

**Quarterly Statistical Summaries**  
**2020 Third Quarter: July - September**

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## 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 CUSIP Global Services.<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 2019 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 a 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 the EMMA website, 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 \$681.9 billion in 2020:Q3, lower than the \$722.9 billion in 2019:Q3 and the \$786.9 billion in 2020:Q2. Total number of trades decreased by about 6.2% to 1.88 million compared to the same period in 2019.

### Most Actively Traded Municipal Securities

A tax and revenue anticipation note from Texas was the most active in terms of par traded with nearly \$8 billion in trading during the quarter, while a Puerto Rico Sales Tax Financing Corporation (COFINA) security had the most trades with 1,165 trades.

### Municipal Market Trades by Trade Type

Customer buying activity accounted for 38% of the 1.88 million trades in 2020:Q3, while customer sales accounted for 25% and interdealer trades accounted for 37% of all trades in the period.

### Municipal Market Variable Securities Rate Resets

The number of variable rate demand obligations rate resets continued to decline in 2020:Q3 to 81,111, down from the 88,913 rate resets in 2019:Q3.

The number of auction rate securities rate resets totaled 707 in 2020:Q3 compared to 835 resets in 2019:Q3.

### Municipal Market Disclosures

The number of continuing disclosure documents received by the MSRB totaled 31,155 in 2020:Q3, with annual, audited financial and bond call filings accounting for nearly 57% of all disclosures.

## Municipal Market Trade Summary

### Transaction Summary

Total par amount traded in \$ millions

<b>2020:Q3</b>	
<b>Total</b>	<b>681,850.6</b>
<b>By Trade Type</b>	
Customer Bought	384,871.8
Customer Sold	189,735.4
Inter-Dealer	107,243.4
<b>By Coupon Type</b>	
Fixed Rate	441,250.9
Variable Rate	180,337.8
Zero Coupon	18,259.4
Other <sup>1</sup>	42,002.5
<b>By Source of Repayment</b>	
General Obligation	170,179.0
Revenue	456,855.0
Double Barrel	13,374.0
Other <sup>1</sup>	41,442.6
<b>By Tax Status</b>	
Tax Exempt	523,033.9
Taxable	123,605.9
AMT	30,039.2
Other <sup>1</sup>	5,171.7

<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

	2020:Q3
<b>Total</b>	<b>1,882,943</b>

#### By Trade Type

Customer Bought	715,152
Customer Sold	469,905
Inter-Dealer	697,886

#### By Coupon Type

Fixed Rate	1,770,473
Variable	54,890
Zero Coupon	53,438
Other <sup>1</sup>	4,142

#### By Source of Repayment

General Obligation	662,180
Revenue	1,159,832
Double Barrel	57,338
Other <sup>1</sup>	3,593

#### By Tax Status

Tax Exempt	1,684,409
Taxable	170,630
AMT	27,211
Other <sup>1</sup>	693

<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, 2020:Q3

By par amount

Rank	CUSIP <sup>1</sup>	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	882724SY4	TEXAS ST	4.00	8/26/2021	7,991.1	655
2	882724PY7	TEXAS ST	4.00	8/27/2020	2,922.6	475
3	74529JQH1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/2051	2,275.8	1,056
4	74529JQG3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/2046	2,241.3	1,033
5	544351PK9	LOS ANGELES CALIF	4.00	6/24/2021	2,230.1	285
6	402207AD6	GULF COAST INDL DEV AUTH TEX REV	-	11/1/2041	2,077.2	142
7	16876QBM0	CHILDRENS TR FD P R TOB SETTLEMENT REV	-	5/15/2057	2,053.4	6
8	915217XF5	UNIVERSITY VA UNIV REVS	2.26	9/1/2050	1,934.3	221
9	594751AM1	MICHIGAN TOB SETTLEMENT FIN AUTH TOB SETTLEMENT ASSET BACKED REV	-	6/1/2058	1,869.4	135
10	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	-	8/1/2035	1,837.7	63
11	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/2030	1,681.1	377
12	341271AD6	FLORIDA ST BRD ADMIN FIN CORP REV	1.26	7/1/2025	1,595.8	210
13	544657HX0	LOS ANGELES CNTY CALIF	4.00	6/30/2021	1,508.3	311
14	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	-	12/1/2059	1,461.9	87
15	64966ML98	NEW YORK N Y	-	12/1/2047	1,430.7	200
16	91412GSK2	UNIVERSITY CALIF REVS	-	5/15/2048	1,333.4	201
17	73358W4V3	PORT AUTH N Y & N J	1.09	7/1/2023	1,316.6	155
18	64971XKS6	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	11/1/2044	1,220.4	101
19	341271AE4	FLORIDA ST BRD ADMIN FIN CORP REV	1.71	7/1/2027	1,180.3	195
20	91412GSJ5	UNIVERSITY CALIF REVS	-	5/15/2048	1,163.4	70
21	270777AD7	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	-	12/1/2040	1,129.2	50
22	467229AF7	JACKSON CNTY MISS PORT FAC REV	-	6/1/2023	1,107.5	118
23	91412GSH9	UNIVERSITY CALIF REVS	-	5/15/2048	1,062.0	118
24	650116DA1	NEW YORK TRANSN DEV CORP SPL FAC REV	4.38	10/1/2045	1,005.6	674
25	913366KA7	UNIV CALIF REGTS MED CTR POOLED REV	-	5/15/2045	992.5	66
26	59261AG92	METROPOLITAN TRANSN AUTH N Y REV	1.93	8/1/2023	901.4	2
27	59261AWK9	METROPOLITAN TRANSN AUTH N Y REV	-	11/15/2050	885.7	125
28	91412HGG2	UNIVERSITY CALIF REVS	1.61	5/15/2030	875.4	152
29	64966JE77	NEW YORK N Y	-	4/1/2042	870.4	265
30	13063A5Y6	CALIFORNIA ST	-	5/1/2034	862.1	104
31	13034AK90	CALIFORNIA INFRASTRUCTURE & ECONOMIC DEV BK REV	-	1/1/2050	857.0	32
32	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/2058	834.8	1,165
33	882830BH4	TEXAS TRANSN COMMN	2.47	10/1/2044	817.1	113
34	67756AH96	OHIO ST HIGHER EDL FAC COMMN REV	-	1/1/2043	800.7	89
35	74514LE86	PUERTO RICO COMWLTH	8.00	7/1/2035	798.3	200
36	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	12/1/2030	797.5	39
37	59259N8Q9	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	-	11/1/2031	792.4	168
38	64966FA87	NEW YORK N Y	-	4/1/2036	784.0	106
39	64966LU41	NEW YORK N Y	-	6/1/2044	775.4	54
40	842475M85	SOUTHERN CALIF PUB PWR AUTH PWR PROJ REV	-	7/1/2036	769.6	37
41	64971M2B7	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	5/1/2034	765.8	101
42	2350367A2	DALLAS FORT WORTH TEX INTL ARPT REV	2.92	11/1/2050	737.9	230
43	13063A5V2	CALIFORNIA ST	-	5/1/2034	732.9	130
44	196729CL9	COLORADO ST GEN FD REV	4.00	6/25/2021	726.0	100
45	64966G2G6	NEW YORK N Y	-	8/1/2024	708.1	72
46	87638QBF5	TARRANT CNTY TEX CULTURAL ED FACS FIN CORP HOSP REV	-	10/1/2041	704.8	40
47	13063DUD8	CALIFORNIA ST	4.00	3/1/2036	701.9	405
48	91412HGF4	UNIVERSITY CALIF REVS	1.32	5/15/2027	691.1	151
49	13063BCF7	CALIFORNIA ST	-	5/1/2033	687.2	98
50	91412GSG1	UNIVERSITY CALIF REVS	-	5/15/2048	671.3	88

