Debt Review Committee

March 27, 2019
Salt Lake County Government Center
2001 S State Street #N1-200, Salt Lake City, Utah 84190

Meeting Minutes

Attendees:

K Wayne Cushing (Chair), member
Dave Delquadro (Council), member
Darrin Casper (Mayor's Finance), member
Jason Rose (County Council), member
Scott Tingley (Auditor), member
Craig Wangsgard (District Attorney)
Ben Umeadi (Treasurer)
Greg Folta (Mayor's Finance)
Shanell Beecher (Mayor's Finance)
Jon Bronson (Zions Bank, ex-officio member)
Eric Pehrson (Zions Bank)
Marcus Keller (Zions Bank)
Lisa Daniels (Treasurer)
Steve Van Maren (Public)

Meeting was called to order by Chairman Cushing.

Public Comment
Wayne asked if the public had any comments. Mr. VanMaren asked for time to ask questions concerning bonds after the meeting. Jon Bronson agreed to meet with him after the meeting. No other comments were made.

Approval of Minutes
The minutes of January 23, 2019 were reviewed with Jon Bronson requesting a minor correction. A motion was made by Jason and seconded by Dave to approve the corrected minutes. All were in favor.

Financial Advisor Updates
Jon turned the time over to Marcus for the market update. Rates are in a good position for the County. It looks like we will be in a great position when we issue the TRANS. The JP Morgan update shows lowering yield rates due to slowing in the global economy. Feds are slowing down and it will be a good rate environment for issuers for the next year or so. 11 out of 17 FOMC now expect zero hikes in 2019. Inflows continue into bond funds for 11 straight weeks.

Jon reviewed some legislative issues that he has been following. HB 441 was removed and will be reworked. This pertains to sales tax issues. It will be around in an interim session.

Nationally, the movement to bring back advanced refundings is gaining a foothold. This may come in legislation at the national level. The feds want to expand the use of private activity bonds and are talking about bringing back the $30m limit for bank qualification.

MBA Bond Issuance
This has been the first week of large supply for this year. Jon went over the set of numbers from the MBA sale today. Comparisons with other agencies were shown. We ended right where we should have. By changing the dates on the Net Debt Service Schedule from June/December to January /July the County saved money.

New Market Tax Credit Status
Greg presented a model of the flow of funds for the NMTC. He would like an approval from the Committee to present to the Council. Wayne asked him to get the schedules ready, distribute to the Committee and an electronic meeting will be called with the anchor in the Treasurer's office.

TRANS Draft Calendar Review
Jon passed around a calendar of events for the upcoming TRANS 2019. Eric and Marcus will be assisting us with the due diligence and Moody's as Jon will be in Europe. Sale is scheduled for July 2, but Jon may suggest a move up a or back a week. He suggested we follow the calendar up through June 20th and then make the call whether we move the sale. Due diligence meeting will be moved from May 30 to May 29 to coincide with our regular DRC meeting.

Natural Gas Futures Discussion
Salt Lake County has sent out a RFP for wholesale natural gas. This natural gas takes the same infrastructure as Dominion Energy but doesn't have regulation on its rates. We have signed a contract to enter in as we could save a lot on our big buildings like major recreation centers, Salt Palace, South Towne and maybe 1 or 2 libraries. This could save the County $250,000 to $300,000 per year just by entering into the contract. This is not speculative, it is covered. Zions will help do an analysis.

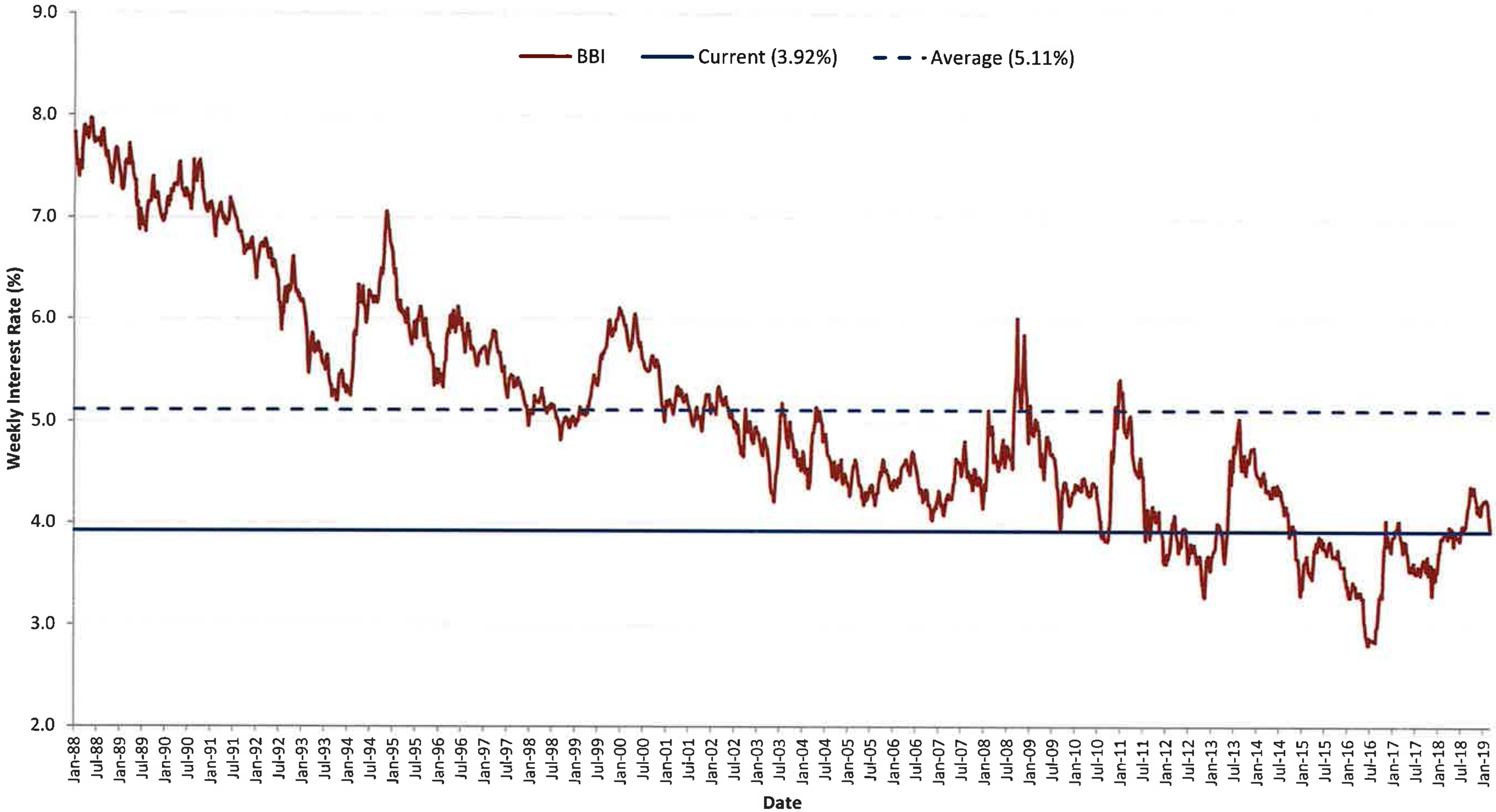
New Business
The regular DRC meeting scheduled for April 24th will remain open. After the electronic meeting to be held in early April it will be determined if another meeting for April should be scheduled.

A motion was made and seconded and the meeting was adjourned.

Interest Rate Trends

Bond Buyer Index

January 1988 to March 2019



Since January 1988:

Interest rates have been higher than the current BBI 83.9% of the time.

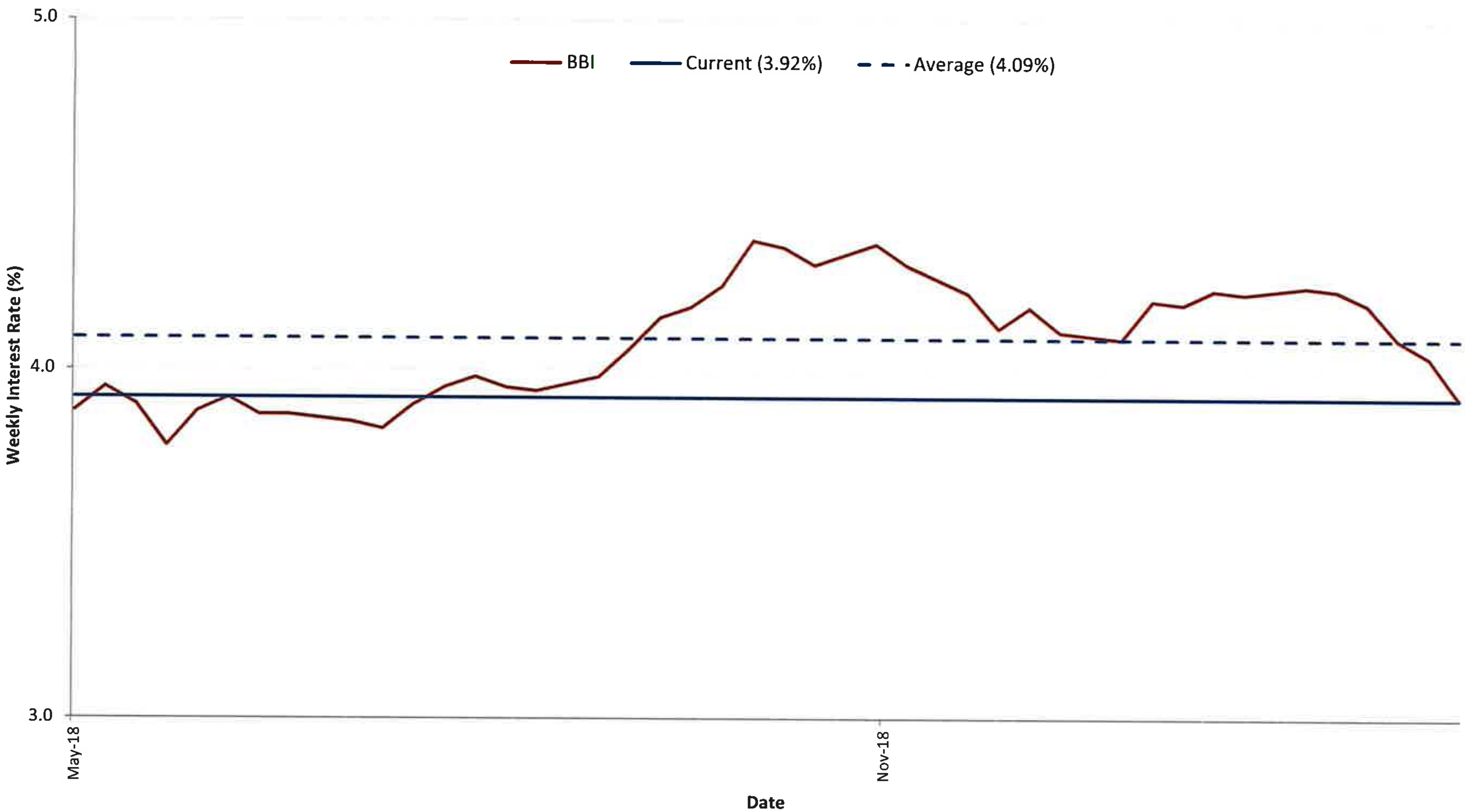
Interest rates have been lower than the current BBI 16.1% of the time.

