

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. 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.

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 MSRB by municipal securities dealers, municipal securities issuers and those acting on their behalf.

MSRB publishes its annual *Fact Book* to provide municipal market participants, policymakers, regulators, academics and others with historical statistics that can be further analyzed to identify market trends and activity. MSRB also publishes quarterly updates to the *Fact Book* on its website, 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 MSRB's regulatory activities.

The 2024 *Fact Book* includes monthly, quarterly and yearly aggregate market information from 2020 to 2024, 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 2020 is included.¹ The data reflect aggregate trading activity at the end of each trading day as submitted to MSRB's Real-Time Transaction Reporting System (RTRS). 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 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 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 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 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 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 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 compilation of data in this *Fact Book* represents what MSRB believes to be an accurate and meaningful presentation of municipal market information. This digital publication is available on MSRB’s website.

ABOUT MSRB

The Municipal Securities Rulemaking Board (MSRB) was established by Congress in 1975 with the mission to protect investors, issuers and the public interest and to promote efficiency, competition and capital formation. MSRB is a private, self-regulatory organization governed by an independent board of directors with market knowledge and expertise. MSRB does not receive federal appropriations and is funded primarily through fees paid by regulated entities. MSRB is overseen by the US Congress and Securities and Exchange Commission (SEC).

ABOUT EMMA

MSRB’s EMMA website, emma.msrb.org, is designated by the SEC 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 from Kroll Bond Ratings, Fitch Ratings, Moody’s Investors Service and Standard & Poor’s 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 service of MSRB.

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Part One

Municipal Market Trade Summary, 2020–2024

Transaction Summary

Total par amount traded in \$ millions

	2020	2021	2022	2023	2024
Total	3,139,655	2,259,105	3,633,317	3,357,993	3,360,800
By Trade Type					
Customer Bought	1,656,201	1,232,274	1,813,577	1,717,891	1,791,624
Customer Sold	994,602	621,565	1,223,928	1,056,430	986,050
Inter-Dealer	488,852	405,265	595,811	583,673	583,126
By Coupon Type					
Fixed Rate	1,971,761	1,562,622	2,486,348	2,209,106	2,156,173
Variable	881,015	466,944	813,915	797,334	863,345
Zero Coupon	106,282	73,176	91,427	57,036	43,979
Other ¹	180,598	156,362	241,626	294,517	297,303
By Source of Repayment					
General Obligation	797,448	605,326	875,404	847,190	831,160
Revenue	2,102,690	1,567,123	2,620,603	2,362,989	2,406,325
Double Barrel	69,536	55,968	84,954	80,381	94,593
Other ¹	169,980	30,688	52,356	67,434	28,722
By Tax Status					
Tax Exempt	2,520,388	1,738,644	3,023,876	2,852,051	2,934,420
Taxable	441,882	392,096	349,476	268,454	246,552
AMT	146,894	114,177	206,848	170,315	151,841
Other ¹	30,491	14,188	53,118	67,174	27,987

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

Transaction Summary

Total number of trades

	2020	2021	2022	2023	2024
Total	8,501,457	7,647,333	12,698,872	13,119,310	14,492,432
By Trade Type					
Customer Bought	3,153,011	2,744,256	4,607,039	4,785,398	5,174,777
Customer Sold	2,171,562	2,125,218	3,234,025	3,316,917	3,805,133
Inter-Dealer	3,176,884	2,777,859	4,857,808	5,016,995	5,512,522
By Coupon Type					
Fixed Rate	7,979,207	7,304,116	12,268,362	12,671,601	14,050,702
Variable	279,181	147,603	230,809	237,050	247,741
Zero Coupon	223,749	178,953	182,395	190,506	165,953
Other ¹	19,320	16,661	17,306	20,153	28,036
By Source of Repayment					
General Obligation	3,031,125	2,874,398	4,695,438	4,995,112	5,493,107
Revenue	5,185,055	4,507,712	7,546,521	7,618,961	8,395,104
Double Barrel	267,725	260,598	453,096	501,510	601,002
Other ¹	17,552	4,623	3,817	3,727	3,219
By Tax Status					
Tax Exempt	7,695,493	6,914,058	11,793,028	12,186,872	13,465,420
Taxable	676,248	634,098	672,558	683,768	763,149
AMT	124,809	96,049	229,454	244,970	260,706
Other ¹	4,907	3,128	3,832	3,700	3,157

DATA AVAILABLE FROM MSRB

Receive Municipal Market Data in Real Time

MSRB offers subscriptions to two feeds of market data:^{*}

- **MSRB Transaction Subscription Service:** All municipal trade data reported to 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](https://emma.msrb.org/).

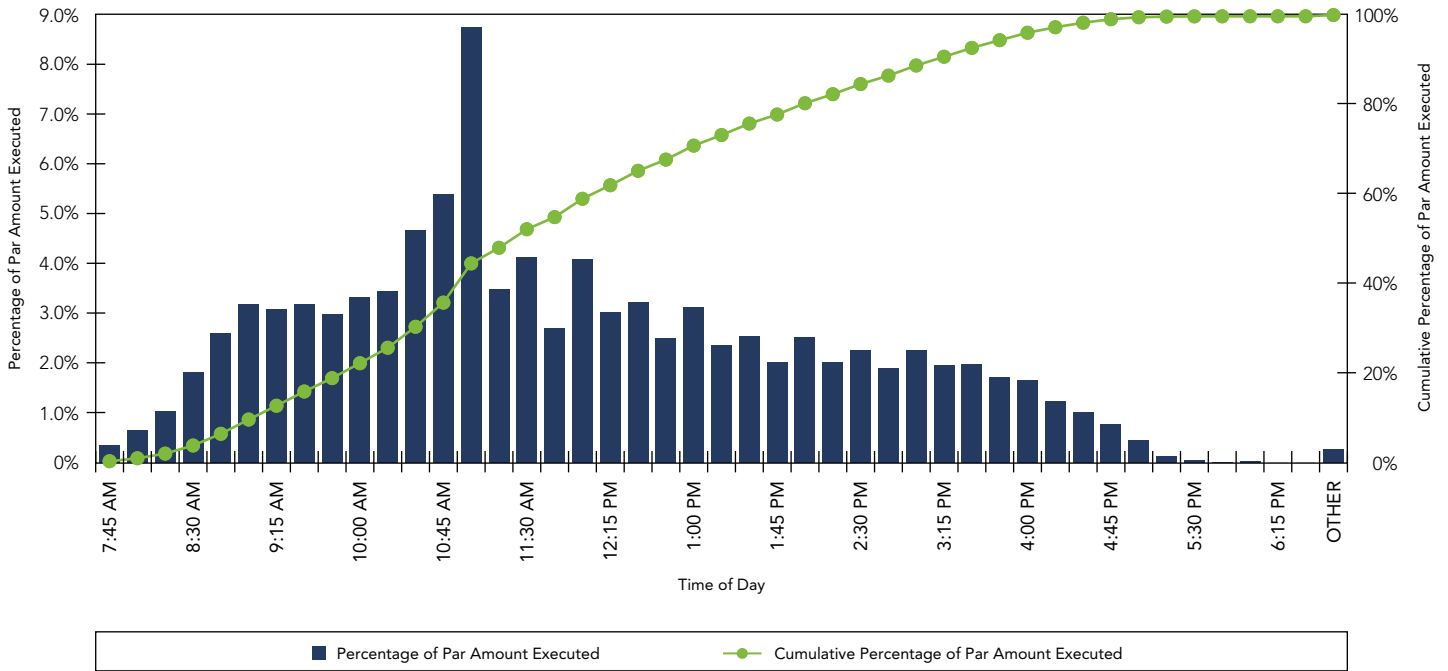
¹ Includes issues that could not be categorized based on available data.

Part Two

Municipal Market Trade Distribution Trends, 2024

Par Amount Traded by Time of Day, 2024

Trades executed within 15 minutes prior to time shown¹



Time of Execution	Average Par Value (\$ Millions)
7:45 AM	47.2
8:00 AM	87.3
8:15 AM	139.0
8:30 AM	241.4
8:45 AM	348.0
9:00 AM	425.2
9:15 AM	411.2
9:30 AM	424.2
9:45 AM	398.3
10:00 AM	443.9
10:15 AM	460.2
10:30 AM	624.6
10:45 AM	719.6
11:00 AM	1,168.0
11:15 AM	465.9
11:30 AM	551.9
11:45 AM	361.5
12:00 PM	546.1
12:15 PM	403.4
12:30 PM	429.6
12:45 PM	334.0
1:00 PM	416.2
1:15 PM	316.1

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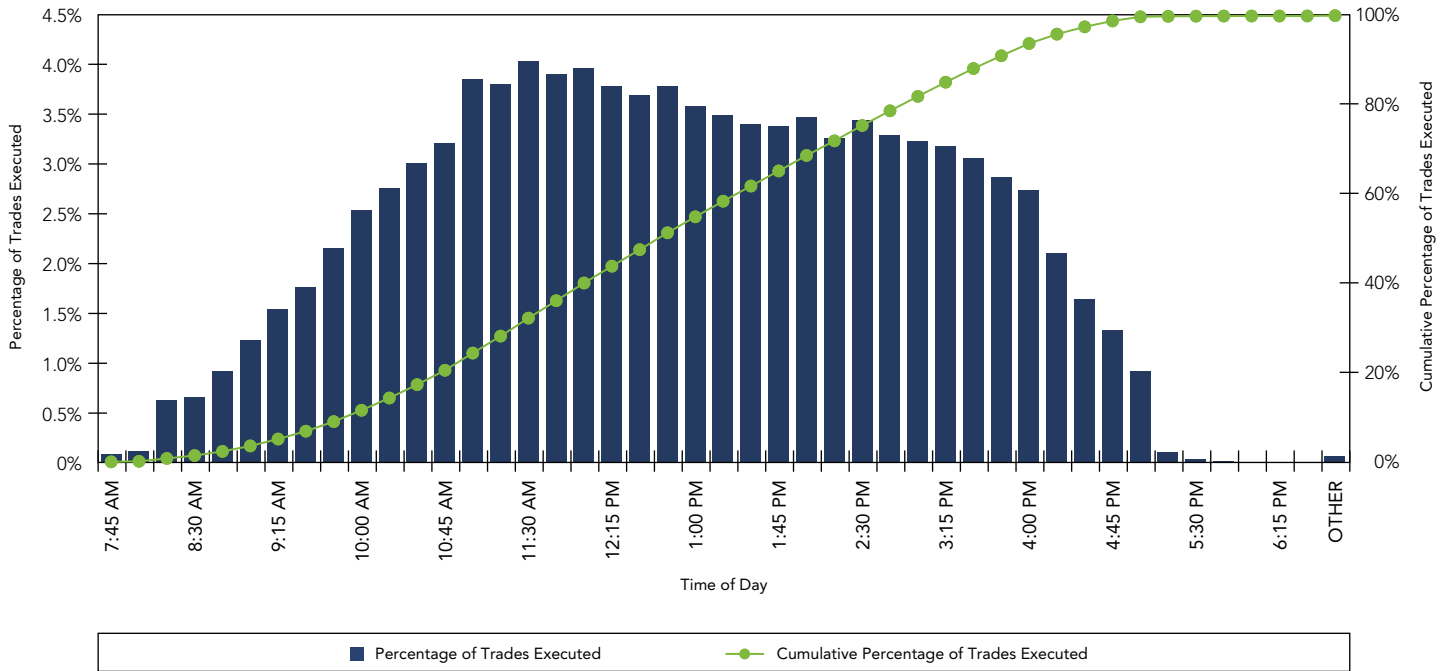
Time of Execution	Average Par Value (\$ Millions)
1:30 PM	340.3
1:45 PM	270.6
2:00 PM	336.1
2:15 PM	268.8
2:30 PM	301.1
2:45 PM	251.6
3:00 PM	302.6
3:15 PM	259.7
3:30 PM	264.6
3:45 PM	228.3
4:00 PM	221.5
4:15 PM	164.1
4:30 PM	135.6
4:45 PM	103.2
5:00 PM	60.7
5:15 PM	17.9
5:30 PM	6.9
5:45 PM	1.9
6:00 PM	0.8
6:15 PM	0.3
6:30 PM	0.3
Other ²	36.8
Total	13,336.5

¹ Eastern time.

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

Number of Trades by Time of Day, 2024

Trades executed within 15 minutes prior to time shown¹



Time of Execution	Average Number of Trades
7:45 AM	54
8:00 AM	69
8:15 AM	364
8:30 AM	377
8:45 AM	531
9:00 AM	705
9:15 AM	884
9:30 AM	1,015
9:45 AM	1,237
10:00 AM	1,453
10:15 AM	1,579
10:30 AM	1,730
10:45 AM	1,844
11:00 AM	2,217
11:15 AM	2,183
11:30 AM	2,317
11:45 AM	2,242
12:00 PM	2,277
12:15 PM	2,171
12:30 PM	2,124
12:45 PM	2,177
1:00 PM	2,060
1:15 PM	2,007

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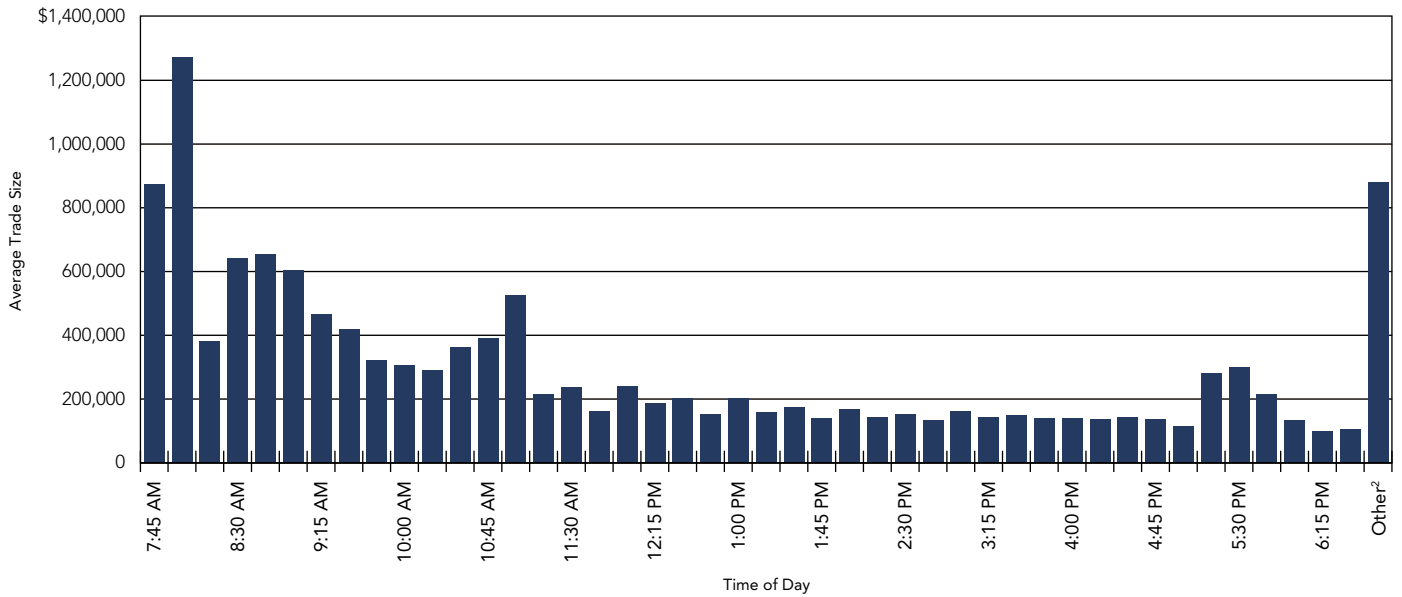
Time of Execution	Average Number of Trades
1:30 PM	1,953
1:45 PM	1,945
2:00 PM	1,993
2:15 PM	1,877
2:30 PM	1,977
2:45 PM	1,894
3:00 PM	1,858
3:15 PM	1,828
3:30 PM	1,762
3:45 PM	1,644
4:00 PM	1,573
4:15 PM	1,210
4:30 PM	941
4:45 PM	763
5:00 PM	527
5:15 PM	63
5:30 PM	23
5:45 PM	9
6:00 PM	6
6:15 PM	3
6:30 PM	3
Other ²	42
Total	57,510

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, 2024

Trades executed within 15 minutes prior to time shown¹



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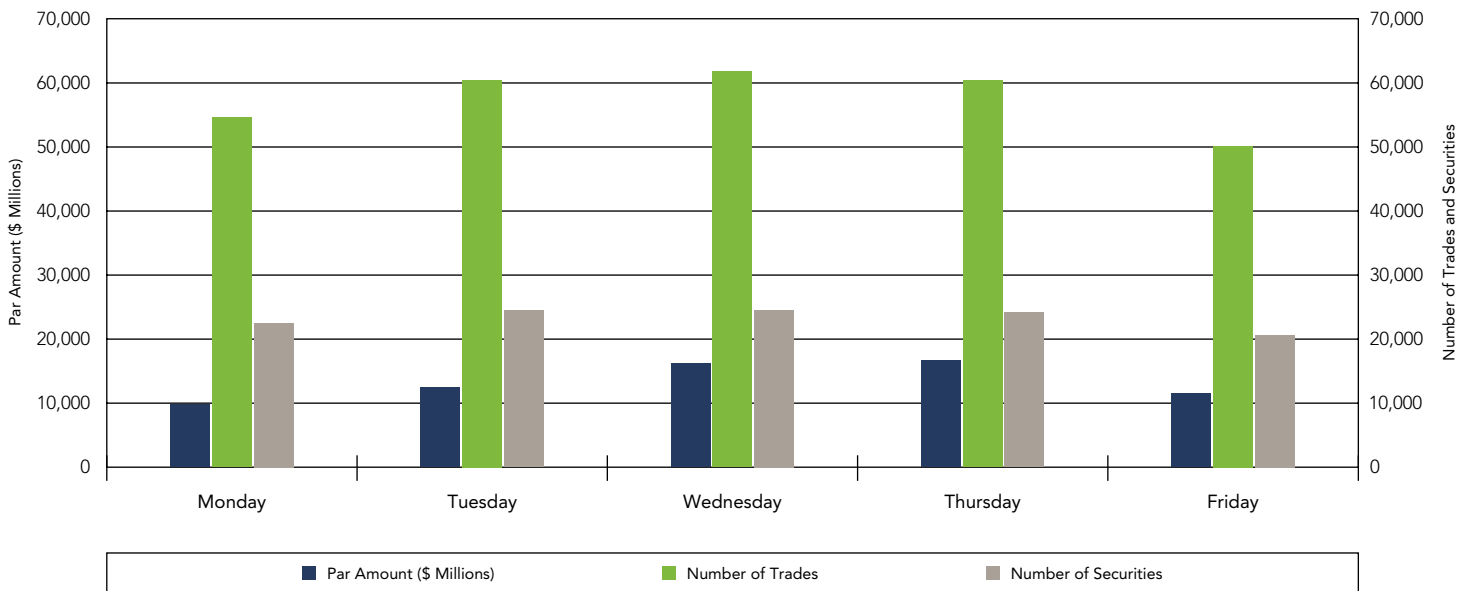
Time of Execution	Average Trade Size (\$)
7:45 AM	873,661
8:00 AM	1,271,667
8:15 AM	382,045
8:30 AM	640,943
8:45 AM	655,640
9:00 AM	602,747
9:15 AM	465,155
9:30 AM	418,101
9:45 AM	322,024
10:00 AM	305,449
10:15 AM	291,425
10:30 AM	361,045
10:45 AM	390,272
11:00 AM	526,856
11:15 AM	213,473
11:30 AM	238,145
11:45 AM	161,281
12:00 PM	239,796
12:15 PM	185,790
12:30 PM	202,234
12:45 PM	153,447
1:00 PM	202,003
1:15 PM	157,518

Time of Execution	Average Trade Size (\$)
1:30 PM	174,200
1:45 PM	139,120
2:00 PM	168,641
2:15 PM	143,226
2:30 PM	152,291
2:45 PM	132,849
3:00 PM	162,847
3:15 PM	142,059
3:30 PM	150,192
3:45 PM	138,844
4:00 PM	140,884
4:15 PM	135,566
4:30 PM	144,091
4:45 PM	135,360
5:00 PM	115,297
5:15 PM	281,581
5:30 PM	299,663
5:45 PM	214,059
6:00 PM	133,182
6:15 PM	99,060
6:30 PM	103,998
Other ²	881,536
Overall	231,900

¹ Eastern time.

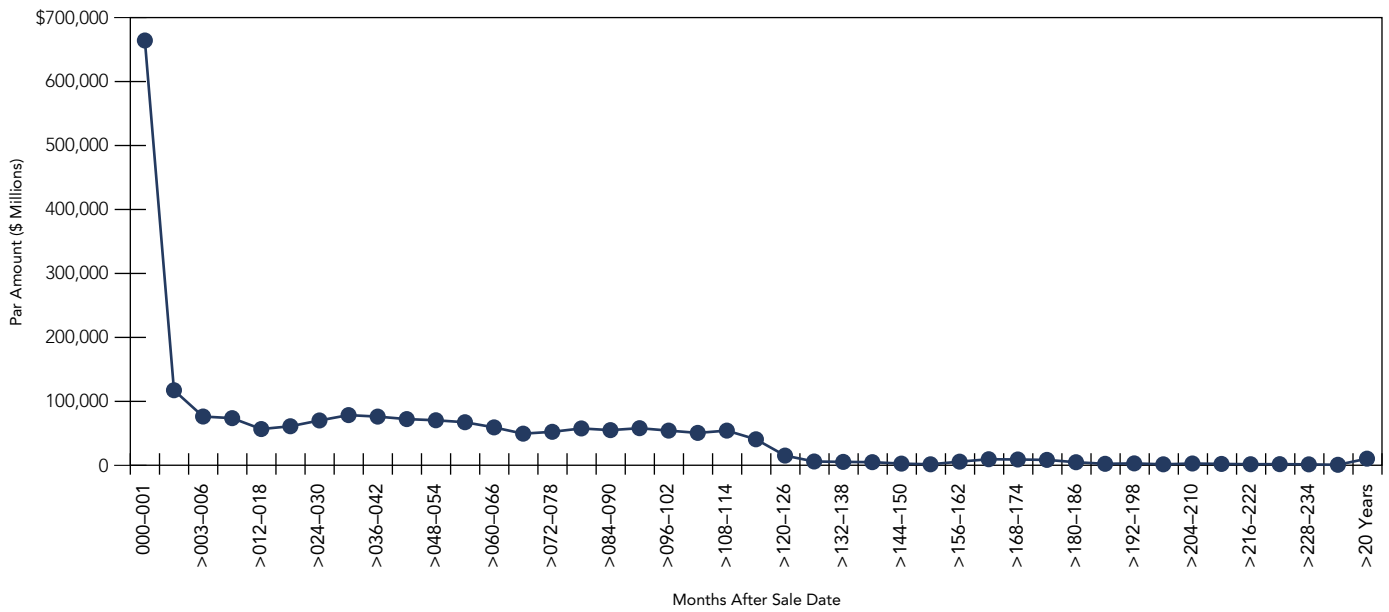
² Trades reported after 6:30 p.m. and before 7:30 a.m.

Average Trading Volume by Day of Week, 2024



Weekday	Par Amount (\$ Millions)	Number of Trades	Number of Securities
Monday	9,805.0	54,585	22,544
Tuesday	12,456.6	60,448	24,503
Wednesday	16,205.1	61,819	24,568
Thursday	16,618.6	60,384	24,118
Friday	11,544.7	50,165	20,627

Par Amount Traded by Months After Sale Date¹, 2024



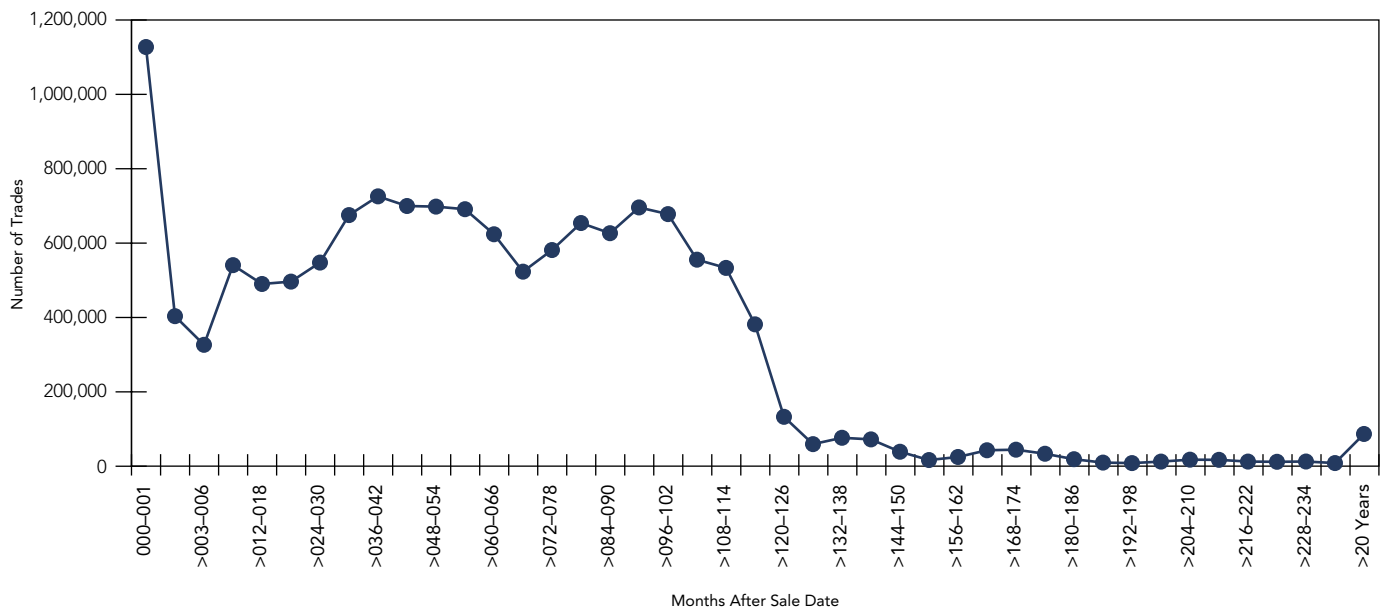
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Months After Sale Date	Par Amount (\$ Millions)	% of Total Par	Cumulative Percentage of Par Value
000-001	664,167.0	31.3%	31.3%
>001-003	117,401.1	5.5%	36.9%
>003-006	76,301.1	3.6%	40.5%
>006-012	73,763.9	3.5%	44.0%
>012-018	56,720.5	2.7%	46.7%
>018-024	61,094.6	2.9%	49.5%
>024-030	70,156.3	3.3%	52.8%
>030-036	78,532.2	3.7%	56.6%
>036-042	76,178.0	3.6%	60.1%
>042-048	72,288.8	3.4%	63.6%
>048-054	70,452.6	3.3%	66.9%
>054-060	67,381.7	3.2%	70.1%
>060-066	59,327.0	2.8%	72.9%
>066-072	49,513.6	2.3%	75.2%
>072-078	52,407.1	2.5%	77.7%
>078-084	57,680.5	2.7%	80.4%
>084-090	55,037.5	2.6%	83.0%
>090-096	58,091.6	2.7%	85.7%
>096-102	54,290.6	2.6%	88.3%
>102-108	50,719.5	2.4%	90.7%
>108-114	54,282.7	2.6%	93.3%
>114-120	40,706.5	1.9%	95.2%

Months After Sale Date	Par Amount (\$ Millions)	% of Total Par	Cumulative Percentage of Par Value
>120-126	15,234.8	0.7%	95.9%
>126-132	6,004.2	0.3%	96.2%
>132-138	5,393.9	0.3%	96.4%
>138-144	4,955.8	0.2%	96.7%
>144-150	2,683.5	0.1%	96.8%
>150-156	1,613.1	0.1%	96.9%
>156-162	5,761.6	0.3%	97.1%
>162-168	9,528.7	0.4%	97.6%
>168-174	9,126.5	0.4%	98.0%
>174-180	8,507.7	0.4%	98.4%
>180-186	4,855.1	0.2%	98.7%
>186-192	2,374.8	0.1%	98.8%
>192-198	3,054.4	0.1%	98.9%
>198-204	1,587.1	0.1%	99.0%
>204-210	2,873.3	0.1%	99.1%
>210-216	2,198.6	0.1%	99.2%
>216-222	1,722.9	0.1%	99.3%
>222-228	1,846.5	0.1%	99.4%
>228-234	1,519.1	0.1%	99.5%
>234-240	836.9	0.0%	99.5%
>20 Years	10,421.5	0.5%	100.0%
Total	2,118,594.5	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 \$2,257 million par amount traded for which the date of sale was not available.

