



Municipal Securities Rulemaking Board



2021 FACT BOOK

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About the MSRB Fact Book

As the self-regulatory organization for the municipal securities market, the Municipal Securities Rulemaking Board (MSRB) collects market data and disclosures to support market transparency and the surveillance functions of regulatory enforcement agencies. The MSRB makes its data, documents and related statistics available in multiple formats to facilitate widespread access to and consumption of information that otherwise would not be readily available.

The MSRB's annual *Fact Book* provides comprehensive and historical statistics on municipal market trading patterns, primary market and continuing disclosures in the municipal securities market, and interest rate resets for municipal variable rate securities. Data in the *Fact Book* are based on information submitted to the MSRB by municipal securities dealers, municipal securities issuers and those acting on their behalf.

As part of its goal of market transparency, the MSRB publishes its annual *Fact Book* to provide municipal market participants, policymakers, regulators, academics and others with historical statistics that can be analyzed to identify market trends and activity. The MSRB also publishes quarterly updates to the *Fact Book* on its website, [MSRB.org](https://www.msrb.org). These and other MSRB statistical reports, and the availability of source data and disclosures, are consistent with the organization's goal to make municipal market data freely available to the public and market participants. The information also supports the MSRB's regulatory activities.

The 2021 *Fact Book* includes monthly, quarterly and yearly aggregate market information from 2017 to 2021, and covers different types of municipal issues, trades and interest rate resets. Information about nearly every trade reported to the MSRB by municipal securities dealers since 2017 is included.¹ The data reflect aggregate trading activity at the end of each trading day as submitted to the MSRB's Real-Time Transaction Reporting System (RTRS). The MSRB obtains some information on the characteristics of securities traded from ICE Data Pricing & Reference Data, LLC and CUSIP databases furnished by CUSIP Global Services.²

Definitions for terminology used in the report can be found in the Definition of Terms Used section at the end of the *Fact Book*. For more information on trading, variable rate resets, continuing disclosures and official statements, please visit the MSRB's Electronic Municipal Market Access (EMMA[®]) website at emma.msrb.org.

¹ As described in a 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 MSRB's transparency products, including data disseminated through EMMA, but may be included in this report.

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WHY THE MSRB COLLECTS TRADE DATA AND DISCLOSURE DOCUMENTS

The MSRB Transaction Reporting Program serves two major functions in the municipal securities market—price transparency and market surveillance. The implementation of RTRS in January 2005 created “real-time” transaction price transparency. Although the most visible part of the MSRB’s transaction reporting program is the transparency function, another important function is the information and support the program provides to enforcement agencies charged with enforcing MSRB rules.

MSRB rules, specifically Rule G-14, require dealers to submit to the MSRB transaction data on all municipal securities trades with customers and with other dealers within 15 minutes of the time of trade, with limited exceptions. Transaction prices are electronically disseminated immediately after transaction data is received by the MSRB and automated error checking is completed. This system effectively provides “real-time” reporting of transaction prices in the municipal securities market.

The RTRS feed disseminates transaction data to information vendors and to the MSRB’s EMMA website, in real-time, as transactions are reported by dealers. The EMMA website receives and disseminates RTRS data in real-time and allows a user to search historical trade data.

The EMMA website provides, at no charge, real-time access to primary market and continuing disclosure documents, as well as documents related to variable rate security liquidity provisions and auction procedures. EMMA’s database contains primary market documents including official statements and advanced refunding documents since 1990. EMMA’s database also contains continuing disclosure documents produced in connection with municipal securities since July 1, 2009, based on EMMA’s designation by the Securities and Exchange Commission as the official repository for continuing disclosure on that date.

The compilation of data in this *Fact Book* represents what the MSRB believes to be an accurate and meaningful presentation of municipal market information. This digital publication is available on the MSRB’s website.

ABOUT THE MSRB

The Municipal Securities Rulemaking Board (MSRB) protects and strengthens the municipal bond market, enabling access to capital, economic growth, and societal progress in tens of thousands of communities across the country. The MSRB fulfills this mission by creating trust in our market through informed regulation of dealers and municipal advisors that protects investors, issuers and the public interest; building technology systems that power our market and provide transparency for issuers, institutions, and the investing public; and serving as the steward of market data that empowers better decisions and fuels innovation for the future. The MSRB is a self-regulatory organization governed by a board of directors that has a majority of public members, in addition to representatives of regulated entities. The MSRB is overseen by the Securities and Exchange Commission and Congress.

ABOUT EMMA®

The MSRB’s EMMA website, emma.msrb.org, is designated by the U. S. Securities and Exchange Commission as the official source for municipal securities data and disclosure documents. The website provides free public access to objective municipal market information and interactive tools for investors, municipal entities and others. EMMA supports municipal market transparency but is not a platform for buying or selling bonds.

EMMA houses municipal disclosure documents including offering documents, called official statements, for most new offerings of municipal bonds, notes, 529 plans and other municipal securities issued since 1990. EMMA also provides access to advance refunding documents, which detail arrangements made when new bonds are issued to establish escrows to pay off existing bonds (usually to refinance their debt at a lower interest rate). Ongoing disclosures about municipal bonds throughout the life of the bonds also are available on EMMA. These continuing disclosures, which include annual financial statements and notices of material events, reflect the financial or operating condition of the issuer and events that can

affect the ability of an issuer to repay its bonds and the value of the bond, among other things. Current municipal securities credit ratings also are provided on EMMA.

EMMA disseminates market transparency data, which includes real-time prices and yields at which bonds and notes are bought and sold, for most trades occurring on or after January 31, 2005. Interest rates for municipal securities, including those for auction rate securities and variable rate demand obligations, are available on EMMA, as well. A market statistics section on EMMA provides a summary of municipal securities transaction activity since 2006.

EMMA is a free service of the Municipal Securities Rulemaking Board.

DATA AVAILABLE FROM THE MSRB

Get Real-Time Feeds of Municipal Securities Market Disclosures

The MSRB offers subscriptions to two feeds of disclosure data:*

- **MSRB Primary Market Subscription Service:** All primary market disclosure documents and related information provided by municipal bond dealers.
- **MSRB Continuing Disclosure Subscription Service:** All continuing disclosure documents and related information.

*This information is also available at no charge on the [EMMA@ website](#).

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Part One

Municipal Market Trade Summary, 2017–2021

Transaction Summary

Total par amount traded in \$ millions

	2017	2018	2019	2020	2021
Total	2,980,146	3,091,206	3,014,104	3,139,655	2,259,105
By Trade Type					
Customer Bought	1,526,641	1,543,192	1,547,610	1,656,201	1,232,274
Customer Sold	925,050	1,023,351	945,111	994,602	621,565
Inter-Dealer	528,455	524,664	521,383	488,852	405,265
By Coupon Type					
Fixed Rate	1,773,113	1,844,298	1,797,962	1,971,761	1,562,622
Variable	940,777	989,411	955,384	881,015	466,944
Zero Coupon	98,167	70,692	71,142	106,282	73,176
Other ¹	168,089	186,806	189,616	180,598	156,362
By Source of Repayment					
General Obligation	795,978	787,852	773,360	797,448	605,326
Revenue	1,950,388	2,111,380	2,016,916	2,102,690	1,567,123
Double Barrel	56,475	62,337	64,169	69,536	55,968
Other ¹	177,306	129,637	159,660	169,980	30,688
By Tax Status					
Tax Exempt	2,527,506	2,573,742	2,480,940	2,520,388	1,738,644
Taxable	253,406	199,764	289,093	441,882	392,096
AMT	153,418	180,379	178,164	146,894	114,177
Other ¹	45,816	137,321	65,908	30,491	14,188

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

Transaction Summary

Total number of trades

	2017	2018	2019	2020	2021
Total	9,888,673	10,173,826	8,753,702	8,501,457	7,647,333
By Trade Type					
Customer Bought	3,946,262	3,949,571	3,327,806	3,153,011	2,744,256
Customer Sold	2,116,210	2,332,120	2,045,963	2,171,562	2,125,218
Inter-Dealer	3,826,201	3,892,135	3,379,933	3,176,884	2,777,859
By Coupon Type					
Fixed Rate	9,312,611	9,576,565	8,135,966	7,979,207	7,304,116
Variable	274,551	334,277	316,264	279,181	147,603
Zero Coupon	284,621	241,246	276,991	223,749	178,953
Other ¹	16,890	21,738	24,481	19,320	16,661
By Source of Repayment					
General Obligation	3,649,601	3,761,095	3,304,017	3,031,125	2,874,398
Revenue	5,897,655	6,071,101	5,159,263	5,185,055	4,507,712
Double Barrel	324,851	327,002	271,265	267,725	260,598
Other ¹	16,566	14,628	19,157	17,552	4,623
By Tax Status					
Tax Exempt	9,120,571	9,437,546	8,008,023	7,695,493	6,914,058
Taxable	635,843	587,926	615,982	676,248	634,098
AMT	127,083	132,014	120,378	124,809	96,049
Other ¹	5,176	16,340	9,319	4,907	3,128

DATA AVAILABLE FROM THE MSRB

Receive Municipal Market Data in Real Time

The MSRB offers subscriptions to two feeds of market data:*

- **MSRB Transaction Subscription Service:** All municipal trade data reported to the MSRB by municipal securities dealers.
- **MSRB Short-term Obligation Subscription Service:** All variable rate securities data and documents.

*This information is also available at no charge on the EMMA® website.



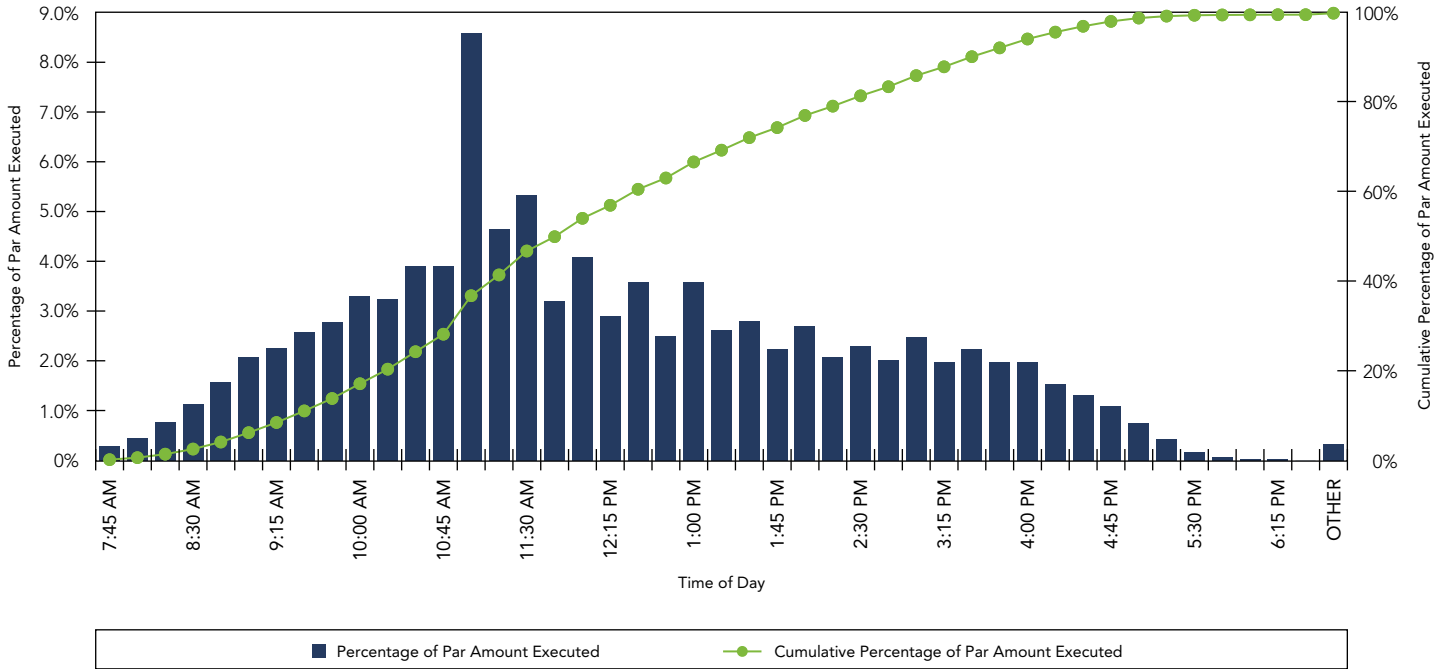
¹ Includes issues that could not be categorized based on available data.

Part Two

Municipal Market Trade Distribution Trends, 2021

Par Amount Traded by Time of Day, 2021

Trades executed within 15 minutes prior to time shown¹



continued >

Time of Execution	Average Par Value (\$ Millions)
7:45 AM	26.0
8:00 AM	40.6
8:15 AM	69.5
8:30 AM	102.5
8:45 AM	140.8
9:00 AM	187.5
9:15 AM	203.0
9:30 AM	232.1
9:45 AM	248.9
10:00 AM	295.4
10:15 AM	291.6
10:30 AM	349.8
10:45 AM	349.8
11:00 AM	771.0
11:15 AM	416.6
11:30 AM	478.4
11:45 AM	286.7
12:00 PM	367.8
12:15 PM	260.8
12:30 PM	321.0
12:45 PM	224.8
1:00 PM	321.7
1:15 PM	235.7

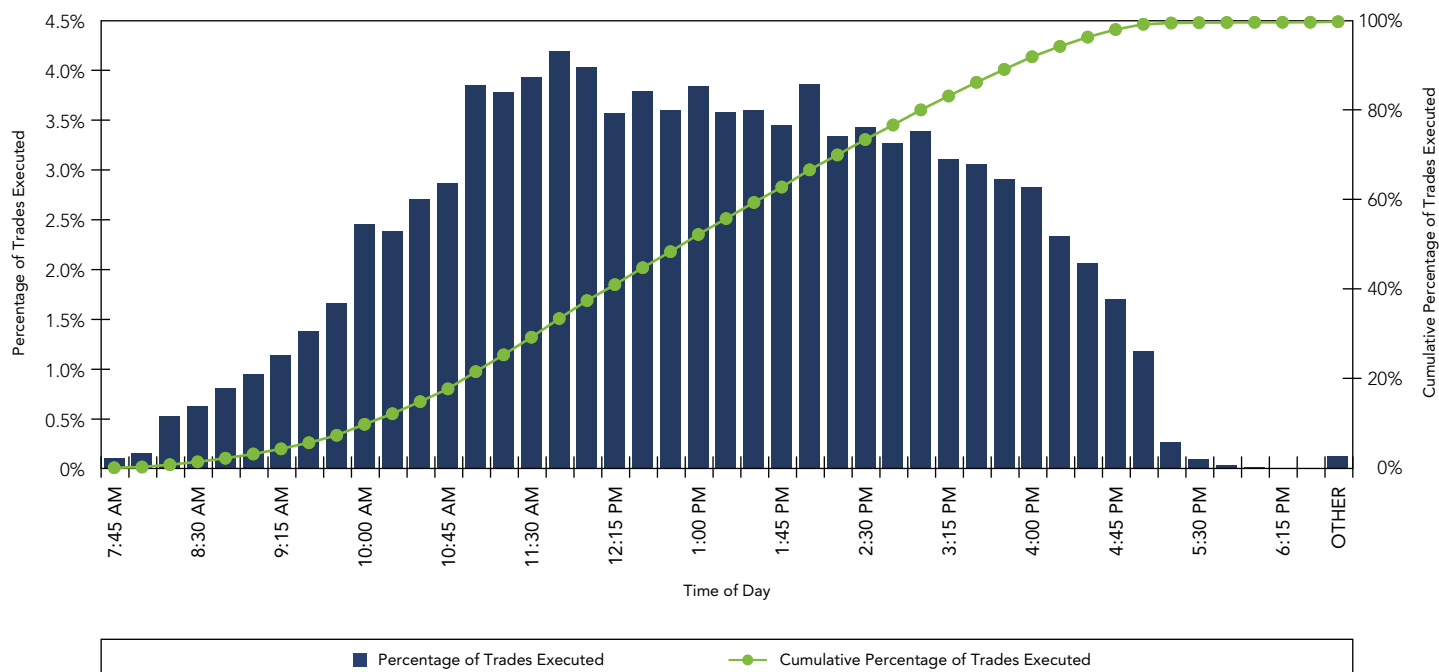
Time of Execution	Average Par Value (\$ Millions)
1:30 PM	251.0
1:45 PM	200.6
2:00 PM	243.4
2:15 PM	186.2
2:30 PM	207.0
2:45 PM	182.1
3:00 PM	222.2
3:15 PM	177.2
3:30 PM	202.1
3:45 PM	176.6
4:00 PM	177.9
4:15 PM	136.7
4:30 PM	117.7
4:45 PM	98.0
5:00 PM	67.3
5:15 PM	38.6
5:30 PM	16.5
5:45 PM	6.1
6:00 PM	2.9
6:15 PM	2.4
6:30 PM	0.4
Other ²	29.6
Total	8,964.7

¹ Eastern time.

² Trades reported after 6:30 p.m. and before 7:30 a.m.

Number of Trades by Time of Day, 2021

Trades executed within 15 minutes prior to time shown¹



Time of Execution	Average Number of Trades
7:45 AM	34
8:00 AM	48
8:15 AM	161
8:30 AM	191
8:45 AM	246
9:00 AM	288
9:15 AM	347
9:30 AM	419
9:45 AM	504
10:00 AM	745
10:15 AM	724
10:30 AM	820
10:45 AM	868
11:00 AM	1,170
11:15 AM	1,146
11:30 AM	1,191
11:45 AM	1,271
12:00 PM	1,221
12:15 PM	1,084
12:30 PM	1,149
12:45 PM	1,092
1:00 PM	1,165
1:15 PM	1,086

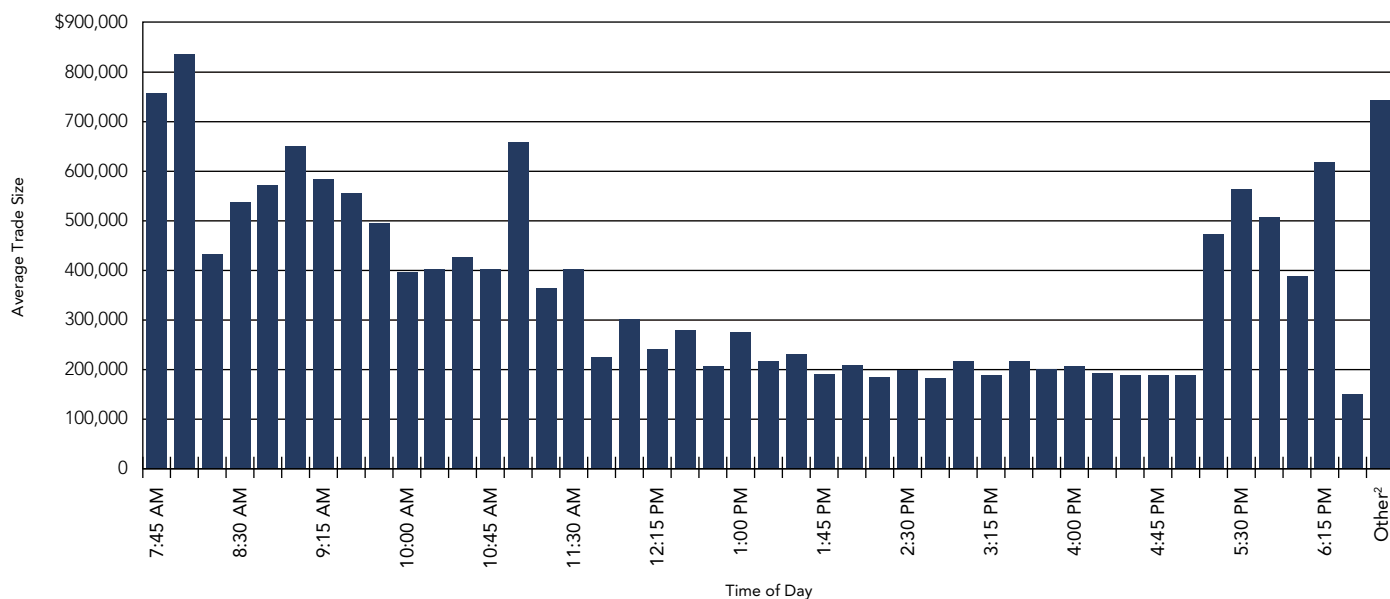
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Time of Execution	Average Number of Trades
1:30 PM	1,091
1:45 PM	1,048
2:00 PM	1,171
2:15 PM	1,012
2:30 PM	1,041
2:45 PM	992
3:00 PM	1,027
3:15 PM	943
3:30 PM	929
3:45 PM	881
4:00 PM	857
4:15 PM	708
4:30 PM	626
4:45 PM	517
5:00 PM	358
5:15 PM	81
5:30 PM	29
5:45 PM	12
6:00 PM	8
6:15 PM	4
6:30 PM	2
Other ²	40
Total	30,347

¹ Eastern time.

² Trades reported after 6:30 p.m. and before 7:30 a.m.

Average Daily Trade Size by Time of Day, 2021

Trades executed within 15 minutes prior to time shown¹

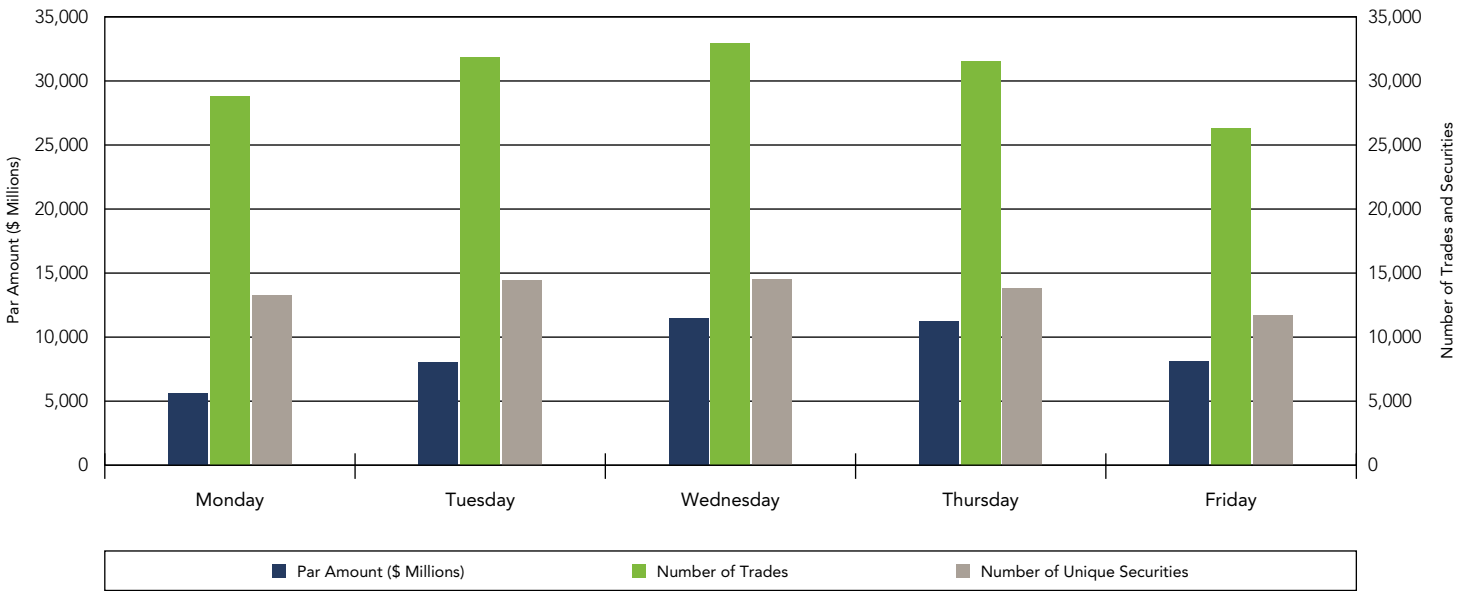
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Time of Execution	Average Trade Size (\$)
7:45 AM	756,444
8:00 AM	836,820
8:15 AM	432,198
8:30 AM	536,732
8:45 AM	572,814
9:00 AM	650,581
9:15 AM	584,727
9:30 AM	554,713
9:45 AM	494,297
10:00 AM	396,800
10:15 AM	402,983
10:30 AM	426,751
10:45 AM	403,133
11:00 AM	659,296
11:15 AM	363,543
11:30 AM	401,614
11:45 AM	225,635
12:00 PM	301,108
12:15 PM	240,721
12:30 PM	279,388
12:45 PM	205,865
1:00 PM	276,152
1:15 PM	217,062

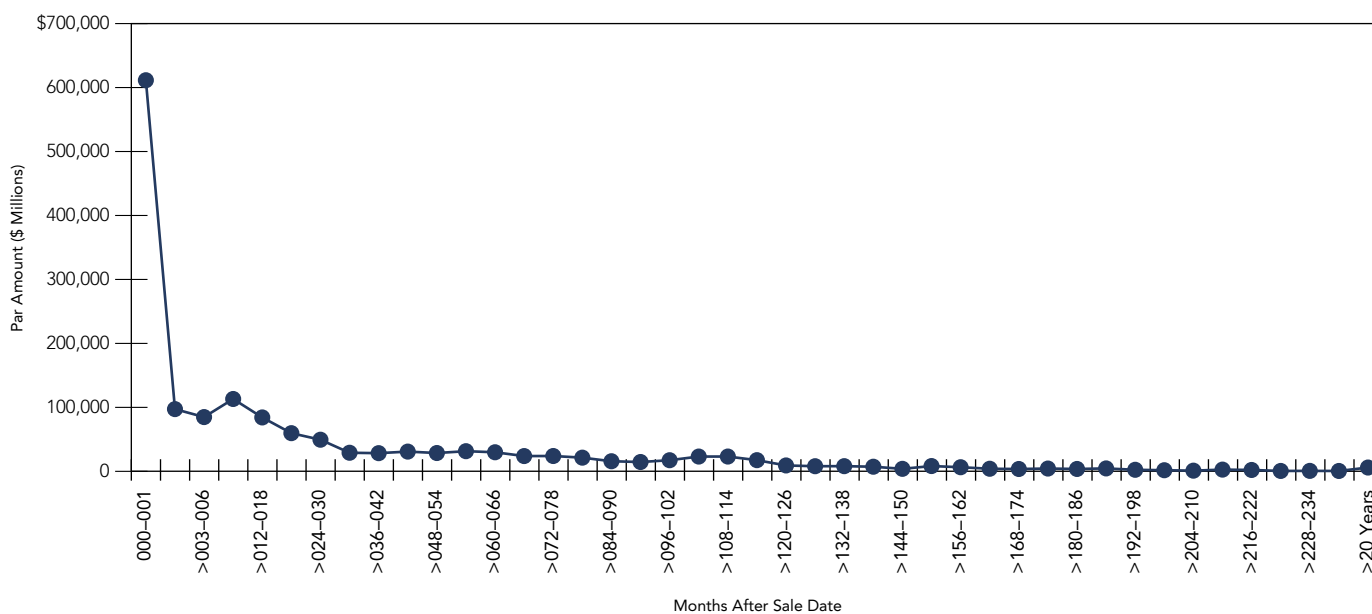
Time of Execution	Average Trade Size (\$)
1:30 PM	229,979
1:45 PM	191,342
2:00 PM	207,915
2:15 PM	183,954
2:30 PM	198,880
2:45 PM	183,542
3:00 PM	216,265
3:15 PM	187,960
3:30 PM	217,466
3:45 PM	200,506
4:00 PM	207,553
4:15 PM	192,980
4:30 PM	188,041
4:45 PM	189,393
5:00 PM	188,242
5:15 PM	473,905
5:30 PM	564,423
5:45 PM	507,445
6:00 PM	387,591
6:15 PM	618,358
6:30 PM	149,916
Other ²	744,160
Overall	295,411

¹ Eastern time.² Trades reported after 6:30 p.m. and before 7:30 a.m.