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Most Actively Traded Municipal Securities

Top 50 Most Active Securities, 2020:Q3

By number of trades

Rank	CUSIP <sup>1</sup>	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/2058	834.8	1,165
2	74529JQH1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/2051	2,275.8	1,056
3	74529JQG3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/2046	2,241.3	1,033
4	74529JPW9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.75	7/1/2053	316.6	856
5	59259YSK6	METROPOLITAN TRANSN AUTH N Y REV	4.00	11/15/2038	48.1	821
6	57584YD22	MASSACHUSETTS ST DEV FIN AGY REV	3.00	10/1/2045	184.0	721
7	59261AFR3	METROPOLITAN TRANSN AUTH N Y REV	4.00	11/15/2036	53.1	697
8	650116DA1	NEW YORK TRANSN DEV CORP SPL FAC REV	4.38	10/1/2045	1,005.6	674
9	882724SY4	TEXAS ST	4.00	8/26/2021	7,991.1	655
10	74444KBK9	PUBLIC FIN AUTH WIS HEALTHCARE FACS REV	3.00	1/1/2050	86.0	625
11	95236PGM6	WEST COVINA CALIF PUB FING AUTH LEASE REV	3.89	8/1/2044	282.9	596
12	59259Y3Q0	METROPOLITAN TRANSN AUTH N Y REV	5.00	11/15/2045	40.6	590
13	36829QAA3	GDB DEBT RECOVERY AUTH OF COMWLTH PUERTO RICO	7.50	8/20/2040	443.3	571
14	59260XAA6	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	5.00	3/1/2022	53.5	535
15	59261AQK6	METROPOLITAN TRANSN AUTH N Y REV	3.25	11/15/2036	23.8	530
16	95737TEK8	WESTCHESTER CNTY N Y LOC DEV CORP REV	3.85	11/1/2050	426.6	519
17	59261AUW5	METROPOLITAN TRANSN AUTH N Y REV	5.00	11/15/2043	36.5	516
18	497766EC5	KISKI VY WTR POLLUTN CTL AUTH PA SWR REV	2.50	9/1/2049	65.9	488
19	74529JRH0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.33	7/1/2040	574.9	482
20	230614PQ6	CUMBERLAND CNTY PA MUN AUTH REV	3.25	11/1/2050	33.6	477
21	882724PY7	TEXAS ST	4.00	8/27/2020	2,922.6	475
22	19648FKU7	COLORADO HEALTH FACS AUTH REV	3.25	8/1/2049	38.6	475
23	57582RD60	MASSACHUSETTS ST	5.00	7/1/2048	564.5	473
24	6461365P2	NEW JERSEY ST TRANSN TR FD AUTH	3.50	6/15/2046	29.8	469
25	59259Y5J4	METROPOLITAN TRANSN AUTH N Y REV	5.25	11/15/2055	29.3	460
26	59259YTT6	METROPOLITAN TRANSN AUTH N Y REV	5.00	11/15/2024	18.6	447
27	74529JQF5	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/2033	60.9	447
28	777857AM5	ROSEVILLE CALIF JT UN HIGH SCH DIST CTFS PARTN	2.38	6/1/2040	63.3	442
29	13063A5G5	CALIFORNIA ST	7.55	4/1/2039	490.9	439
30	44420RBF6	HUDSON YDS INFRASTRUCTURE CORP N Y SECOND INDENTURE REV	4.00	2/15/2044	67.9	439
31	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/2029	51.7	438
32	74529JQE8	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/2031	96.5	436
33	777857AP8	ROSEVILLE CALIF JT UN HIGH SCH DIST CTFS PARTN	2.63	6/1/2050	60.5	435
34	13063DWA2	CALIFORNIA ST	3.00	11/1/2050	414.1	433
35	531127AC2	LIBERTY N Y DEV CORP REV	5.25	10/1/2035	42.0	427
36	646136U66	NEW JERSEY ST TRANSN TR FD AUTH	4.25	6/15/2044	23.4	424
37	797661ZW8	SAN FRANCISCO CALIF BAY AREA RAPID TRAN DIST	2.00	8/1/2046	99.5	406
38	13063DUD8	CALIFORNIA ST	4.00	3/1/2036	701.9	405
39	45204FEE1	ILLINOIS FIN AUTH REV	3.00	5/15/2050	202.0	389
40	59261AH83	METROPOLITAN TRANSN AUTH N Y REV	4.00	11/15/2049	328.9	384
41	646136XT3	NEW JERSEY ST TRANSN TR FD AUTH	6.10	12/15/2028	42.0	382
42	59261AA49	METROPOLITAN TRANSN AUTH N Y REV	5.00	9/1/2022	113.6	382
43	64971PFH3	NEW YORK N Y CITY INDL DEV AGY REV	5.00	3/1/2046	18.1	380
44	59261AXD4	METROPOLITAN TRANSN AUTH N Y REV	5.00	9/1/2021	78.1	380
45	59261AE86	METROPOLITAN TRANSN AUTH N Y REV	4.00	2/1/2022	120.3	377
46	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/2030	1,681.1	377
47	6.46136E+36	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/2042	38.2	371
48	74529JPY5	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.55	7/1/2040	5.8	370
49	642714DH9	NEW BRITAIN CONN	3.00	9/1/2044	85.6	370
50	57582RD29	MASSACHUSETTS ST	3.00	7/1/2039	150.6	366