Number of Trades by Months After Sale Date¹, 2024



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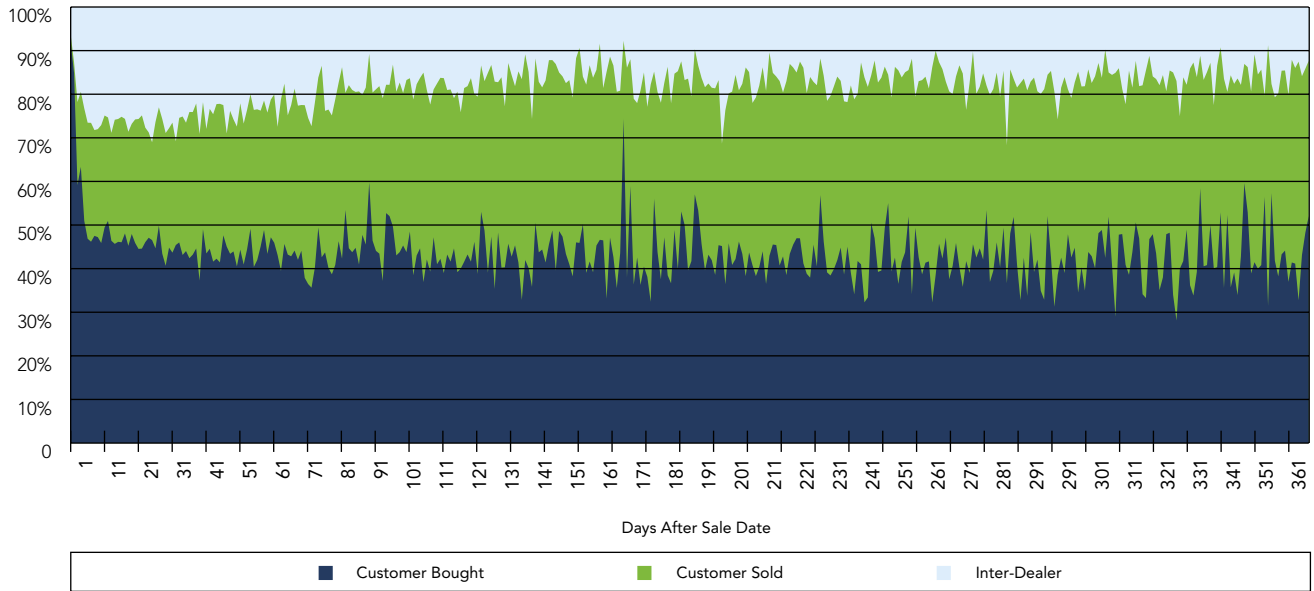
Months After Sale Date	Number of Trades	% of Total Trades	Cumulative Percentage of Number of Trades
000-001	1,127,320	8.0%	8.0%
>001-003	403,549	2.9%	10.9%
>003-006	326,501	2.3%	13.2%
>006-012	540,775	3.9%	17.1%
>012-018	490,101	3.5%	20.6%
>018-024	496,461	3.5%	24.1%
>024-030	547,656	3.9%	28.0%
>030-036	675,375	4.8%	32.8%
>036-042	725,738	5.2%	38.0%
>042-048	699,777	5.0%	43.0%
>048-054	698,141	5.0%	48.0%
>054-060	691,183	4.9%	52.9%
>060-066	623,791	4.4%	57.3%
>066-072	523,235	3.7%	61.1%
>072-078	581,358	4.1%	65.2%
>078-084	654,002	4.7%	69.9%
>084-090	626,658	4.5%	74.3%
>090-096	695,933	5.0%	79.3%
>096-102	677,999	4.8%	84.1%
>102-108	555,462	4.0%	88.1%
>108-114	533,321	3.8%	91.9%
>114-120	381,581	2.7%	94.6%

Months After Sale Date	Number of Trades	% of Total Trades	Cumulative Percentage of Number of Trades
>120-126	132,875	0.9%	95.5%
>126-132	59,413	0.4%	96.0%
>132-138	76,515	0.5%	96.5%
>138-144	72,180	0.5%	97.0%
>144-150	38,959	0.3%	97.3%
>150-156	16,648	0.1%	97.4%
>156-162	24,884	0.2%	97.6%
>162-168	42,948	0.3%	97.9%
>168-174	44,507	0.3%	98.2%
>174-180	33,560	0.2%	98.5%
>180-186	18,879	0.1%	98.6%
>186-192	9,767	0.1%	98.7%
>192-198	8,455	0.1%	98.7%
>198-204	12,478	0.1%	98.8%
>204-210	17,636	0.1%	98.9%
>210-216	17,183	0.1%	99.1%
>216-222	12,509	0.1%	99.1%
>222-228	11,931	0.1%	99.2%
>228-234	12,656	0.1%	99.3%
>234-240	8,524	0.1%	99.4%
>20 Years	86,752	0.6%	100.0%
Total	14,035,176	100%	

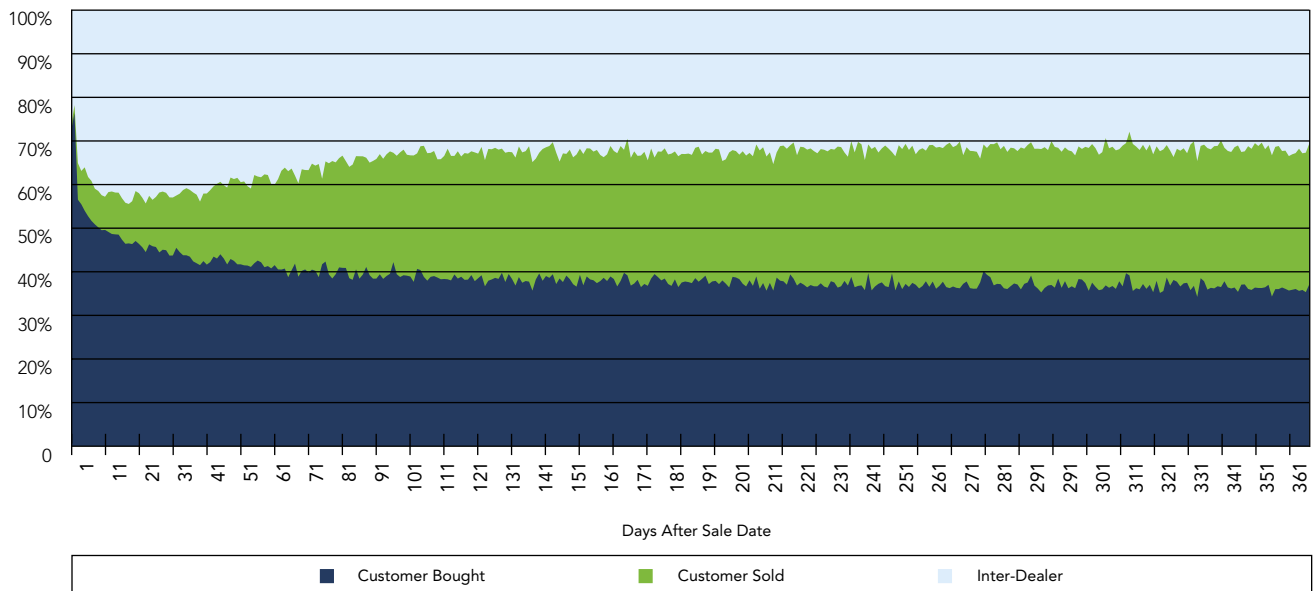
¹ Includes only Bonds—securities with maturities of two or more years (maturity date less dated date) with fixed or zero interest rate. Excludes 833 trades for which the date of sale was not available.

Distribution of Trades by Type After Sale Date¹, 2024

Par Amount

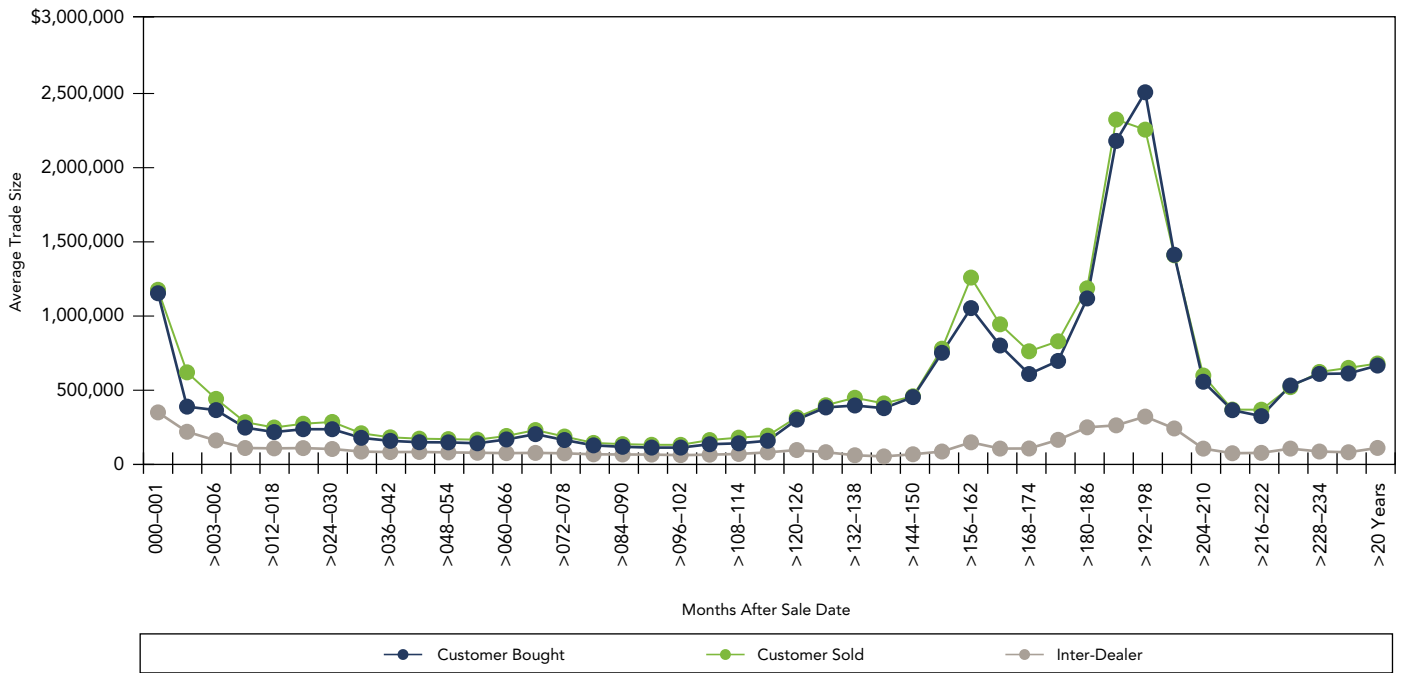


Number of Trades



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

Average Trade Size by Trade Type by Months After Sale Date¹, 2024 All trades



Months After Sale Date	Customer Bought	Customer Sold	Inter-dealer
000-001	1,151,625	1,174,955	348,554
>001-003	387,372	618,439	217,922
>003-006	363,876	439,677	159,603
>006-012	246,019	282,795	108,424
>012-018	216,031	246,639	106,179
>018-024	235,242	272,205	107,889
>024-030	235,156	284,035	101,932
>030-036	177,036	207,753	84,425
>036-042	156,718	180,525	81,089
>042-048	147,473	171,466	82,056
>048-054	146,452	168,442	79,047
>054-060	140,352	164,646	76,548
>060-066	166,283	189,673	73,895
>066-072	201,899	229,502	75,587
>072-078	162,225	185,884	72,742
>078-084	126,376	142,850	65,980
>084-090	116,541	134,577	64,967
>090-096	111,339	130,122	64,210
>096-102	111,277	129,842	60,388
>102-108	133,971	162,149	63,611
>108-114	140,157	178,262	68,430
>114-120	157,260	191,793	79,076

continued >

Months After Sale Date	Customer Bought	Customer Sold	Inter-dealer
>120-126	299,852	315,165	94,876
>126-132	382,020	396,760	80,416
>132-138	395,014	447,133	59,607
>138-144	377,011	408,928	51,883
>144-150	451,644	457,110	66,282
>150-156	750,170	778,001	84,825
>156-162	1,051,508	1,257,166	146,791
>162-168	799,397	942,266	104,643
>168-174	607,098	760,359	105,269
>174-180	695,369	827,870	163,573
>180-186	1,116,668	1,184,971	247,915
>186-192	2,178,294	2,322,383	261,220
>192-198	2,506,261	2,254,393	320,285
>198-204	1,410,943	1,407,505	240,294
>204-210	555,102	597,031	104,383
>210-216	363,434	367,535	73,207
>216-222	323,352	366,637	75,853
>222-228	529,788	518,807	104,529
>228-234	607,984	621,141	84,797
>234-240	610,760	648,694	79,910
>20 Years	664,311	677,891	109,069

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

Part Three

Most Actively Traded Municipal Securities, 2024

Top 50 Most Active Securities, 2024

By par amount

Rank	CUSIP ¹	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	402207AD6	GULF COAST INDL DEV AUTH TEX REV	-	11/1/41	9,332.3	851
2	20775DTS1	CONNECTICUT ST HEALTH & EDL FACS AUTH REV	-	7/1/42	8,188.5	497
3	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	-	12/1/30	6,290.6	347
4	64971XFY9	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	8/1/45	5,955.3	543
5	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	-	12/1/59	5,950.1	1,291
6	072024YE6	BAY AREA TOLL AUTH CALIF TOLL BRDG REV	-	4/1/55	4,962.4	870
7	64972GC85	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/53	4,813.9	593
8	64971XHT8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	8/1/42	4,783.0	517
9	160853VA2	CHARLOTTE-MECKLENBURG HOSP AUTH N C HEALTH CARE SYS REV	-	1/15/42	4,642.7	603
10	13063EBP0	CALIFORNIA ST	5.13	9/1/29	4,634.2	452
11	64972GZB3	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/45	4,449.7	361
12	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	-	8/1/35	4,413.1	376
13	544532HW7	LOS ANGELES CALIF DEPT WTR & PWR REV	-	7/1/47	4,324.5	334
14	20775DTU6	CONNECTICUT ST HEALTH & EDL FACS AUTH REV	-	7/1/42	4,319.0	431
15	91412HPW7	UNIVERSITY CALIF REVS	-	5/15/48	4,134.9	313
16	64966KTD5	NEW YORK N Y	-	3/1/42	4,114.1	311
17	19648FVN1	COLORADO HEALTH FACS AUTH REV	-	5/15/62	4,105.4	248
18	072024YF3	BAY AREA TOLL AUTH CALIF TOLL BRDG REV	-	4/1/55	4,064.1	463
19	64966MSB6	NEW YORK N Y	-	10/1/46	4,027.4	420
20	91412GSK2	UNIVERSITY CALIF REVS	-	5/15/48	3,787.3	466
21	45204FAG0	ILLINOIS FIN AUTH REV	-	8/15/49	3,717.5	243
22	60527EAA5	MISSISSIPPI BUSINESS FIN CORP MISS PORT FAC REV	-	6/1/43	3,710.6	168
23	57585KSV1	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	-	7/1/31	3,678.2	333
24	87638QBF5	TARRANT CNTY TEX CULTURAL ED FACS FIN CORP HOSP REV	-	10/1/41	3,671.1	211
25	59261AM53	METROPOLITAN TRANSN AUTH N Y REV	-	11/15/50	3,496.1	689
26	64966QWL0	NEW YORK N Y	-	4/1/42	3,427.5	440
27	931542AB0	WALKER CNTY ALA ECONOMIC & INDL DEV AUTH SOLID WASTE DISP REV	-	8/1/63	3,390.8	361
28	64972FWK8	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/39	3,334.4	210
29	74514L3T2	PUERTO RICO COMWLTH	-	11/1/43	3,299.7	4,167
30	38122NB84	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	0.00	6/1/66	3,274.6	242
31	74265L3A4	PRIVATE COLLEGES & UNIVS AUTH GA REV	5.00	9/1/33	3,274.4	699
32	544495DH4	LOS ANGELES CALIF DEPT WTR & PWR REV	-	7/1/34	3,224.9	714
33	544532BQ6	LOS ANGELES CALIF DEPT WTR & PWR REV	-	7/1/50	3,175.8	283
34	341271AH7	FLORIDA ST BRD ADMIN FIN CORP REV	5.53	7/1/34	3,141.7	4,179
35	64966JE77	NEW YORK N Y	-	4/1/42	3,071.3	571
36	64966LU25	NEW YORK N Y	-	6/1/44	3,016.1	631
37	544532HC1	LOS ANGELES CALIF DEPT WTR & PWR REV	-	7/1/57	2,963.3	240
38	64966ML98	NEW YORK N Y	-	12/1/47	2,963.3	351
39	64972GC69	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	-	6/15/44	2,910.9	511
40	118217DA3	BUCKEYE OHIO TOB SETTLEMENT FING AUTH	-	6/1/57	2,908.9	146
41	91412GSH9	UNIVERSITY CALIF REVS	-	5/15/48	2,879.8	370
42	64971XKS6	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	11/1/44	2,859.3	449
43	64966QZZ6	NEW YORK N Y	-	5/1/52	2,742.0	167
44	45204FQE8	ILLINOIS FIN AUTH REV	-	8/15/57	2,703.7	185
45	64966LLS8	NEW YORK N Y	-	3/1/40	2,684.9	668
46	64966LU41	NEW YORK N Y	-	6/1/44	2,684.4	465
47	544525YL6	LOS ANGELES CALIF DEPT WTR & PWR WTRWKS REV	-	7/1/45	2,684.0	801
48	452151LF8	ILLINOIS ST	5.10	6/1/33	2,611.0	1,613
49	64971WE63	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	-	2/1/45	2,597.4	761
50	13062RG77	CALIFORNIA ST	-	5/1/40	2,560.9	416

¹ See page 1 for information on CUSIP identifiers.

Top 50 Most Active Securities, 2024

By number of trades

Rank	CUSIP ¹	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74448GAA7	PUBLIC FIN AUTH WIS POOLED CHARTER SCH CTFS SER 2023-1	5.75	7/1/62	847.8	4,745
2	341271AH7	FLORIDA ST BRD ADMIN FIN CORP REV	5.53	7/1/34	3,141.7	4,179
3	74514L3T2	PUERTO RICO COMWLTH	-	11/1/43	3,299.7	4,167
4	896035DG4	TRIBOROUGH BRDG & TUNL AUTH N Y SALES TAX REV	4.13	5/15/64	1,187.8	3,978
5	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/29	553.3	3,272
6	74514L3R6	PUERTO RICO COMWLTH	0.00	7/1/33	108.7	3,133
7	646067GX0	NEW JERSEY ST EDL FACS AUTH REV	4.00	3/1/53	651.7	3,103
8	74514L3H8	PUERTO RICO COMWLTH	5.63	7/1/29	103.0	2,968
9	785870P67	SACRAMENTO CALIF CITY UNI SCH DIST	4.00	8/1/54	474.7	2,937
10	74514L3N5	PUERTO RICO COMWLTH	4.00	7/1/41	261.5	2,892
11	74514L3L9	PUERTO RICO COMWLTH	4.00	7/1/35	77.2	2,868
12	74514L3G0	PUERTO RICO COMWLTH	5.63	7/1/27	137.1	2,833
13	7091756Y4	PENNSYLVANIA ST HIGHER EDL FACS AUTH REV	4.00	8/15/49	590.8	2,809
14	74514L3P0	PUERTO RICO COMWLTH	4.00	7/1/46	275.1	2,804
15	74514L3J4	PUERTO RICO COMWLTH	5.75	7/1/31	107.4	2,798
16	74514L3K1	PUERTO RICO COMWLTH	4.00	7/1/33	125.1	2,791
17	645790QD1	NEW JERSEY HEALTH CARE FACS FING AUTH REV	4.00	7/1/51	291.1	2,695
18	74514L3F2	PUERTO RICO COMWLTH	5.38	7/1/25	109.3	2,691
19	64990FPV0	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	4.00	2/15/47	445.0	2,663
20	74514L3M7	PUERTO RICO COMWLTH	4.00	7/1/37	90.0	2,595
21	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	1,126.9	2,467
22	646140FY4	NEW JERSEY ST TPK AUTH TPK REV	4.13	1/1/54	471.8	2,391
23	448474ZS8	HUTTO TEX	4.25	8/1/54	501.5	2,346
24	646140DK6	NEW JERSEY ST TPK AUTH TPK REV	4.00	1/1/51	294.1	2,346
25	6461367L9	NEW JERSEY ST TRANSN TR FD AUTH	4.00	6/15/50	320.9	2,322
26	13063A5G5	CALIFORNIA ST	7.55	4/1/39	1,431.9	2,301
27	64972JNS3	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	4.25	5/1/54	676.9	2,162
28	13032UB23	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	8/15/48	622.9	2,141
29	74529JQG3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	0.00	7/1/46	1,728.1	2,056
30	531127AC2	LIBERTY N Y DEV CORP REV	5.25	10/1/35	422.0	2,033
31	89602RGB5	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	4.00	11/15/54	230.7	1,981
32	89602HEZ6	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	5.00	12/16/24	522.6	1,981
33	896035DD1	TRIBOROUGH BRDG & TUNL AUTH N Y SALES TAX REV	4.00	5/15/54	642.7	1,907
34	74514L4G9	PUERTO RICO COMWLTH	-	11/1/51	1,170.3	1,892
35	74529JQH1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	0.00	7/1/51	1,111.3	1,883
36	64989KLE4	NEW YORK ST PWR AUTH REV	4.00	11/15/50	472.2	1,854
37	64972GZP2	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	4.00	6/15/45	352.6	1,846
38	6461395W1	NEW JERSEY ST TPK AUTH TPK REV	5.00	1/1/45	213.7	1,845
39	40934TAV5	HAMPTON RDS VA TRANSN ACCOUNTABILITY COMMN REV	5.00	7/1/26	562.8	1,801
40	59261A2H9	METROPOLITAN TRANSN AUTH N Y REV	4.00	11/15/48	407.6	1,775
41	592643DR8	METROPOLITAN WASH D C ARPTS AUTH DULLES TOLL RD REV	4.00	10/1/52	532.0	1,749
42	913366KT6	UNIV CALIF REGTS MED CTR POOLED REV	4.00	5/15/53	292.4	1,739
43	13063A5E0	CALIFORNIA ST	7.50	4/1/34	858.7	1,700
44	13032UVN5	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	8/15/50	297.2	1,698
45	108152MN6	BRIDGEPORT CONN	7.64	1/15/30	52.9	1,694
46	64972GK45	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	4.00	6/15/54	492.4	1,633
47	74529JPW9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.75	7/1/53	529.3	1,621
48	452151LF8	ILLINOIS ST	5.10	6/1/33	2,611.0	1,613
49	650036AP1	NEW YORK ST URBAN DEV CORP REV	4.00	3/15/49	243.4	1,605
50	64990F6S8	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	4.00	3/15/47	340.3	1,584

¹ See page 1 for information on CUSIP identifiers.

Top 50 Most Active Fixed-Rate¹ Securities, 2024

By par amount

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	13063EBP0	CALIFORNIA ST	5.13	9/1/29	4,634.2	452
2	74265L3A4	PRIVATE COLLEGES & UNIVS AUTH GA REV	5.00	9/1/33	3,274.4	699
3	341271AH7	FLORIDA ST BRD ADMIN FIN CORP REV	5.53	7/1/34	3,141.7	4,179
4	452151LF8	ILLINOIS ST	5.10	6/1/33	2,611.0	1,613
5	13063EBB1	CALIFORNIA ST	5.00	9/1/32	2,205.0	384
6	544351SE0	LOS ANGELES CALIF	5.00	6/26/25	2,079.5	736
7	118217CZ9	BUCKEYE OHIO TOB SETTLEMENT FING AUTH	5.00	6/1/55	1,936.3	1,374
8	65000BW38	NEW YORK ST DORM AUTH REVS NON ST SUPPORTED DEBT	5.50	7/1/54	1,610.4	779
9	64972JJP4	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	5.00	11/1/32	1,603.7	203
10	13063A5G5	CALIFORNIA ST	7.55	4/1/39	1,431.9	2,301
11	896035DH2	TRIBOROUGH BRDG & TUNL AUTH N Y SALES TAX REV	5.25	5/15/64	1,391.1	932
12	650116HQ2	NEW YORK TRANSN DEV CORP SPL FAC REV	5.50	6/30/60	1,370.6	417
13	544647HR4	LOS ANGELES CALIF UNI SCH DIST	5.00	7/1/34	1,335.1	971
14	544647HQ6	LOS ANGELES CALIF UNI SCH DIST	5.00	7/1/33	1,269.0	776
15	13063EBW5	CALIFORNIA ST	5.00	9/1/31	1,263.9	227
16	88258MAB1	TEXAS NAT GAS SECURITIZATION FIN CORP REV	5.17	4/1/41	1,248.9	381
17	896035DG4	TRIBOROUGH BRDG & TUNL AUTH N Y SALES TAX REV	4.13	5/15/64	1,187.8	3,978
18	650116HW9	NEW YORK TRANSN DEV CORP SPL FAC REV	5.50	12/31/60	1,145.0	200
19	43233KAH7	HILLSBOROUGH CNTY FLA INDL DEV AUTH HEALTH SYS REV	5.00	11/15/34	1,133.5	261
20	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	1,126.9	2,467
21	472682ZS5	JEFFERSON CNTY ALA SWR REV	5.50	10/1/53	1,125.8	452
22	64972GK29	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	5.00	6/15/51	1,123.9	442
23	340618DV6	FLORIDA DEV FIN CORP REV	5.25	7/1/53	1,115.1	1,112
24	442378GP4	HOUSTON TEX HIGHER ED FIN CORP HIGHER ED REV	5.00	5/15/34	1,089.6	651
25	472682ZR7	JEFFERSON CNTY ALA SWR REV	5.25	10/1/49	1,071.9	479
26	09182TDU8	BLACK BELT ENERGY GAS DIST ALA GAS PROJ REV	5.00	5/1/55	1,065.0	226
27	574205JJ0	MARYLAND ST ECONOMIC DEV CORP REV	5.43	5/31/56	1,053.3	194
28	574193WN4	MARYLAND ST	5.00	6/1/34	1,053.1	268
29	544351RJ0	LOS ANGELES CALIF	5.00	6/27/24	1,050.8	898
30	340618DT1	FLORIDA DEV FIN CORP REV	5.50	7/1/53	1,034.8	573
31	57585BAL2	MASSACHUSETTS ST DEV FIN AGY REV	5.00	2/15/34	1,001.9	588
32	79768HHP2	SAN FRANCISCO CALIF CITY & CNTY PUB UTILS COMMN WASTEWATER REV	5.00	10/1/54	1,001.8	776
33	650116HT6	NEW YORK TRANSN DEV CORP SPL FAC REV	5.25	12/31/54	965.7	524
34	64972GH98	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	5.25	6/15/54	953.1	1,068
35	88258MAA3	TEXAS NAT GAS SECURITIZATION FIN CORP REV	5.10	4/1/35	949.7	283
36	340618DJ3	FLORIDA DEV FIN CORP REV	8.25	7/1/57	948.4	36
37	646067GY8	NEW JERSEY ST EDL FACS AUTH REV	5.25	3/1/54	947.0	1,458
38	574205HW3	MARYLAND ST ECONOMIC DEV CORP REV	5.94	5/31/57	942.3	180
39	682001LQ3	OMAHA PUB PWR DIST NEB ELEC REV	5.50	2/1/54	934.1	316
40	13063EBQ8	CALIFORNIA ST	5.15	9/1/34	933.2	996
41	544657JB6	LOS ANGELES CNTY CALIF	5.00	6/30/25	919.1	527
42	46247SFR0	IOWA FIN AUTH REV	5.00	8/1/34	917.9	253
43	63610HAA0	NATIONAL FIN AUTH N H UTIL REV	6.89	4/1/34	908.9	173
44	780869XK4	ROYSE CITY TEX INDPT SCH DIST	5.00	2/15/32	904.3	23
45	64972GK37	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	5.25	6/15/53	900.0	620
46	546399SZ0	LOUISIANA PUB FACS AUTH REV	5.75	9/1/64	883.6	153
47	57582R5Q5	MASSACHUSETTS ST	5.00	1/1/49	867.8	955
48	13063A5E0	CALIFORNIA ST	7.50	4/1/34	858.7	1,700
49	65000B6L7	NEW YORK ST DORM AUTH REVS NON ST SUPPORTED DEBT	4.00	5/1/54	851.6	953
50	57582R5R3	MASSACHUSETTS ST	5.00	1/1/54	848.3	769

¹ Excludes zero-coupon securities.