ZIONS PUBLIC FINANCE, INC.

Interest Rate Trends

Bond Buyer Index

May 2018 to March 2019



Since May 2018:
Interest rates have been higher than the current BBI 75.56% of the time.
Interest rates have been lower than the current BBI 24.44% of the time.

ZIONS PUBLIC FINANCE, INC.

Municipal Market Outlook

March 21, 2019

RATE DATA	Today	Week Prior	Month Prior	Year Prior
MMD AAA GO				
3 Year	1.61	1.59	1.61	1.75
5 Year	1.71	1.68	1.68	2.05
10 Year	2.02	2.05	2.10	2.52
15 Year	2.39	2.43	2.52	2.77
20 Year	2.63	2.70	2.81	2.93
30 Year	2.80	2.87	2.99	3.05
US Treasury				
2 Year	2.47	2.53	2.54	2.31
5 Year	2.34	2.41	2.47	2.69
10 Year	2.44	2.51	2.55	2.89
30 Year	2.79	2.82	2.84	3.12
Federal Funds	2.41	2.40	2.40	1.44
Prime Rate	5.50	5.50	5.50	4.50
SIFMA 7 Day	1.53	1.61	1.75	1.75

BOND BUYER AND SHORT TERM INDEXES				
20 Bond GO[1]	3.92	4.04	4.23	3.90
25 Bond REV[2]	4.39	4.51	4.70	4.38
Jefferies ST	1.55	1.59	1.75	1.25

[1] GO bonds maturing in 20 years, avg. rating equivalent to Moody's Aa2 & S&P's AA

[2] Revenue bonds maturing in 30 years, avg. rating equivalent to Moody's A1 & S&P A+

ZIONS PUBLIC FINANCE, INC.

ZIONS PUBLIC FINANCE – MMD Muni Bond Yields – 03/26/2019 EOD

				General Obligations				"AAA" Coupon Range	
		"AAA"	PRE-RE	INSURED	"AA"	"A"	"BAA"	"LOW"	"HIGH"
1	2020	1.51	1.49	1.66	1.52	1.66	2.01	5.00	5.00
2	2021	1.52	1.50	1.68	1.54	1.72	2.09	5.00	5.00
3	2022	1.53	1.52	1.74	1.56	1.77	2.14	5.00	5.00
4	2023	1.56	1.56	1.82	1.61	1.85	2.21	5.00	5.00
5	2024	1.61	1.62	1.89	1.67	1.93	2.32	5.00	5.00
6	2025	1.66	1.68	1.96	1.74	1.99	2.38	5.00	5.00
7	2026	1.71	1.73	2.02	1.80	2.07	2.45	5.00	5.00
8	2027	1.76	1.78	2.09	1.88	2.14	2.52	5.00	5.00
9	2028	1.82		2.16	1.96	2.21	2.60	5.00	5.00
10	2029	1.90		2.25	2.06	2.28	2.68	5.00	5.00
11	2030	1.99		2.35	2.18	2.38	2.78	5.00	5.00
12	2031	2.09		2.45	2.28	2.49	2.88	5.00	5.00
13	2032	2.16		2.52	2.36	2.57	2.95	5.00	5.00
14	2033	2.22		2.58	2.42	2.63	3.03	5.00	5.00
15	2034	2.26		2.62	2.46	2.69	3.07	5.00	5.00
16	2035	2.31		2.66	2.51	2.75	3.11	5.00	5.00
17	2036	2.36		2.70	2.56	2.80	3.16	5.00	5.00
18	2037	2.41		2.75	2.62	2.86	3.21	5.00	5.00
19	2038	2.45		2.79	2.66	2.90	3.25	5.00	5.00
20	2039	2.49		2.83	2.70	2.94	3.28	5.00	5.00
21	2040	2.52		2.86	2.73	2.96	3.31	5.00	5.00
22	2041	2.55		2.89	2.76	2.99	3.34	5.00	5.00
23	2042	2.57		2.91	2.78	3.01	3.36	5.00	5.00
24	2043	2.59		2.93	2.80	3.03	3.38	5.00	5.00
25	2044	2.60		2.94	2.81	3.04	3.39	5.00	5.00
26	2045	2.61		2.95	2.82	3.05	3.40	5.00	5.00
27	2046	2.62		2.96	2.83	3.06	3.41	5.00	5.00
28	2047	2.63		2.97	2.84	3.07	3.42	5.00	5.00
29	2048	2.64		2.98	2.85	3.08	3.43	5.00	5.00
30	2049	2.65		2.99	2.86	3.09	3.44	5.00	5.00

Interpolated AAA Yields

		10 Mo	11 Mo	12 Mo	13 Mo	14 Mo	15 Mo	16 Mo	17 Mo	18 Mo	19 Mo	20 Mo	21 Mo
	MAT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2020	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.52	1.52	1.52	1.52
2	2021	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.53	1.53	1.53	1.53
3	2022	1.53	1.53	1.53	1.53	1.54	1.54	1.54	1.54	1.55	1.55	1.55	1.55
4	2023	1.56	1.56	1.56	1.56	1.57	1.57	1.57	1.58	1.58	1.58	1.59	1.59
5	2024	1.61	1.61	1.61	1.61	1.62	1.62	1.63	1.63	1.64	1.64	1.65	1.65
6	2025	1.65	1.66	1.66	1.66	1.67	1.67	1.68	1.68	1.69	1.69	1.70	1.70
7	2026	1.70	1.71	1.71	1.71	1.72	1.72	1.73	1.73	1.74	1.74	1.75	1.75
8	2027	1.75	1.76	1.76	1.76	1.77	1.77	1.78	1.78	1.79	1.79	1.80	1.80
9	2028	1.81	1.82	1.82	1.82	1.83	1.83	1.84	1.84	1.85	1.86	1.86	1.87
10	2029	1.89	1.90	1.90	1.90	1.91	1.91	1.92	1.92	1.93	1.94	1.94	1.95
11	2030	1.98	1.99	1.99	1.99	2.00	2.00	2.01	2.01	2.02	2.02	2.03	2.03
12	2031	2.08	2.09	2.09	2.09	2.10	2.10	2.10	2.10	2.11	2.11	2.11	2.11
13	2032	2.16	2.16	2.16	2.16	2.17	2.17	2.17	2.17	2.18	2.18	2.18	2.18

"AAA" Muni Yields as percent of US Treas Yields

	01/02/2018 to 03/26/2019					04/11/2018 to 03/26/2019			
MUNI/TREAS	CURR %	AVG %	# SD	MAX %	MIN %	AVG %	# SD	MAX %	MIN %
1 yr/1 yr	62.2	63.6	-0.80	68.2	61.6	68.3	-1.07	81.1	60.2
2 yr/2 yr	67.5	65.3	1.07	72.4	61.7	67.4	0.03	76.8	59.7
3 yr/3 yr	70.3	66.9	1.50	74.9	62.6	68.9	0.41	77.0	62.6
5 yr/5 yr	73.8	70.4	1.27	78.9	65.6	73.0	0.24	79.7	65.6
7 yr/7 yr	74.7	73.1	0.71	80.8	68.9	77.0	-0.82	81.9	68.9
10yr/10yr	79.0	80.0	-0.54	86.0	77.2	83.4	-1.80	87.4	77.2
15yr/10yr	94.0	94.6	-0.44	98.6	91.7	93.7	0.16	98.6	89.3
20yr/10yr	103.5	105.3	-1.00	108.7	101.6	101.4	0.67	108.7	94.8
30yr/10yr	110.2	111.5	-0.83	114.6	107.9	106.3	0.98	114.6	98.4
15yr/30yr	78.7	83.4	-1.97	86.9	78.7	87.0	-3.02	91.7	78.7
20yr/30yr	86.8	92.8	-2.20	96.8	86.8	94.2	-3.37	99.0	86.8
30yr/30yr	92.3	98.3	-2.24	102.1	92.3	98.6	-2.93	103.2	92.3

Spot Yield Summary

	1-YR	5-YR	10-YR	15-YR	20-YR	30-YR
"AAA" GO	1.51	1.61	1.90	2.26	2.49	2.65
"AA" GO	1.52	1.67	2.06	2.46	2.70	2.86
"A" GO	1.66	1.93	2.28	2.69	2.94	3.09
"A" Revenue	1.70	2.05	2.50	2.95	3.20	3.35
Insured	1.66	1.89	2.25	2.62	2.83	2.99
PreRefunded	1.49	1.62				
U.S. Treasury	2.43	2.18	2.40	2.63	2.75	2.87
"AAA" GO Grossed up by 37.0%	2.40	2.56	3.02	3.59	3.95	4.21

MIG1	YIELD	CHANGE	T-BILLS	CPN-EQV	CHANGE	AAA PRE-RES	YIELD	CHANGE
Apr-19	1.53	-	3mos	2.46	1	Sep-19	1.46	-
May-19	1.55	-	6mos	2.48	1	Mar-20	1.49	-
Jun-19	1.57	-	1yr*	2.43	-	Sep-20	1.50	-
Jul-19	1.58	-				Mar-21	1.50	-
Aug-19	1.60	-	T-NOTES			Sep-21	1.51	-
Sep-19	1.62	-	2yr	2.25	(1)	Mar-22	1.52	-
Oct-19	1.64	-	3yr	2.17	(1)	Sep-22	1.54	-
Nov-19	1.66	-	5yr	2.18	(2)	Mar-23	1.56	-
Dec-19	1.68	-				Sep-23	1.58	-
Jan-20	1.70	-	LIBOR			Mar-24	1.62	-
Feb-20	1.70	-	1mo	2.49	(1)	Sep-24	1.65	-
Mar-20	1.70	-	3mos	2.61	-	Mar-25	1.68	-
Apr-20	1.71	-	6mos	2.67	-	Sep-25	1.71	-
May-20	1.71	-	1yr	2.75	(4)	Mar-26	1.73	-