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Most Actively Traded Municipal Securities

Top 50 Most Active Fixed Rate<sup>1</sup> Securities, 2020:Q3

By par amount

Rank	CUSIP <sup>2</sup>	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	882724SY4	TEXAS ST	4.00	8/26/2021	7,991.1	655
2	882724PY7	TEXAS ST	4.00	8/27/2020	2,922.6	475
3	544351PK9	LOS ANGELES CALIF	4.00	6/24/2021	2,230.1	285
4	915217XF5	UNIVERSITY VA UNIV REVS	2.26	9/1/2050	1,934.3	221
5	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/2030	1,681.1	377
6	341271AD6	FLORIDA ST BRD ADMIN FIN CORP REV	1.26	7/1/2025	1,595.8	210
7	544657HX0	LOS ANGELES CNTY CALIF	4.00	6/30/2021	1,508.3	311
8	73358W4V3	PORT AUTH N Y & N J	1.09	7/1/2023	1,316.6	155
9	341271AE4	FLORIDA ST BRD ADMIN FIN CORP REV	1.71	7/1/2027	1,180.3	195
10	650116DA1	NEW YORK TRANSN DEV CORP SPL FAC REV	4.38	10/1/2045	1,005.6	674
11	59261AG92	METROPOLITAN TRANSN AUTH N Y REV	1.93	8/1/2023	901.4	2
12	91412HGG2	UNIVERSITY CALIF REVS	1.61	5/15/2030	875.4	152
13	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/2058	834.8	1,165
14	882830BH4	TEXAS TRANSN COMMN	2.47	10/1/2044	817.1	113
15	74514LE86	PUERTO RICO COMWLTH	8.00	7/1/2035	798.3	200
16	2350367A2	DALLAS FORT WORTH TEX INTL ARPT REV	2.92	11/1/2050	737.9	230
17	196729CL9	COLORADO ST GEN FD REV	4.00	6/25/2021	726.0	100
18	13063DUD8	CALIFORNIA ST	4.00	3/1/2036	701.9	405
19	91412HGF4	UNIVERSITY CALIF REVS	1.32	5/15/2027	691.1	151
20	650036CA2	NEW YORK ST URBAN DEV CORP REV	4.00	3/15/2039	666.5	57
21	13063DWS3	CALIFORNIA ST	5.00	11/1/2030	618.5	171
22	717883XP2	PHILADELPHIA PA SCH DIST	4.00	6/30/2021	604.4	81
23	61075TUV8	MONROE CNTY N Y INDL DEV CORP REV	4.00	7/1/2050	602.0	165
24	650116CZ7	NEW YORK TRANSN DEV CORP SPL FAC REV	5.00	10/1/2040	600.7	187
25	59334PJT5	MIAMI-DADE CNTY FLA TRAN SYS SALES SURTAX REV	2.60	7/1/2042	579.2	71
26	74529JRH0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.33	7/1/2040	574.9	482
27	2350366Z8	DALLAS FORT WORTH TEX INTL ARPT REV	3.09	11/1/2040	570.9	171
28	57582RD60	MASSACHUSETTS ST	5.00	7/1/2048	564.5	473
29	57421CAV6	MARYLAND ST HEALTH & HIGHER EDL FACS AUTH REV	3.05	7/1/2040	532.6	118
30	882806HT2	TEXAS TECH UNIV REVS	2.75	2/15/2040	516.6	181
31	13077DNK4	CALIFORNIA ST UNIV REV	2.90	11/1/2051	501.6	63
32	91412HGE7	UNIVERSITY CALIF REVS	0.88	5/15/2025	500.8	99
33	57421CAW4	MARYLAND ST HEALTH & HIGHER EDL FACS AUTH REV	3.20	7/1/2050	496.6	123
34	650116CY0	NEW YORK TRANSN DEV CORP SPL FAC REV	5.00	10/1/2035	494.4	162
35	79765PDV2	SAN FRANCISCO CALIF CITY & CNTY MULTIFAMILY HSG REV	5.63	12/1/2052	492.0	2
36	13063A5G5	CALIFORNIA ST	7.55	4/1/2039	490.9	439
37	91412HHG1	UNIVERSITY CALIF REVS	4.00	5/15/2047	477.7	177
38	16772PBF2	CHICAGO ILL TRAN AUTH SALES TAX RCPTS REV	5.25	12/1/2049	476.8	157
39	118217CZ9	BUCKEYE OHIO TOB SETTLEMENT FING AUTH	5.00	6/1/2055	470.7	309
40	64990FXG4	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	5.00	3/31/2021	468.3	361
41	576000ZJ5	MASSACHUSETTS ST SCH BLDG AUTH DEDICATED SALES TAX REV	1.75	8/15/2030	465.3	56
42	57582RD52	MASSACHUSETTS ST	5.00	7/1/2045	459.5	258
43	594615HY5	MICHIGAN ST BLDG AUTH REV	2.71	10/15/2040	458.1	75
44	04108WCD2	ARKANSAS ST DEV FIN AUTH INDL DEV REV	4.75	9/1/2049	451.5	57
45	36829QAA3	GDB DEBT RECOVERY AUTH OF COMWLTH PUERTO RICO	7.50	8/20/2040	443.3	571
46	95737TEK8	WESTCHESTER CNTY N Y LOC DEV CORP REV	3.85	11/1/2050	426.6	519
47	717813YG8	PHILADELPHIA PA	4.00	6/30/2021	417.9	41
48	13063DWA2	CALIFORNIA ST	3.00	11/1/2050	414.1	433
49	73358W5V2	PORT AUTH N Y & N J	4.00	7/15/2060	413.9	193
50	650116CX2	NEW YORK TRANSN DEV CORP SPL FAC REV	4.00	10/1/2030	405.8	272