² See page 1 for information on CUSIP identifiers.

Top 50 Most Active Fixed-Rate¹ Securities, 2024

By number of trades

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74448GAA7	PUBLIC FIN AUTH WIS POOLED CHARTER SCH CTF5 SER 2023-1	5.75	7/1/62	847.8	4,745
2	341271AH7	FLORIDA ST BRD ADMIN FIN CORP REV	5.53	7/1/34	3,141.7	4,179
3	896035DG4	TRIBOROUGH BRDG & TUNL AUTH N Y SALES TAX REV	4.13	5/15/64	1,187.8	3,978
4	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/29	553.3	3,272
5	646067GX0	NEW JERSEY ST EDL FACS AUTH REV	4.00	3/1/53	651.7	3,103
6	74514L3H8	PUERTO RICO COMWLTH	5.63	7/1/29	103.0	2,968
7	785870P67	SACRAMENTO CALIF CITY UNI SCH DIST	4.00	8/1/54	474.7	2,937
8	74514L3N5	PUERTO RICO COMWLTH	4.00	7/1/41	261.5	2,892
9	74514L3L9	PUERTO RICO COMWLTH	4.00	7/1/35	77.2	2,868
10	74514L3G0	PUERTO RICO COMWLTH	5.63	7/1/27	137.1	2,833
11	70917S6Y4	PENNSYLVANIA ST HIGHER EDL FACS AUTH REV	4.00	8/15/49	590.8	2,809
12	74514L3P0	PUERTO RICO COMWLTH	4.00	7/1/46	275.1	2,804
13	74514L3J4	PUERTO RICO COMWLTH	5.75	7/1/31	107.4	2,798
14	74514L3K1	PUERTO RICO COMWLTH	4.00	7/1/33	125.1	2,791
15	645790QD1	NEW JERSEY HEALTH CARE FACS FING AUTH REV	4.00	7/1/51	291.1	2,695
16	74514L3F2	PUERTO RICO COMWLTH	5.38	7/1/25	109.3	2,691
17	64990FPV0	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	4.00	2/15/47	445.0	2,663
18	74514L3M7	PUERTO RICO COMWLTH	4.00	7/1/37	90.0	2,595
19	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	1,126.9	2,467
20	646140FY4	NEW JERSEY ST TPK AUTH TPK REV	4.13	1/1/54	471.8	2,391
21	448474ZS8	HUTTO TEX	4.25	8/1/54	501.5	2,346
22	646140DK6	NEW JERSEY ST TPK AUTH TPK REV	4.00	1/1/51	294.1	2,346
23	6461367L9	NEW JERSEY ST TRANSN TR FD AUTH	4.00	6/15/50	320.9	2,322
24	13063A5G5	CALIFORNIA ST	7.55	4/1/39	1,431.9	2,301
25	64972JNS3	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	4.25	5/1/54	676.9	2,162
26	13032UB23	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	8/15/48	622.9	2,141
27	531127AC2	LIBERTY N Y DEV CORP REV	5.25	10/1/35	422.0	2,033
28	89602HEZ6	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	5.00	12/16/24	522.6	1,981
29	89602RGB5	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	4.00	11/15/54	230.7	1,981
30	896035DD1	TRIBOROUGH BRDG & TUNL AUTH N Y SALES TAX REV	4.00	5/15/54	642.7	1,907
31	64989KLE4	NEW YORK ST PWR AUTH REV	4.00	11/15/50	472.2	1,854
32	64972GZP2	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	4.00	6/15/45	352.6	1,846
33	6461395W1	NEW JERSEY ST TPK AUTH TPK REV	5.00	1/1/45	213.7	1,845
34	40934TAV5	HAMPTON RDS VA TRANSN ACCOUNTABILITY COMMN REV	5.00	7/1/26	562.8	1,801
35	59261A2H9	METROPOLITAN TRANSN AUTH N Y REV	4.00	11/15/48	407.6	1,775
36	592643DR8	METROPOLITAN WASH D C ARPTS AUTH DULLES TOLL RD REV	4.00	10/1/52	532.0	1,749
37	913366KT6	UNIV CALIF REGTS MED CTR POOLED REV	4.00	5/15/53	292.4	1,739
38	13063A5E0	CALIFORNIA ST	7.50	4/1/34	858.7	1,700
39	13032UVN5	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	8/15/50	297.2	1,698
40	108152MN6	BRIDGEPORT CONN	7.64	1/15/30	52.9	1,694
41	64972GK45	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	4.00	6/15/54	492.4	1,633
42	74529JPW9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.75	7/1/53	529.3	1,621
43	452151LF8	ILLINOIS ST	5.10	6/1/33	2,611.0	1,613
44	650036AP1	NEW YORK ST URBAN DEV CORP REV	4.00	3/15/49	243.4	1,605
45	64990F6S8	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	4.00	3/15/47	340.3	1,584
46	59334DLV4	MIAMI-DADE CNTY FLA WTR & SWR REV	4.00	10/1/49	261.2	1,573
47	13063DUD8	CALIFORNIA ST	4.00	3/1/36	399.0	1,568
48	64972JGX0	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	4.25	2/1/54	270.9	1,548
49	64966SBB1	NEW YORK N Y	4.13	3/1/54	324.6	1,542
50	646140DC4	NEW JERSEY ST TPK AUTH TPK REV	4.00	1/1/48	196.3	1,527

¹ Excludes zero-coupon securities.

² See page 1 for information on CUSIP identifiers.

Top 50 Most Active Variable Rate Securities, 2024

By par amount

Rank	CUSIP ²	Issuer Name	Maturity	Par Amount (\$ Millions)	Number of Trades
1	402207AD6	GULF COAST INDL DEV AUTH TEX REV	11/1/41	9,332.3	851
2	20775DTS1	CONNECTICUT ST HEALTH & EDL FACS AUTH REV	7/1/42	8,188.5	497
3	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/30	6,290.6	347
4	64971XFY9	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	8/1/45	5,955.3	543
5	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	12/1/59	5,950.1	1,291
6	072024YE6	BAY AREA TOLL AUTH CALIF TOLL BRDG REV	4/1/55	4,962.4	870
7	64972GC85	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/53	4,813.9	593
8	64971XHT8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	8/1/42	4,783.0	517
9	160853VA2	CHARLOTTE-MECKLENBURG HOSP AUTH N C HEALTH CARE SYS REV	1/15/42	4,642.7	603
10	64972GZB3	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/45	4,449.7	361
11	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	8/1/35	4,413.1	376
12	544532HW7	LOS ANGELES CALIF DEPT WTR & PWR REV	7/1/47	4,324.5	334
13	20775DTU6	CONNECTICUT ST HEALTH & EDL FACS AUTH REV	7/1/42	4,319.0	431
14	91412HPW7	UNIVERSITY CALIF REVS	5/15/48	4,134.9	313
15	64966KTD5	NEW YORK N Y	3/1/42	4,114.1	311
16	19648FVN1	COLORADO HEALTH FACS AUTH REV	5/15/62	4,105.4	248
17	072024YF3	BAY AREA TOLL AUTH CALIF TOLL BRDG REV	4/1/55	4,064.1	463
18	64966MSB6	NEW YORK N Y	10/1/46	4,027.4	420
19	91412GSK2	UNIVERSITY CALIF REVS	5/15/48	3,787.3	466
20	45204FAG0	ILLINOIS FIN AUTH REV	8/15/49	3,717.5	243
21	60527EAA5	MISSISSIPPI BUSINESS FIN CORP MISS PORT FAC REV	6/1/43	3,710.6	168
22	57585KSV1	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	7/1/31	3,678.2	333
23	87638QBF5	TARRANT CNTY TEX CULTURAL ED FACS FIN CORP HOSP REV	10/1/41	3,671.1	211
24	59261AM53	METROPOLITAN TRANSN AUTH N Y REV	11/15/50	3,496.1	689
25	64966QWL0	NEW YORK N Y	4/1/42	3,427.5	440
26	931542AB0	WALKER CNTY ALA ECONOMIC & INDL DEV AUTH SOLID WASTE DISP REV	8/1/63	3,390.8	361
27	64972FWK8	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/39	3,334.4	210
28	74514L3T2	PUERTO RICO COMWLTH	11/1/43	3,299.7	4,167
29	544495DH4	LOS ANGELES CALIF DEPT WTR & PWR REV	7/1/34	3,224.9	714
30	544532BQ6	LOS ANGELES CALIF DEPT WTR & PWR REV	7/1/50	3,175.8	283
31	64966JE77	NEW YORK N Y	4/1/42	3,071.3	571
32	64966LU25	NEW YORK N Y	6/1/44	3,016.1	631
33	544532HC1	LOS ANGELES CALIF DEPT WTR & PWR REV	7/1/57	2,963.3	240
34	64966ML98	NEW YORK N Y	12/1/47	2,963.3	351
35	64972GC69	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/44	2,910.9	511
36	91412GSH9	UNIVERSITY CALIF REVS	5/15/48	2,879.8	370
37	64971XKS6	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	11/1/44	2,859.3	449
38	64966QZZ6	NEW YORK N Y	5/1/52	2,742.0	167
39	45204FQE8	ILLINOIS FIN AUTH REV	8/15/57	2,703.7	185
40	64966LLS8	NEW YORK N Y	3/1/40	2,684.9	668
41	64966LU41	NEW YORK N Y	6/1/44	2,684.4	465
42	544525YL6	LOS ANGELES CALIF DEPT WTR & PWR WTRWKS REV	7/1/45	2,684.0	801
43	64971WE63	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2/1/45	2,597.4	761
44	13062RG77	CALIFORNIA ST	5/1/40	2,560.9	416
45	74447GAE0	PUBLIC FIN AUTH WIS HEALTH CARE SYS REV	10/1/55	2,519.7	161
46	45204FME2	ILLINOIS FIN AUTH REV	7/15/55	2,510.4	437
47	64986UA72	NEW YORK ST HSG FIN AGY REV	11/1/46	2,460.1	172
48	072024ZB1	BAY AREA TOLL AUTH CALIF TOLL BRDG REV	4/1/59	2,438.0	89
49	64972GYZ1	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/45	2,425.2	284
50	67756AH96	OHIO ST HIGHER EDL FAC COMMN REV	1/1/43	2,416.8	514

¹ See page 1 for information on CUSIP identifiers.

Top 50 Most Active Variable Rate Securities, 2024

By number of trades

Rank	CUSIP ²	Issuer Name	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74514L3T2	PUERTO RICO COMWLTH	11/1/43	3,299.7	4,167
2	74514L4G9	PUERTO RICO COMWLTH	11/1/51	1,170.3	1,892
3	74514L4C8	PUERTO RICO COMWLTH	11/1/51	1,625.5	1,467
4	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	12/1/59	5,950.1	1,291
5	60528ABX1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/35	2,123.2	1,056
6	13013JAP1	CALIFORNIA CMNTY CHOICE FING AUTH CLEAN ENERGY PROJ REV	2/1/52	1,322.2	1,035
7	6133408D3	MONTGOMERY CNTY MD	11/1/37	1,689.4	989
8	072024YE6	BAY AREA TOLL AUTH CALIF TOLL BRDG REV	4/1/55	4,962.4	870
9	402207AD6	GULF COAST INDL DEV AUTH TEX REV	11/1/41	9,332.3	851
10	09182NBR0	BLACK BELT ENERGY GAS DIST ALA GAS SUPPLY REV	6/1/51	394.2	806
11	544525YL6	LOS ANGELES CALIF DEPT WTR & PWR WTRWKS REV	7/1/45	2,684.0	801
12	64971WE63	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	2/1/45	2,597.4	761
13	20774LRU1	CONNECTICUT ST HEALTH & EDL FACS AUTH REV	7/1/36	1,140.4	750
14	74440DCM4	KENTUCKY INC KY PUB ENERGY AUTH GAS SUPPLY REV	2/1/50	174.9	729
15	20774LRT4	CONNECTICUT ST HEALTH & EDL FACS AUTH REV	7/1/36	1,603.3	728
16	64972GCM4	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/50	2,083.3	728
17	544495DH4	LOS ANGELES CALIF DEPT WTR & PWR REV	7/1/34	3,224.9	714
18	57585KKV9	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	7/1/35	634.9	695
19	57585KGP7	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	11/1/49	377.9	693
20	59261AM53	METROPOLITAN TRANSN AUTH N Y REV	11/15/50	3,496.1	689
21	64966LLS8	NEW YORK N Y	3/1/40	2,684.9	668
22	41315RGU2	HARRIS CNTY TEX HEALTH FACS DEV CORP REV	12/1/41	2,095.3	637
23	64966LU25	NEW YORK N Y	6/1/44	3,016.1	631
24	60528ABZ6	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/35	1,162.2	627
25	677561LA8	OHIO ST HOSP FAC REV	1/1/52	1,920.9	622
26	59261AB22	METROPOLITAN TRANSN AUTH N Y REV	11/1/32	1,058.3	622
27	56035DHK1	MAIN STR NAT GAS INC GA GAS SUPPLY REV	12/1/54	1,391.7	621
28	60528ACC6	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	11/1/35	1,400.4	615
29	74514L4D6	PUERTO RICO COMWLTH	11/1/51	341.0	608
30	88256PAG5	TEXAS MUN GAS ACQUISITION & SUPPLY CORP IV GAS SUPPLY REV	1/1/54	1,199.4	604
31	160853VA2	CHARLOTTE-MECKLENBURG HOSP AUTH N C HEALTH CARE SYS REV	1/15/42	4,642.7	603
32	64972GC85	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	6/15/53	4,813.9	593
33	292723BN2	ENERGY SOUTHEAST ALA COOP DIST ENERGY SUPPLY REV	7/1/54	2,068.4	592
34	547804AM6	LOWER ALA GAS DIST GAS PROJ REV	12/1/50	391.0	585
35	56035DGT3	MAIN STR NAT GAS INC GA GAS SUPPLY REV	5/1/54	1,454.2	584
36	84131TBA9	SOUTHEAST ALA GAS SUPPLY DIST GAS SUPPLY REV	8/1/54	1,554.8	582
37	13013JDR4	CALIFORNIA CMNTY CHOICE FING AUTH CLEAN ENERGY PROJ REV	5/1/54	2,008.0	574
38	74440DEC4	KENTUCKY INC KY PUB ENERGY AUTH GAS SUPPLY REV	4/1/54	420.4	574
39	64966G4P4	NEW YORK N Y	4/1/38	1,153.4	572
40	64966JE77	NEW YORK N Y	4/1/42	3,071.3	571
41	64579FYJ6	NEW JERSEY HEALTH CARE FACS FING AUTH REV	7/1/43	658.1	569
42	64966MU98	NEW YORK N Y	10/1/46	1,814.7	569
43	60528AAT1	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/30	1,532.9	568
44	64971WGU8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	8/1/43	1,045.9	564
45	040507QB4	ARIZONA HEALTH FACS AUTH REV	1/1/46	1,053.8	562
46	154872AT2	CENTRAL PLAINS ENERGY PROJ NEB GAS SUPPLY REV	12/1/49	624.3	560
47	60528AAU8	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	12/1/30	1,314.1	559
48	677561LD2	OHIO ST HOSP FAC REV	1/1/52	1,203.2	557
49	71884SAC4	PHOENIX ARIZ INDL DEV AUTH HEALTH CARE FACS REV	11/15/52	1,218.9	549
50	57586CFZ3	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	7/1/40	119.4	549

¹ See page 1 for information on CUSIP identifiers.

Top 50 Most Active Short-Term¹ Securities, 2024

By par amount

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	544351SE0	LOS ANGELES CALIF	5.00	6/26/25	2,079.5	736
2	463608YH6	IRVINE CALIF IMPT BD ACT 1915	0.95	9/2/25	1,236.1	74
3	544351RJ0	LOS ANGELES CALIF	5.00	6/27/24	1,050.8	898
4	544657JB6	LOS ANGELES CNTY CALIF	5.00	6/30/25	919.1	527
5	19672MDE5	COLORADO ST ED LN PROG	5.00	6/30/25	796.9	609
6	341271AD6	FLORIDA ST BRD ADMIN FIN CORP REV	1.26	7/1/25	779.5	1,049
7	04779PBF1	ATLANTA GA ARPT THIRD LIEN GEN REV IAM COML PAPER NTS 3/A2 SER N-2 AMT	3.18	2/18/25	745.2	16
8	402230ER3	GULF COAST WASTE DISP AUTH TEX POLLUTN CTL REV	3.90	10/1/24	636.2	85
9	940158EZ7	WASHINGTON SUBN SAN DIST MD	3.50	6/1/24	622.5	149
10	79768HGG7	SAN FRANCISCO CALIF CITY & CNTY PUB UTILS COMMN WASTEWATER REV	1.00	10/1/25	615.5	667
11	64613CEY0	NEW JERSEY ST TRANSN TR FD AUTH	5.09	6/15/25	558.3	118
12	89602HEZ6	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	5.00	12/16/24	522.6	1,981
13	692160VB7	OYSTER BAY N Y	4.00	3/7/25	502.6	412
14	769110CY1	RIVERSIDE CNTY CALIF	5.00	6/30/25	499.6	373
15	40222PAN2	GULF COAST WASTE DISP AUTH TEX ENVIRONMENTAL FACS REV	1.29	9/1/25	491.7	54
16	646039YJ0	NEW JERSEY ST	5.00	6/1/25	485.2	896
17	59333RLU6	MIAMI-DADE CNTY FLA SCH DIST	4.50	1/7/25	479.2	329
18	544657JA8	LOS ANGELES CNTY CALIF	5.00	6/28/24	479.1	447
19	628137AF8	MUSKOGEE OKLA INDL TR POLLUTN CTL REV	3.75	1/1/25	453.6	20
20	41386RUA4	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	1.00	1/16/24	450.0	5
21	41386RUB2	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	1.05	1/17/24	450.0	5
22	41386RUC0	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	1.15	1/18/24	450.0	5
23	41386RUD8	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	1.40	1/19/24	450.0	5
24	41386RUE6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.00	1/22/24	450.0	5
25	41386RUF3	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.40	1/23/24	450.0	5
26	41386RUG1	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	4.60	1/24/24	450.0	5
27	41386RUH9	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	4.60	1/25/24	450.0	5
28	41386RUJ5	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	4.40	1/26/24	450.0	5
29	41386RUK2	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	4.50	1/29/24	450.0	5
30	41386RUL0	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	4.00	1/30/24	450.0	5
31	41386RUM8	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.75	1/31/24	450.0	5
32	41386RUN6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.25	2/1/24	450.0	5
33	41386RUP1	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	2.90	2/2/24	450.0	5
34	41386RUQ9	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	2.25	2/5/24	450.0	5
35	41386RUR7	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	1.50	2/6/24	450.0	5
36	41386RUS5	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	1.25	2/7/24	450.0	5
37	41386RUT3	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	1.90	2/8/24	450.0	5
38	41386RUU0	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.08	2/9/24	450.0	5
39	41386RUV8	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.90	2/12/24	450.0	7
40	41386RUW6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.75	2/13/24	450.0	7
41	41386RUZ9	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.00	2/16/24	450.0	6
42	41386RV62	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	2.90	2/26/24	450.0	6
43	41386RVA3	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.75	3/1/24	450.0	6
44	41386RVB1	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.75	3/4/24	450.0	6
45	41386RVC9	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.45	3/5/24	450.0	7
46	41386RVD7	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.10	3/6/24	450.0	6
47	41386RVE5	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.38	3/7/24	450.0	6
48	41386RVF2	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.40	3/8/24	450.0	6
49	41386RVG0	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.55	3/11/24	450.0	6
50	41386RVH8	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV IAM COML PAPER 3/A2 SER C-1	3.45	3/12/24	450.0	6

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, 2024

By number of trades

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74514L3F2	PUERTO RICO COMWLTH	5.38	7/1/25	109.3	2,691
2	89602HEZ6	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	5.00	12/16/24	522.6	1,981
3	68441VAA3	ORANGE CNTY CALIF TRANSN AUTH REV	5.00	10/15/24	434.3	1,354
4	341271AD6	FLORIDA ST BRD ADMIN FIN CORP REV	1.26	7/1/25	779.5	1,049
5	574193PD4	MARYLAND ST	5.00	8/1/25	178.3	1,034
6	89602HDT1	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	5.00	8/15/24	325.6	1,007
7	40934TAV5	HAMPTON RDS VA TRANSN ACCOUNTABILITY COMMN REV	5.00	7/1/26	176.3	951
8	79905VBB6	SAN MATEO FOSTER CITY CALIF PUB FING AUTH WASTEWATER REV	5.00	8/1/25	131.4	940
9	176553HB4	CITIZENS PPTY INS CORP FLA	5.00	6/1/25	326.1	931
10	5446465N8	LOS ANGELES CALIF UNI SCH DIST	5.00	7/1/25	98.7	911
11	544351RJ0	LOS ANGELES CALIF	5.00	6/27/24	1,050.8	898
12	646039YJ0	NEW JERSEY ST	5.00	6/1/25	485.2	896
13	650036ER3	NEW YORK ST URBAN DEV CORP REV	5.00	3/15/25	93.2	876
14	575579S73	MASSACHUSETTS BAY TRANSN AUTH MASS SALES TAX REV	4.00	5/1/25	204.8	872
15	13063CQT0	CALIFORNIA ST	5.00	3/1/26	72.2	834
16	89602HFB8	TRIBOROUGH BRDG & TUNL AUTH N Y PAYROLL MOBILITY TAX	5.00	11/15/24	197.3	813
17	74514L3Q8	PUERTO RICO COMWLTH	0.00	7/1/24	3.9	812
18	64990E5N3	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	5.00	2/15/25	87.5	789
19	70914PJ86	PENNSYLVANIA ST	5.00	1/1/25	191.5	776
20	544351SE0	LOS ANGELES CALIF	5.00	6/26/25	2,079.5	736
21	650036GP5	NEW YORK ST URBAN DEV CORP REV	5.00	3/15/26	52.3	733
22	452152P88	ILLINOIS ST	5.00	11/1/24	148.2	731
23	89602RGS8	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	5.00	11/1/25	127.1	688
24	73358WAH7	PORT AUTH N Y & N J	5.86	12/1/24	115.7	686
25	650035S66	NEW YORK ST URBAN DEV CORP REV	5.00	3/15/25	43.0	681
26	646039YK7	NEW JERSEY ST	5.00	6/1/26	159.9	679
27	79768HGG7	SAN FRANCISCO CALIF CITY & CNTY PUB UTILS COMMN WASTEWATER REV	1.00	10/1/25	615.5	667
28	19672MDA3	COLORADO ST ED LN PROG	5.00	6/28/24	225.8	666
29	13063DPA0	CALIFORNIA ST	5.00	4/1/25	186.7	656
30	684421FQ8	ORANGE CNTY CALIF WTR DIST REV CTFS PARTN	4.00	2/15/25	49.4	651
31	70914PJ94	PENNSYLVANIA ST	5.00	1/1/26	107.3	628
32	594612DG5	MICHIGAN ST	5.00	3/15/25	44.0	628
33	70914PYR7	PENNSYLVANIA ST	5.00	8/15/25	84.9	619
34	91412GU94	UNIVERSITY CALIF REVS	3.06	7/1/25	288.7	610
35	169498FR8	CHINO BASIN CALIF REGL FING AUTH REV	4.00	11/1/25	190.0	609
36	19672MDE5	COLORADO ST ED LN PROG	5.00	6/30/25	796.9	609
37	64990AJP1	NEW YORK ST DORM AUTH SALES TAX REV ST SUPPORTED DEBT	5.00	3/15/25	56.9	606
38	646136EN7	NEW JERSEY ST TRANSN TR FD AUTH	0.00	12/15/25	29.2	595
39	29270CP90	ENERGY NORTHWEST WASH ELEC REV	5.00	7/1/25	97.7	588
40	575579HC4	MASSACHUSETTS BAY TRANSN AUTH MASS SALES TAX REV	5.00	7/1/25	43.5	587
41	645913BD5	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	0.00	2/15/25	94.5	577
42	367298ZL3	GASTON CNTY N C	4.00	5/1/25	72.6	573
43	452152Q46	ILLINOIS ST	5.00	11/1/25	214.7	571
44	59261ANE3	METROPOLITAN TRANSN AUTH N Y REV	5.00	11/15/24	106.6	570
45	794665GD5	SALES TAX ASSET RECEIVABLE CORP N Y REV	5.00	10/15/24	44.3	566
46	64966MJJ9	NEW YORK N Y	5.00	8/1/25	44.5	557
47	4424354B6	HOUSTON TEX UTIL SYS REV	5.00	5/15/25	37.5	555
48	794665FM6	SALES TAX ASSET RECEIVABLE CORP N Y REV	5.00	10/15/25	76.6	540
49	64990F3B8	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	5.00	2/15/26	43.8	535
50	64577BKK9	NEW JERSEY ECONOMIC DEV AUTH REV	4.25	6/15/26	53.4	527