VRD Averages

	VRDO Rates		% Total	NON-AMT GM	NON-AMT CAL	NON-AMT NY	AMT GM	AMT CAL	AMT NY
3/26/2019	Tue	Daily	98%	1.30	1.16	1.29	1.36	1.65	1.36
3/25/2019	Mon	Daily	100%	1.27	1.14	1.26	1.33	1.62	1.30
3/22/2019	Fri	Daily	100%	1.27	1.14	1.26	1.33	1.61	1.30
3/21/2019	Thu	Daily	100%	1.26	1.12	1.25	1.31	1.61	1.30
3/20/2019	Wed	Daily	100%	1.26	1.13	1.26	1.32	1.61	1.31
3/19/2019	Tue	Daily	100%	1.31	1.19	1.30	1.37	1.66	1.35
3/18/2019	Mon	Daily	100%	1.36	1.23	1.34	1.43	1.70	1.41
3/26/2019	Tue	Weekly	100%	n/a	n/a	n/a	n/a	n/a	n/a
3/21/2019	Thu	Weekly	100%	1.66	1.58	1.80	1.66	1.54	1.87
3/20/2019	Wed	Weekly	100%	1.61	1.40	1.53	1.65	1.56	1.58
3/19/2019	Tue	Weekly	100%	n/a	n/a	n/a	n/a	n/a	n/a
3/14/2019	Thu	Weekly	100%	1.74	1.65	1.84	1.73	1.62	1.94
3/13/2019	Wed	Weekly	100%	1.69	1.48	1.61	1.72	1.65	1.66

J.P. Morgan Municipal Market Update

A. Recent J.P. Morgan Transactions

ISSUER	AWARD DATE	SIZE ($MM)	UNDERLYING RATING	FINAL COUPON	FINAL SPREAD	FINAL YIELD	FINAL MTY
Indianapolis Local Public Improvement Bond Bank – Series 2019A (IN)	22-Mar	610.65	Aa1/NR/AAA	5.250%	33	3.130%	2054
Indianapolis Local Public Improvement Bond Bank – Series 2019B (IN)	22-Mar	13.75	Aa1/NR/AAA	3.250%	70	3.330%	2039
Department of Veterans Affairs of the State of California – 2019 Series A	22-Mar	52.66	Aa3/AA/AA-	3.600%	86	3.600%	2043
Department of Veterans Affairs of the State of California – 2019 Series A[1]	22-Mar	25.50	Aa3/AA/AA-	4.000%	73	2.440%	2024
Rhode Island Health and Educational Building Corporation – Series 2019A	21-Mar	41.38	Aa3/AA-/NR	5.000%	30	3.020%	2042
Stanford University – Series 2019 (CA) (Taxable)	21-Mar	121.00	Aaa/AAA/AAA	3.089%	55	3.089%	2029
Stanford University – Series V-1 (CA)	21-Mar	441.80	Aaa/AAA/AAA	5.000%	32	3.120%	2049
CentraCare Health System – Series 2019A (MN)	14-Mar	130.00	A2/NR/AA-	4.000%	90	3.770%	2049
Kansas Turnpike Authority – Series 2019A	13-Mar	62.34	Aa2/AA-/NR	5.000%	15	2.810%	2038
Appalachian Power Company – Series 2019A (Put Bond) (WV)[2]	13-Mar	86.00	Baa1/A-/NR	2.550%	88	2.550%	2024

Source: Thomson Reuters and Bloomberg; [1]PAC bond; final maturity indicates estimated average life of 5 years; [2]Final maturity indicates mandatory put date

B. Market Commentary

- UST yields declined mid-week on the back of a dovish Fed and fell even further on Friday amid disappointing global manufacturing data, as the 3 month to 10 month portion of the curve inverted for the first time since 2007; ultimately, 2-, 5-, 10-, and 30-year yields decreased by 12, 15, 14, and 13 bps, respectively[1,2]
  - The Fed was more dovish than consensus expectations, with the majority of FOMC members now expecting zero rate hikes in 2019, down from a median projection of two hikes in December; the median FOMC member continues to expect one hike in 2020[1]
    - In line with expectations, the FOMC reported that balance sheet runoff will end in October but added that it will taper down the pace of the runoff of Treasuries starting in May[1]
  - Markit's U.S. PMI manufacturing composite index declined from 53.0 to 52.5, the lowest level since June 2017, and the headline index for the services survey, which gauges business activity, slipped from 56.0 to 54.8[1]
  - Markit's Germany PMI manufacturing index fell to 44.7, the lowest level since 2012, missing expectations of 48 and sending German 10-year bond yields below zero percent for the first time since 2016[3]
  - Stocks fell on Friday amid global growth concerns, with the S&P 500 and the Dow Jones Industrial Average experiencing their biggest one-day declines since January 3rd, falling 1.9% and 1.8%, respectively[2]
- In the municipal market, the MMD curve flattened and yields reached YTD lows, as 2-, 5-, 10-, and 30-year yields decreased by 5, 7, 12, and 18 bps, respectively[4]
  - J.P. Morgan-involved transactions experienced strong demand across the curve and for various coupon structures, with several transactions tightening spreads from initial pricing levels
  - For the period ending March 20th, municipal bond funds saw weekly and monthly inflows of $1.4bn, marking the 11th consecutive week of inflows[1,5]
    - YTD inflows for municipal bond funds total $21.0bn compared to $47.1bn in taxable fixed income fund flows and $4.0bn in U.S. and global equity fund flows[1,5]
    - While YTD inflows into high-yield funds ($4.4bn) also marked new records for the period, high-yield supply remains low with just $2.9bn in YTD supply, excluding the COFINA exchange bonds; this YTD total is the second lowest in the past 20 years[1,5]
- Issuance for the week is expected to be elevated, with $9.9bn in projected primary market volume, about 170% of the 5 year average for the equivalent week, with the majority ($6.0bn) selling competitively[1,2]

[1] J.P. Morgan Research, *US Fixed Income Markets Weekly*, 3/22/2019, jpmm.com
[2] Bloomberg
[3] Bloomberg, *German 10-Year Yields Drop Below Zero for First Time Since 2016*, 3/22/2019, Bloomberg.com
[4] Thomson Reuters Municipal Market Data
[5] Lipper, iMoneyNet, as of 3/20/2019

C. Interest Rate Forecast

MMD YIELDS	3/22/2019	2Q19	3Q19	4Q19	1Q20
2-Year	1.53%	1.70%	1.75%	1.75%	1.80%
5-Year	1.63%	1.85%	1.85%	1.90%	1.95%
10-Year	1.92%	2.15%	2.25%	2.35%	2.40%
30-Year	2.67%	2.85%	2.95%	3.05%	3.15%
TAXABLE YIELDS	**3/22/2019**	**2Q19**	**3Q19**	**4Q19**	**1Q20**
Fed Funds	2.41%	2.40%	2.40%	2.40%	2.40%
3-Month LIBOR	2.60%	2.60%	2.55%	2.65%	2.55%
2-Year T Note	2.33%	2.55%	2.55%	2.70%	2.80%
5-Year T Note	2.25%	2.50%	2.50%	2.65%	2.75%
10-Year T Note	2.45%	2.70%	2.75%	2.90%	3.00%
30-Year T Bond	2.89%	3.05%	3.10%	3.25%	3.35%

Source: J.P. Morgan Research, *US Fixed Income Markets Weekly,* 3/22/2019, jpmm.com; Thomson Reuters Municipal Market Data, Bloomberg as of 3/22/2019, current rates as of 3/22/2019

D. Market Monitor

SHORT TERM MUNICIPAL MARKET	3/22/2019	1-WEEK Δ	10Y AVERAGE
SIFMA Index	1.53%	-8 bps	0.41%
1-Month LIBOR	2.50%	2 bps	0.57%
SOFR*	2.40%	1 bps	0.76%
SIFMA/1-Month LIBOR Ratio	61.23%	-3.65%	71.30%
Tax-exempt MMF Flows 4-week Avg.[1,2]	$238mm	$334mm	--
LONG TERM MUNICIPAL MARKET	**3/22/2019**	**1-WEEK Δ**	**10Y AVERAGE**
AAA MMD (30-Year)	2.67%	-18 bps	3.39%
AAA MMD (30 – 2 Year)	1.14%	-13 bps	2.67%
30-Year SIFMA Swap Rate[3]	2.18%	-12 bps	2.75%
30-Year 3M LIBOR Swap Rate[3]	2.63%	-16 bps	3.10%
All Muni Fund Flows 4-week Avg.[2]	$2,565mm	$2,576mm	--
CORPORATE SPREADS TO UST (BPS)	**3/22/2019**	**1-WEEK Δ**	**10Y AVERAGE**
J.P. Morgan JULI Index	153	0 bps	175
J.P. Morgan Domestic HY Index	450	6 bps	580
EQUITIES AND ENERGY ($)	**3/22/2019**	**1-WEEK Δ**	**YTD Δ**
S&P 500	2,801	-0.77%	11.72%
DJIA	25,502	-1.34%	9.32%
NASDAQ 100	7,326	0.26%	15.74%
WTI Crude Oil (per bbl.)	59.04	0.89%	12.50

Source: J.P. Morgan, Bloomberg, Thomson Reuters Municipal Market Data, The Bond Buyer; Lipper FMI, iMoneyNet, *Federal Reserve Bank of New York historical indicative SOFR available starting 8/22/2014

E. Yield Curve Rates and Ratios

BENCHMARK/MATURITY	2-YEAR	5-YEAR	10-YEAR	30-YEAR
MMD	1.53%	1.63%	1.92%	2.67%
UST	2.33%	2.25%	2.45%	2.89%
MMD/UST Ratio	65.72%	72.30%	78.24%	92.45%

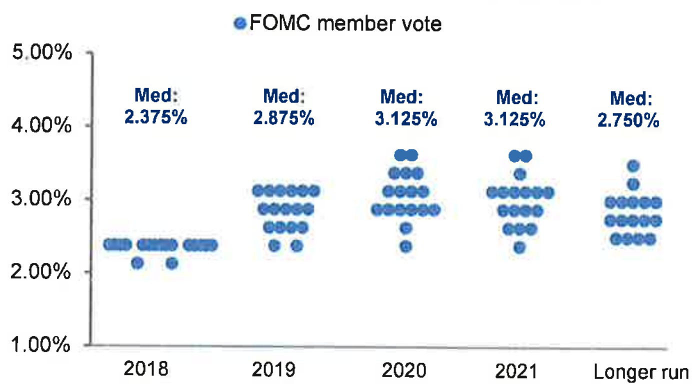
Source: J.P. Morgan, Thomson Reuters Municipal Market Data as of 3/22/2019

[1]MMF: Money Market Fund, 1-week Δ represents the actual figure reported for the previous week
[2]Reflects all tax-exempt mutual funds reporting on a weekly or monthly basis, excluding tax-exempt money market funds
[3]Swap rates are provided for informational purposes only. Please note that J.P. Morgan no longer enters into interest rate derivative transactions with municipal or public entities, and therefore will not serve as swap counterparty to public entities on any new interest rate derivative transactions