<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, 2020:Q3

By number of trades

Rank	CUSIP <sup>2</sup>	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/2058	834.8	1,165
2	74529JPW9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.75	7/1/2053	316.6	856
3	59259YSK6	METROPOLITAN TRANSN AUTH N Y REV	4.00	11/15/2038	48.1	821
4	57584YD22	MASSACHUSETTS ST DEV FIN AGY REV	3.00	10/1/2045	184.0	721
5	59261AFR3	METROPOLITAN TRANSN AUTH N Y REV	4.00	11/15/2036	53.1	697
6	650116DA1	NEW YORK TRANSN DEV CORP SPL FAC REV	4.38	10/1/2045	1,005.6	674
7	882724SY4	TEXAS ST	4.00	8/26/2021	7,991.1	655
8	74444KBK9	PUBLIC FIN AUTH WIS HEALTHCARE FACS REV	3.00	1/1/2050	86.0	625
9	95236PGM6	WEST COVINA CALIF PUB FING AUTH LEASE REV	3.89	8/1/2044	282.9	596
10	59259Y3Q0	METROPOLITAN TRANSN AUTH N Y REV	5.00	11/15/2045	40.6	590
11	36829QAA3	GDB DEBT RECOVERY AUTH OF COMWLTH PUERTO RICO	7.50	8/20/2040	443.3	571
12	59260XAA6	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	5.00	3/1/2022	53.5	535
13	59261AQK6	METROPOLITAN TRANSN AUTH N Y REV	3.25	11/15/2036	23.8	530
14	95737TEK8	WESTCHESTER CNTY N Y LOC DEV CORP REV	3.85	11/1/2050	426.6	519
15	59261AUW5	METROPOLITAN TRANSN AUTH N Y REV	5.00	11/15/2043	36.5	516
16	497766EC5	KISKI VY WTR POLLUTN CTL AUTH PA SWR REV	2.50	9/1/2049	65.9	488
17	74529JRH0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.33	7/1/2040	574.9	482
18	230614PQ6	CUMBERLAND CNTY PA MUN AUTH REV	3.25	11/1/2050	33.6	477
19	19648FKU7	COLORADO HEALTH FACS AUTH REV	3.25	8/1/2049	38.6	475
20	882724PY7	TEXAS ST	4.00	8/27/2020	2,922.6	475
21	57582RD60	MASSACHUSETTS ST	5.00	7/1/2048	564.5	473
22	6461365P2	NEW JERSEY ST TRANSN TR FD AUTH	3.50	6/15/2046	29.8	469
23	59259YSJ4	METROPOLITAN TRANSN AUTH N Y REV	5.25	11/15/2055	29.3	460
24	59259YTT6	METROPOLITAN TRANSN AUTH N Y REV	5.00	11/15/2024	18.6	447
25	777857AM5	ROSEVILLE CALIF JT UN HIGH SCH DIST CTFS PARTN	2.38	6/1/2040	63.3	442
26	44420RBF6	HUDSON YDS INFRASTRUCTURE CORP N Y SECOND INDENTURE REV	4.00	2/15/2044	67.9	439
27	13063A5G5	CALIFORNIA ST	7.55	4/1/2039	490.9	439
28	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/2029	51.7	438
29	777857AP8	ROSEVILLE CALIF JT UN HIGH SCH DIST CTFS PARTN	2.63	6/1/2050	60.5	435
30	13063DWA2	CALIFORNIA ST	3.00	11/1/2050	414.1	433
31	531127AC2	LIBERTY N Y DEV CORP REV	5.25	10/1/2035	42.0	427
32	646136U66	NEW JERSEY ST TRANSN TR FD AUTH	4.25	6/15/2044	23.4	424
33	797661ZW8	SAN FRANCISCO CALIF BAY AREA RAPID TRAN DIST	2.00	8/1/2046	99.5	406
34	13063DUD8	CALIFORNIA ST	4.00	3/1/2036	701.9	405
35	45204FEE1	ILLINOIS FIN AUTH REV	3.00	5/15/2050	202.0	389
36	59261AH83	METROPOLITAN TRANSN AUTH N Y REV	4.00	11/15/2049	328.9	384
37	59261AA49	METROPOLITAN TRANSN AUTH N Y REV	5.00	9/1/2022	113.6	382
38	646136XT3	NEW JERSEY ST TRANSN TR FD AUTH	6.10	12/15/2028	42.0	382
39	64971PFH3	NEW YORK N Y CITY INDL DEV AGY REV	5.00	3/1/2046	18.1	380
40	59261AXD4	METROPOLITAN TRANSN AUTH N Y REV	5.00	9/1/2021	78.1	380
41	59261AE86	METROPOLITAN TRANSN AUTH N Y REV	4.00	2/1/2022	120.3	377
42	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/2030	1,681.1	377
43	6.4614E+36	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/2042	38.2	371
44	642714DH9	NEW BRITAIN CONN	3.00	9/1/2044	85.6	370
45	74529JPY5	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.55	7/1/2040	5.8	370
46	57582RD29	MASSACHUSETTS ST	3.00	7/1/2039	150.6	366
47	777857AN3	ROSEVILLE CALIF JT UN HIGH SCH DIST CTFS PARTN	2.50	6/1/2045	63.3	365
48	64990FXG4	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	5.00	3/31/2021	468.3	361
49	59259YWG0	METROPOLITAN TRANSN AUTH N Y REV	3.63	11/15/2037	15.9	359
50	36005FDV4	FULTON CNTY GA DEV AUTH REV	3.24	10/1/2049	33.8	359