Average Trading Volume by Day of Week, 2021



Weekday	Par Amount (\$ Millions)	Number of Trades	Number of Unique Securities
Monday	5,618.0	28,806	13,239
Tuesday	8,045.9	31,849	14,469
Wednesday	11,455.5	32,919	14,515
Thursday	11,249.6	31,560	13,850
Friday	8,145.1	26,319	11,726

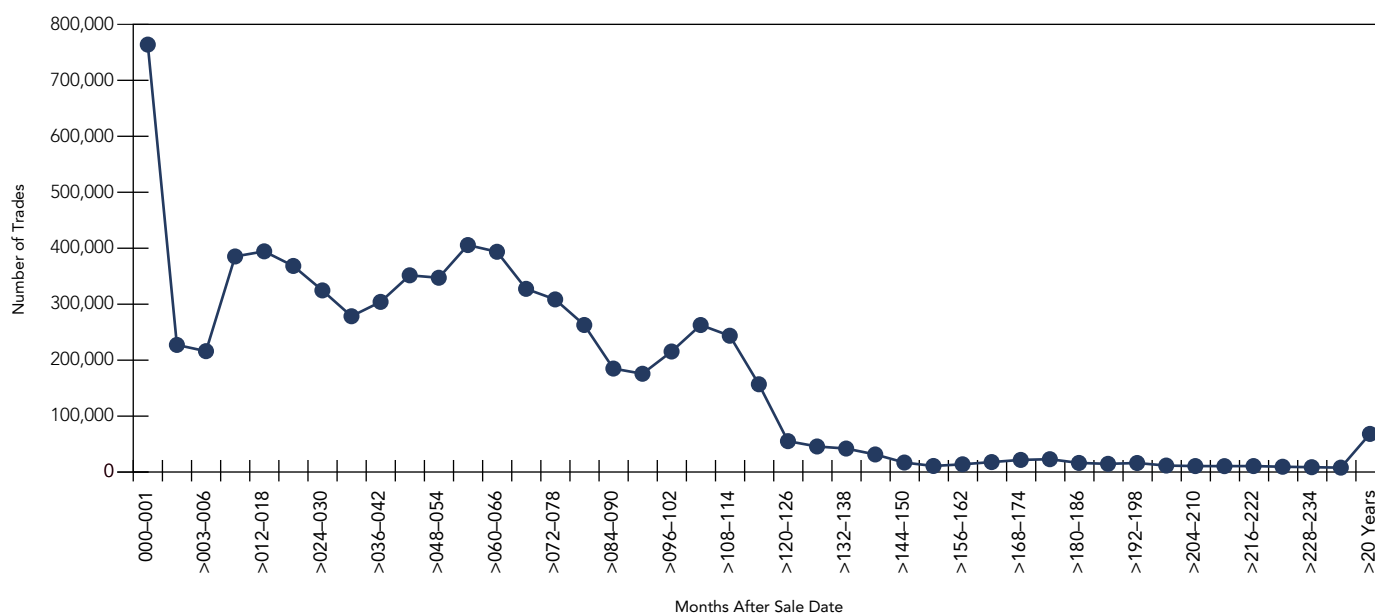
Par Amount Traded by Months After Sale Date¹, 2021

continued >

Months After Sale Date	Par Amount (\$ Millions)	% of Total Par	Cumulative Percentage of Par Value
000-001	611,415.5	39.5%	39.5%
>001-003	97,281.8	6.3%	45.8%
>003-006	84,835.2	5.5%	51.3%
>006-012	113,110.7	7.3%	58.6%
>012-018	84,257.9	5.4%	64.0%
>018-024	59,672.8	3.9%	67.9%
>024-030	49,432.0	3.2%	71.0%
>030-036	29,047.0	1.9%	72.9%
>036-042	28,416.9	1.8%	74.8%
>042-048	30,859.0	2.0%	76.8%
>048-054	28,625.2	1.8%	78.6%
>054-060	31,496.0	2.0%	80.6%
>060-066	29,813.9	1.9%	82.6%
>066-072	23,882.5	1.5%	84.1%
>072-078	23,964.1	1.5%	85.7%
>078-084	21,380.6	1.4%	87.0%
>084-090	15,786.4	1.0%	88.1%
>090-096	14,582.4	0.9%	89.0%
>096-102	17,371.0	1.1%	90.1%
>102-108	23,112.7	1.5%	91.6%
>108-114	23,127.3	1.5%	93.1%
>114-120	17,464.5	1.1%	94.2%
>120-126	9,199.5	0.6%	94.8%
>126-132	8,005.8	0.5%	95.3%
>132-138	8,085.8	0.5%	95.9%
>138-144	7,212.5	0.5%	96.3%
>144-150	3,907.7	0.3%	96.6%
>150-156	8,267.7	0.5%	97.1%
>156-162	6,422.1	0.4%	97.5%
>162-168	4,045.3	0.3%	97.8%
>168-174	3,658.1	0.2%	98.0%
>174-180	4,361.0	0.3%	98.3%
>180-186	3,709.8	0.2%	98.5%
>186-192	4,557.2	0.3%	98.8%
>192-198	2,424.9	0.2%	99.0%
>198-204	1,733.0	0.1%	99.1%
>204-210	1,052.8	0.1%	99.2%
>210-216	2,706.3	0.2%	99.4%
>216-222	2,136.7	0.1%	99.5%
>222-228	617.6	0.0%	99.5%
>228-234	714.2	0.0%	99.6%
>234-240	574.6	0.0%	99.6%
>20 Years	5,946.6	0.4%	100.0%
Total	1,548,274.7	100%	

¹ Includes only Bonds—securities with maturities of two or more years (maturity date less dated date) with fixed or zero interest rate. Excludes \$1,392 million par amount traded for which the date of sale was not available.

Number of Trades by Months After Sale Date¹, 2021



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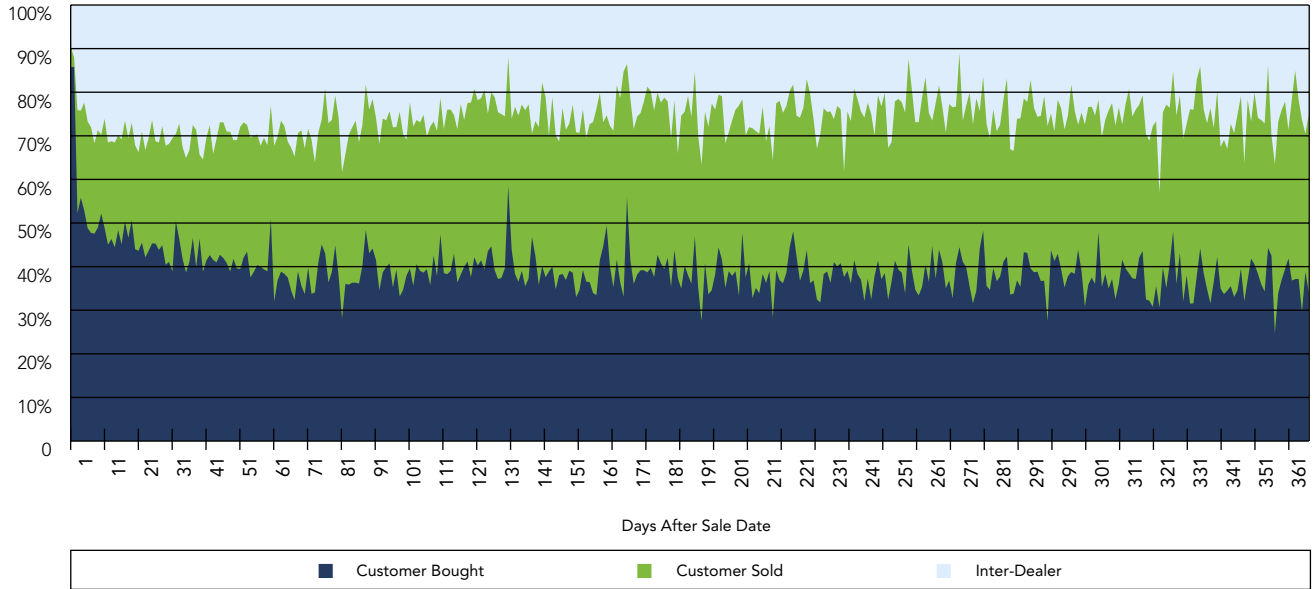
Months After Sale Date	Number of Trades	% of Total Trades	Cumulative Percentage of Number of Trades
000-001	763,788	10.4%	10.4%
>001-003	227,231	3.1%	13.5%
>003-006	216,066	2.9%	16.4%
>006-012	385,267	5.2%	21.6%
>012-018	394,420	5.4%	27.0%
>018-024	368,322	5.0%	32.0%
>024-030	324,616	4.4%	36.4%
>030-036	278,448	3.8%	40.2%
>036-042	304,118	4.1%	44.3%
>042-048	351,582	4.8%	49.1%
>048-054	347,222	4.7%	53.8%
>054-060	405,655	5.5%	59.3%
>060-066	393,639	5.3%	64.6%
>066-072	327,413	4.4%	69.1%
>072-078	308,523	4.2%	73.3%
>078-084	262,829	3.6%	76.9%
>084-090	184,982	2.5%	79.4%
>090-096	175,690	2.4%	81.7%
>096-102	215,455	2.9%	84.7%
>102-108	262,771	3.6%	88.2%
>108-114	243,638	3.3%	91.6%
>114-120	156,916	2.1%	93.7%

Months After Sale Date	Number of Trades	% of Total Trades	Cumulative Percentage of Number of Trades
>120-126	55,288	0.8%	94.4%
>126-132	45,778	0.6%	95.1%
>132-138	42,073	0.6%	95.6%
>138-144	31,525	0.4%	96.1%
>144-150	17,072	0.2%	96.3%
>150-156	10,935	0.1%	96.4%
>156-162	13,935	0.2%	96.6%
>162-168	17,921	0.2%	96.9%
>168-174	21,772	0.3%	97.2%
>174-180	23,053	0.3%	97.5%
>180-186	16,366	0.2%	97.7%
>186-192	14,748	0.2%	97.9%
>192-198	16,240	0.2%	98.1%
>198-204	11,671	0.2%	98.3%
>204-210	10,770	0.1%	98.4%
>210-216	10,643	0.1%	98.6%
>216-222	10,776	0.1%	98.7%
>222-228	9,563	0.1%	98.8%
>228-234	8,758	0.1%	99.0%
>234-240	7,982	0.1%	99.1%
>20 Years	68,229	0.9%	100.0%
Total	7,363,689	100%	

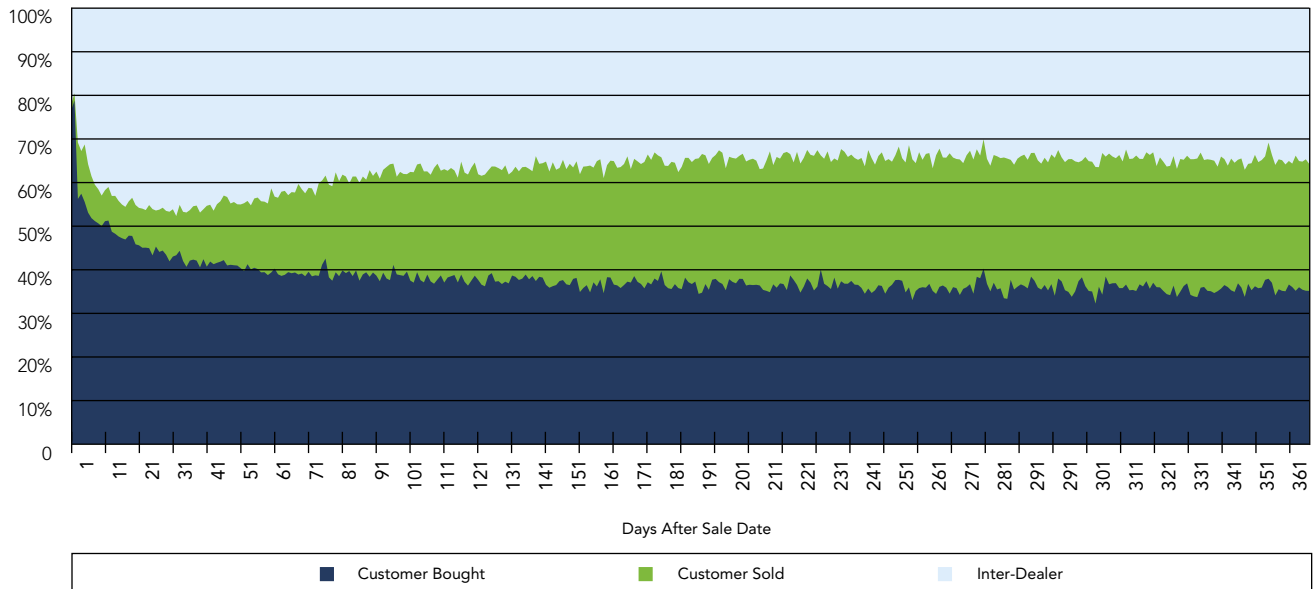
¹ Includes only Bonds—securities with maturities of two or more years (maturity date less dated date) with fixed or zero interest rate. Excludes 728 trades for which the date of sale was not available.

Distribution of Trades by Type After Sale Date¹, 2021

Par Amount

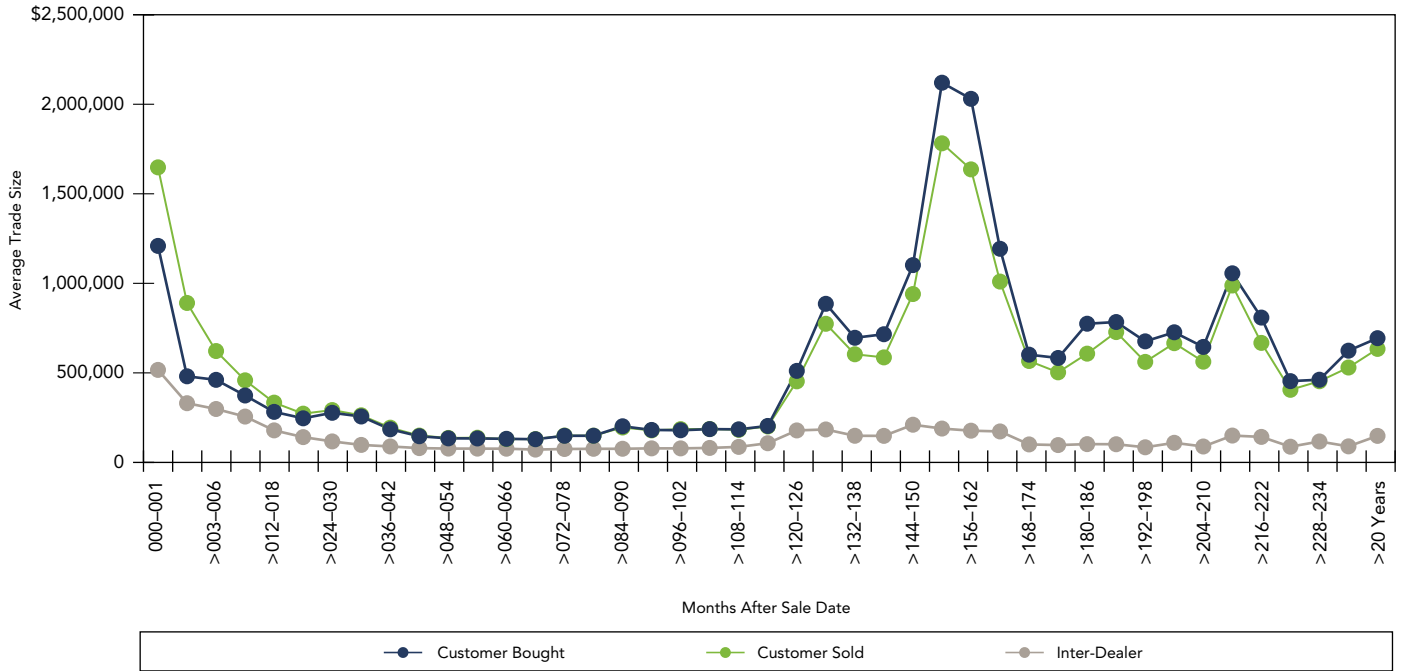


Number of Trades



¹ Excludes transactions for which the date of sale was not available.

Average Trade Size by Trade Type by Months After Sale Date¹, 2021 All trades



Months After Sale Date	Customer Bought	Customer Sold	Inter-dealer
000-001	1,201,626	1,642,874	505,167
>001-003	469,219	881,096	318,089
>003-006	449,324	611,124	285,563
>006-012	361,400	446,590	243,029
>012-018	269,391	321,256	165,519
>018-024	233,252	259,367	127,667
>024-030	264,172	279,565	103,450
>030-036	243,490	250,130	83,816
>036-042	171,445	180,582	75,090
>042-048	132,596	136,254	65,899
>048-054	120,630	123,137	63,262
>054-060	120,124	124,279	63,039
>060-066	118,012	116,472	62,594
>066-072	115,778	116,627	57,554
>072-078	134,938	136,276	60,881
>078-084	135,300	135,726	61,972
>084-090	188,531	181,622	62,208
>090-096	167,906	165,446	64,500
>096-102	166,119	172,468	64,362
>102-108	172,478	173,222	66,911
>108-114	171,312	168,470	72,711
>114-120	190,369	187,334	93,245

continued >

Months After Sale Date	Customer Bought	Customer Sold	Inter-dealer
>120-126	499,697	440,925	165,183
>126-132	876,378	764,148	170,642
>132-138	685,536	592,957	135,141
>138-144	705,510	575,446	134,609
>144-150	1,093,776	931,298	197,204
>150-156	2,118,276	1,777,859	175,662
>156-162	2,027,721	1,631,419	163,733
>162-168	1,185,444	1,001,268	159,480
>168-174	590,738	555,190	86,613
>174-180	572,177	491,496	82,936
>180-186	764,519	596,435	88,235
>186-192	774,028	717,589	87,630
>192-198	665,523	550,165	70,519
>198-204	716,437	655,252	95,650
>204-210	634,269	551,440	74,904
>210-216	1,047,703	979,332	136,329
>216-222	799,086	656,809	128,839
>222-228	442,070	393,297	73,706
>228-234	450,027	441,445	103,089
>234-240	613,176	518,562	75,671
>20 Years	683,432	623,112	134,511

¹ Excludes transactions for which the date of sale was not available.

Part Three

Most Actively Traded Municipal Securities, 2021

Top 50 Most Active Securities, 2021

By par amount

Rank	CUSIP ¹	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	38122NB84	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	-	6/1/66	9,513.0	113
2	74529JQH1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/51	6,742.5	3,591
3	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	-	8/1/35	6,625.9	307
4	74529JQG3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/46	5,072.0	3,602
5	59261AM79	METROPOLITAN TRANSN AUTH N Y REV	-	11/15/22	4,104.3	93
6	16876QBM0	CHILDRENS TR FD P R TOB SETTLEMENT REV	-	5/15/57	4,066.8	23
7	74514LE86	PUERTO RICO COMWLTH	8.00	7/1/35	3,889.8	735
8	402207AD6	GULF COAST INDL DEV AUTH TEX REV	-	11/1/41	3,816.9	461
9	882724SY4	TEXAS ST	4.00	8/26/21	3,590.0	2,875
10	270777AD7	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	-	12/1/40	3,330.9	238
11	16876QBL2	CHILDRENS TR FD P R TOB SETTLEMENT REV	-	5/15/57	3,300.0	14
12	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	12/1/30	3,170.7	173
13	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	-	12/1/59	3,103.4	484
14	888805CJ5	TOBACCO SETTLEMENT AUTH IOWA TOB SETTLEMENT REV	-	6/1/65	3,088.7	108
15	64966ML98	NEW YORK N Y	-	12/1/47	2,952.1	362
16	792070BH6	ST LUCIE CNTY FLA POLLUTN CTL REV	-	9/1/28	2,917.0	312
17	64971XHT8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	8/1/42	2,568.1	372
18	64972GZB3	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/45	2,446.9	247
19	64966KCW1	NEW YORK N Y	-	10/1/38	2,406.4	452
20	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	2,307.9	3,832
21	64971XFY9	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	8/1/45	2,296.7	290
22	64966JE77	NEW YORK N Y	-	4/1/42	2,246.1	543
23	594751AM1	MICHIGAN TOB SETTLEMENT FIN AUTH TOB SETTLEMENT ASSET BACKED REV	-	6/1/58	2,209.1	88
24	649441AE2	NEW YORK CNTYS TOB TR V	-	6/1/60	2,150.0	8
25	544351PL7	LOS ANGELES CALIF	4.00	6/23/22	2,118.2	557
26	60528ACC6	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	11/1/35	2,014.9	339
27	452151LF8	ILLINOIS ST	5.10	6/1/33	2,007.3	1,356
28	917393BK5	UTAH CNTY UTAH HOSP REV	-	5/15/51	1,892.8	98
29	13048TGT4	CALIFORNIA MUN FIN AUTH REV	-	11/1/35	1,869.9	332
30	118217CZ9	BUCKEYE OHIO TOB SETTLEMENT FING AUTH	5.00	6/1/55	1,869.8	809
31	915217XM0	UNIVERSITY VA UNIV REVS	2.58	11/1/51	1,851.4	178
32	64971XKU1	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	8/1/39	1,812.6	249
33	38122NZX3	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	3.12	6/1/38	1,808.3	308
34	64972GEL4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/49	1,804.1	156
35	59261AWK9	METROPOLITAN TRANSN AUTH N Y REV	-	11/15/50	1,799.1	174
36	64966J5Y8	NEW YORK N Y	-	10/1/40	1,797.5	527
37	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/30	1,789.6	957
38	60528AAT1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	12/1/30	1,740.2	364
39	64986URA7	NEW YORK ST HSG FIN AGY REV	-	11/1/41	1,717.7	109
40	64971WEY2	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	2/1/44	1,680.0	443
41	36829QAA3	GDB DEBT RECOVERY AUTH OF COMWLTH PUERTO RICO	7.50	8/20/40	1,672.7	2,323
42	64972GCM4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/50	1,604.8	459
43	60528ABY9	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	11/1/35	1,578.3	190
44	40934TAV5	HAMPTON RDS VA TRANSN ACCOUNTABILITY COMMN REV	5.00	7/1/26	1,554.3	209
45	13013JAP1	CALIFORNIA CMNTY CHOICE FING AUTH CLEAN ENERGY PROJ REV	4.00	2/1/52	1,552.0	214
46	64972F2J4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/44	1,511.0	218
47	467229AF7	JACKSON CNTY MISS PORT FAC REV	-	6/1/23	1,502.9	540
48	64970KRM1	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/33	1,465.4	210
49	45204FAG0	ILLINOIS FIN AUTH REV	-	8/15/49	1,420.7	182
50	60528ACB8	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	11/1/35	1,390.8	249

¹ See page 1 for information on CUSIP identifiers.

Top 50 Most Active Securities, 2021

By number of trades

Rank	CUSIP ¹	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	2,307.9	3,832
2	74529JQG3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/46	5,072.0	3,602
3	74529JQH1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/51	6,742.5	3,591
4	882724SY4	TEXAS ST	4.00	8/26/21	3,590.0	2,875
5	74529JPW9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.75	7/1/53	641.8	2,797
6	36829QAA3	GDB DEBT RECOVERY AUTH OF COMWLTH PUERTO RICO	7.50	8/20/40	1,672.7	2,323
7	64971XYC6	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2.25	2/1/51	335.3	2,243
8	74514LB89	PUERTO RICO COMWLTH	5.00	7/1/41	575.7	2,215
9	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/29	507.6	2,030
10	13063A5G5	CALIFORNIA ST	7.55	4/1/39	996.3	1,943
11	745220JQ7	PUERTO RICO COMWLTH INFRASTRUCTURE FING AUTH SPL TAX REV	5.00	7/1/46	257.0	1,667
12	74529JQF5	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/33	133.9	1,574
13	74529JRH0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.33	7/1/40	697.1	1,515
14	646136J85	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/42	118.0	1,441
15	74529JPY5	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.55	7/1/40	23.9	1,438
16	745220EZ2	PUERTO RICO COMWLTH INFRASTRUCTURE FING AUTH SPL TAX REV	5.00	7/1/41	465.2	1,427
17	74529JQE8	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/31	147.1	1,422
18	745235R37	PUERTO RICO PUB BLDGS AUTH REV GTD	5.25	7/1/42	911.8	1,382
19	452151LF8	ILLINOIS ST	5.10	6/1/33	2,007.3	1,356
20	89602HBX4	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	2.50	5/15/51	298.4	1,346
21	531127AC2	LIBERTY N Y DEV CORP REV	5.25	10/1/35	345.0	1,326
22	645913BB9	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	-	2/15/23	73.3	1,298
23	343137JG1	FLORIDA ST TPK AUTH TPK REV	2.00	7/1/50	220.8	1,217
24	74514LB63	PUERTO RICO COMWLTH	5.13	7/1/37	249.1	1,197
25	544646XZ0	LOS ANGELES CALIF UNI SCH DIST	5.75	7/1/34	404.8	1,161
26	13063A5E0	CALIFORNIA ST	7.50	4/1/34	838.7	1,141
27	74529JQC2	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/27	43.8	1,138
28	646136X55	NEW JERSEY ST TRANSN TR FD AUTH	5.75	12/15/28	155.1	1,126
29	74529JQD0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/29	35.9	1,114
30	13066YSX8	CALIFORNIA ST DEPT WTR RES PWR SUPPLY REV	5.00	5/1/22	174.3	1,103
31	13033LW52	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	8/15/52	151.2	1,095
32	74529JPU3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.50	7/1/34	33.3	1,064
33	74529JRL1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.78	7/1/58	318.4	1,055
34	74529JQA6	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	12.2	1,011
35	20772KMG1	CONNECTICUT ST	2.00	1/15/41	120.3	1,010
36	64990GGK2	NEW YORK ST DORM AUTH REVS NON ST SUPPORTED DEBT	4.95	8/1/48	89.1	1,005
37	646136U66	NEW JERSEY ST TRANSN TR FD AUTH	4.25	6/15/44	48.5	1,003
38	13032UMR6	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	11/1/27	120.9	991
39	151069GK1	CELINA OHIO CITY SCH DIST	2.88	12/1/58	114.7	983
40	59333P3W6	MIAMI-DADE CNTY FLA AVIATION REV	4.28	10/1/41	55.2	980
41	362762QP4	GAINESVILLE & HALL CNTY GA HOSP AUTH REV ANTIC CTF5	2.50	2/15/51	126.3	976
42	646136J51	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/38	76.7	970
43	362671BH1	GAHANNA-JEFFERSON CITY SCH DIST OHIO CTF5 PARTN	2.25	12/1/50	81.1	969
44	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/30	1,789.6	957
45	59260XAA6	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	5.00	3/1/22	227.7	956
46	13062TH72	CALIFORNIA ST	5.25	8/1/32	765.2	931
47	74514LD20	PUERTO RICO COMWLTH	5.00	7/1/35	137.9	928
48	13063DWS3	CALIFORNIA ST	5.00	11/1/30	553.9	914
49	574294AW4	MARYLAND ST STAD AUTH BUILT LEARN REV	2.75	6/1/51	187.2	912
50	13033LYS0	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	8/15/51	104.4	888

¹ See page 1 for information on CUSIP identifiers.

