

UNDERWRITERS AND FINANCIAL ADVISORS

UNITED STATES MUNICIPALS REVIEW

First Quarter 2023

An LSEG Business

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United States Municipal Review

First Quarter 2023 | Underwriters, Financial Advisors & Credit Enhancers

Global Deals Intelligence

MUNICIPAL BOND ISSUANCE FALLS 24% TO FIVE-YEAR LOW

US municipal bond issuance totaled US\$74.0 billion during the first quarter of 2023, a 24% decline compared to a year ago and the slowest opening period for municipal bonds in five years. By number of issues, nearly 1,400 municipal bonds were brought to market during the first quarter of 2023, a 40% decrease compared to year ago levels. First quarter 2023 municipal bond proceeds increased 9% compared to the fourth quarter of 2022.

REFUNDINGS FALL TO 23-YEAR LOW; NEW MONEY OFFERINGS DOWN 19%

Refunding activity within the municipal bond market totaled US\$14.0 billion during the first quarter of 2023, a 39% decrease compared to 2022 levels and the slowest opening period for refunding issuance since 2000. New money offerings totaled US\$60.0 billion during the first quarter of 2023, a 19% decrease compared to a year ago and the slowest opening period for new money municipal bonds since 2020.

GREEN BOND ISSUANCE DOUBLES; STRONGEST FIRST QUARTER ON RECORD

Green bond issuance in the US municipal bond market totaled US\$4.3 billion during the first quarter of 2023, doubling first quarter 2022 levels, and marking the strongest first quarter for green municipal bond issuance on record. By number of issues, 16 green bonds were sold during first quarter 2023, a 30% decrease compared to first quarter 2022 levels and a five-year low. Green bond offerings from issuers in California, New York and the District of Columbia accounted for 88% of first quarter 2023 issuance.

TEXAS, CALIFORNIA AND NEW YORK LEAD MUNI MARKET

Bond issuers in Texas, California and New York accounted for a combined 47% of the US municipal bond market during the first quarter of 2023, up from 37% during first quarter 2022. Within the top 20 states for new municipal bonds, issuers in Oregon, Louisiana and Wisconsin registered strong percentage gains compared to a year ago, while Colorado, Michigan and Florida issuers registered average declines of 50% compared to first quarter 2022.

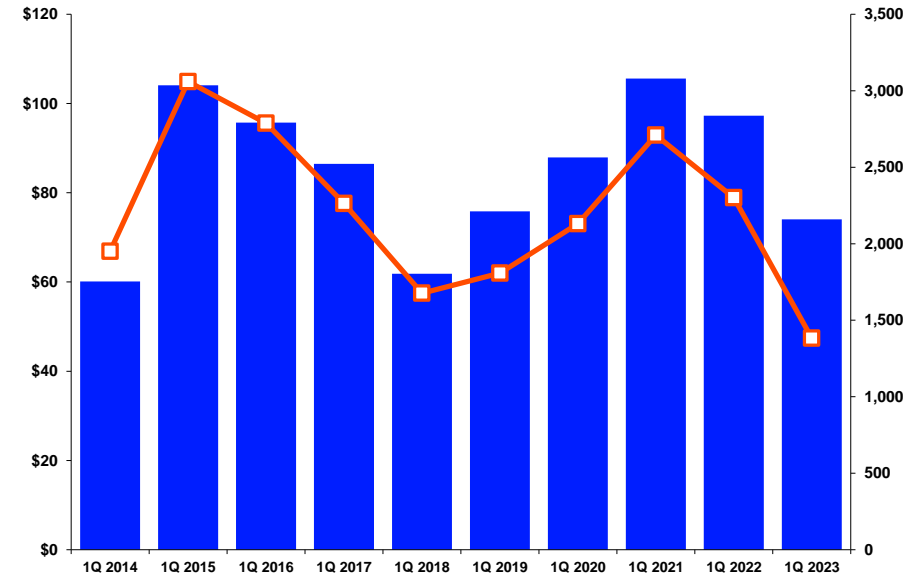
UTILITIES, EDUCATION AND HOUSING BONDS GAIN SHARE

Municipal bonds with Utilities, Education and Housing use of proceeds registered market share gains compared to the first quarter of 2022, with an average increase of 2.5 market share points. Environmental Facilities and Development bonds lead the first quarter's advancing use of proceeds compared to a year ago. New issuance with Public Facilities and Healthcare use of proceeds fell an average of 66%, by par amount, and 50% by number of issues, compared to first quarter 2022.

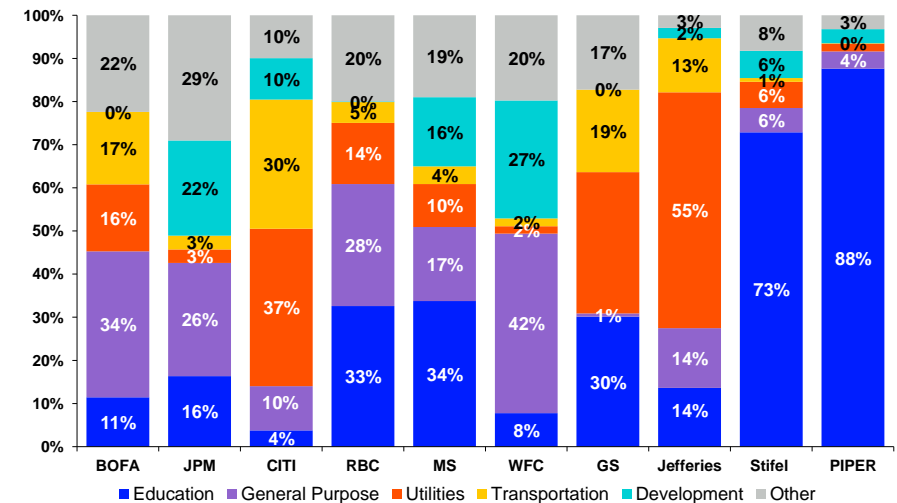
TAXABLE MUNICIPAL BONDS DECLINE 29% FROM 2022 LEVELS

Taxable municipal bond offerings totaled US\$11.3 billion during the first quarter of 2023, a decrease of 29% compared to levels seen during first quarter 2022 and marking the slowest opening period for taxable bonds since 2019. Taxable offerings accounted for 15% of first quarter 2023 municipal bond issuance, down slightly from first quarter 2022, when taxable bonds accounted for 16% of total US municipal bond issuance.