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

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Most Actively Traded Municipal Securities

Top 50 Most Active Variable Rate Securities, 2020:Q3

By par amount

Rank	CUSIP <sup>1</sup>	Issuer Name	Maturity	Par Amount (\$ Millions)	Number of Trades
1	402207AD6	GULF COAST INDL DEV AUTH TEX REV	11/1/2041	2,077.2	142
2	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	8/1/2035	1,837.7	63
3	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	12/1/2059	1,461.9	87
4	64966ML98	NEW YORK N Y	12/1/2047	1,430.7	200
5	91412GSK2	UNIVERSITY CALIF REVS	5/15/2048	1,333.4	201
6	64971XKS6	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	11/1/2044	1,220.4	101
7	91412GSJ5	UNIVERSITY CALIF REVS	5/15/2048	1,163.4	70
8	270777AD7	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	12/1/2040	1,129.2	50
9	467229AF7	JACKSON CNTY MISS PORT FAC REV	6/1/2023	1,107.5	118
10	91412GSH9	UNIVERSITY CALIF REVS	5/15/2048	1,062.0	118
11	913366KA7	UNIV CALIF REGTS MED CTR POOLED REV	5/15/2045	992.5	66
12	59261AWK9	METROPOLITAN TRANSN AUTH N Y REV	11/15/2050	885.7	125
13	64966JE77	NEW YORK N Y	4/1/2042	870.4	265
14	13063ASV6	CALIFORNIA ST	5/1/2034	862.1	104
15	13034AK90	CALIFORNIA INFRASTRUCTURE & ECONOMIC DEV BK REV	1/1/2050	857.0	32
16	67756AH96	OHIO ST HIGHER EDL FAC COMMN REV	1/1/2043	800.7	89
17	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/2030	797.5	39
18	59259N8Q9	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	11/1/2031	792.4	168
19	64966FA87	NEW YORK N Y	4/1/2036	784.0	106
20	64966LU41	NEW YORK N Y	6/1/2044	775.4	54
21	842475M85	SOUTHERN CALIF PUB PWR AUTH PWR PROJ REV	7/1/2036	769.6	37
22	64971M2B7	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	5/1/2034	765.8	101
23	13063ASV2	CALIFORNIA ST	5/1/2034	732.9	130
24	87638QBF5	TARRANT CNTY TEX CULTURAL ED FACS FIN CORP HOSP REV	10/1/2041	704.8	40
25	13063BCF7	CALIFORNIA ST	5/1/2033	687.2	98
26	91412GSG1	UNIVERSITY CALIF REVS	5/15/2048	671.3	88
27	13057EBE3	CALIFORNIA PUB FIN AUTH REV	8/1/2052	663.7	112
28	13063BCH3	CALIFORNIA ST	5/1/2033	662.8	79
29	45204FAG0	ILLINOIS FIN AUTH REV	8/15/2049	637.7	33
30	548351AC9	LOWER NECHES VALLEY AUTH TEX INDL DEV CORP REV	11/1/2038	635.5	146
31	915137U35	UNIVERSITY TEX UNIV REVS	8/1/2039	627.6	50
32	60528ABX1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/2035	615.7	179
33	54834RAC3	LOWER NECHES VALLEY AUTH TEX INDL DEV CORP EXEMPT FACS REV	11/1/2029	614.0	32
34	89602RDR3	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	1/1/2033	613.8	126
35	64971WGW4	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	8/1/2043	613.5	56
36	64972GCR3	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/2049	608.6	82
37	792070BH6	ST LUCIE CNTY FLA POLLUTN CTL REV	9/1/2028	602.4	70
38	677561LA8	OHIO ST HOSP FAC REV	1/1/2052	601.4	76
39	79765TBY0	SAN FRANCISCO CALIF CITY & CNTY REDEV AGY MULTIFAMILY REV	6/15/2034	600.0	9
40	64972GEL4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/2049	550.8	58
41	64966LCP4	NEW YORK N Y	8/1/2040	547.5	90
42	59261AB22	METROPOLITAN TRANSN AUTH N Y REV	11/1/2032	541.4	51
43	64971WE63	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2/1/2045	541.1	171
44	64579FYJ6	NEW JERSEY HEALTH CARE FACS FING AUTH REV	7/1/2043	531.5	146
45	71884SAA8	PHOENIX ARIZ INDL DEV AUTH HEALTH CARE FACS REV	11/15/2052	530.6	77
46	64972FJ4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/2044	521.8	105
47	13057EBD5	CALIFORNIA PUB FIN AUTH REV	8/1/2052	521.5	125
48	13063ASX8	CALIFORNIA ST	5/1/2034	511.1	84
49	60528ABY9	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/2035	508.8	84
50	544525DB1	LOS ANGELES CALIF DEPT WTR & PWR WTRWKS REV	7/1/2035	502.4	55

