



Municipal Securities Rulemaking Board

## Municipal Securities Market Trading Summary

*Last Updated: January 17, 2023*

The Municipal Securities Rulemaking Board (MSRB) is publishing this data analysis to provide insight regarding trading activity in the municipal securities market.

### Methodology and Definitions

The data reflect aggregate trading activity at the end of each month as submitted to the MSRB's Real-Time Transaction Reporting System (RTRS). The MSRB may update trade statistics periodically to account for modifications, cancellations, trades reported late or any other changes to the underlying characteristics of the securities.

The data in *Part I: Overall Market Trading Activity* include trades of bonds and notes (fixed, variable and zero coupon) disseminated by the MSRB through its free Electronic Municipal Market Access (EMMA<sup>®</sup>) website at [emma.msrb.org](https://emma.msrb.org) and subscription products. *Part II: Municipal Fixed-Rate Market Trading Activity* includes trades of fixed-rate and zero-coupon securities. *Part III: Municipal Variable-Rate Market Trading Activity* includes trades of all types of variable rate securities, including, among others, variable rate demand obligations (VRDO) and auction rate securities (ARS).

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## Municipal Securities Market Trading Summary

### Part I: Overall Market Trading Activity (Including Fixed, Variable and Zero Coupon)

#### December 2022: 12/01/2022 – 12/31/2022

##### Daily Averages

Number of Trades: 61,016

Par Amount: \$15,031 Million

Trade Type	Number of Trades	Par Amount (\$ Millions)
Customer Purchases	457,877	153,818
Customer Sales	345,893	106,086
Inter- Dealer Trades	477,569	55,755
All Trades	1,281,339	315,660

#### 2022: 01/01/2022 - 12/31/2022

##### Daily Averages

Number of Trades: 50,963

Par Amount: \$14,223 Million

Trade Type	Number of Trades	Par Amount (\$ Millions)
Customer Purchases	4,603,036	1,771,497
Customer Sales	3,229,529	1,174,865
Inter- Dealer Trades	4,857,310	595,152
All Trades	12,689,875	3,541,514

#### 2021: 01/01/2021—12/31/2021

##### Daily Averages

Number of Trades: 30,560

Par Amount: \$8,894 Million

Trade Type	Number of Trades	Par Amount (\$ Millions)
Customer Purchases	2,741,482	1,216,320
Customer Sales	2,121,262	602,414
Inter- Dealer Trades	2,777,246	404,654
All Trades	7,639,990	2,223,388

#### 2020: 01/01/2020 – 12/31/2020

##### Daily Averages

Number of Trades: 33,801

Par Amount: \$12,077 Million

Trade Type	Number of Trades	Par Amount (\$ Millions)
Customer Purchases	3,145,003	1,603,396
Customer Sales	2,163,533	940,616
Inter- Dealer Trades	3,175,586	487,415
All Trades	8,484,122	3,031,428

## Municipal Securities Market Trading Summary

### Part II: Municipal Fixed-Rate Market Trading Activity

Annual Averages 2019 – 2022

January 1, 2019 – December 31, 2022

#### Customer Purchases: Fixed-Rate Trades

Daily Averages	Number of Trades					Par Traded (\$ Millions)				
	\$100,000 or less	More than \$100,000 to \$1 Million	More than \$1 Million to \$5 Million	More than \$5 Million	Total	\$100,000 or less	More than \$100,000 to \$1 Million	More than \$1 Million to \$5 Million	More than \$5 Million	Total
2019	9,944	2,181	460	132	12,718	333	751	1,092	1,814	3,990
2020	9,145	2,242	545	154	12,086	293	827	1,308	2,134	4,561
2021	8,109	2,038	474	126	10,747	258	738	1,106	1,768	3,870
2022	14,637	2,692	569	188	18,085	482	873	1,381	2,569	5,305
Jun 2020	8,785	2,388	604	142	11,919	280	921	1,409	1,989	4,599
Jul 2020	8,197	2,159	542	146	11,044	259	825	1,301	2,097	4,482
Aug 2020	7,557	2,014	501	142	10,214	238	764	1,160	2,151	4,313
Sep 2020	8,229	2,217	557	143	11,145	262	845	1,325	1,945	4,377
Oct 2020	9,107	2,591	757	202	12,656	294	1,002	1,807	2,621	5,724
Nov 2020	7,885	1,922	403	97	10,307	254	686	949	1,230	3,119
Dec 2020	7,876	2,025	441	98	10,440	254	734	1,042	1,402	3,433
Jan 2021	8,345	2,278	489	126	11,239	267	835	1,151	1,658	3,911
Feb 2021	9,123	2,316	549	152	12,139	291	863	1,292	2,191	4,638
Mar 2021	8,755	2,287	508	133	11,683	281	840	1,196	1,678	3,995
Apr 2021	8,225	2,176	461	118	10,979	264	789	1,070	1,627	3,750
May 2021	8,316	2,213	468	114	11,112	265	793	1,055	1,551	3,664
Jun 2021	8,137	2,093	512	136	10,879	259	769	1,172	1,933	4,133
Jul 2021	7,189	1,802	440	113	9,546	224	653	1,029	1,523	3,429
Aug 2021	7,238	1,759	439	118	9,554	228	648	1,022	1,571	3,468
Sep 2021	7,478	1,816	446	128	9,868	237	660	1,048	1,786	3,731
Oct 2021	8,415	2,065	555	145	11,181	269	750	1,313	1,871	4,204
Nov 2021	8,225	1,945	468	127	10,765	259	687	1,097	1,722	3,764
Dec 2021	8,015	1,788	371	111	10,284	257	607	878	2,203	3,945
Jan 2022	9,718	1,965	435	148	12,266	307	660	1,058	1,996	4,022
Feb 2022	10,879	2,245	524	156	13,805	345	776	1,242	1,891	4,255
Mar 2022	11,927	2,231	523	201	14,883	376	759	1,298	2,716	5,149
Apr 2022	15,119	2,737	669	228	18,753	484	923	1,652	2,940	5,998
May 2022	16,887	3,111	679	234	20,912	550	1,027	1,659	3,021	6,256
Jun 2022	15,769	2,761	613	204	19,348	520	906	1,471	2,740	5,636
Jul 2022	12,863	2,359	500	165	15,887	428	751	1,208	2,166	4,552
Aug 2022	13,113	2,385	517	151	16,166	433	794	1,238	2,181	4,646
Sep 2022	15,154	2,556	537	200	18,447	500	812	1,339	2,905	5,557
Oct 2022	18,302	3,231	686	234	22,453	611	1,018	1,682	3,264	6,574
Nov 2022	18,659	3,484	634	198	22,975	637	1,064	1,521	2,802	6,024
Dec 2022	17,364	3,283	514	140	21,299	594	992	1,229	2,181	4,995