United States Municipals Issuance



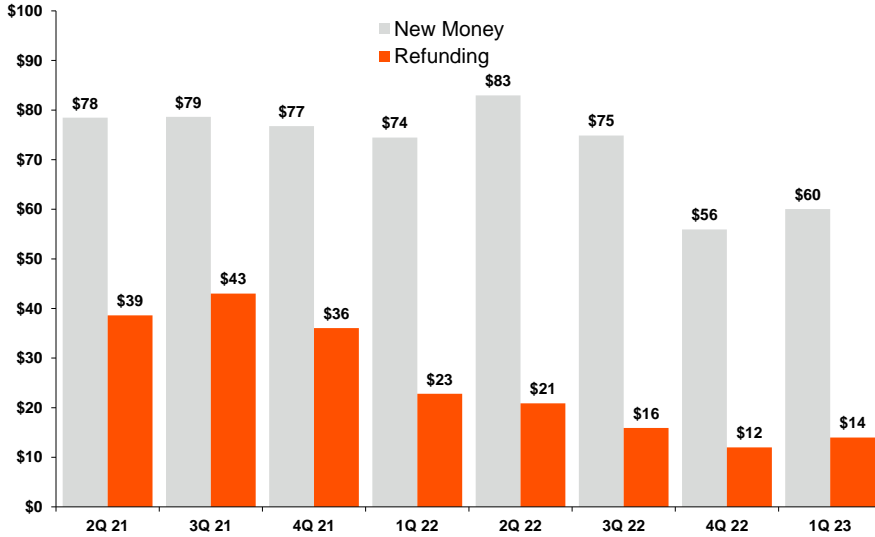
Top 10 Bookrunners by Proceeds - Use of Proceeds Composition



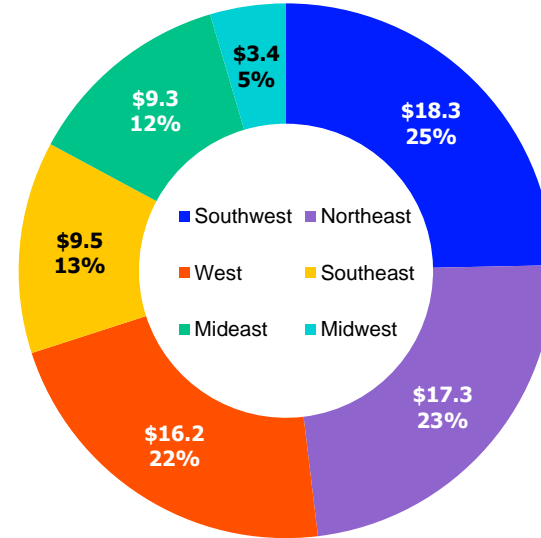
US Municipal Insights

First Quarter 2023 | Underwriters, Financial Advisors & Credit Enhancers

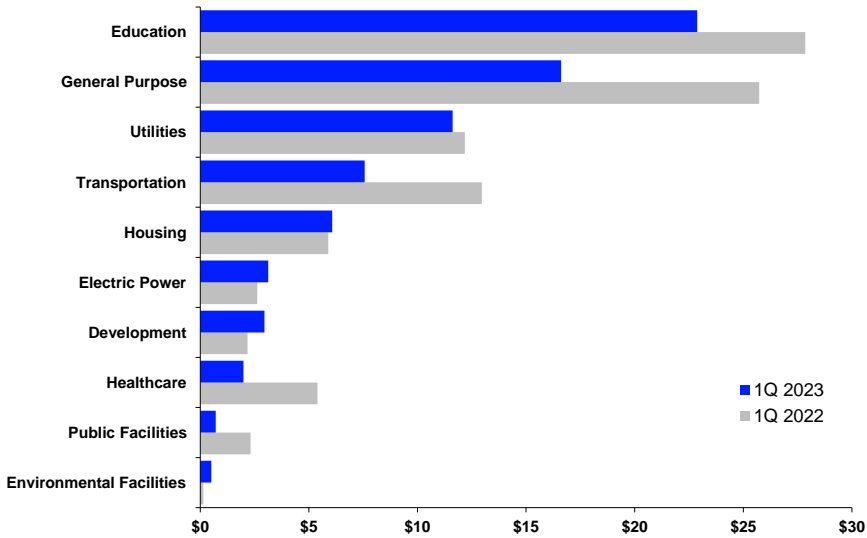
New Money vs. Refunding (US\$bil)



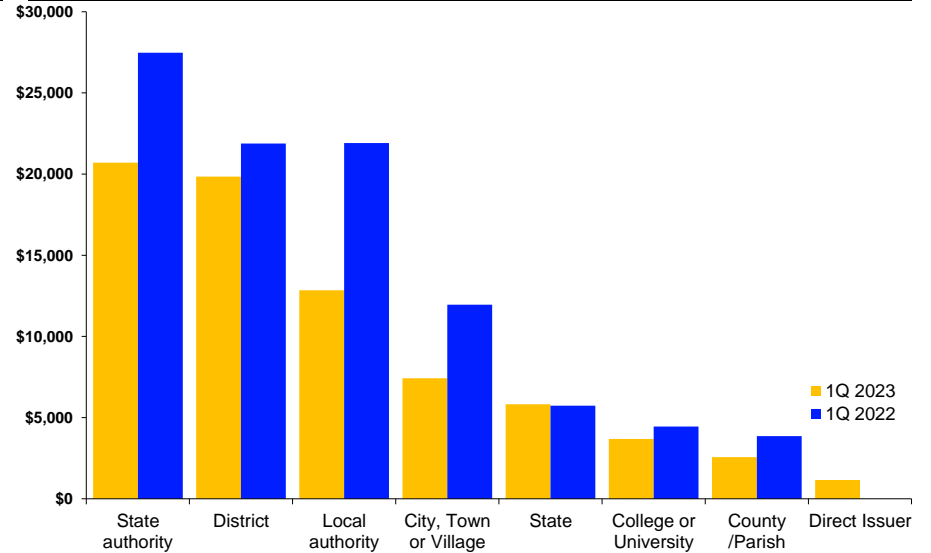
Regional Composition of Proceeds (US\$bil)



Use of Proceeds (US\$bil)



Issuer Type Composition (US\$bil)



US Underwriters

First Quarter 2023 | Underwriters, Financial Advisors & Credit Enhancers

Bookrunners (AT01)								
	YoY Change (\$)		-24%		QoQ Change (\$)		9%	
Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals		
BofA Securities Inc	1	1	9,550	12.9	0.1	77		
RBC Capital Markets	2	3	7,480	10.1	2.4	86		
Jefferies LLC	3	11	6,572	8.9	5.3	27		
Morgan Stanley	4	6	6,520	8.8	3.1	50		
Goldman Sachs & Co LLC	5	7	5,976	8.1	3.1	25		
J P Morgan Securities LLC	6	2	4,812	6.5	-4.3	46		
Stifel Nicolaus & Co Inc	7	8	3,361	4.5	-0.1	124		
Raymond James	8	9	3,314	4.5	0.8	86		
Citi	9	5	3,256	4.4	-2.7	25		
Wells Fargo & Co	10	4	2,908	3.9	-3.2	26		
Siebert Williams Shank & Co	11	16	2,814	3.8	2.3	16		
Piper Sandler & Co	12	12	2,626	3.6	0.1	60		
Robert W Baird & Co Inc	13	13	2,609	3.5	0.4	140		
Ramirez & Co Inc	14	15	1,599	2.2	0.2	7		
Barclays	15	10	1,563	2.1	-1.6	14		
Industry Total			74,039	100.0		1,383		