Top 50 Most Active Fixed Rate¹ Securities, 2021

By par amount

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	59261AM79	METROPOLITAN TRANSN AUTH N Y REV	0.78	11/15/22	4,104.3	93
2	74514LE86	PUERTO RICO COMWLTH	8.00	7/1/35	3,889.8	735
3	882724SY4	TEXAS ST	4.00	8/26/21	3,590.0	2,875
4	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	2,307.9	3,832
5	544351PL7	LOS ANGELES CALIF	4.00	6/23/22	2,118.2	557
6	452151LF8	ILLINOIS ST	5.10	6/1/33	2,007.3	1,356
7	118217CZ9	BUCKEYE OHIO TOB SETTLEMENT FING AUTH	5.00	6/1/55	1,869.8	809
8	915217XM0	UNIVERSITY VA UNIV REVS	2.58	11/1/51	1,851.4	178
9	38122NZX3	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	3.12	6/1/38	1,808.3	308
10	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/30	1,789.6	957
11	36829QAA3	GDB DEBT RECOVERY AUTH OF COMWLTH PUERTO RICO	7.50	8/20/40	1,672.7	2,323
12	40934TAV5	HAMPTON RDS VA TRANSN ACCOUNTABILITY COMMN REV	5.00	7/1/26	1,554.3	209
13	544657HY8	LOS ANGELES CNTY CALIF	4.00	6/30/22	1,390.4	651
14	91412HKE2	UNIVERSITY CALIF REVS	3.07	5/15/51	1,388.9	214
15	64972GZP2	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	4.00	6/15/45	1,248.9	304
16	89602HAB3	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	5.00	5/15/51	1,150.9	377
17	544657HX0	LOS ANGELES CNTY CALIF	4.00	6/30/21	1,073.9	606
18	84136FAV9	SOUTHEAST ENERGY AUTH COMMODITY SUPPLY REV ALA	4.00	12/1/51	1,070.5	129
19	29270C4J1	ENERGY NORTHWEST WASH ELEC REV	5.00	7/1/40	1,046.2	97
20	38122ND66	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	4.21	6/1/50	1,046.2	351
21	68441VAA3	ORANGE CNTY CALIF TRANSN AUTH REV	5.00	10/15/24	1,011.0	192
22	34061YAH3	FLORIDA DEV FIN CORP SURFACE TRANSN FAC REV	7.38	1/1/49	1,005.3	845
23	341271AD6	FLORIDA ST BRD ADMIN FIN CORP REV	1.26	7/1/25	1,004.7	740
24	13063A5G5	CALIFORNIA ST	7.55	4/1/39	996.3	1,943
25	73358W4V3	PORT AUTH N Y & N J	1.09	7/1/23	991.2	483
26	345105JH4	FOOTHILL / EASTERN TRANSN CORRIDOR AGY CALIF TOLL RD REV	4.00	1/15/46	975.4	90
27	73358XCNO	PORT AUTH N Y & N J	3.18	7/15/60	973.7	249
28	130179SD7	CALIFORNIA EDL FACS AUTH REV	5.00	5/1/49	929.5	348
29	745235R37	PUERTO RICO PUB BLDGS AUTH REV GTD	5.25	7/1/42	911.8	1,382
30	544445SX8	LOS ANGELES CALIF DEPT ARPTS ARPT REV	5.00	5/15/46	878.2	198
31	45506ECL5	INDIANA ST FIN AUTH REV	3.05	1/1/51	850.9	132
32	341271AE4	FLORIDA ST BRD ADMIN FIN CORP REV	1.71	7/1/27	850.9	547
33	13032UB23	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	8/15/48	847.7	127
34	13063A5E0	CALIFORNIA ST	7.50	4/1/34	838.7	1,141
35	38122ND41	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	3.49	6/1/36	833.1	141
36	64971PLK9	NEW YORK N Y CITY INDL DEV AGY REV	3.00	1/1/46	831.6	524
37	649519DW2	NEW YORK LIBERTY DEV CORP LIBERTY REV	3.00	11/15/51	802.2	188
38	38611TDL8	GRAND PARKWAY TRANSN CORP TEX SYS TOLL REV	3.24	10/1/52	801.1	168
39	915217XF5	UNIVERSITY VA UNIV REVS	2.26	9/1/50	797.0	163
40	646140DK6	NEW JERSEY ST TPK AUTH TPK REV	4.00	1/1/51	791.8	699
41	13063DC48	CALIFORNIA ST	1.70	2/1/28	772.9	134
42	13063BJC7	CALIFORNIA ST	7.60	11/1/40	770.7	309
43	13062TH72	CALIFORNIA ST	5.25	8/1/32	765.2	931
44	797661ZX6	SAN FRANCISCO CALIF BAY AREA RAPID TRAN DIST	3.00	8/1/50	758.7	280
45	795576KB2	SALT LAKE CITY UTAH ARPT REV	5.00	7/1/46	733.8	82
46	93978TS59	WASHINGTON ST HSG FIN COMMN	3.50	12/20/35	732.1	82
47	38122NB76	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	3.00	6/1/46	711.9	118
48	13077DRW4	CALIFORNIA ST UNIV REV	2.72	11/1/52	708.4	134
49	64990FYF5	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	3.00	3/15/38	701.3	236
50	74529JRH0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.33	7/1/40	697.1	1,515

¹ Excludes zero-coupon securities.² See page 1 for information on CUSIP identifiers.

Top 50 Most Active Fixed Rate¹ Securities, 2021

By number of trades

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	2,307.9	3,832
2	882724SY4	TEXAS ST	4.00	8/26/21	3,590.0	2,875
3	74529JPW9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.75	7/1/53	641.8	2,797
4	36829QAA3	GDB DEBT RECOVERY AUTH OF COMWLTH PUERTO RICO	7.50	8/20/40	1,672.7	2,323
5	64971XYC6	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2.25	2/1/51	335.3	2,243
6	74514LB89	PUERTO RICO COMWLTH	5.00	7/1/41	575.7	2,215
7	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/29	507.6	2,030
8	13063A5G5	CALIFORNIA ST	7.55	4/1/39	996.3	1,943
9	745220JQ7	PUERTO RICO COMWLTH INFRASTRUCTURE FING AUTH SPL TAX REV	5.00	7/1/46	257.0	1,667
10	74529JRH0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.33	7/1/40	697.1	1,515
11	646136J85	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/42	118.0	1,441
12	74529JPY5	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.55	7/1/40	23.9	1,438
13	745220E22	PUERTO RICO COMWLTH INFRASTRUCTURE FING AUTH SPL TAX REV	5.00	7/1/41	465.2	1,427
14	745235R37	PUERTO RICO PUB BLDGS AUTH REV GTD	5.25	7/1/42	911.8	1,382
15	452151LF8	ILLINOIS ST	5.10	6/1/33	2,007.3	1,356
16	89602HBX4	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	2.50	5/15/51	298.4	1,346
17	531127AC2	LIBERTY N Y DEV CORP REV	5.25	10/1/35	345.0	1,326
18	343137JG1	FLORIDA ST TPK AUTH TPK REV	2.00	7/1/50	220.8	1,217
19	74514LB63	PUERTO RICO COMWLTH	5.13	7/1/37	249.1	1,197
20	544646X20	LOS ANGELES CALIF UNI SCH DIST	5.75	7/1/34	404.8	1,161
21	13063A5E0	CALIFORNIA ST	7.50	4/1/34	838.7	1,141
22	646136XS5	NEW JERSEY ST TRANSN TR FD AUTH	5.75	12/15/28	155.1	1,126
23	13066YSX8	CALIFORNIA ST DEPT WTR RES PWR SUPPLY REV	5.00	5/1/22	174.3	1,103
24	13033LW52	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	8/15/52	151.2	1,095
25	74529JPU3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.50	7/1/34	33.3	1,064
26	74529JRL1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.78	7/1/58	318.4	1,055
27	74529JQA6	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	12.2	1,011
28	20772KMG1	CONNECTICUT ST	2.00	1/15/41	120.3	1,010
29	64990GGK2	NEW YORK ST DORM AUTH REVS NON ST SUPPORTED DEBT	4.95	8/1/48	89.1	1,005
30	646136U66	NEW JERSEY ST TRANSN TR FD AUTH	4.25	6/15/44	48.5	1,003
31	13032UMR6	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	11/1/27	120.9	991
32	151069GK1	CELINA OHIO CITY SCH DIST	2.88	12/1/58	114.7	983
33	59333P3W6	MIAMI-DADE CNTY FLA AVIATION REV	4.28	10/1/41	55.2	980
34	362762QP4	GAINESVILLE & HALL CNTY GA HOSP AUTH REV ANTIC CTF5	2.50	2/15/51	126.3	976
35	646136J51	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/38	76.7	970
36	362671BH1	GAHANNA-JEFFERSON CITY SCH DIST OHIO CTF5 PARTN	2.25	12/1/50	81.1	969
37	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/30	1,789.6	957
38	59260XAA6	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	5.00	3/1/22	227.7	956
39	13062TH72	CALIFORNIA ST	5.25	8/1/32	765.2	931
40	74514LD20	PUERTO RICO COMWLTH	5.00	7/1/35	137.9	928
41	13063DWS3	CALIFORNIA ST	5.00	11/1/30	553.9	914
42	574294AW4	MARYLAND ST STAD AUTH BUILT LEARN REV	2.75	6/1/51	187.2	912
43	13033LYS0	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	8/15/51	104.4	888
44	60637ARG9	MISSOURI ST HEALTH & EDL FACS AUTH HEALTH FACS REV	3.00	6/1/53	38.0	886
45	59261AA49	METROPOLITAN TRANSN AUTH N Y REV	5.00	9/1/22	462.7	862
46	646140CV3	NEW JERSEY ST TPK AUTH TPK REV	5.00	1/1/43	48.7	848
47	34061YAH3	FLORIDA DEV FIN CORP SURFACE TRANSN FAC REV	7.38	1/1/49	1,005.3	845
48	74514LUR6	PUERTO RICO COMWLTH	6.00	7/1/27	53.0	837
49	6461365P2	NEW JERSEY ST TRANSN TR FD AUTH	3.50	6/15/46	71.1	823
50	59259Y5J4	METROPOLITAN TRANSN AUTH N Y REV	5.25	11/15/55	68.8	823

¹ Excludes zero-coupon securities.² See page 1 for information on CUSIP identifiers.

Top 50 Most Active Variable Rate Securities, 2021

By par amount

Rank	CUSIP ¹	Issuer Name	Maturity	Par Amount (\$ Millions)	Number of Trades
1	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	8/1/35	6,625.9	307
2	402207AD6	GULF COAST INDL DEV AUTH TEX REV	11/1/41	3,816.9	461
3	270777AD7	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	12/1/40	3,330.9	238
4	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/30	3,170.7	173
5	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	12/1/59	3,103.4	484
6	64966ML98	NEW YORK N Y	12/1/47	2,952.1	362
7	792070BH6	ST LUCIE CNTY FLA POLLUTN CTL REV	9/1/28	2,917.0	312
8	64971XHT8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	8/1/42	2,568.1	372
9	64972GZB3	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/45	2,446.9	247
10	64966KCW1	NEW YORK N Y	10/1/38	2,406.4	452
11	64971XFY9	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	8/1/45	2,296.7	290
12	64966JE77	NEW YORK N Y	4/1/42	2,246.1	543
13	60528ACC6	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/35	2,014.9	339
14	917393BK5	UTAH CNTY UTAH HOSP REV	5/15/51	1,892.8	98
15	13048TGT4	CALIFORNIA MUN FIN AUTH REV	11/1/35	1,869.9	332
16	64971XKU1	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	8/1/39	1,812.6	249
17	64972GEL4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/49	1,804.1	156
18	59261AWK9	METROPOLITAN TRANSN AUTH N Y REV	11/15/50	1,799.1	174
19	64966J5Y8	NEW YORK N Y	10/1/40	1,797.5	527
20	60528AAT1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/30	1,740.2	364
21	64986URA7	NEW YORK ST HSG FIN AGY REV	11/1/41	1,717.7	109
22	64971WEY2	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2/1/44	1,680.0	443
23	64972GCM4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/50	1,604.8	459
24	60528ABY9	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/35	1,578.3	190
25	13013JAP1	CALIFORNIA CMNTY CHOICE FING AUTH CLEAN ENERGY PROJ REV	2/1/52	1,552.0	214
26	64972F2J4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/44	1,511.0	218
27	467229AF7	JACKSON CNTY MISS PORT FAC REV	6/1/23	1,502.9	540
28	64970KRM1	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/33	1,465.4	210
29	45204FAG0	ILLINOIS FIN AUTH REV	8/15/49	1,420.7	182
30	60528ACB8	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/35	1,390.8	249
31	64971WCT5	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	11/1/42	1,386.7	182
32	160853VA2	CHARLOTTE-MECKLENBURG HOSP AUTH N C HEALTH CARE SYS REV	1/15/42	1,375.2	146
33	64972GCP7	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/48	1,356.8	290
34	64966MSB6	NEW YORK N Y	10/1/46	1,350.0	203
35	64986UA72	NEW YORK ST HSG FIN AGY REV	11/1/46	1,327.3	144
36	91412GSH9	UNIVERSITY CALIF REVS	5/15/48	1,326.2	339
37	245903AB5	DELAWARE CNTY PA INDL DEV AUTH ARPT FACS REV	9/1/45	1,318.4	253
38	13062RG77	CALIFORNIA ST	5/1/40	1,283.3	294
39	573202AY4	MARTIN CNTY FLA POLLUTN CTL REV	7/15/22	1,267.5	176
40	821697L23	SHELBY CNTY TENN HEALTH EDL & HSG FACS BRD REV	6/1/42	1,247.4	129
41	91412GSJ5	UNIVERSITY CALIF REVS	5/15/48	1,240.8	244
42	64966FA87	NEW YORK N Y	4/1/36	1,237.3	304
43	88255QBH1	TEXAS MUN GAS ACQUISITION & SUPPLY CORP II GAS SUPPLY REV	9/15/27	1,235.5	11
44	915260CL5	UNIVERSITY WIS HOSPS & CLINICS AUTH REV	4/1/48	1,217.4	177
45	91412GSK2	UNIVERSITY CALIF REVS	5/15/48	1,212.1	328
46	87638QBF5	TARRANT CNTY TEX CULTURAL ED FACS FIN CORP HOSP REV	10/1/41	1,210.2	167
47	64966MGC7	NEW YORK N Y	8/1/44	1,199.1	205
48	60528ABS2	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/30	1,178.7	68
49	544525YL6	LOS ANGELES CALIF DEPT WTR & PWR WTRWKS REV	7/1/45	1,163.3	320
50	60528ABX1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/35	1,118.2	443

¹ See page 1 for information on CUSIP identifiers.

Top 50 Most Active Variable Rate Securities, 2021

By number of trades

Rank	CUSIP ¹	Issuer Name	Maturity	Par Amount (\$ Millions)	Number of Trades
1	64966JE77	NEW YORK N Y	4/1/42	2,246.1	543
2	467229AF7	JACKSON CNTY MISS PORT FAC REV	6/1/23	1,502.9	540
3	64966J5Y8	NEW YORK N Y	10/1/40	1,797.5	527
4	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	12/1/59	3,103.4	484
5	64971MLS9	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	11/1/27	99.6	483
6	64966GMR0	NEW YORK N Y	8/1/26	133.2	469
7	60528AAU8	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/30	832.2	465
8	64970KY77	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/35	520.1	463
9	402207AD6	GULF COAST INDL DEV AUTH TEX REV	11/1/41	3,816.9	461
10	64972GCM4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/50	1,604.8	459
11	649845FA7	NEW YORK ST ENERGY RESH & DEV AUTH POLLUTN CTL REV	10/1/28	78.1	455
12	89602REB7	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	1/1/32	527.4	452
13	64966KCW1	NEW YORK N Y	10/1/38	2,406.4	452
14	64971WEY2	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2/1/44	1,680.0	443
15	60528ABX1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/35	1,118.2	443
16	64966G4P4	NEW YORK N Y	4/1/38	311.6	414
17	91412GST3	UNIVERSITY CALIF REVS	5/15/48	97.4	407
18	64971QV26	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	11/1/36	912.4	404
19	64971XHT8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	8/1/42	2,568.1	372
20	09182NBR0	BLACK BELT ENERGY GAS DIST ALA GAS SUPPLY REV	6/1/51	1,009.4	367
21	60528AAT1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/30	1,740.2	364
22	64966ML98	NEW YORK N Y	12/1/47	2,952.1	362
23	119732AR6	BUFFALO N Y SWR AUTH SWR SYS ENVIRONMENTAL IMPACT REV	6/15/49	48.3	341
24	60528ACC6	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/35	2,014.9	339
25	91412GSH9	UNIVERSITY CALIF REVS	5/15/48	1,326.2	339
26	13048TGT4	CALIFORNIA MUN FIN AUTH REV	11/1/35	1,869.9	332
27	13048TGU1	CALIFORNIA MUN FIN AUTH REV	11/1/35	480.1	330
28	89602RED3	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	1/1/32	742.4	328
29	91412GSK2	UNIVERSITY CALIF REVS	5/15/48	1,212.1	328
30	57586CGA7	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	7/1/40	72.2	327
31	64966GMQ2	NEW YORK N Y	8/1/26	79.3	325
32	544525YL6	LOS ANGELES CALIF DEPT WTR & PWR WTRWKS REV	7/1/45	1,163.3	320
33	64966GPX4	NEW YORK N Y	8/1/26	51.7	314
34	792070BH6	ST LUCIE CNTY FLA POLLUTN CTL REV	9/1/28	2,917.0	312
35	130795VL8	CALIFORNIA STATEWIDE CMNTYS DEV AUTH REV	8/15/47	636.1	311
36	130795DH7	CALIFORNIA STATEWIDE CMNTYS DEV AUTH REV	7/1/41	119.9	310
37	01757LDW3	ALLEN CNTY OHIO HOSP FACS REV	6/1/34	436.8	309
38	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	8/1/35	6,625.9	307
39	46246K5H1	IOWA FIN AUTH REV	2/15/41	458.2	306
40	64966FHM9	NEW YORK N Y	8/1/34	199.0	304
41	64966FA87	NEW YORK N Y	4/1/36	1,237.3	304
42	64966GMS8	NEW YORK N Y	8/1/26	45.0	302
43	64971WUK4	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2/1/45	869.4	301
44	46613CMV4	JEA FLA ELEC SYS REV	10/1/38	489.8	299
45	57586CZW8	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	7/1/42	123.5	296
46	64966LCP4	NEW YORK N Y	8/1/40	972.3	295
47	64972EA58	NEW YORK N Y CITY HSG DEV CORP MULTIFAMILY HSG REV	11/1/41	52.3	295
48	467222CJ2	JACKSON CNTY MISS POLLUTN CTL REV	6/1/23	481.1	295
49	13062RG77	CALIFORNIA ST	5/1/40	1,283.3	294
50	89602RFC4	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	1/1/31	416.6	293

¹ See page 1 for information on CUSIP identifiers.

Top 50 Most Active Short-Term¹ Securities, 2021

By par amount

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	59261AM79	METROPOLITAN TRANSN AUTH N Y REV	0.78	11/15/22	4,104.3	93
2	882724SY4	TEXAS ST	4.00	8/26/21	3,590.0	2,875
3	544351PL7	LOS ANGELES CALIF	4.00	6/23/22	2,118.2	557
4	544657HY8	LOS ANGELES CNTY CALIF	4.00	6/30/22	1,390.4	651
5	573202AY4	MARTIN CNTY FLA POLLUTN CTL REV	-	7/15/22	1,267.5	176
6	544657HX0	LOS ANGELES CNTY CALIF	4.00	6/30/21	1,073.9	606
7	467229AF7	JACKSON CNTY MISS PORT FAC REV	-	6/1/23	905.1	316
8	197212AA1	COLUMBIA ALA INDL DEV BRD REV	-	11/1/21	791.8	121
9	59333RJM7	MIAMI-DADE CNTY FLA SCH DIST	2.50	2/23/22	675.0	46
10	05914GBJ6	LOS ANGELES CALIF	4.00	6/24/21	597.9	557
11	19672MCR7	COLORADO ST ED LN PROG	4.00	6/29/22	577.4	242
12	797400MN5	SAN DIEGO CNTY CALIF REGL TRANSN COMMN SALES TAX REV	5.00	10/1/22	550.0	502
13	59336HDS9	MIAMI-DADE CNTY FLA SEAPORT REV IAM COML PAPER NTS 3/A2 AMT SER A-1	-	9/1/21	471.4	8
14	73358W4V3	PORT AUTH N Y & N J	1.09	7/1/23	466.5	219
15	59261AA49	METROPOLITAN TRANSN AUTH N Y REV	5.00	9/1/22	462.7	862
16	05914GBJ6	BALTIMORE CNTY MD	4.00	3/23/22	441.0	119
17	270838AJ4	EAST BATON ROUGE PARISH LA POLLUTION CTL REV	-	3/1/22	424.9	64
18	59261AZB6	METROPOLITAN TRANSN AUTH N Y REV	5.00	5/15/22	404.3	557
19	59336HDT7	MIAMI-DADE CNTY FLA SEAPORT REV IAM COML PAPER NTS 3/A2 AMT SER A-1	-	9/15/21	397.4	6
20	59336HDQ3	MIAMI-DADE CNTY FLA SEAPORT REV IAM COML PAPER NTS 3/A2 AMT SER A-1	-	8/18/21	388.7	4
21	59336HDP5	MIAMI-DADE CNTY FLA SEAPORT REV IAM COML PAPER NTS 3/A2 AMT SER A-1	-	5/6/21	388.7	3
22	59211PFH3	METROPOLITAN GOVT NASHVILLE & DAVIDSON CNTY TENN IAM COML PAPER NTS 3/A2 SER B-1	-	2/25/21	375.0	10
23	542691EY2	LONG IS PWR AUTH N Y ELEC SYS REV	-	3/1/23	365.3	93
24	788070BU3	ST CHARLES PARISH LA POLLUTN CTL REV	-	10/1/22	362.8	45
25	196729CL9	COLORADO ST GEN FD REV	4.00	6/25/21	356.3	358
26	452151LE1	ILLINOIS ST	4.95	6/1/23	353.8	176
27	769110CV7	RIVERSIDE CNTY CALIF	2.00	6/30/22	349.6	137
28	74441XHB8	PUBLIC FIN AUTH WIS MULTIFAMILY HSG REV	5.25	12/1/22	344.7	1
29	467222CJ2	JACKSON CNTY MISS POLLUTN CTL REV	-	6/1/23	344.2	203
30	13059QAM7	CALIFORNIA SCH FIN AUTH REV	-	12/30/21	344.0	124
31	190819JT0	COBB CNTY GA SCH DIST	1.50	12/15/21	340.2	60
32	59261AE86	METROPOLITAN TRANSN AUTH N Y REV	4.00	2/1/22	338.6	484
33	23530RBB6	DALLAS TEX IAM COML PAPER NTS 3/A2 SER A	-	10/21/21	323.4	5
34	23530RBD2	DALLAS TEX IAM COML PAPER NTS 3/A2 SER A	-	11/19/21	319.4	4
35	46256QLX2	IOWA ST BRD REGENTS HOSP REV	-	10/1/22	317.1	45
36	451434CA0	IDAHO ST	3.00	6/30/22	312.7	145
37	79625JJP8	SAN ANTONIO TEX ELEC & GAS REV IAM COML PAPER NTS 3/A2 SER A	-	4/9/21	306.1	7
38	79625UJL7	SAN ANTONIO TEX ELEC & GAS REV IAM COML PAPER NTS 3/A2 SER A	-	2/19/21	305.0	7
39	79625UJM5	SAN ANTONIO TEX ELEC & GAS REV IAM COML PAPER NTS 3/A2 SER A	-	2/26/21	305.0	7
40	79625UJN3	SAN ANTONIO TEX ELEC & GAS REV IAM COML PAPER NTS 3/A2 SER A	-	3/24/21	305.0	7
41	79625UJK9	SAN ANTONIO TEX ELEC & GAS REV IAM COML PAPER NTS 3/A2 SER A	-	2/16/21	305.0	9
42	41386REJ3	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	-	6/2/21	304.6	7
43	25478KAX3	DISTRICT COLUMBIA IAM COML PAPER BD ANTIC NTS 3/A2 SER 2019	-	11/2/21	300.2	20
44	61335W6X0	MONTGOMERY CNTY MD IAM COML PAPER 3/A2 SER 2010 B BANS	-	9/23/21	300.0	14
45	61335W6W2	MONTGOMERY CNTY MD IAM COML PAPER 3/A2 SER 2010 B BANS	-	7/8/21	300.0	14
46	61335W6V4	MONTGOMERY CNTY MD IAM COML PAPER 3/A2 SER 2010 B BANS	-	5/5/21	300.0	14
47	25478KAZ8	DISTRICT COLUMBIA IAM COML PAPER BD ANTIC NTS 3/A2 SER 2019	-	12/1/21	300.0	20
48	23530RBA8	DALLAS TEX IAM COML PAPER NTS 3/A2 SER A	-	9/22/21	297.5	4
49	13017HAL0	CALIFORNIA EARTHQUAKE AUTH REV	-	12/1/21	295.9	48
50	923035BR9	VENTURA CNTY CALIF	4.00	6/30/21	294.3	85

¹ Securities with under two years in remaining maturity.² See page 1 for information on CUSIP identifiers.

Top 50 Most Active Short-Term¹ Securities, 2021

By number of trades

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	882724SY4	TEXAS ST	4.00	8/26/21	3,590.0	2,875
2	645913BB9	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	-	2/15/23	66.7	1,117
3	13066YSX8	CALIFORNIA ST DEPT WTR RES PWR SUPPLY REV	5.00	5/1/22	174.3	1,103
4	59260XAA6	METROPOLITAN TRANSN AUTH N Y DEDICATED TAX FD	5.00	3/1/22	227.7	956
5	59261AA49	METROPOLITAN TRANSN AUTH N Y REV	5.00	9/1/22	462.7	862
6	575579E61	MASSACHUSETTS BAY TRANSN AUTH MASS SALES TAX REV	4.00	12/1/21	158.2	764
7	645913BA1	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	-	2/15/22	101.4	738
8	544657HY8	LOS ANGELES CNTY CALIF	4.00	6/30/22	1,390.4	651
9	544657HX0	LOS ANGELES CNTY CALIF	4.00	6/30/21	1,073.9	606
10	544351PL7	LOS ANGELES CALIF	4.00	6/23/22	2,118.2	557
11	544351PK9	LOS ANGELES CALIF	4.00	6/24/21	597.9	557
12	59261AZB6	METROPOLITAN TRANSN AUTH N Y REV	5.00	5/15/22	404.3	557
13	59261AE78	METROPOLITAN TRANSN AUTH N Y REV	5.00	2/1/23	199.0	512
14	797400MN5	SAN DIEGO CNTY CALIF REGL TRANSN COMMN SALES TAX REV	5.00	10/1/22	550.0	502
15	59261AE86	METROPOLITAN TRANSN AUTH N Y REV	4.00	2/1/22	338.6	484
16	59261AXD4	METROPOLITAN TRANSN AUTH N Y REV	5.00	9/1/21	64.5	467
17	176553HA6	CITIZENS PPTY INS CORP FLA	5.00	6/1/22	44.9	455
18	64990FXG4	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	5.00	3/31/21	170.2	451
19	7962532F8	SAN ANTONIO TEX ELEC & GAS REV	5.00	2/1/22	44.8	450
20	64990FNB6	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	5.00	12/15/21	70.8	428
21	794665GC7	SALES TAX ASSET RECEIVABLE CORP N Y REV	5.00	10/15/22	27.8	395
22	239427AG2	DAWSON RIDGE MET DIST NO 1 COLO	-	10/1/22	183.5	382
23	650035D96	NEW YORK ST URBAN DEV CORP REV	5.00	3/15/22	61.2	373
24	938823AS0	WASHINGTON FED HWY GRNT ANTIC REV	5.00	9/1/22	26.0	366
25	13063DST6	CALIFORNIA ST	3.00	3/1/22	16.3	362
26	794665FY0	SALES TAX ASSET RECEIVABLE CORP N Y REV	5.00	10/15/21	46.6	359
27	672319BT6	OAKLAND CALIF PENSION OBLIG	-	12/15/22	14.3	358
28	196729CL9	COLORADO ST GEN FD REV	4.00	6/25/21	356.3	358
29	64990FVS0	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	5.00	2/15/22	69.7	330
30	658196PP9	NORTH CAROLINA EASTN MUN PWR AGY PWR SYS REV	6.00	1/1/22	37.3	324
31	650035W53	NEW YORK ST URBAN DEV CORP REV	5.00	3/15/22	94.1	317
32	467229AF7	JACKSON CNTY MISS PORT FAC REV	-	6/1/23	905.1	316
33	574193PA0	MARYLAND ST	5.00	8/1/22	117.9	315
34	574193QK7	MARYLAND ST	5.00	8/1/22	20.8	313
35	89602NZZ0	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	5.00	11/15/22	32.1	313
36	70914PG71	PENNSYLVANIA ST	5.00	1/15/22	56.6	312
37	13063BFS6	CALIFORNIA ST	6.65	3/1/22	10.6	309
38	647310X48	NEW MEXICO ST SEVERANCE TAX	4.00	7/1/22	26.6	304
39	40934TAU7	HAMPTON RDS VA TRANSN ACCOUNTABILITY COMMN REV	5.00	7/1/22	36.6	303
40	646136EC1	NEW JERSEY ST TRANSN TR FD AUTH	5.50	12/15/21	22.4	301
41	13066YSW0	CALIFORNIA ST DEPT WTR RES PWR SUPPLY REV	5.00	5/1/21	98.0	299
42	64972GXL3	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	5.00	6/15/22	26.0	297
43	797356BE1	SAN DIEGO CALIF UNI SCH DIST	5.00	7/1/22	82.4	297
44	010609AR6	ALABAMA ST PUB SCH & COLLEGE AUTH	5.00	1/1/22	40.1	294
45	010609AS4	ALABAMA ST PUB SCH & COLLEGE AUTH	5.00	1/1/23	20.3	285
46	13063BJA1	CALIFORNIA ST	5.70	11/1/21	38.8	278
47	4424354L4	HOUSTON TEX UTIL SYS REV	5.00	5/15/22	23.8	278
48	59259YTR0	METROPOLITAN TRANSN AUTH N Y REV	5.00	11/15/22	30.7	275
49	646136LU3	NEW JERSEY ST TRANSN TR FD AUTH	5.50	12/15/22	10.4	274
50	59261AC54	METROPOLITAN TRANSN AUTH N Y REV	5.00	11/15/22	135.5	270

¹ Securities with under two years in remaining maturity.² See page 1 for information on CUSIP identifiers.