## Municipal Securities Market Trading Summary

### Customer Sales: Fixed-Rate Trades

Daily Averages	Number of Trades					Par Traded (\$ Millions)				
	\$100,000 or less	More than \$100,000 to \$1 Million	More than \$1 Million to \$5 Million	More than \$5 Million	Total	\$100,000 or less	More than \$100,000 to \$1 Million	More than \$1 Million to \$5 Million	More than \$5 Million	Total
2019	6,179	1,107	225	56	7,567	192	372	556	659	1,779
2020	6,586	1,178	251	72	8,086	207	388	634	877	2,107
2021	6,890	1,074	198	48	8,209	207	342	482	568	1,600
2022	10,238	1,845	387	123	12,592	323	566	957	1,403	3,249
Jun 2020	6,000	1,069	243	48	7,360	185	370	590	534	1,679
Jul 2020	5,782	985	195	44	7,006	178	328	486	562	1,555
Aug 2020	5,437	874	191	46	6,548	166	295	474	575	1,510
Sep 2020	5,920	975	206	41	7,142	181	326	504	476	1,487
Oct 2020	6,111	1,047	232	52	7,443	190	345	582	573	1,690
Nov 2020	5,932	923	205	53	7,113	183	299	518	567	1,567
Dec 2020	6,539	1,199	207	43	7,989	204	390	504	491	1,588
Jan 2021	7,343	1,245	242	59	8,890	221	414	589	727	1,952
Feb 2021	7,343	1,182	253	66	8,844	225	388	641	852	2,106
Mar 2021	7,485	1,267	222	53	9,027	231	402	546	588	1,767
Apr 2021	7,057	1,208	206	48	8,519	215	395	497	616	1,722
May 2021	6,857	1,067	179	45	8,149	207	330	431	578	1,546
Jun 2021	6,483	1,033	193	46	7,755	195	338	463	534	1,530
Jul 2021	6,019	848	155	34	7,056	175	272	375	403	1,225
Aug 2021	5,943	820	168	36	6,966	173	259	411	395	1,237
Sep 2021	6,466	954	177	45	7,642	190	304	433	508	1,434
Oct 2021	7,370	1,111	218	56	8,755	224	344	527	635	1,730
Nov 2021	7,399	1,105	200	50	8,754	219	342	488	618	1,667
Dec 2021	7,291	1,118	179	38	8,625	221	340	438	469	1,468
Jan 2022	8,982	1,283	239	77	10,581	264	387	597	876	2,125
Feb 2022	9,368	1,367	305	96	11,135	280	431	752	1,052	2,514
Mar 2022	9,266	1,410	317	122	11,115	275	435	809	1,466	2,985
Apr 2022	11,137	1,872	443	161	13,614	338	571	1,111	1,941	3,961
May 2022	11,253	2,031	464	167	13,915	347	619	1,143	1,946	4,055
Jun 2022	10,138	1,801	396	124	12,459	319	559	970	1,448	3,297
Jul 2022	8,296	1,616	332	93	10,337	267	497	815	1,041	2,621
Aug 2022	7,610	1,466	333	79	9,489	235	478	795	828	2,336
Sep 2022	9,325	1,768	395	138	11,627	296	552	995	1,649	3,492
Oct 2022	11,842	2,427	526	173	14,968	388	749	1,313	1,959	4,409
Nov 2022	13,079	2,598	497	148	16,323	445	766	1,225	1,633	4,070
Dec 2022	12,920	2,556	400	99	15,974	432	762	977	1,037	3,209

## Municipal Securities Market Trading Summary

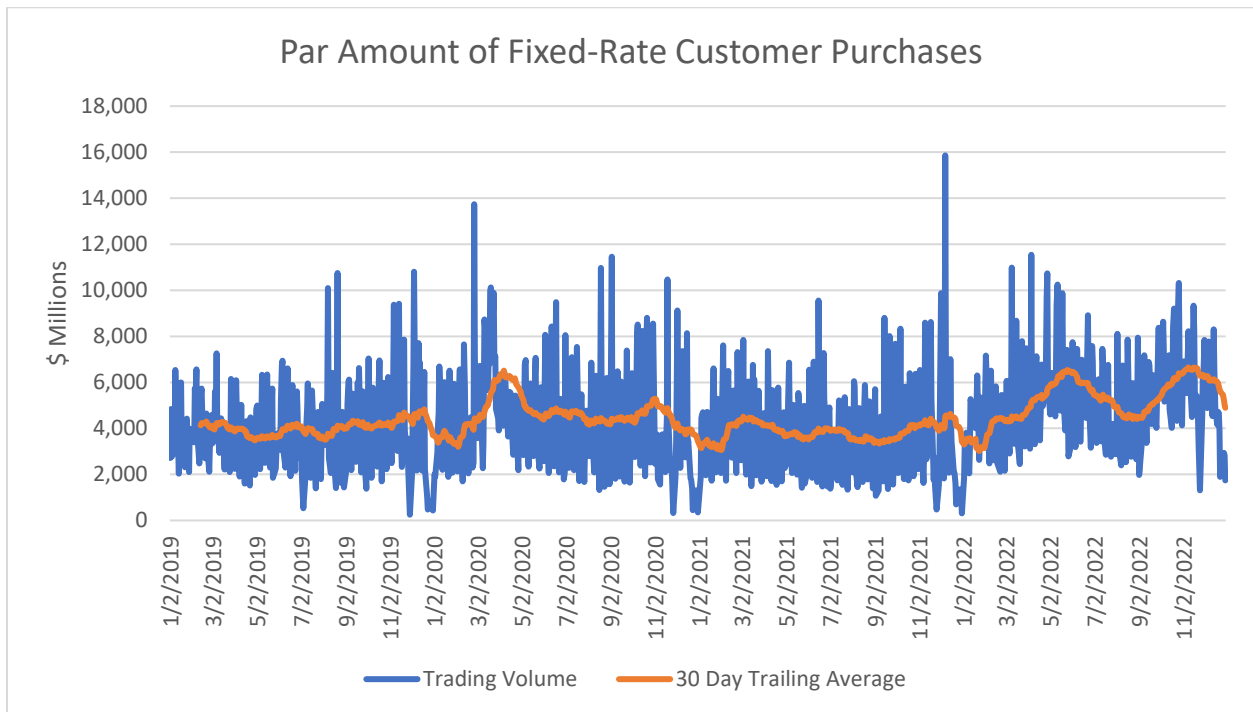
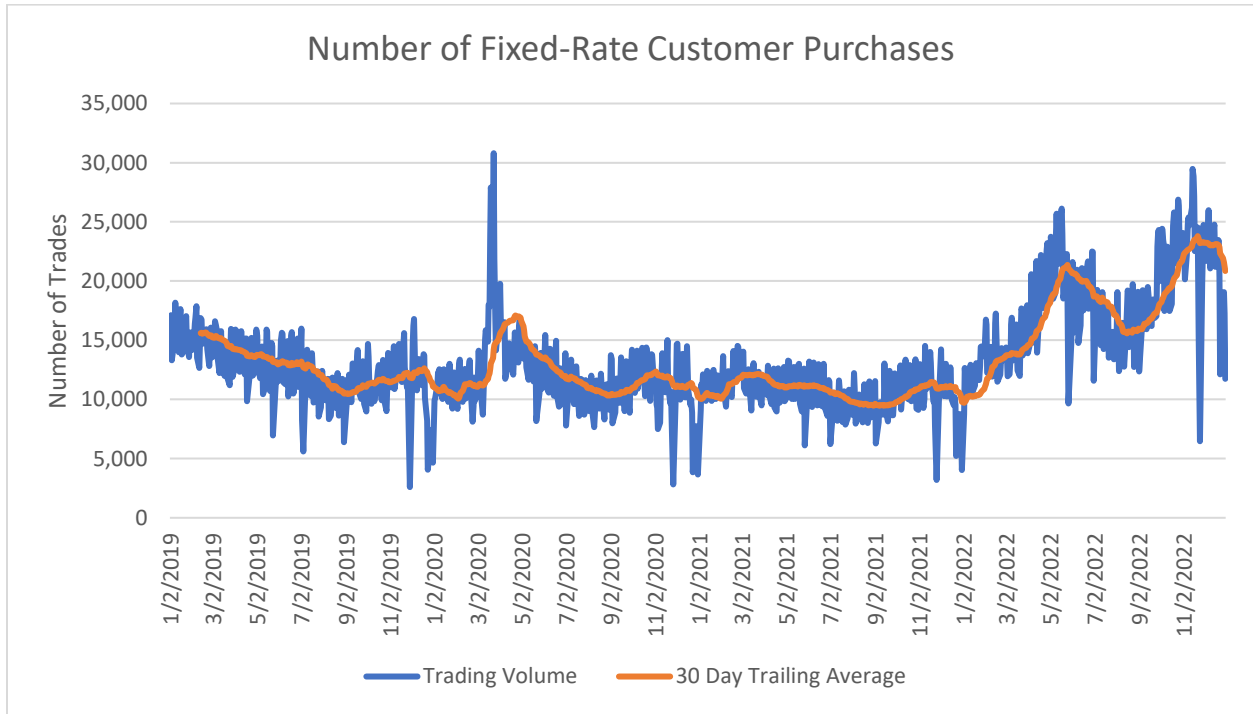
### Customer Purchases to Sale Net: Fixed-Rate Trades