F. A decidedly dovish pivot by the FOMC

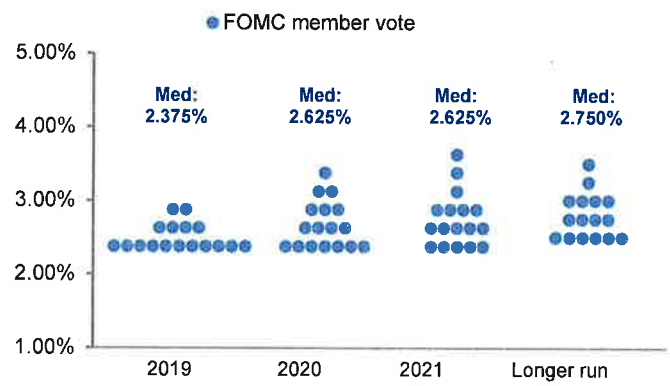
- 11 out of 17 FOMC members now expect zero hikes in 2019, down from a median projection of two hikes in December, an outcome that was more dovish than consensus estimates, but in line with recent Fedspeak regarding the Fed's ability to be patient[1]
  - This shift in near-term rate views is broadly consistent with recent FOMC Statements calling for a neutral bias towards rates, as the FOMC has determined that it will be patient prior to making any future adjustments; the median Committee participant expects one hike in 2020 and the median longer-run terminal rate is unchanged at 2.75%[9]
    - Many market participants now see Fed policy as remaining modestly stimulative over the next three years, in contrast with December's outlook where participants foresaw restrictive policy in both 2020 and 2021[1]
  - With inflation still running below target, J.P. Morgan Research believes that the Fed may seek to foster a period of inflation modestly above 2% to focus on "upholding the credibility" of its inflation target mandate[1]
  - In line with the FOMC median outlook, J.P. Morgan Research continues to expect zero hikes this year and one hike next year[2]
- The Fed announced plans for balance sheet runoff which were more accommodative than anticipated; the FOMC will reduce the cap on Treasury runoff from the SOMA portfolio from $30 billion per month down to $15 billion in May, with a conclusion of balance sheet runoff expected in October[1]
- On Wednesday, Treasuries rallied and stocks closed mostly lower as markets adjusted to a more dovish than expected outlook from the Fed[3]
  - In contrast with the outlook of both the median FOMC member and J.P. Morgan Research, OIS markets now imply that the Fed is "on pause" over the next four quarters, with the probability of rate cuts outweighing rate hikes, as the market prices in broad concerns over global growth[2]

December FOMC year-end Fed Funds projection



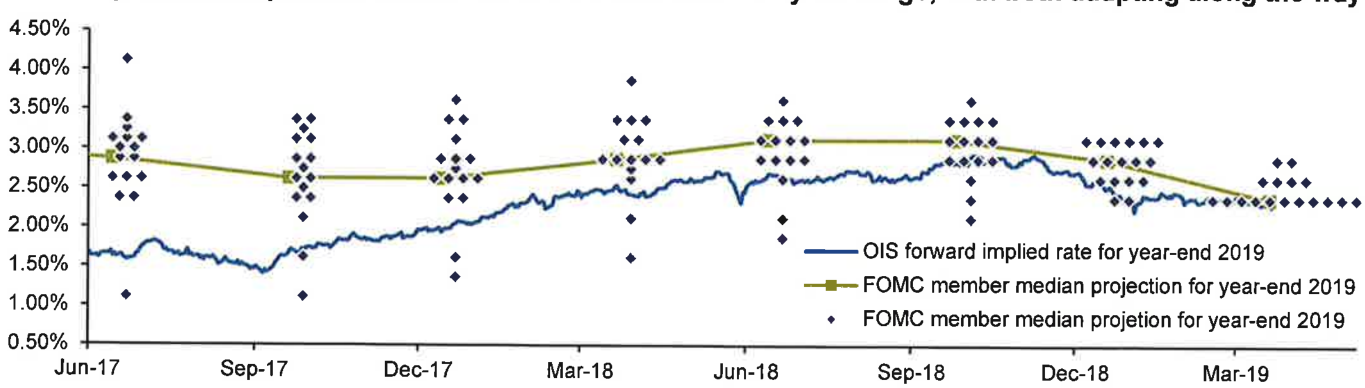
Source: Federal Reserve Board, 12/19/2018, www.federalreserve.gov
*One participant did not submit a longer run projection

March FOMC year-end Fed Funds projection



Source: Federal Reserve Board, 3/20/2019, www.federalreserve.gov
*One participant did not submit a longer run projection

Generally, market expectations and FOMC forecasts eventually converge, with both adapting along the way



Source: J.P. Morgan Research, *US Fixed Income Markets Weekly*, 3/22/2019, jpmm.com

[1] J.P. Morgan Research, *A dovish jailbreak in the FOMC dots*, 3/20/2019, jpmm.com
[2] J.P. Morgan Research, *US Fixed Income Markets Weekly*, 3/22/2019, jpmm.com
[3] Bloomberg

Current Negotiated Forward Visible Supply - Week of March 25th

Notable Negotiated Municipal Transactions

Sale Date	State	Par Amount ($000s)	Issuer	Expected Ratings	Industry
3/25/2019	TX	54,000	Potter County	-/-/-	LEASE
3/25/2019	CA	27,075	City of Sacramento	-/AA/AA	REV
3/26/2019	NY	850,000	New York City Transitional Finance Auth	Aa1/AAA/AAA	REV
3/26/2019	CT	158,160	Bradley International Airport	-/A-/BBB	TRANS
3/26/2019	NE	147,915	Nebraska Investment Finance Authority	-/AA+/-	HSG
3/26/2019	AZ	63,470	Arizona Transportation Board	Aa2/AA+/AA	TRANS
3/26/2019	CA	55,000	Solana Beach School District	Aaa/AAA/-	GO
3/26/2019	AZ	42,600	Vail Unified School District No. 20	-/A/-	GO
3/26/2019	CA	15,000	Middletown Unified School District	-/-/-	GO
3/26/2019	PA	14,415	Unionville-Chadds Ford Pennsylvania School Dist.	Aa1/-/-	GO
3/27/2019	CT	850,000	State of Connecticut	A1/A/A+	GO
3/27/2019	IL	721,870	City of Chicago	-/-/-	GO
3/27/2019	OR	159,510	State of Oregon (Lottery Bonds)	Aa2/AAA/-	REV
3/27/2019	CA	150,000	West Valley-Mission Community College District	Aaa/AAA/-	HE
3/27/2019	GA	96,935	Georgia Tech	Aa3/AA-/-	HE
3/27/2019	NY	65,590	City of Syracuse Industrial Development Agy	Aa2/AA/-	REV
3/27/2019	FL	45,215	Sarasota County	-/AA+/AA+	REV
3/27/2019	KS	44,000	USD 202 Wyandotte County	-/A+/-	GO
3/27/2019	**UT**	**18,000**	**Municipal Building Auth of Salt Lake County**	**-/AA+/AA+**	**LEASE**
3/27/2019	FL	15,000	Escambia County Housing Finance Authority	Aaa/-/-	HSG
3/27/2019	WI	14,310	County of Shawano	Aa2/-/-	GO
3/27/2019	GA	12,740	URA of the City of Cornelia	Baa2/-/-	REV
3/28/2019	TX	224,000	Pflugerville Independent School District	Aaa/AAA/-	GO
3/28/2019	MA	215,000	University of Massachusetts Building Authority	Aa2/AA-/AA	HE
3/28/2019	NC	117,190	North Carolina Housing Finance Agency	Aa1/AA+/-	HSG
3/28/2019	IN	90,735	IPS Multi-School Building Corp	-/AA+/-	REV
3/28/2019	CA	39,000	Ohlone CCD	-/-/-	GO
3/28/2019	TX	12,925	City of Taylor	-/AA-/-	LEASE
Week of 3/25 Est. Total	$	4,319,655			

Total visible supply for the week of March 25th (competitive and negotiated) is expected to be approximately $8.5 - $9.5 billion

Sources: IPREO, as of March 22, 2019

IPREO Gameday

jonzionbank@i-Deal.com

$17,860,000 Municipal Building Authority of Salt Lake County, Utah Lease Revenue Bonds, Series 2019

Stock | Series 1

Overview | Retail | Managers | Investors

Managers/Accounts

Retail 0% | Institutional 99% | Stock <1% | Show All

1.0x

1: 01/15/2037, 5.000%

Series	Par ($M)
1	1,130
Orders ($M)	**Subscription**
1,130	1.0x
Coupon	**Yield/Price**
5.000%	2.640%

Call Feature

Optional call in 01/15/2028 @ 100.00

Insurance

none

Ord #	Manager	Series	Maturity	Type	Priority	Account	Amount ($M) ↓
30	Wells Fargo Sec	1	01/15/37	Institutional	MEM	Allstate Insurance C...	1,130

S&P 500 ETF (SPY): 278.83... | US 10Y: 2.363 (-0.053) | No MMD Reads Available | 10:30 AM ET **EIA Petroleum Status Report**

Account	Retail	Institutional	Total	Money Type
Breckinridge Capital Advisors, Inc.	0	4,340	4,340	SMA
Chilton Investment Company, Inc.	0	2,285	2,285	SMA
Bessemer Investment Management LLC	0	7,085	7,085	SMA
Allstate Insurance Company	0	10,245	10,245	Insurance
Nuveen Asset Management	0	500	500	SMA
Southern Farm Bureau Life Insurance Co.	0	2,560	2,560	Insurance
Stock	0	0	100	Stock
7 Accounts	0	27,015	27,115	