Top 50 Most Active Long-Term¹ Securities, 2021

By par amount

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	38122NB84	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	-	6/1/66	9,513.0	113
2	74529JQH1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/51	6,742.5	3,591
3	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	-	8/1/35	6,625.9	307
4	74529JQG3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/46	5,072.0	3,602
5	16876QBM0	CHILDRENS TR FD P R TOB SETTLEMENT REV	-	5/15/57	4,066.8	23
6	74514LE86	PUERTO RICO COMWLTH	8.00	7/1/35	3,889.8	735
7	402207AD6	GULF COAST INDL DEV AUTH TEX REV	-	11/1/41	3,816.9	461
8	270777AD7	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	-	12/1/40	3,330.9	238
9	16876QBL2	CHILDRENS TR FD P R TOB SETTLEMENT REV	-	5/15/57	3,300.0	14
10	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	12/1/30	3,170.7	173
11	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	-	12/1/59	3,103.4	484
12	888805CJ5	TOBACCO SETTLEMENT AUTH IOWA TOB SETTLEMENT REV	-	6/1/65	3,088.7	108
13	64966ML98	NEW YORK N Y	-	12/1/47	2,952.1	362
14	792070BH6	ST LUCIE CNTY FLA POLLUTN CTL REV	-	9/1/28	2,917.0	312
15	64971XHT8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	8/1/42	2,568.1	372
16	64972GZB3	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/45	2,446.9	247
17	64966KCW1	NEW YORK N Y	-	10/1/38	2,406.4	452
18	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	2,307.9	3,832
19	64971XFY9	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	8/1/45	2,296.7	290
20	64966JE77	NEW YORK N Y	-	4/1/42	2,246.1	543
21	594751AM1	MICHIGAN TOB SETTLEMENT FIN AUTH TOB SETTLEMENT ASSET BACKED REV	-	6/1/58	2,209.1	88
22	649441AE2	NEW YORK CNTYS TOB TR V	-	6/1/60	2,150.0	8
23	60528ACC6	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	11/1/35	2,014.9	339
24	452151LF8	ILLINOIS ST	5.10	6/1/33	2,007.3	1,356
25	917393BK5	UTAH CNTY UTAH HOSP REV	-	5/15/51	1,892.8	98
26	13048TGT4	CALIFORNIA MUN FIN AUTH REV	-	11/1/35	1,869.9	332
27	118217CZ9	BUCKEYE OHIO TOB SETTLEMENT FING AUTH	5.00	6/1/55	1,869.8	809
28	915217XM0	UNIVERSITY VA UNIV REVS	2.58	11/1/51	1,851.4	178
29	64971XKU1	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	8/1/39	1,812.6	249
30	38122NZX3	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	3.12	6/1/38	1,808.3	308
31	64972GEL4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/49	1,804.1	156
32	59261AWK9	METROPOLITAN TRANSN AUTH N Y REV	-	11/15/50	1,799.1	174
33	64966J5Y8	NEW YORK N Y	-	10/1/40	1,797.5	527
34	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/30	1,789.6	957
35	60528AAT1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	12/1/30	1,740.2	364
36	64986URA7	NEW YORK ST HSG FIN AGY REV	-	11/1/41	1,717.7	109
37	64971WEY2	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	2/1/44	1,680.0	443
38	36829QAA3	GDB DEBT RECOVERY AUTH OF COMWLTH PUERTO RICO	7.50	8/20/40	1,672.7	2,323
39	64972GCM4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/50	1,604.8	459
40	60528ABY9	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	11/1/35	1,578.3	190
41	40934TAV5	HAMPTON RDS VA TRANSN ACCOUNTABILITY COMMN REV	5.00	7/1/26	1,554.3	209
42	13013JAP1	CALIFORNIA CMNTY CHOICE FING AUTH CLEAN ENERGY PROJ REV	4.00	2/1/52	1,552.0	214
43	64972F2J4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/44	1,511.0	218
44	64970KRM1	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/33	1,465.4	210
45	45204FAG0	ILLINOIS FIN AUTH REV	-	8/15/49	1,420.7	182
46	60528ACB8	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	11/1/35	1,390.8	249
47	91412HKE2	UNIVERSITY CALIF REVS	3.07	5/15/51	1,388.9	214
48	64971WCT5	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	11/1/42	1,386.7	182
49	160853VA2	CHARLOTTE-MECKLENBURG HOSP AUTH N C HEALTH CARE SYS REV	-	1/15/42	1,375.2	146
50	64972GCP7	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/48	1,356.8	290

¹ Securities with two years or more in remaining maturity.² See page 1 for information on CUSIP identifiers.

Top 50 Most Active Long-Term¹ Securities, 2021

By number of trades

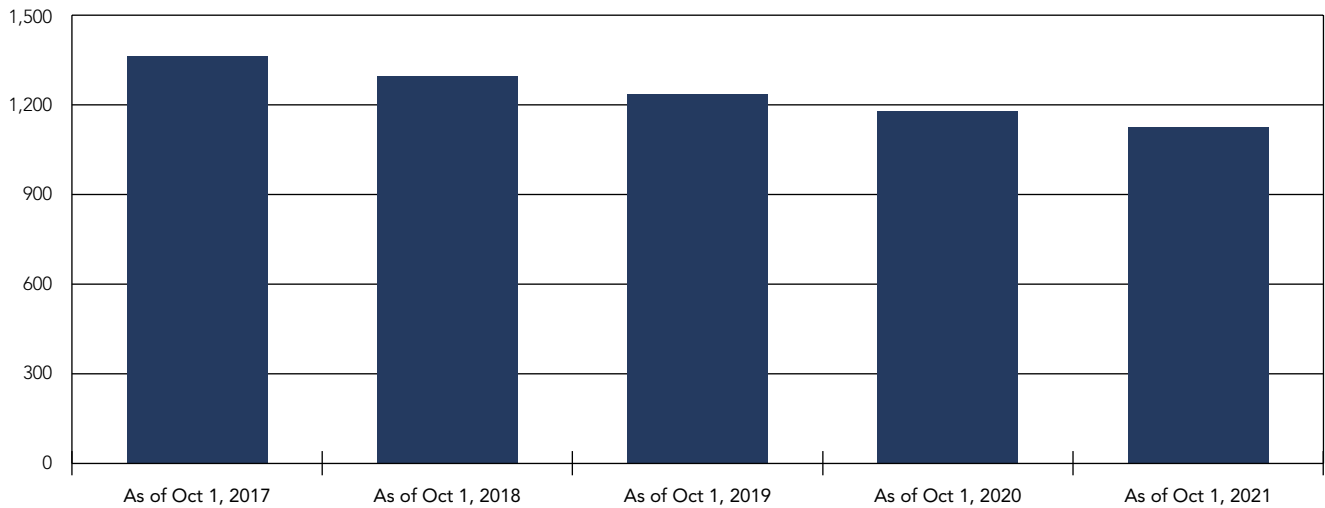
Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	2,307.9	3,832
2	74529JQG3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/46	5,072.0	3,602
3	74529JQH1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/51	6,742.5	3,591
4	74529JPW9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.75	7/1/53	641.8	2,797
5	36829QAA3	GDB DEBT RECOVERY AUTH OF COMWLTH PUERTO RICO	7.50	8/20/40	1,672.7	2,323
6	64971XYC6	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2.25	2/1/51	335.3	2,243
7	74514LB89	PUERTO RICO COMWLTH	5.00	7/1/41	575.7	2,215
8	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/29	507.6	2,030
9	13063A5G5	CALIFORNIA ST	7.55	4/1/39	996.3	1,943
10	745220JQ7	PUERTO RICO COMWLTH INFRASTRUCTURE FING AUTH SPL TAX REV	5.00	7/1/46	257.0	1,667
11	74529JQF5	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/33	133.9	1,574
12	74529JRH0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.33	7/1/40	697.1	1,515
13	646136J85	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/42	118.0	1,441
14	74529JPY5	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.55	7/1/40	23.9	1,438
15	745220EZ2	PUERTO RICO COMWLTH INFRASTRUCTURE FING AUTH SPL TAX REV	5.00	7/1/41	465.2	1,427
16	74529JQE8	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/31	147.1	1,422
17	745235R37	PUERTO RICO PUB BLDGS AUTH REV GTD	5.25	7/1/42	911.8	1,382
18	452151LF8	ILLINOIS ST	5.10	6/1/33	2,007.3	1,356
19	89602HBX4	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	2.50	5/15/51	298.4	1,346
20	531127AC2	LIBERTY N Y DEV CORP REV	5.25	10/1/35	345.0	1,326
21	343137JG1	FLORIDA ST TPK AUTH TPK REV	2.00	7/1/50	220.8	1,217
22	74514LB63	PUERTO RICO COMWLTH	5.13	7/1/37	249.1	1,197
23	544646XZ0	LOS ANGELES CALIF UNI SCH DIST	5.75	7/1/34	404.8	1,161
24	13063A5E0	CALIFORNIA ST	7.50	4/1/34	838.7	1,141
25	74529JQC2	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/27	43.8	1,138
26	646136XS5	NEW JERSEY ST TRANSN TR FD AUTH	5.75	12/15/28	155.1	1,126
27	74529JQD0	PUERTO RICO SALES TAX FING CORP SALES TAX REV	-	7/1/29	35.9	1,114
28	13033LW52	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	8/15/52	151.2	1,095
29	74529JPU3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.50	7/1/34	33.3	1,064
30	74529JRL1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.78	7/1/58	318.4	1,055
31	74529JQA6	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	12.2	1,011
32	20772KMG1	CONNECTICUT ST	2.00	1/15/41	120.3	1,010
33	64990GGK2	NEW YORK ST DORM AUTH REVS NON ST SUPPORTED DEBT	4.95	8/1/48	89.1	1,005
34	646136U66	NEW JERSEY ST TRANSN TR FD AUTH	4.25	6/15/44	48.5	1,003
35	13032UMR6	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	11/1/27	120.9	991
36	151069GK1	CELINA OHIO CITY SCH DIST	2.88	12/1/58	114.7	983
37	59333P3W6	MIAMI-DADE CNTY FLA AVIATION REV	4.28	10/1/41	55.2	980
38	362762QP4	GAINESVILLE & HALL CNTY GA HOSP AUTH REV ANTIC CTFS	2.50	2/15/51	126.3	976
39	646136J51	NEW JERSEY ST TRANSN TR FD AUTH	5.00	6/15/38	76.7	970
40	362671BH1	GAHANNA-JEFFERSON CITY SCH DIST OHIO CTFS PARTN	2.25	12/1/50	81.1	969
41	341271AF1	FLORIDA ST BRD ADMIN FIN CORP REV	2.15	7/1/30	1,789.6	957
42	13062TH72	CALIFORNIA ST	5.25	8/1/32	765.2	931
43	74514LD20	PUERTO RICO COMWLTH	5.00	7/1/35	137.9	928
44	13063DWS3	CALIFORNIA ST	5.00	11/1/30	553.9	914
45	574294AW4	MARYLAND ST STAD AUTH BUILT LEARN REV	2.75	6/1/51	187.2	912
46	13033LYS0	CALIFORNIA HEALTH FACS FING AUTH REV	5.00	8/15/51	104.4	888
47	60637ARG9	MISSOURI ST HEALTH & EDL FACS AUTH HEALTH FACS REV	3.00	6/1/53	38.0	886
48	645913BC7	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	-	2/15/24	84.8	864
49	646140CV3	NEW JERSEY ST TPK AUTH TPK REV	5.00	1/1/43	48.7	848
50	34061YAH3	FLORIDA DEV FIN CORP SURFACE TRANSN FAC REV	7.38	1/1/49	1,005.3	845

¹ Securities with two years or more in remaining maturity.² See page 1 for information on CUSIP identifiers.

Part Four

Dealer Activity and Distribution of Municipal Trades, 2017–2021

Number of MSRB Registered Dealers



	Number of Registered Dealers	% Change from Prior Period ¹
As of Oct 1, 2017	1,363	-5.9%
As of Oct 1, 2018	1,295	-5.0%
As of Oct 1, 2019	1,237	-4.5%
As of Oct 1, 2020	1,180	-4.6%
As of Oct 1, 2021	1,125	-4.7%

¹ A number of factors have impacted the decrease in the number of registered dealers, including the consolidation of broker dealers, mergers and acquisitions, as well as firms exiting the municipal securities business.

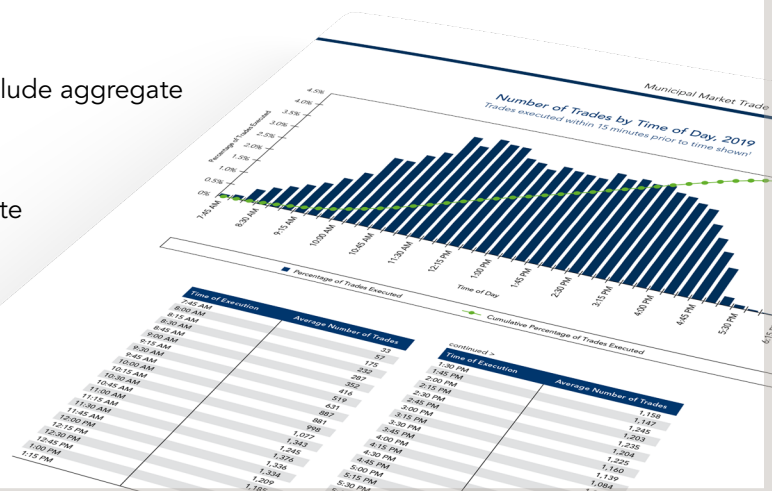
DATA AVAILABLE FROM THE MSRB

See the Latest Aggregate Data with the MSRB’s Quarterly Statistical Summaries

The MSRB’s free Quarterly Statistical Summaries include aggregate municipal bond market information on:

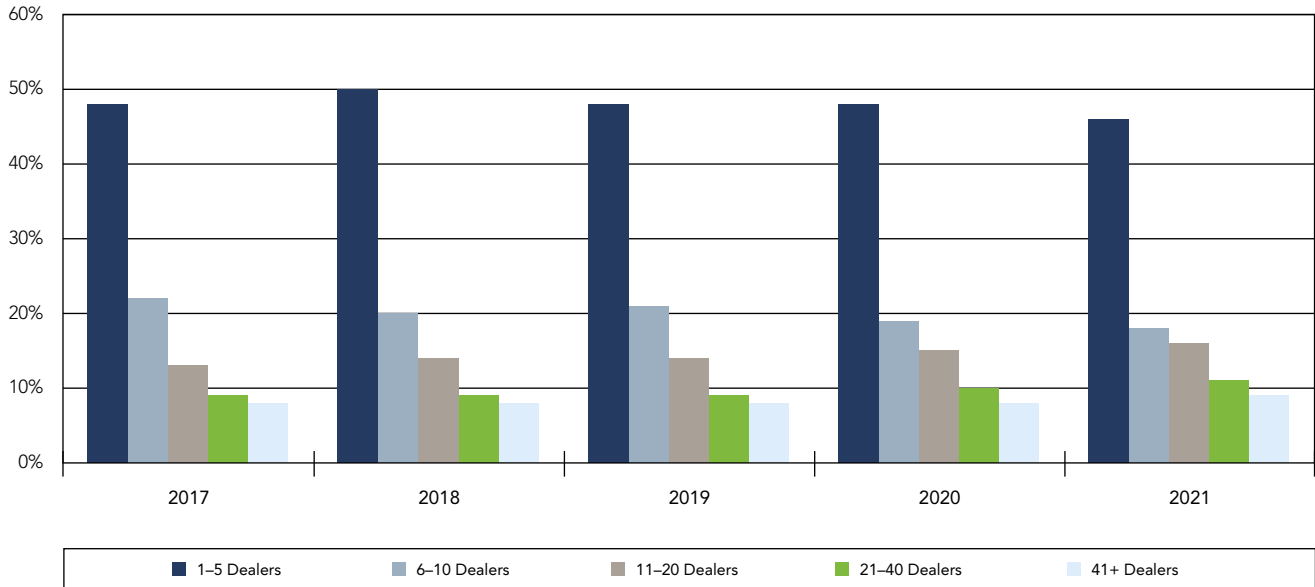
- Trading activity,
- The number of interest rate resets for variable rate demand obligations and auction rate securities, and
- Statistics about the continuing disclosure documents received through the MSRB’s EMMA® website.

[View the quarterly statistical summaries.](#)



Distribution of Customer Trades by Number of Dealers

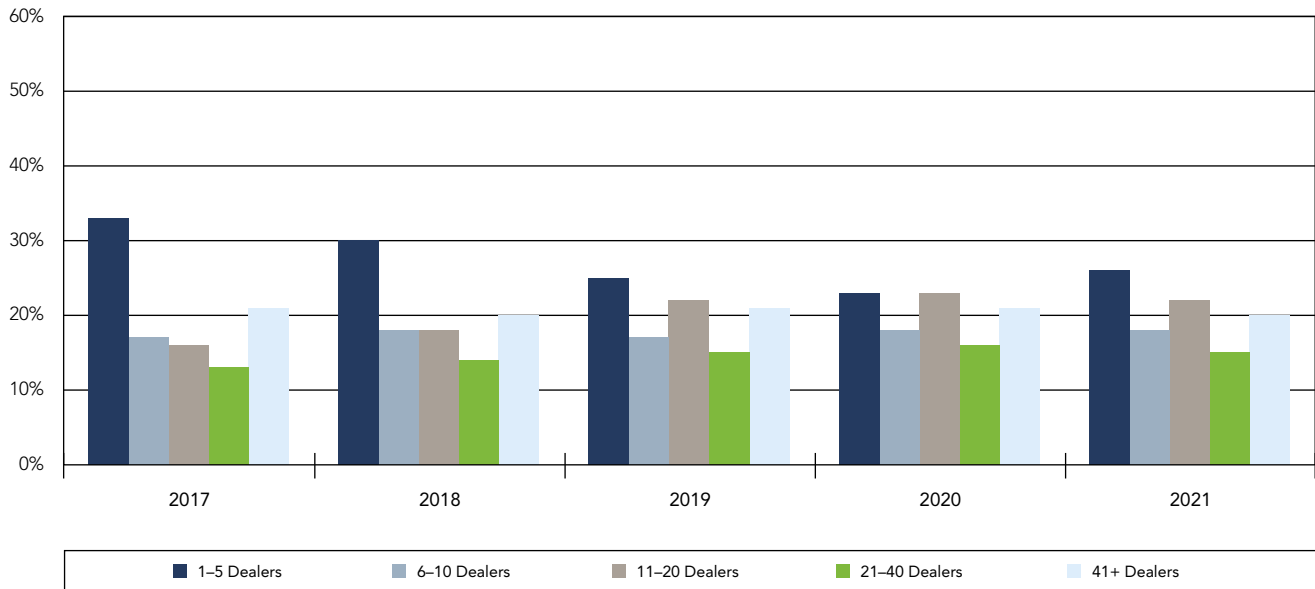
Par amount



	2017	2018	2019	2020	2021
1-5 Dealers	48%	50%	48%	48%	46%
6-10 Dealers	22%	20%	21%	19%	18%
11-20 Dealers	13%	14%	14%	15%	16%
21-40 Dealers	9%	9%	9%	10%	11%
41+ Dealers	8%	8%	8%	8%	9%

Distribution of Customer Trades by Number of Dealers

Number of trades



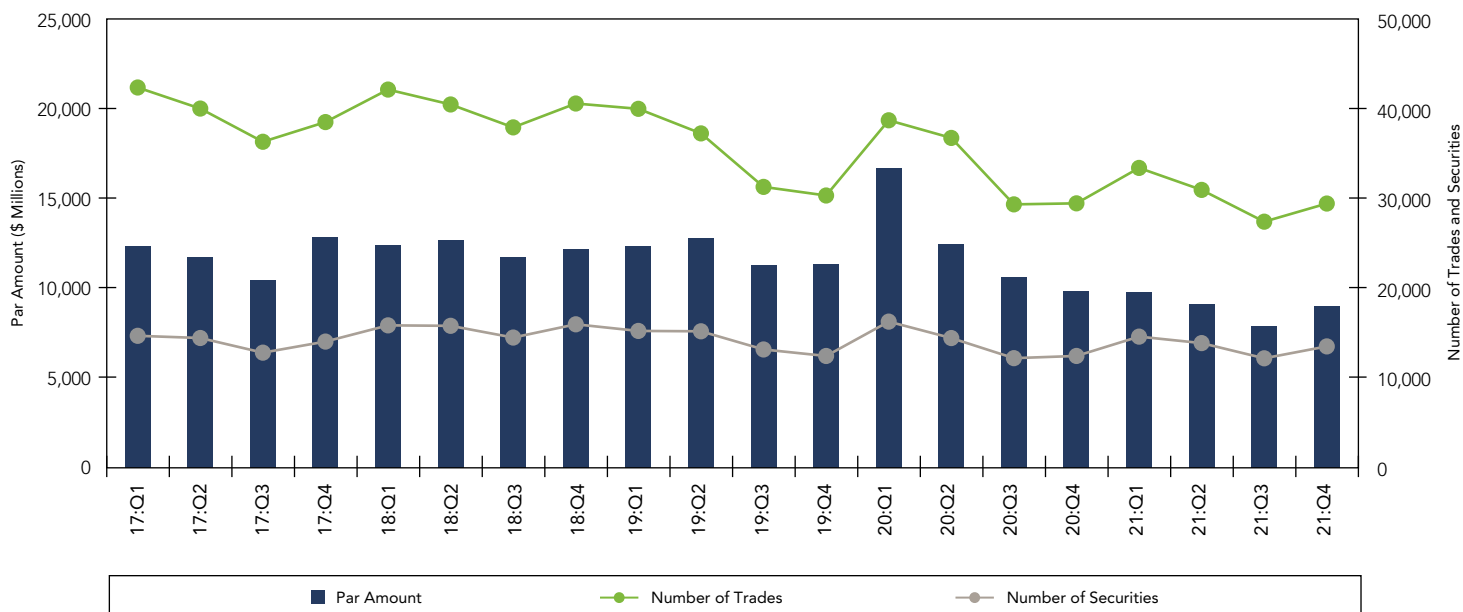
	2017	2018	2019	2020	2021
1-5 Dealers	33%	30%	25%	23%	26%
6-10 Dealers	17%	18%	17%	18%	18%
11-20 Dealers	16%	18%	22%	23%	22%
21-40 Dealers	13%	14%	15%	16%	15%
41+ Dealers	21%	20%	21%	21%	20%

Part Five

Overall Municipal Market Trading Activity, 2017–2021

Average Daily Trading Volume, 2017–2021

By par amount, number of trades and number of unique securities

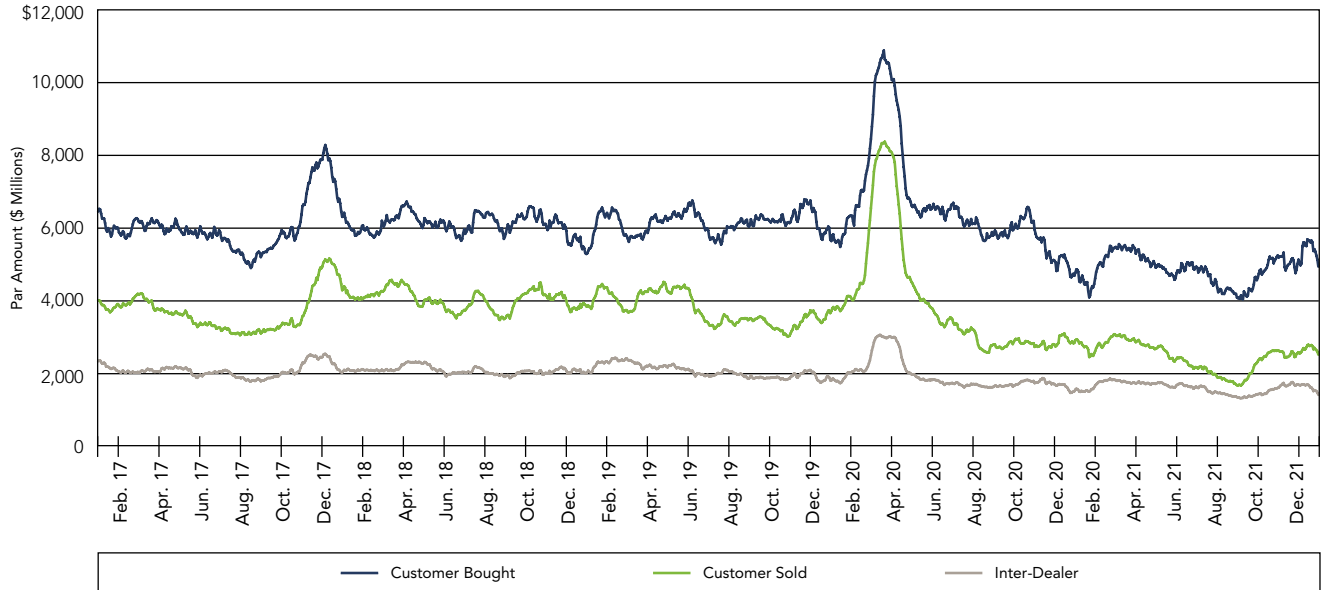


Quarter	Par Amount (\$ Millions)	Number of Trades	Number of Unique Securities
17:Q1	12,363.8	42,478	14,743
17:Q2	11,748.8	40,125	14,499
17:Q3	10,492.5	36,417	12,862
17:Q4	12,895.1	38,616	14,099
2017	11,873.1	39,397	14,048
18:Q1	12,407.8	42,247	15,911
18:Q2	12,728.1	40,582	15,860
18:Q3	11,729.3	38,023	14,549
18:Q4	12,199.8	40,689	16,029
2018	12,266.7	40,372	15,588
19:Q1	12,396.0	40,096	15,288
19:Q2	12,813.6	37,351	15,248
19:Q3	11,295.8	31,377	13,218
19:Q4	11,371.3	30,415	12,491
2019	11,960.7	34,737	14,042
20:Q1	16,751.5	38,816	16,328
20:Q2	12,491.4	36,845	14,493
20:Q3	10,653.9	29,424	12,248
20:Q4	9,878.9	29,539	12,494
2020	12,409.7	33,603	13,869
21:Q1	9,825.8	33,496	14,653
21:Q2	9,156.5	31,041	13,930
21:Q3	7,887.1	27,491	12,232
21:Q4	9,032.8	29,517	13,560
2021	8,964.7	30,347	13,580