Daily Averages	Number of Trades					Par Traded (\$ Millions)				
	\$100,000 or less	More than \$100,000 to \$1 Million	More than \$1 Million to \$5 Million	More than \$5 Million	Total	\$100,000 or less	More than \$100,000 to \$1 Million	More than \$1 Million to \$5 Million	More than \$5 Million	Total
2019	3,766	1,073	236	76	5,151	142	378	536	1,155	2,211
2020	2,559	1,065	294	82	4,000	86	438	674	1,256	2,455
2021	1,201	957	274	78	2,510	50	394	619	1,192	2,256
2022	4,399	847	182	66	5,493	159	307	425	1,166	2,056
Jun 2020	2,785	1,319	362	93	4,559	95	551	819	1,455	2,920
Jul 2020	2,415	1,174	347	102	4,038	81	496	815	1,535	2,927
Aug 2020	2,120	1,139	310	97	3,666	72	469	686	1,576	2,803
Sep 2020	2,309	1,241	351	102	4,003	81	519	821	1,469	2,890
Oct 2020	2,996	1,543	525	149	5,213	104	656	1,226	2,048	4,034
Nov 2020	1,953	999	198	43	3,193	70	388	431	663	1,552
Dec 2020	1,337	826	234	54	2,451	50	344	539	911	1,844
Jan 2021	1,002	1,032	248	67	2,349	46	421	561	930	1,958
Feb 2021	1,779	1,134	296	86	3,295	66	476	651	1,340	2,532
Mar 2021	1,270	1,020	286	80	2,656	50	438	650	1,090	2,228
Apr 2021	1,167	968	255	70	2,460	49	394	574	1,010	2,027
May 2021	1,459	1,146	289	69	2,963	59	463	624	973	2,118
Jun 2021	1,654	1,061	319	90	3,124	64	431	709	1,399	2,603
Jul 2021	1,171	954	285	79	2,489	49	382	654	1,120	2,204
Aug 2021	1,296	939	271	82	2,587	55	389	611	1,176	2,231
Sep 2021	1,012	862	269	83	2,226	47	356	615	1,278	2,296
Oct 2021	1,045	954	338	89	2,426	46	406	787	1,235	2,474
Nov 2021	826	841	268	77	2,011	40	345	609	1,103	2,097
Dec 2021	724	670	192	73	1,659	36	268	440	1,734	2,477
Jan 2022	736	682	196	71	1,685	43	274	461	1,120	1,897
Feb 2022	1,511	878	220	61	2,670	66	346	490	839	1,741
Mar 2022	2,661	821	206	80	3,767	101	325	488	1,250	2,163
Apr 2022	3,981	865	226	67	5,139	146	352	541	999	2,037
May 2022	5,634	1,081	215	67	6,996	203	408	516	1,075	2,201
Jun 2022	5,632	959	216	81	6,889	200	347	501	1,292	2,339
Jul 2022	4,567	743	168	72	5,551	160	254	392	1,124	1,931
Aug 2022	5,503	919	184	72	6,677	198	316	443	1,353	2,310
Sep 2022	5,829	788	142	61	6,821	204	260	344	1,257	2,066
Oct 2022	6,459	804	161	61	7,485	223	269	369	1,305	2,165
Nov 2022	5,580	886	137	50	6,652	192	298	295	1,169	1,954
Dec 2022	4,444	727	114	41	5,325	161	230	252	1,143	1,787

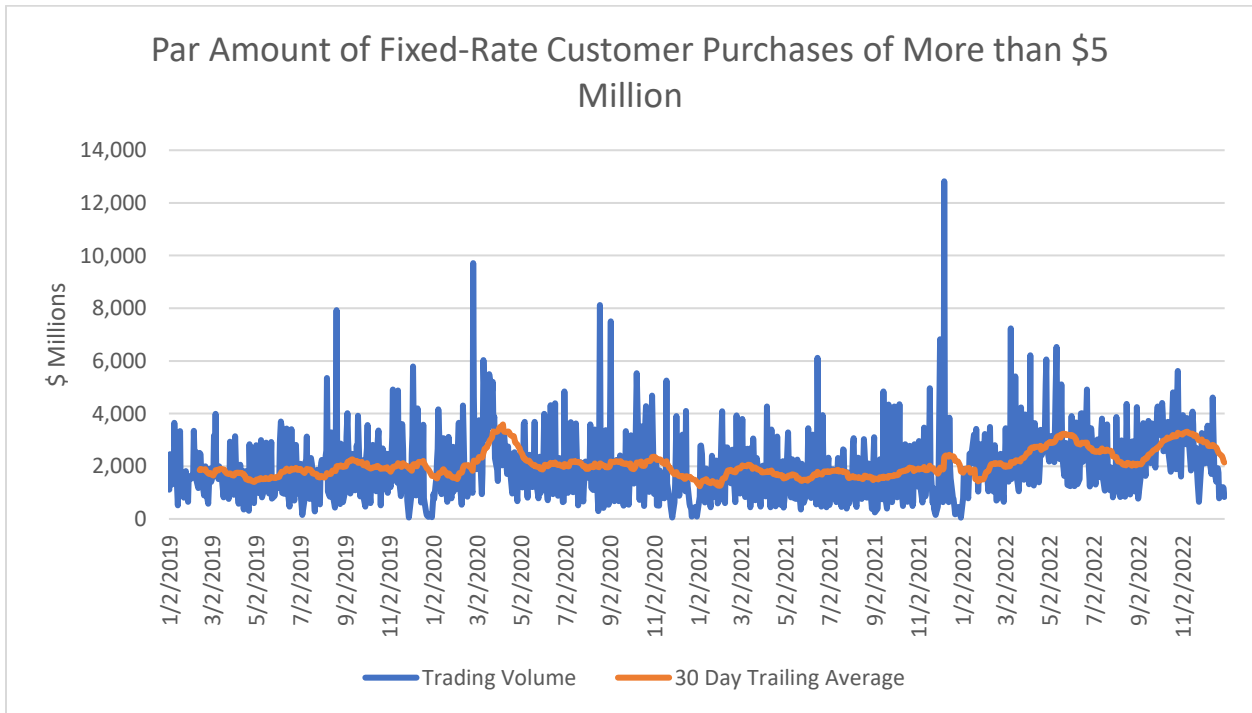
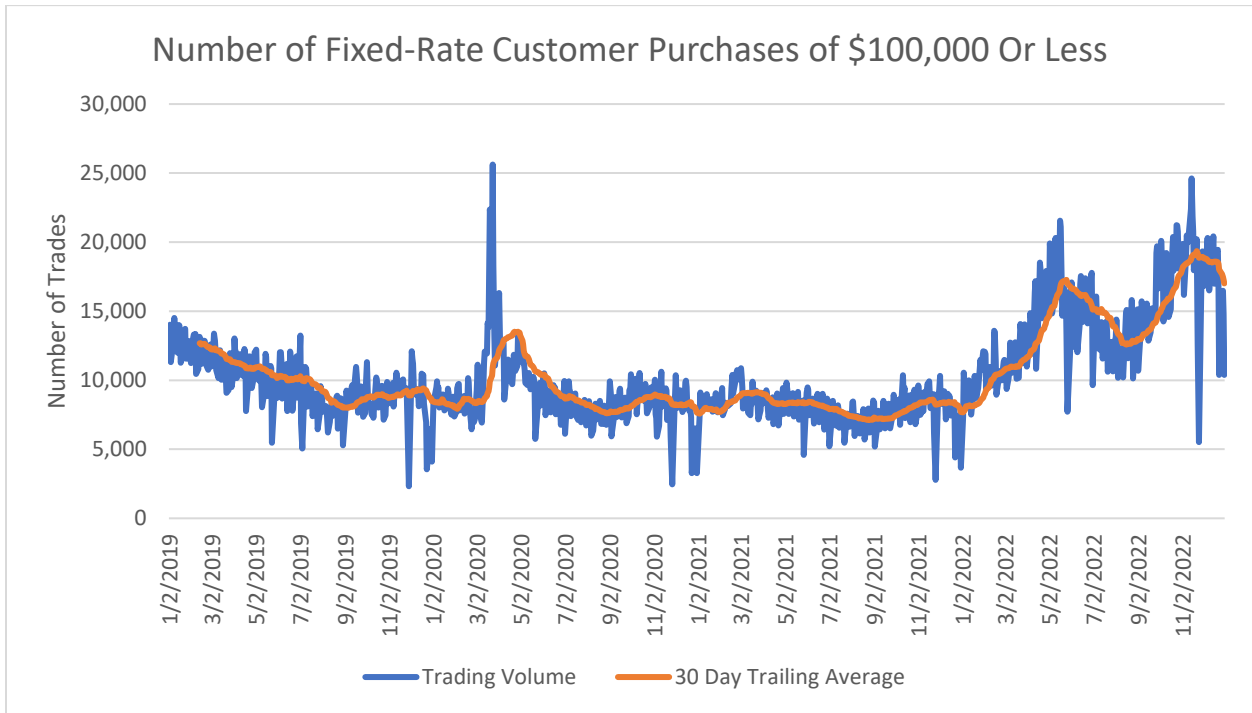
# Municipal Securities Market Trading Summary