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, 2024

By par amount

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	402207AD6	GULF COAST INDL DEV AUTH TEX REV	1.20	11/1/41	9,332.3	851
2	20775DTS1	CONNECTICUT ST HEALTH & EDL FACS AUTH REV	0.85	7/1/42	8,188.5	497
3	60528AAS3	MISSISSIPPI BUSINESS FIN CORP MISS GULF OPPORTUNITY ZONE INDL DEV REV	1.20	12/1/30	6,290.6	347
4	64971XFY9	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	1.20	8/1/45	5,955.3	543
5	414009PV6	HARRIS CNTY TEX CULTURAL ED FACS FIN CORP REV	1.20	12/1/59	5,950.1	1,291
6	072024YE6	BAY AREA TOLL AUTH CALIF TOLL BRDG REV	0.85	4/1/55	4,962.4	870
7	64972GC85	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	1.20	6/15/53	4,813.9	593
8	64971XHT8	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	1.20	8/1/42	4,783.0	517
9	160853VA2	CHARLOTTE-MECKLENBURG HOSP AUTH N C HEALTH CARE SYS REV	1.15	1/15/42	4,642.7	603
10	13063EBP0	CALIFORNIA ST	5.13	9/1/29	4,634.2	452
11	64972GZB3	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	1.35	6/15/45	4,449.7	361
12	270777AC9	EAST BATON ROUGE PARISH LA INC INDL DEV BRD REV	1.22	8/1/35	4,413.1	376
13	544532HW7	LOS ANGELES CALIF DEPT WTR & PWR REV	3.90	7/1/47	4,324.5	334
14	20775DTU6	CONNECTICUT ST HEALTH & EDL FACS AUTH REV	0.80	7/1/42	4,319.0	431
15	91412HPW7	UNIVERSITY CALIF REVS	1.31	5/15/48	4,134.9	313
16	64966KTD5	NEW YORK N Y	1.20	3/1/42	4,114.1	311
17	19648FVN1	COLORADO HEALTH FACS AUTH REV	1.20	5/15/62	4,105.4	248
18	072024YF3	BAY AREA TOLL AUTH CALIF TOLL BRDG REV	0.90	4/1/55	4,064.1	463
19	64966MSB6	NEW YORK N Y	1.20	10/1/46	4,027.4	420
20	91412GSK2	UNIVERSITY CALIF REVS	0.85	5/15/48	3,787.3	466
21	45204FAG0	ILLINOIS FIN AUTH REV	1.10	8/15/49	3,717.5	243
22	60527EAA5	MISSISSIPPI BUSINESS FIN CORP MISS PORT FAC REV	1.20	6/1/43	3,710.6	168
23	57585KSV1	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV	0.70	7/1/31	3,678.2	333
24	87638QBF5	TARRANT CNTY TEX CULTURAL ED FACS FIN CORP HOSP REV	1.20	10/1/41	3,671.1	211
25	59261AM53	METROPOLITAN TRANSN AUTH N Y REV	1.20	11/15/50	3,496.1	689
26	64966QWL0	NEW YORK N Y	1.25	4/1/42	3,427.5	440
27	931542AB0	WALKER CNTY ALA ECONOMIC & INDL DEV AUTH SOLID WASTE DISP REV	1.35	8/1/63	3,390.8	361
28	64972FWK8	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	1.15	6/15/39	3,334.4	210
29	74514L3T2	PUERTO RICO COMWLTH	-	11/1/43	3,299.7	4,167
30	38122NB84	GOLDEN ST TOB SECURITIZATION CORP CALIF TOB SETTLEMENT REV	0.00	6/1/66	3,274.6	242
31	74265L3A4	PRIVATE COLLEGES & UNIVS AUTH GA REV	5.00	9/1/33	3,274.4	699
32	544495DH4	LOS ANGELES CALIF DEPT WTR & PWR REV	4.15	7/1/34	3,224.9	714
33	544532BQ6	LOS ANGELES CALIF DEPT WTR & PWR REV	4.15	7/1/50	3,175.8	283
34	341271AH7	FLORIDA ST BRD ADMIN FIN CORP REV	5.53	7/1/34	3,141.7	4,179
35	64966JE77	NEW YORK N Y	1.70	4/1/42	3,071.3	571
36	64966LU25	NEW YORK N Y	1.20	6/1/44	3,016.1	631
37	544532HC1	LOS ANGELES CALIF DEPT WTR & PWR REV	4.35	7/1/57	2,963.3	240
38	64966ML98	NEW YORK N Y	1.20	12/1/47	2,963.3	351
39	64972GC69	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	1.15	6/15/44	2,910.9	511
40	118217DA3	BUCKEYE OHIO TOB SETTLEMENT FING AUTH	0.00	6/1/57	2,908.9	146
41	91412GSH9	UNIVERSITY CALIF REVS	0.85	5/15/48	2,879.8	370
42	64971XKS6	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	1.20	11/1/44	2,859.3	449
43	64966QZZ6	NEW YORK N Y	1.20	5/1/52	2,742.0	167
44	45204FQE8	ILLINOIS FIN AUTH REV	1.10	8/15/57	2,703.7	185
45	64966LLS8	NEW YORK N Y	1.20	3/1/40	2,684.9	668
46	64966LU41	NEW YORK N Y	1.20	6/1/44	2,684.4	465
47	544525YL6	LOS ANGELES CALIF DEPT WTR & PWR WTRWKS REV	4.15	7/1/45	2,684.0	801
48	452151LF8	ILLINOIS ST	5.10	6/1/33	2,611.0	1,613
49	64971WE63	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	1.20	2/1/45	2,597.4	761
50	13062RG77	CALIFORNIA ST	-	5/1/40	2,560.9	416

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, 2024

By number of trades

Rank	CUSIP ²	Issuer Name	Coupon	Maturity	Par Amount (\$ Millions)	Number of Trades
1	74448GAA7	PUBLIC FIN AUTH WIS POOLED CHARTER SCH CTFS SER 2023-1	5.75	7/1/62	847.8	4,745
2	341271AH7	FLORIDA ST BRD ADMIN FIN CORP REV	5.53	7/1/34	3,141.7	4,179
3	74514L3T2	PUERTO RICO COMWLTH	-	11/1/43	3,299.7	4,167
4	896035DG4	TRIBOROUGH BRDG & TUNL AUTH N Y SALES TAX REV	4.13	5/15/64	1,187.8	3,978
5	645913AA2	NEW JERSEY ECONOMIC DEV AUTH ST PENSION FDG REV	7.43	2/15/29	553.3	3,272
6	74514L3R6	PUERTO RICO COMWLTH	0.00	7/1/33	108.7	3,133
7	646067GX0	NEW JERSEY ST EDL FACS AUTH REV	4.00	3/1/53	651.7	3,103
8	74514L3H8	PUERTO RICO COMWLTH	5.63	7/1/29	103.0	2,968
9	785870P67	SACRAMENTO CALIF CITY UNI SCH DIST	4.00	8/1/54	474.7	2,937
10	74514L3N5	PUERTO RICO COMWLTH	4.00	7/1/41	261.5	2,892
11	74514L3L9	PUERTO RICO COMWLTH	4.00	7/1/35	77.2	2,868
12	74514L3G0	PUERTO RICO COMWLTH	5.63	7/1/27	137.1	2,833
13	7091756Y4	PENNSYLVANIA ST HIGHER EDL FACS AUTH REV	4.00	8/15/49	590.8	2,809
14	74514L3P0	PUERTO RICO COMWLTH	4.00	7/1/46	275.1	2,804
15	74514L3J4	PUERTO RICO COMWLTH	5.75	7/1/31	107.4	2,798
16	74514L3K1	PUERTO RICO COMWLTH	4.00	7/1/33	125.1	2,791
17	645790QD1	NEW JERSEY HEALTH CARE FACS FING AUTH REV	4.00	7/1/51	291.1	2,695
18	64990FPV0	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	4.00	2/15/47	445.0	2,663
19	74514L3M7	PUERTO RICO COMWLTH	4.00	7/1/37	90.0	2,595
20	74529JPX7	PUERTO RICO SALES TAX FING CORP SALES TAX REV	5.00	7/1/58	1,126.9	2,467
21	646140FY4	NEW JERSEY ST TPK AUTH TPK REV	4.13	1/1/54	471.8	2,391
22	646140DK6	NEW JERSEY ST TPK AUTH TPK REV	4.00	1/1/51	294.1	2,346
23	448474ZS8	HUTTO TEX	4.25	8/1/54	501.5	2,346
24	6461367L9	NEW JERSEY ST TRANSN TR FD AUTH	4.00	6/15/50	320.9	2,322
25	13063A5G5	CALIFORNIA ST	7.55	4/1/39	1,431.9	2,301
26	64972JNS3	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	4.25	5/1/54	676.9	2,162
27	13032UB23	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	8/15/48	622.9	2,141
28	74529JQG3	PUERTO RICO SALES TAX FING CORP SALES TAX REV	0.00	7/1/46	1,728.1	2,056
29	531127AC2	LIBERTY N Y DEV CORP REV	5.25	10/1/35	422.0	2,033
30	89602RGB5	TRIBOROUGH BRDG & TUNL AUTH N Y REVS	4.00	11/15/54	230.7	1,981
31	896035DD1	TRIBOROUGH BRDG & TUNL AUTH N Y SALES TAX REV	4.00	5/15/54	642.7	1,907
32	74514L4G9	PUERTO RICO COMWLTH	-	11/1/51	1,170.3	1,892
33	74529JQH1	PUERTO RICO SALES TAX FING CORP SALES TAX REV	0.00	7/1/51	1,111.3	1,883
34	64989KLE4	NEW YORK ST PWR AUTH REV	4.00	11/15/50	472.2	1,854
35	64972GZP2	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	4.00	6/15/45	352.6	1,846
36	6461395W1	NEW JERSEY ST TPK AUTH TPK REV	5.00	1/1/45	213.7	1,845
37	59261A2H9	METROPOLITAN TRANSN AUTH N Y REV	4.00	11/15/48	407.6	1,775
38	592643DR8	METROPOLITAN WASH D C ARPTS AUTH DULLES TOLL RD REV	4.00	10/1/52	532.0	1,749
39	913366KT6	UNIV CALIF REGTS MED CTR POOLED REV	4.00	5/15/53	292.4	1,739
40	13063A5E0	CALIFORNIA ST	7.50	4/1/34	858.7	1,700
41	13032UVN5	CALIFORNIA HEALTH FACS FING AUTH REV	4.00	8/15/50	297.2	1,698
42	108152MN6	BRIDGEPORT CONN	7.64	1/15/30	52.9	1,694
43	64972GK45	NEW YORK N Y CITY MUN WTR FIN AUTH WTR & SWR SYS REV	4.00	6/15/54	492.4	1,633
44	74529JPW9	PUERTO RICO SALES TAX FING CORP SALES TAX REV	4.75	7/1/53	529.3	1,621
45	452151LF8	ILLINOIS ST	5.10	6/1/33	2,611.0	1,613
46	650036AP1	NEW YORK ST URBAN DEV CORP REV	4.00	3/15/49	243.4	1,605
47	64990F6S8	NEW YORK ST DORM AUTH ST PERS INCOME TAX REV	4.00	3/15/47	340.3	1,584
48	59334DLV4	MIAMI-DADE CNTY FLA WTR & SWR REV	4.00	10/1/49	261.2	1,573
49	13063DUD8	CALIFORNIA ST	4.00	3/1/36	399.0	1,568
50	64972JGX0	NEW YORK N Y CITY TRANSITIONAL FIN AUTH REV	4.25	2/1/54	270.9	1,548

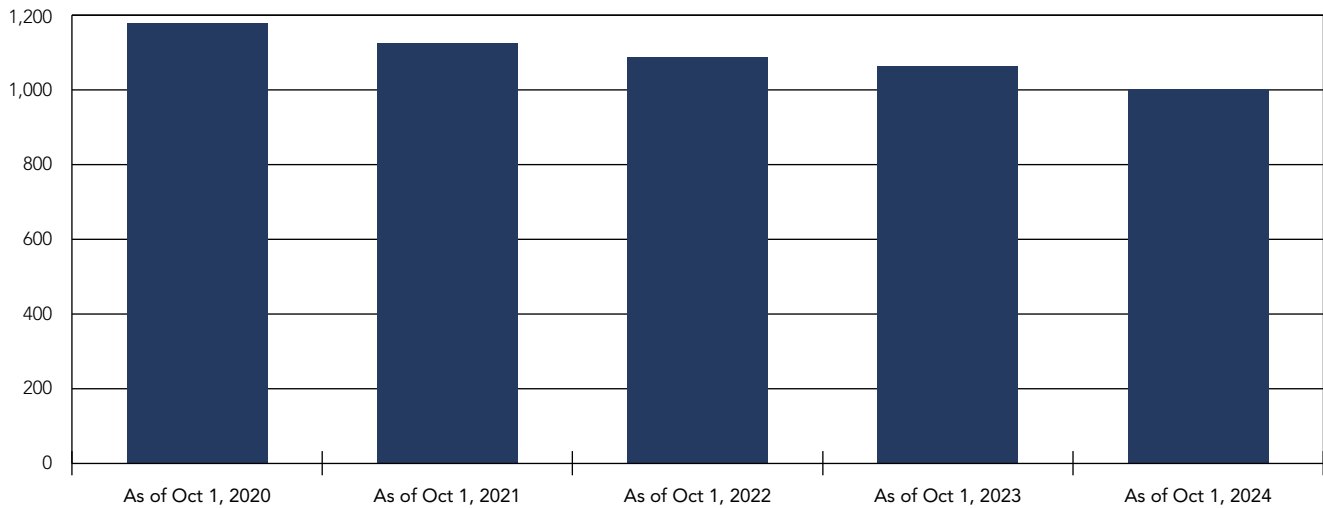
¹ Securities with two years or more in remaining maturity.

² See page 1 for information on CUSIP identifiers.

Part Four

Dealer Activity and Distribution of Municipal Trades, 2020–2024

Number of MSRB Registered Dealers



	Number of Registered Dealers	% Change from Prior Period ¹
As of Oct 1, 2020	1,180	-4.6%
As of Oct 1, 2021	1,125	-4.7%
As of Oct 1, 2022	1,089	-3.2%
As of Oct 1, 2023	1,063	-2.4%
As of Oct 1, 2024	1,001	-5.8%

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 MSRB

Get Real-Time Feeds of Municipal Securities Market Disclosures

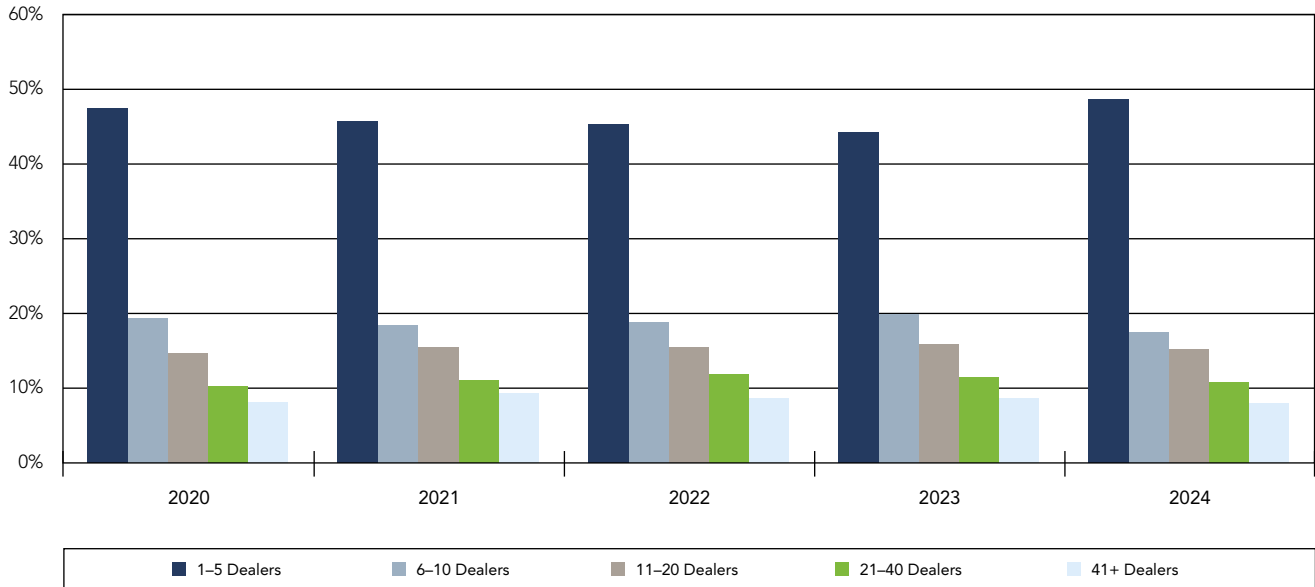
MSRB offers subscriptions to two feeds of disclosure data:*

- 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.

Distribution of Customer Trades by Number of Dealers

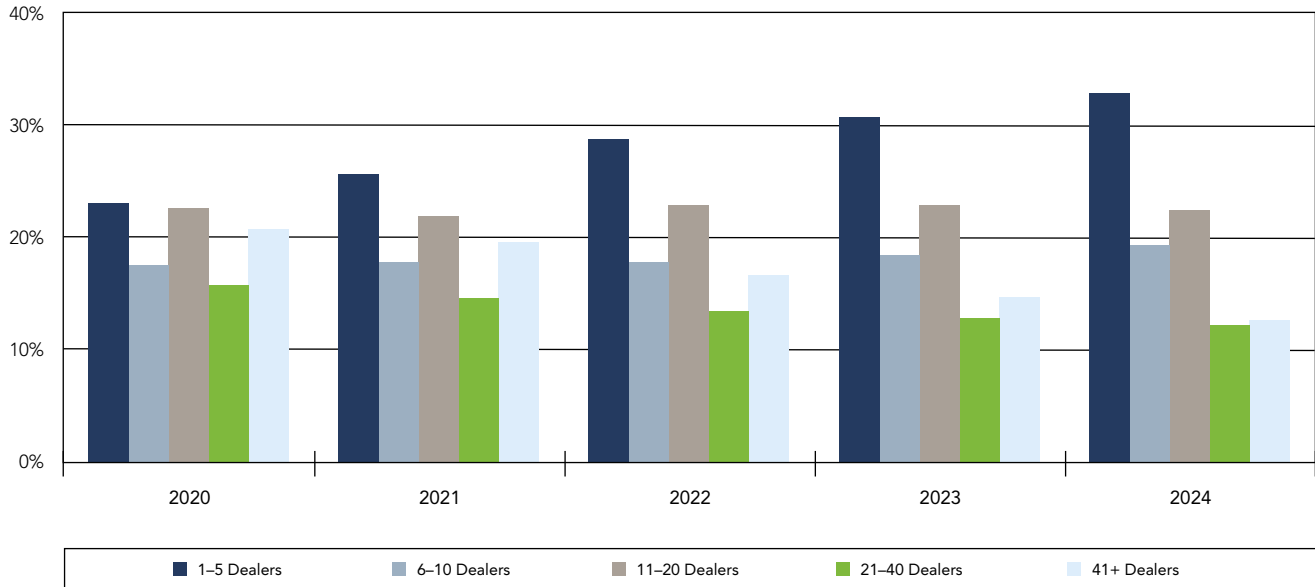
Par amount



	2020	2021	2022	2023	2024
1-5 Dealers	47.5	45.7	45.3	44.3	48.6
6-10 Dealers	19.4	18.4	18.8	19.9	17.5
11-20 Dealers	14.7	15.5	15.4	15.8	15.2
21-40 Dealers	10.3	11.1	11.9	11.4	10.8
41+ Dealers	8.1	9.3	8.6	8.6	7.9

Distribution of Customer Trades by Number of Dealers

Number of trades



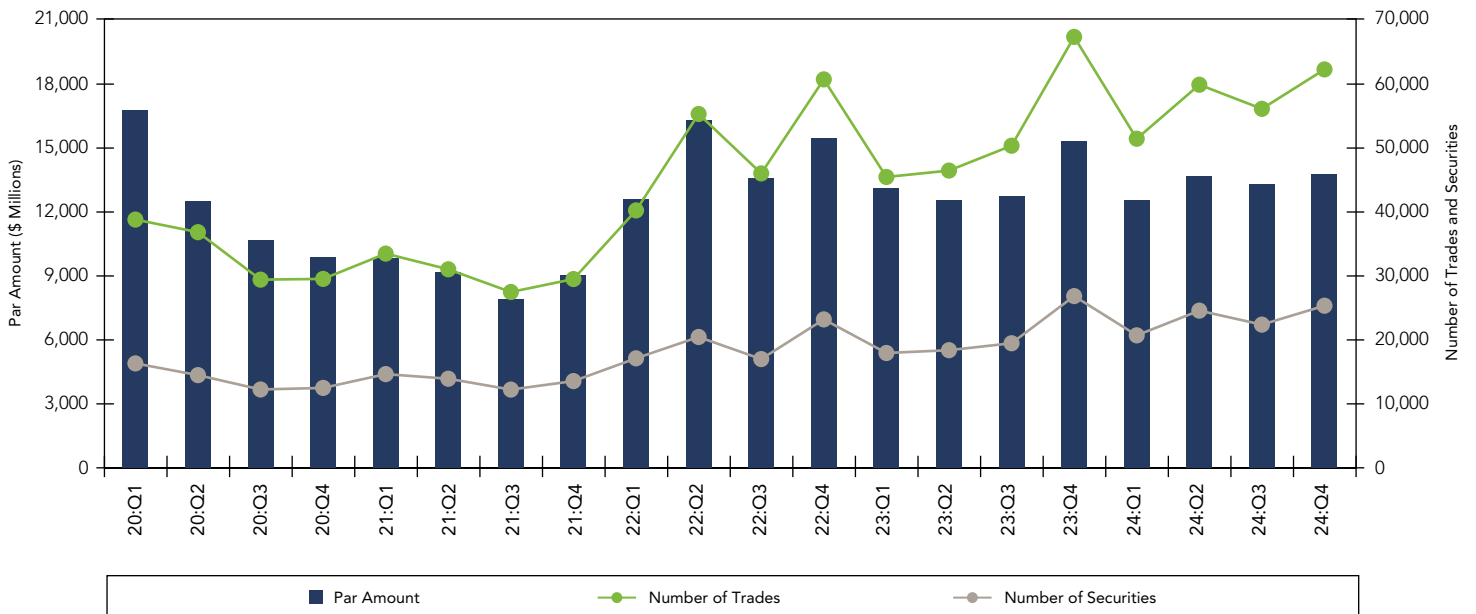
	2020	2021	2022	2023	2024
1-5 Dealers	23.2	25.7	28.9	30.8	33.0
6-10 Dealers	17.6	17.9	17.9	18.5	19.4
11-20 Dealers	22.7	22.0	23.0	23.0	22.5
21-40 Dealers	15.8	14.7	13.5	12.9	12.3
41+ Dealers	20.8	19.7	16.7	14.8	12.7

Part Five

Overall Municipal Market Trading Activity, 2020–2024

Average Daily Trading Volume, 2020–2024

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

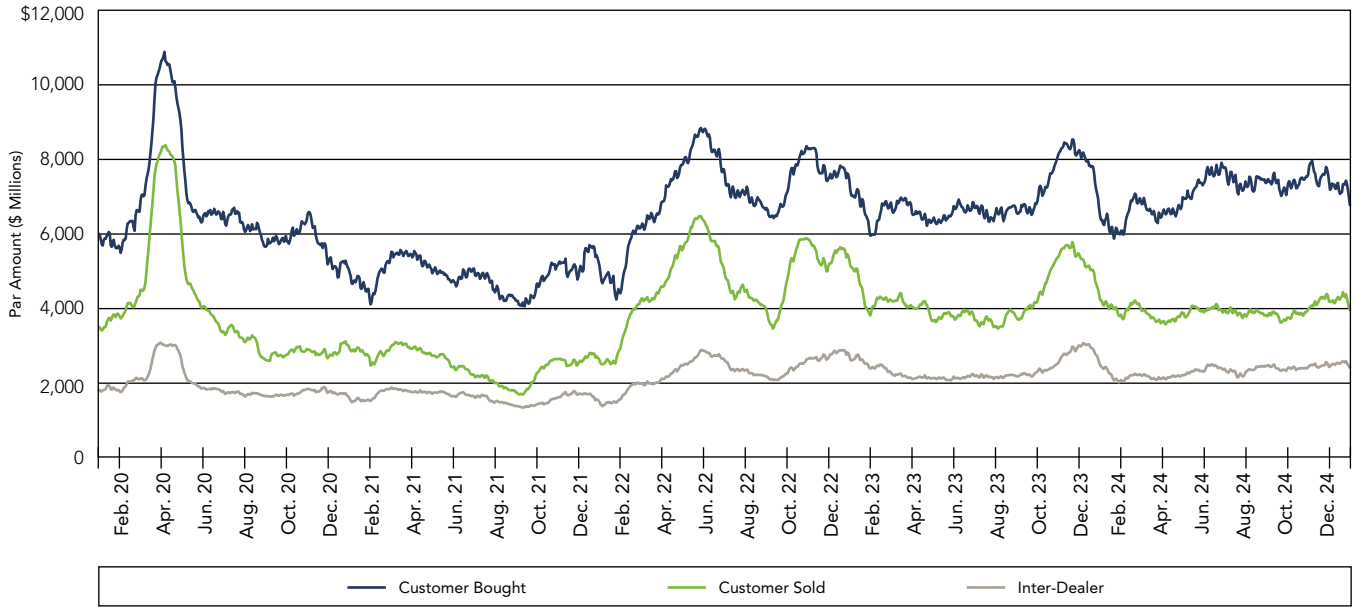


Quarter	Par Amount (\$ Millions)	Number of Trades	Number of Unique Securities
20:Q1	16,751.5	38,816	16,328
20:Q2	12,491.4	36,845	14,493
20:Q3	10,653.9	29,424	12,248
20:Q4	9,878.9	29,539	12,494
2020	12,409.7	33,603	13,869
21:Q1	9,825.8	33,496	14,653
21:Q2	9,156.5	31,041	13,930
21:Q3	7,887.1	27,491	12,232
21:Q4	9,032.8	29,517	13,560
2021	8,964.7	30,347	13,580
22:Q1	12,591.8	40,250	17,123
22:Q2	16,282.5	55,329	20,459
22:Q3	13,598.1	46,037	17,003
22:Q4	15,441.8	60,740	23,207
2022	14,475.4	50,593	19,444
23:Q1	13,103.6	45,477	17,954
23:Q2	12,549.4	46,479	18,393
23:Q3	12,725.8	50,366	19,479
23:Q4	15,329.9	67,382	26,852
2023	13,432.0	52,477	20,689
24:Q1	12,562.2	51,457	20,713
24:Q2	13,693.5	59,905	24,577
24:Q3	13,307.8	56,135	22,389
24:Q4	13,751.8	62,296	25,348
2024	13,336.5	57,510	23,282