Long & Short Term (AT16)								
	YoY Change (\$)		-22%		QoQ Change (\$)		9%	
Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals		
BofA Securities Inc	1	1	10,245	13.2	0.5	87		
RBC Capital Markets	2	3	7,480	9.6	2.0	86		
Jefferies LLC	3	12	6,963	9.0	5.4	57		
Morgan Stanley	4	6	6,620	8.5	2.6	51		
Goldman Sachs & Co LLC	5	7	5,976	7.7	2.9	25		
J P Morgan Securities LLC	6	2	5,648	7.3	-3.5	63		
Raymond James	7	11	3,376	4.3	0.6	90		
Stifel Nicolaus & Co Inc	8	8	3,366	4.3	-0.3	127		
Citi	9	5	3,356	4.3	-2.6	26		
Wells Fargo & Co	10	4	3,134	4.0	-3.0	28		
Piper Sandler & Co	11	10	2,863	3.7	0.0	111		
Siebert Williams Shank & Co	12	16	2,814	3.6	2.1	16		
Robert W Baird & Co Inc	13	13	2,783	3.6	0.6	143		
Ramirez & Co Inc	14	15	1,599	2.1	0.1	7		
Barclays	15	9	1,563	2.0	-1.9	14		
Industry Total			77,717	100.0		1,645		

Issuers (AT15)								
	YoY Change (\$)		-24%		QoQ Change (\$)		9%	
Issuer	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals		
Texas Natural Gas Sec Fin Corp	1	-	3,522	4.8	4.8	1		
Triborough Bridge & Tunnel Auth	2	31	2,847	3.9	3.3	3		
NYC Transitional Finance Auth	3	1	2,446	3.3	-0.3	5		
Regents of the University of California	4	-	2,168	2.9	2.9	4		
New York City-New York	5	14	1,878	2.5	1.5	3		
California Comm Choice Fin Auth	6	-	1,840	2.5	2.5	4		
California	7	4	1,804	2.4	0.1	1		
Main Street Natural Gas Inc	8	10	1,530	2.1	0.9	2		
Louisiana Gov Env Fac & CDA (LCDA)	9	473	1,516	2.1	2.1	3		
NYC Municipal Water Fin Auth	10	7	1,493	2.0	0.6	2		
Oregon	11	-	989	1.3	1.3	4		
Wisconsin	12	47	956	1.3	0.9	4		
District of Columbia	13	-	820	1.1	1.1	2		
Tennessee Energy Acquisition Corp	14	-	788	1.1	1.1	2		
Sales Tax Securitization Corp	15	-	741	1.0	1.0	5		
Industry Total			74,039	100.0		1,383		

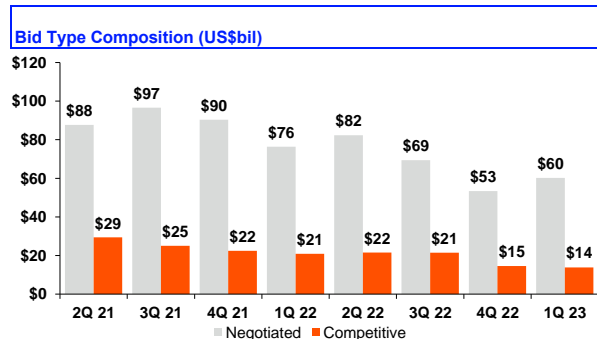
Negotiated (AT03)								
	YoY Change (\$)		-21%		QoQ Change (\$)		13%	
Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals		
RBC Capital Markets	1	3	7,166	11.9	2.6	74		
BofA Securities Inc	2	1	6,788	11.3	0.1	43		
Goldman Sachs & Co LLC	3	5	5,976	9.9	3.6	25		
Jefferies LLC	4	11	5,877	9.8	6.2	17		
Morgan Stanley	5	8	4,746	7.9	3.1	25		
J P Morgan Securities LLC	6	2	3,462	5.8	-4.9	27		
Stifel Nicolaus & Co Inc	7	7	3,296	5.5	-0.3	120		
Raymond James	8	10	3,008	5.0	0.9	60		
Siebert Williams Shank & Co	9	15	2,814	4.7	2.8	16		
Piper Sandler & Co	10	12	2,521	4.2	0.8	49		
Citi	11	6	2,233	3.7	-2.4	14		
Wells Fargo & Co	12	4	2,103	3.5	-3.5	20		
Ramirez & Co Inc	13	14	1,599	2.7	0.1	7		
Barclays	14	9	1,563	2.6	-2.1	14		
Robert W Baird & Co Inc	15	16	1,404	2.3	0.5	60		
Industry Total			60,179	100.0		796		

Competitive (AT04)								
	YoY Change (\$)		-34%		QoQ Change (\$)		-5%	
Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals		
BofA Securities Inc	1	1	2,762	19.9	1.0	34		
Morgan Stanley	2	4	1,774	12.8	3.9	25		
J P Morgan Securities LLC	3	2	1,351	9.7	-1.5	19		
Robert W Baird & Co Inc	4	5	1,206	8.7	0.6	80		
Citi	5	3	1,024	7.4	-3.1	11		
Wells Fargo & Co	6	6	806	5.8	-1.7	6		
Jefferies LLC	7	8	695	5.0	1.5	10		
Mesirow Financial Inc	8	20	394	2.8	1.6	9		
Fifth Third Securities Inc	9	26	344	2.5	2.2	7		
Hilltop Securities	10	15	340	2.5	1.0	17		
RBC Capital Markets	11	13	315	2.3	0.5	12		
Raymond James	12	10	306	2.2	-0.2	26		
BOK Financial Securities Inc	13	21	259	1.9	0.7	42		
Samco Capital Markets	14	19	247	1.8	0.4	35		
Fidelity Capital Markets	15	16	222	1.6	0.2	22		
Industry Total			13,860	100.0		587		

