4.00	2/15/2047	354.8	1,011
41	24916PGB7	DENVER COLO CITY & CNTY BRD WTR COMMRS WTR REV	5.00	9/15/2047	352.2	53
42	8827236V6	TEXAS ST	5.00	10/1/2033	343.3	70
43	13066YTZ2	CALIFORNIA ST DEPT WTR RES PWR SUPPLY REV	2.00	5/1/2022	340.1	49
44	59259N8M8	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	5.25	11/15/2057	340.0	94
45	6500354S4	NEW YORK ST URBAN DEV CORP REV	2.10	3/15/2022	339.4	11
46	13032UMM7	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	11/1/2038	333.8	290
47	57582RMV5	MASSACHUSETTS ST	5.00	4/1/2042	327.2	132
48	745160RC7	PUERTO RICO COMWLTH AQUEDUCT & SWR AUTH REV	5.25	7/1/2042	323.3	1,312
49	64986DDZ5	NEW YORK ST ENVIRONMENTAL FACS CORP ST CLEAN WTR & DRINKING WTR REV	5.00	6/15/2046	320.7	70
50	20772GF45	CONNECTICUT ST	5.85	3/15/2032	319.0	89

<sup>1</sup> Includes zero-coupon securities

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## Most Actively Traded Municipal Securities

### Top 50 Most Active Fixed Rate<sup>1</sup> Securities, 2017:Q2

By number of trades

Rank	CUSIP <sup>2</sup>	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74514LB89	PUERTO RICO COMWLTH	5.00	7/1/2041	255.2	1,682
2	44420RBF6	HUDSON YDS INFRASTRUCTURE CORP N Y SECOND INDENTURE REV	4.00	2/15/2044	573.0	1,652
3	20772J6W7	CONNECTICUT ST	4.00	4/15/2037	156.1	1,356
4	745160RC7	PUERTO RICO COMWLTH AQUEDUCT & SWR AUTH REV	5.25	7/1/2042	323.3	1,312
5	452151LF8	ILLINOIS ST	5.10	6/1/2033	1,262.2	1,246
6	59447TMQ3	MICHIGAN FIN AUTH REV	4.00	11/15/2046	125.2	1,055
7	20772J6R8	CONNECTICUT ST	3.50	4/15/2031	81.0	1,053
8	49126KKG5	KENTUCKY ECONOMIC DEV FIN AUTH HOSP REV	4.00	6/1/2045	162.2	1,027
9	368497HQ9	GEISINGER AUTH PA HEALTH SYS REV	4.00	2/15/2047	354.8	1,011
10	745235R37	PUERTO RICO PUB BLDGS AUTH REV GTD	5.25	7/1/2042	130.7	1,005
11	64972GMU5	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	3.00	6/15/2046	72.0	984
12	64971W4W7	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	3.50	2/1/2038	131.0	915
13	407272V59	HAMILTON CNTY OHIO HOSP FACS REV	4.25	8/15/2047	94.3	897
14	5742182R3	MARYLAND ST HEALTH & HIGHER EDL FACS AUTH REV	4.00	5/15/2047	264.1	891
15	745190DH8	PUERTO RICO COMWLTH HWY & TRANSN AUTH TRANSN REV	4.75	7/1/2038	50.0	858
16	902562CK1	UAB MEDICINE FIN AUTH ALA REV	4.00	9/1/2047	125.1	841
17	74514LB63	PUERTO RICO COMWLTH	5.13	7/1/2037	95.4	799
18	556589HJ1	MADISON ALA WTR & WASTE WTR BRD WTR & SWR REV	3.75	12/1/2047	72.1	770
19	59259N7F4	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	3.13	11/15/2033	114.6	768
20	373385AS2	GEORGIA ST	3.00	2/1/2034	75.2	750
21	6461396W0	NEW JERSEY ST TPK AUTH TPK REV	3.50	1/1/2036	71.9	745
22	745160QC8	PUERTO RICO COMWLTH AQUEDUCT & SWR AUTH REV	5.13	7/1/2047	65.0	728
23	645790KJ4	NEW JERSEY HEALTH CARE FACS FING AUTH REV	4.00	7/1/2052	87.1	727
24	646136XT3	NEW JERSEY ST TRANSN TR FD AUTH	6.10	12/15/2028	100.2	715
25	452152KQ3	ILLINOIS ST	5.75	1/1/2037	36.1	699
26	64971W7F1	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	3.25	5/1/2043	97.9	697
27	44420PAC8	HUDSON YDS INFRASTRUCTURE CORP N Y REV	5.00	2/15/2047	51.2	690
28	44420PAA2	HUDSON YDS INFRASTRUCTURE CORP N Y REV	4.50	2/15/2047	102.0	668
29	74514LD20	PUERTO RICO COMWLTH	5.00	7/1/2035	73.4	667
30	546399CM6	LOUISIANA PUB FACS AUTH REV	4.00	5/15/2042	217.2	665
31	650010AD3	NEW YORK ST TWY AUTH GEN REV JR INDBT OBLIGS	5.00	5/1/2019	246.8	644
32	44420RBB5	HUDSON YDS INFRASTRUCTURE CORP N Y SECOND INDENTURE REV	3.50	2/15/2038	84.3	636
33	647370HW8	NEW MEXICO ST HOSP EQUIP LN COUNCIL HOSP REV	4.00	8/1/2046	82.4	633
34	64971W5D8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	3.63	2/1/2045	95.1	630
35	646136U66	NEW JERSEY ST TRANSN TR FD AUTH	4.25	6/15/2044	21.8	630
36	645790KH8	NEW JERSEY HEALTH CARE FACS FING AUTH REV	4.00	7/1/2047	78.1	624
37	59447TMP5	MICHIGAN FIN AUTH REV	3.25	11/15/2042	44.7	622
38	452152BM2	ILLINOIS ST	6.63	2/1/2035	116.1	618
39	74529JAC9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	6.05	8/1/2036	278.7	614
40	837151JG5	SOUTH CAROLINA ST PUB SVC AUTH REV	5.00	12/1/2048	60.9	607
41	13063C8Q6	CALIFORNIA ST	3.50	8/1/2027	1,586.2	606
42	245913MM7	DELAWARE CNTY PA AUTH REV	4.00	7/1/2037	46.6	603
43	74526QKX9	PUERTO RICO ELEC PWR AUTH PWR REV	5.00	7/1/2037	41.5	603
44	13032UNH7	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	8/15/2049	123.7	590
45	745160RR4	PUERTO RICO COMWLTH AQUEDUCT & SWR AUTH REV	5.00	7/1/2033	210.9	579
46	6.4614E+36	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/2042	40.4	565
47	796334AS9	SAN ANTONIO TEX PUB FACS CORP LEASE REV	4.00	9/15/2042	187.5	561
48	51856ACR4	LAUDERHILL FLA	3.75	1/1/2042	54.3	559
49	902562BX4	UAB MEDICINE FIN AUTH ALA REV	3.75	9/1/2042	80.0	557
50	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/2029	317.5	556