## 2019 – 2022 Daily Trade Activity

### Customer Purchases: Fixed-Rate Trades January 1, 2019 – December 31, 2022



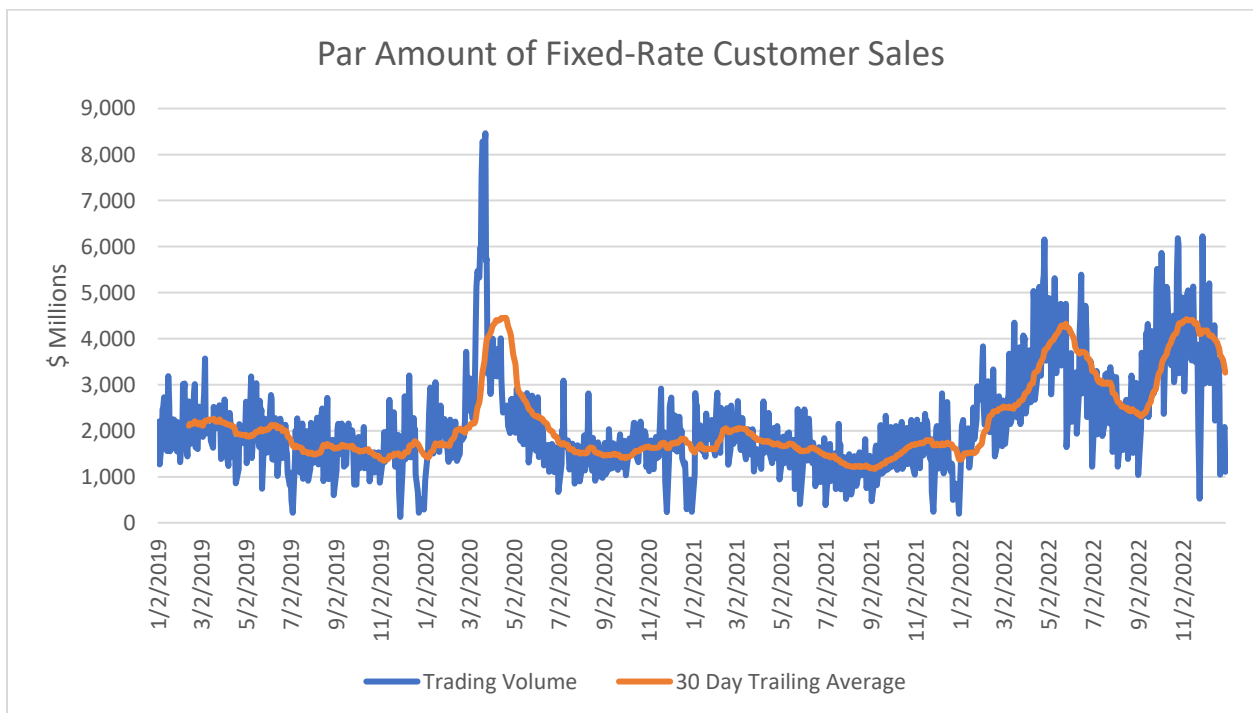
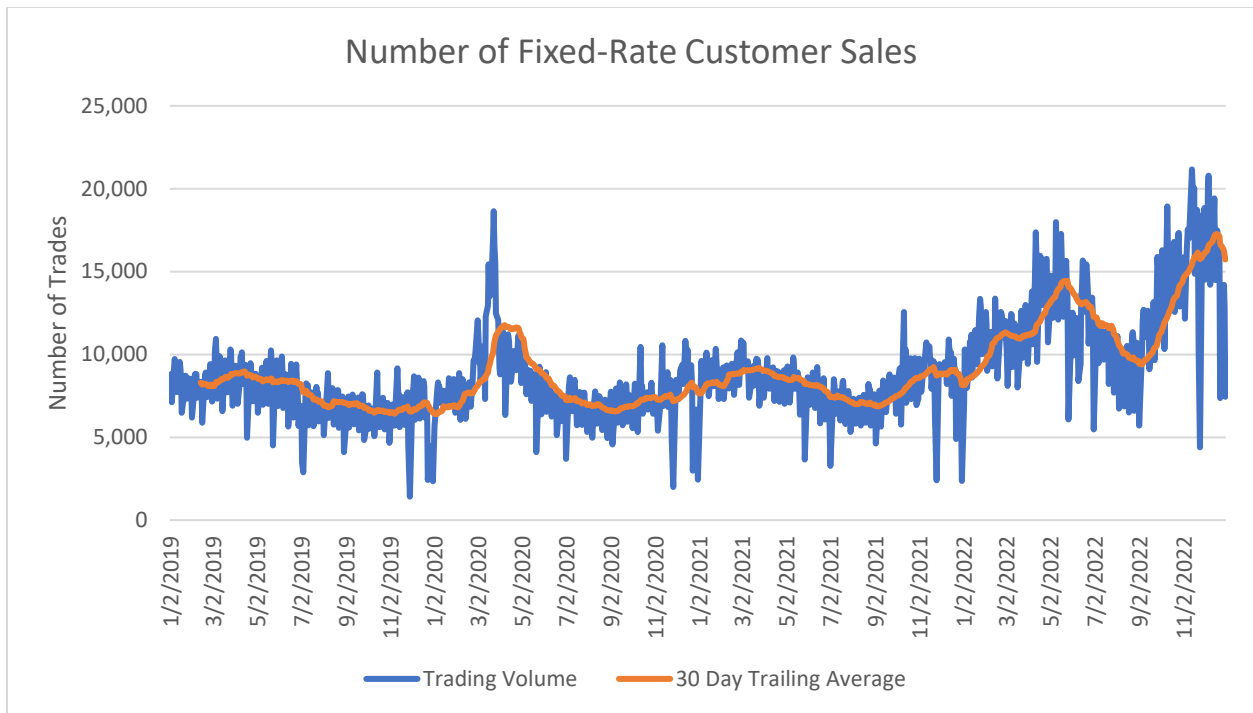
## Municipal Securities Market Trading Summary