Co-Manager (AT12)								
	YoY Change (\$)		-17%		QoQ Change (\$)		24%	
Co-Manager	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals		
Stifel Nicolaus & Co Inc	1	10	2,683	3.6	1.3	101		
Raymond James	2	2	2,474	3.3	0.1	102		
Ramirez & Co Inc	3	5	2,223	3.0	0.2	135		
Siebert Williams Shank & Co	4	1	2,175	2.9	-0.4	46		
Morgan Stanley	5	6	1,942	2.6	-0.1	90		
Jefferies LLC	6	16	1,890	2.6	1.3	53		
J P Morgan Securities LLC	7	7	1,858	2.5	0.0	63		
Piper Sandler & Co	8	15	1,852	2.5	0.7	28		
Loop Capital Markets	9	4	1,806	2.4	-0.4	125		
RBC Capital Markets	10	11	1,560	2.1	-0.1	61		
Citi	11	8	1,412	1.9	-0.5	61		
UBS Financial Services Inc	12	14	1,400	1.9	0.0	92		
Barclays	13	19	1,334	1.8	0.8	43		
Blaylock Van LLC	14	20	1,308	1.8	0.8	31		
Academy Securities Inc	15	9	1,292	1.8	-0.6	44		
Industry Total			50,220	100.0		490		

US Taxable Municipal Debt (AT62)								
	YoY Change (\$)		-58%		QoQ Change (\$)		74%	
Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals		
JP Morgan	1	11	800	18.4	15.7	5		
Wells Fargo & Co	2	1	780	17.9	3.4	6		
Morgan Stanley	3	10	635	14.6	11.7	4		
Citi	4	8	612	14.0	7.8	5		
BofA Securities Inc	5	2	325	7.5	-5.3	7		
Robert W Baird & Co Inc	6	12	297	6.8	4.4	8		
RBC Capital Markets	7	3	197	4.5	-6.3	6		
UBS	8	9	164	3.8	-0.8	3		
Siebert Williams Shank & Co	9	-	141	3.2	3.2	2		
Piper Sandler & Co	10	14	82	1.9	0.4	5		
Industry Total			4,358	100.0		96		

Minority Owned Firms (AT41)								
	YoY Change (\$)		-16%		QoQ Change (\$)		22%	
Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals		
Siebert Williams Shank & Co	1	3	2,814	7.1	4.0	16		
Ramirez & Co Inc	2	2	1,599	4.0	-0.2	7		
Loop Capital Markets	3	1	894	2.3	-2.7	9		
Estrada Hinojosa & Company Inc	4	5	123	0.3	0.2	3		
Bancroft Capital	5	-	23	0.1	0.1	2		
Stern Brothers & Co	6	-	6	0.0	0.0	1		
Industry Total			39,613	100.0		343		



*Indicates a Tie

Composite Amount US\$10m & Under

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Bookrunner Composite Amount Under \$10m (AT02)

Bookrunner	Rank		Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
	2023	2022				
Robert W Baird & Co Inc	1	3	380	15.1	7.5	74
Stifel Nicolaus & Co Inc	2	1	251	10.0	-0.7	44
Raymond James	3	4	191	7.6	0.8	33
Samco Capital Markets	4	7	164	6.5	2.4	32
Piper Sandler & Co	5	2	118	4.7	-3.7	28
D A Davidson & Co	6	5	112	4.5	-2.0	37
FMSbonds Inc	7	13	102	4.0	1.3	21
RBC Capital Markets	8	10	93	3.7	0.7	14
LJ Hart & Company	9	18	87	3.5	1.7	25
Janney Montgomery Scott LLC	10	27	80	3.2	2.4	10
TD Securities (USA) LLC	11	55*	77	3.1	2.9	20
BOK Financial Securities Inc	12	12	75	3.0	0.1	34
PNC Financial Services Group Inc	13	15	61	2.4	0.1	8
Hilltop Securities	14	16	61	2.4	0.4	9
Roosevelt & Cross Inc	15	9	57	2.3	-1.6	25
Industry Total			2,520	100.0		596

YoY Change (\$) -42% QoQ Change (\$) -9%

Co-Manager Composite Amount Under \$10m (AT12a)

Co-Manager	Rank		Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
	2023	2022				
CINCaP Investment Group	1	12	21	0.9	0.4	40
R Seelaus & Company Inc	2	11	21	0.8	0.2	39
Cantor Fitzgerald LP	3*	2	21	0.8	-0.6	6
Truist Financial Corp	3*	3*	21	0.8	-0.4	6
BOK Financial Securities Inc	5	6	20	0.8	0.0	3
Stifel Nicolaus & Co Inc	6*	3*	19	0.8	-0.4	15
Sierra Pacific Securities	6*	13	19	0.8	0.3	63
Carty & Company Inc	8	69*	19	0.8	0.8	62
Crews & Associates Inc	9	7	18	0.7	0.0	58
D A Davidson & Co	10	5	18	0.7	-0.2	9
Intercoastal Capital Markets	11	14	18	0.7	0.2	30
Loop Capital Markets	12	17	16	0.7	0.4	56
United Bankers Bank	13	1	16	0.6	-1.0	10
Ramirez & Co Inc	14	9	15	0.6	-0.1	35
Fidelity Capital Markets	15	41	15	0.6	0.4	21
Industry Total			625	100.0		121

YoY Change (\$) -35% QoQ Change (\$) -30%

Financial Advisor Composite Amt Under \$10m (AT07a)

Financial Advisor	Rank		Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
	2023	2022				
PFM Financial Advisors LLC	1	1	240	14.1	2.0	36
Robert W Baird & Co Inc	2	4	150	8.8	3.3	31
Hilltop Securities	3	3	135	7.9	2.1	26
Masterson Advisors LLC	4	8	120	7.1	4.5	21
Ehlers & Associates	5	2	103	6.0	0.2	20
Stephen H McDonald & Associates Inc	6	7	69	4.1	1.2	32
Baker Tilly Municipal Advisors	7	14	69	4.0	1.8	15
PMA Securities Inc	8	16	50	2.9	0.9	10
Capital Markets Advisors LLC	9	20	47	2.8	1.3	10
Urban Futures Inc	10	21	47	2.8	1.3	8
Samco Capital Markets	11	10	41	2.4	0.0	7
GMS Group LLC	12	13	40	2.3	0.1	7
Fieldman Rolapp & Associates	13	46	39	2.3	1.8	9
Piper Sandler & Co	14	5	38	2.2	-2.9	6
RBC Capital Markets	15	18	37	2.2	0.4	6
Industry Total			1,704	100.0		398

YoY Change (\$) -43% QoQ Change (\$) -18%

Negotiated Composite Amt Under \$10m (AT21)