MBA of Salt Lake County
Lease Revenue Bonds, Series 2019 Comparables

Pricing Date:	3/27/2019					2/26/2019						
Par Amount:	$17,860,000					$26,785,000						
Issuer:	MBA of Salt Lake County, UT					Palo Alto, CA CTFS PARTN						
Issue:	Lease Revenue Bonds, Series 2019					Lease -Rent						
Insurance:	-					-						
Dated Date:	4/11/2019					3/21/2019						
Underlying Rating:	AA+					Aa+ S&P						
Optional Call:	1/15/2028					2/1/2029						
Sale Type:	Negotiated					Negotiate						
Underwriter	Wells Fargo					Stifel, Nicolaus						
Maturity Date:	1/15/2041					11/1/2044						
Maturity	Par (000s)	Coupon	Yield YTW/YTM	EOD 3/26/2019 MMD JAN	Spread to MMD YTW/YTM	Par (000s)	Coupon	Yield YTW/YTM	EOD 2/26/2019 MMD Nov	Spread to MMD YTW/YTM	Deal vs. Comp Spread
2019											
2020											
2021											
2022	530	5.000	1.63	1.53	0.10	310	5.000	1.43	1.61	0.00	0.28
2023	560	5.000	1.67	1.56	0.11	690	5.000	1.49	1.65	(0.16)	0.27
2024	585	5.000	1.74	1.61	0.13	720	5.000	1.55	1.71	(0.16)	0.29
2025	610	5.000	1.79	1.65	0.14	760	5.000	1.66	1.78	(0.12)	0.26
2026	655	5.000	1.85	1.70	0.15	795	5.000	1.79	1.85	(0.06)	0.21
2027	685	5.000	1.91	1.75	0.16	835	5.000	1.88	1.94	(0.06)	0.22
2028	715	5.000	1.98	1.81	0.17	880	5.000	1.99	2.03	(0.04)	0.21
2029	760	5.000	2.07 / 2.31	1.89	0.18 / 0.42	920	5.000	2.12 / 2.28	2.13	(0.01) / 0.15	0.19 / 0.27
2030	795	5.000	2.18 / 2.60	1.98	0.20 / 0.62	970	5.000	2.27 / 2.59	2.24	0.03 / 0.35	0.17 / 0.27
2031	840	5.000	2.29 / 2.85	2.08	0.21 / 0.77	1,015	5.000	2.39 / 2.84	2.32	0.07 / 0.52	0.14 / 0.25
2032	880	5.000	2.38 / 3.04	2.16	0.22 / 0.88	1,065	5.000	2.52 / 3.05	2.39	0.13 / 0.66	0.09 / 0.22
2033	925	5.000	2.45 / 3.19	2.22	0.23 / 0.97	1,120	5.000	2.63 / 3.23	2.44	0.19 / 0.79	0.04 / 0.18
2034	975	5.000	2.49 / 3.31	2.26	0.23 / 1.05	1,175	5.000	2.69 / 3.35	2.48	0.21 / 0.87	0.02 / 0.17
2035	1,025	5.000	2.54 / 3.41	2.31	0.23 / 1.10	1,235	5.000	2.76 / 3.47	2.54	0.22 / 0.93	0.01 / 0.18
2036	1,075	5.000	2.59 / 3.51	2.36	0.23 / 1.15	1,295	5.000	2.84 / 3.58	2.60	0.24 / 0.98	(0.01) / 0.17
2037	1,130	5.000	2.64 / 3.59	2.41	0.23 / 1.18	1,360	5.000	2.90 / 3.66	2.66	0.24 / 1.00	(0.01) / 0.18
2038	1,185.00	5.00	2.68 / 3.66	2.45	0.23 / 1.21	1,430	5.000	2.96 / 3.74	2.72	0.24 / 1.02	(0.01) / 0.19
2039	1,245.00	5.00	2.72 / 3.73	2.49	0.23 / 1.24	1,500	5.000	3.02 / 3.82	2.78	0.24 / 1.04	(0.01) / 0.20
2040	1,315	5.00	2.75 / 3.78	2.52	0.23 / 1.26						
2041	1,370.00	5.00	2.78 / 3.83	2.55	0.23 / 1.28						
2042											
2043											
2044						8,710	5.000	3.16 / 4.03	2.9	0.26 / 1.13	
2045											
2046											
2047											
2048											
2049											
2050											
2051											
2052											
2053											
	17,860					26,785					

ZP FI

ZIONS PUBLIC FINANCE, INC.

MBA of Salt Lake County
Lease Revenue Bonds, Series 2019 Comparables

Pricing Date	3/27/2019					3/5/2019					
Par Amount	$17,860,000					$11,155,000					
Issuer:	MBA of Salt Lake County, UT					MBA of West Valley City, UT					
Issue	Lease Revenue Bonds, Series 2019					Lease Revenue Bonds, Series 2019					
Insurance	-					Assured Guaranty Municipal Corp					
Dated Date	4/11/2019					3/19/2019					
Underlying Rating	AA+					- / A+ / - (insured AA)					
Optional Call	1/15/2028					2/1/2029					
Sale Type	Negotiated					Negotiated					
Underwriter	Wells Fargo					Keybanc Capital Markets					
Maturity Date	1/15/2041					2/1/2044					
Maturity	Par (000s)	Coupon	Yield YTW/YTM	EOD 3/26/2019 MMD JAN	Spread to MMD YTW/YTM	Par (000s)	Coupon	Yield YTW/YTM	EOD 3/5/2019 MMD March	Spread to MMD YTW/YTM	Deal vs. Comp Spread
2019											
2020						285	5.000	1.77	1.57	0.20	
2021						230	5.000	1.83	1.58	0.25	
2022	530	5.000	1.63	1.53	0.10	245	5.000	1.89	1.59	0.30	(0.20)
2023	560	5.000	1.67	1.56	0.11	255	5.000	1.95	1.62	0.33	(0.22)
2024	585	5.000	1.74	1.61	0.13	300	5.000	2.03	1.68	0.35	(0.22)
2025	610	5.000	1.79	1.65	0.14	315	5.000	2.14	1.77	0.37	(0.23)
2026	655	5.000	1.85	1.70	0.15	330	5.000	2.23	1.83	0.40	(0.25)
2027	685	5.000	1.91	1.75	0.16	350	5.000	2.33	1.92	0.41	(0.25)
2028	715	5.000	1.98	1.81	0.17	365	5.000	2.45	2.02	0.43	(0.26)
2029	760	5.000	2.07 / 2.31	1.89	0.18 / 0.42	385	5.000	2.58	2.13	0.45	(0.27)
2030	795	5.000	2.18 / 2.60	1.98	0.20 / 0.62						
2031	840	5.000	2.29 / 2.85	2.08	0.21 / 0.77	820	3.000	3.12	2.34	0.78	(0.57) / (0.01)
2032	880	5.000	2.38 / 3.04	2.16	0.22 / 0.88						
2033	925	5.000	2.45 / 3.19	2.22	0.23 / 0.97						
2034	975	5.000	2.49 / 3.31	2.26	0.23 / 1.05	1,350	5.000	3.03 / 3.55	2.53	0.50 / 1.02	(0.27) / 0.03
2035	1,025	5.000	2.54 / 3.41	2.31	0.23 / 1.10						
2036	1,075	5.000	2.59 / 3.51	2.36	0.23 / 1.15						
2037	1,130	5.000	2.64 / 3.59	2.41	0.23 / 1.18						
2038	1,185.00	5.00	2.68 / 3.66	2.45	0.23 / 1.21						
2039	1,245.00	5.00	2.72 / 3.73	2.49	0.23 / 1.24	2,660	3.625	3.70	2.83	0.87	(0.64) / 0.37
2040	1,315	5.00	2.75 / 3.78	2.52	0.23 / 1.26						
2041	1,370.00	5.00	2.78 / 3.83	2.55	0.23 / 1.28						
2042											
2043											
2044						3,265	5.000	3.47 / 4.17	2.95	0.52 / 1.22	
2045											
2046											
2047											
2048											
2049											
2050											
2051											
2052											
2053											
	17,860					11,155					

MBA of Salt Lake County
Lease Revenue Bonds, Series 2019 Comparables

	MBA of Salt Lake County, UT	Jordan Valley WTR Conserv District
Pricing Date:	*3/27/2019*	1/16/2019
Par Amount:	*$17,860,000*	$29,030,000
Issuer:	MBA of Salt Lake County, UT	Jordan Valley WTR Conserv District
Issue:	Lease Revenue Bonds, Series 2019	Revenue Bonds, Series 2019
Insurance:	-	-
Dated Date:	*4/11/2019*	2/14/2019
Underlying Rating:	*AA+*	*AA+*
Optional Call:	*1/15/2028*	10/1/2028
Sale Type:	*Negotiated*	Negotiated
Underwriter	*Wells Fargo*	George K. Baum
Maturity Date:	*1/15/2041*	10/1/2049

Maturity	Par (000s)	Coupon	Yield YTW/YTM	EOD 3/26/2019 MMD JAN	Spread to MMD YTW/YTM	Par (000s)	Coupon	Yield YTW/YTM	EOD 1/16/2019 MMD Oct	Spread to MMD YTW/YTM	Deal vs. Comp Spread
2019											
2020						440	4.000	1.77	1.7	0.07	
2021						460	4.000	1.80	1.72	0.08	
2022	530	5.000	1.63	1.53	0.10	480	5.000	1.84	1.76	0.08	0.02
2023	560	5.000	1.67	1.56	0.11	505	5.000	1.88	1.82	0.06	0.05
2024	585	5.000	1.74	1.61	0.13	530	5.000	1.93	1.87	0.06	0.07
2025	610	5.000	1.79	1.65	0.14	555	3.000	2.03	1.93	0.10	0.04
2026	655	5.000	1.85	1.70	0.15	575	5.000	2.11	2.00	0.11	0.04
2027	685	5.000	1.91	1.75	0.16	605	5.000	2.16	2.07	0.09	0.07
2028	715	5.000	1.98	1.81	0.17	635	5.000	2.27	2.16	0.11	0.06
2029	760	5.000	2.07 / 2.31	1.89	0.18 / 0.42	670	5.000	2.39 / 2.58	2.25	0.14 / 0.33	0.04 / 0.09
2030	795	5.000	2.18 / 2.60	1.98	0.20 / 0.62	705	5.000	2.51 / 2.85	2.33	0.18 / 0.52	0.02 / 0.10
2031	840	5.000	2.29 / 2.85	2.08	0.21 / 0.77	740	5.000	2.61 / 3.06	2.41	0.20 / 0.65	0.01 / 0.12
2032	880	5.000	2.38 / 3.04	2.16	0.22 / 0.88	775	5.000	2.68 / 3.21	2.47	0.21 / 0.74	0.01 / 0.13
2033	925	5.000	2.45 / 3.19	2.22	0.23 / 0.97	815	5.000	2.72 / 3.33	2.52	0.20 / 0.81	0.03 / 0.16
2034	975	5.000	2.49 / 3.31	2.26	0.23 / 1.05	860	5.000	2.78 / 3.45	2.58	0.20 / 0.87	0.03 / 0.18
2035	1,025	5.000	2.54 / 3.41	2.31	0.23 / 1.10	905	5.000	2.92 / 3.60	2.65	0.27 / 0.95	(0.04) / 0.15
2036	1,075	5.000	2.59 / 3.51	2.36	0.23 / 1.15	950	5.000	2.98 / 3.69	2.71	0.27 / 0.98	(0.04) / 0.16
2037	1,130	5.000	2.64 / 3.59	2.41	0.23 / 1.18	1,000	5.000	3.04 / 3.78	2.77	0.27 / 1.01	(0.04) / 0.18
2038	1,185.00	5.00	2.68 / 3.66	2.45	0.23 / 1.21	1,050	5.000	3.09 / 3.85	2.83	0.26 / 1.02	(0.03) / 0.20
2039	1,245.00	5.00	2.72 / 3.73	2.49	0.23 / 1.24	1,105	5.000	3.13 / 3.90	2.88	0.25 / 1.02	(0.02) / 0.22
2040	1,315	5.00	2.75 / 3.78	2.52	0.23 / 1.26						
2041	1,370.00	5.00	2.78 / 3.83	2.55	0.23 / 1.28						
2042											
2043											
2044						6,420	5.000	3.25 / 4.09	2.99	0.26 / 1.10	
2045											
2046											
2047											
2048											
2049						8,250	5.000	3.33 / 4.20	3.04	0.29 / 1.16	
2050											
2051											
2052											
2053											
	17,860					29,030					