# Municipal Securities Market Trading Summary

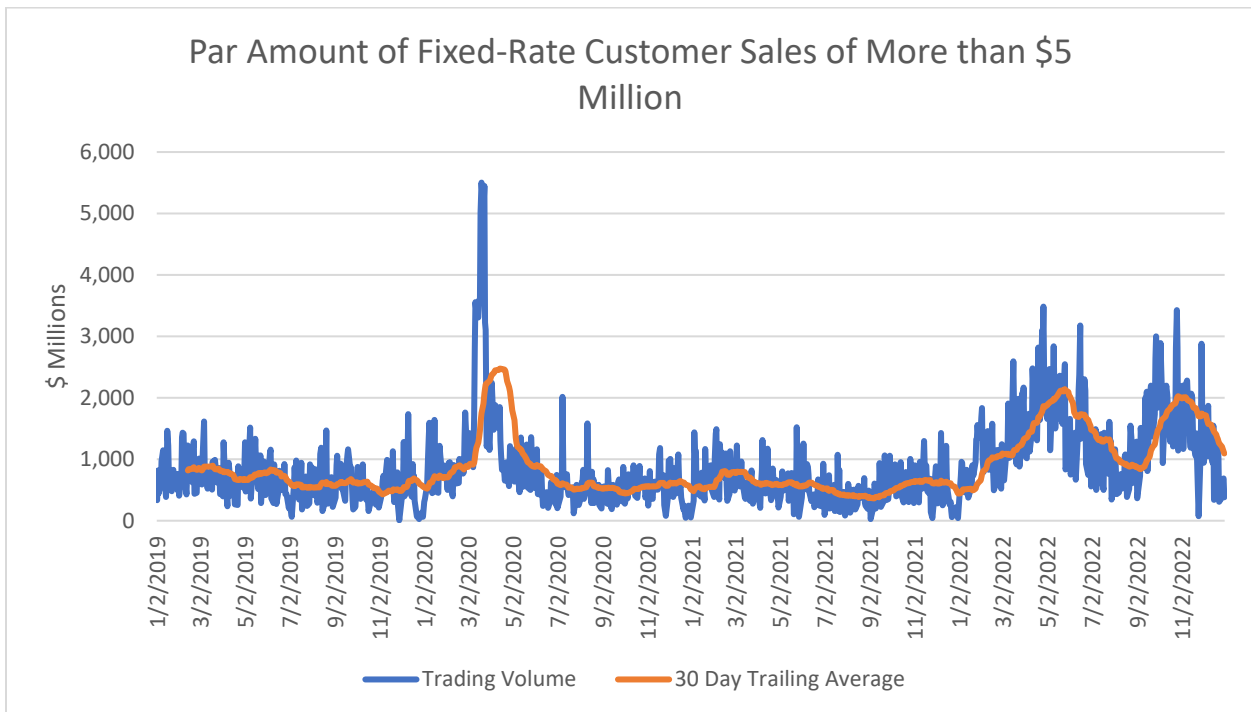
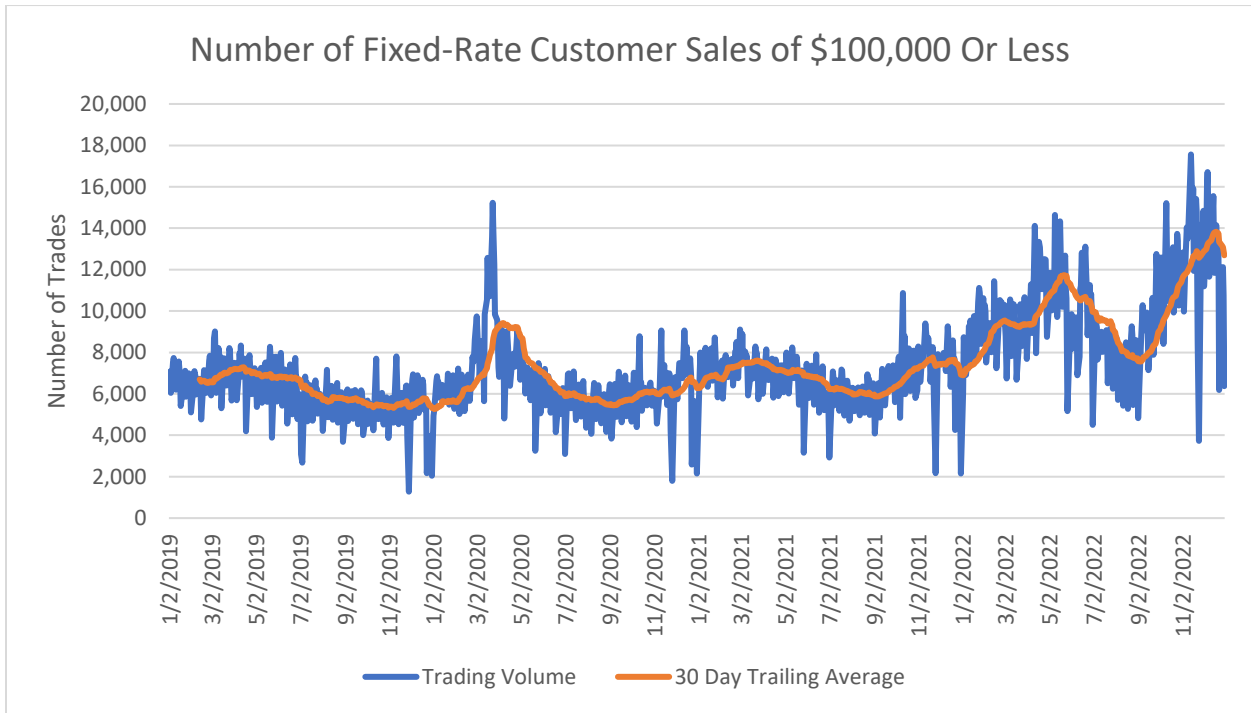
## Customer Sales: Fixed-Rate Trades

January 1, 2019 – December 31, 2022





## Municipal Securities Market Trading Summary



## Municipal Securities Market Trading Summary

### Part III: Municipal Variable-Rate Market Trading Activity

**Annual Averages 2019 – 2022**

**January 1, 2019 – December 31, 2022**

#### Customer Purchases: Variable-Rate Trades

Daily Averages	Number of Trades				Par Traded (\$ Millions)			
	Under \$1 Million	\$1 Million to \$5 Million	More than \$5 Million	Total	Under \$1 Million	\$1 Million to \$5 Million	More than \$5 Million	Total
2019	301	151	97	549	85	356	1,503	1,944
2020	214	135	90	439	64	322	1,390	1,776
2021	118	75	50	243	32	182	761	974
2022	204	109	81	394	50	267	1,319	1,636
Jun 2020	156	118	84	358	48	288	1,261	1,597
Jul 2020	167	125	91	382	49	304	1,394	1,747
Aug 2020	167	113	58	339	52	261	880	1,193
Sep 2020	131	104	70	305	38	256	1,135	1,429
Oct 2020	155	101	75	332	46	244	1,039	1,330
Nov 2020	161	98	59	318	47	233	811	1,090
Dec 2020	168	106	62	336	51	247	852	1,150
Jan 2021	167	60	40	267	48	137	609	793
Feb 2021	139	69	42	251	38	163	612	813
Mar 2021	122	85	64	272	32	207	976	1,215
Apr 2021	129	98	63	291	34	238	883	1,155
May 2021	135	90	59	283	38	218	747	1,003
Jun 2021	122	76	44	243	34	183	753	970
Jul 2021	97	55	39	191	26	132	646	803
Aug 2021	111	52	25	188	29	122	365	516
Sep 2021	91	72	51	214	25	181	889	1,095
Oct 2021	96	72	55	224	24	181	786	992
Nov 2021	100	77	52	229	25	193	751	968
Dec 2021	113	90	69	273	30	222	1,094	1,346
Jan 2022	114	67	56	237	27	167	852	1,046
Feb 2022	132	103	91	325	30	260	1,545	1,835
Mar 2022	153	115	102	369	41	293	1,588	1,922
Apr 2022	214	118	82	414	52	286	1,264	1,602
May 2022	234	128	104	466	59	312	1,742	2,114
Jun 2022	286	113	80	479	63	277	1,276	1,617
Jul 2022	179	94	71	344	43	235	1,267	1,546
Aug 2022	208	101	65	374	52	242	1,061	1,355
Sep 2022	192	105	84	382	47	255	1,428	1,731
Oct 2022	247	125	79	450	60	294	1,203	1,557
Nov 2022	237	99	51	387	55	238	760	1,054
Dec 2022	250	140	105	495	64	342	1,806	2,212