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## Municipal Market Trades by Trade Type

### Trade Type and Size

Average daily par amount in \$ millions

#### 2020:Q3

#### All Trades

**Total 10,653.9**

0 - \$25,000	215.6
\$25,001 - \$50,000	216.4
\$50,001 - \$75,000	94.0
\$75,001 - \$100,000	188.6
\$100,001 - \$500,000	1,014.9
\$500,001 - \$1,000,000	788.6
\$1,000,001 - \$2,000,000	953.4
More than \$2,000,000	7,182.4

#### Customer Bought

**Total 6,013.6**

0 - \$25,000	76.3
\$25,001 - \$50,000	77.5
\$50,001 - \$75,000	34.0
\$75,001 - \$100,000	68.6
\$100,001 - \$500,000	456.7
\$500,001 - \$1,000,000	414.3
\$1,000,001 - \$2,000,000	525.9
More than \$2,000,000	4,360.3

#### Customer Sold

**Total 2,964.6**

0 - \$25,000	54.3
\$25,001 - \$50,000	53.9
\$50,001 - \$75,000	24.8
\$75,001 - \$100,000	49.5
\$100,001 - \$500,000	223.5
\$500,001 - \$1,000,000	170.0
\$1,000,001 - \$2,000,000	225.1
More than \$2,000,000	2,163.5

#### Inter-Dealer

**Total 1,675.7**

0 - \$25,000	85.0
\$25,001 - \$50,000	85.0
\$50,001 - \$75,000	35.1
\$75,001 - \$100,000	70.5
\$100,001 - \$500,000	334.7
\$500,001 - \$1,000,000	204.3
\$1,000,001 - \$2,000,000	202.4
More than \$2,000,000	658.6

## Municipal Market Trades by Trade Type

### Trade Type and Size

Average daily number of trades

#### 2020:Q3

##### All Trades

**Total 29,421**

0 - \$25,000	14,349
\$25,001 - \$50,000	5,189
\$50,001 - \$75,000	1,417
\$75,001 - \$100,000	1,952
\$100,001 - \$500,000	3,998
\$500,001 - \$1,000,000	981
\$1,000,001 - \$2,000,000	626
More than \$2,000,000	910

##### Customer Bought

**Total 11,174**

0 - \$25,000	4,974
\$25,001 - \$50,000	1,855
\$50,001 - \$75,000	512
\$75,001 - \$100,000	710
\$100,001 - \$500,000	1,738
\$500,001 - \$1,000,000	515
\$1,000,001 - \$2,000,000	345
More than \$2,000,000	524

##### Customer Sold

**Total 7,342**

0 - \$25,000	3,628
\$25,001 - \$50,000	1,298
\$50,001 - \$75,000	373
\$75,001 - \$100,000	511
\$100,001 - \$500,000	917
\$500,001 - \$1,000,000	209
\$1,000,001 - \$2,000,000	147
More than \$2,000,000	259

##### Inter-Dealer

**Total 10,904**

0 - \$25,000	5,748
\$25,001 - \$50,000	2,035
\$50,001 - \$75,000	531
\$75,001 - \$100,000	731
\$100,001 - \$500,000	1,342
\$500,001 - \$1,000,000	258
\$1,000,001 - \$2,000,000	134
More than \$2,000,000	126

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

### Transaction Summary - Fixed Rate Securities

Average daily par amount in \$ millions

2020:Q3	
<b>Fixed Rate</b>	
<b>Total</b>	<b>6,894.5</b>
0 - \$25,000	208.9
\$25,001 - \$50,000	208.5
\$50,001 - \$75,000	90.0
\$75,001 - \$100,000	171.9
\$100,001 - \$500,000	921.4
\$500,001 - \$1,000,000	695.6
\$1,000,001 - \$2,000,000	798.3
More than \$2,000,000	3,799.9

<b>Zero Coupon</b>	
<b>Total</b>	<b>285.3</b>
0 - \$25,000	5.8
\$25,001 - \$50,000	6.8
\$50,001 - \$75,000	3.2
\$75,001 - \$100,000	5.6
\$100,001 - \$500,000	22.9
\$500,001 - \$1,000,000	11.9
\$1,000,001 - \$2,000,000	11.5
More than \$2,000,000	217.4

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

**Transaction Summary - Fixed Rate Securities**

Average daily number of trades

<b>2020:Q3</b>	
<b>Fixed Trade</b>	
<b>Total</b>	<b>27,664</b>
0 - \$25,000	13,875
\$25,001 - \$50,000	4,997
\$50,001 - \$75,000	1,357
\$75,001 - \$100,000	1,782
\$100,001 - \$500,000	3,654
\$500,001 - \$1,000,000	865
\$1,000,001 - \$2,000,000	524
More than \$2,000,000	611

<b>Zero Coupon</b>	
<b>Total</b>	<b>835</b>
0 - \$25,000	427
\$25,001 - \$50,000	167
\$50,001 - \$75,000	50
\$75,001 - \$100,000	59
\$100,001 - \$500,000	96
\$500,001 - \$1,000,000	15
\$1,000,001 - \$2,000,000	8
More than \$2,000,000	14

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

### Source of Repayment

Average daily par amount in \$ millions

2020:Q3	
<b>Fixed Rate</b>	
<b>Total</b>	<b>6,894.5</b>
General Obligation	2,285.5
Revenue	4,421.1
Double Barrel	187.9

<b>Zero Coupon</b>	
<b>Total</b>	<b>285.3</b>
General Obligation	58.3
Revenue	225.5
Double Barrel	1.5