ZIONS PUBLIC FINANCE INC

MBA of Salt Lake County
Lease Revenue Bonds, Series 2019 Comparables

Pricing Date:	3/27/2019					12/7/2018					
Par Amount:	$17,860,000					$30,755,000					
Issuer:	MBA of Salt Lake County, UT					South Dakota ST Bldg Auth Rev					
Issue:	Lease Revenue Bonds, Series 2019					Lease-Rent					
Insurance:	-					-					
Dated Date:	4/11/2019					12/27/2018					
Underlying Rating:	AA+					Aa1/AA+					
Optional Call:	1/15/2028					6/1/2028					
Sale Type:	Negotiated					Negotiated					
Underwriter:	Wells Fargo					Piper Jaffray					
Maturity Date:	1/15/2041					6/1/2040					
Maturity	Par (000s)	Coupon	Yield YTW/YTM	EOD 3/26/2019 MMD JAN	Spread to MMD YTW/YTM	Par (000s)	Coupon	Yield YTW/YTM	EOD 12/7/2018 MMD Jun	Spread to MMD YTW/YTM	Deal vs. Comp Spread
2019						1,720	3.000	1.86	1.72	0.14	
2020						895	4.000	1.97	1.80	0.17	
2021						935	4.000	2.05	1.85	0.20	
2022	530	5.000	1.63	1.53	0.10	970	4.000	2.11	1.91	0.20	(0.10)
2023	560	5.000	1.67	1.56	0.11	1,010	4.000	2.21	1.98	0.23	(0.12)
2024	585	5.000	1.74	1.61	0.13	1,050	4.000	2.28	2.05	0.23	(0.10)
2025	610	5.000	1.79	1.65	0.14	1,100	5.000	2.37	2.12	0.25	(0.11)
2026	655	5.000	1.85	1.70	0.15	1,160	5.000	2.48	2.21	0.27	(0.12)
2027	685	5.000	1.91	1.75	0.16	1,215	5.000	2.57	2.29	0.28	(0.12)
2028	715	5.000	1.98	1.81	0.17	1,275	5.000	2.67	2.36	0.31	(0.14)
2029	760	5.000	2.07 / 2.31	1.89	0.18 / 0.42	1,340	5.000	2.78 / 2.95	2.43	0.35 / 0.52	(0.17) / (0.10)
2030	795	5.000	2.18 / 2.60	1.98	0.20 / 0.62	1,405	5.000	2.86 / 3.16	2.49	0.37 / 0.67	(0.17) / (0.04)
2031	840	5.000	2.29 / 2.85	2.08	0.21 / 0.77	1,475	5.000	2.95 / 3.34	2.55	0.40 / 0.79	(0.19) / (0.02)
2032	880	5.000	2.38 / 3.04	2.16	0.22 / 0.88	1,550	5.000	3.00 / 3.47	2.60	0.40 / 0.87	(0.18) / 0.01
2033	925	5.000	2.45 / 3.19	2.22	0.23 / 0.97	1,625	5.000	3.06 / 3.59	2.66	0.40 / 0.93	(0.17) / 0.04
2034	975	5.000	2.49 / 3.31	2.26	0.23 / 1.05	1,710	5.000	3.12 / 3.69	2.72	0.40 / 0.97	(0.17) / 0.07
2035	1,025	5.000	2.54 / 3.41	2.31	0.23 / 1.10	1,795	5.000	3.18 / 3.79	2.78	0.40 / 1.01	(0.17) / 0.10
2036	1,075	5.000	2.59 / 3.51	2.36	0.23 / 1.15	1,885	5.000	3.23 / 3.87	2.83	0.40 / 1.04	(0.17) / 0.11
2037	1,130	5.000	2.64 / 3.59	2.41	0.23 / 1.18	1,980	5.000	3.28 / 3.94	2.88	0.40 / 1.06	(0.17) / 0.13
2038	1,185.00	5.00	2.68 / 3.66	2.45	0.23 / 1.21	2,075	5.000	3.32 / 3.99	2.93	0.39 / 1.06	(0.16) / 0.15
2039	1,245.00	5.00	2.72 / 3.73	2.49	0.23 / 1.24	2,015	5.000	3.35 / 4.04	2.96	0.39 / 1.08	(0.16) / 0.16
2040	1,315	5.00	2.75 / 3.78	2.52	0.23 / 1.26	570	5.000	3.38 / 4.08	2.99	0.39 / 1.09	(0.16) / 0.17
2041	1,370.00	5.00	2.78 / 3.83	2.55	0.23 / 1.28						
2042											
2043											
2044											
2045											
2046											
2047											
2048											
2049											
2050											
2051											
2052											
2053											
	17,860					30,755					

MBA of Salt Lake County
Lease Revenue Bonds, Series 2019 Comparables

Pricing Date:	3/27/2019					3/5/2019					
Par Amount:	$17,860,000					$23,865,000					
Issuer:	MBA of Salt Lake County, UT					Fort Collins, CO CTFS PARTN					
Issue:	Lease Revenue Bonds, Series 2019					Lease-Rent					
Insurance:	-					-					
Dated Date:	4/11/2019					3/21/2019					
Underlying Rating:	AA+					Aa1					
Optional Call:	1/15/2028					12/1/2028					
Sale Type:	Negotiated					Competitive					
Underwriter	Wells Fargo					Robert W. Baird					
Maturity Date:	1/15/2041					12/1/2038					
Maturity	Par (000s)	Coupon	Yield YTW/YTM	EOD 3/26/2019 MMD JAN	Spread to MMD YTW/YTM	Par (000s)	Coupon	Yield YTW/YTM	EOD 3/5/2019 MMD Dec	Spread to MMD YTW/YTM	Deal vs. Comp Spread
2019						1,020	5.000	1.58	1.55	0.03	
2020						780	5.000	1.60	1.58	0.02	
2021						820	5.000	1.61	1.59	0.02	
2022	530	5.000	1.63	1.53	0.10	860	5.000	1.65	1.61	0.04	0.06
2023	560	5.000	1.67	1.56	0.11	905	5.000	1.70	1.65	0.05	0.06
2024	585	5.000	1.74	1.61	0.13	950	5.000	1.78	1.73	0.05	0.08
2025	610	5.000	1.79	1.65	0.14	995	5.000	1.86	1.81	0.05	0.09
2026	655	5.000	1.85	1.70	0.15	1,045	5.000	1.95	1.88	0.07	0.08
2027	685	5.000	1.91	1.75	0.16	1,100	5.000	2.07	1.97	0.10	0.06
2028	715	5.000	1.98	1.81	0.17	1,155	5.000	2.17	2.07	0.10	0.07
2029	760	5.000	2.07 / 2.31	1.89	0.18 / 0.42	1,210	4.000	2.35 / 2.48	2.18	0.17 / 0.30	0.01 / 0.12
2030	795	5.000	2.18 / 2.60	1.98	0.20 / 0.62	1,260	4.000	2.60 / 2.80	2.28	0.32 / 0.52	(0.12) / 0.11
2031	840	5.000	2.29 / 2.85	2.08	0.21 / 0.77	1,310	4.000	2.70 / 2.95	2.36	0.34 / 0.59	(0.13) / 0.17
2032	880	5.000	2.38 / 3.04	2.16	0.22 / 0.88						
2033	925	5.000	2.45 / 3.19	2.22	0.23 / 0.97	2,765	3.000	3.00 / 3.00	2.49	0.51 / 0.51	(0.28) / 0.46
2034	975	5.000	2.49 / 3.31	2.26	0.23 / 1.05	1,445	3.000	3.10	2.53	0.57	(0.34) / 0.48
2035	1,025	5.000	2.54 / 3.41	2.31	0.23 / 1.10	1,490	3.125	3.20	2.59	0.61	(0.38) / 0.49
2036	1,075	5.000	2.59 / 3.51	2.36	0.23 / 1.15	1,535	3.125	3.25	2.65	0.60	(0.37) / 0.55
2037	1,130	5.000	2.64 / 3.59	2.41	0.23 / 1.18	1,585	3.250	3.30	2.71	0.59	(0.36) / 0.59
2038	1,185.00	5.00	2.68 / 3.66	2.45	0.23 / 1.21	1,635	3.250	3.35	2.77	0.58	(0.35) / 0.63
2039	1,245.00	5.00	2.72 / 3.73	2.49	0.23 / 1.24						
2040	1,315	5.00	2.75 / 3.78	2.52	0.23 / 1.26						
2041	1,370.00	5.00	2.78 / 3.83	2.55	0.23 / 1.28						
2042											
2043											
2044											
2045											
2046											
2047											
2048											
2049											
2050											
2051											
2052											
2053											
	17,860					23,865					

ZIONS PUBLIC FINANCE, INC.