## Municipal Securities Market Trading Summary

### Customer Sales: Variable-Rate Trades

Daily Averages	Number of Trades				Par Traded (\$ Millions)			
	Under \$1 Million	\$1 Million to \$5 Million	More than \$5 Million	Total	Under \$1 Million	\$1 Million to \$5 Million	More than \$5 Million	Total
2019	354	137	87	578	97	319	1,343	1,758
2020	329	124	80	533	89	287	1,257	1,633
2021	171	63	41	275	36	173	708	917
2022	211	93	73	378	50	229	1,178	1,457
Jun 2020	322	109	69	501	86	254	1,064	1,404
Jul 2020	275	111	80	466	75	258	1,257	1,591
Aug 2020	221	78	45	344	55	177	736	968
Sep 2020	270	103	63	436	73	238	1,042	1,354
Oct 2020	231	85	65	381	61	205	940	1,205
Nov 2020	206	86	50	341	55	200	687	941
Dec 2020	225	87	52	364	59	197	766	1,022
Jan 2021	198	50	30	278	48	108	486	642
Feb 2021	212	68	42	322	55	159	634	848
Mar 2021	223	76	49	348	56	179	770	1,005
Apr 2021	198	79	52	329	50	186	737	973
May 2021	201	72	43	316	51	166	562	779
Jun 2021	160	54	34	248	39	127	522	689
Jul 2021	130	47	33	210	30	109	582	721
Aug 2021	126	38	17	181	29	91	219	339
Sep 2021	159	72	49	280	41	174	777	992
Oct 2021	160	64	40	265	40	156	585	781
Nov 2021	151	69	46	266	35	163	669	867
Dec 2021	147	73	56	276	36	177	849	1,061
Jan 2022	155	70	65	290	35	176	1,036	1,247
Feb 2022	163	90	73	326	39	223	1,109	1,371
Mar 2022	171	89	87	347	40	230	1,406	1,676
Apr 2022	223	102	76	401	50	249	1,194	1,493
May 2022	201	94	94	390	46	237	1,625	1,908
Jun 2022	205	89	69	363	49	222	1,126	1,396
Jul 2022	204	99	80	383	51	247	1,310	1,608
Aug 2022	182	66	45	292	43	159	712	913
Sep 2022	233	113	91	436	58	274	1,490	1,822
Oct 2022	235	92	56	383	53	220	884	1,157
Nov 2022	276	100	51	428	65	238	746	1,049
Dec 2022	289	118	89	496	69	283	1,480	1,831

## Municipal Securities Market Trading Summary

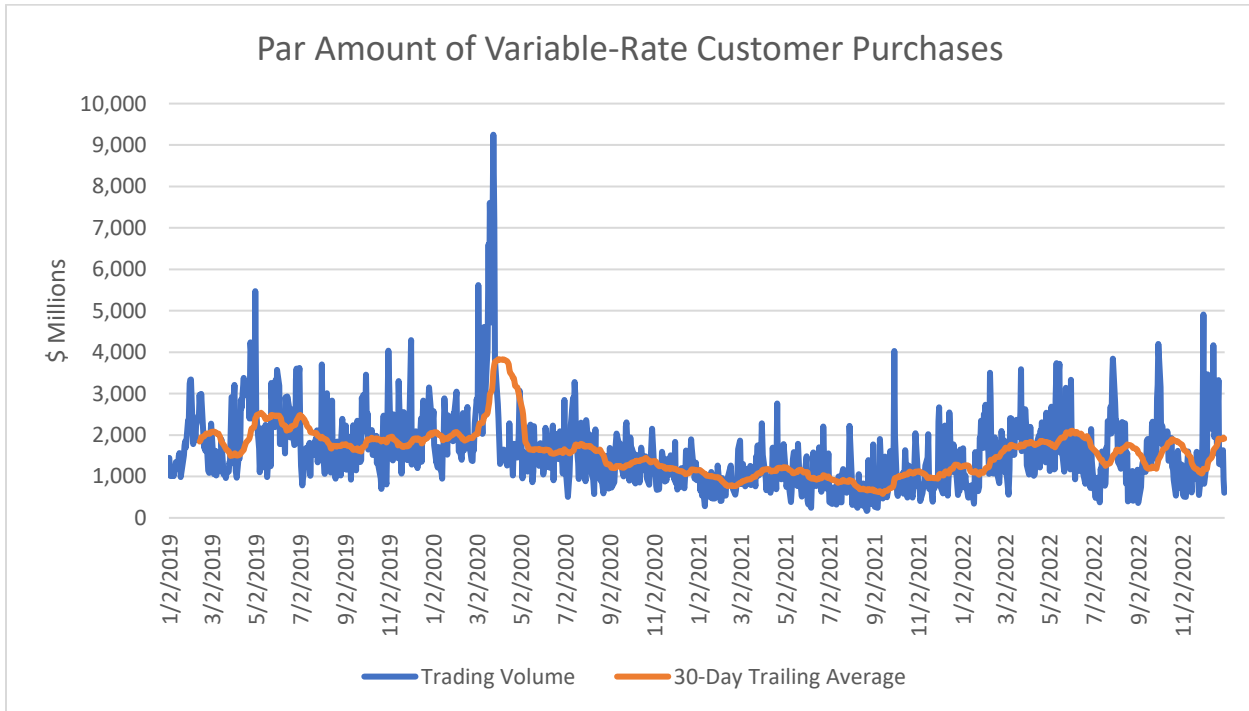
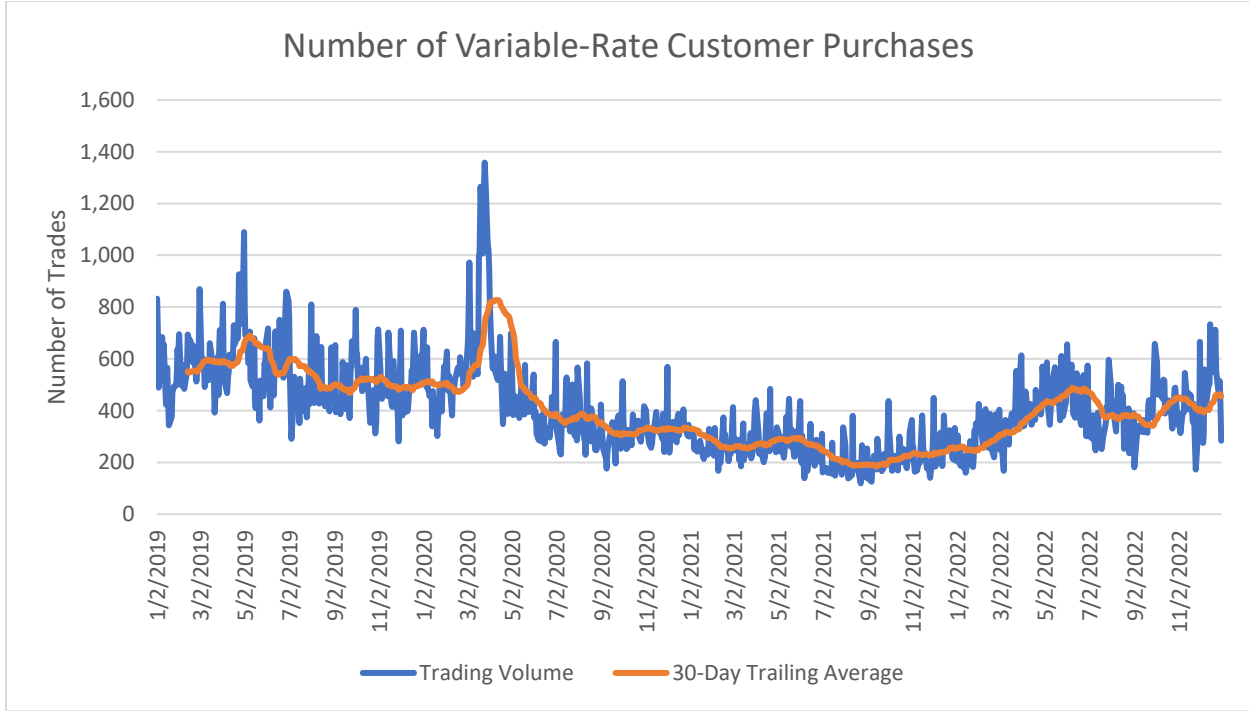
### Customer Purchases to Sale Net: Variable-Rate Trades