<sup>1</sup> Includes zero-coupon securities

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## Most Actively Traded Municipal Securities

### Top 50 Most Active Variable Rate Securities, 2017:Q2

By par amount

Rank	CUSIP <sup>1</sup>	Issuer Name	Maturity	Par Amount (\$ Millions)	Number of Trades
1	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	8/1/2035	3,406.8	166
2	402207AD6	GULF COAST INDL DEV AUTH TEX REV	11/1/2041	1,866.0	262
3	71884SAA8	PHOENIX ARIZ INDL DEV AUTH HEALTH CARE FACS REV	11/15/2052	1,753.7	105
4	130534XA3	CALIFORNIA POLLUTN CTL FING AUTH POLLUTN CTL REV	11/1/2026	1,526.9	159
5	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/2030	1,521.4	105
6	533485BD9	LINCOLN CNTY WYO POLLUTN CTL REV	10/1/2044	1,319.2	50
7	533485BB3	LINCOLN CNTY WYO POLLUTN CTL REV	10/1/2044	1,271.2	68
8	548351AC9	LOWER NECHES VALLEY AUTH TEX INDL DEV CORP REV	11/1/2038	1,237.2	130
9	54834RAC3	LOWER NECHES VALLEY AUTH TEX INDL DEV CORP EXEMPT FACS REV	2/1/2031	1,083.6	44
10	13062RG77	CALIFORNIA ST	5/1/2040	1,043.2	106
11	74926YY96	RBC MUN PRODS INC TR VARIOUS STS	12/17/2018	997.8	28
12	91425MDV6	UNIVERSITY DEL REV	11/1/2037	982.3	41
13	64966LCJ8	NEW YORK N Y	8/1/2038	980.3	194
14	64983M4P0	NEW YORK ST DORM AUTH REVS ST SUPPORTED DEBT	7/1/2031	979.5	113
15	01170PBX3	ALASKA HSG FIN CORP HOME MTG REV	12/1/2041	918.3	48
16	573202AY4	MARTIN CNTY FLA POLLUTN CTL REV	7/15/2022	890.9	134
17	64971QYH0	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	8/1/2039	884.6	136
18	13063A5Y6	CALIFORNIA ST	5/1/2034	861.5	44
19	57586CV69	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	12/1/2037	823.4	110
20	64971WE63	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2/1/2045	818.1	214
21	235035BJ0	DALLAS-FORT WORTH TEX INTL ARPT FAC IMPT CORP REV	5/1/2032	780.3	67
22	821697L23	SHELBY CNTY TENN HEALTH EDL & HSG FACS BRD REV	6/1/2042	779.7	58
23	89602NCG7	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	11/1/2032	713.6	190
24	735222AH4	PORT PORT ARTHUR TEX NAV DIST POLLUTN CTL REV	10/1/2024	712.4	26
25	947648CF6	WEBER CNTY UTAH HOSP REV	2/15/2035	694.6	69
26	45203HYZ9	ILLINOIS FIN AUTH REV	12/1/2034	686.6	37
27	60528ACA0	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/2035	679.1	78
28	903592AQ6	UINTA CNTY WYO POLLUTION CTL REV	8/15/2020	676.0	109
29	45200F6J3	ILLINOIS FIN AUTH REV	8/1/2044	675.9	55
30	130534XX3	CALIFORNIA POLLUTN CTL FING AUTH POLLUTN CTL REV	11/1/2026	673.6	80
31	467229AF7	JACKSON CNTY MISS PORT FAC REV	6/1/2023	658.5	121
32	677632NX5	OHIO ST UNIV GEN RCPTS	6/1/2035	657.9	48
33	13063BCH3	CALIFORNIA ST	5/1/2033	650.3	74
34	60528ACC6	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/2035	647.9	91
35	544495DH4	LOS ANGELES CALIF DEPT WTR & PWR REV	7/1/2034	640.5	330
36	60528ACJ1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/2035	638.0	69
37	41315RGV0	HARRIS CNTY TEX HEALTH FACS DEV CORP REV	12/1/2041	635.1	167
38	546598AA1	LOUISVILLE & JEFFERSON CNTY KY REGL ARPT AUTH SPL FACS REV	1/1/2029	628.4	32
39	270777AD7	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	12/1/2040	615.9	77
40	64966KTD5	NEW YORK N Y	3/1/2042	615.6	53
41	915137T78	UNIVERSITY TEX UNIV REVS	8/1/2033	615.2	50
42	548351AE5	LOWER NECHES VALLEY AUTH TEX INDL DEV CORP REV	5/1/2046	606.7	128
43	64966J5Y8	NEW YORK N Y	10/1/2040	605.9	121
44	93978HDB8	WASHINGTON ST HEALTH CARE FACS AUTH REV	8/15/2041	605.7	86
45	594698DF6	MICHIGAN ST STRATEGIC FD LTD OBLIG REV	12/1/2042	604.0	33
46	64578EJG3	NEW JERSEY ECONOMIC DEV AUTH ST LEASE REV	6/15/2043	600.0	13
47	64970KYY7	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/2035	599.9	111
48	130534XL9	CALIFORNIA POLLUTN CTL FING AUTH POLLUTN CTL REV	11/1/2026	598.6	79
49	709224VP1	PENNSYLVANIA ST TPK COMMN TPK REV	12/1/2041	597.6	15
50	59259Y7B9	METROPOLITAN TRANSN AUTH N Y REV	11/15/2050	595.6	77