Bookrunner	Rank		Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
	2023	2022				
Stifel Nicolaus & Co Inc	1	1	232	19.5	1.9	41
Robert W Baird & Co Inc	2	8	136	11.4	8.0	26
Raymond James	3	3	120	10.1	1.7	20
D A Davidson & Co	4	2	108	9.1	-2.4	35
FMSbonds Inc	5	5	102	8.6	4.1	21
LJ Hart & Company	6	9	87	7.3	4.0	25
RBC Capital Markets	7	6	64	5.4	1.3	10
Piper Sandler & Co	8	4	64	5.4	-2.9	20
PNC Financial Services Group Inc	9	10	43	3.6	0.3	6
Bernardi Securities Inc	10	18	22	1.8	0.1	7
Oppenheimer & Co	11	31	21	1.8	1.3	4
The Frazer Lanier Company Inc	12	13	19	1.6	-0.4	5
Hilltop Securities	13	19	17	1.5	0.1	2
Samco Capital Markets	14	14	15	1.3	-0.7	3
UMB Bank NA	15	20	14	1.2	0.0	3
Industry Total			1,191	100.0		266

*Indicates a Tie

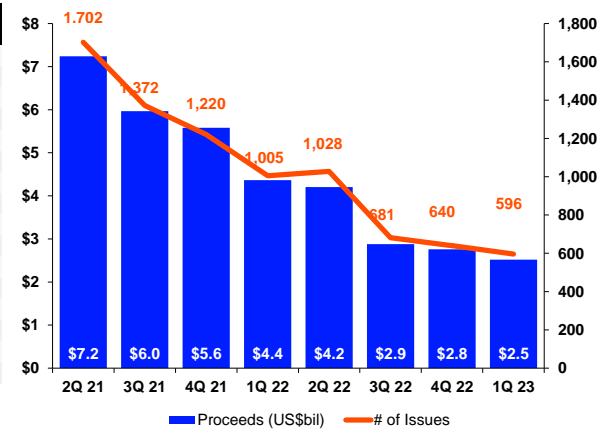
YoY Change (\$) -50% QoQ Change (\$) 7%

Competitive Composite Amt Under \$10m (AT20)

Bookrunner	Rank		Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
	2023	2022				
Robert W Baird & Co Inc	1	1	244	18.4	5.7	48
Samco Capital Markets	2	5	149	11.2	4.6	29
Janney Montgomery Scott LLC	3	16	80	6.0	4.3	10
TD Securities (USA) LLC	4	35	77	5.8	5.4	20
Raymond James	5	8	71	5.4	0.4	13
BOK Financial Securities Inc	6	7	69	5.2	-0.5	33
Roosevelt & Cross Inc	7	9	57	4.3	0.5	25
Fidelity Capital Markets	8	12	56	4.2	1.6	12
Piper Sandler & Co	9	4	54	4.1	-4.4	8
Huntington Bancshares Inc	10	10	48	3.6	0.1	10
Northland Securities	11	3	47	3.6	-4.9	10
StoneX Group Inc	12	31*	44	3.3	2.8	10
Hilltop Securities	13	11	43	3.3	0.6	7
Bank of New York Mellon Corp	14	26	31	2.3	1.7	5
RBC Capital Markets	15	17	29	2.2	0.6	4
Industry Total			1,329	100.0		330

YoY Change (\$) -33% QoQ Change (\$) -19%

Municipal Issuance - Composite Amount US\$10mil & Under



US Financial Advisors

First Quarter 2023 | Underwriters, Financial Advisors & Credit Enhancers

Financial Advisors (AT07) YoY Change (\$) **-21%** QoQ Change (\$) **14%**

Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
PFM Financial Advisors LLC	1	2	10,976	17.2	2.5	118
Public Resources Advisory Group	2	1	8,485	13.3	-2.0	37
Estrada Hinojosa & Company Inc	3	11	5,801	9.1	7.2	16
Hilltop Securities	4	4	3,517	5.5	1.2	79
Frasca & Associates	5	3	2,859	4.5	-1.2	9
Municipal Capital Markets Group Inc	6	8	2,461	3.9	1.7	4
Acacia Financial Group Inc	7	5	1,682	2.6	0.1	12
Caine Mitter & Associates Inc	8	20	1,516	2.4	1.2	26
CSG Advisors Incorporated	9	13	1,512	2.4	0.6	28
RBC Capital Markets	10	14	1,329	2.1	0.4	19
Baker Tilly Municipal Advisors	11	12	1,262	2.0	0.2	42
Post Oak Municipal Advisors LLC	12	39	1,147	1.8	1.3	10
Backstrom McCarley Berry & Co	13	38	1,090	1.7	1.2	4
Specialized Public Finance Inc	14	23	951	1.5	0.4	20
Government Consultants Inc	15	36	935	1.5	0.9	8
Industry Total			63,683	100.0		991

Financial Advisors Long & Short Term (AT18) YoY Change (\$) **-19%** QoQ Change (\$) **14%**

Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
PFM Financial Advisors LLC	1	2	11,098	16.6	2.2	120
Public Resources Advisory Group	2	1	8,489	12.7	-2.3	38
Estrada Hinojosa & Company Inc	3	13	5,801	8.7	6.9	16
Hilltop Securities	4	4	3,704	5.5	1.1	108
Frasca & Associates	5	3	2,859	4.3	-1.2	9
Municipal Capital Markets Group Inc	6	9	2,461	3.7	1.6	4
Acacia Financial Group Inc	7	5	1,798	2.7	0.2	19
RBC Capital Markets	8	8	1,754	2.6	0.5	20
Caine Mitter & Associates Inc	9	21	1,516	2.3	1.1	26
CSG Advisors Incorporated	10	14	1,512	2.3	0.6	28
Baker Tilly Municipal Advisors	11	12	1,314	2.0	0.1	44
Post Oak Municipal Advisors LLC	12	42	1,147	1.7	1.2	10
Backstrom McCarley Berry & Co	13	41	1,090	1.6	1.1	4
Piper Sandler & Co	14	10	958	1.4	-0.6	25
Specialized Public Finance Inc	15	24	951	1.4	0.3	20
Industry Total			66,908	100.0		1,217

Financial Advisors Number of Issues (AT07d) YoY Change (\$) **-40%** QoQ Change (\$) **-11%**

Financial Advisor	Rank 2023	Rank 2022	# of Deals	Market Share	Mkt. Sh.	Proceeds US\$mil
PFM Financial Advisors LLC	1	1	118	11.9	-0.6	10,976
Hilltop Securities	2	2	79	8.0	1.0	3,517
Robert W Baird & Co Inc	3*	5	42	4.2	0.8	380
Baker Tilly Municipal Advisors	3*	3	42	4.2	0.6	1,262
Public Resources Advisory Group	5	9	37	3.7	0.9	8,485
Ehlers & Associates	6	4	36	3.6	0.2	510
Stephen H McDonald & Associates Inc	7	6	35	3.5	0.3	217
Stephen L Smith Corp	8*	21	30	3.0	1.6	88
Masterson Advisors LLC	8*	14	30	3.0	1.1	433
CSG Advisors Incorporated	10	23*	28	2.8	1.5	1,512
Caine Mitter & Associates Inc	11	37*	26	2.6	1.9	1,516
Fiscal Advisors & Marketing Inc	12	7	25	2.5	-0.6	126
Piper Sandler & Co	13	8	23	2.3	-0.8	925
Phoenix Advisors LLC	14	12*	21	2.1	0.2	712
PMA Securities Inc	15*	10	20	2.0	-0.2	455
Specialized Public Finance Inc	15*	15	20	2.0	0.2	951
Industry Total			991	100.0		63,683