MBA of Salt Lake County
Lease Revenue Bonds, Series 2019 Comparables

Pricing Date:	3/27/2019	2/12/2019
Par Amount:	$17,860,000	$23,575,000
Issuer:	MBA of Salt Lake County, UT	Utah Water Finance Agency
Issue:	Lease Revenue Bonds, Series 2019	Revenue Bonds, Series 2019
Insurance:	-	-
Dated Date:	4/11/2019	3/1/2019
Underlying Rating:	AA+	AA
Optional Call:	1/15/2028	3/1/2029
Sale Type:	Negotiated	Negotiated
Underwriter:	Wells Fargo	George K. Baum
Maturity Date:	1/15/2041	3/1/2035

Maturity	Par (000s)	Coupon	Yield YTW/YTM	EOD 3/26/2019 MMD JAN	Spread to MMD YTW/YTM	Par (000s)	Coupon	Yield YTW/YTM	EOD 2/12/2019 MMD	Spread to MMD YTW/YTM	Deal vs. Comp Spread
2019											
2020											
2021						1,080	5.000	1.62	1.61	0.01	
2022	530	5.000	1.63	1.53	0.10	1,135	5.000	1.66	1.63	0.03	0.07
2023	560	5.000	1.67	1.56	0.11	1,200	5.000	1.69	1.66	0.03	0.08
2024	585	5.000	1.74	1.61	0.13	1,255	5.000	1.75	1.7	0.05	0.08
2025	610	5.000	1.79	1.65	0.14	1,320	5.000	1.86	1.76	0.10	0.04
2026	655	5.000	1.85	1.70	0.15	1,390	5.000	1.98	1.84	0.14	0.01
2027	685	5.000	1.91	1.75	0.16	1,460	5.000	2.06	1.93	0.13	0.03
2028	715	5.000	1.98	1.81	0.17	1,535	5.000	2.20	2.02	0.18	(0.01)
2029	760	5.000	2.07 / 2.31	1.89	0.18 / 0.42	1,615	5.000	2.31	2.12	0.19	(0.01)
2030	795	5.000	2.18 / 2.60	1.98	0.20 / 0.62	1,700	5.000	2.45 / 2.63	2.23	0.22 / 0.40	(0.02) / 0.22
2031	840	5.000	2.29 / 2.85	2.08	0.21 / 0.77	1,785	5.000	2.57 / 2.89	2.34	0.23 / 0.55	(0.02) / 0.22
2032	880	5.000	2.38 / 3.04	2.16	0.22 / 0.88	1,875	5.000	2.63 / 3.06	2.42	0.21 / 0.64	0.01 / 0.24
2033	925	5.000	2.45 / 3.19	2.22	0.23 / 0.97	1,975	5.000	2.71 / 3.22	2.49	0.22 / 0.73	0.01 / 0.24
2034	975	5.000	2.49 / 3.31	2.26	0.23 / 1.05	2,075	5.000	2.77 / 3.35	2.54	0.23 / 0.81	0.00 / 0.24
2035	1,025	5.000	2.54 / 3.41	2.31	0.23 / 1.10	2,175	5.000	2.85 / 3.48	2.6	0.25 / 0.88	(0.02) / 0.23
2036	1,075	5.000	2.59 / 3.51	2.36	0.23 / 1.15						
2037	1,130	5.000	2.64 / 3.59	2.41	0.23 / 1.18						
2038	1,185.00	5.00	2.68 / 3.66	2.45	0.23 / 1.21						
2039	1,245.00	5.00	2.72 / 3.73	2.49	0.23 / 1.24						
2040	1,315	5.00	2.75 / 3.78	2.52	0.23 / 1.26						
2041	1,370.00	5.00	2.78 / 3.83	2.55	0.23 / 1.28						
2042											
2043											
2044											
2045											
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2047											
2048											
2049											
2050											
2051											
2052											
2053											
	17,860					23,575					

Municipal Building Authority of Salt Lake County, Utah

$17,840,000 Lease Revenue Bonds

Series 2019

(Final Numbers)

Table of Contents

Municipal Building Authority of Salt Lake County, Utah

$17,840,000 Lease Revenue Bonds

Series 2019

(Final Numbers)

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
04/11/2019	-	-	-	-	-
07/15/2019	-	-	232,911.11	232,911.11	232,911.11
01/15/2020	-	-	446,000.00	446,000.00	-
07/15/2020	-	-	446,000.00	446,000.00	892,000.00
01/15/2021	-	-	446,000.00	446,000.00	-
07/15/2021	-	-	446,000.00	446,000.00	892,000.00
01/15/2022	530,000.00	5.000%	446,000.00	976,000.00	-
07/15/2022	-	-	432,750.00	432,750.00	1,408,750.00
01/15/2023	560,000.00	5.000%	432,750.00	992,750.00	-
07/15/2023	-	-	418,750.00	418,750.00	1,411,500.00
01/15/2024	585,000.00	5.000%	418,750.00	1,003,750.00	-
07/15/2024	-	-	404,125.00	404,125.00	1,407,875.00
01/15/2025	610,000.00	5.000%	404,125.00	1,014,125.00	-
07/15/2025	-	-	388,875.00	388,875.00	1,403,000.00
01/15/2026	655,000.00	5.000%	388,875.00	1,043,875.00	-
07/15/2026	-	-	372,500.00	372,500.00	1,416,375.00
01/15/2027	685,000.00	5.000%	372,500.00	1,057,500.00	-
07/15/2027	-	-	355,375.00	355,375.00	1,412,875.00
01/15/2028	715,000.00	5.000%	355,375.00	1,070,375.00	-
07/15/2028	-	-	337,500.00	337,500.00	1,407,875.00
01/15/2029	760,000.00	5.000%	337,500.00	1,097,500.00	-
07/15/2029	-	-	318,500.00	318,500.00	1,416,000.00
01/15/2030	795,000.00	5.000%	318,500.00	1,113,500.00	-
07/15/2030	-	-	298,625.00	298,625.00	1,412,125.00
01/15/2031	840,000.00	5.000%	298,625.00	1,138,625.00	-
07/15/2031	-	-	277,625.00	277,625.00	1,416,250.00
01/15/2032	880,000.00	5.000%	277,625.00	1,157,625.00	-
07/15/2032	-	-	255,625.00	255,625.00	1,413,250.00
01/15/2033	925,000.00	5.000%	255,625.00	1,180,625.00	-
07/15/2033	-	-	232,500.00	232,500.00	1,413,125.00
01/15/2034	970,000.00	5.000%	232,500.00	1,202,500.00	-
07/15/2034	-	-	208,250.00	208,250.00	1,410,750.00
01/15/2035	1,020,000.00	5.000%	208,250.00	1,228,250.00	-
07/15/2035	-	-	182,750.00	182,750.00	1,411,000.00
01/15/2036	1,075,000.00	5.000%	182,750.00	1,257,750.00	-
07/15/2036	-	-	155,875.00	155,875.00	1,413,625.00
01/15/2037	1,130,000.00	5.000%	155,875.00	1,285,875.00	-
07/15/2037	-	-	127,625.00	127,625.00	1,413,500.00
01/15/2038	1,180,000.00	5.000%	127,625.00	1,307,625.00	-
07/15/2038	-	-	98,125.00	98,125.00	1,405,750.00
01/15/2039	1,245,000.00	5.000%	98,125.00	1,343,125.00	-
07/15/2039	-	-	67,000.00	67,000.00	1,410,125.00
01/15/2040	1,310,000.00	5.000%	67,000.00	1,377,000.00	-
07/15/2040	-	-	34,250.00	34,250.00	1,411,250.00
01/15/2041	1,370,000.00	5.000%	34,250.00	1,404,250.00	-
07/15/2041	-	-	-	-	1,404,250.00
Total	**$17,840,000.00**	-	**$12,396,161.11**	**$30,236,161.11**	-

Yield Statistics

Bond Year Dollars	$247,923.22
Average Life	13.897 Years
Average Coupon	5.0000000%
Net Interest Cost (NIC)	3.6650066%
True Interest Cost (TIC)	3.2761540%
Bond Yield for Arbitrage Purposes	2.4102102%
All Inclusive Cost (AIC)	3.3599453%

IRS Form 8038

Net Interest Cost	3.0648997%
Weighted Average Maturity	13.900 Years

Municipal Building Authority of Salt Lake County, Utah

$17,840,000 Lease Revenue Bonds

Series 2019

(Final Numbers)

Pricing Summary

Maturity	Type of Bond	Coupon	Yield	Maturity Value	Price		YTM	Call Date	Call Price	Dollar Price
01/15/2022	Serial Coupon	5.000%	1.610%	530,000.00	109.116%		-	-	-	578,314.80
01/15/2023	Serial Coupon	5.000%	1.640%	560,000.00	112.204%		-	-	-	628,342.40
01/15/2024	Serial Coupon	5.000%	1.710%	585,000.00	114.979%		-	-	-	672,627.15
01/15/2025	Serial Coupon	5.000%	1.760%	610,000.00	117.674%		-	-	-	717,811.40
01/15/2026	Serial Coupon	5.000%	1.830%	655,000.00	120.070%		-	-	-	786,458.50
01/15/2027	Serial Coupon	5.000%	1.890%	685,000.00	122.349%		-	-	-	838,090.65
01/15/2028	Serial Coupon	5.000%	1.960%	715,000.00	124.360%		-	-	-	889,174.00
01/15/2029	Serial Coupon	5.000%	2.070%	760,000.00	123.363%	c	2.312%	01/15/2028	100.000%	937,558.80
01/15/2030	Serial Coupon	5.000%	2.180%	795,000.00	122.376%	c	2.602%	01/15/2028	100.000%	972,889.20
01/15/2031	Serial Coupon	5.000%	2.290%	840,000.00	121.398%	c	2.846%	01/15/2028	100.000%	1,019,743.20
01/15/2032	Serial Coupon	5.000%	2.380%	880,000.00	120.605%	c	3.039%	01/15/2028	100.000%	1,061,324.00
01/15/2033	Serial Coupon	5.000%	2.450%	925,000.00	119.992%	c	3.193%	01/15/2028	100.000%	1,109,926.00
01/15/2034	Serial Coupon	5.000%	2.490%	970,000.00	119.643%	c	3.307%	01/15/2028	100.000%	1,160,537.10
01/15/2035	Serial Coupon	5.000%	2.540%	1,020,000.00	119.210%	c	3.413%	01/15/2028	100.000%	1,215,942.00
01/15/2036	Serial Coupon	5.000%	2.590%	1,075,000.00	118.777%	c	3.508%	01/15/2028	100.000%	1,276,852.75
01/15/2037	Serial Coupon	5.000%	2.640%	1,130,000.00	118.347%	c	3.593%	01/15/2028	100.000%	1,337,321.10
01/15/2038	Serial Coupon	5.000%	2.680%	1,180,000.00	118.004%	c	3.664%	01/15/2028	100.000%	1,392,447.20
01/15/2039	Serial Coupon	5.000%	2.720%	1,245,000.00	117.663%	c	3.728%	01/15/2028	100.000%	1,464,904.35
01/15/2040	Serial Coupon	5.000%	2.750%	1,310,000.00	117.407%	c	3.782%	01/15/2028	100.000%	1,538,031.70
01/15/2041	Serial Coupon	5.000%	2.780%	1,370,000.00	117.152%	c	3.831%	01/15/2028	100.000%	1,604,982.40
Total	-	-	-	**$17,840,000.00**	-	-	-	-	-	**$21,203,278.70**

Bid Information

Par Amount of Bonds	$17,840,000.00
Reoffering Premium or (Discount)	3,363,278.70
Gross Production	$21,203,278.70
Total Underwriter's Discount (0.300%)	$(53,520.00)
Bid (118.552%)	21,149,758.70
Total Purchase Price	$21,149,758.70
Bond Year Dollars	$247,923.22
Average Life	13.897 Years
Average Coupon	5.0000000%
Net Interest Cost (NIC)	3.6650066%
True Interest Cost (TIC)	3.2761540%

Municipal Building Authority of Salt Lake County, Utah

$17,840,000 Lease Revenue Bonds

Series 2019

(Final Numbers)