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## Municipal Market Trades by Trade Type

### Trade Type and Size

Average daily par amount in \$ millions

2017:Q2	
<b>All Trades</b>	
<b>Total</b>	<b>11,743.6</b>
0 - \$25,000	313.2
\$25,001 - \$50,000	331.6
\$50,001 - \$75,000	127.4
\$75,001 - \$100,000	288.4
\$100,001 - \$500,000	1,277.3
\$500,001 - \$1,000,000	810.6
\$1,000,001 - \$2,000,000	902.4
More than \$2,000,000	7,692.6
<b>Customer Bought</b>	
<b>Total</b>	<b>6,024.6</b>
0 - \$25,000	122.1
\$25,001 - \$50,000	132.3
\$50,001 - \$75,000	49.2
\$75,001 - \$100,000	115.0
\$100,001 - \$500,000	508.4
\$500,001 - \$1,000,000	356.6
\$1,000,001 - \$2,000,000	428.0
More than \$2,000,000	4,313.1
<b>Customer Sold</b>	
<b>Total</b>	<b>3,649.3</b>
0 - \$25,000	66.4
\$25,001 - \$50,000	65.6
\$50,001 - \$75,000	27.9
\$75,001 - \$100,000	60.9
\$100,001 - \$500,000	267.7
\$500,001 - \$1,000,000	186.1
\$1,000,001 - \$2,000,000	243.7
More than \$2,000,000	2,731.0
<b>Inter-Dealer</b>	
<b>Total</b>	<b>2,069.7</b>
0 - \$25,000	124.7
\$25,001 - \$50,000	133.8
\$50,001 - \$75,000	50.3
\$75,001 - \$100,000	112.5
\$100,001 - \$500,000	501.2
\$500,001 - \$1,000,000	268.0
\$1,000,001 - \$2,000,000	230.7
More than \$2,000,000	648.5

## Municipal Market Trades by Trade Type

### Trade Type and Size

Average daily number of trades

#### 2017:Q2

All Trades	
<b>Total</b>	<b>40,126</b>
0 - \$25,000	19,748
\$25,001 - \$50,000	7,830
\$50,001 - \$75,000	1,910
\$75,001 - \$100,000	2,966
\$100,001 - \$500,000	5,126
\$500,001 - \$1,000,000	1,022
\$1,000,001 - \$2,000,000	597
More than \$2,000,000	927

Customer Bought	
<b>Total</b>	<b>15,899</b>
0 - \$25,000	7,611
\$25,001 - \$50,000	3,113
\$50,001 - \$75,000	735
\$75,001 - \$100,000	1,180
\$100,001 - \$500,000	2,038
\$500,001 - \$1,000,000	446
\$1,000,001 - \$2,000,000	281
More than \$2,000,000	495

Customer Sold	
<b>Total</b>	<b>8,662</b>
0 - \$25,000	4,291
\$25,001 - \$50,000	1,557
\$50,001 - \$75,000	417
\$75,001 - \$100,000	626
\$100,001 - \$500,000	1,077
\$500,001 - \$1,000,000	231
\$1,000,001 - \$2,000,000	160
More than \$2,000,000	303

Inter-Dealer	
<b>Total</b>	<b>15,565</b>
0 - \$25,000	7,847
\$25,001 - \$50,000	3,159
\$50,001 - \$75,000	758
\$75,001 - \$100,000	1,160
\$100,001 - \$500,000	2,011
\$500,001 - \$1,000,000	345
\$1,000,001 - \$2,000,000	157
More than \$2,000,000	129

## Municipal Fixed Rate Securities - Par Amount Traded and Number of Trades

### Transaction Summary - Fixed Rate Securities

Average daily par amount in \$ millions

2017:Q2	
<b>Fixed Rate</b>	
<b>Total</b>	<b>6,906.1</b>
0 - \$25,000	303.6
\$25,001 - \$50,000	318.9
\$50,001 - \$75,000	121.4
\$75,001 - \$100,000	263.9
\$100,001 - \$500,000	1,148.8
\$500,001 - \$1,000,000	688.1
\$1,000,001 - \$2,000,000	731.3
More than \$2,000,000	3,330.1