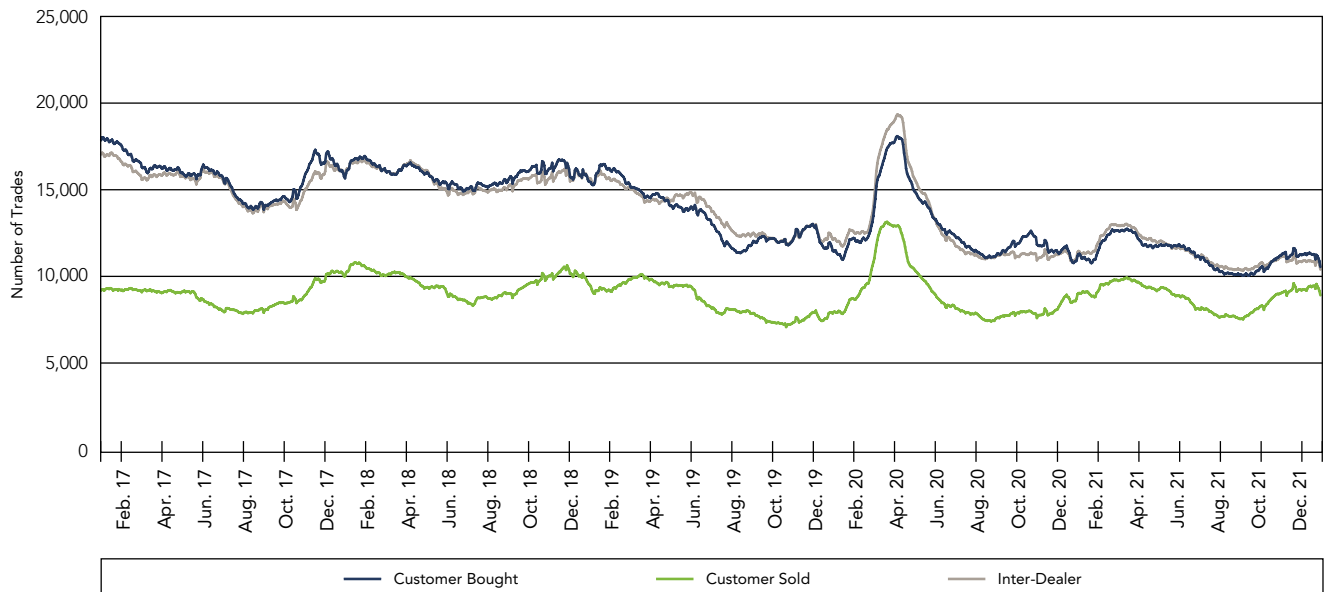
Daily Trading Volume, 2017–2021

30-day trailing average by trade type

Par Amount



Number of Trades



Trade Type and Size, 2017–2021

Average daily par amount in \$ millions

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
All Trades									
Total	11,873.1	12,266.7	11,960.7	12,409.7	8,964.7	9,825.8	9,156.5	7,887.1	9,032.8
0–\$25,000	304.3	310.7	253.3	244.9	228.2	249.6	231.3	209.6	223.3
\$25,001–\$50,000	327.8	335.6	275.1	252.1	226.0	249.4	230.3	202.7	222.6
\$50,001–\$75,000	125.2	134.3	114.7	110.8	105.0	115.2	106.7	91.7	106.8
\$75,001–\$100,000	291.2	299.8	250.6	226.4	188.0	212.1	193.5	166.6	181.0
\$100,001–\$500,000	1,268.4	1,266.9	1,194.2	1,153.8	962.0	1,112.3	1,027.4	844.2	872.3
\$500,001–\$1,000,000	815.5	767.6	812.5	844.4	685.2	798.2	732.5	611.2	605.1
\$1,000,001–\$2,000,000	924.3	906.9	961.7	1,033.2	813.2	901.4	864.1	729.8	762.3
More than \$2,000,000	7,816.5	8,244.8	8,098.5	8,544.1	5,757.2	6,187.7	5,770.8	5,031.4	6,059.3
Customer Bought									
Total	6,082.2	6,123.8	6,141.3	6,546.2	4,890.0	5,199.9	4,979.4	4,424.2	4,972.4
0–\$25,000	119.5	118.2	93.2	86.1	75.7	82.1	77.6	69.5	74.0
\$25,001–\$50,000	131.8	131.5	105.2	89.7	77.8	85.0	79.9	69.8	77.1
\$50,001–\$75,000	48.9	51.6	43.7	39.4	37.3	40.3	38.3	32.9	38.0
\$75,001–\$100,000	117.0	118.2	96.0	80.7	67.1	75.0	69.8	59.5	64.3
\$100,001–\$500,000	511.7	509.1	482.9	484.3	420.0	484.1	452.9	369.6	376.7
\$500,001–\$1,000,000	363.0	334.9	363.9	414.8	348.1	402.0	373.4	315.5	304.4
\$1,000,001–\$2,000,000	446.1	425.0	471.4	536.2	438.0	472.8	469.6	403.8	408.1
More than \$2,000,000	4,344.3	4,435.3	4,484.9	4,815.2	3,426.0	3,558.6	3,418.1	3,103.6	3,629.8
Customer Sold									
Total	3,685.5	4,060.9	3,750.4	3,931.2	2,466.5	2,868.3	2,480.3	2,033.9	2,502.7
0–\$25,000	63.5	68.7	58.0	61.5	65.2	70.2	64.8	59.1	67.1
\$25,001–\$50,000	64.3	70.2	58.7	63.0	62.4	68.6	62.6	54.5	64.2
\$50,001–\$75,000	27.4	31.6	26.3	29.9	30.5	33.4	30.4	25.5	32.7
\$75,001–\$100,000	60.4	67.3	57.4	60.5	52.1	59.7	52.9	44.1	52.1
\$100,001–\$500,000	265.1	302.0	273.9	281.0	232.1	273.6	244.1	188.2	224.5
\$500,001–\$1,000,000	190.6	212.4	204.0	204.0	154.2	186.9	163.4	126.4	141.7
\$1,000,001–\$2,000,000	249.8	278.7	264.5	275.5	198.2	231.4	203.4	167.6	192.0
More than \$2,000,000	2,764.2	3,030.1	2,807.6	2,955.9	1,671.9	1,944.5	1,658.6	1,368.5	1,728.4
Inter-Dealer									
Total	2,105.4	2,082.0	2,069.0	1,932.2	1,608.2	1,757.6	1,696.8	1,429.0	1,557.7
0–\$25,000	121.2	123.8	102.0	97.3	87.2	97.2	88.9	81.1	82.2
\$25,001–\$50,000	131.6	133.8	111.3	99.4	85.7	95.8	87.9	78.4	81.3
\$50,001–\$75,000	49.0	51.2	44.7	41.5	37.2	41.6	38.0	33.4	36.1
\$75,001–\$100,000	113.8	114.4	97.2	85.2	68.8	77.3	70.7	62.9	64.6
\$100,001–\$500,000	491.6	455.8	437.4	388.5	310.0	354.6	330.4	286.3	271.1
\$500,001–\$1,000,000	261.9	220.3	244.5	225.6	183.0	209.4	195.7	169.3	159.1
\$1,000,001–\$2,000,000	228.4	203.2	225.8	221.6	176.9	197.2	191.1	158.4	162.2
More than \$2,000,000	708.0	779.5	806.0	773.0	659.3	684.6	694.1	559.3	701.1

Trade Type and Size, 2017–2021

Average daily number of trades

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
All Trades Total	39,397	40,372	34,737	33,603	30,347	33,496	31,041	27,491	29,517
0–\$25,000	19,148	19,594	16,412	16,161	15,266	16,648	15,440	14,116	14,928
\$25,001–\$50,000	7,728	7,945	6,533	6,029	5,452	6,002	5,551	4,891	5,392
\$50,001–\$75,000	1,876	2,014	1,723	1,668	1,583	1,734	1,609	1,383	1,615
\$75,001–\$100,000	2,993	3,085	2,584	2,341	1,952	2,198	2,007	1,728	1,886
\$100,001–\$500,000	5,080	5,175	4,802	4,611	3,927	4,480	4,163	3,441	3,652
\$500,001–\$1,000,000	1,020	969	1,029	1,051	860	995	920	769	762
\$1,000,001–\$2,000,000	610	600	639	679	539	594	575	485	505
More than \$2,000,000	942	992	1,016	1,063	768	845	777	678	777
Customer Bought Total	15,722	15,673	13,206	12,462	10,890	11,939	11,269	9,864	10,543
0–\$25,000	7,413	7,313	5,836	5,574	4,942	5,365	5,051	4,549	4,823
\$25,001–\$50,000	3,097	3,102	2,491	2,143	1,874	2,040	1,921	1,681	1,863
\$50,001–\$75,000	729	771	655	593	562	606	576	495	575
\$75,001–\$100,000	1,200	1,214	989	834	697	778	725	618	671
\$100,001–\$500,000	2,042	2,071	1,933	1,879	1,658	1,878	1,779	1,461	1,528
\$500,001–\$1,000,000	451	421	459	515	437	501	470	397	383
\$1,000,001–\$2,000,000	292	280	312	352	291	312	313	268	270
More than \$2,000,000	497	501	531	574	429	460	435	393	431
Customer Sold Total	8,431	9,254	8,119	8,583	8,433	9,261	8,450	7,453	8,610
0–\$25,000	4,095	4,382	3,866	4,064	4,393	4,701	4,348	4,036	4,501
\$25,001–\$50,000	1,528	1,678	1,405	1,513	1,515	1,658	1,515	1,324	1,570
\$50,001–\$75,000	409	472	394	448	458	501	458	383	493
\$75,001–\$100,000	621	693	591	625	542	619	549	458	544
\$100,001–\$500,000	1,068	1,230	1,099	1,154	986	1,145	1,025	804	977
\$500,001–\$1,000,000	235	263	254	251	191	231	203	156	177
\$1,000,001–\$2,000,000	163	182	174	180	130	151	135	110	126
More than \$2,000,000	311	353	336	348	218	255	217	181	222
Inter-Dealer Total	15,244	15,445	13,412	12,557	11,023	12,297	11,322	10,175	10,364
0–\$25,000	7,640	7,898	6,710	6,523	5,932	6,582	6,041	5,532	5,604
\$25,001–\$50,000	3,103	3,165	2,637	2,373	2,063	2,304	2,115	1,886	1,960
\$50,001–\$75,000	737	770	674	627	563	628	575	505	547
\$75,001–\$100,000	1,172	1,178	1,004	882	713	801	733	652	671
\$100,001–\$500,000	1,970	1,874	1,770	1,578	1,283	1,457	1,360	1,176	1,148
\$500,001–\$1,000,000	334	284	316	285	232	263	247	216	203
\$1,000,001–\$2,000,000	154	137	153	147	118	131	128	106	108
More than \$2,000,000	133	138	148	142	120	130	124	103	124

Trade Type and Size, 2017–2021

Average daily number of unique securities

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
All Trades									
Total	14,048	15,588	14,042	13,869	13,580	14,653	13,930	12,232	13,560
0–\$25,000	7,602	8,323	7,151	7,171	7,253	7,818	7,333	6,653	7,235
\$25,001–\$50,000	3,327	3,647	3,119	2,937	2,776	3,032	2,835	2,449	2,801
\$50,001–\$75,000	956	1,064	937	915	888	966	903	764	924
\$75,001–\$100,000	1,444	1,552	1,347	1,219	1,048	1,173	1,084	915	1,027
\$100,001–\$500,000	2,369	2,532	2,441	2,318	2,052	2,257	2,183	1,799	1,980
\$500,001–\$1,000,000	588	588	617	585	485	535	527	437	446
\$1,000,001–\$2,000,000	385	392	409	399	318	335	345	287	307
More than \$2,000,000	567	593	584	554	409	434	422	362	419
Customer Bought									
Total	9,748	10,508	9,207	9,048	8,560	9,281	8,848	7,742	8,408
0–\$25,000	5,275	5,588	4,636	4,539	4,337	4,698	4,433	3,995	4,238
\$25,001–\$50,000	2,350	2,494	2,076	1,859	1,706	1,858	1,755	1,523	1,697
\$50,001–\$75,000	643	690	597	559	539	579	553	474	553
\$75,001–\$100,000	979	1,021	859	740	641	711	666	567	621
\$100,001–\$500,000	1,534	1,595	1,526	1,493	1,347	1,487	1,437	1,187	1,284
\$500,001–\$1,000,000	356	349	373	396	335	375	359	305	301
\$1,000,001–\$2,000,000	237	238	257	277	226	239	244	206	214
More than \$2,000,000	375	387	389	408	297	319	304	266	299
Customer Sold									
Total	7,352	8,114	7,056	7,672	7,733	8,430	7,753	6,838	7,945
0–\$25,000	3,726	4,015	3,445	3,797	4,143	4,425	4,107	3,789	4,263
\$25,001–\$50,000	1,442	1,579	1,338	1,458	1,472	1,609	1,474	1,283	1,531
\$50,001–\$75,000	397	452	382	440	451	493	451	377	487
\$75,001–\$100,000	594	659	570	606	531	605	538	448	535
\$100,001–\$500,000	995	1,143	1,032	1,088	948	1,088	984	778	950
\$500,001–\$1,000,000	223	252	244	239	184	220	195	150	172
\$1,000,001–\$2,000,000	157	176	167	171	126	144	130	107	122
More than \$2,000,000	284	320	297	305	199	231	196	166	203
Inter-Dealer									
Total	8,082	8,905	7,879	7,473	7,103	7,831	7,348	6,498	6,772
0–\$25,000	4,562	5,022	4,317	4,214	4,100	4,521	4,195	3,794	3,912
\$25,001–\$50,000	1,887	2,047	1,729	1,562	1,426	1,595	1,469	1,284	1,366
\$50,001–\$75,000	491	535	469	435	401	450	411	354	393
\$75,001–\$100,000	724	763	659	577	480	539	498	429	455
\$100,001–\$500,000	1,155	1,166	1,113	991	838	933	897	761	766
\$500,001–\$1,000,000	217	192	208	188	154	170	165	144	137
\$1,000,001–\$2,000,000	104	97	104	100	81	87	88	73	76
More than \$2,000,000	91	100	102	96	81	85	85	71	84

Average Daily Trade Size, 2017–2021

By customer trade



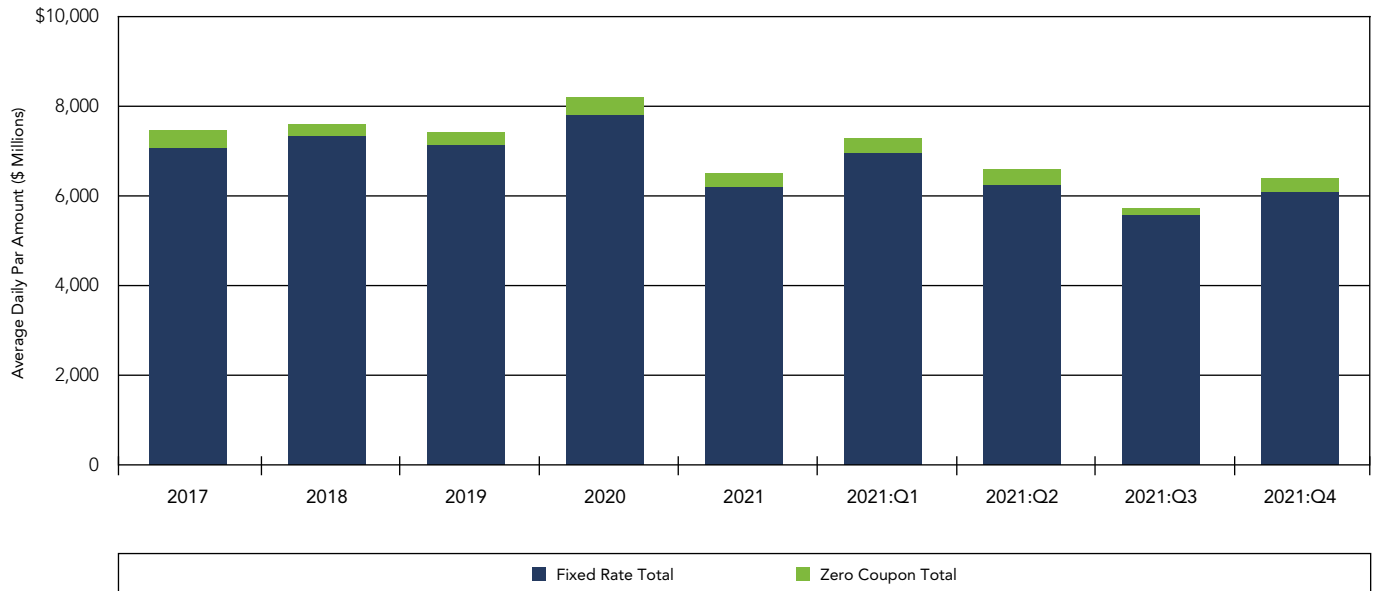
Quarter	Customer Bought (\$)	Customer Sold (\$)
17:Q1	358,804	451,250
17:Q2	379,215	421,387
17:Q3	372,358	417,310
17:Q4	439,631	456,033
2017	386,857	437,126
18:Q1	373,632	427,266
18:Q2	407,117	447,947
18:Q3	397,458	452,122
18:Q4	384,782	430,054
2018	390,724	438,807
19:Q1	386,948	437,483
19:Q2	459,644	468,504
19:Q3	506,954	467,321
19:Q4	528,878	478,646
2019	465,054	461,939
20:Q1	596,512	584,055
20:Q2	479,497	439,682
20:Q3	538,134	403,755
20:Q4	482,574	367,821
2020	525,276	458,012
21:Q1	435,553	309,724
21:Q2	441,866	293,541
21:Q3	448,529	272,908
21:Q4	471,612	290,684
2021	449,038	292,471

Part Six

Municipal Fixed Rate Securities—Par Amount Traded and Number of Trades, 2017–2021

Transaction Summary—Fixed Rate Securities, 2017–2021

Average daily par amount in \$ millions



	2017	2018	2019	2020	2021
Fixed Rate Total	7,064.2	7,318.6	7,134.8	7,793.5	6,200.9
0–\$25,000	295.2	302.6	245.1	238.0	222.4
\$25,001–\$50,000	315.7	325.4	265.2	243.6	219.1
\$50,001–\$75,000	119.7	129.4	109.7	106.5	101.5
\$75,001–\$100,000	267.6	273.2	225.5	205.3	176.5
\$100,001–\$500,000	1,143.7	1,115.1	1,052.0	1,032.4	900.5
\$500,001–\$1,000,000	696.8	627.7	673.8	724.0	622.7
\$1,000,001–\$2,000,000	744.1	699.3	751.3	840.9	704.5
More than \$2,000,000	3,481.5	3,845.9	3,812.1	4,402.9	3,253.8

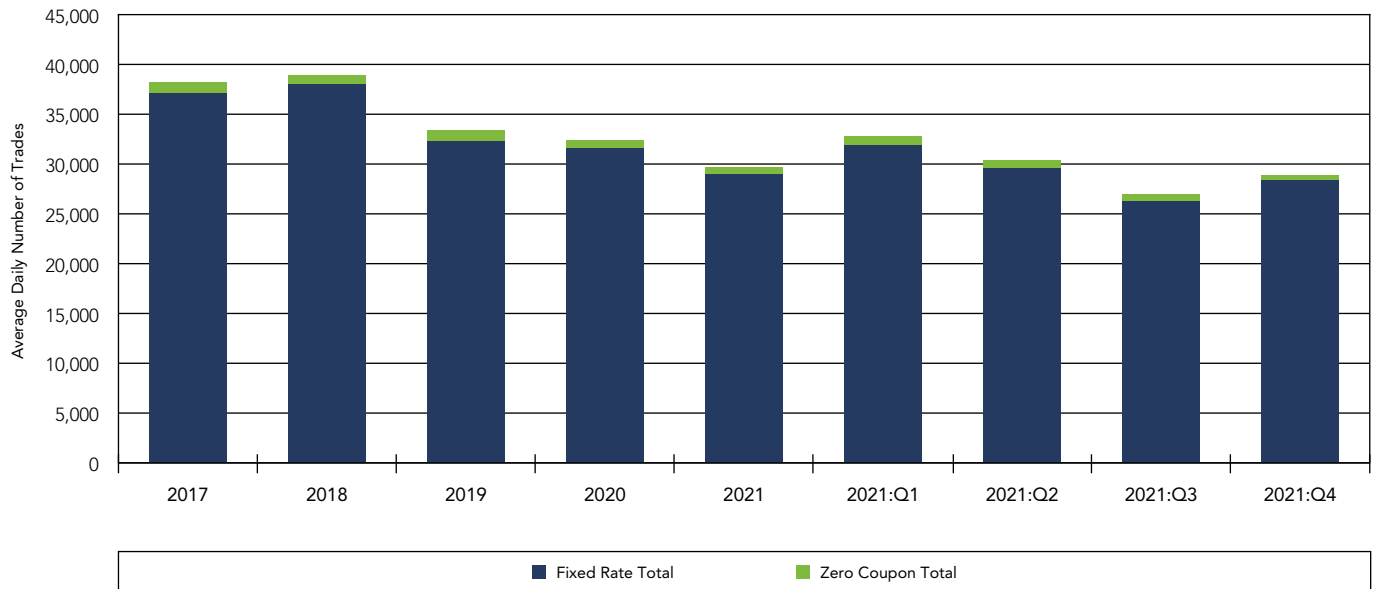
	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	6,959.9	6,245.2	5,561.9	6,072.7
0–\$25,000	242.5	225.2	204.3	218.5
\$25,001–\$50,000	240.8	223.1	196.7	216.9
\$50,001–\$75,000	110.8	103.1	88.5	104.0
\$75,001–\$100,000	197.9	181.0	156.1	171.9
\$100,001–\$500,000	1,035.2	959.9	792.4	821.7
\$500,001–\$1,000,000	724.7	662.3	561.0	548.3
\$1,000,001–\$2,000,000	789.2	741.0	640.6	651.5
More than \$2,000,000	3,618.8	3,149.6	2,922.3	3,339.9

	2017	2018	2019	2020	2021
Zero Coupon Total	391.1	280.5	282.3	420.1	290.4
0–\$25,000	7.9	6.9	7.1	6.0	5.0
\$25,001–\$50,000	10.3	8.4	8.4	7.3	5.8
\$50,001–\$75,000	4.8	3.9	4.1	3.5	2.7
\$75,001–\$100,000	9.4	7.3	7.0	6.1	4.7
\$100,001–\$500,000	32.1	26.2	27.4	24.6	16.8
\$500,001–\$1,000,000	17.6	12.3	14.6	14.1	9.2
\$1,000,001–\$2,000,000	18.7	12.2	15.7	14.7	10.5
More than \$2,000,000	290.5	203.3	198.0	343.8	235.7

	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Zero Coupon Total	326.8	351.9	160.1	325.4
0–\$25,000	6.2	5.3	4.5	3.9
\$25,001–\$50,000	7.4	6.1	5.1	4.7
\$50,001–\$75,000	3.5	2.7	2.6	2.0
\$75,001–\$100,000	5.5	4.9	4.8	3.6
\$100,001–\$500,000	20.9	17.2	15.2	14.1
\$500,001–\$1,000,000	12.2	10.4	6.3	8.0
\$1,000,001–\$2,000,000	13.4	12.0	7.1	9.5
More than \$2,000,000	257.6	293.2	114.5	279.4

Transaction Summary—Fixed Rate Securities, 2017–2021

Average daily number of trades



	2017	2018	2019	2020	2021
Fixed Rate Total	37,102	38,002	32,286	31,538	28,985
0–\$25,000	18,550	19,053	15,761	15,668	14,841
\$25,001–\$50,000	7,439	7,700	6,293	5,824	5,286
\$50,001–\$75,000	1,792	1,939	1,647	1,603	1,531
\$75,001–\$100,000	2,753	2,815	2,329	2,127	1,834
\$100,001–\$500,000	4,624	4,624	4,275	4,166	3,697
\$500,001–\$1,000,000	874	794	856	900	781
\$1,000,001–\$2,000,000	493	464	500	552	467
More than \$2,000,000	577	612	623	698	547

	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	31,886	29,585	26,295	28,318
0–\$25,000	16,129	14,996	13,724	14,577
\$25,001–\$50,000	5,796	5,375	4,745	5,254
\$50,001–\$75,000	1,668	1,555	1,334	1,573
\$75,001–\$100,000	2,053	1,880	1,621	1,793
\$100,001–\$500,000	4,192	3,914	3,246	3,463
\$500,001–\$1,000,000	903	832	706	691
\$1,000,001–\$2,000,000	521	494	426	432
More than \$2,000,000	625	539	492	535

	2017	2018	2019	2020	2021
Zero Coupon Total	1,134	957	1,099	884	710
0–\$25,000	525	465	590	441	375
\$25,001–\$50,000	248	204	205	176	141
\$50,001–\$75,000	72	60	63	53	41
\$75,001–\$100,000	98	75	73	64	49
\$100,001–\$500,000	136	113	120	103	73
\$500,001–\$1,000,000	22	16	19	18	12
\$1,000,001–\$2,000,000	12	8	11	10	7
More than \$2,000,000	21	16	17	20	12

	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Zero Coupon Total	885	748	647	570
0–\$25,000	465	396	346	296
\$25,001–\$50,000	180	150	124	114
\$50,001–\$75,000	54	41	40	31
\$75,001–\$100,000	58	51	49	38
\$100,001–\$500,000	91	74	66	60
\$500,001–\$1,000,000	15	13	8	10
\$1,000,001–\$2,000,000	9	8	5	6
More than \$2,000,000	14	14	9	13

Source of Repayment and Trade Size, 2017–2021

Average daily par amount in \$ millions

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	7,064.2	7,315.7	7,133.8	7,793.0	6,200.9	6,959.9	6,245.2	5,561.9	6,072.7
General Obligation	2,654.8	2,619.7	2,627.2	2,707.9	2,160.0	2,491.8	2,199.7	1,936.7	2,028.0
Revenue	4,205.2	4,465.6	4,294.0	4,860.6	3,841.0	4,240.9	3,813.3	3,446.8	3,881.3
Double Barrel	204.1	230.5	212.5	224.5	199.9	227.2	232.2	178.5	163.4
Zero Coupon Total	391.1	280.5	282.3	420.1	290.4	326.8	351.9	160.1	325.4
General Obligation	114.1	80.9	76.7	75.5	48.6	61.9	45.2	41.0	47.1
Revenue	274.9	196.8	202.3	342.5	239.5	263.5	305.7	118.2	272.9
Double Barrel	2.1	2.9	3.2	2.1	2.2	1.4	0.9	1.0	5.4

Average daily number of trades

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	37,102	38,002	32,285	31,538	28,985	31,886	29,585	26,295	28,318
General Obligation	13,790	14,262	12,470	11,395	10,967	12,064	11,230	9,978	10,650
Revenue	22,042	22,470	18,767	19,109	17,000	18,744	17,305	15,363	16,674
Double Barrel	1,271	1,270	1,048	1,034	1,018	1,078	1,050	953	993
Zero Coupon Total	1,134	957	1,099	884	710	885	748	647	570
General Obligation	606	502	487	446	371	463	388	342	297
Revenue	510	431	592	423	326	405	345	295	263
Double Barrel	18	24	20	16	13	17	15	9	10

Tax Status and Trade Size, 2017–2021

Average daily par amount in \$ millions

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	7,064.2	7,317.0	7,133.9	7,793.4	6,200.9	6,959.9	6,245.2	5,561.9	6,072.7
Tax Exempt	6,113.2	6,379.2	5,898.2	6,010.3	4,652.3	5,209.7	4,825.2	4,166.1	4,436.9
Taxable	789.8	676.4	979.5	1,554.4	1,378.3	1,568.7	1,263.2	1,217.4	1,471.0
AMT	161.2	261.5	256.3	228.7	170.3	181.5	156.8	178.4	164.8
Zero Coupon Total	391.1	280.5	282.3	420.1	290.4	326.8	351.9	160.1	325.4
Tax Exempt	359.5	265.5	262.6	396.8	269.6	310.1	329.2	142.4	299.7
Taxable	31.6	15.0	19.7	23.1	20.6	16.7	22.4	17.5	25.7
AMT	<0.1	<0.1	<0.1	0.2	0.1	<0.1	0.3	0.3	<0.1

Average daily number of trades

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	37,102	38,002	32,285	31,538	28,985	31,886	29,585	26,295	28,318
Tax Exempt	34,260	35,324	29,538	28,535	26,221	28,666	26,761	23,853	25,724.7
Taxable	2,389	2,214	2,337	2,563	2,424	2,818	2,476	2,138	2,281.9
AMT	453	465	410	440	340	402	348	304	311.0
Zero Coupon Total	1,134	957	1,099	884	710	884	748	647	570
Tax Exempt	1,014	862	1,018	800	639	796	671	585	510.4
Taxable	120	95	81	84	71	88	77	62	59.2
AMT	<1	<1	<1	<1	<1	<1	<1	<1	<1