Daily Averages	Number of Trades				Par Traded (\$ Millions)			
	Under \$1 Million	\$1 Million to \$5 Million	More than \$5 Million	Total	Under \$1 Million	\$1 Million to \$5 Million	More than \$5 Million	Total
2019	-53	14	10	-28	-11	37	160	186
2020	-116	11	10	-94	-25	35	133	142
2021	-53	11	10	-32	-4	9	53	58
2022	-7	16	8	17	0	38	141	179
Jun 2020	-166	9	15	-142	-38	35	197	194
Jul 2020	-108	14	11	-83	-26	45	137	157
Aug 2020	-54	36	13	-5	-3	84	144	225
Sep 2020	-139	2	7	-130	-35	18	92	75
Oct 2020	-76	16	10	-49	-15	40	100	125
Nov 2020	-44	12	9	-23	-8	33	124	149
Dec 2020	-57	19	10	-28	-8	50	85	128
Jan 2021	-31	10	10	-10	-1	29	123	151
Feb 2021	-73	1	0	-71	-16	4	-23	-35
Mar 2021	-100	8	15	-77	-25	28	206	210
Apr 2021	-69	19	11	-39	-16	52	146	182
May 2021	-66	18	16	-33	-14	52	185	224
Jun 2021	-38	22	11	-5	-5	56	231	282
Jul 2021	-33	8	7	-18	-4	23	64	82
Aug 2021	-15	14	8	7	0	31	146	177
Sep 2021	-68	0	2	-66	-16	7	113	103
Oct 2021	-64	7	15	-41	-15	25	201	211
Nov 2021	-52	8	6	-37	-11	30	81	101
Dec 2021	-34	17	13	-3	-6	45	245	285
Jan 2022	-41	-3	-10	-53	-7	-9	-185	-200
Feb 2022	-32	13	18	-1	-9	38	435	464
Mar 2022	-18	26	15	23	0	64	182	246
Apr 2022	-9	16	7	13	2	37	70	109
May 2022	33	34	10	77	13	75	118	206
Jun 2022	80	25	10	116	14	56	151	221
Jul 2022	-25	-5	-8	-38	-8	-12	-42	-62
Aug 2022	26	35	20	81	10	83	349	442
Sep 2022	-40	-7	-7	-55	-10	-19	-61	-91
Oct 2022	12	33	23	67	8	74	318	400
Nov 2022	-40	-2	0	-41	-9	1	14	5
Dec 2022	-39	22	16	-1	-5	59	326	380

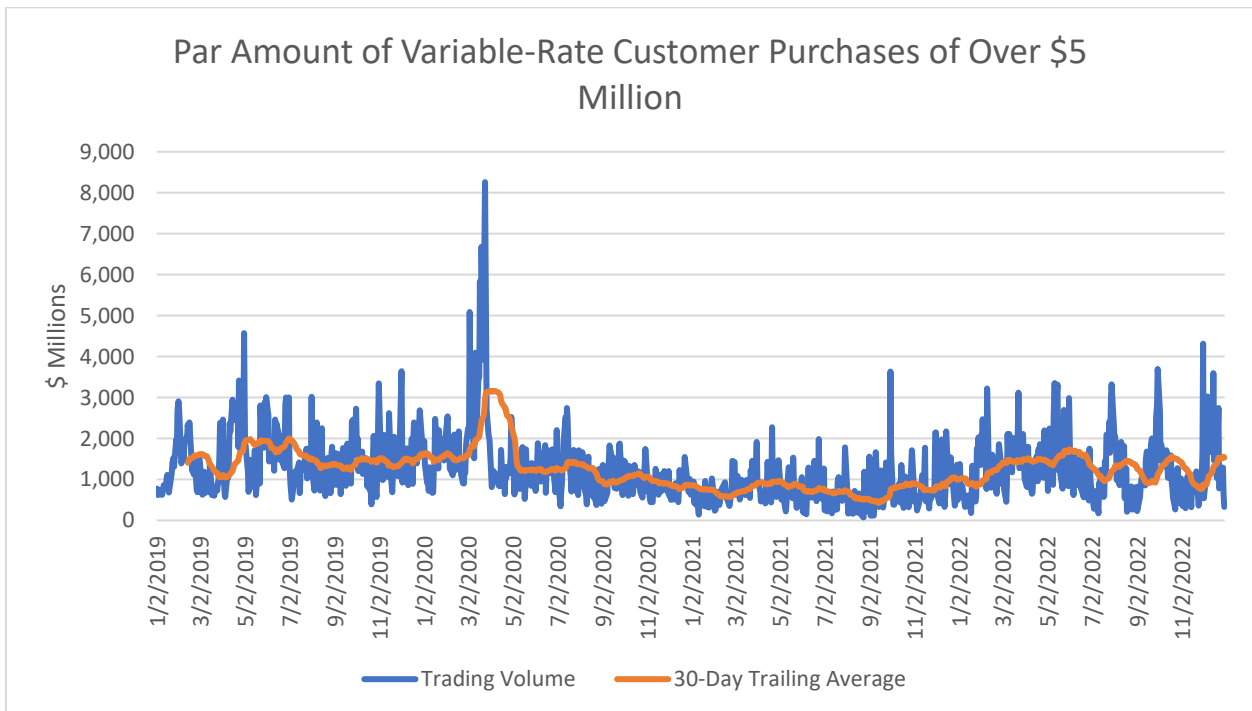
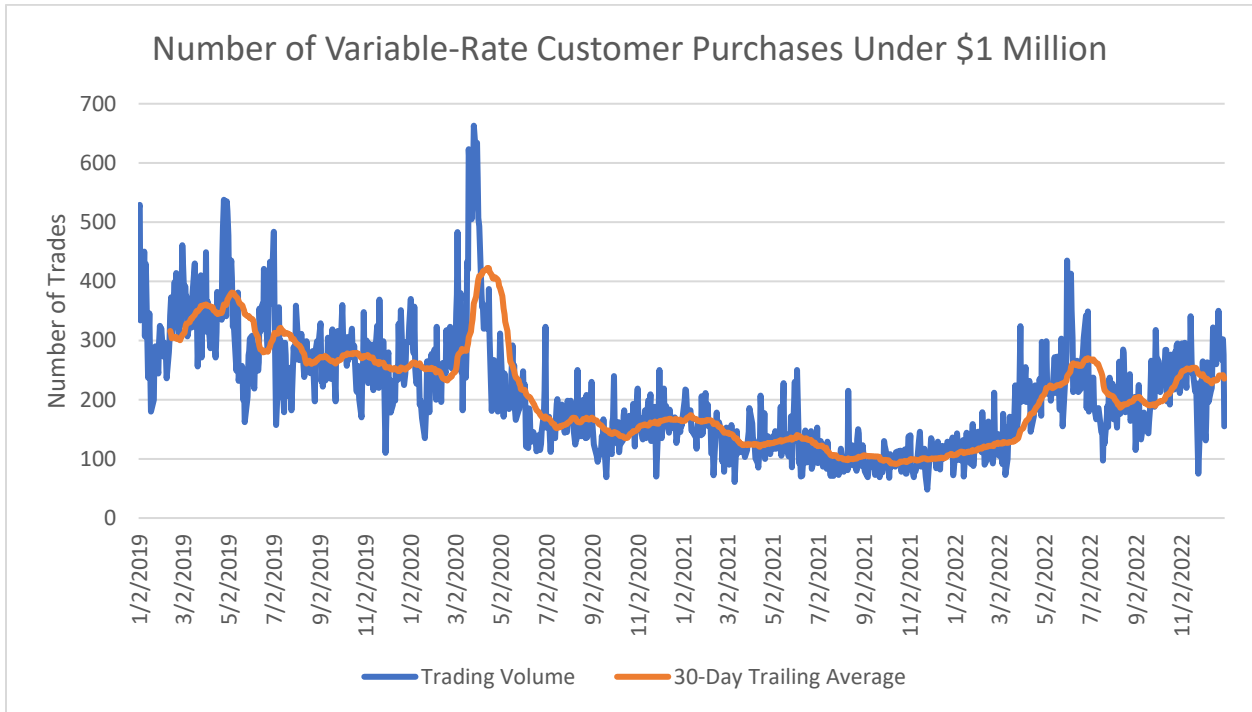
# Municipal Securities Market Trading Summary