<b>Zero Coupon</b>	
<b>Total</b>	<b>393.4</b>
0 - \$25,000	8.5
\$25,001 - \$50,000	11.0
\$50,001 - \$75,000	5.3
\$75,001 - \$100,000	10.4
\$100,001 - \$500,000	34.8
\$500,001 - \$1,000,000	19.9
\$1,000,001 - \$2,000,000	21.2
More than \$2,000,000	282.3

## Municipal Fixed Rate Securities - Par Amount Traded and Number of Trades

### Transaction Summary - Fixed Rate Securities

Average daily number of trades

2017:Q2	
<b>Fixed Trade</b>	
<b>Total</b>	<b>37,754</b>
0 - \$25,000	19,122
\$25,001 - \$50,000	7,525
\$50,001 - \$75,000	1,819
\$75,001 - \$100,000	2,716
\$100,001 - \$500,000	4,653
\$500,001 - \$1,000,000	870
\$1,000,001 - \$2,000,000	487
More than \$2,000,000	562

<b>Zero Coupon</b>	
<b>Total</b>	<b>1,225</b>
0 - \$25,000	561
\$25,001 - \$50,000	266
\$50,001 - \$75,000	80
\$75,001 - \$100,000	108
\$100,001 - \$500,000	147
\$500,001 - \$1,000,000	26
\$1,000,001 - \$2,000,000	14
More than \$2,000,000	21

## Municipal Fixed Rate Securities - Par Amount Traded and Number of Trades

### Source of Repayment

Average daily par amount in \$ millions

2017:Q2	
<b>Fixed Rate</b>	
<b>Total</b>	<b>6,906.1</b>
General Obligation	2,598.9
Revenue	4,070.3
Double Barrel	236.9

<b>Zero Coupon</b>	
<b>Total</b>	<b>393.4</b>
General Obligation	100.9
Revenue	287.4
Double Barrel	5.0

Average daily number of trades

<b>Fixed Rate</b>	
<b>Total</b>	<b>37,754</b>
General Obligation	14,132
Revenue	22,335
Double Barrel	1,287

<b>Zero Coupon</b>	
<b>Total</b>	<b>1,225</b>
General Obligation	621
Revenue	564
Double Barrel	40



## Municipal Fixed Rate Securities - Par Amount Traded and Number of Trades

### Tax Status

Average daily par amount in \$ millions

<b>2017:Q2</b>	
<b>Fixed Rate</b>	
<b>Total</b>	<b>6,906.1</b>
Tax Exempt	5,939.0
Taxable	823.2
AMT	143.9

<b>Zero Coupon</b>	
<b>Total</b>	<b>393.4</b>
Tax Exempt	372.1
Taxable	21.3
AMT	<0.1

Average daily number of trades

<b>Fixed Rate</b>	
<b>Total</b>	<b>37,754</b>
Tax Exempt	34,691
Taxable	2,548
AMT	515

<b>Zero Coupon</b>	
<b>Total</b>	<b>1,224</b>
Tax Exempt	1,093
Taxable	131
AMT	<0

## Municipal Fixed Rate Securities - Par Amount Traded and Number of Trades

### Sector

Average daily par amount in \$ millions

2017:Q2	
<b>Fixed Rate</b>	
<b>Total</b>	<b>6,906.1</b>
Education	1,662.5
Health	573.1
Housing	134.1
Tax-Revenue	882.8
Transportation	527.8
Utility	817.9
Various Purpose	977.8
Other	1,330.3

<b>Zero Coupon</b>	
<b>Total</b>	<b>393.4</b>
Education	98.4
Health	7.8
Housing	0.4
Tax-Revenue	87.1
Transportation	27.5
Utility	4.9
Various Purpose	7.9
Other	159.5

Average daily number of trades

<b>Fixed Rate</b>	
<b>Total</b>	<b>37,754</b>
Education	9,716
Health	3,044
Housing	737
Tax-Revenue	3,969
Transportation	2,768
Utility	5,203
Various Purpose	4,755
Other	7,562

<b>Zero Coupon</b>	
<b>Total</b>	<b>1,225</b>
Education	575
Health	34
Housing	4
Tax-Revenue	176
Transportation	129
Utility	77
Various Purpose	94
Other	136

## Municipal Variable Rate Securities - Par Amount Traded and Number of Trades

### Variable Rate Demand Obligations<sup>1</sup> Trade Type and Size

Average daily par amount in \$ millions

2017:Q2	
<b>All Trades</b>	
<b>Total</b>	<b>3,394.1</b>
0 - \$25,000	0.0
\$25,001 - \$50,000	0.1
\$50,001 - \$75,000	<0.1
\$75,001 - \$100,000	10.9
\$100,001 - \$500,000	75.3
\$500,001 - \$1,000,000	88.1
\$1,000,001 - \$2,000,000	131.7
More than \$2,000,000	3,088.1
<b>Customer Bought</b>	
<b>Total</b>	<b>1,703.2</b>
0 - \$25,000	<0.1
\$25,001 - \$50,000	<0.1
\$50,001 - \$75,000	<0.1
\$75,001 - \$100,000	4.8
\$100,001 - \$500,000	37.6
\$500,001 - \$1,000,000	43.9
\$1,000,001 - \$2,000,000	66.9
More than \$2,000,000	1,550.0
<b>Customer Sold</b>	
<b>Total</b>	<b>1,649.9</b>
0 - \$25,000	<0.1
\$25,001 - \$50,000	<0.1
\$50,001 - \$75,000	<0.1
\$75,001 - \$100,000	4.9
\$100,001 - \$500,000	31.0
\$500,001 - \$1,000,000	37.4
\$1,000,001 - \$2,000,000	59.0
More than \$2,000,000	1,517.5
<b>Inter-Dealer</b>	
<b>Total</b>	<b>41.1</b>
0 - \$25,000	<0.1
\$25,001 - \$50,000	<0.1
\$50,001 - \$75,000	<0.1
\$75,001 - \$100,000	1.2
\$100,001 - \$500,000	6.7
\$500,001 - \$1,000,000	6.8
\$1,000,001 - \$2,000,000	5.8
More than \$2,000,000	20.6

<sup>1</sup> Based on data submitted to the MSRB's Short-Term Obligation Rate Transparency (SHORT) System. May exclude submissions that could not be categorized based on available data.