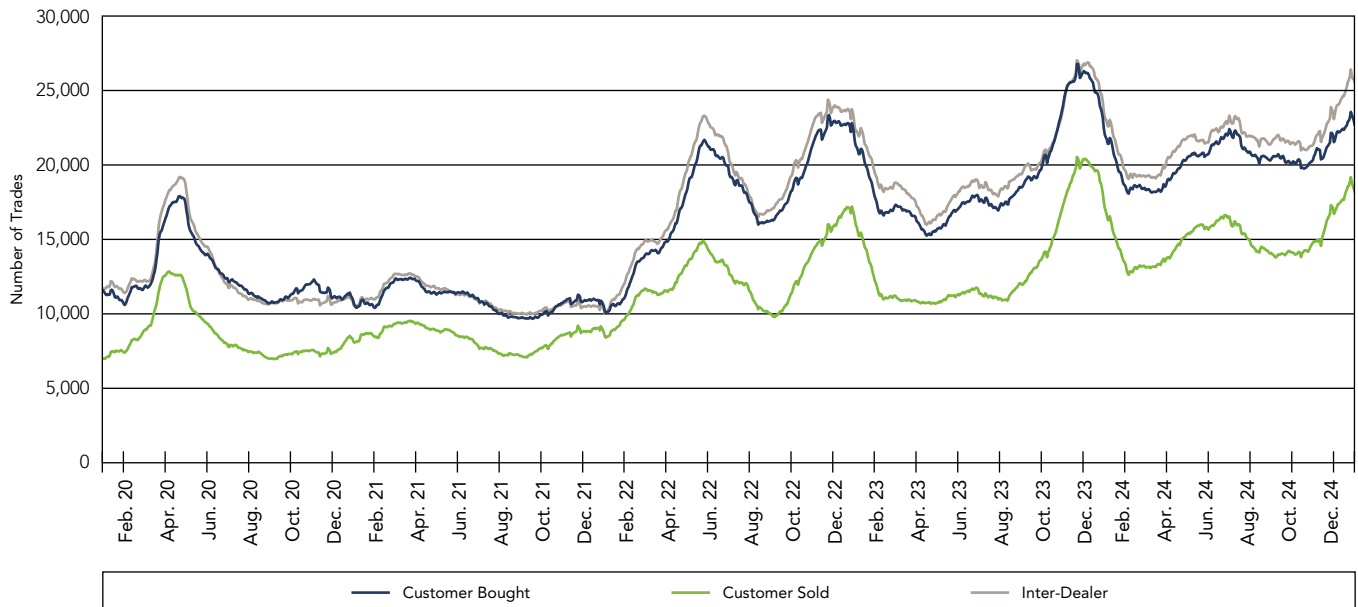
Daily Trading Volume, 2020–2024

30-day trailing average by trade type

Par Amount



Number of Trades



Trade Type and Size, 2020–2024

Average daily par amount in \$ millions

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
All Trades									
Total	12,409.7	8,964.7	14,475.4	13,432.0	13,336.5	12,562.2	13,693.5	13,307.8	13,751.8
0–\$25,000	244.9	228.2	383.4	396.2	443.8	396.8	469.7	430.4	476.6
\$25,001–\$50,000	252.1	226.0	419.0	435.3	457.4	413.4	470.9	446.9	496.4
\$50,001–\$75,000	110.8	105.0	191.9	196.6	210.9	185.7	216.8	202.6	237.3
\$75,001–\$100,000	226.4	188.0	345.6	359.2	368.5	332.1	373.4	361.9	404.8
\$100,001–\$500,000	1,153.8	962.0	1,429.9	1,480.0	1,523.4	1,395.7	1,529.1	1,517.9	1,645.0
\$500,001–\$1,000,000	844.4	685.2	837.4	861.7	858.3	825.0	864.0	871.3	871.6
\$1,000,001–\$2,000,000	1,033.2	813.2	1,071.9	1,029.7	1,034.3	949.1	1,075.9	1,073.9	1,034.9
More than \$2,000,000	8,544.1	5,757.2	9,796.2	8,673.3	8,440.0	8,064.5	8,693.7	8,403.0	8,585.1
Customer Bought									
Total	6,546.2	4,890.0	7,225.4	6,871.6	7,109.6	6,584.1	7,438.7	7,182.6	7,213.6
0–\$25,000	86.1	75.7	136.3	140.9	151.8	136.9	160.5	148.8	160.4
\$25,001–\$50,000	89.7	77.8	152.2	158.8	161.4	149.4	165.2	160.2	170.2
\$50,001–\$75,000	39.4	37.3	66.9	70.8	75.0	67.7	76.8	73.9	81.2
\$75,001–\$100,000	80.7	67.1	127.2	132.8	135.0	124.9	136.7	135.9	142.2
\$100,001–\$500,000	484.3	420.0	553.8	574.8	606.8	563.8	613.6	614.7	633.0
\$500,001–\$1,000,000	414.8	348.1	371.0	375.3	398.9	375.8	413.4	411.8	393.7
\$1,000,001–\$2,000,000	536.2	438.0	509.3	494.9	523.5	464.7	556.5	547.6	523.1
More than \$2,000,000	4,815.2	3,426.0	5,308.7	4,923.3	5,057.3	4,700.9	5,316.0	5,089.7	5,109.7
Customer Sold									
Total	3,931.2	2,466.5	4,876.2	4,225.7	3,912.9	3,836.8	3,934.8	3,785.4	4,091.4
0–\$25,000	61.5	65.2	93.0	98.0	117.6	103.2	127.5	110.9	128.1
\$25,001–\$50,000	63.0	62.4	98.2	101.0	112.0	98.4	119.1	104.3	125.9
\$50,001–\$75,000	29.9	30.5	54.2	53.2	58.6	50.1	62.8	53.1	68.0
\$75,001–\$100,000	60.5	52.1	80.6	81.3	85.2	73.6	88.9	78.5	99.5
\$100,001–\$500,000	281.0	232.1	377.7	380.7	380.8	341.0	396.4	352.8	431.3
\$500,001–\$1,000,000	204.0	154.2	238.8	245.1	228.9	226.7	233.3	216.2	239.3
\$1,000,001–\$2,000,000	275.5	198.2	348.8	323.2	299.8	289.2	310.0	295.0	304.6
More than \$2,000,000	2,955.9	1,671.9	3,584.9	2,943.2	2,630.0	2,654.6	2,596.7	2,574.5	2,694.8
Inter-Dealer									
Total	1,932.2	1,608.2	2,373.7	2,334.7	2,314.0	2,141.3	2,320.1	2,339.8	2,446.7
0–\$25,000	97.3	87.2	154.1	157.3	174.5	156.7	181.7	170.7	188.1
\$25,001–\$50,000	99.4	85.7	168.6	175.4	184.0	165.6	186.6	182.5	200.3
\$50,001–\$75,000	41.5	37.2	70.8	72.6	77.3	68.0	77.2	75.5	88.2
\$75,001–\$100,000	85.2	68.8	137.8	145.2	148.2	133.6	147.8	147.5	163.1
\$100,001–\$500,000	388.5	310.0	498.4	524.6	535.8	490.9	519.1	550.3	580.7
\$500,001–\$1,000,000	225.6	183.0	227.6	241.3	230.6	222.4	217.3	243.3	238.6
\$1,000,001–\$2,000,000	221.6	176.9	213.8	211.5	211.0	195.2	209.4	231.3	207.2
More than \$2,000,000	773.0	659.3	902.6	806.8	752.7	709.0	781.0	738.7	780.5

Trade Type and Size, 2020–2024

Average daily number of trades

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
All Trades									
Total	33,603	30,347	50,593	52,477	57,510	51,457	59,905	56,135	62,296
0–\$25,000	16,161	15,266	24,899	26,140	30,014	26,635	31,742	29,154	32,394
\$25,001–\$50,000	6,029	5,452	10,090	10,449	11,048	9,967	11,414	10,782	11,984
\$50,001–\$75,000	1,668	1,583	2,905	2,973	3,199	2,812	3,295	3,072	3,600
\$75,001–\$100,000	2,341	1,952	3,589	3,727	3,831	3,448	3,885	3,758	4,215
\$100,001–\$500,000	4,611	3,927	6,133	6,334	6,596	5,936	6,671	6,498	7,249
\$500,001–\$1,000,000	1,051	860	1,058	1,094	1,091	1,045	1,098	1,109	1,109
\$1,000,001–\$2,000,000	679	539	710	684	687	630	714	714	688
More than \$2,000,000	1,063	768	1,209	1,077	1,044	983	1,087	1,049	1,056
Customer Bought									
Total	12,462	10,890	18,355	19,142	20,535	18,585	21,380	20,354	21,742
0–\$25,000	5,574	4,942	8,634	9,103	10,110	8,998	10,696	9,918	10,784
\$25,001–\$50,000	2,143	1,874	3,644	3,798	3,883	3,586	3,985	3,849	4,098
\$50,001–\$75,000	593	562	1,012	1,071	1,138	1,024	1,168	1,121	1,232
\$75,001–\$100,000	834	697	1,318	1,376	1,403	1,295	1,421	1,411	1,480
\$100,001–\$500,000	1,879	1,658	2,335	2,440	2,584	2,377	2,622	2,593	2,737
\$500,001–\$1,000,000	515	437	466	474	504	475	521	521	499
\$1,000,001–\$2,000,000	352	291	337	328	347	308	369	364	347
More than \$2,000,000	574	429	609	552	566	521	598	577	565
Customer Sold									
Total	8,583	8,433	12,885	13,268	15,100	13,279	16,146	14,174	16,731
0–\$25,000	4,064	4,393	6,171	6,586	8,055	7,057	8,703	7,636	8,786
\$25,001–\$50,000	1,513	1,515	2,415	2,477	2,758	2,421	2,945	2,565	3,089
\$50,001–\$75,000	448	458	821	806	889	759	955	806	1,030
\$75,001–\$100,000	625	542	845	851	893	769	934	821	1,042
\$100,001–\$500,000	1,154	986	1,654	1,644	1,677	1,462	1,761	1,547	1,929
\$500,001–\$1,000,000	251	191	301	310	290	286	297	273	304
\$1,000,001–\$2,000,000	180	130	231	214	198	191	205	194	202
More than \$2,000,000	348	218	446	381	340	334	347	332	349
Inter-Dealer									
Total	12,557	11,023	19,354	20,068	21,875	19,593	22,378	21,607	23,823
0–\$25,000	6,523	5,932	10,094	10,451	11,850	10,580	12,343	11,599	12,825
\$25,001–\$50,000	2,373	2,063	4,031	4,174	4,407	3,961	4,483	4,367	4,797
\$50,001–\$75,000	627	563	1,071	1,096	1,172	1,028	1,172	1,145	1,337
\$75,001–\$100,000	882	713	1,426	1,500	1,535	1,383	1,531	1,527	1,693
\$100,001–\$500,000	1,578	1,283	2,144	2,250	2,335	2,097	2,288	2,359	2,583
\$500,001–\$1,000,000	285	232	291	310	296	284	280	315	306
\$1,000,001–\$2,000,000	147	118	143	142	142	132	140	155	139
More than \$2,000,000	142	120	154	144	138	128	142	140	142

Trade Type and Size, 2020–2024

Average daily number of unique securities

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
All Trades									
Total	13,869	13,580	19,444	20,689	23,282	20,713	24,577	22,389	25,348
0–\$25,000	7,171	7,253	10,447	11,272	13,355	11,774	14,236	12,895	14,454
\$25,001–\$50,000	2,937	2,776	4,568	4,817	5,237	4,650	5,509	5,026	5,741
\$50,001–\$75,000	915	888	1,539	1,608	1,764	1,538	1,857	1,672	1,981
\$75,001–\$100,000	1,219	1,048	1,709	1,802	1,879	1,662	1,942	1,810	2,092
\$100,001–\$500,000	2,318	2,052	2,996	3,155	3,294	2,899	3,408	3,187	3,665
\$500,001–\$1,000,000	585	485	606	631	630	593	639	640	646
\$1,000,001–\$2,000,000	399	318	429	420	419	381	436	433	424
More than \$2,000,000	554	409	642	595	560	525	584	562	567
Customer Bought									
Total	9,048	8,560	12,968	13,755	15,176	13,575	16,027	14,741	16,299
0–\$25,000	4,539	4,337	6,779	7,369	8,535	7,525	9,121	8,331	9,123
\$25,001–\$50,000	1,859	1,706	2,996	3,190	3,340	3,042	3,473	3,265	3,570
\$50,001–\$75,000	559	539	948	1,004	1,071	958	1,108	1,049	1,167
\$75,001–\$100,000	740	641	1,121	1,179	1,217	1,104	1,244	1,205	1,311
\$100,001–\$500,000	1,493	1,347	1,924	1,996	2,094	1,876	2,146	2,059	2,285
\$500,001–\$1,000,000	396	335	388	385	395	369	406	401	403
\$1,000,001–\$2,000,000	277	226	289	273	276	247	292	283	279
More than \$2,000,000	408	297	465	409	388	360	410	389	393
Customer Sold									
Total	7,672	7,733	11,533	11,900	13,547	12,008	14,493	12,728	14,904
0–\$25,000	3,797	4,143	5,750	6,159	7,566	6,644	8,177	7,182	8,226
\$25,001–\$50,000	1,458	1,472	2,332	2,393	2,672	2,346	2,860	2,481	2,989
\$50,001–\$75,000	440	451	808	794	876	748	942	794	1,014
\$75,001–\$100,000	606	531	824	828	870	748	911	798	1,016
\$100,001–\$500,000	1,088	948	1,596	1,579	1,603	1,399	1,688	1,473	1,844
\$500,001–\$1,000,000	239	184	294	301	279	276	286	263	293
\$1,000,001–\$2,000,000	171	126	225	208	191	184	198	188	195
More than \$2,000,000	305	199	402	345	304	300	310	297	310
Inter-Dealer									
Total	7,473	7,103	11,018	11,403	12,897	11,504	13,289	12,577	14,160
0–\$25,000	4,214	4,100	6,328	6,542	7,673	6,847	7,996	7,490	8,323
\$25,001–\$50,000	1,562	1,426	2,587	2,668	2,879	2,578	2,947	2,814	3,165
\$50,001–\$75,000	435	401	752	762	828	725	835	800	946
\$75,001–\$100,000	577	480	892	937	979	869	981	963	1,100
\$100,001–\$500,000	991	838	1,326	1,389	1,480	1,297	1,468	1,481	1,667
\$500,001–\$1,000,000	188	154	195	206	202	190	193	213	210
\$1,000,001–\$2,000,000	100	81	100	98	100	92	101	109	99
More than \$2,000,000	96	81	106	100	95	88	99	95	98

Average Daily Trade Size, 2020–2024 By customer trade



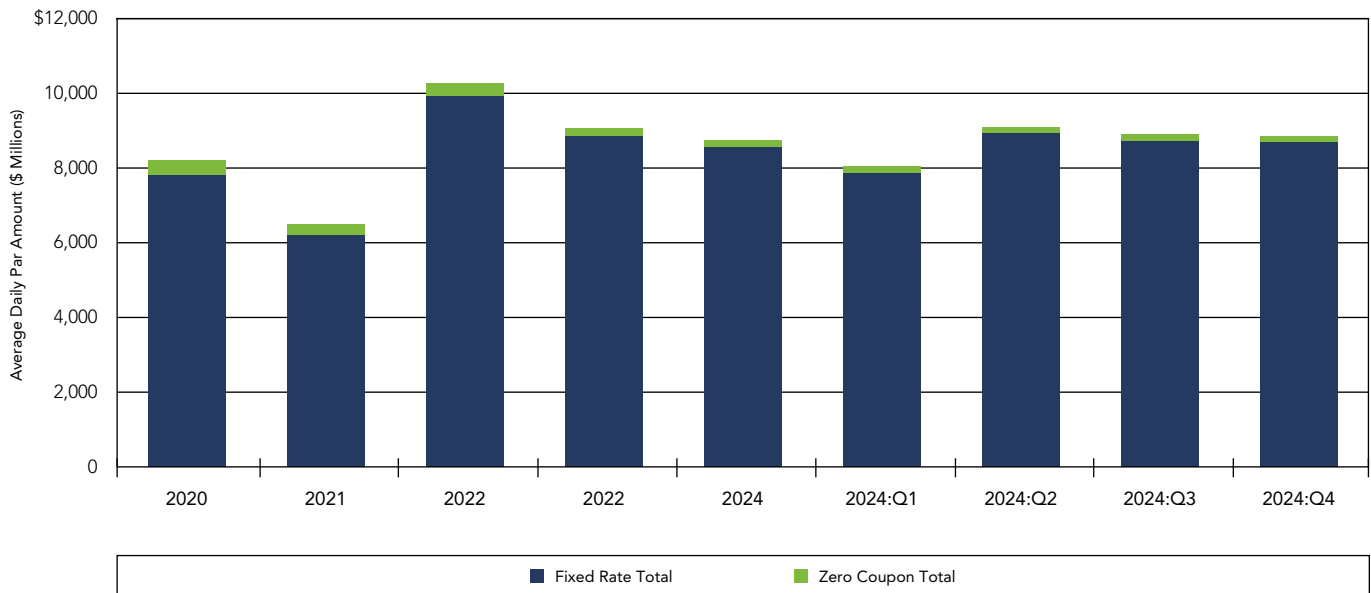
Quarter	Customer Bought (\$)	Customer Sold (\$)
20:Q1	596,512	584,055
20:Q2	479,497	439,682
20:Q3	538,134	403,755
20:Q4	482,574	367,821
2020	525,276	458,012
21:Q1	435,553	309,724
21:Q2	441,866	293,541
21:Q3	448,529	272,908
21:Q4	471,612	290,684
2021	449,038	292,471
22:Q1	452,643	374,051
22:Q2	398,916	410,070
22:Q3	405,241	406,403
22:Q4	342,583	334,759
2022	393,654	378,454
23:Q1	400,708	380,119
23:Q2	386,862	332,682
23:Q3	355,338	317,317
23:Q4	314,218	274,646
2023	358,986	318,497
24:Q1	354,270	288,947
24:Q2	347,921	243,695
24:Q3	352,890	267,062
24:Q4	331,781	244,543
2024	346,222	259,137

Part Six

Municipal Fixed Rate Securities—Par Amount Traded and Number of Trades, 2020–2024

Transaction Summary—Fixed Rate Securities, 2020–2024

Average daily par amount in \$ millions



	2020	2021	2022	2023	2024
Fixed Rate Total	7,793.5	6,200.9	9,905.8	8,836.4	8,556.2
0–\$25,000	238.0	222.4	377.2	389.4	436.9
\$25,001–\$50,000	243.6	219.1	411.2	426.8	449.2
\$50,001–\$75,000	106.5	101.5	188.1	192.2	206.3
\$75,001–\$100,000	205.3	176.5	330.9	344.4	354.9
\$100,001–\$500,000	1,032.4	900.5	1,346.6	1,396.8	1,447.0
\$500,001–\$1,000,000	724.0	622.7	752.9	776.5	779.0
\$1,000,001–\$2,000,000	840.9	704.5	926.3	887.5	884.2
More than \$2,000,000	4,402.9	3,253.8	5,572.5	4,422.8	3,998.7

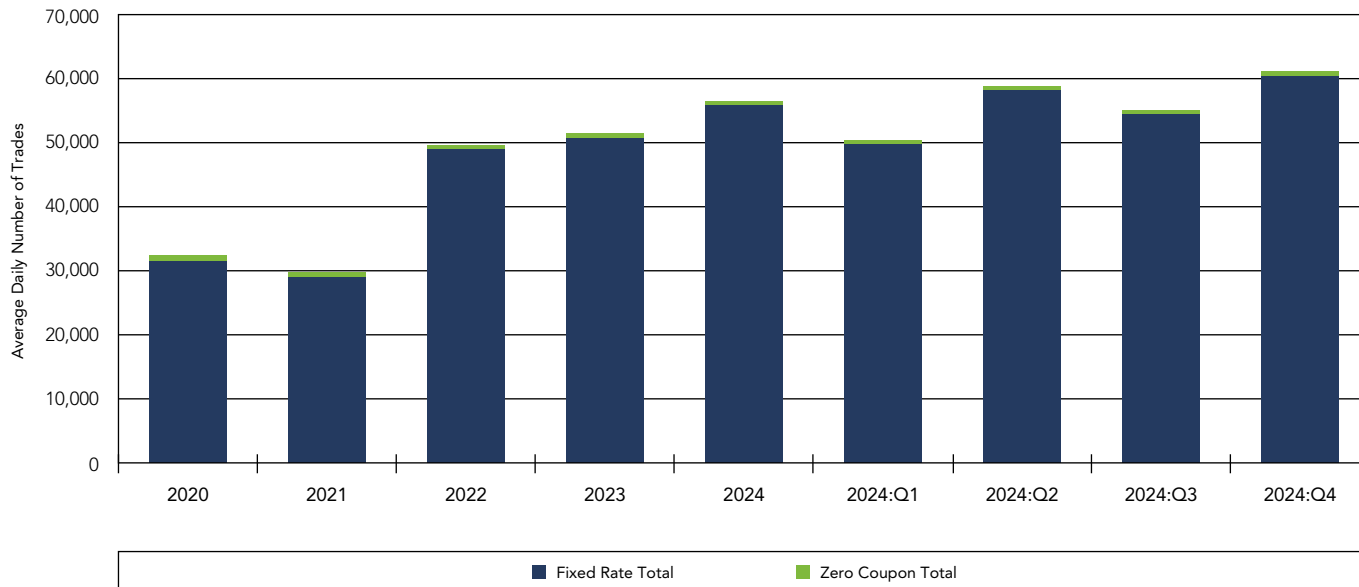
	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate Total	7,845.1	8,940.8	8,723.7	8,688.0
0–\$25,000	390.0	462.7	423.6	469.5
\$25,001–\$50,000	405.4	463.0	438.9	487.7
\$50,001–\$75,000	181.6	212.4	198.1	232.1
\$75,001–\$100,000	318.8	359.7	349.2	390.3
\$100,001–\$500,000	1,320.5	1,454.3	1,444.5	1,562.9
\$500,001–\$1,000,000	746.3	785.9	798.9	783.4
\$1,000,001–\$2,000,000	807.9	927.5	933.3	865.3
More than \$2,000,000	3,674.6	4,275.2	4,137.1	3,896.8

	2020	2021	2022	2023	2024
Zero Coupon Total	420.1	290.4	364.3	228.1	174.5
0–\$25,000	6.0	5.0	4.8	4.9	4.5
\$25,001–\$50,000	7.3	5.8	5.9	6.1	5.4
\$50,001–\$75,000	3.5	2.7	2.7	2.9	2.8
\$75,001–\$100,000	6.1	4.7	5.0	5.4	4.6
\$100,001–\$500,000	24.6	16.8	18.4	19.1	16.2
\$500,001–\$1,000,000	14.1	9.2	10.9	9.8	8.3
\$1,000,001–\$2,000,000	14.7	10.5	12.4	10.5	9.1
More than \$2,000,000	343.8	235.7	304.2	169.4	123.6

	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Zero Coupon Total	204.1	156.0	165.1	174.0
0–\$25,000	4.6	4.6	4.3	4.4
\$25,001–\$50,000	5.5	5.1	5.4	5.5
\$50,001–\$75,000	2.7	2.6	2.7	3.2
\$75,001–\$100,000	4.6	4.0	4.3	5.5
\$100,001–\$500,000	16.8	14.4	15.3	18.1
\$500,001–\$1,000,000	10.3	7.2	6.8	9.1
\$1,000,001–\$2,000,000	10.3	7.8	7.7	10.5
More than \$2,000,000	149.2	110.1	118.4	117.8

Transaction Summary—Fixed Rate Securities, 2020–2024

Average daily number of trades



	2020	2021	2022	2023	2024
Fixed Rate Total	31,538	28,985	48,878	50,686	55,757
0–\$25,000	15,668	14,841	24,421	25,605	29,502
\$25,001–\$50,000	5,824	5,286	9,902	10,243	10,848
\$50,001–\$75,000	1,603	1,531	2,847	2,906	3,129
\$75,001–\$100,000	2,127	1,834	3,440	3,575	3,692
\$100,001–\$500,000	4,166	3,697	5,827	6,027	6,303
\$500,001–\$1,000,000	900	781	953	989	991
\$1,000,001–\$2,000,000	552	467	616	591	589
More than \$2,000,000	698	547	872	749	702

	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate Total	49,754	58,148	54,454	60,428
0–\$25,000	26,129	31,214	28,660	31,874
\$25,001–\$50,000	9,771	11,220	10,587	11,770
\$50,001–\$75,000	2,749	3,227	3,004	3,521
\$75,001–\$100,000	3,312	3,745	3,628	4,066
\$100,001–\$500,000	5,659	6,384	6,213	6,927
\$500,001–\$1,000,000	947	999	1,018	998
\$1,000,001–\$2,000,000	538	617	622	578
More than \$2,000,000	649	740	722	694

	2020	2021	2022	2023	2024
Zero Coupon Total	884	710	727	762	659
0–\$25,000	441	375	368	392	335
\$25,001–\$50,000	176	141	143	149	132
\$50,001–\$75,000	53	41	41	45	43
\$75,001–\$100,000	64	49	52	57	48
\$100,001–\$500,000	103	73	79	83	71
\$500,001–\$1,000,000	18	12	14	12	10
\$1,000,001–\$2,000,000	10	7	8	7	6
More than \$2,000,000	20	12	21	17	13

	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Zero Coupon Total	683	651	628	673
0–\$25,000	352	353	315	319
\$25,001–\$50,000	136	127	132	134
\$50,001–\$75,000	42	40	42	49
\$75,001–\$100,000	48	42	45	57
\$100,001–\$500,000	71	64	69	81
\$500,001–\$1,000,000	13	9	8	11
\$1,000,001–\$2,000,000	7	5	5	7
More than \$2,000,000	16	12	11	13

Source of Repayment and Trade Size, 2020–2024

Average daily par amount in \$ millions

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate Total	7,793.0	6,200.9	9,905.8	8,836.4	8,556.2	7,845.1	8,940.8	8,723.7	8,688.0
General Obligation	2,707.9	2,160.0	3,081.6	3,051.1	2,889.0	2,672.3	3,090.0	2,947.0	2,839.7
Revenue	4,860.6	3,841.0	6,522.1	5,485.9	5,322.2	4,861.3	5,537.0	5,404.7	5,467.4
Double Barrel	224.5	199.9	302.1	299.4	345.1	311.5	313.8	372.0	380.9
Zero Coupon Total	420.1	384.5	364.3	228.1	174.5	204.1	156.0	165.1	174.0
General Obligation	75.5	142.8	81.5	69.6	52.0	62.6	53.7	40.8	51.4
Revenue	342.5	239.5	278.5	156.4	119.4	140.2	97.7	121.0	119.4
Double Barrel	2.1	2.2	4.3	2.2	3.1	1.3	4.5	3.3	3.2

Average daily number of trades

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate Total	31,538	28,985	48,878	50,686	55,757	49,754	58,148	54,454	60,428
General Obligation	11,395	10,967	18,164	19,442	21,304	18,969	22,516	20,895	22,746
Revenue	19,109	17,000	28,929	29,257	32,085	28,746	33,163	31,212	35,079
Double Barrel	1,034	1,018	1,784	1,987	2,367	2,039	2,468	2,346	2,602
Zero Coupon Total	884	402	727	762	659	683	651	628	673
General Obligation	446	63	413	409	369	379	371	353	371
Revenue	423	326	298	339	277	290	267	263	287
Double Barrel	16	13	15	14	13	14	13	12	14