Financial Advisors Negotiated (AT07b) YoY Change (\$) **-15%** QoQ Change (\$) **22%**

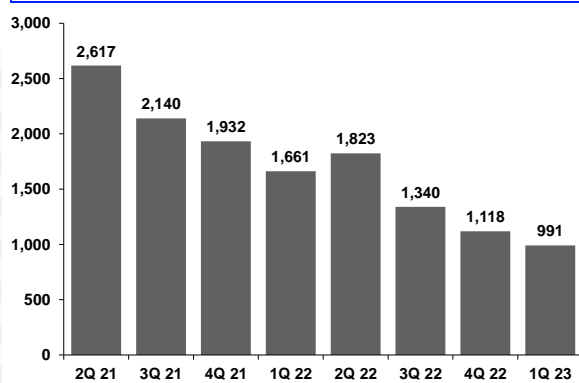
Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
PFM Financial Advisors LLC	1	2	9,806	19.2	3.8	77
Public Resources Advisory Group	2	1	6,943	13.6	-3.8	18
Estrada Hinojosa & Company Inc	3	8	5,801	11.4	8.9	16
Frasca & Associates	4	3	2,650	5.2	-1.8	6
Municipal Capital Markets Group Inc	5	7	2,461	4.8	1.9	4
Hilltop Securities	6	4	2,180	4.3	0.6	42
Caine Mitter & Associates Inc	7	15	1,516	3.0	1.4	26
CSG Advisors Incorporated	8	9	1,512	3.0	0.6	28
Acacia Financial Group Inc	9	12	1,459	2.9	0.9	8
RBC Capital Markets	10	10	1,284	2.5	0.4	14
Post Oak Municipal Advisors LLC	11	29	1,124	2.2	1.5	6
Backstrom McCarley Berry & Co	12	43*	1,090	2.1	1.7	4
Government Consultants Inc	13	27	935	1.8	1.1	8
Kaufman Hall & Associates Inc	14	5	858	1.7	-1.6	3
Baker Tilly Municipal Advisors	15	25	789	1.5	0.6	14
Industry Total			51,105	100.0		423

*Indicates a Tie

Financial Advisors Competitive (AT07c) YoY Change (\$) **-37%** QoQ Change (\$) **-12%**

Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Public Resources Advisory Group	1	2	1,542	12.3	3.4	19
Hilltop Securities	2	3	1,337	10.6	4.3	37
PFM Financial Advisors LLC	3	1	1,170	9.3	-3.4	41
Piper Sandler & Co	4	4	896	7.1	1.8	20
Davenport & Company LLC	5	8	647	5.2	1.3	9
Ehlers & Associates	6	10	510	4.1	1.4	36
Baker Tilly Municipal Advisors	7	5	474	3.8	-0.9	28
Masterson Advisors LLC	8	26	433	3.4	2.3	30
First Tryon Securities LLC	9	9	427	3.4	0.7	3
Robert W Baird & Co Inc	10	7	380	3.0	-1.0	42
PMA Securities Inc	11	13	351	2.8	0.5	18
Montague DeRose & Associates LLC	12	15	347	2.8	0.9	4
Phoenix Advisors LLC	13	14	284	2.3	0.2	17
BOK Financial Securities Inc	14	37	244	1.9	1.2	7
Specialized Public Finance Inc	15	20	235	1.9	0.4	10
Industry Total			12,578	100.0		568

Financial Advisor - Number of Issues



US Green Bonds

First Quarter 2023 | Underwriters, Financial Advisors & Credit Enhancers

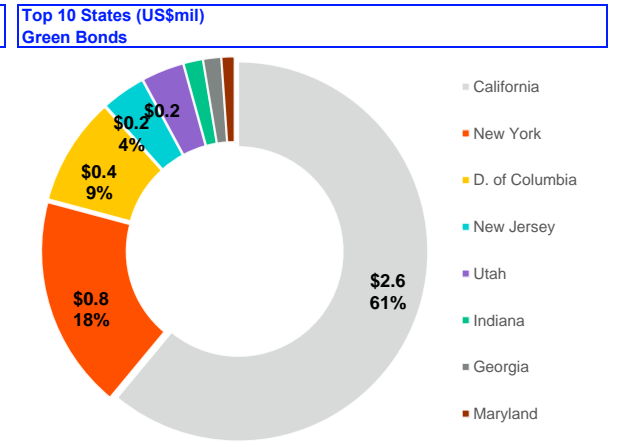
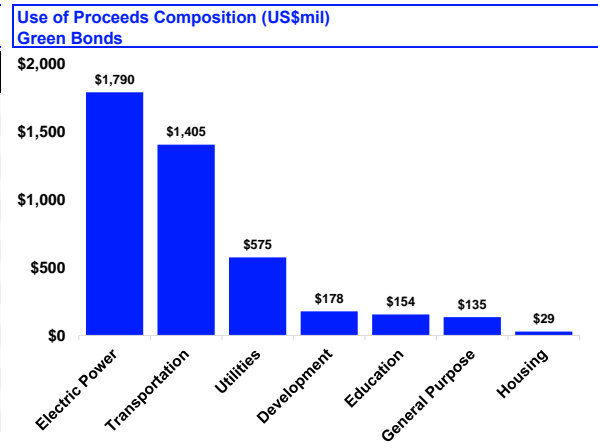
Bookrunner Green Bonds (AT70)								
	YoY Change (\$)		124%		QoQ Change (\$)		63%	
Bookrunner	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals		
Goldman Sachs & Co LLC	1	2	1,880	44.1	15.9	4		
Morgan Stanley	2	11	792	18.6	17.0	2		
Citi	3	-	615	14.4	14.4	2		
RBC Capital Markets	4	-	392	9.2	9.2	1		
Ramirez & Co Inc	5	-	248	5.8	5.8	1		
Loop Capital Markets	6	-	160	3.8	3.8	1		
Wells Fargo & Co	7	6	77	1.8	-0.8	1		
TD Securities (USA) LLC	8	-	29	0.7	0.7	1		
Jefferies LLC	9	-	26	0.6	0.6	1		
BofA Securities Inc	10	1	19	0.4	-33.0	1		
Stifel Nicolaus & Co Inc	11	5	18	0.4	-3.4	1		
Raymond James	12	14	9	0.2	-0.5	1		
The Frazer Lanier Company Inc	13	15	2	0.1	-0.1	1		
Industry Total			4,266	100.0		16		