## Municipal Variable Rate Securities - Par Amount Traded and Number of Trades

### Variable Rate Demand Obligations<sup>1</sup> Trade Type and Size

Average daily number of trades

2017:Q2	
<b>All Trades</b>	
<b>Total</b>	<b>841</b>
0 - \$25,000	3
\$25,001 - \$50,000	1
\$50,001 - \$75,000	1
\$75,001 - \$100,000	109
\$100,001 - \$500,000	255
\$500,001 - \$1,000,000	108
\$1,000,001 - \$2,000,000	85
More than \$2,000,000	278
<b>Customer Bought</b>	
<b>Total</b>	<b>416</b>
0 - \$25,000	1
\$25,001 - \$50,000	1
\$50,001 - \$75,000	<1
\$75,001 - \$100,000	48
\$100,001 - \$500,000	127
\$500,001 - \$1,000,000	54
\$1,000,001 - \$2,000,000	44
More than \$2,000,000	143
<b>Customer Sold</b>	
<b>Total</b>	<b>373</b>
0 - \$25,000	2
\$25,001 - \$50,000	1
\$50,001 - \$75,000	<1
\$75,001 - \$100,000	49
\$100,001 - \$500,000	105
\$500,001 - \$1,000,000	46
\$1,000,001 - \$2,000,000	38
More than \$2,000,000	131
<b>Inter-Dealer</b>	
<b>Total</b>	<b>52</b>
0 - \$25,000	<1
\$25,001 - \$50,000	<1
\$50,001 - \$75,000	<1
\$75,001 - \$100,000	12
\$100,001 - \$500,000	24
\$500,001 - \$1,000,000	8
\$1,000,001 - \$2,000,000	4
More than \$2,000,000	4

<sup>1</sup> Based on data submitted to the MSRB's Short-Term Obligation Rate Transparency (SHORT) System. May exclude submissions that could not be categorized based on available data.

## Municipal Variable Rate Securities - Par Amount Traded and Number of Trades

### Auction Rate Securities<sup>1</sup> Trade Type and Size

Average daily par amount in \$ millions

2017:Q2	
<b>All Trades</b>	
<b>Total</b>	<b>17.8</b>
0 - \$25,000	0.1
\$25,001 - \$50,000	0.3
\$50,001 - \$75,000	0.2
\$75,001 - \$100,000	0.8
\$100,001 - \$500,000	4.8
\$500,001 - \$1,000,000	3.3
\$1,000,001 - \$2,000,000	2.2
More than \$2,000,000	6.2
<b>Customer Bought</b>	
<b>Total</b>	<b>6.3</b>
0 - \$25,000	0.1
\$25,001 - \$50,000	0.1
\$50,001 - \$75,000	0.0
\$75,001 - \$100,000	0.2
\$100,001 - \$500,000	1.7
\$500,001 - \$1,000,000	1.2
\$1,000,001 - \$2,000,000	0.6
More than \$2,000,000	2.4
<b>Customer Sold</b>	
<b>Total</b>	<b>6.5</b>
0 - \$25,000	<0.1
\$25,001 - \$50,000	0.1
\$50,001 - \$75,000	0.1
\$75,001 - \$100,000	0.4
\$100,001 - \$500,000	1.5
\$500,001 - \$1,000,000	0.8
\$1,000,001 - \$2,000,000	0.8
More than \$2,000,000	2.8
<b>Inter-Dealer</b>	
<b>Total</b>	<b>5.0</b>
0 - \$25,000	<0.1
\$25,001 - \$50,000	0.1
\$50,001 - \$75,000	0.1
\$75,001 - \$100,000	0.2
\$100,001 - \$500,000	1.6
\$500,001 - \$1,000,000	1.3
\$1,000,001 - \$2,000,000	0.9
More than \$2,000,000	0.9

<sup>1</sup> Based on data submitted to the MSRB's Short-Term Obligation Rate Transparency (SHORT) System. May exclude submissions that could not be categorized based on available data.

## Municipal Variable Rate Securities - Par Amount Traded and Number of Trades

### Auction Rate Securities<sup>1</sup> Trade Type and Size

Average daily number of trades

2017:Q2	
<b>All Trades</b>	
<b>Total</b>	<b>46</b>
0 - \$25,000	5
\$25,001 - \$50,000	6
\$50,001 - \$75,000	2
\$75,001 - \$100,000	8
\$100,001 - \$500,000	17
\$500,001 - \$1,000,000	4
\$1,000,001 - \$2,000,000	2
More than \$2,000,000	1
<b>Customer Bought</b>	
<b>Total</b>	<b>16</b>
0 - \$25,000	2
\$25,001 - \$50,000	2
\$50,001 - \$75,000	1
\$75,001 - \$100,000	2
\$100,001 - \$500,000	6
\$500,001 - \$1,000,000	2
\$1,000,001 - \$2,000,000	0
More than \$2,000,000	0
<b>Customer Sold</b>	
<b>Total</b>	<b>16</b>
0 - \$25,000	2
\$25,001 - \$50,000	2
\$50,001 - \$75,000	1
\$75,001 - \$100,000	4
\$100,001 - \$500,000	5
\$500,001 - \$1,000,000	1
\$1,000,001 - \$2,000,000	1
More than \$2,000,000	0
<b>Inter-Dealer</b>	
<b>Total</b>	<b>14</b>
0 - \$25,000	1
\$25,001 - \$50,000	2
\$50,001 - \$75,000	1
\$75,001 - \$100,000	2
\$100,001 - \$500,000	6
\$500,001 - \$1,000,000	2
\$1,000,001 - \$2,000,000	1
More than \$2,000,000	0

<sup>1</sup> Based on data submitted to the MSRB's Short-Term Obligation Rate Transparency (SHORT) System. May exclude submissions that could not be categorized based on available data.