Tax Status and Trade Size, 2020–2024

Average daily par amount in \$ millions

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate									
Total	7,793.4	6,200.9	9,905.8	8,836.4	8,556.2	7,845.1	8,940.8	8,723.7	8,688.0
Tax Exempt	6,010.3	4,652.3	8,275.1	7,606.7	7,434.2	6,915.5	7,767.4	7,557.0	7,477.9
Taxable	1,554.4	1,378.3	1,132.9	854.1	789.3	707.4	812.3	795.0	839.1
AMT	228.7	170.3	497.8	375.6	332.7	222.2	361.1	371.7	371.0
Zero Coupon									
Total	420.1	290.4	364.2	228.1	174.5	204.1	156.0	165.1	174.0
Tax Exempt	396.8	269.6	341.2	219.0	161.9	181.1	147.0	157.7	162.5
Taxable	23.1	20.6	23.0	9.2	11.6	23.0	9.0	7.4	7.5
AMT	0.2	0.1	<0.1	<0.1	1.0	–	–	–	4.1

Average daily number of trades

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate									
Total	31,538	28,985	48,878	50,686	55,757	49,754	58,148	54,454	60,428
Tax Exempt	28,535	26,221	45,449	47,129	51,839	46,139	54,326	50,524	56,140
Taxable	2,563	2,424	2,566	2,625	2,924	2,769	2,857	2,918	3,142
AMT	440	340	863	933	994	845	965	1,012	1,145
Zero Coupon									
Total	884	710	727	762	659	683	651	628	673
Tax Exempt	800	639	674	715	608	618	603	584	628
Taxable	84	71	53	47	50	66	48	44	43
AMT	<1	<1	<1	<1	<1	–	–	–	2

Sector—Fixed Rate Securities, 2020–2024

Average daily par amount in \$ millions

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate Total	7,793.5	6,200.9	9,905.8	8,836.4	8,556.2	7,845.1	8,940.8	8,723.7	8,688.0
Education	1,683.8	1,373.8	1,968.1	2,039.6	1,981.3	1,997.9	2,212.2	1,889.6	1,829.9
Health	511.5	349.0	805.8	632.1	552.8	540.8	560.7	553.3	555.9
Housing	190.0	235.6	232.8	327.4	391.6	371.0	388.4	372.4	433.6
Tax-Revenue	908.7	724.1	1,374.4	1,024.7	979.6	955.4	862.2	977.9	1,120.2
Transportation	875.6	658.9	1,271.0	1,035.0	926.1	778.3	842.6	1,044.5	1,030.5
Utility	911.2	735.6	1,234.6	1,200.5	1,161.7	971.0	1,248.4	1,271.2	1,148.5
Various Purpose	1,305.1	1,035.3	1,536.2	1,313.8	1,306.1	1,123.1	1,388.7	1,375.8	1,329.7
Other Sectors	1,407.5	1,088.6	1,482.9	1,263.4	1,257.1	1,107.6	1,437.7	1,239.0	1,239.8
Zero Coupon Total	420.1	290.4	364.3	228.1	174.5	204.1	156.0	165.1	174.0
Education	74.3	52.6	74.9	67.9	52.3	65.8	52.6	39.4	52.1
Health	4.5	2.7	3.4	2.7	2.2	1.4	1.4	3.0	3.0
Housing	0.5	0.1	4.6	0.3	3.4	5.7	0.1	0.3	7.5
Tax-Revenue	200.0	63.1	100.3	57.9	27.4	37.0	22.5	25.6	24.7
Transportation	19.9	12.6	41.2	31.6	25.2	37.6	25.7	15.9	22.0
Utility	2.6	2.2	2.8	2.4	1.9	1.9	1.8	1.4	2.3
Various Purpose	3.7	8.5	12.8	6.2	2.2	2.6	3.6	1.6	1.1
Other Sectors	114.6	148.6	124.2	59.1	60.0	52.1	48.4	77.9	61.2

Average daily number of trades

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate Total	31,538	28,985	48,878	50,686	55,757	49,754	58,148	54,454	60,428
Education	7,974	7,568	12,549	13,667	15,291	13,897	16,376	14,874	15,971
Health	2,242	1,765	3,458	3,375	3,343	3,249	3,284	3,303	3,532
Housing	717	736	1,171	1,718	2,079	1,925	2,071	2,003	2,312
Tax-Revenue	5,812	3,015	5,253	4,906	5,497	4,882	5,644	5,255	6,181
Transportation	3,294	2,438	4,516	4,507	4,774	4,118	4,862	4,711	5,374
Utility	3,156	4,058	6,783	7,120	7,955	6,973	8,284	7,807	8,716
Various Purpose	4,110	4,146	7,261	7,150	7,931	6,897	8,449	7,676	8,660
Other Sectors	4,235	5,258	7,887	8,244	8,886	7,812	9,177	8,826	9,682
Zero Coupon Total	884	710	727	762	659	683	651	628	673
Education	416	348	369	377	343	351	337	332	351
Health	20	18	11	10	11	10	10	11	12
Housing	1	1	1	1	1	1	1	1	0
Tax-Revenue	86	124	100	101	89	96	86	85	90
Transportation	161	79	92	121	91	97	86	87	94
Utility	109	40	35	36	35	32	35	33	40
Various Purpose	48	34	56	52	32	44	36	23	25
Other Sectors	43	66	63	64	57	53	60	57	60

Remaining Maturity—Fixed Rate Securities, 2020–2024

Average daily par amount in \$ millions

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate Total	7,793.5	6,200.9	9,905.8	8,836.4	8,556.2	7,845.1	8,940.8	8,723.7	8,688.0
0–9 Months	354.3	253.3	384.0	327.5	347.8	367.3	396.2	281.4	347.8
>9 Months–2 Years	491.9	399.5	574.2	535.0	571.1	485.8	650.7	615.5	529.7
>2 Years–5 Years	835.3	693.4	1,142.8	1,000.8	1,068.5	994.3	1,144.4	1,021.3	1,111.8
>5 Years–10 Years	1,383.5	1,199.2	1,862.9	1,716.4	1,771.8	1,503.8	1,893.9	1,854.9	1,823.9
>10 Years–15 Years	1,302.7	1,068.8	1,446.3	1,371.4	1,415.7	1,293.8	1,454.7	1,424.6	1,484.4
>15 Years–20 Years	1,152.3	875.2	1,331.6	1,241.4	1,132.0	1,046.9	1,165.2	1,168.2	1,144.2
>20 Years–30 Years	1,816.5	1,357.3	2,651.4	2,230.5	1,790.8	1,698.2	1,712.3	1,854.6	1,892.5
More than 30 Years	453.4	345.6	510.4	412.8	457.4	453.9	521.6	502.7	352.4
Unavailable	3.7	8.6	2.2	0.7	1.2	1.0	1.9	0.5	1.4
Zero Coupon Total	420.1	290.4	364.2	228.1	174.5	204.1	156.0	165.1	174.0
0–9 Months	5.2	3.1	9.4	7.4	5.1	3.8	5.3	4.2	7.1
>9 Months–2 Years	5.7	5.9	10.6	8.8	5.9	4.6	6.4	6.9	5.9
>2 Years–5 Years	15.7	10.1	22.3	14.4	13.7	17.9	11.7	9.8	15.7
>5 Years–10 Years	23.2	19.1	27.9	30.2	20.4	26.0	22.4	12.1	21.4
>10 Years–15 Years	27.1	20.2	30.1	24.1	24.3	20.2	23.5	26.0	27.1
>15 Years–20 Years	22.3	13.8	29.6	18.6	13.3	19.3	13.1	10.0	11.2
>20 Years–30 Years	132.3	50.4	103.9	66.6	47.3	64.7	33.5	44.7	47.1
More than 30 Years	188.6	167.6	130.4	58.0	44.4	47.7	40.1	51.4	38.6
Unavailable	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Average daily number of trades

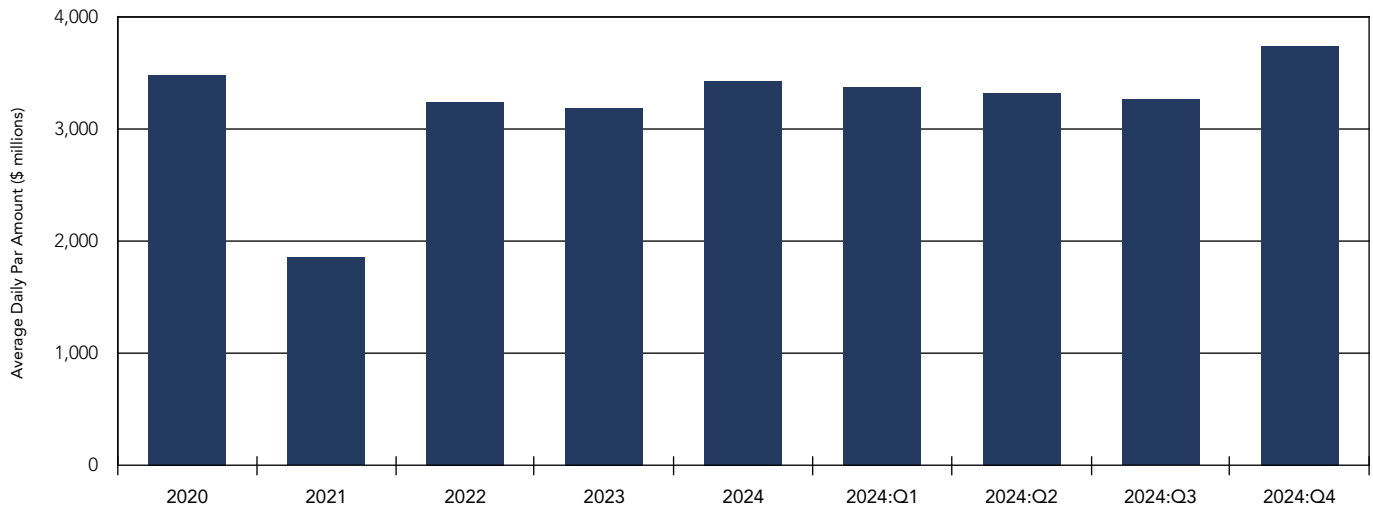
	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Fixed Rate Total	31,538	28,985	48,878	50,686	55,757	49,754	58,148	54,454	60,428
0–9 Months	1,608	1,542	2,128	2,395	3,018	2,883	3,600	2,421	3,170
>9 Months–2 Years	2,490	2,296	3,838	4,125	4,860	4,355	5,292	4,672	5,103
>2 Years–5 Years	5,263	4,964	8,518	9,061	10,565	9,550	11,736	9,996	10,949
>5 Years–10 Years	7,649	7,685	12,986	13,100	14,292	12,291	15,130	14,007	15,660
>10 Years–15 Years	5,521	5,151	8,676	8,242	8,712	7,491	8,583	8,550	10,164
>15 Years–20 Years	3,926	3,235	5,308	5,503	5,496	4,741	5,490	5,491	6,227
>20 Years–30 Years	4,479	3,631	6,644	7,327	7,746	7,364	7,172	8,174	8,248
More than 30 Years	587	452	772	926	1,062	1,074	1,138	1,140	899
Unavailable	16	30	8	6	5	4	5	4	8
Zero Coupon Total	884	710	726	762	659	683	651	628	673
0–9 Months	40	34	39	44	47	47	63	38	42
>9 Months–2 Years	75	69	72	79	68	68	58	70	74
>2 Years–5 Years	171	142	149	141	144	131	143	141	159
>5 Years–10 Years	232	195	190	204	177	187	183	159	178
>10 Years–15 Years	154	118	126	114	91	92	84	93	96
>15 Years–20 Years	92	67	71	77	55	70	49	51	53
>20 Years–30 Years	89	67	68	86	70	82	65	70	63
More than 30 Years	30	16	12	17	7	8	4	6	8
Unavailable	1	1	<1	<1	<1	<1	<1	<1	<1

Part Seven

Municipal Variable Rate Securities—Par Amount Traded and Number of Trades, 2020–2024

Transaction Summary—Variable Rate Securities, 2020–2024

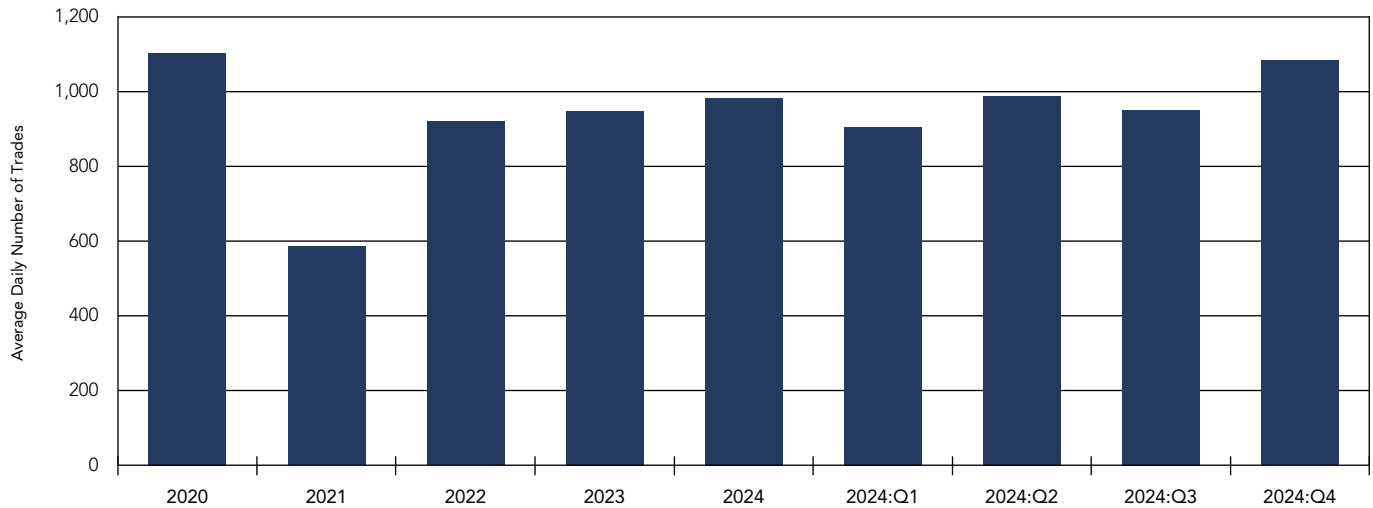
Average daily par amount in \$ millions



	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Total	3,482.3	1,853.0	3,242.7	3,189.3	3,426.0	3,376.4	3,319.8	3,261.8	3,741.9
0–\$25,000	0.9	0.8	1.4	1.8	2.1	1.7	2.0	2.1	2.4
\$25,001–\$50,000	1.2	1.0	1.8	2.2	2.4	2.1	2.4	2.2	2.8
\$50,001–\$75,000	0.8	0.7	1.1	1.3	1.5	1.2	1.6	1.5	1.8
\$75,001–\$100,000	14.6	6.6	9.4	9.1	8.4	8.2	9.1	7.9	8.4
\$100,001–\$500,000	93.5	42.3	62.8	61.8	56.2	54.3	57.0	54.2	59.1
\$500,001–\$1,000,000	101.2	48.9	70.4	72.3	66.9	64.3	67.0	61.4	74.6
\$1,000,001–\$2,000,000	167.3	88.0	125.9	125.5	133.0	124.0	132.6	124.6	150.1
More than \$2,000,000	3,102.8	1,664.6	2,969.8	2,915.3	3,155.6	3,120.6	3,048.2	3,007.7	3,442.6

Transaction Summary—Variable Rate Securities, 2020–2024

Average daily number of trades



	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Variable Rate Total	1,103	586	920	948	983	905	988	951	1,084
0–\$25,000	51	49	107	130	154	128	148	158	179
\$25,001–\$50,000	28	24	43	53	58	51	57	55	70
\$50,001–\$75,000	11	11	16	20	23	18	24	23	27
\$75,001–\$100,000	147	67	94	92	85	83	92	81	85
\$100,001–\$500,000	330	149	220	215	206	192	209	202	223
\$500,001–\$1,000,000	127	61	87	90	84	80	84	77	94
\$1,000,001–\$2,000,000	111	58	82	81	87	81	87	82	97
More than \$2,000,000	300	167	270	267	286	273	286	275	308

Variable Rate Demand Obligations¹ Trade Type and Size, 2020–2024

Average daily par amount in \$ millions

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Total	3,208.6	1,626.7	2,818.7	2,720.3	2,987.8	2,988.1	2,897.3	2,908.3	3,156.3
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	<0.1	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	13.2	5.6	7.4	6.9	6.2	6.2	6.7	5.8	6.1
\$100,001–\$500,000	82.9	34.9	49.6	47.1	41.8	41.1	43.4	40.2	42.4
\$500,001–\$1,000,000	91.6	42.6	59.0	60.3	54.8	53.9	56.1	50.8	58.2
\$1,000,001–\$2,000,000	153.0	77.6	108.0	106.5	111.5	105.3	112.7	106.9	120.7
More than \$2,000,000	2,867.9	1,466.2	2,594.8	2,499.4	2,773.5	2,781.5	2,678.3	2,704.4	2,928.7
Customer Bought Total	1,567.1	786.0	1,349.9	1,316.6	1,473.6	1,435.2	1,454.0	1,437.0	1,566.3
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	<0.1	<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	2.9	1.1	2.2	1.7	1.5	1.4	1.5	1.3	1.7
\$100,001–\$500,000	26.2	11.2	20.1	16.8	13.9	13.6	13.4	13.1	15.4
\$500,001–\$1,000,000	37.2	18.1	26.4	25.9	23.2	22.7	22.7	21.4	25.9
\$1,000,001–\$2,000,000	72.5	37.3	52.4	50.8	53.0	50.2	52.9	51.0	57.7
More than \$2,000,000	1,428.2	718.2	1,248.8	1,221.3	1,382.1	1,347.4	1,363.5	1,350.1	1,465.5
Customer Sold Total	1,530.0	754.8	1,307.1	1,268.4	1,407.7	1,419.4	1,346.3	1,388.8	1,475.8
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	<0.1	<0.1	<0.1	<0.1
\$75,001–\$100,000	7.5	3.5	3.7	4.1	3.9	3.8	4.3	3.8	3.7
\$100,001–\$500,000	43.5	18.7	20.9	23.9	23.5	22.2	25.2	23.0	23.4
\$500,001–\$1,000,000	44.6	20.6	25.3	28.5	27.8	26.5	29.1	26.5	29.0
\$1,000,001–\$2,000,000	70.2	35.0	46.7	48.2	52.4	48.5	52.9	50.5	57.5
More than \$2,000,000	1,364.1	676.9	1,210.4	1,163.7	1,300.0	1,318.3	1,234.8	1,284.9	1,362.0
Inter-Dealer Total	111.6	86.1	161.9	135.3	106.5	133.4	96.9	82.5	114.3
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	<0.1	<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	2.7	1.0	1.5	1.1	0.8	1.0	0.9	0.7	0.7
\$100,001–\$500,000	13.2	4.9	8.6	6.4	4.4	5.3	4.8	4.1	3.5
\$500,001–\$1,000,000	9.9	3.9	7.4	5.9	3.8	4.7	4.3	2.9	3.4
\$1,000,001–\$2,000,000	10.3	5.2	8.8	7.6	6.1	6.6	6.9	5.3	5.5
More than \$2,000,000	75.6	71.0	135.6	114.4	91.4	115.8	80.0	69.3	101.2

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, 2020–2024

Average daily number of trades

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Total	917	430	618	600	602	580	615	583	628
0–\$25,000	3	1	1	2	2	1	2	2	3
\$25,001–\$50,000	2	1	1	2	2	1	2	2	2
\$50,001–\$75,000	1	1	1	<1	1	<1	1	1	1
\$75,001–\$100,000	132	56	74	69	62	62	67	58	61
\$100,001–\$500,000	288	119	166	157	147	141	151	143	152
\$500,001–\$1,000,000	115	54	73	75	70	68	71	65	75
\$1,000,001–\$2,000,000	102	52	70	70	73	69	74	71	79
More than \$2,000,000	274	147	231	225	245	237	246	241	255
Customer Bought Total	349	168	266	247	247	236	246	240	267
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	29	11	22	17	15	14	15	13	17
\$100,001–\$500,000	86	36	66	54	46	44	44	44	52
\$500,001–\$1,000,000	47	23	33	32	29	28	29	27	33
\$1,000,001–\$2,000,000	48	25	34	33	35	33	35	34	38
More than \$2,000,000	136	73	112	109	122	116	122	122	127
Customer Sold Total	462	217	277	295	311	294	322	305	323
0–\$25,000	1	1	1	<1	1	<1	1	1	2
\$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	76	35	37	41	39	38	43	38	37
\$100,001–\$500,000	153	65	71	81	85	78	90	85	87
\$500,001–\$1,000,000	56	26	32	35	35	34	37	34	37
\$1,000,001–\$2,000,000	47	23	30	32	35	32	35	33	38
More than \$2,000,000	128	66	106	104	114	111	114	112	119
Inter-Dealer Total	106	45	74	58	43	49	47	38	38
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	27	10	15	11	8	10	9	7	7
\$100,001–\$500,000	49	18	30	22	16	19	17	15	13
\$500,001–\$1,000,000	12	5	9	7	5	6	6	4	4
\$1,000,001–\$2,000,000	7	3	6	5	4	4	5	4	4
More than \$2,000,000	9	8	14	12	9	10	10	8	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.

Auction Rate Securities¹ Trade Type and Size, 2020–2024

Average daily par amount in \$ millions

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Total	21.9	6.8	13.3	8.4	5.7	9.0	7.7	3.1	3.0
0–\$25,000	0.3	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1
\$25,001–\$50,000	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
\$50,001–\$75,000	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
\$75,001–\$100,000	0.4	0.2	0.4	0.3	0.2	0.3	0.3	0.2	0.1
\$100,001–\$500,000	3.3	1.8	3.6	3.4	1.8	3.0	1.9	1.3	1.1
\$500,001–\$1,000,000	2.6	0.9	2.2	1.8	0.9	1.5	0.8	0.6	0.6
\$1,000,001–\$2,000,000	2.6	1.2	1.8	1.1	0.6	1.2	0.5	0.1	0.7
More than \$2,000,000	12.4	2.2	4.9	1.3	1.8	2.5	3.9	0.6	0.3
Customer Bought									
Total	7.1	2.2	3.9	2.6	1.4	2.5	1.3	0.9	0.9
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	0.0	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$75,001–\$100,000	0.1	0.1	0.1	0.1	<0.1	0.2	0.1	<0.1	<0.1
\$100,001–\$500,000	1.1	0.5	1.0	0.9	0.5	0.9	0.5	0.3	0.3
\$500,001–\$1,000,000	0.8	0.3	0.6	0.6	0.3	0.5	0.2	0.3	0.2
\$1,000,001–\$2,000,000	1.0	0.5	0.6	0.4	0.2	0.5	0.0	0.0	0.2
More than \$2,000,000	4.0	0.7	1.4	0.4	0.2	0.1	0.2	0.2	0.1
Customer Sold									
Total	7.2	2.2	3.9	2.58	1.45	2.91	1.34	0.81	0.80
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	0.2	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$100,001–\$500,000	1.1	0.6	1.1	1.3	0.5	1.0	0.5	0.4	0.3
\$500,001–\$1,000,000	0.9	0.3	0.6	0.4	0.3	0.5	0.3	0.1	0.1
\$1,000,001–\$2,000,000	0.8	0.3	0.5	0.3	0.2	0.3	0.2	0.1	0.2
More than \$2,000,000	4.1	0.8	1.4	0.3	0.3	0.9	0.2	<0.1	<0.1
Inter-Dealer									
Total	7.6	2.4	5.5	3.29	2.83	3.61	5.14	1.34	1.29
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	0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
\$100,001–\$500,000	1.2	0.7	1.5	1.2	0.8	1.2	0.9	0.6	0.5
\$500,001–\$1,000,000	0.9	0.3	1.0	0.8	0.3	0.5	0.3	0.2	0.2
\$1,000,001–\$2,000,000	0.9	0.4	0.7	0.4	0.3	0.4	0.3	<0.1	0.4
More than \$2,000,000	4.3	0.8	2.1	0.6	1.3	1.4	3.5	0.3	<0.1

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.