Sector—Fixed Rate Securities, 2017–2021

Average daily par amount in \$ millions

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	7,064.2	7,318.6	7,134.8	7,793.5	6,200.9	6,959.9	6,245.2	5,561.9	6,072.7
Education	1,561.8	1,475.3	1,548.3	1,683.8	1,373.8	1,673.3	1,484.1	1,175.9	1,177.4
Health	527.5	490.6	459.1	511.5	349.0	375.3	287.0	341.2	393.0
Housing	118.1	134.1	185.3	190.0	235.6	220.5	205.7	237.3	277.5
Tax-Revenue	808.5	921.5	835.7	908.7	724.1	851.7	696.7	582.4	771.2
Transportation	703.5	779.7	831.5	875.6	658.9	799.0	638.9	570.5	633.3
Utility	817.0	874.1	828.8	911.2	735.6	753.8	768.0	723.8	698.1
Various Purpose	1,131.0	1,132.5	1,157.0	1,305.1	1,035.3	1,190.4	960.8	934.6	1,061.5
Other Sectors	1,396.8	1,510.9	1,289.1	1,407.5	1,088.6	1,095.8	1,204.1	996.1	1,060.7
Zero Coupon Total	391.1	280.5	282.3	420.1	290.4	326.7	351.9	160.1	325.4
Education	106.7	76.2	72.1	74.3	52.6	61.1	61.2	47.6	41.1
Health	5.5	2.8	5.3	4.5	2.7	3.4	1.6	2.7	3.0
Housing	0.2	0.4	0.1	0.5	0.1	<0.1	0.0	0.2	<0.1
Tax-Revenue	87.5	75.9	102.8	200.0	63.1	87.1	93.8	33.0	40.0
Transportation	32.1	28.3	28.0	19.9	12.6	17.9	8.3	6.9	17.6
Utility	3.9	3.2	3.6	2.6	2.2	3.3	1.5	2.0	2.2
Various Purpose	11.4	7.5	8.3	3.7	8.5	2.2	13.3	8.6	9.7
Other Sectors	143.7	86.1	62.1	114.6	148.6	151.7	172.1	59.2	211.8

Average daily number of trades

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	37,102	38,002	32,286	31,538	28,985	31,886	29,585	26,295	28,318
Education	9,448	9,531	8,381	7,974	7,568	8,448	7,905	6,737	7,228
Health	2,972	2,742	2,251	2,242	1,765	1,980	1,725	1,597	1,768
Housing	713	804	811	717	736	796	701	687	763
Tax-Revenue	3,808	3,915	3,301	5,812	3,015	3,362	3,024	2,704	2,986
Transportation	2,935	3,145	2,643	3,294	2,438	2,772	2,462	2,148	2,386
Utility	5,003	5,247	4,274	3,156	4,058	4,312	4,119	3,837	3,977
Various Purpose	4,736	4,972	4,271	4,110	4,146	4,580	4,198	3,746	4,080
Other Sectors	7,486	7,646	6,353	4,235	5,258	5,636	5,450	4,838	5,130
Zero Coupon Total	1,134	957	1,099	884	710	885	748	647	570
Education	546	459	453	416	348	437	365	318	275
Health	30	27	23	20	18	21	18	19	13
Housing	2	2	1	1	1	1	1	1	1
Tax-Revenue	157	135	317	86	124	152	136	111	98
Transportation	129	112	109	161	79	102	80	72	64
Utility	67	59	56	109	40	50	39	39	33
Various Purpose	80	63	52	48	34	39	43	28	29
Other Sectors	124	100	88	43	66	82	67	59	58

Remaining Maturity—Fixed Rate Securities, 2017–2021

Average daily par amount in \$ millions

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	7,064.2	7,318.6	7,134.8	7,793.5	6,200.9	6,959.9	6,245.2	5,561.9	6,072.7
0–9 Months	298.4	338.5	317.4	354.3	253.3	243.7	333.3	183.1	253.8
>9 Months–2 Years	459.4	547.7	502.2	491.9	399.5	360.4	417.3	409.9	408.9
>2 Years–5 Years	753.6	801.7	754.0	835.3	693.4	753.4	695.7	648.3	679.1
>5 Years–10 Years	1,308.8	1,401.8	1,347.4	1,383.5	1,199.2	1,373.2	1,240.7	1,015.9	1,175.7
>10 Years–15 Years	1,208.3	1,212.9	1,141.1	1,302.7	1,068.8	1,223.1	1,082.9	941.6	1,034.9
>15 Years–20 Years	1,141.2	1,028.3	1,025.8	1,152.3	875.2	1,022.2	868.0	801.1	816.5
>20 Years–30 Years	1,570.2	1,676.0	1,653.1	1,816.5	1,357.3	1,601.5	1,225.4	1,209.8	1,401.7
More than 30 Years	321.1	304.0	388.6	453.4	345.6	371.3	374.3	340.8	297.7
Unavailable	3.3	7.7	5.3	3.7	8.6	11.1	7.6	11.4	4.5
Zero Coupon Total	391.1	280.5	282.3	420.1	290.4	326.8	351.9	160.1	325.4
0–9 Months	4.2	3.8	5.0	5.2	3.1	2.1	3.4	2.8	4.0
>9 Months–2 Years	5.3	5.6	4.4	5.7	5.9	7.1	5.5	4.2	6.6
>2 Years–5 Years	14.9	13.3	12.6	15.7	10.1	9.7	10.4	9.1	11.2
>5 Years–10 Years	31.0	25.3	30.2	23.2	19.1	19.6	19.1	20.0	17.7
>10 Years–15 Years	42.1	26.0	34.6	27.1	20.2	22.3	22.2	12.4	24.1
>15 Years–20 Years	40.0	35.7	18.0	22.3	13.8	18.2	11.7	10.0	15.5
>20 Years–30 Years	92.8	88.9	93.5	132.3	50.4	59.0	55.5	39.1	48.7
More than 30 Years	160.7	81.8	80.8	188.6	167.6	188.7	223.7	62.4	197.6
Unavailable	0.1	0.1	3.2	0.1	0.2	0.1	0.3	0.2	<0.1

Average daily number of trades

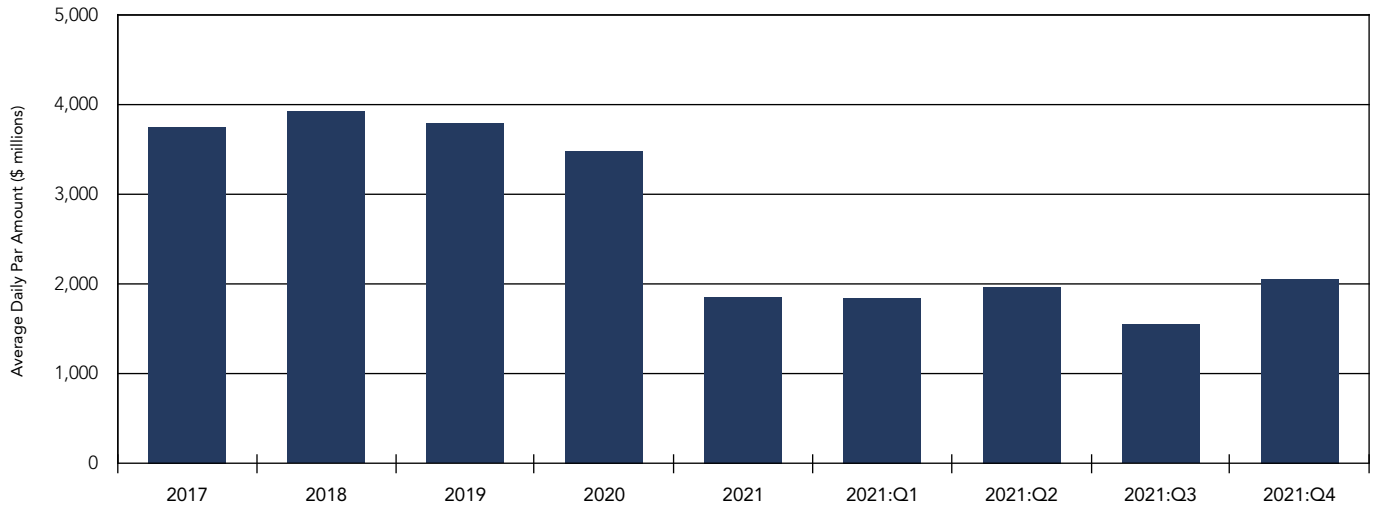
	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Fixed Rate Total	37,102	38,002	32,286	31,538	28,985	31,886	29,585	26,295	28,318
0–9 Months	1,167	1,507	1,526	1,608	1,542	1,788	1,677	1,115	1,601
>9 Months–2 Years	2,091	2,633	2,271	2,490	2,296	2,414	2,229	2,097	2,447
>2 Years–5 Years	5,000	5,736	4,854	5,263	4,964	5,552	5,132	4,302	4,900
>5 Years–10 Years	8,105	9,083	7,532	7,649	7,685	8,358	7,781	6,946	7,688
>10 Years–15 Years	6,799	6,864	5,707	5,521	5,151	5,750	5,253	4,709	4,920
>15 Years–20 Years	6,309	5,325	4,380	3,926	3,235	3,565	3,367	3,088	2,936
>20 Years–30 Years	6,849	6,183	5,254	4,479	3,631	3,952	3,635	3,549	3,403
More than 30 Years	768	648	737	587	452	480	491	444	395
Unavailable	14	24	25	16	30	28	20	44	29
Zero Coupon Total	1,134	957	1,099	884	710	885	748	647	570
0–9 Months	39	43	42	40	34	37	44	27	28
>9 Months–2 Years	74	80	62	75	69	86	71	64	58
>2 Years–5 Years	187	179	162	171	142	177	157	127	108
>5 Years–10 Years	272	234	278	232	195	243	195	184	161
>10 Years–15 Years	229	178	238	154	118	152	124	105	93
>15 Years–20 Years	160	117	102	92	67	82	68	63	54
>20 Years–30 Years	146	107	148	89	67	79	63	69	59
More than 30 Years	27	18	64	30	16	28	25	5	8
Unavailable	<1	1	2	1	1	1	1	2	1

Part Seven

Municipal Variable Rate Securities—Par Amount Traded and Number of Trades, 2017–2021

Transaction Summary—Variable Rate Securities, 2017–2021

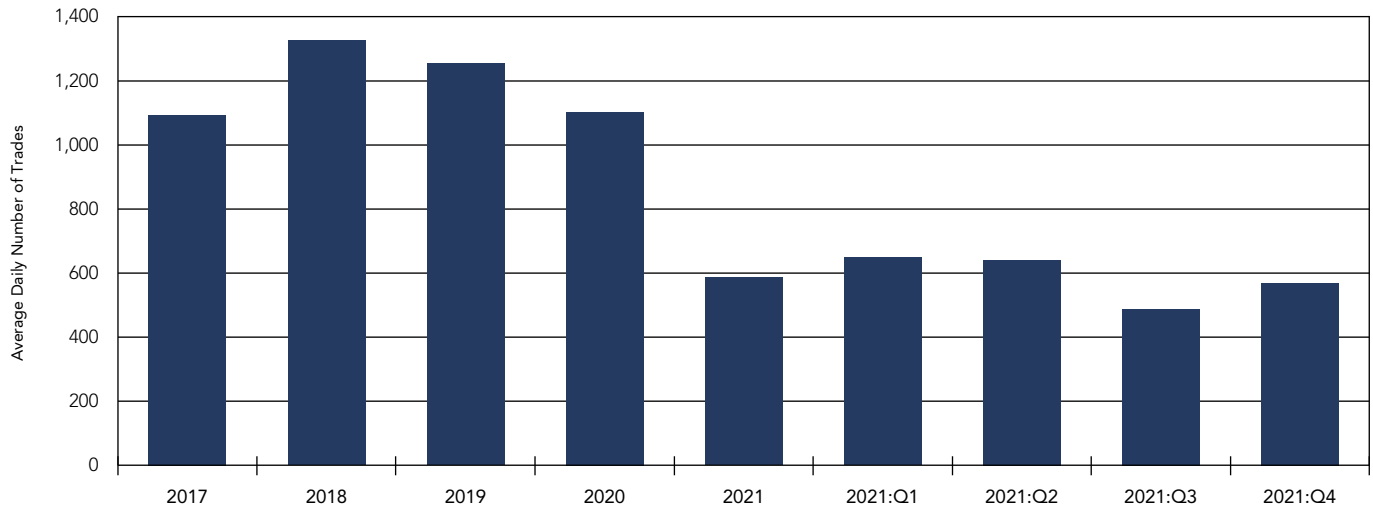
Average daily par amount in \$ millions



	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Total	3,748.1	3,926.2	3,791.2	3,482.3	1,853.0	1,842.6	1,965.2	1,550.3	2,054.9
0–\$25,000	1.2	1.2	1.0	0.9	0.8	0.9	0.8	0.7	0.9
\$25,001–\$50,000	1.8	1.7	1.5	1.2	1.0	1.1	1.1	0.9	1.0
\$50,001–\$75,000	0.8	0.9	0.8	0.8	0.7	0.8	0.8	0.6	0.7
\$75,001–\$100,000	13.9	18.8	17.5	14.6	6.6	8.4	7.3	5.6	5.4
\$100,001–\$500,000	89.7	121.1	109.5	93.5	42.3	53.2	48.1	34.1	34.3
\$500,001–\$1,000,000	98.1	121.8	116.3	101.2	48.9	56.8	55.1	40.5	43.8
\$1,000,001–\$2,000,000	156.1	185.9	180.5	167.3	88.0	88.7	101.9	71.0	90.5
More than \$2,000,000	3,386.7	3,474.9	3,364.0	3,102.8	1,664.6	1,632.8	1,750.2	1,396.9	1,878.4

Transaction Summary—Variable Rate Securities, 2017–2021

Average daily number of trades



	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Variable Rate Total	1,094	1,326	1,255	1,103	586	649	641	488	569
0–\$25,000	68	72	58	51	49	51	45	45	54
\$25,001–\$50,000	40	39	33	28	24	25	25	21	24
\$50,001–\$75,000	11	13	12	11	11	12	11	9	11
\$75,001–\$100,000	139	188	176	147	67	84	73	56	54
\$100,001–\$500,000	309	421	386	330	149	187	167	122	122
\$500,001–\$1,000,000	121	151	145	127	61	72	69	51	55
\$1,000,001–\$2,000,000	101	121	119	111	58	58	67	47	60
More than \$2,000,000	305	321	326	300	167	160	183	136	190

Variable Rate Demand Obligations¹ Trade Type and Size, 2017–2021

Average daily par amount in \$ millions

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Total	3,316.8	3,599.7	3,469.6	3,208.6	1,626.7	1,669.6	1,698.6	1,320.9	1,821.0
0–\$25,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$25,001–\$50,000	<0.1	<0.1	0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1
\$50,001–\$75,000	<0.1	<0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1
\$75,001–\$100,000	11.0	16.3	15.6	13.2	5.6	7.2	6.1	4.5	4.4
\$100,001–\$500,000	75.1	108.2	97.3	82.9	34.9	46.1	39.6	27.5	26.8
\$500,001–\$1,000,000	86.5	112.1	105.8	91.6	42.6	51.9	46.9	34.6	37.5
\$1,000,001–\$2,000,000	141.0	173.3	165.1	153.0	77.6	80.0	89.0	61.1	80.4
More than \$2,000,000	3,003.2	3,189.8	3,085.7	2,867.9	1,466.2	1,484.3	1,517.0	1,193.0	1,671.9
Customer Bought Total	1,646.8	1,805.3	1,717.2	1,567.1	786.0	804.2	827.0	621.9	892.4
0–\$25,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$25,001–\$50,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$50,001–\$75,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$75,001–\$100,000	4.5	6.2	4.9	2.9	1.1	1.5	1.2	0.9	0.8
\$100,001–\$500,000	36.3	49.6	38.8	26.2	11.2	15.1	12.3	9.2	8.6
\$500,001–\$1,000,000	42.7	53.5	47.5	37.2	18.1	21.7	20.3	15.0	15.7
\$1,000,001–\$2,000,000	72.3	86.9	79.8	72.5	37.3	37.8	44.8	28.6	38.2
More than \$2,000,000	1,490.9	1,609.1	1,546.2	1,428.2	718.2	727.9	748.3	568.3	829.1
Customer Sold Total	1,611.9	1,729.7	1,671.6	1,530.0	754.8	794.5	773.6	626.3	826.7
0–\$25,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$25,001–\$50,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$50,001–\$75,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$75,001–\$100,000	5.4	8.4	8.2	7.5	3.5	4.3	3.9	2.8	2.9
\$100,001–\$500,000	32.1	49.1	46.8	43.5	18.7	24.9	21.4	14.3	14.7
\$500,001–\$1,000,000	37.9	51.2	50.0	44.6	20.6	25.4	22.1	16.2	18.7
\$1,000,001–\$2,000,000	62.4	77.9	77.0	70.2	35.0	37.6	37.8	28.2	36.6
More than \$2,000,000	1,474.1	1,543.0	1,489.5	1,364.1	676.9	702.2	688.4	564.7	753.8
Inter-Dealer Total	58.2	64.8	80.9	111.6	86.1	71.0	98.1	72.7	102.0
0–\$25,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$25,001–\$50,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$50,001–\$75,000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$75,001–\$100,000	1.1	1.8	2.4	2.7	1.0	1.4	1.0	0.8	0.7
\$100,001–\$500,000	6.6	9.5	11.8	13.2	4.9	6.1	5.9	4.1	3.5
\$500,001–\$1,000,000	5.9	7.3	8.4	9.9	3.9	4.8	4.5	3.4	3.0
\$1,000,001–\$2,000,000	6.4	8.5	8.2	10.3	5.2	4.6	6.3	4.3	5.6
More than \$2,000,000	38.2	37.7	50.1	75.6	71.0	54.2	80.2	60.1	89.1

¹ 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.

Variable Rate Demand Obligations¹ Trade Type and Size, 2017–2021

Average daily number of trades

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Total	841	1,088	1,037	917	430	497	477	344	407
0–\$25,000	3	2	1	3	1	2	2	1	1
\$25,001–\$50,000	1	1	1	2	1	1	1	1	1
\$50,001–\$75,000	<1	1	<1	1	1	1	1	<1	1
\$75,001–\$100,000	110	163	156	132	56	72	62	45	44
\$100,001–\$500,000	253	371	338	288	119	158	134	95	91
\$500,001–\$1,000,000	106	139	132	115	54	66	59	44	47
\$1,000,001–\$2,000,000	91	113	109	102	52	53	59	41	53
More than \$2,000,000	276	297	299	274	147	144	160	117	169
Customer Bought Total	406	504	443	349	168	189	188	133	165
0–\$25,000	1	1	<1	1	<1	1	<1	<1	<1
\$25,001–\$50,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
\$50,001–\$75,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
\$75,001–\$100,000	45	62	49	29	11	15	12	9	8
\$100,001–\$500,000	120	167	132	86	36	48	39	30	27
\$500,001–\$1,000,000	52	66	59	47	23	27	25	19	20
\$1,000,001–\$2,000,000	47	57	53	48	25	25	30	19	25
More than \$2,000,000	139	150	150	136	73	71	81	55	85
Customer Sold Total	384	511	503	462	217	255	238	174	203
0–\$25,000	1	1	1	1	1	1	1	1	<1
\$25,001–\$50,000	1	1	1	1	1	1	0	1	1
\$50,001–\$75,000	<1	<1	<1	1	<1	<1	<1	<1	<1
\$75,001–\$100,000	54	84	83	76	35	43	39	28	29
\$100,001–\$500,000	109	170	163	153	65	87	74	50	51
\$500,001–\$1,000,000	47	64	63	56	26	32	28	20	24
\$1,000,001–\$2,000,000	40	51	51	47	23	25	25	19	24
More than \$2,000,000	132	141	143	128	66	66	70	55	74
Inter-Dealer Total	51	73	91	106	45	54	51	38	39
0–\$25,000	<1	<1	<1	1	<1	<1	<1	<1	<1
\$25,001–\$50,000	<1	<1	<1	<1	<1	1	<1	<1	<1
\$50,001–\$75,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
\$75,001–\$100,000	11	18	24	27	10	14	10	8	7
\$100,001–\$500,000	23	34	44	49	18	23	21	15	13
\$500,001–\$1,000,000	7	9	11	12	5	6	6	4	4
\$1,000,001–\$2,000,000	4	6	6	7	3	3	4	3	4
More than \$2,000,000	5	6	7	9	8	7	9	7	10

¹ 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.

Auction Rate Securities¹ Trade Type and Size, 2017–2021

Average daily par amount in \$ millions

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Total	22.5	27.6	20.4	21.9	6.8	7.0	10.2	4.3	5.8
0–\$25,000	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
\$25,001–\$50,000	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1
\$50,001–\$75,000	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1
\$75,001–\$100,000	0.8	0.8	0.5	0.4	0.2	0.2	0.2	0.2	0.1
\$100,001–\$500,000	4.4	4.8	4.8	3.3	1.8	2.2	2.0	1.4	1.5
\$500,001–\$1,000,000	3.1	3.1	2.8	2.6	0.9	1.0	1.4	0.6	0.9
\$1,000,001–\$2,000,000	2.9	3.0	2.8	2.6	1.2	0.9	1.6	0.7	1.5
More than \$2,000,000	10.6	15.1	8.8	12.4	2.2	2.2	4.5	1.0	1.2
Customer Bought									
Total	8.9	10.1	7.2	7.1	2.2	2.3	3.2	1.6	1.7
0–\$25,000	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
\$25,001–\$50,000	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
\$50,001–\$75,000	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0
\$75,001–\$100,000	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0
\$100,001–\$500,000	1.7	1.5	1.5	1.1	0.5	0.6	0.6	0.5	0.4
\$500,001–\$1,000,000	1.1	1.1	1.0	0.8	0.3	0.3	0.5	0.2	0.3
\$1,000,001–\$2,000,000	1.0	1.0	0.9	1.0	0.5	0.4	0.7	0.2	0.6
More than \$2,000,000	4.7	5.9	3.3	4.0	0.7	0.8	1.2	0.4	0.3
Customer Sold									
Total	7.3	9.4	6.5	7.2	2.2	2.3	3.4	1.5	1.8
0–\$25,000	<0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
\$25,001–\$50,000	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1
\$50,001–\$75,000	0.1	0.1	0.1	0.1	<0.1	0.0	0.1	0.1	<0.1
\$75,001–\$100,000	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1	<0.1
\$100,001–\$500,000	1.4	1.8	1.8	1.1	0.6	0.7	0.7	0.4	0.5
\$500,001–\$1,000,000	1.0	1.0	0.9	0.9	0.3	0.3	0.5	0.2	0.4
\$1,000,001–\$2,000,000	0.9	0.8	0.8	0.8	0.3	0.3	0.4	0.2	0.4
More than \$2,000,000	3.4	5.2	2.6	4.1	0.8	0.7	1.5	0.4	0.4
Inter-Dealer									
Total	6.3	8.1	6.7	7.6	2.4	2.3	3.6	1.3	2.3
0–\$25,000	<0.1	<0.1	<0.1	0.1	0.1	0.1	0.1	<0.1	<0.1
\$25,001–\$50,000	0.1	0.1	0.1	0.1	<0.1	0.0	<0.1	<0.1	<0.1
\$50,001–\$75,000	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1
\$75,001–\$100,000	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
\$100,001–\$500,000	1.3	1.5	1.6	1.2	0.7	0.8	0.7	0.5	0.7
\$500,001–\$1,000,000	1.1	1.0	0.9	0.9	0.3	0.3	0.4	0.1	0.3
\$1,000,001–\$2,000,000	1.0	1.1	1.0	0.9	0.4	0.2	0.6	0.3	0.6
More than \$2,000,000	2.5	4.0	2.9	4.3	0.8	0.7	1.7	0.2	0.6

¹ 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.

Auction Rate Securities¹ Trade Type and Size, 2017–2021

Average daily number of trades

	2017	2018	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
Total	46	53	49	41	25	28	28	22	21
0–\$25,000	6	9	8	10	8	9	8	8	7
\$25,001–\$50,000	6	6	6	5	3	3	4	3	3
\$50,001–\$75,000	2	3	3	2	2	2	3	2	1
\$75,001–\$100,000	8	8	5	4	2	2	2	2	1
\$100,001–\$500,000	16	18	19	13	7	9	8	6	6
\$500,001–\$1,000,000	4	4	4	3	1	1	2	1	1
\$1,000,001–\$2,000,000	2	2	2	2	1	1	1	<1	1
More than \$2,000,000	2	2	2	2	0	0	1	<1	<1
Customer Bought Total	17	18	17	13	8	9	9	8	7
0–\$25,000	3	3	4	3	3	3	3	3	3
\$25,001–\$50,000	2	3	2	2	1	1	1	1	1
\$50,001–\$75,000	1	1	1	1	1	1	1	1	1
\$75,001–\$100,000	2	2	2	1	1	1	1	1	<1
\$100,001–\$500,000	6	6	6	4	2	3	3	2	2
\$500,001–\$1,000,000	1	2	1	1	<1	<1	1	<1	<1
\$1,000,001–\$2,000,000	1	1	1	1	<1	<1	<1	<1	<1
More than \$2,000,000	1	1	1	1	<1	<1	<1	<1	<1
Customer Sold Total	16	20	17	15	9	9	10	8	7
0–\$25,000	2	3	3	5	3	3	3	3	3
\$25,001–\$50,000	2	2	2	2	1	1	1	1	1
\$50,001–\$75,000	1	1	1	1	1	1	1	1	<1
\$75,001–\$100,000	4	4	2	2	1	1	1	1	<1
\$100,001–\$500,000	5	7	7	4	2	3	3	2	2
\$500,001–\$1,000,000	1	1	1	1	<1	<1	1	<1	<1
\$1,000,001–\$2,000,000	1	1	1	1	<1	<1	<1	<1	<1
More than \$2,000,000	1	1	<1	1	<1	<1	<1	<1	<1
Inter-Dealer Total	13	15	14	13	8	9	9	7	7
0–\$25,000	1	2	2	3	2	3	3	2	2
\$25,001–\$50,000	1	2	1	1	1	1	1	1	1
\$50,001–\$75,000	1	1	1	1	1	1	1	1	1
\$75,001–\$100,000	2	2	1	1	1	1	1	1	1
\$100,001–\$500,000	5	6	6	5	3	3	3	2	3
\$500,001–\$1,000,000	1	1	1	1	<1	<1	1	<1	<1
\$1,000,001–\$2,000,000	1	1	1	1	<1	<1	<1	<1	<1
More than \$2,000,000	1	1	1	1	<1	<1	<1	<1	<1

¹Based 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.