## Municipal Market Coupon Distributions

### Customer Trade and Size of Tax Exempt, Fixed Rate Securities

Average daily yields

2017:Q2	
<b>All Trades</b>	
<b>Total</b>	<b>2.60</b>
0 - \$25,000	2.67
\$25,001 - \$50,000	2.58
\$50,001 - \$75,000	2.31
\$75,001 - \$100,000	2.36
\$100,001 - \$500,000	2.49
\$500,001 - \$1,000,000	3.37
\$1,000,001 - \$2,000,000	2.49
More than \$2,000,000	2.74
<b>Customer Bought</b>	
<b>Total</b>	<b>2.28</b>
0 - \$25,000	2.35
\$25,001 - \$50,000	2.26
\$50,001 - \$75,000	2.11
\$75,001 - \$100,000	2.15
\$100,001 - \$500,000	2.05
\$500,001 - \$1,000,000	2.28
\$1,000,001 - \$2,000,000	2.48
More than \$2,000,000	2.78
<b>Customer Sold</b>	
<b>Total</b>	<b>2.54</b>
0 - \$25,000	2.71
\$25,001 - \$50,000	2.47
\$50,001 - \$75,000	2.33
\$75,001 - \$100,000	2.26
\$100,001 - \$500,000	2.21
\$500,001 - \$1,000,000	2.37
\$1,000,001 - \$2,000,000	2.44
More than \$2,000,000	2.79
<b>Inter-Dealer</b>	
<b>Total</b>	<b>2.97</b>
0 - \$25,000	2.96
\$25,001 - \$50,000	2.96
\$50,001 - \$75,000	2.49
\$75,001 - \$100,000	2.63
\$100,001 - \$500,000	3.05
\$500,001 - \$1,000,000	5.15
\$1,000,001 - \$2,000,000	2.54
More than \$2,000,000	2.56



## Municipal Market Variable Securities Rate Resets

### Number of Variable Rate Demand Obligations Rate Resets by Type<sup>1</sup>

	2017:Q2
<b>Total</b>	<b>106,095</b>
Set by Remarketing Agent	105,875
Set by Formula	157
Maximum Rate	63

<sup>1</sup> Based on data submitted to the MSRB's Short-Obligation Rate Transparency (SHORT) System.  
May exclude submissions that could not be categorized based on available information.

## Municipal Market Variable Securities Rate Resets

### Number of Auction Rate Securities Rate Resets by Type<sup>1</sup>

2017:Q2	
<b>Total</b>	<b>1,879</b>
Set by Auction	426
Maximum Rate	1,387
All Hold Rate	66

<sup>1</sup> Based on data submitted to the MSRB's Short-Obligation Rate Transparency (SHORT) System.  
May exclude submissions that could not be categorized based on available information.

## Municipal Market Disclosures

### Continuing Disclosures Submissions

Number of Documents

	2017:Q2
Audited Financial Statements or CAFR	7,668
Annual Financial Information and Operation Data	6,756
Bond Call	10,160
Quarterly/Monthly Financial Information	3,499
Other Financial/Operating Data	1,963
Rating Change	2,129
Budget	1,211
Failure to Provide Annual Financial Info	1,203
Other Event-Based Disclosures	1,375
Defeasance	1,067
Interim/Additional Financial Information/Operating Data	216
Notice to Investor Pursuant to Bond Documents	156
Tender Offer/Secondary Market Purchases	80
Principal & Interest Payment Delinquency	119
Asset Backed Securities Filings <sup>1</sup>	43
Successor, Additional or Change in Trustee	53
Information Provided to Rating Agency, Credit/Liquidity Provider or Other Third Party	44
Consolidation	28
Consultant Reports	65
Investment/Debt/Financial Policy	20
Unscheduled Draw on Debt Service Reserve	36
Bid for Auction Rate or Other Securities	26
Release, Substitution or Sale of Property	20
Substitution of Credit or Liquidity Provider or Its Failure to Perform	26
Bankruptcy, Insolvency, Receivership	27
Change in Obligated Person	4
Non-payment Related Default	47
Amendment to Continuing Disclosure Undertaking	18
Modification to the Rights of Security Holders	12
Unscheduled Draw on Credit Enhancement	8
Communication from the Internal Revenue Service	1
Bank Loan	115
Capital or Other Financing Plan	9
Litigation/Enforcement Action	8
Change of Tender Agent, Remarketing Agent, or Other On-Going Party	14
Adverse Tax Opinion or Event Affecting Tax-Exempt Status	2
Change in Fiscal Year/Timing of Annual Disclosure	15

<sup>1</sup> Disclosures related to municipal asset-backed securities required under Securities Exchange Act of 1934 Rule 15Ga-1

## Definition of Terms Used

Alternative Minimum Tax (AMT) Municipal Security—a tax-exempt bond, interest on which is subject to the alternative minimum tax.