Average daily number of trades

<b>Fixed Rate</b>	
<b>Total</b>	<b>27,664</b>
General Obligation	9,810
Revenue	16,978
Double Barrel	876

<b>Zero Coupon</b>	
<b>Total</b>	<b>835</b>
General Obligation	428
Revenue	393
Double Barrel	15

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

### Tax Status

Average daily par amount in \$ millions

2020:Q3	
<b>Fixed Rate</b>	
<b>Total</b>	<b>6,894.4</b>
Tax Exempt	4,912.2
Taxable	1,770.4
AMT	211.8

<b>Zero Coupon</b>	
<b>Total</b>	<b>285.3</b>
Tax Exempt	267.8
Taxable	16.8
AMT	0.7

Average daily number of trades

<b>Fixed Rate</b>	
<b>Total</b>	<b>27,664</b>
Tax Exempt	24,714
Taxable	2,565
AMT	385

<b>Zero Coupon</b>	
<b>Total</b>	<b>835</b>
Tax Exempt	753
Taxable	81
AMT	<1



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

### Sector

Average daily par amount in \$ millions

2020:Q3	
<b>Fixed Rate</b>	
<b>Total</b>	<b>6,894.5</b>
Education	1,535.8
Health	378.8
Housing	190.0
Tax-Revenue	817.3
Transportation	814.2
Utility	767.7
Various Purpose	1,054.8
Other	1,336.0

<b>Zero Coupon</b>	
<b>Total</b>	<b>285.3</b>
Education	66.7
Health	2.1
Housing	0.1
Tax-Revenue	96.7
Transportation	13.8
Utility	2.1
Various Purpose	3.0
Other	100.8

Average daily number of trades

<b>Fixed Rate</b>	
<b>Total</b>	<b>27,664</b>
Education	6,987
Health	1,919
Housing	680
Tax-Revenue	4,992
Transportation	2,908
Utility	2,956
Various Purpose	3,596
Other	3,626

<b>Zero Coupon</b>	
<b>Total</b>	<b>835</b>
Education	400
Health	18
Housing	1
Tax-Revenue	83
Transportation	149
Utility	105
Various Purpose	43
Other	35

## 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

#### 2020:Q3

##### All Trades

**Total 2,579.1**

0 - \$25,000	<0.1
\$25,001 - \$50,000	0.1
\$50,001 - \$75,000	0.1
\$75,001 - \$100,000	9.4
\$100,001 - \$500,000	58.3
\$500,001 - \$1,000,000	66.8
\$1,000,001 - \$2,000,000	119.1
More than \$2,000,000	2,325.4

##### Customer Bought

**Total 1,265.9**

0 - \$25,000	<0.1
\$25,001 - \$50,000	<0.1
\$50,001 - \$75,000	<0.1
\$75,001 - \$100,000	1.8
\$100,001 - \$500,000	17.9
\$500,001 - \$1,000,000	27.1
\$1,000,001 - \$2,000,000	58.3
More than \$2,000,000	1,160.8

##### Customer Sold

**Total 1,245.6**

0 - \$25,000	<0.1
\$25,001 - \$50,000	<0.1
\$50,001 - \$75,000	<0.1
\$75,001 - \$100,000	6.0
\$100,001 - \$500,000	32.5
\$500,001 - \$1,000,000	34.1
\$1,000,001 - \$2,000,000	54.1
More than \$2,000,000	1,118.9

##### Inter-Dealer

**Total 67.6**

0 - \$25,000	<0.1
\$25,001 - \$50,000	<0.1
\$50,001 - \$75,000	<0.1
\$75,001 - \$100,000	1.7
\$100,001 - \$500,000	7.9
\$500,001 - \$1,000,000	5.7
\$1,000,001 - \$2,000,000	6.7
More than \$2,000,000	45.6

<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

#### 2020:Q3

##### All Trades

Total	682
0 - \$25,000	2
\$25,001 - \$50,000	1
\$50,001 - \$75,000	1
\$75,001 - \$100,000	95
\$100,001 - \$500,000	202
\$500,001 - \$1,000,000	84
\$1,000,001 - \$2,000,000	79
More than \$2,000,000	219

##### Customer Bought

Total	259
0 - \$25,000	1
\$25,001 - \$50,000	<1
\$50,001 - \$75,000	<1
\$75,001 - \$100,000	18
\$100,001 - \$500,000	57
\$500,001 - \$1,000,000	34
\$1,000,001 - \$2,000,000	39
More than \$2,000,000	110

##### Customer Sold

Total	358
0 - \$25,000	1
\$25,001 - \$50,000	1
\$50,001 - \$75,000	1
\$75,001 - \$100,000	60
\$100,001 - \$500,000	115
\$500,001 - \$1,000,000	43
\$1,000,001 - \$2,000,000	36
More than \$2,000,000	103

##### Inter-Dealer

Total	65
0 - \$25,000	1
\$25,001 - \$50,000	<1
\$50,001 - \$75,000	<1
\$75,001 - \$100,000	17
\$100,001 - \$500,000	30
\$500,001 - \$1,000,000	7
\$1,000,001 - \$2,000,000	4
More than \$2,000,000	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

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

Average daily par amount in \$ millions

#### 2020:Q3

##### All Trades

**Total 13.5**

0 - \$25,000	0.3
\$25,001 - \$50,000	0.2
\$50,001 - \$75,000	0.1
\$75,001 - \$100,000	0.3
\$100,001 - \$500,000	2.3
\$500,001 - \$1,000,000	2.0
\$1,000,001 - \$2,000,000	1.8
More than \$2,000,000	6.5