Part Eight

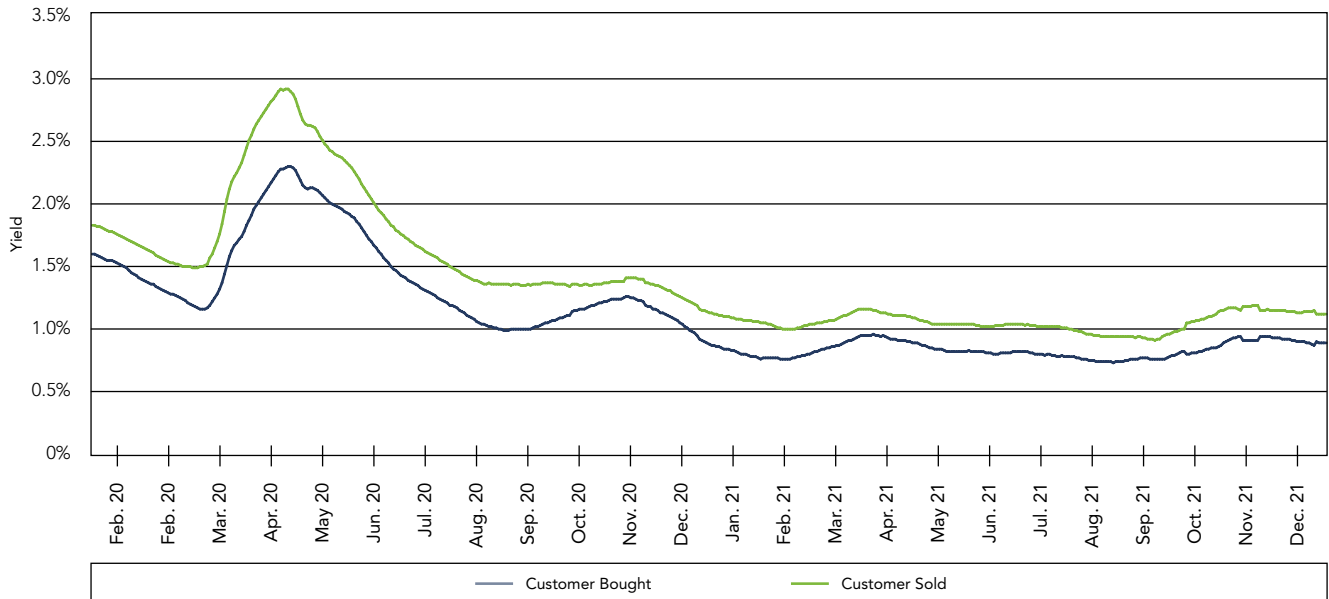
Yield Distributions, 2019–2021

Customer Trade and Size of Tax Exempt, Fixed Rate Securities, 2019–2021

Average daily yields

	2019	2020	2021	2021:Q1	2021:Q2	2021:Q3	2021:Q4
All Trades							
Total	2.08	1.69	0.98	1.00	0.96	0.89	1.07
0–\$25,000	2.14	1.78	1.02	1.05	1.00	0.92	1.11
\$25,001–\$50,000	2.05	1.64	0.92	0.92	0.89	0.82	1.02
\$50,001–\$75,000	1.95	1.53	0.84	0.83	0.84	0.76	0.92
\$75,001–\$100,000	2.00	1.57	0.89	0.89	0.87	0.82	0.95
\$100,001–\$500,000	1.98	1.51	0.92	0.94	0.91	0.85	0.99
\$500,001–\$1,000,000	2.11	1.66	1.23	1.23	1.20	1.21	1.29
\$1,000,001–\$2,000,000	2.17	1.78	1.30	1.31	1.26	1.24	1.40
More than \$2,000,000	2.31	1.98	1.43	1.42	1.35	1.33	1.61
Customer Bought							
Total	1.95	1.48	0.86	0.87	0.85	0.78	0.95
0–\$25,000	1.98	1.55	0.85	0.87	0.84	0.76	0.94
\$25,001–\$50,000	1.92	1.43	0.78	0.77	0.76	0.69	0.89
\$50,001–\$75,000	1.80	1.29	0.70	0.68	0.71	0.64	0.78
\$75,001–\$100,000	1.87	1.35	0.77	0.77	0.76	0.71	0.83
\$100,001–\$500,000	1.85	1.30	0.86	0.86	0.86	0.79	0.92
\$500,001–\$1,000,000	2.05	1.56	1.23	1.23	1.20	1.21	1.30
\$1,000,001–\$2,000,000	2.16	1.74	1.33	1.31	1.27	1.28	1.48
More than \$2,000,000	2.33	1.95	1.48	1.44	1.36	1.42	1.70
Customer Sold							
Total	2.20	1.82	1.06	1.09	1.05	0.97	1.12
0–\$25,000	2.33	1.95	1.18	1.21	1.17	1.07	1.23
\$25,001–\$50,000	2.13	1.74	0.98	1.01	0.97	0.89	1.05
\$50,001–\$75,000	2.02	1.63	0.89	0.90	0.89	0.80	0.95
\$75,001–\$100,000	2.01	1.63	0.87	0.89	0.86	0.80	0.93
\$100,001–\$500,000	1.95	1.54	0.83	0.86	0.80	0.74	0.88
\$500,001–\$1,000,000	2.04	1.72	1.05	1.09	1.02	1.01	1.07
\$1,000,001–\$2,000,000	2.10	1.85	1.14	1.20	1.11	1.05	1.17
More than \$2,000,000	2.27	2.13	1.32	1.37	1.32	1.13	1.44

Daily Yield of Customer Trades of Tax Exempt, Fixed Rate Securities, 2020–2021 30-day trailing average



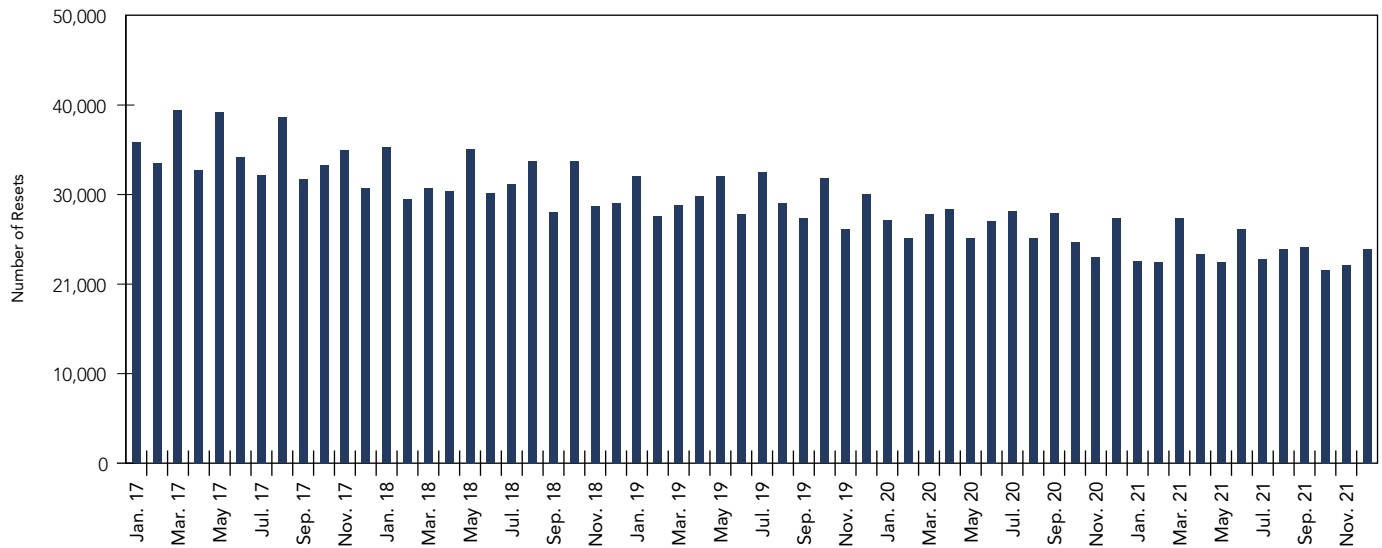

EMMALabs Pioneering the future of market transparency

- EMMALabs is the MSRB’s innovation sandbox—a proving ground for functional prototypes that could ultimately be deployed on the EMMA website.
- Work with us to co-create the future of municipal bond market transparency. Create a free EMMALabs account to test these prototypes, or Active Labs, provide feedback and offer ideas for future Active Labs, tools and partnerships.

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Part Nine

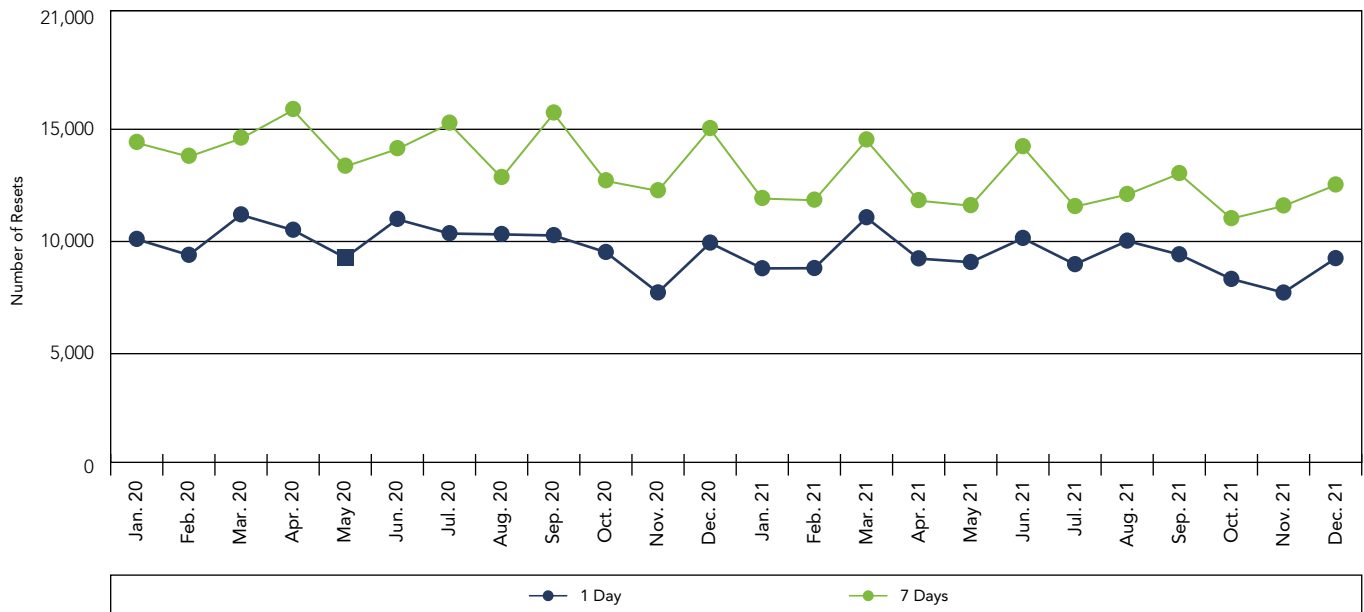
Municipal Market Variable Securities Rate Resets, 2017–2021

Number of Variable Rate Demand Obligations Rate Resets¹, 2017–2021

	2017	2018	2019	2020	2021
January	35,828	35,287	32,017	27,103	22,515
February	33,470	29,509	27,555	25,157	22,448
March	39,420	30,717	28,787	27,767	27,353
April	32,734	30,369	29,853	28,313	23,297
May	39,171	35,111	32,045	25,148	22,404
June	34,169	30,144	27,793	27,056	26,098
July	32,191	31,118	32,541	28,113	22,797
August	38,606	33,772	29,059	25,077	23,845
September	31,678	28,062	27,313	27,869	24,144
October	33,300	33,699	31,768	24,638	21,563
November	34,934	28,740	26,132	22,986	22,124
December	30,658	29,052	30,060	27,302	23,928

¹ 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.

Number of Variable Rate Demand Obligations Rate Resets by Period¹, 2020–2021

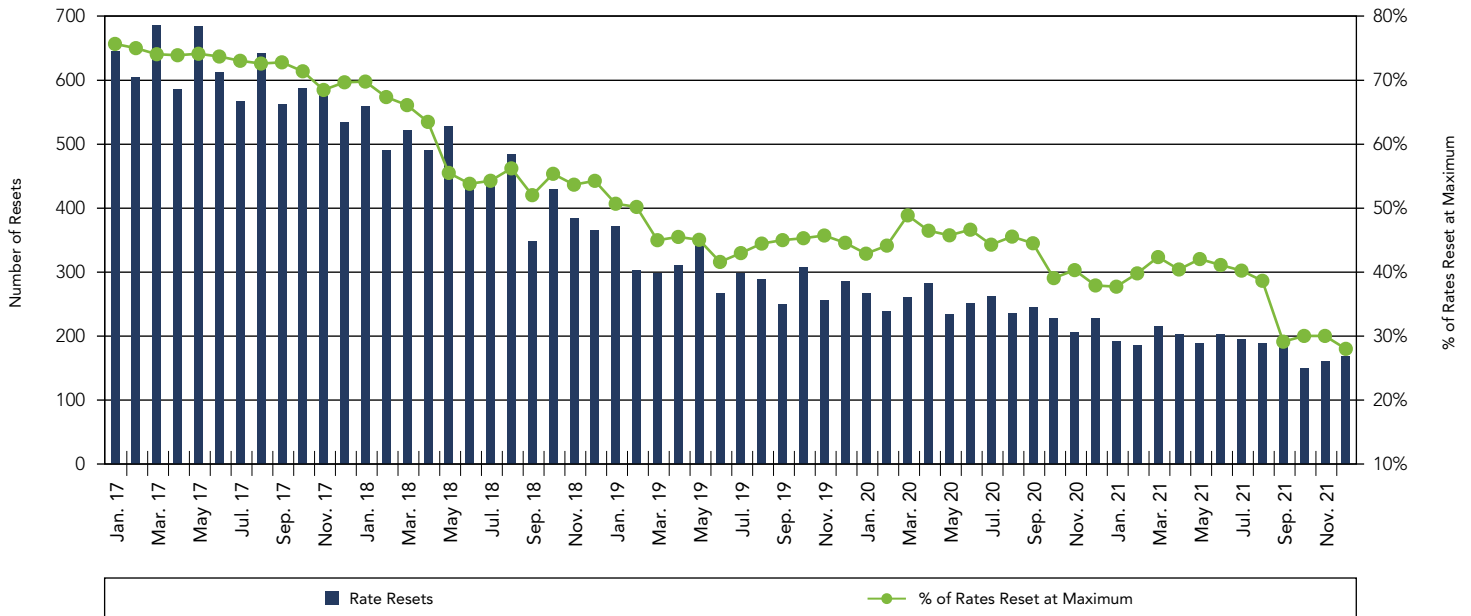


	1 Day	7 Days
Jan. 20	9,893	14,188
Feb. 20	9,188	13,575
Mar. 20	10,979	14,381
Apr. 20	10,299	15,647
May 20	9,071	13,135
Jun. 20	10,780	13,912
Jul. 20	10,146	15,042
Aug. 20	10,110	12,636
Sep. 20	10,061	15,492
Oct. 20	9,315	12,490
Nov. 20	7,523	12,049
Dec. 20	9,730	14,802

	1 Day	7 Days
Jan. 20	8,594	11,706
Feb. 20	8,603	11,631
Mar. 20	10,853	14,299
Apr. 20	9,032	11,612
May 20	8,871	11,389
Jun. 20	9,937	14,000
Jul. 20	8,774	11,347
Aug. 20	9,817	11,884
Sep. 20	9,213	12,810
Oct. 20	8,122	10,813
Nov. 20	7,518	11,376
Dec. 20	9,041	12,304

¹ 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. The remaining 61,044 resets were for securities with other periodic reset frequencies.

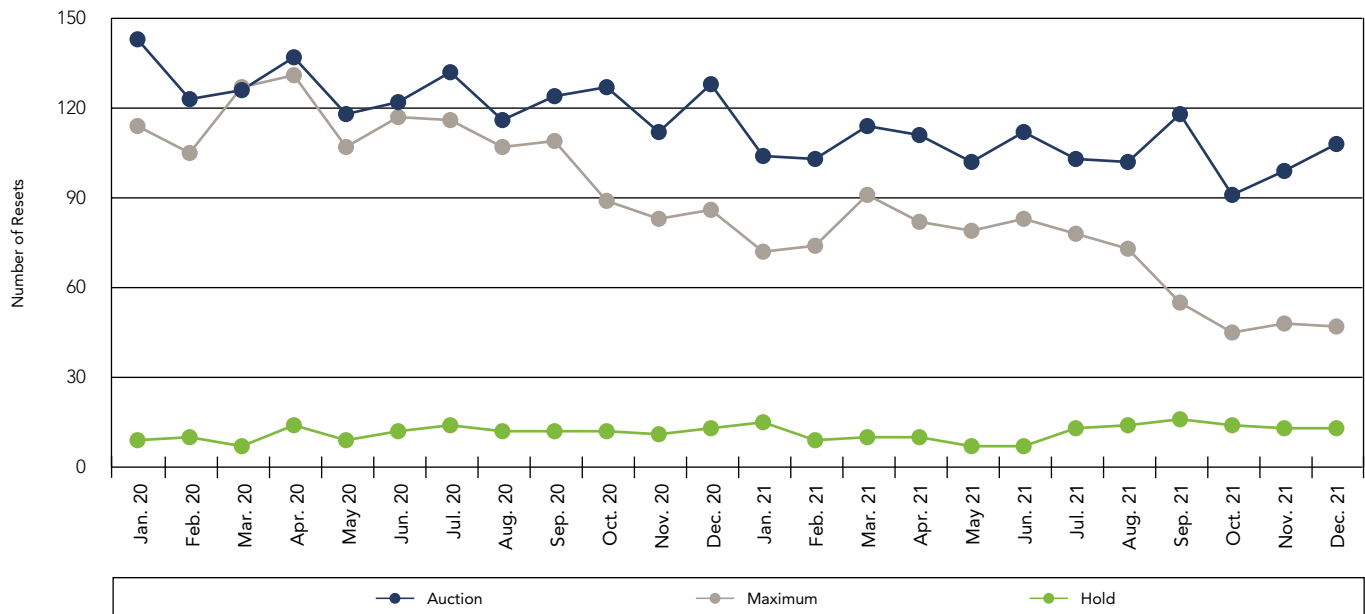
Number of Auction Rate Securities Rate Resets¹, 2017–2021



	2017	2018	2019	2020	2021
January	645	559	371	266	191
February	604	490	303	238	186
March	686	522	298	260	215
April	586	490	310	282	203
May	684	528	342	234	188
June	612	435	267	251	202
July	567	446	298	262	194
August	642	484	288	235	189
September	562	348	249	245	189
October	587	430	307	228	150
November	577	384	256	206	160
December	534	365	285	227	168

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

Number of Auction Rate Securities Rate Resets by Type¹, 2020–2021

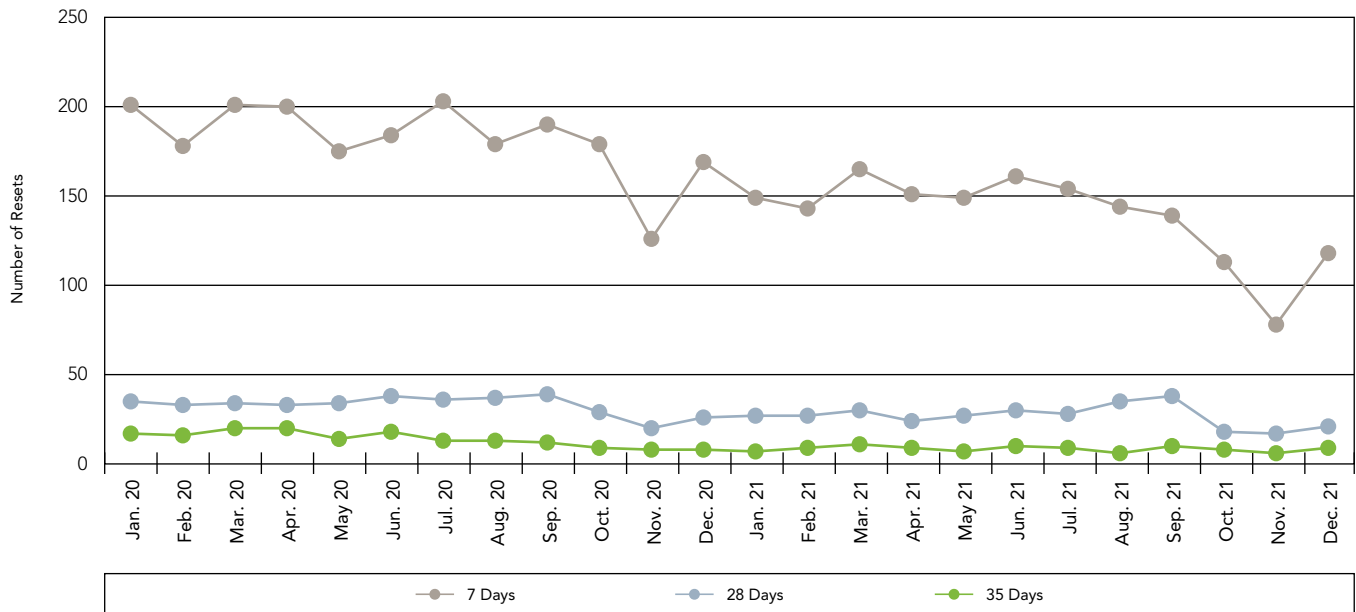


	Auction	Maximum	Hold
Jan. 20	143	114	9
Feb. 20	123	105	10
Mar. 20	126	127	7
Apr. 20	137	131	14
May 20	118	107	9
Jun. 20	122	117	12
Jul. 20	132	116	14
Aug. 20	116	107	12
Sep. 20	124	109	12
Oct. 20	127	89	12
Nov. 20	112	83	11
Dec. 20	128	86	13

	Auction	Maximum	Hold
Jan. 21	104	72	15
Feb. 21	103	74	9
Mar. 21	114	91	10
Apr. 21	111	82	10
May 21	102	79	7
Jun. 21	112	83	7
Jul. 21	103	78	13
Aug. 21	102	73	14
Sep. 21	118	55	16
Oct. 21	91	45	14
Nov. 21	99	48	13
Dec. 21	108	47	13

¹ 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.

Number of Auction Rate Securities Rate Resets by Period¹, 2020–2021



	7 Days	28 Days	35 Days
Jan. 20	201	35	17
Feb. 20	178	33	16
Mar. 20	201	34	20
Apr. 20	200	33	20
May 20	175	34	14
Jun. 20	184	38	18
Jul. 20	203	36	13
Aug. 20	179	37	13
Sep. 20	190	39	12
Oct. 20	179	29	9
Nov. 20	126	20	8
Dec. 20	169	26	8

	7 Days	28 Days	35 Days
Jan. 21	149	27	7
Feb. 21	143	27	9
Mar. 21	165	30	11
Apr. 21	151	24	9
May 21	149	27	7
Jun. 21	161	30	10
Jul. 21	154	28	9
Aug. 21	144	35	6
Sep. 21	139	38	10
Oct. 21	113	18	8
Nov. 21	78	17	6
Dec. 21	118	21	9

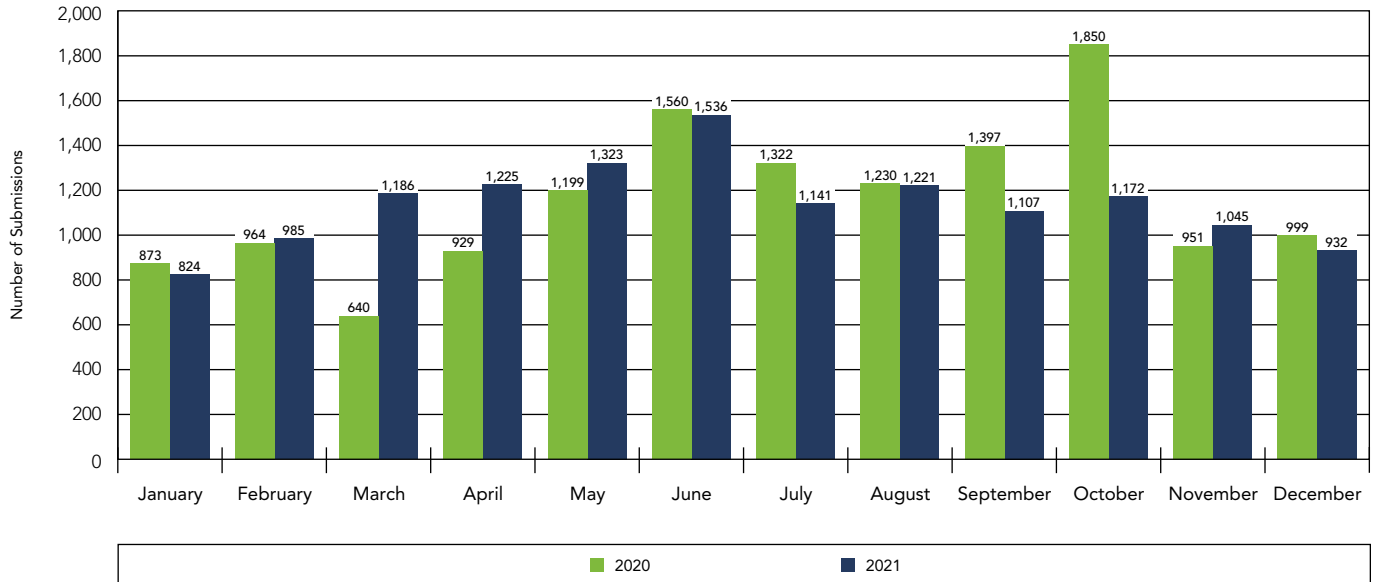
¹ Based on data submitted to the MSRB's Short-Term Obligation Rate Transparency (SHORT) System. May exclude submissions that could not be categorized based on available data.

Part Ten

Municipal Market Disclosures, 2017–2021

Number of Primary Market Submissions¹, 2020–2021

By number of submissions

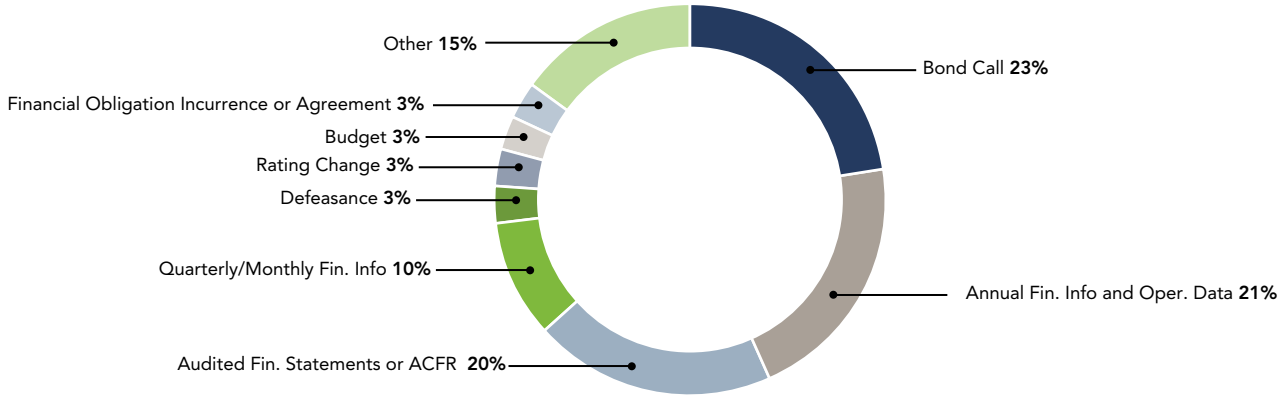


	2020	2021
January	873	824
February	964	985
March	640	1186
April	929	1225
May	1,199	1323
June	1,560	1536
July	1,322	1141
August	1,230	1221
September	1,397	1107
October	1,850	1172
November	951	1045
December	999	932
Total	13,914	13,697

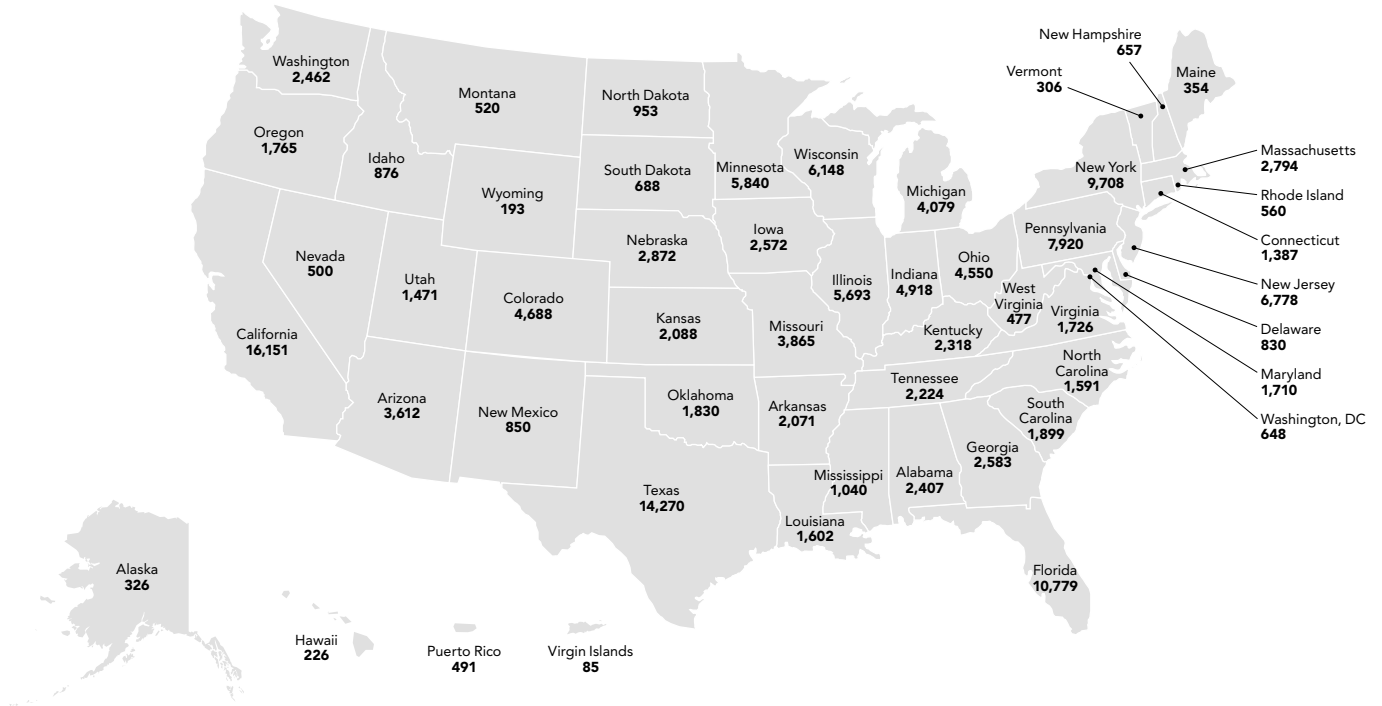
¹ Excludes remarketings.