Auction Rate Securities (ARS)—variable rate bonds whose interest rate is reset periodically under the Dutch auction process.

Bond—a security with two years or more in maturity (maturity date less dated date) with fixed or zero interest rate.

Commercial Paper—short-term, unsecured promissory notes, usually backed by a line of credit with a bank, that mature within 270 days.

CUSIP number (Committee on Uniform Securities Identification Procedures)—an identification number assigned to each maturity of an issue intended to help facilitate the identification and clearance of securities.

Customer Bought—a municipal trade in which a customer bought the security from a broker dealer or bank.

Customer Sold—a municipal trade in which a customer sold the security to a broker-dealer or bank.

Customer Trade—a municipal securities trade between a broker-dealer (including a dealer bank or broker's broker), acting as agent in an agency trade or as purchaser or seller in a principal trade, and a contra-party that is not a broker-dealer (including including a dealer bank or broker's broker).

Dated Date—the date of an issue from which interest on the issue usually starts to accrue, even though the issue may actually be delivered at some later date.

Double Barrel Municipal Security—a security with characteristics of both revenue and general obligation instruments.

Fixed Rate—an interest rate on a security that does not change for the remaining life of the security.

General Obligation Municipal Security— a security that is secured by the full faith, credit and taxing power of an issuer. General obligation securities issued by local units of government are typically secured by a pledge of the issuer's "ad valorem" taxing power; general obligation securities issued by states are generally based upon appropriations made by the state legislature for the purposes specified.

Inter-Dealer—a municipal securities trade between two broker-dealers, including dealer banks or broker's brokers.

Long Note—a security with over nine months in maturity, but under two years in maturity (maturity date less dated date) with fixed or zero interest rate.

Revenue Municipal Security—a security that is payable from a specific source of revenue and to which the full faith and credit of an issuer with taxing power is not pledged. Revenue bonds are payable from identified sources of revenue and do not permit the bondholders to compel taxation or legislative appropriation of funds not pledged for payment of debt service.

RULE 15c2-12—an SEC rule under the Securities Exchange Act of 1934 setting forth certain obligations of (i) underwriters to receive, review and disseminate official statements prepared by issuers of most primary offerings of municipal securities, (ii) underwriters to obtain continuing disclosure agreements from issuers and other obligated persons to provide material event disclosures and annual financial information on a continuing basis, and (iii) broker-dealers to have access to such continuing disclosure in order to make recommendations of municipal securities in the secondary market.

Sector—transactions according to the security's use of proceeds, i.e., issuer's intended use of the capital raised by the offering, according to definitions provided by Standard & Poor's Securities Evaluations, Inc. The top seven most active sectors based on par amount are displayed, as well as an "Other" category that includes the remaining sectors and trades for which the sector information was not available.

Short Note—a security with nine months or less in maturity (maturity date less dated date) with fixed or zero interest rate.

Tax Exempt—interest on most municipal securities is excluded from gross income for federal income tax purposes and may or may not be exempt from state income or personal property taxation in the jurisdiction where issued or in other jurisdictions. If the bond is exempt from state income tax, it possesses "double exemption" status. "Triple exemption" bonds are exempt from municipal, local income or other special taxes, as well as from federal and state income tax.

Taxable—bonds or other securities issued by a municipal issuer for which interest or other investment return is included in gross income for federal income tax purposes. A municipal security may be issued on a taxable basis because the intended use of proceeds does not meet federal tax law requirements for the exclusion from gross income (e.g., private activity bonds that are not qualified bonds) or because certain other federal tax law requirements are not met (e.g., insufficient volume cap).

Variable (Long and Short)—variable interest rate securities with interest reset periods. Over 99 percent of these securities are short variable (interest reset period of nine months or less) as opposed to long variables (interest reset period longer than nine months.)

Variable Rate—an interest rate, sometimes referred to as a "floating rate," on a security that changes at intervals according to market conditions or a predetermined index or formula.

Variable Rate Demand Obligation (VRDO)—floating rate obligations that have a nominal long-term maturity but have a coupon rate that is reset periodically (e.g., daily or weekly). The investor has the option to put the issue back to the trustee or tender agent at any time with specified (e.g., seven days') notice.

Zero Coupon—an original issue discount bond on which no periodic interest payments are made but which is issued at a deep discount from par, accreting (at the rate represented by the offering yield at issuance) to its full value at maturity.

## **Continuing Disclosure Definitions**

### **Financial/Operating-based disclosures**

#### Rule 15c2-12-Based Financial/Operating Data

Annual Financial Information and Operating Data—issuer's/obligated person's financial information or operating data, of the type included in the original official statement, provided on at least an annual basis—see Exchange Act Rule 15c2-12(b)(5)(i)(A), 15c2-12(d)(2)(ii)(A) and 15c2-12(f)(9).

Audited Financial Statements or CAFR—issuer's/obligated person's audited financial statements or Comprehensive Annual Financial Report, if not included in annual financial information and operating data—see Exchange Act Rule 15c2-12(b)(5)(1)(B).

Failure to Provide Annual Financial Information—notice that issuer's/obligated person's annual financial information and operating data not submitted by date specified in the continuing disclosure undertaking—see Exchange Act Rule 15c2-12(b)(5)(i)(A).

#### Additional/Voluntary Financial/Operating Data

Quarterly/Monthly Financial Information—issuer's/obligated person's financial information provided on a quarterly or monthly basis.

Change in Fiscal Year/Timing of Annual Disclosure—notice that issuer's/obligated person's fiscal year has changed or the date specified in the continuing disclosure undertaking for submitting annual financial information and operating data has changed.