##### Customer Bought

**Total 5.3**

0 - \$25,000	0.1
\$25,001 - \$50,000	0.1
\$50,001 - \$75,000	0.1
\$75,001 - \$100,000	0.1
\$100,001 - \$500,000	0.8
\$500,001 - \$1,000,000	0.7
\$1,000,001 - \$2,000,000	0.8
More than \$2,000,000	2.7

##### Customer Sold

**Total 5.2**

0 - \$25,000	0.2
\$25,001 - \$50,000	0.1
\$50,001 - \$75,000	<0.1
\$75,001 - \$100,000	0.1
\$100,001 - \$500,000	0.6
\$500,001 - \$1,000,000	0.7
\$1,000,001 - \$2,000,000	0.5
More than \$2,000,000	3.0

##### Inter-Dealer

**Total 3.0**

0 - \$25,000	0.1
\$25,001 - \$50,000	0.1
\$50,001 - \$75,000	0.1
\$75,001 - \$100,000	0.1
\$100,001 - \$500,000	0.9
\$500,001 - \$1,000,000	0.6
\$1,000,001 - \$2,000,000	0.4
More than \$2,000,000	0.7

<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

#### 2020:Q3

##### All Trades

Total	36
0 - \$25,000	13
\$25,001 - \$50,000	4
\$50,001 - \$75,000	2
\$75,001 - \$100,000	3
\$100,001 - \$500,000	9
\$500,001 - \$1,000,000	3
\$1,000,001 - \$2,000,000	1
More than \$2,000,000	1

##### Customer Bought

Total	12
0 - \$25,000	3
\$25,001 - \$50,000	2
\$50,001 - \$75,000	1
\$75,001 - \$100,000	1
\$100,001 - \$500,000	3
\$500,001 - \$1,000,000	1
\$1,000,001 - \$2,000,000	1
More than \$2,000,000	<1

##### Customer Sold

Total	13
0 - \$25,000	6
\$25,001 - \$50,000	1
\$50,001 - \$75,000	<1
\$75,001 - \$100,000	1
\$100,001 - \$500,000	3
\$500,001 - \$1,000,000	1
\$1,000,001 - \$2,000,000	<1
More than \$2,000,000	1

##### Inter-Dealer

Total	12
0 - \$25,000	3
\$25,001 - \$50,000	1
\$50,001 - \$75,000	1
\$75,001 - \$100,000	1
\$100,001 - \$500,000	3
\$500,001 - \$1,000,000	1
\$1,000,001 - \$2,000,000	<1
More than \$2,000,000	<1

<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

2020:Q3	
<b>All Trades</b>	
<b>Total</b>	<b>1.29</b>
0 - \$25,000	1.34
\$25,001 - \$50,000	1.23
\$50,001 - \$75,000	1.13
\$75,001 - \$100,000	1.20
\$100,001 - \$500,000	1.17
\$500,001 - \$1,000,000	1.38
\$1,000,001 - \$2,000,000	1.49
More than \$2,000,000	1.57
<b>Customer Bought</b>	
<b>Total</b>	<b>1.09</b>
0 - \$25,000	1.11
\$25,001 - \$50,000	1.03
\$50,001 - \$75,000	0.91
\$75,001 - \$100,000	1.01
\$100,001 - \$500,000	1.00
\$500,001 - \$1,000,000	1.30
\$1,000,001 - \$2,000,000	1.47
More than \$2,000,000	1.56
<b>Customer Sold</b>	
<b>Total</b>	<b>1.40</b>
0 - \$25,000	1.52
\$25,001 - \$50,000	1.30
\$50,001 - \$75,000	1.19
\$75,001 - \$100,000	1.22
\$100,001 - \$500,000	1.12
\$500,001 - \$1,000,000	1.38
\$1,000,001 - \$2,000,000	1.53
More than \$2,000,000	1.65

## Municipal Market Variable Securities Rate Resets

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

2020:Q3	
<b>Total</b>	<b>81,111</b>
Set by Remarketing Agent	81,027
Set by Formula	80
Maximum Rate	4

<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>

2020:Q3	
<b>Total</b>	<b>707</b>
Set by Auction	337
Maximum Rate	332
All Hold Rate	38

<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

	2020:Q3
Bond Call	9,111
Audited Financial Statements or CAFR	4,368
Annual Financial Information and Operation Data	4,299
Quarterly/Monthly Financial Information	3,833
Other Financial/Operating Data	1,882
Other Event-Based Disclosures	1,316
Defeasance	1,257
Financial Obligation - Incurrence or Agreement	1,126
Rating Change	1,119
Budget	983
Failure to Provide Annual Financial Info	521
Interim/Additional Financial Information/Operating Data	300
Failure to Provide Event Filing Information	213
Notice to Investor Pursuant to Bond Documents	196
Tender Offer/Secondary Market Purchases	93
Principal & Interest Payment Delinquency	76
Consultant Reports	56
Asset Backed Securities Filings <sup>1</sup>	52
Successor, Additional or Change in Trustee	43
Information Provided to Rating Agency, Credit/Liquidity Provider or Other Third Party	37
Unscheduled Draw on Debt Service Reserve	35
Capital or Other Financing Plan	32
Bid for Auction Rate or Other Securities	26
Consolidation	19
Non-payment Related Default	17
Bankruptcy, Insolvency, Receivership	17
Modification to the Rights of Security Holders	16
Substitution of Credit or Liquidity Provider or Its Failure to Perform	16
Change of Tender Agent, Remarketing Agent, or Other On-Going Party	16
Investment/Debt/Financial Policy	15
Unscheduled Draw on Credit Enhancement	14
Change in Obligated Person	13
Release, Substitution or Sale of Property	11
Litigation/Enforcement Action	9
Financial Obligation - Event Reflecting Financial Difficulties	7
Communication from the Internal Revenue Service	5
Amendment to Continuing Disclosure Undertaking	4
Change in Fiscal Year/Timing of Annual Disclosure	2

<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.