Co-Manager Green Bonds (AT71)								
	YoY Change (\$)		30%		QoQ Change (\$)		-10%	
Co-Manager	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals		
J P Morgan Securities LLC	1	6	215	5.0	0.3	2		
Siebert Williams Shank & Co	2	2	198	4.6	-16.0	3		
Ramirez & Co Inc	3	1	192	4.5	-20.1	4		
UBS Financial Services Inc	4	22*	170	4.0	3.9	3		
Jefferies LLC	5	-	153	3.6	3.6	2		
American Veterans Group PBC	6*	17*	124	2.9	2.7	1		
Citi	6*	-	124	2.9	2.9	1		
Loop Capital Markets	8	4	122	2.9	-6.3	3		
Stern Brothers & Co	9*	-	100	2.4	2.4	2		
Rice Financial Products Company	9*	-	100	2.4	2.4	2		
Raymond James	11	22*	72	1.7	1.6	2		
RBC Capital Markets	12*	11	55	1.3	0.3	1		
PNC Financial Services Group Inc	12*	-	55	1.3	1.3	1		
Academy Securities Inc	12*	3	55	1.3	-10.6	1		
BofA Securities Inc	12*	8	55	1.3	-1.2	1		
Drexel Hamilton LLC	12*	-	55	1.3	1.3	1		
Industry Total			2,245	100.0		7		

Financial Advisor Green Bonds (AT72)								
	YoY Change (\$)		208%		QoQ Change (\$)		67%	
Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals		
Municipal Capital Markets Group Inc	1	-	999	24.3	24.3	1		
PFM Financial Advisors LLC	2	5	927	22.6	17.3	4		
Hilltop Securities	3	-	545	13.3	13.3	1		
Public Resources Advisory Group	4	-	507	12.3	12.3	2		
Backstrom McCarley Berry & Co	5	-	383	9.3	9.3	1		
Frasca & Associates	6	1	320	7.8	-33.2	2		
Phoenix Capital Partners LLP	7	-	196	4.8	4.8	1		
Stifel Nicolaus & Co Inc	8	-	154	3.8	3.8	1		
Caine Mitter & Associates Inc	9	-	29	0.7	0.7	1		
Davenport & Company LLC	10	-	19	0.5	0.5	1		
Urban Futures Inc	11	-	18	0.4	0.4	1		
Capital Markets Advisors LLC	12	-	9	0.2	0.2	1		
Industry Total			4,104	100.0		14		

Issuer Green Bonds (AT73)								
	YoY Change (\$)		124%		QoQ Change (\$)		63%	
Issuer	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals		
California Comm Choice Fin Auth	1	-	1,790	42.0	42.0	3		
Triborough Bridge & Tunnel Auth	2	-	765	17.9	17.9	1		
California Infrstr & Eco Dev Bank	3	-	545	12.8	12.8	1		
Washington Metro Area Transit Au	4	-	392	9.2	9.2	1		
Los Angeles Dept of Airports	5	1	248	5.8	-22.9	1		
New Jersey Econ Dev Auth	6	-	160	3.8	3.8	1		
Utah State Board of Regents	7	-	154	3.6	3.6	1		
Indiana Finance Authority	8	-	70	1.6	1.6	1		
Metro Atlanta Rapid Transit Au (MARTA)	9	-	65	1.5	1.5	1		
Montgomery Co Hsg Opportunities Comm	10	-	29	0.7	0.7	1		
Washington Suburban Sanitary Dt	11	-	19	0.4	0.4	1		
Alameda Comm Facs Dt #1	12	-	18	0.4	0.4	1		
Upper Mohawk Valley Reg Wtr Fin Auth	13	-	9	0.2	0.2	1		
Houston Co Water Authority	14	-	2	0.1	0.1	1		
Industry Total			4,266	100.0		16		

*Indicates a Tie



US Private Deals & Credit Enhancers

First Quarter 2023 | Underwriters, Financial Advisors & Credit Enhancers

Private Placement Agent / Purchaser (AT24)

YoY Change (\$) -62% QoQ Change (\$) -68%

Placement Agent or Purchaser	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Citi	1	3	1,013	54.9	46.8	6
TD Securities (USA) LLC	2	4	109	5.9	-1.6	2
Stifel Nicolaus & Co Inc	3	5	93	5.0	-1.9	12
Piper Sandler & Co	4	1	84	4.6	-7.8	14
Robert W Baird & Co Inc	5	7	69	3.7	-1.4	16
RBC Capital Markets	6	14	55	3.0	1.1	3
Wells Fargo & Co	7	-	45	2.4	2.4	1
J P Morgan Securities LLC	8	2	43	2.4	-7.0	1
Deutsche Bank	9	-	38	2.0	2.0	1
South State Corp	10	-	31	1.7	1.7	1
UBS Financial Services Inc	11	-	30	1.6	1.6	1
The First National Bank of Pennsylvania	12	-	30	1.6	1.6	1
Truist Financial Corp	13	8	29	1.6	-2.8	1
ANB Bank	14	-	25	1.3	1.3	1
Webster Financial Corp	15	17	24	1.3	-0.5	1
Industry Total			1,846	100.0		77

Private Issuers (AT44)

YoY Change (\$) -62% QoQ Change (\$) -68%

Issuer	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Mobile Airport Authority	1	-	800	43.3	43.3	1
Orlando City-Florida	2	-	89	4.8	4.8	1
Wisconsin Hlth & Ed Fac Auth (WHEFA)	3	14	81	4.4	2.9	2
Broward Co Housing Finance Auth	4	-	77	4.2	4.2	1
Colorado Hsg & Fin Auth (CHFA)	5	23	69	3.8	2.7	2
Nevada Housing Division	6	-	55	3.0	3.0	1
California Statewide CDA (CSCDA)	7	-	36	2.0	2.0	1
Florida Capital Projects Fin Auth	8	-	31	1.7	1.7	1
Massachusetts Housing Fin Agcy	9	-	30	1.6	1.6	1
Delaware Regional Water Ct Auth	10*	-	30	1.6	1.6	1
St John The Baptist Parish-Louisiana	10*	44*	30	1.6	1.0	1
South Carolina Jobs Econ Dev Au	12	5	29	1.6	-1.3	1
Austin Housing Finance Corp	13	-	27	1.5	1.5	1
Ellinwood Hospital District	14	-	26	1.4	1.4	1
Milwaukie City-Oregon	15	-	24	1.3	1.3	1
Industry Total			1,846	100.0		77