Change in Accounting Standard—notice that issuer's/obligated person's accounting standards pursuant to which it prepares its financial information have changed.

Interim/Additional Financial Information/Operating Data—additional financial or operating data of issuer/obligated person supplementing annual financial information or operating data or providing such information or data on an interim basis in addition to the annual submission.

Budget—issuer's/obligated person's budget document or other information relating to its budget.

Investment/Debt/Financial Policy—issuer's/obligated person's policy on its investment activities, debt incurrence or other financial matters.

Information Provided to Rating Agency, Credit/Liquidity Provider or Other Third Party—information that issuer/obligated person has provided to a rating agency, provider of a credit or liquidity facility or other entity that the issuer/obligated person wishes to be made available publicly.

Consultant Reports—report prepared for or about an issuer/obligated person by a third-party in connection with the issuer's/obligated person's issue of securities or other financial or operating matters.

Other Financial/Operating Data—any financial information or operating data of the issuer/obligated person not otherwise described in another category.

### **Event-Based Disclosures**

#### Rule 15c2-12 Material Event Notices

P&I Payment Delinquency—a delinquency in scheduled payment of principal of or interest on municipal securities—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(1).

Non-payment Related Default—a default relating to municipal securities other than a delinquency in payment of principal or interest, if material—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(2).

Unscheduled Draw on Debt Service Reserve—an unscheduled draw on any debt service reserve fund/account that reflects financial difficulties of the issuer/obligated person or in connection with the municipal securities—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(3).

Unscheduled Draw on Credit Enhancement—an unscheduled draw on credit enhancement for municipal securities reflecting financial difficulties of the issuer/obligated person or in connection with the municipal securities—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(4).

Substitution of Credit or Liquidity Provider or Its Failure to Perform—a change in the entity providing any credit enhancement or liquidity support for the municipal securities, or any failure by such entity to perform its obligations under such credit enhancement or liquidity support—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(5).

Adverse Tax Opinion or Event Affecting Tax-Exempt Status—notice of an adverse tax opinion, issuance by the Internal Revenue Service of proposed or final determination of taxability, Notice of Proposed Issue (IRS Form 5701-TEB) or other material notice of determination with respect to the tax status of the municipal securities, or other material event affecting the tax status of the municipal securities—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(6).

Modification to the Rights of Security Holders—a modification to the rights of holders of the municipal securities, if material—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(7).

Bond Call—a notice that municipal securities are called for redemption, if material—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(8).

Tender Offer/Secondary Market Purchases—a notice that the issuer/obligated person is seeking offers to tender municipal securities for purchase or redemption by the issuer/obligated person, or that the issuer/obligated person has or seeks to purchase its securities in the secondary market—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(8).

Defeasance—a notice that municipal securities have been defeased, typically by establishment of an escrow to pay principal and interest and the release of the covenants and original security lien—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(9).

Release, Substitution or Sale of Property—a notice that there has been a release, substitution or sale of property securing repayment of the municipal securities, if material—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(10).

Rating Change—a notice that a rating assigned by a rating agency on the municipal securities, the issuer of municipal securities, an obligated person or other rating relating to the municipal securities has been changed—see Exchange Act Rule 15c2-12(b)(5)

Bankruptcy, Insolvency, Receivership—a notice of bankruptcy, insolvency, receivership or similar event of the issuer/obligated person—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(12).

Merger, Consolidation, Acquisition and Sale of Assets—a notice of the consummation of a merger, consolidation, or acquisition involving an issuer/obligated person, or the sale of all or substantially all of the assets of the issuer/obligated person, if material—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(13).

Successor, Additional or Change in Trustee—a notice of the appointment of a successor or additional trustee, or the change of name of a trustee, if material—see Exchange Act Rule 15c2-12(b)(5)(i)(C)(14).

#### Additional/Voluntary Event-Based Disclosures

Amendment to Continuing Disclosure Undertaking—a notice that the issuer/obligated person has amended the continuing disclosure undertaking relating to its municipal securities.

Change in Obligated Person—a notice that a new obligated party for whom continuing disclosures will be provided has been added with respect to municipal securities and, if applicable, an existing obligated person has been released from its continuing disclosure obligation.

Notice to Investor Pursuant to Bond Documents—a notice required or authorized to be provided under the legal documents relating to the municipal securities.

Communication from the Internal Revenue Service—a notice of any communication from the Internal Revenue Service to the issuer/obligated person other than the items covered by “Adverse Tax Opinion or Event Affecting Tax-Exempt Status” above.

Bid for Auction Rate or Other Securities—a notice of a bid placed by the issuer/obligated person to purchase auction rate securities through the auction rate setting procedure or the purchase of any other of its securities.

Capital or Other Financing Plan—disclosure regarding an issuer’s/obligated person’s capital improvement plans or other financing or refinancing plans.

Litigation/Enforcement Action—disclosure regarding any litigation involving the issuer/obligated person or any other relevant party that has the potential to have a material impact on the municipal securities, or any regulatory enforcement action that may have such an impact.

Change of Tender Agent, Remarketing Agent, or Other On-Going Party—a notice of a change in the tender agent, remarketing agent, or other market participant that provides on-going services in connection with the issuer’s/obligated person’s municipal securities.

Derivative or Other Similar Transaction—any notice, disclosure or other document relating to derivatives or other financial products or structures used in connection with the issuer’s/obligated person’s municipal securities.

Other Event-Based Disclosures—any notice, disclosure or other document relating to the occurrence of an event or other non-financial matter relating to the issuer’s/obligated person’s municipal securities not otherwise described in another category.