Continuing Disclosures Submissions, 2021

By number of documents

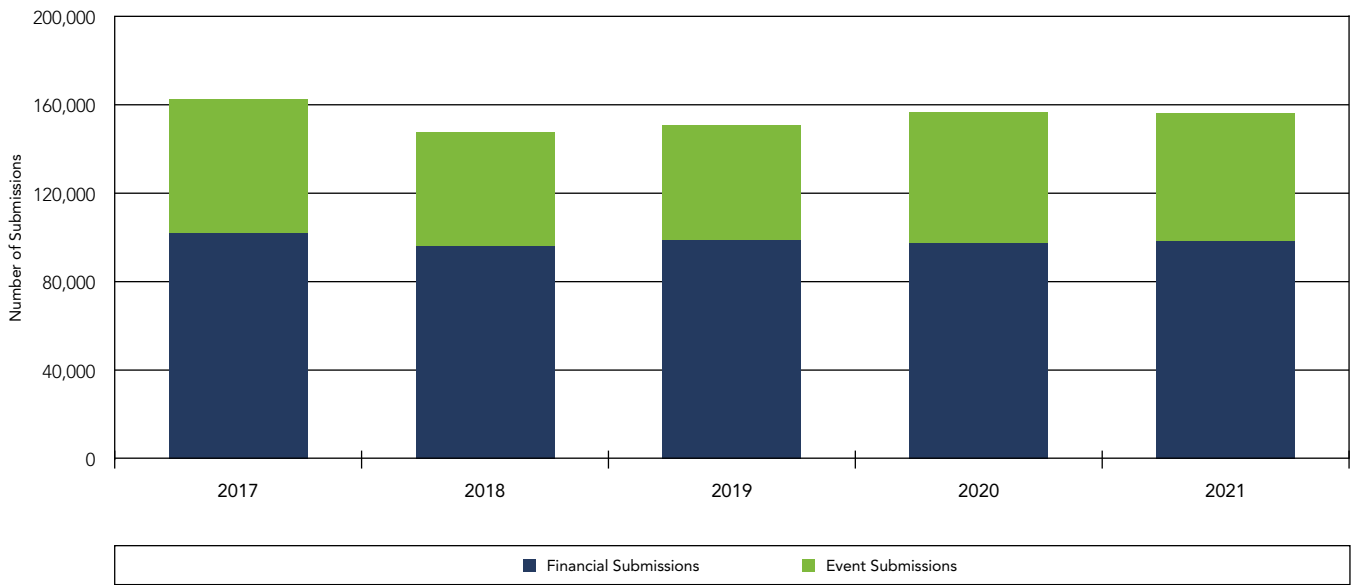


By state¹



¹ Based on information derived from the CUSIP Service Bureau.

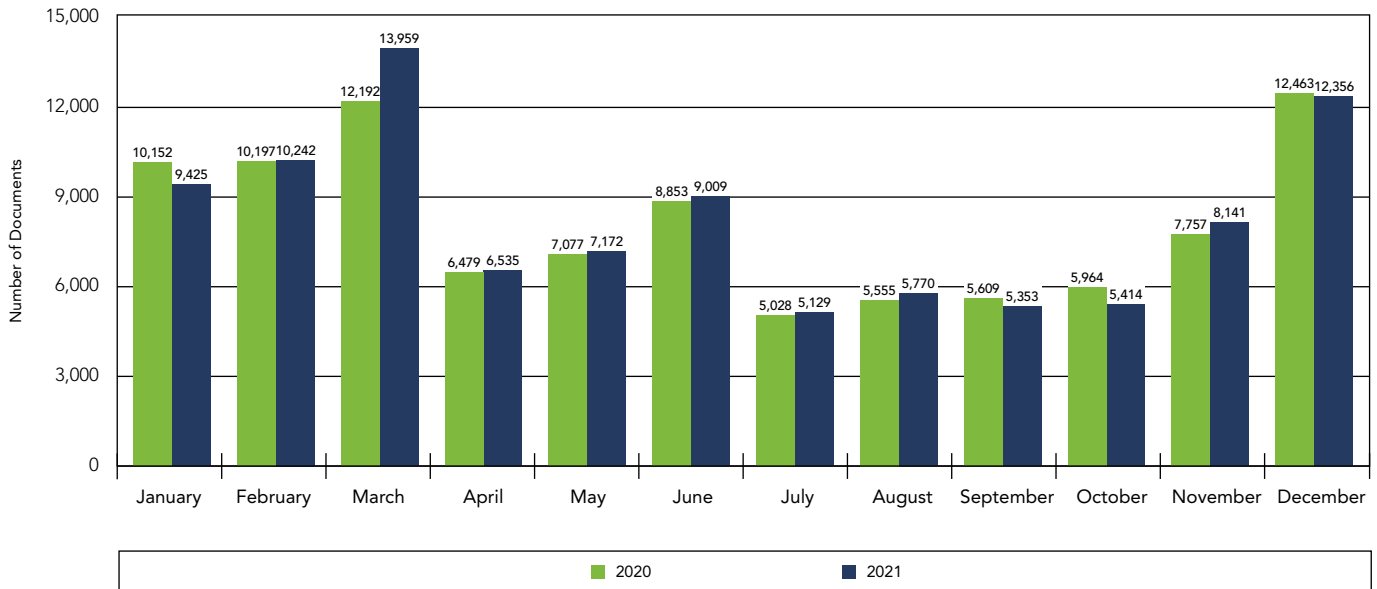
Number of Continuing Disclosure Submissions, 2017–2021



	Financial Submissions	Event Submissions
2017	101,843	60,883
2018	96,098	51,182
2019	98,925	51,660
2020	97,326	59,521
2021	98,505	57,779

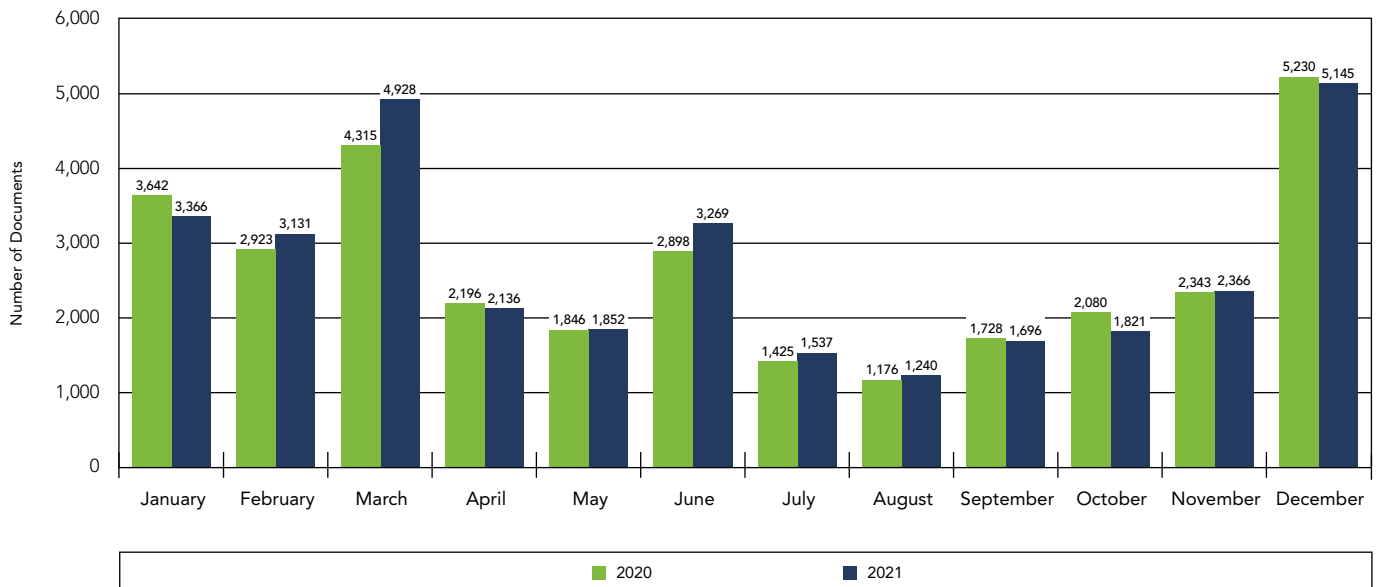
All Financial Disclosures, 2020–2021

By number of documents



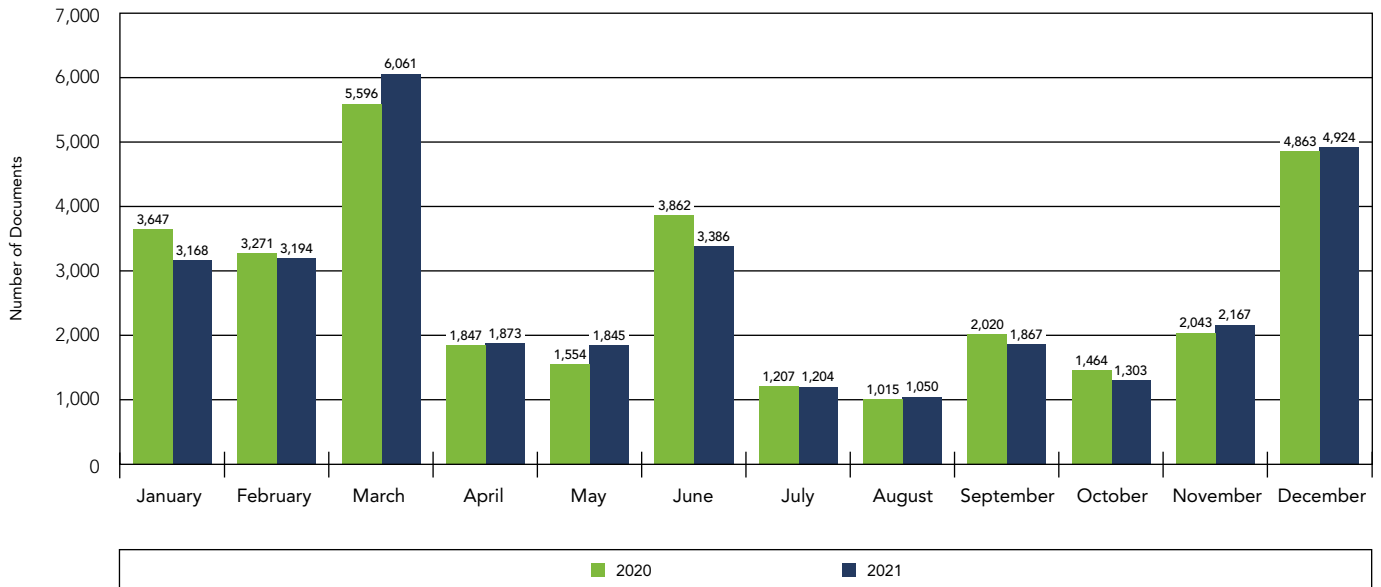
Audited Financial Statements or ACFR Submissions, 2020–2021

By number of documents



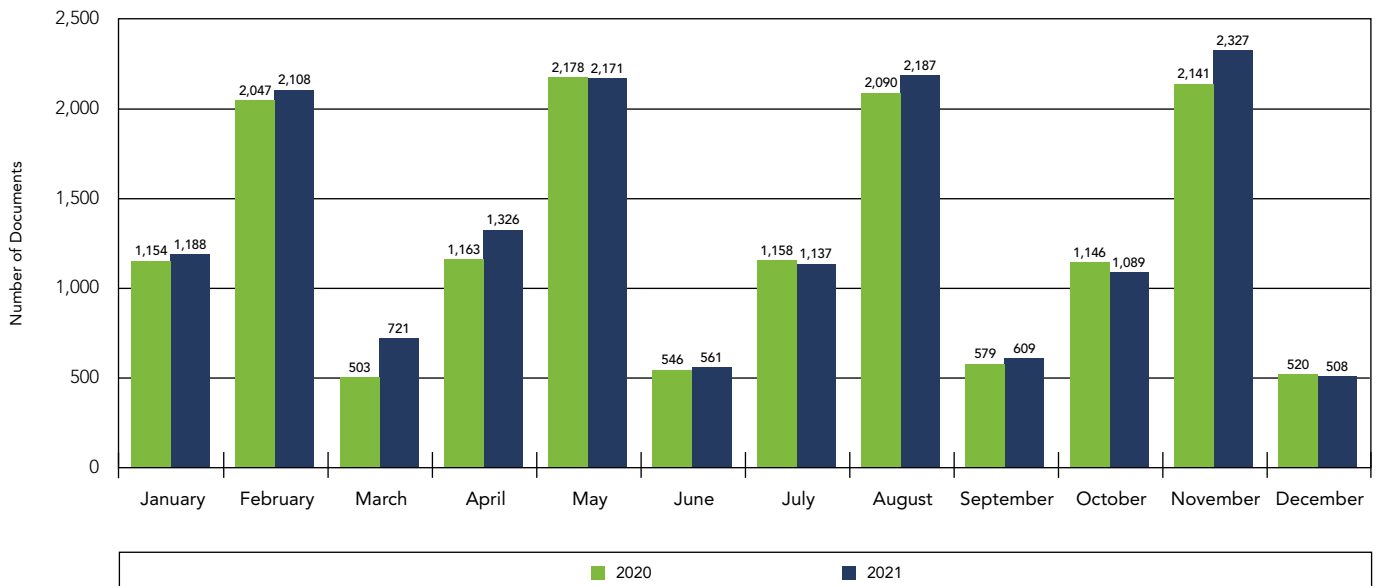
Annual Financial Information and Operating Data Submissions, 2020–2021

By number of documents



Quarterly/Monthly Financial Information Submissions, 2020–2021

By number of documents



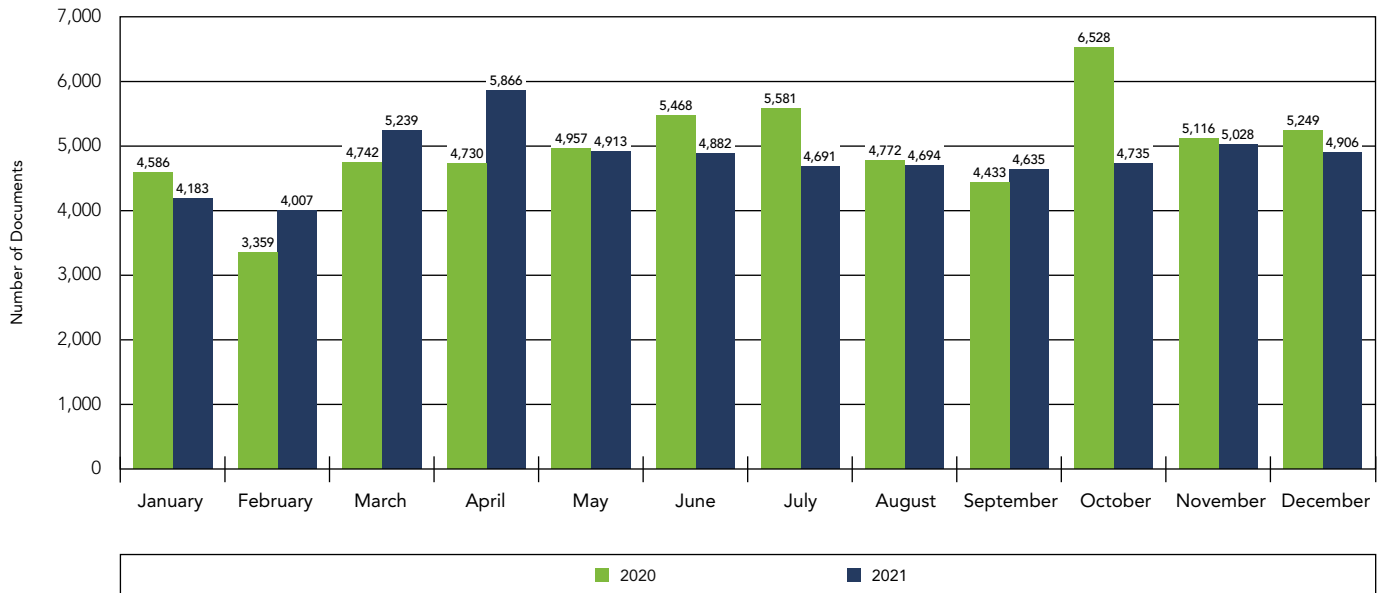
Other Financial Disclosures, 2020–2021

Financial disclosures

By Number of Documents	2020	2021
BUDGET	4,201	4,233
CHANGE IN ACCOUNTING STANDARD	1	1
CHANGE IN FISCAL YEAR/TIMING OF ANNUAL DISCLOSURE	29	53
CONSULTANT REPORTS	285	279
FAILURE TO PROVIDE ANNUAL FINANCIAL INFORMATION	2,669	2,777
INFORMATION PROVIDED TO RATING AGENCY, CREDIT/LIQUIDITY PROVIDER OR OTHER THIRD PARTY	229	214
INTERIM/ADDITIONAL FINANCIAL INFORMATION/OPERATING DATA	1,739	1,801
INVESTMENT/DEBT/FINANCIAL POLICY	128	82
OTHER FINANCIAL/OPERATING DATA	8,629	8,604

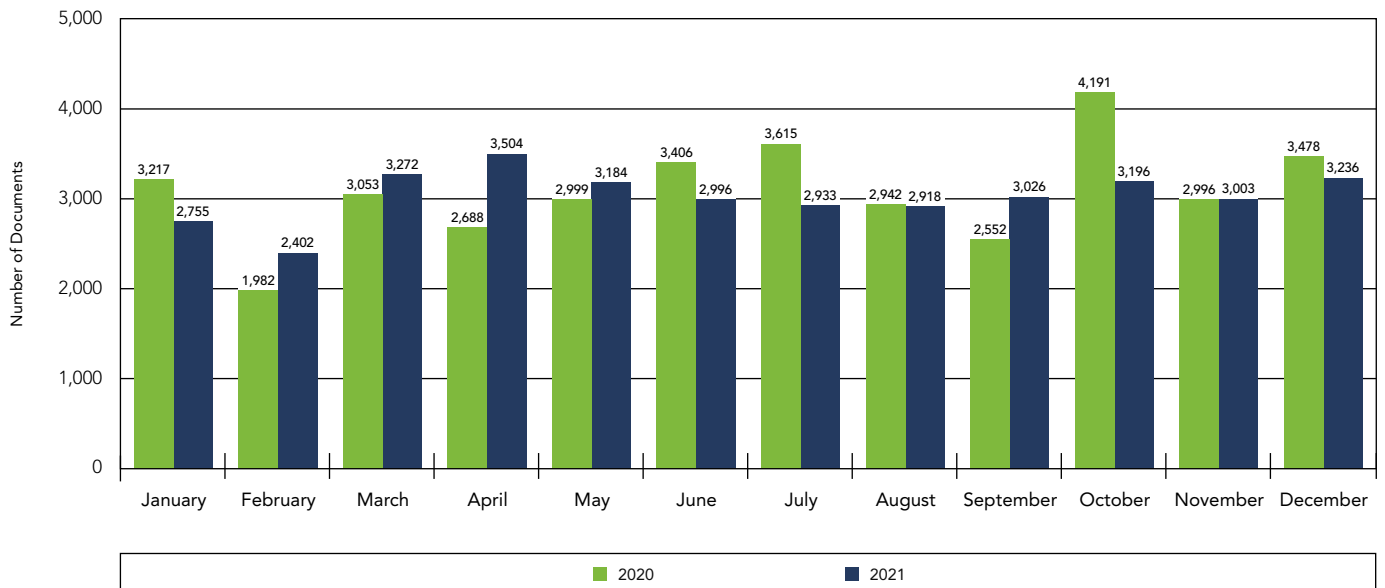
All Event Disclosures, 2020–2021

By number of documents



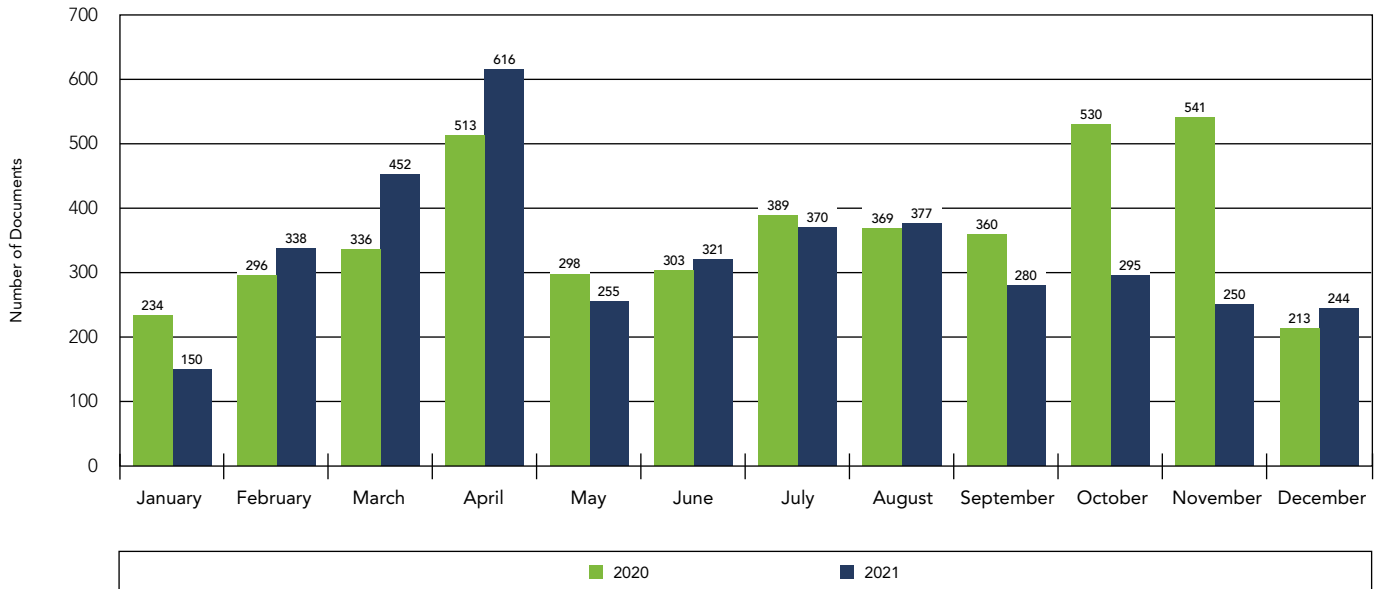
Bond Call Submissions, 2020–2021

By number of documents



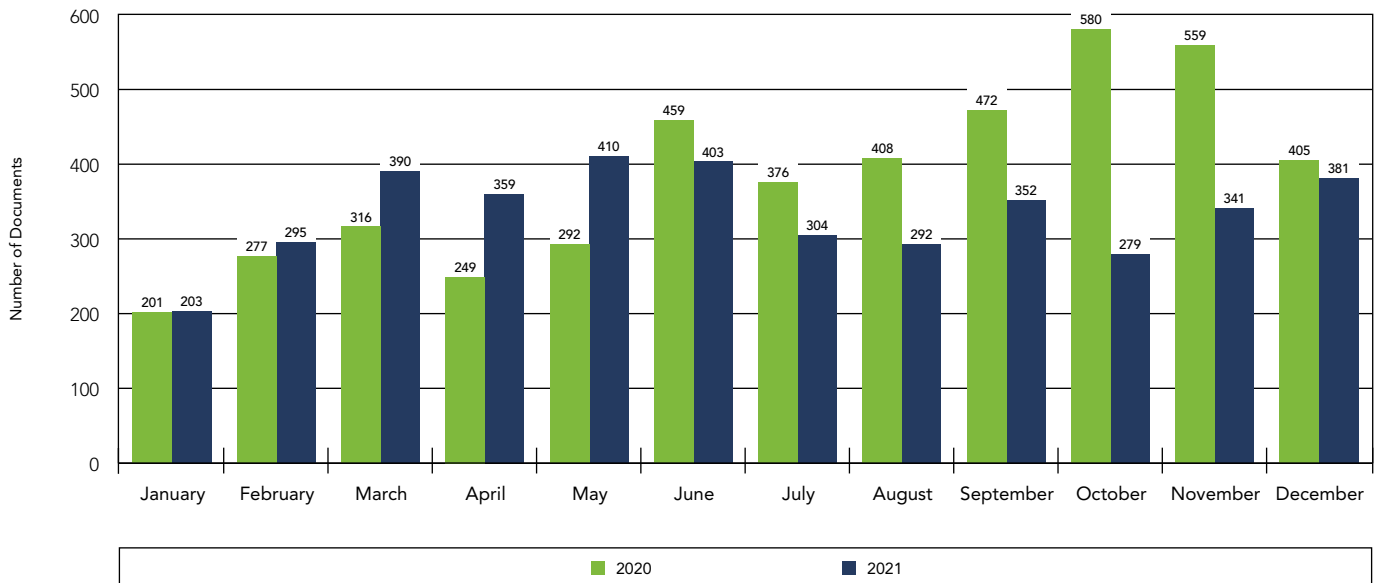
Rating Change Submissions, 2020–2021

By number of documents



Defeasance Submissions, 2020–2021

By number of documents



Other Event Disclosures, 2020–2021

Event disclosures

By Number of Documents	2020	2021
ADVERSE TAX OPINION OR EVENT AFFECTING TAX-EXEMPT STATUS	2	22
AMENDMENT TO CONTINUING DISCLOSURE UNDERTAKING	45	35
BANKRUPTCY, INSOLVENCY, RECEIVERSHIP	52	129
BID FOR AUCTION RATE OR OTHER SECURITIES	109	158
CAPITAL OR OTHER FINANCING PLAN	118	132
CHANGE IN OBLIGATED PERSON	38	50
CHANGE OF TENDER AGENT, REMARKETING AGENT, OR OTHER ON-GOING PARTY	60	81
COMMUNICATION FROM THE INTERNAL REVENUE SERVICE	9	4
DERIVATIVE OR OTHER SIMILAR TRANSACTION	3	4
FAILURE TO PROVIDE EVENT FILING INFORMATION	879	940
FINANCIAL OBLIGATION - EVENT REFLECTING FINANCIAL DIFFICULTIES	23	16
FINANCIAL OBLIGATION - INCURRENCE OR AGREEMENT	4,115	4,109
LITIGATION/ENFORCEMENT ACTION	47	60
MERGER, CONSOLIDATION, ACQUISITION AND SALE OF ASSETS	95	88
MODIFICATION TO THE RIGHTS OF SECURITY HOLDERS	69	72
NON-PAYMENT RELATED DEFAULT	97	54
NOTICE TO INVESTOR PURSUANT TO BOND DOCUMENTS	901	967
OTHER EVENT-BASED DISCLOSURES	5,630	4,675
P&I PAYMENT DELINQUENCY	350	361
RELEASE, SUBSTITUTION OR SALE OF PROPERTY	54	54
SUBSTITUTION OF CREDIT OR LIQUIDITY PROVIDER OR ITS FAILURE TO PERFORM	59	362
SUCCESSOR, ADDITIONAL OR CHANGE IN TRUSTEE	151	579
TENDER OFFER/SECONDARY MARKET PURCHASES	333	277
UNSCHEDULED DRAW ON CREDIT ENHANCEMENT	47	40
UNSCHEDULED DRAW ON DEBT SERVICE RESERVE	140	128

Part Eleven

Definitions 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 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.

Event Disclosure—A type of continuing disclosure that is filed following a primary offering of municipal securities. See [Selecting Event Disclosure Categories on EMMA Dataport](#) for explanations of each category of event disclosure.

Final Maturity—Time remaining between original issue date and the stated final maturity date of the security. Final maturity does not take into account possible call and put options and rate reset frequencies as is the case with certain types of variable rate securities, such as auction rate securities and variable rate demand obligations.

Financial/Operating Disclosure—A type of continuing disclosure that is filed following a primary offering of municipal securities. See [Selecting Financial/Operating Disclosure Categories on EMMA Dataport](#) for explanations of each category of financial/operating disclosure.

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.

Remaining Maturity—Time remaining between the trade date and the stated final maturity date of the security. Remaining maturity does not take into account possible call and put options and rate reset frequencies as is the case with certain types of variable rate securities, such as auction rate securities and variable rate demand obligations.

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.

Sale Date or Award—The official acceptance by the issuer of a bid or offer to purchase a new issue of municipal securities by an underwriter. The date of the award is generally considered the "sale date" of an issue.

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.



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