Private Financial Advisor (AT25)

YoY Change (\$) -72% QoQ Change (\$) -71%

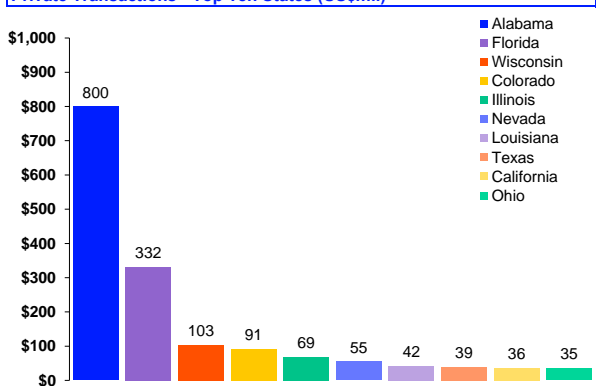
Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
PFM Financial Advisors LLC	1	3	108	20.3	12.8	4
Public Financial Advisors	2	-	89	16.7	16.7	1
CSG Advisors Incorporated	3	10	46	8.6	5.4	2
Blue Rose Capital Advisors	4	-	43	8.2	8.2	1
Government Consultants Inc	5	8	42	7.9	2.9	2
Hendrickson Company	6	-	40	7.6	7.6	2
D A Davidson & Co	7	-	40	7.4	7.4	2
Piper Sandler & Co	8	-	24	4.4	4.4	1
Dunlap & Associates	9	18	20	3.8	2.8	1
Baker Tilly Municipal Advisors	10	11	20	3.7	1.5	2
Caine Mitter & Associates Inc	11	31	17	3.2	3.0	1
Building Hope Services LLC	12	-	17	3.2	3.2	1
Samco Capital Markets	13	-	14	2.7	2.7	1
Crowe LLP	14	16	5	0.9	-0.3	1
LWG CPAs & Advisors	15	22	5	0.9	0.3	1
Industry Total			531	100.0		25

Public & Private Issuers (AT46)

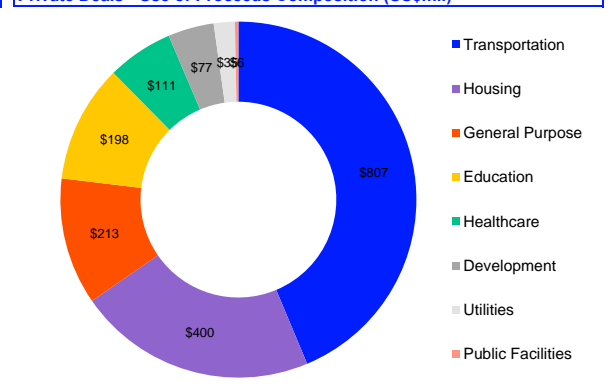
YoY Change (\$) -26% QoQ Change (\$) 3%

Issuer	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Texas Natural Gas Sec Fin Corp	1	-	3,522	4.6	4.6	1
Triborough Bridge & Tunnel Auth	2	31	2,847	3.8	3.2	3
NYC Transitional Finance Auth	3	1	2,446	3.2	-0.2	5
Regents of the University of California	4	-	2,168	2.9	2.9	4
New York City-New York	5	14	1,878	2.5	1.6	3
California Comm Choice Fin Auth	6	-	1,840	2.4	2.4	4
California	7	4	1,804	2.4	0.2	1
Main Street Natural Gas Inc	8	10	1,530	2.0	0.9	2
Louisiana Gov Env Fac & CDA (LCDA)	9	245*	1,528	2.0	1.9	4
NYC Municipal Water Fin Auth	10	7	1,493	2.0	0.6	2
Oregon	11	-	989	1.3	1.3	4
Wisconsin	12	48	956	1.3	0.9	4
District of Columbia	13	-	820	1.1	1.1	2
Mobile Airport Authority	14	-	800	1.1	1.1	1
Tennessee Energy Acquisition Corp	15	-	788	1.0	1.0	2
Industry Total			75,885	100.0		1,460

Private Transactions - Top Ten States (US\$mil)



Private Deals - Use of Proceeds Composition (US\$mil)



Bond Insurers (AT10)

YoY Change (\$) 17.3%

Insurer	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
AGM formerly FSA Inc	1	1	3,415	59.5	4.4	124
Build America Mutual (BAM)	2	2	2,320	40.5	1.8	136
Industry Total			5,735	100.0		260

*Indicates a Tie

Credit Enhancers (AT80)

YoY Change (\$) -9%

Credit Enhancers Types	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Guaranteed	1	1	5,789	45.5	-5.4	177
Bond insurance	2	2	5,735	45.0	0.5	260
LOC Domestic Bank	3	5	507	4.0	4.0	6
LOC Foreign Bank	4	4	154	1.2	-0.4	3
Mortgage backed	5	3	125	1.0	-0.6	5
Standby Purch Agreement	6	6	34	0.3	-0.4	1
Industry Total			12,732	100.0		442

Top Issuers by Insured Amount

Top Issuers by Insured Amt	Rank 2023	US\$mil	Share	US\$mil	Deals
Metro Washington Airports Auth	1	754.8	2.2	754.8	2
Montgomery Co Hghr Ed & Health Auth	2	672.8	1.9	672.8	1
NYS Dorm Authority	3	666.9	1.9	759.1	1
NYS Power Authority	4	608.3	1.8	608.3	1
Pennsylvania Econ Dev Fin Auth	5	572.0	1.7	1,759.1	1
Los Angeles Dept of Airports	6	546.0	1.6	546.0	1
Duval Co School Board	7	508.7	1.5	561.5	1
Alameda Corridor Transport Auth	8	459.9	1.3	613.5	3
SC Pub Svc Au (Santee Cooper)	9	422.7	1.2	621.5	2
Louisville-Jefferson Co Metro Gov	10	411.0	1.2	411.0	2
Top 10 Total		5,623.1	16.3	7,307.6	15

United States Municipals Criteria

FIRST QUARTER 2023 | U.S. Underwriters, Financial Advisors & Credit Enhancers

If you would like to participate in the submission process, receive quarterly press releases, or have questions about our full league table criteria please contact:

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Rankings and volume totals include all municipal new issues underwritten during the period from January 1, 2023 to March 31, 2023, of which Refinitiv was made aware. All current data and previous year's data are as of 9:00am EDT on April 3, 2023. Except where indicated, the rankings quoted above do not include short-term, preliminary, private placement or rank-ineligible issues. Bookrunners receive full credit or true allocation credit if joint, on each issue of which they provide underwriting services. Co-managers receive equal credit for each issue on which they provide co-manager services. Financial advisors receive full credit, equal if joint, on each deal on which they provide advisory services.

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