Auction Rate Securities¹ Trade Type and Size, 2020–2024

Average daily number of trades

	2020	2021	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
Total	41	25	33	31	20	29	22	16	14
0–\$25,000	10	8	6	7	5	7	6	5	4
\$25,001–\$50,000	5	3	3	4	3	4	3	2	2
\$50,001–\$75,000	2	2	2	2	1	2	1	1	1
\$75,001–\$100,000	4	2	4	3	2	3	3	2	1
\$100,001–\$500,000	13	7	13	11	7	10	7	5	4
\$500,001–\$1,000,000	3	1	3	2	1	2	1	1	1
\$1,000,001–\$2,000,000	2	1	1	1	<1	1	<1	<1	1
More than \$2,000,000	2	0	1	<1	<1	<1	<1	<1	<1
Customer Bought Total	13	8	12	12	8	13	9	6	5
0–\$25,000	3	3	2	3	3	4	3	3	2
\$25,001–\$50,000	2	1	1	2	1	2	2	1	1
\$50,001–\$75,000	1	1	1	1	1	1	<1	1	0
\$75,001–\$100,000	1	1	1	1	1	2	1	<1	<1
\$100,001–\$500,000	4	2	4	3	2	3	2	1	1
\$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
Customer Sold Total	15	9	9	9	6	8	6	5	4
0–\$25,000	5	3	1	2	1	2	2	1	1
\$25,001–\$50,000	2	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	2	1	1	1	1	1	1	1	1
\$100,001–\$500,000	4	2	4	4	2	3	2	2	1
\$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	8	12	11	7	9	8	6	5
0–\$25,000	3	2	2	2	1	2	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	1	1	1	1	1	1	1	1	<1
\$100,001–\$500,000	5	3	5	4	3	4	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

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 Eight

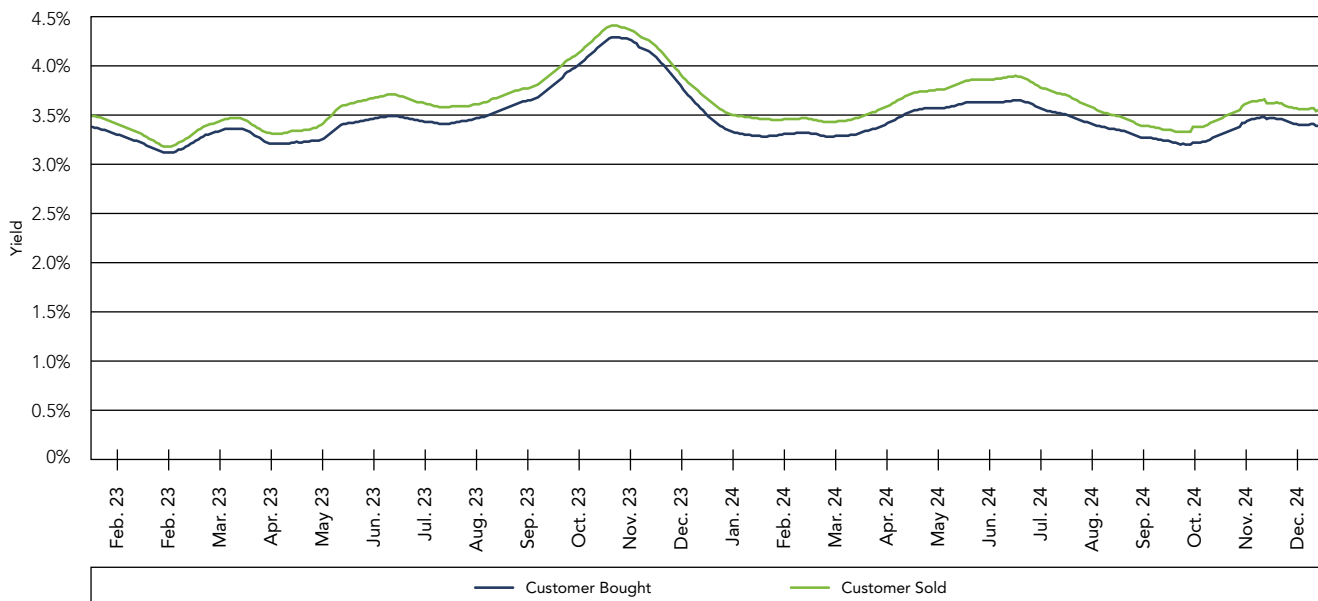
Yield Distributions, 2022–2024

Customer Trade and Size of Tax Exempt, Fixed Rate Securities, 2022–2024

Average daily yields

	2022	2023	2024	2024:Q1	2024:Q2	2024:Q3	2024:Q4
All Trades							
Total	3.01	3.72	3.55	3.44	3.76	3.46	3.52
0–\$25,000	3.03	3.77	3.59	3.48	3.81	3.49	3.55
\$25,001–\$50,000	3.02	3.70	3.54	3.43	3.74	3.45	3.52
\$50,001–\$75,000	2.91	3.61	3.45	3.33	3.65	3.35	3.43
\$75,001–\$100,000	3.00	3.69	3.54	3.44	3.73	3.47	3.52
\$100,001–\$500,000	2.91	3.60	3.46	3.36	3.65	3.39	3.43
\$500,001–\$1,000,000	2.98	3.62	3.49	3.39	3.66	3.42	3.47
\$1,000,001–\$2,000,000	3.05	3.67	3.52	3.40	3.68	3.44	3.52
More than \$2,000,000	3.27	3.82	3.57	3.49	3.72	3.48	3.59
Customer Bought							
Total	2.92	3.59	3.41	3.30	3.60	3.34	3.39
0–\$25,000	2.96	3.64	3.45	3.33	3.65	3.36	3.42
\$25,001–\$50,000	2.94	3.59	3.41	3.31	3.60	3.34	3.39
\$50,001–\$75,000	2.80	3.48	3.31	3.19	3.50	3.23	3.30
\$75,001–\$100,000	2.89	3.57	3.41	3.31	3.58	3.36	3.38
\$100,001–\$500,000	2.75	3.46	3.32	3.20	3.50	3.25	3.29
\$500,001–\$1,000,000	2.86	3.50	3.39	3.28	3.57	3.32	3.39
\$1,000,001–\$2,000,000	3.00	3.60	3.46	3.34	3.62	3.39	3.48
More than \$2,000,000	3.26	3.78	3.55	3.47	3.69	3.46	3.58
Customer Sold							
Total	3.02	3.74	3.58	3.46	3.82	3.48	3.55
0–\$25,000	3.07	3.79	3.62	3.50	3.86	3.51	3.58
\$25,001–\$50,000	2.99	3.72	3.57	3.44	3.80	3.47	3.55
\$50,001–\$75,000	2.92	3.63	3.48	3.35	3.70	3.36	3.46
\$75,001–\$100,000	2.94	3.71	3.57	3.46	3.79	3.47	3.55
\$100,001–\$500,000	2.88	3.61	3.48	3.38	3.69	3.38	3.45
\$500,001–\$1,000,000	2.97	3.62	3.51	3.41	3.69	3.44	3.49
\$1,000,001–\$2,000,000	3.04	3.69	3.55	3.44	3.71	3.48	3.54
More than \$2,000,000	3.29	3.87	3.63	3.55	3.79	3.53	3.63

Daily Yield of Customer Trades of Tax Exempt, Fixed Rate Securities, 2023–2024 30-day trailing average



DATA AVAILABLE FROM MSRB

See the Latest Municipal Market Data in MSRB’s Quarterly Summaries

MSRB’s free quarterly summaries discuss key developments in yields, trading volume, new issuance, and mutual fund flows in the municipal securities market.

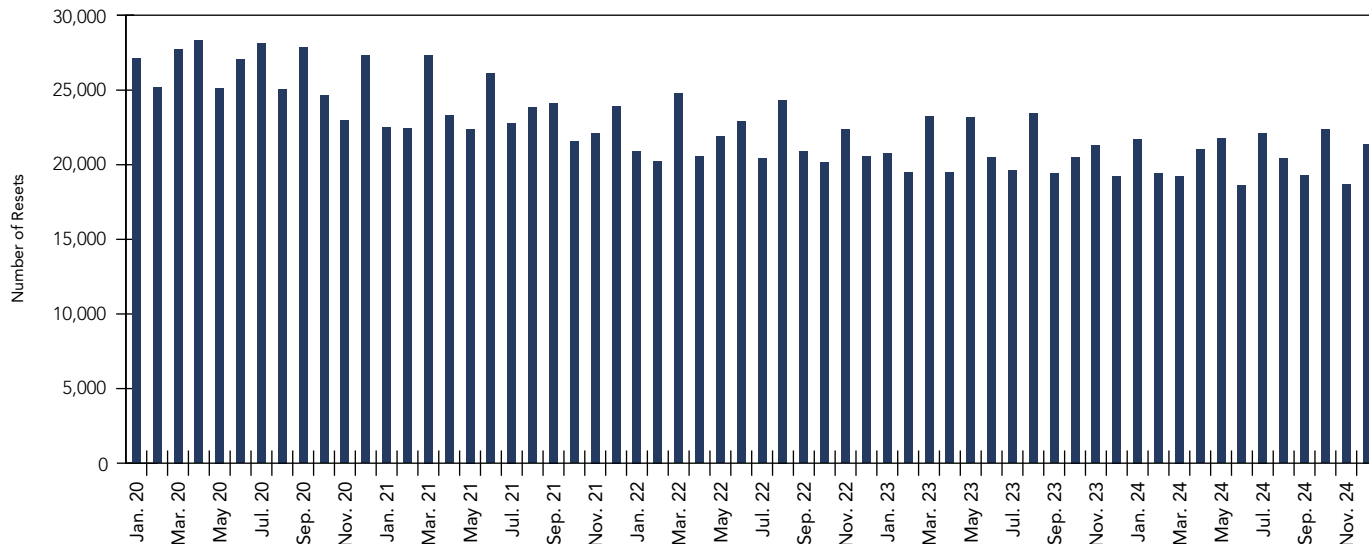
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Part Nine

Municipal Market Variable Securities Rate Resets, 2020–2024

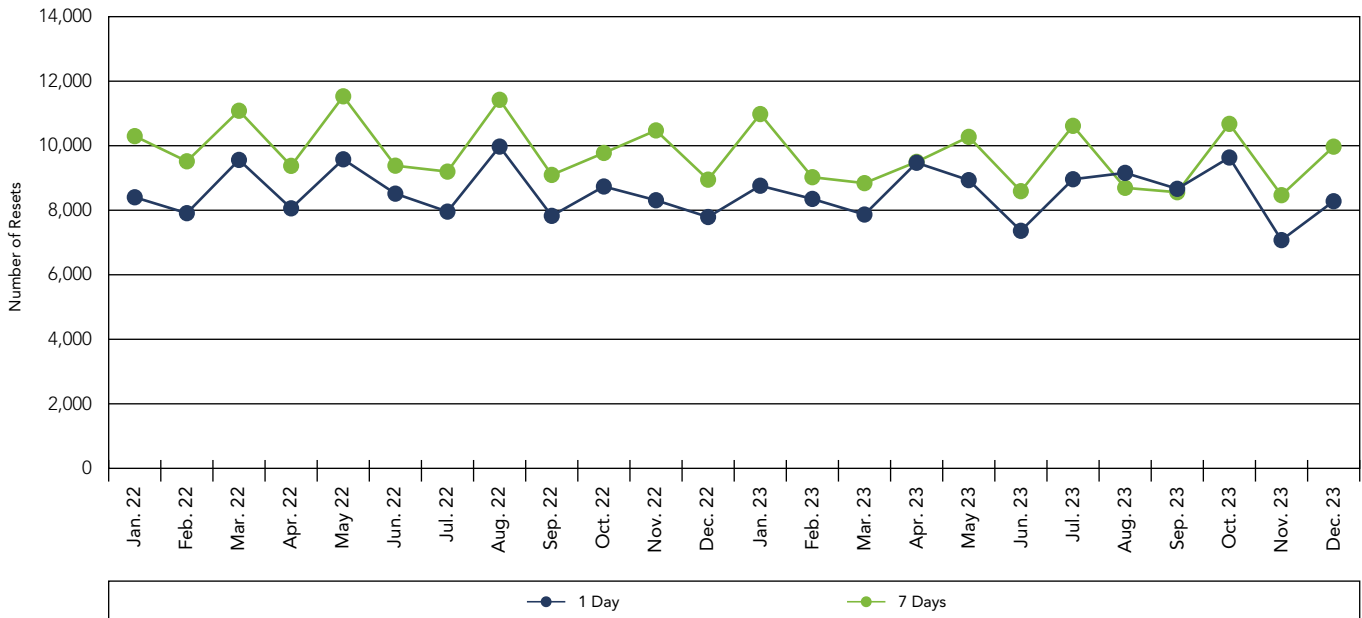
Number of Variable Rate Demand Obligations Rate Resets¹, 2020–2024



	2020	2021	2022	2023	2024
January	27,103	22,515	20,927	20,739	21,735
February	25,157	22,448	20,250	19,470	19,408
March	27,767	27,353	24,774	23,220	19,239
April	28,313	23,297	20,573	19,475	21,021
May	25,148	22,404	21,885	23,170	21,756
June	27,056	26,098	22,879	20,479	18,602
July	28,113	22,797	20,399	19,613	22,128
August	25,077	23,845	24,338	23,425	20,420
September	27,869	24,144	20,905	19,415	19,294
October	24,638	21,563	20,156	20,510	22,358
November	22,986	22,124	22,364	21,295	18,681
December	27,302	23,928	20,534	19,253	21,378

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, 2023–2024

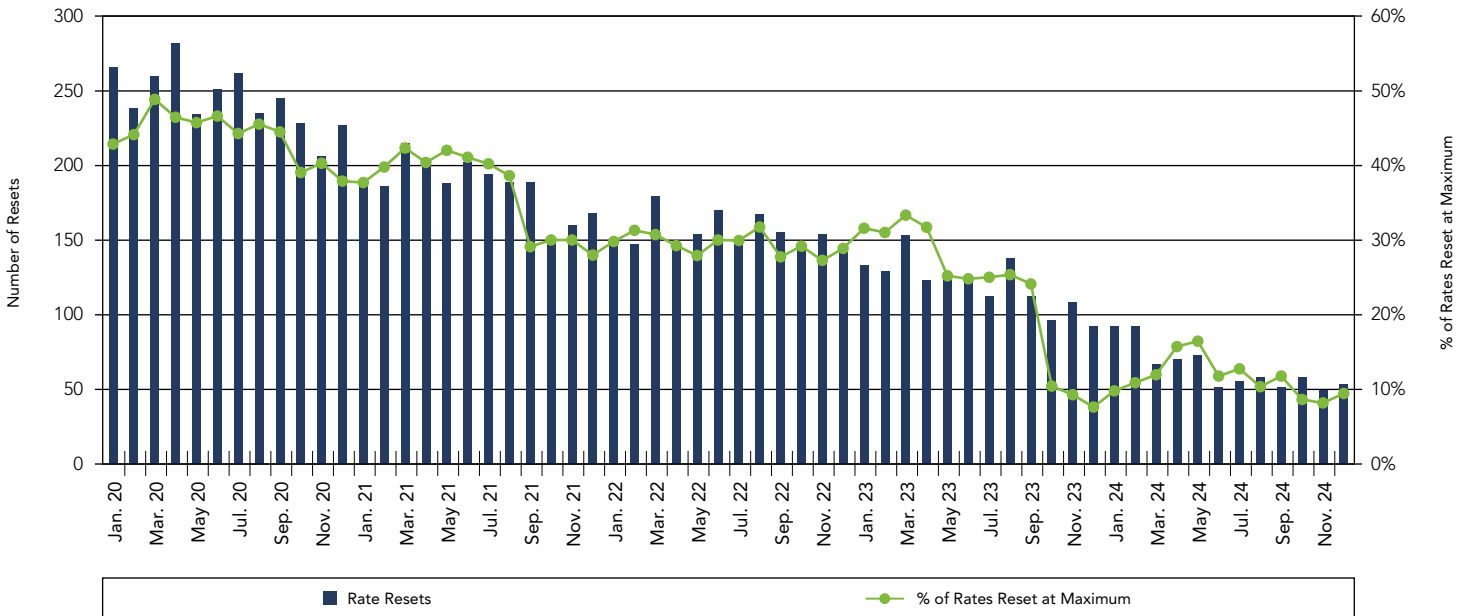


	1 Day	7 Days
Jan. 23	8,402	10,297
Feb. 23	7,909	9,517
Mar. 23	9,560	11,084
Apr. 23	8,059	9,376
May 23	9,579	11,531
Jun. 23	8,514	9,381
Jul. 23	7,957	9,197
Aug. 23	9,973	11,423
Sep. 23	7,826	9,095
Oct. 23	8,736	9,776
Nov. 23	8,310	10,474
Dec. 23	7,790	8,948

	1 Day	7 Days
Jan. 24	8,760	10,981
Feb. 24	8,351	9,024
Mar. 24	7,867	8,840
Apr. 24	9,472	9,499
May 24	8,933	10,274
Jun. 24	7,363	8,591
Jul. 24	8,961	10,616
Aug. 24	9,158	8,695
Sep. 24	8,664	8,558
Oct. 24	9,634	10,677
Nov. 24	7,074	8,467
Dec. 24	8,279	9,971

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 29,304 resets were for securities with other periodic reset frequencies.

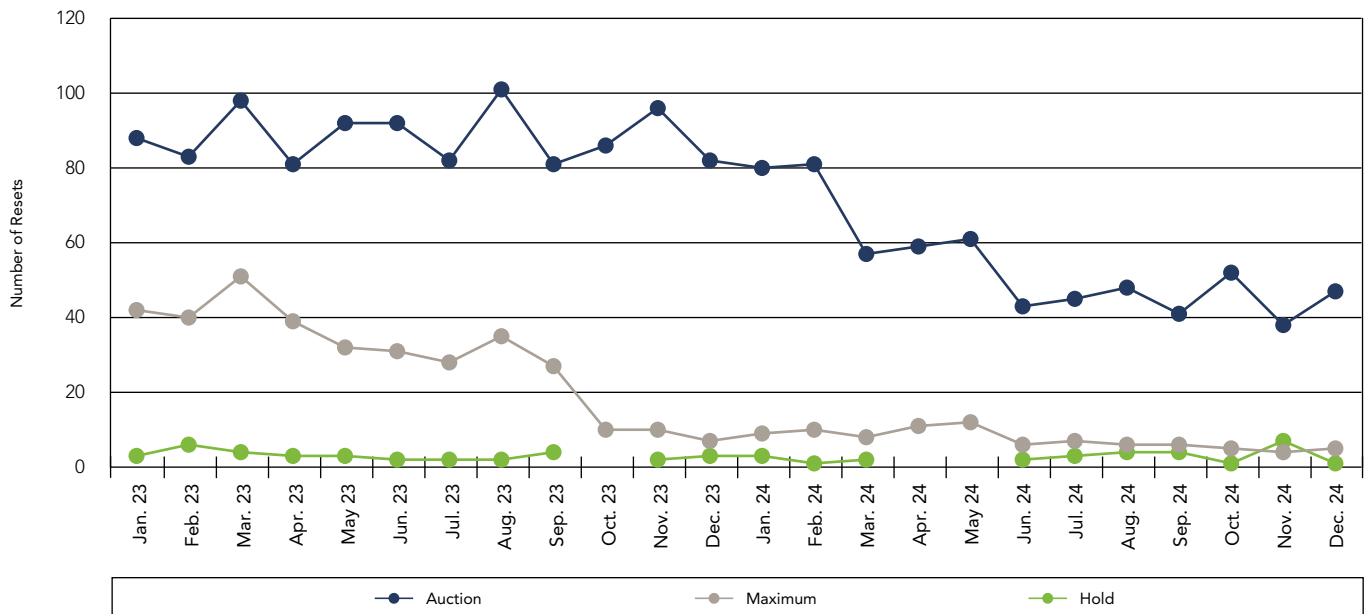
Number of Auction Rate Securities Rate Resets¹, 2020–2024



	2020	2021	2022	2023	2024
January	266	191	151	133	92
February	238	186	147	129	92
March	260	215	179	153	67
April	282	203	147	123	70
May	234	188	154	127	73
June	251	202	170	125	51
July	262	194	147	112	55
August	235	189	167	138	58
September	245	189	155	112	51
October	228	150	144	96	58
November	206	160	154	108	49
December	227	168	142	92	53

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 Type¹, 2023–2024

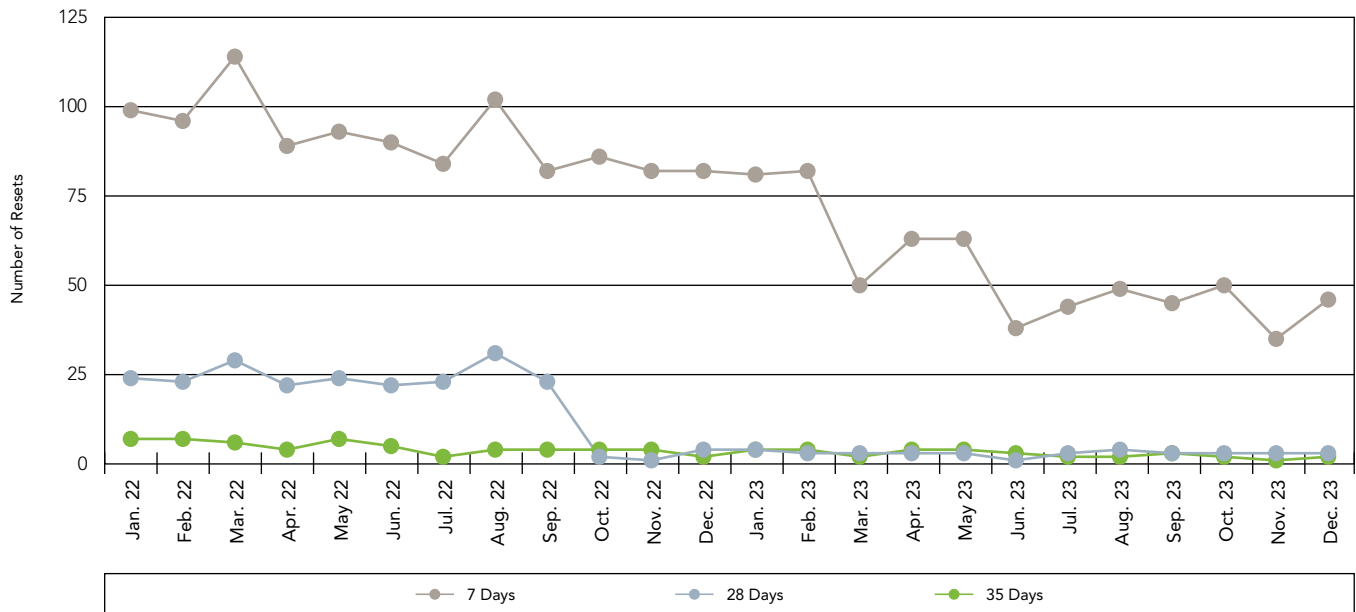


	Auction	Maximum	Hold
Jan. 23	88	42	3
Feb. 23	83	40	6
Mar. 23	98	51	4
Apr. 23	81	39	3
May 23	92	32	3
Jun. 23	92	31	2
Jul. 23	82	28	2
Aug. 23	101	35	2
Sep. 23	81	27	4
Oct. 23	86	10	
Nov. 23	96	10	2
Dec. 23	82	7	3

	Auction	Maximum	Hold
Jan. 24	80	9	3
Feb. 24	81	10	1
Mar. 24	57	8	2
Apr. 24	59	11	
May 24	61	12	
Jun. 24	43	6	2
Jul. 24	45	7	3
Aug. 24	48	6	4
Sep. 24	41	6	4
Oct. 24	52	5	1
Nov. 24	38	4	7
Dec. 24	47	5	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.

Number of Auction Rate Securities Rate Resets by Period¹, 2023–2024



	7 Days	28 Days	35 Days
Jan. 23	99	24	7
Feb. 23	96	23	7
Mar. 23	114	29	6
Apr. 23	89	22	4
May 23	93	24	7
Jun. 23	90	22	5
Jul. 23	84	23	2
Aug. 23	102	31	4
Sep. 23	82	23	4
Oct. 23	86	2	4
Nov. 23	82	1	4
Dec. 23	82	4	2

	7 Days	28 Days	35 Days
Jan. 24	81	4	4
Feb. 24	82	3	4
Mar. 24	50	3	2
Apr. 24	63	3	4
May 24	63	3	4
Jun. 24	38	1	3
Jul. 24	44	3	2
Aug. 24	49	4	2
Sep. 24	45	3	3
Oct. 24	50	3	2
Nov. 24	35	3	1
Dec. 24	46	3	2

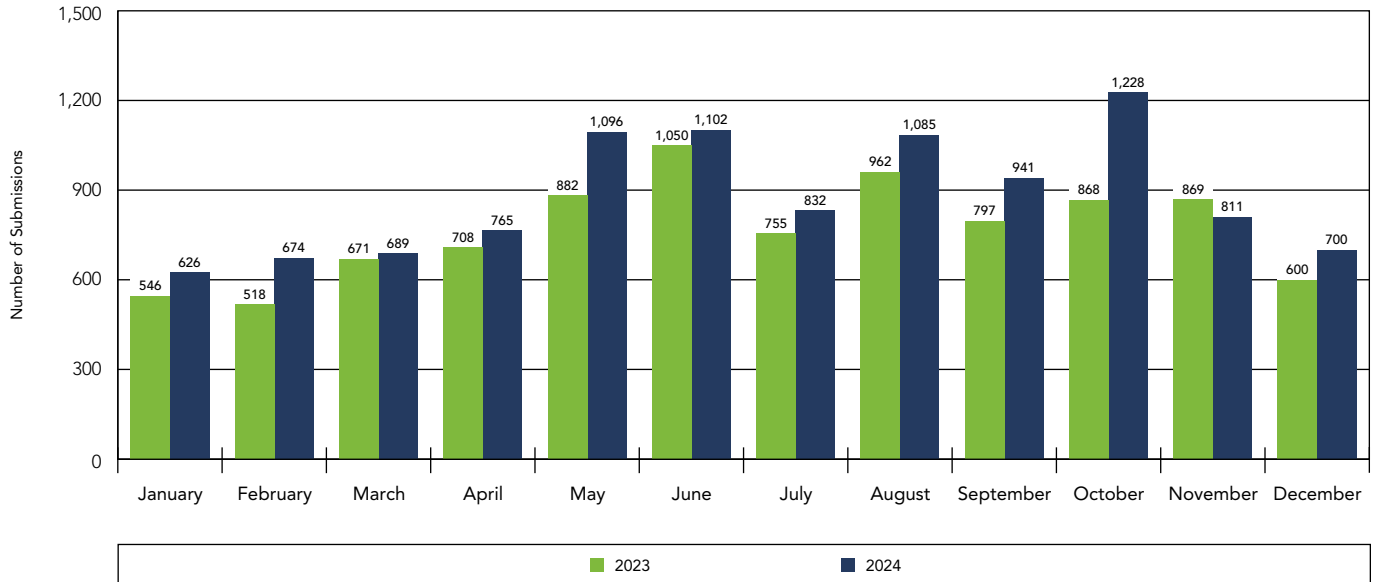
¹ Based on data submitted to the MSRB's Short-Term Obligation Rate Transparency (SHORT) System. May exclude submissions that could not be categorized based on available data.

Part Ten

Municipal Market Disclosures, 2020–2024

Number of Primary Market Submissions¹, 2023–2024

By number of submissions

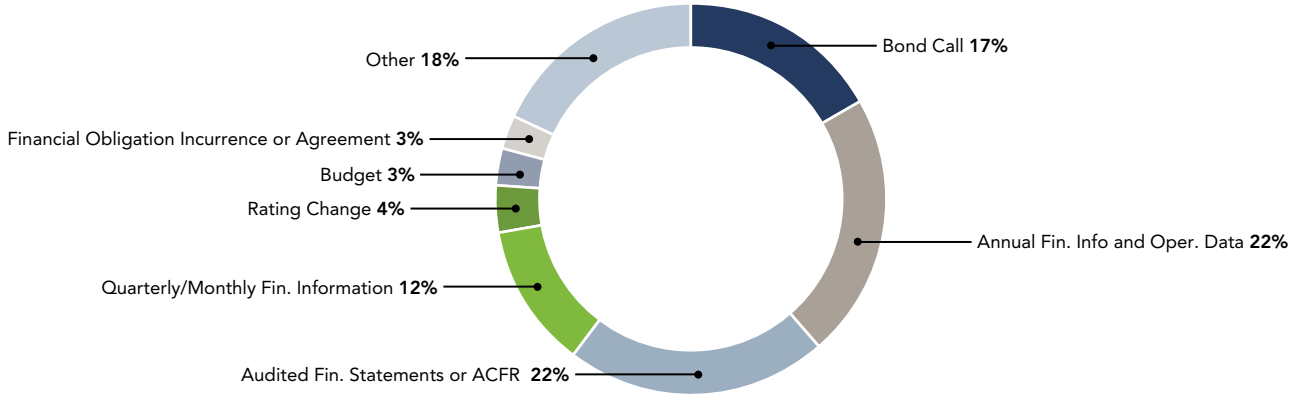


	2023	2024
January	546	626
February	518	674
March	671	689
April	708	765
May	882	1,096
June	1,050	1,102
July	755	832
August	962	1,085
September	797	941
October	868	1,228
November	869	811
December	600	700
Total	9,226	10,549

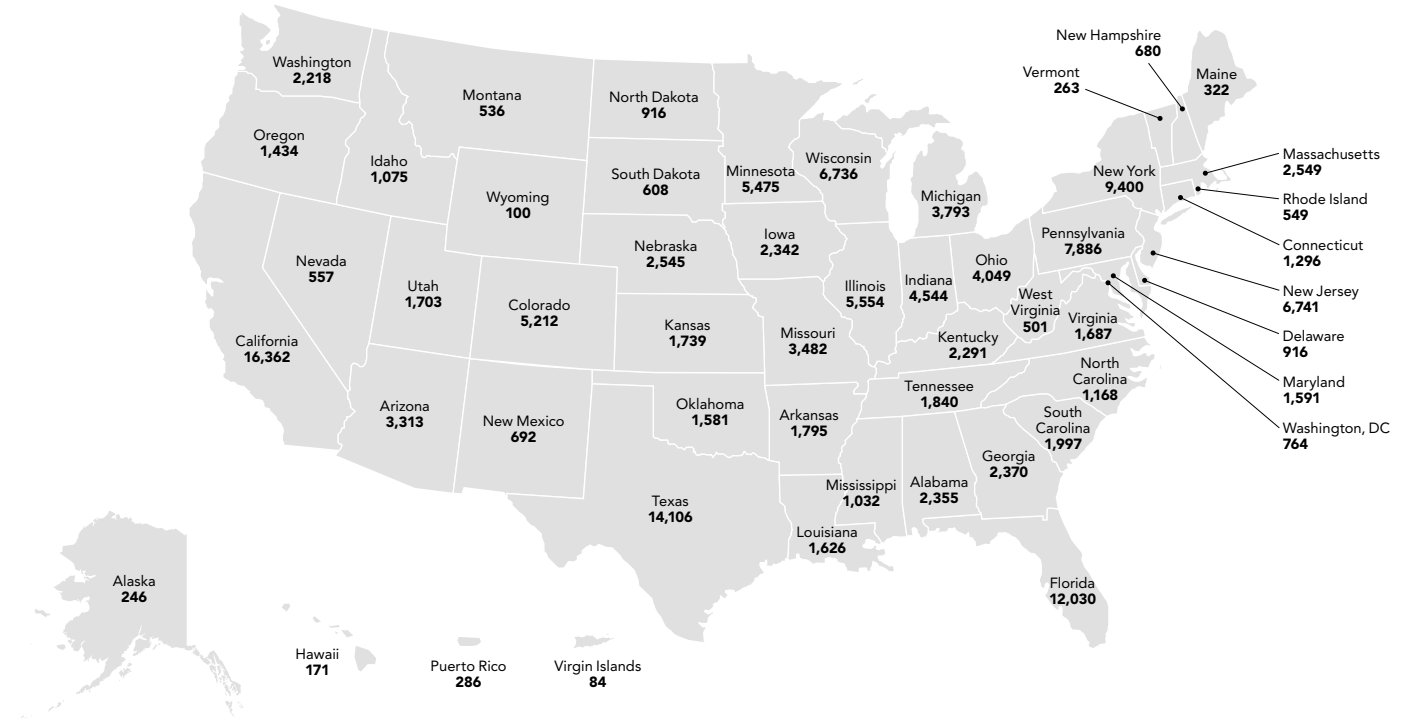
¹ Excludes remarketings.