## 2019 – 2022 Daily Trade Activity

### Customer Purchases: Variable-Rate Trades January 1, 2019 – December 31, 2022

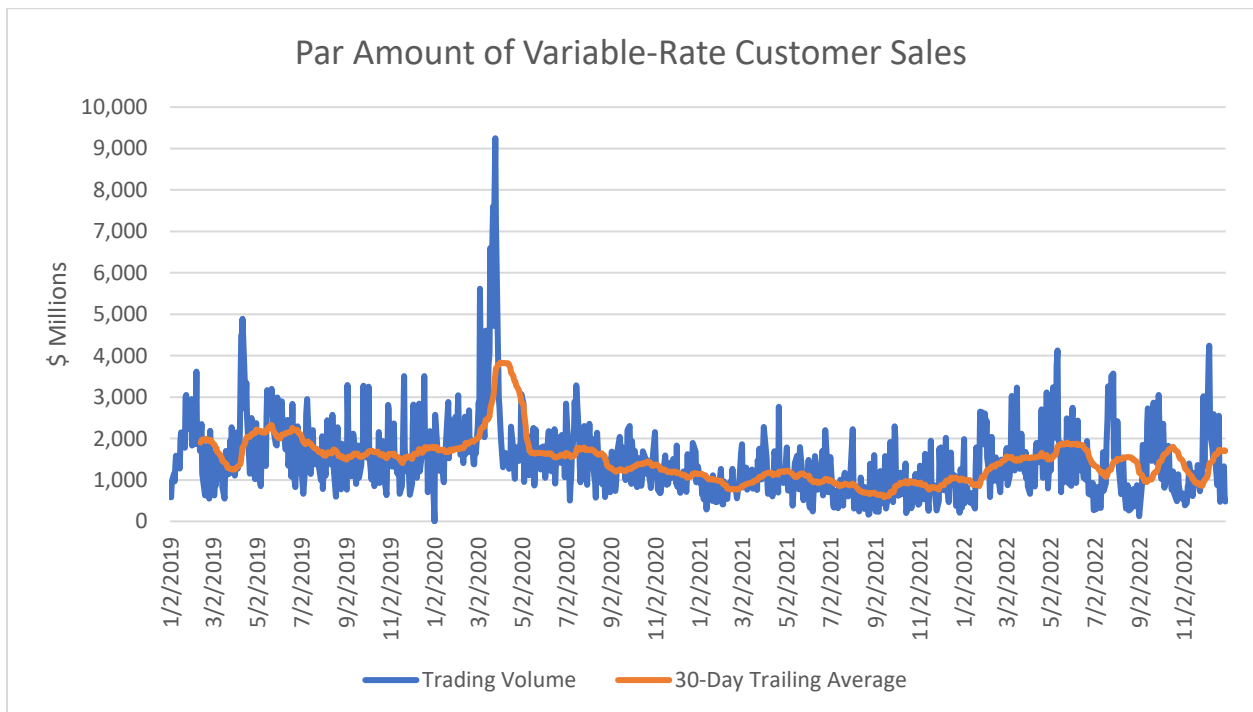
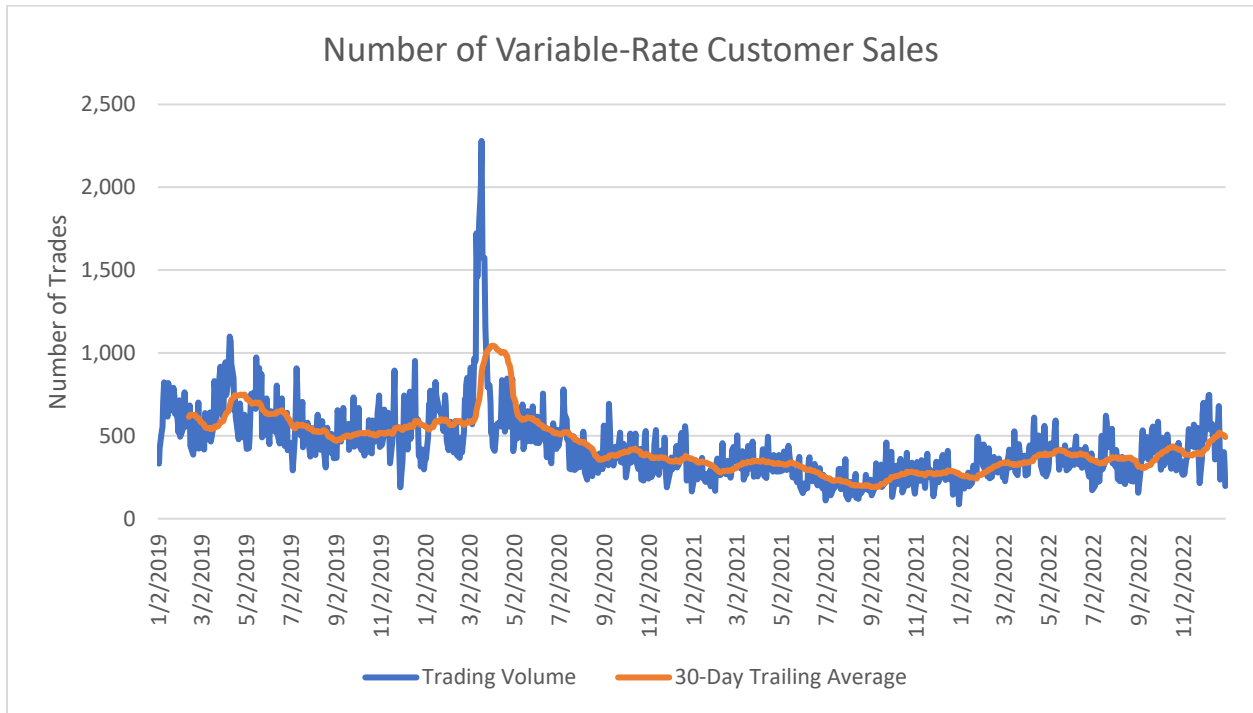


## Municipal Securities Market Trading Summary



## Municipal Securities Market Trading Summary

### Customer Sales: Variable-Rate Trades January 1, 2019 – December 31, 2022



## Municipal Securities Market Trading Summary