Continuing Disclosures Submissions, 2024

By number of documents



By state¹



¹ Based on information derived from the CUSIP Service Bureau

Number of Continuing Disclosure Submissions, 2020–2024

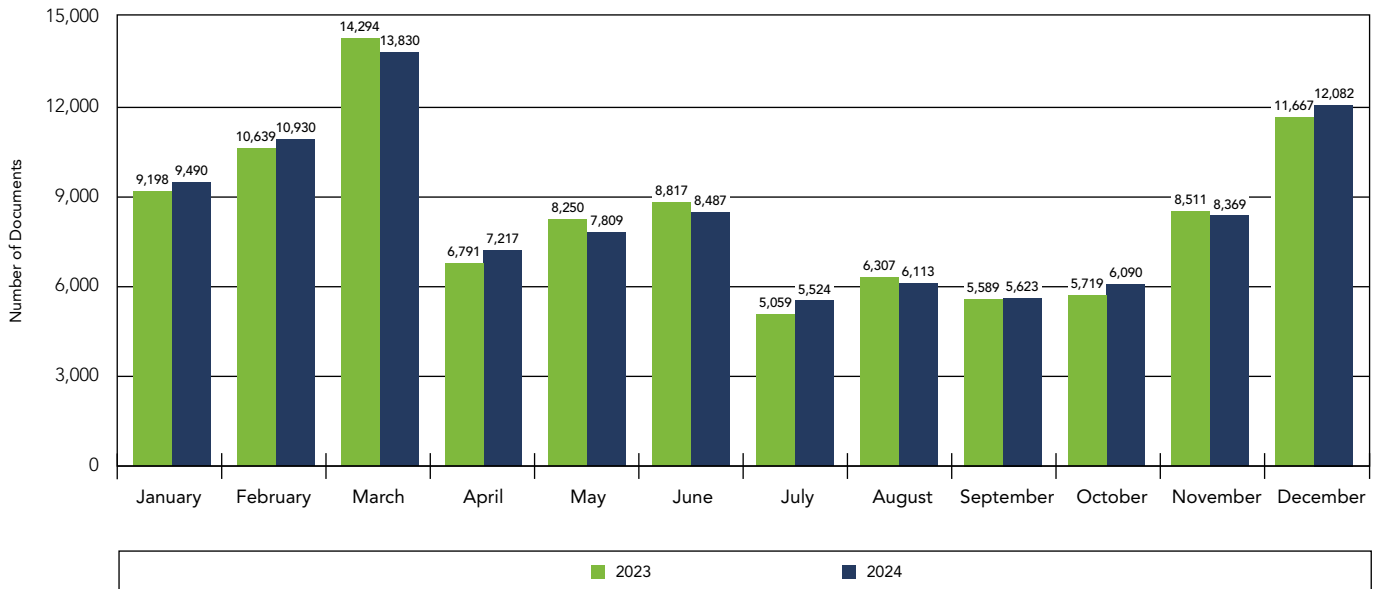


	Financial Submissions	Event Submissions
2020	97,326	59,521
2021	98,505	57,779
2022	98,903	50,125
2023	100,841	41,971
2024	101,564	50,485

¹ CUSIP Global Services.

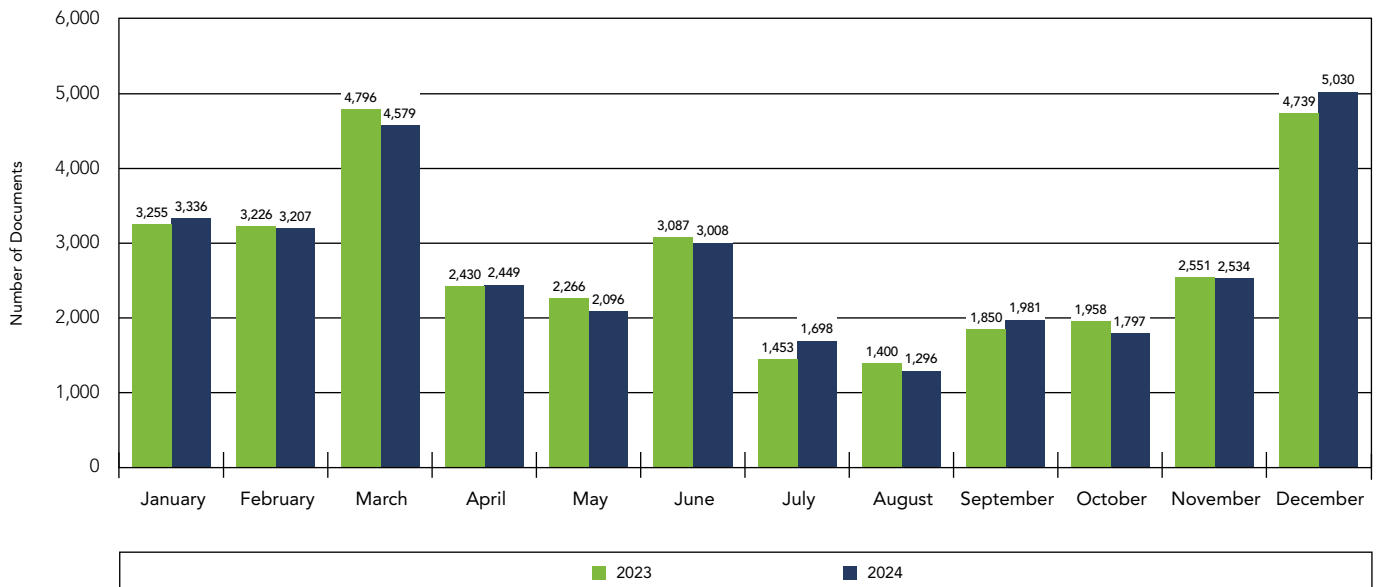
All Financial Disclosures, 2023–2024

By number of documents

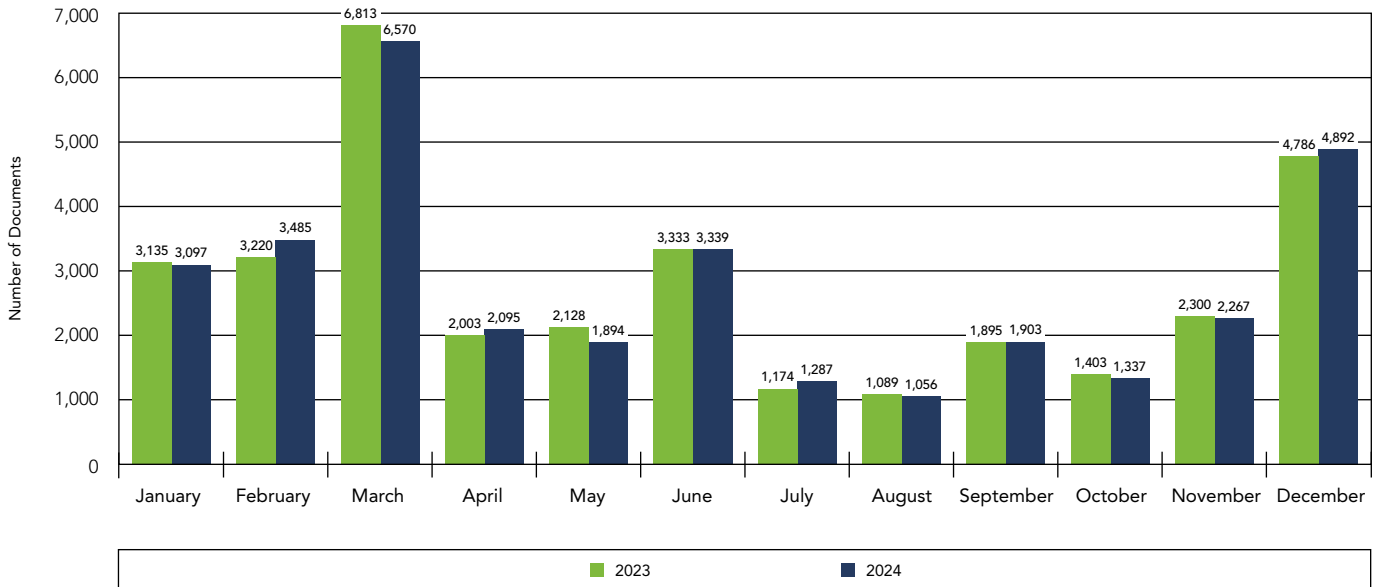


Audited Financial Statements or ACFR Submissions, 2023–2024

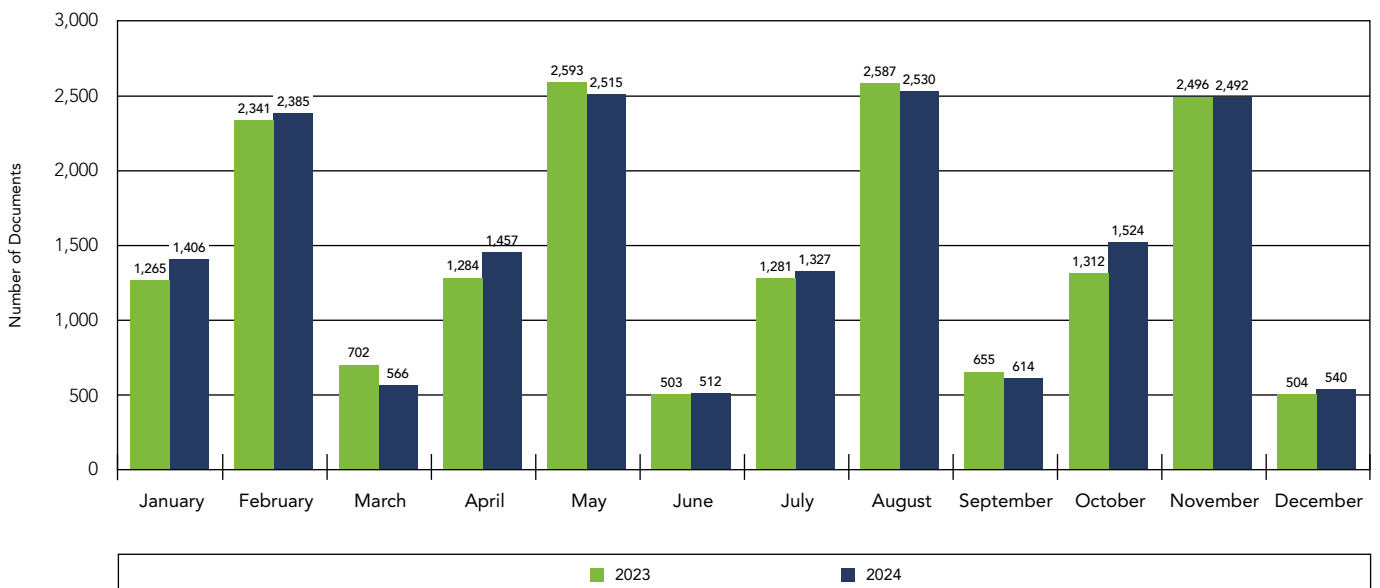
By number of documents



Annual Financial Information and Operating Data Submissions, 2023–2024 By number of documents



Quarterly/Monthly Financial Information Submissions, 2023–2024 By number of documents



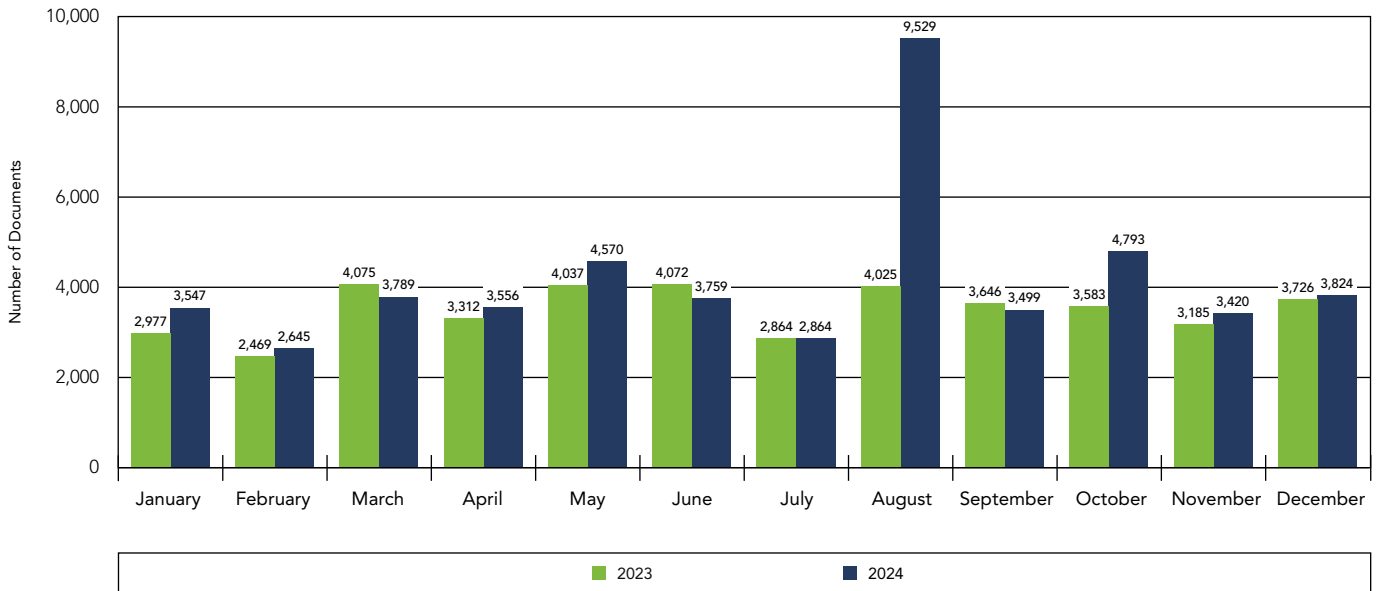
Other Financial Disclosures, 2023–2024

Financial disclosures

By Number of Documents	2023	2024
BUDGET	4,465	4,539
CHANGE IN ACCOUNTING STANDARD	2	3
CHANGE IN FISCAL YEAR/TIMING OF ANNUAL DISCLOSURE	18	26
CONSULTANT REPORTS	286	242
FAILURE TO PROVIDE ANNUAL FINANCIAL INFORMATION	2,930	2,970
INFORMATION PROVIDED TO RATING AGENCY, CREDIT/LIQUIDITY PROVIDER OR OTHER THIRD PARTY	193	243
INTERIM/ADDITIONAL FINANCIAL INFORMATION/OPERATING DATA	1,613	1,592
INVESTMENT/DEBT/FINANCIAL POLICY	55	62
OTHER FINANCIAL/OPERATING DATA	7,466	7,786

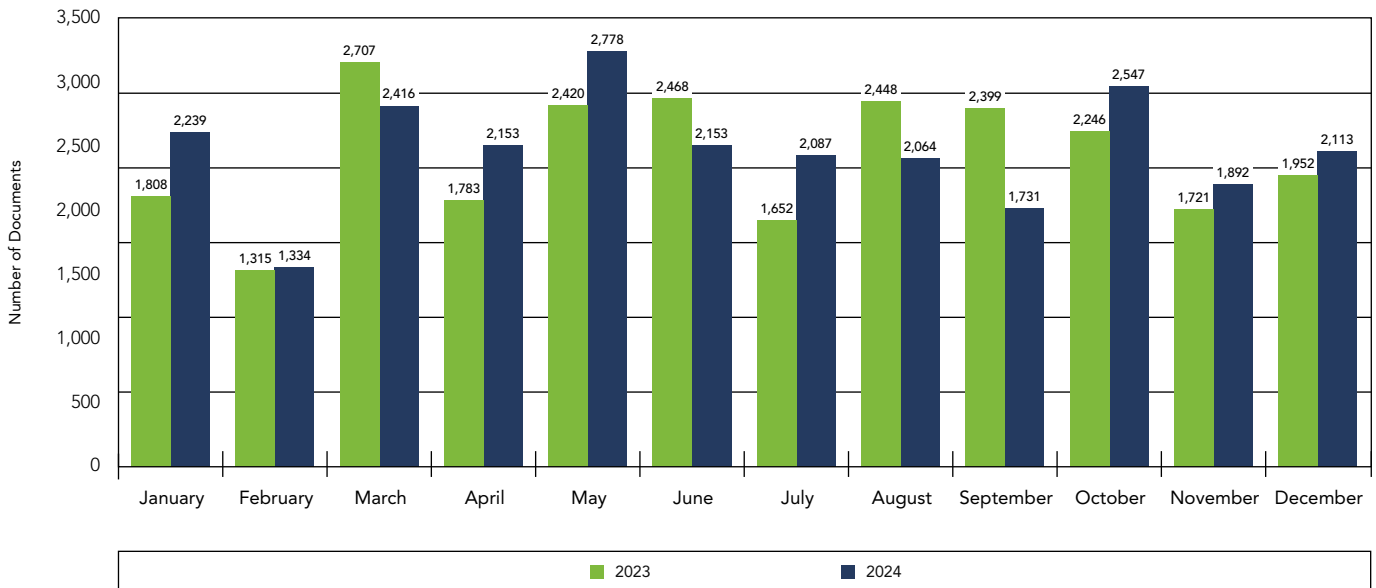
All Event Disclosures, 2023–2024

By number of documents



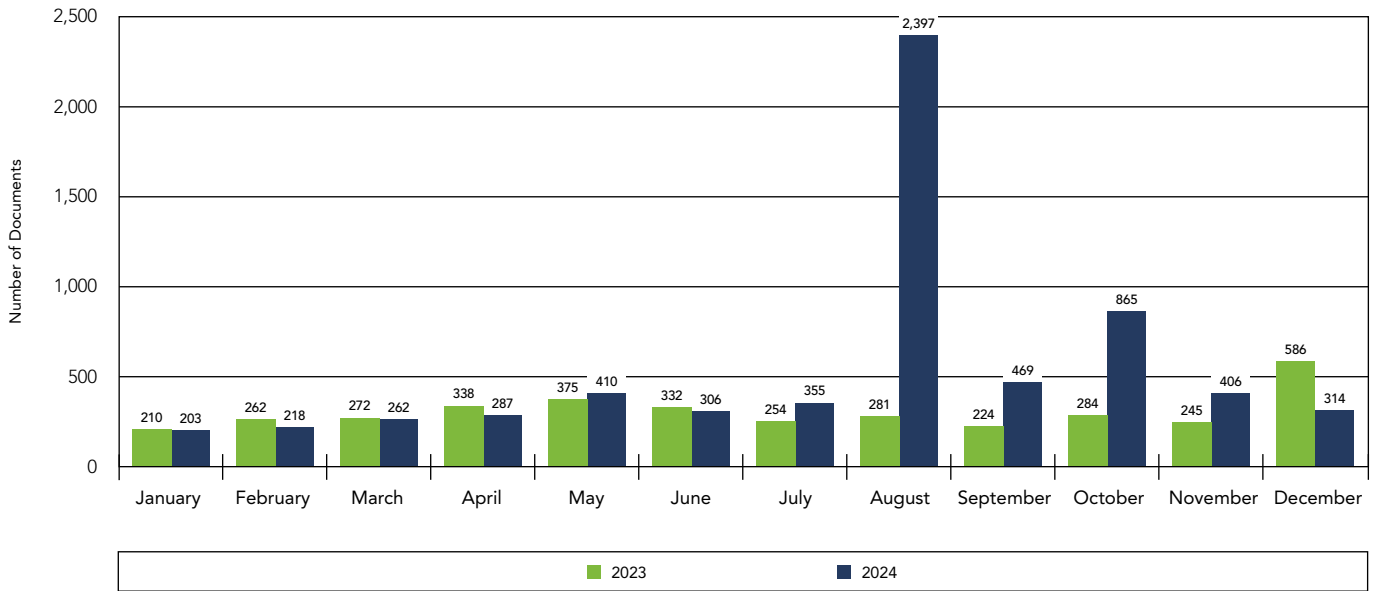
Bond Call Submissions, 2023–2024

By number of documents



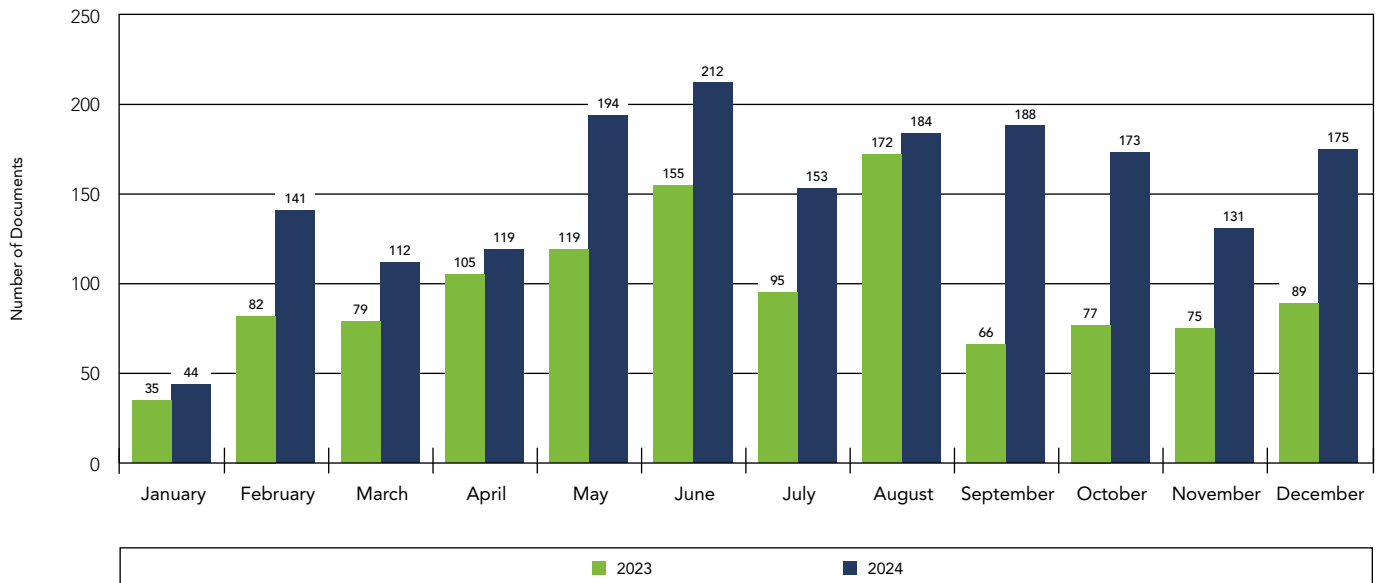
Rating Change Submissions, 2023–2024

By number of documents



Defeasance Submissions, 2023–2024

By number of documents



Other Event Disclosures, 2023–2024

Event disclosures

By Number of Documents	2023	2024
ADVERSE TAX OPINION OR EVENT AFFECTING TAX-EXEMPT STATUS	3	4
AMENDMENT TO CONTINUING DISCLOSURE UNDERTAKING	40	46
BANKRUPTCY, INSOLVENCY, RECEIVERSHIP	64	92
BID FOR AUCTION RATE OR OTHER SECURITIES	104	103
CAPITAL OR OTHER FINANCING PLAN	41	74
CHANGE IN OBLIGATED PERSON	59	66
CHANGE OF TENDER AGENT, REMARKETING AGENT, OR OTHER ON-GOING PARTY	60	176
COMMUNICATION FROM THE INTERNAL REVENUE SERVICE	3	1
DERIVATIVE OR OTHER SIMILAR TRANSACTION	5	0
FAILURE TO PROVIDE EVENT FILING INFORMATION	814	846
FINANCIAL OBLIGATION - EVENT REFLECTING FINANCIAL DIFFICULTIES	61	34
FINANCIAL OBLIGATION - INCURRENCE OR AGREEMENT	4,177	4,124
LITIGATION/ENFORCEMENT ACTION	54	49
MERGER, CONSOLIDATION, ACQUISITION AND SALE OF ASSETS	118	192
MODIFICATION TO THE RIGHTS OF SECURITY HOLDERS	56	61
NON-PAYMENT RELATED DEFAULT	81	76
NOTICE TO INVESTOR PURSUANT TO BOND DOCUMENTS	1,419	1,776
OTHER EVENT-BASED DISCLOSURES	3,894	4,646
P&I PAYMENT DELINQUENCY	239	194
RELEASE, SUBSTITUTION OR SALE OF PROPERTY	59	51
SUBSTITUTION OF CREDIT OR LIQUIDITY PROVIDER OR ITS FAILURE TO PERFORM	41	3,066
SUCCESSOR, ADDITIONAL OR CHANGE IN TRUSTEE	203	219
TENDER OFFER/SECONDARY MARKET PURCHASES	542	633
UNSCHEDULED DRAW ON CREDIT ENHANCEMENT	6	8
UNSCHEDULED DRAW ON DEBT SERVICE RESERVE	97	123

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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