Total Issue Sources And Uses

Dated 04/11/2019 | Delivered 04/11/2019

	Holladay Library	Daybreak Library	Operations Center	Library Collection	Issue Summary
Sources Of Funds					
Par Amount of Bonds	$3,380,000.00	$12,455,000.00	$1,075,000.00	$930,000.00	$17,840,000.00
Reoffering Premium	637,418.15	2,347,955.80	202,950.05	174,954.70	3,363,278.70
Total Sources	$4,017,418.15	$14,802,955.80	$1,277,950.05	$1,104,954.70	$21,203,278.70
Uses Of Funds					
Deposit to Project Construction Fund	3,700,000.00	13,300,000.00	1,200,000.00	1,000,000.00	19,200,000.00
Capitalized Interest	269,764.21	1,338,382.43	64,335.74	92,608.80	1,765,091.18
Costs of Issuance	34,103.14	125,667.04	10,846.41	9,383.41	180,000.00
Total Underwriter's Discount (0.300%)	10,140.00	37,365.00	3,225.00	2,790.00	53,520.00
Rounding Amount	3,410.80	1,541.33	(457.10)	172.49	4,667.52
Total Uses	$4,017,418.15	$14,802,955.80	$1,277,950.05	$1,104,954.70	$21,203,278.70

Municipal Building Authority of Salt Lake County, Utah

$17,840,000 Lease Revenue Bonds

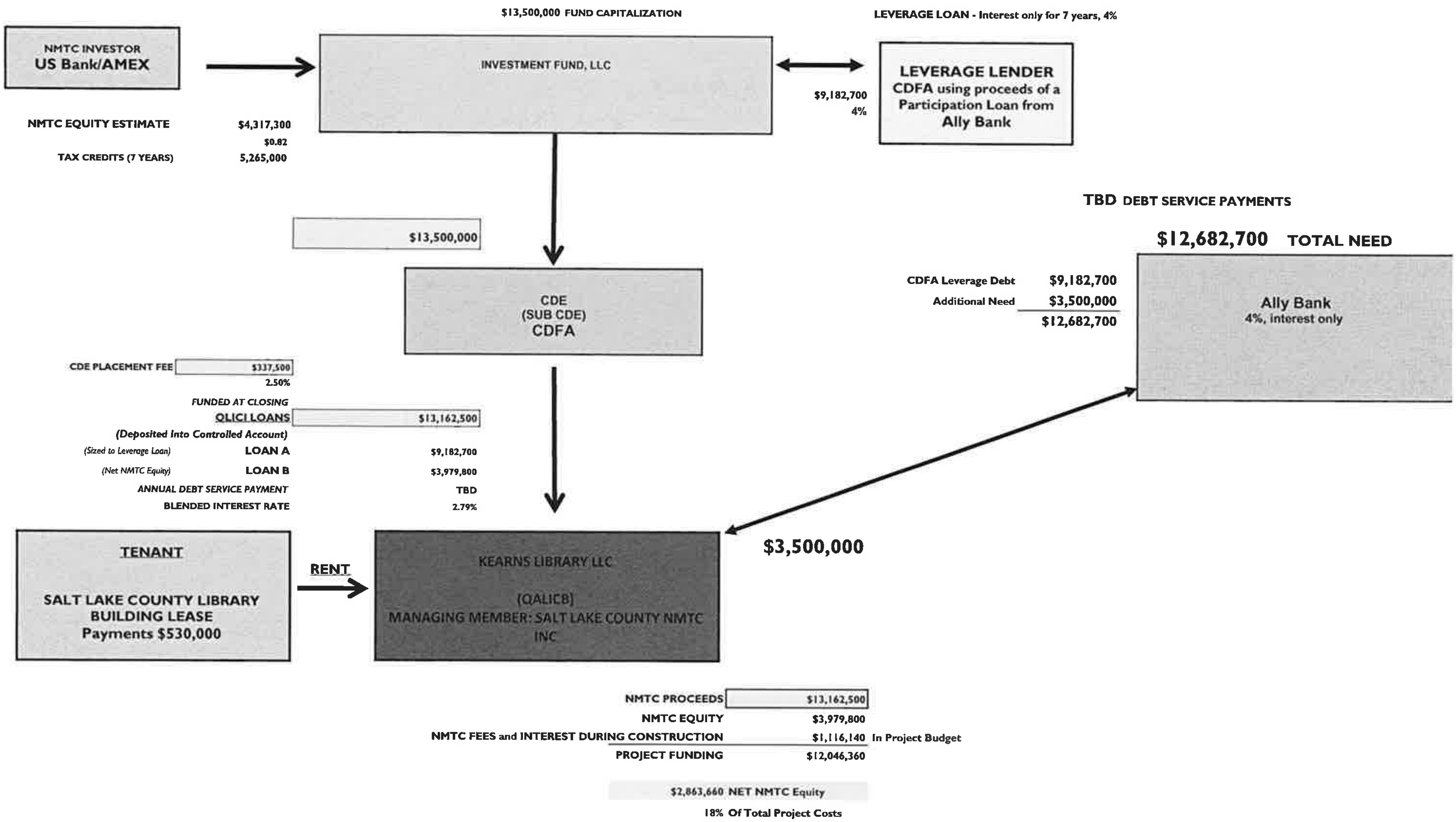
Series 2019

(Final Numbers)

Net Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	CIF	Net New D/S	Fiscal Total
04/11/2019	-	-	-	-	-	-	-
07/15/2019	-	-	232,911.11	232,911.11	(232,911.11)	-	-
01/15/2020	-	-	446,000.00	446,000.00	(446,000.00)	-	-
07/15/2020	-	-	446,000.00	446,000.00	(443,909.72)	2,090.28	2,090.28
01/15/2021	-	-	446,000.00	446,000.00	(398,469.44)	47,530.56	-
07/15/2021	-	-	446,000.00	446,000.00	(300,848.61)	145,151.39	192,681.94
01/15/2022	530,000.00	5.000%	446,000.00	976,000.00	-	976,000.00	-
07/15/2022	-	-	432,750.00	432,750.00	-	432,750.00	1,408,750.00
01/15/2023	560,000.00	5.000%	432,750.00	992,750.00	-	992,750.00	-
07/15/2023	-	-	418,750.00	418,750.00	-	418,750.00	1,411,500.00
01/15/2024	585,000.00	5.000%	418,750.00	1,003,750.00	-	1,003,750.00	-
07/15/2024	-	-	404,125.00	404,125.00	-	404,125.00	1,407,875.00
01/15/2025	610,000.00	5.000%	404,125.00	1,014,125.00	-	1,014,125.00	-
07/15/2025	-	-	388,875.00	388,875.00	-	388,875.00	1,403,000.00
01/15/2026	655,000.00	5.000%	388,875.00	1,043,875.00	-	1,043,875.00	-
07/15/2026	-	-	372,500.00	372,500.00	-	372,500.00	1,416,375.00
01/15/2027	685,000.00	5.000%	372,500.00	1,057,500.00	-	1,057,500.00	-
07/15/2027	-	-	355,375.00	355,375.00	-	355,375.00	1,412,875.00
01/15/2028	715,000.00	5.000%	355,375.00	1,070,375.00	-	1,070,375.00	-
07/15/2028	-	-	337,500.00	337,500.00	-	337,500.00	1,407,875.00
01/15/2029	760,000.00	5.000%	337,500.00	1,097,500.00	-	1,097,500.00	-
07/15/2029	-	-	318,500.00	318,500.00	-	318,500.00	1,416,000.00
01/15/2030	795,000.00	5.000%	318,500.00	1,113,500.00	-	1,113,500.00	-
07/15/2030	-	-	298,625.00	298,625.00	-	298,625.00	1,412,125.00
01/15/2031	840,000.00	5.000%	298,625.00	1,138,625.00	-	1,138,625.00	-
07/15/2031	-	-	277,625.00	277,625.00	-	277,625.00	1,416,250.00
01/15/2032	880,000.00	5.000%	277,625.00	1,157,625.00	-	1,157,625.00	-
07/15/2032	-	-	255,625.00	255,625.00	-	255,625.00	1,413,250.00
01/15/2033	925,000.00	5.000%	255,625.00	1,180,625.00	-	1,180,625.00	-
07/15/2033	-	-	232,500.00	232,500.00	-	232,500.00	1,413,125.00
01/15/2034	970,000.00	5.000%	232,500.00	1,202,500.00	-	1,202,500.00	-
07/15/2034	-	-	208,250.00	208,250.00	-	208,250.00	1,410,750.00
01/15/2035	1,020,000.00	5.000%	208,250.00	1,228,250.00	-	1,228,250.00	-
07/15/2035	-	-	182,750.00	182,750.00	-	182,750.00	1,411,000.00
01/15/2036	1,075,000.00	5.000%	182,750.00	1,257,750.00	-	1,257,750.00	-
07/15/2036	-	-	155,875.00	155,875.00	-	155,875.00	1,413,625.00
01/15/2037	1,130,000.00	5.000%	155,875.00	1,285,875.00	-	1,285,875.00	-
07/15/2037	-	-	127,625.00	127,625.00	-	127,625.00	1,413,500.00
01/15/2038	1,180,000.00	5.000%	127,625.00	1,307,625.00	-	1,307,625.00	-
07/15/2038	-	-	98,125.00	98,125.00	-	98,125.00	1,405,750.00
01/15/2039	1,245,000.00	5.000%	98,125.00	1,343,125.00	-	1,343,125.00	-
07/15/2039	-	-	67,000.00	67,000.00	-	67,000.00	1,410,125.00
01/15/2040	1,310,000.00	5.000%	67,000.00	1,377,000.00	-	1,377,000.00	-
07/15/2040	-	-	34,250.00	34,250.00	-	34,250.00	1,411,250.00
01/15/2041	1,370,000.00	5.000%	34,250.00	1,404,250.00	-	1,404,250.00	-
07/15/2041	-	-	-	-	-	-	1,404,250.00
Total	**$17,840,000.00**	**-**	**$12,396,161.11**	**$30,236,161.11**	**(1,822,138.89)**	**$28,414,022.22**	**-**

KEARNS LIBRARY
NMTC FLOW OF FUNDS - AT CLOSING



Created September 16, 2018
Updated December 12, 2018

SALT LAKE COUNTY, UTAH

$50,000,000* Tax and Revenue Anticipation Notes, Series 2019

as of February 15, 2019

May

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Day	Date	Event	Responsibility
Wednesday	April 24	Calendar of Events is distributed at Regular DRC Meeting.	DRC, MA
Friday	May 3	Note Counsel is selected by DA's office.	DA
Wednesday	May 22	Draft Preliminary Official Statement is distributed to the working group.	MA
Thursday	May ~~30~~ 29	Cash flow projections are prepared and the size of the Tax Notes is determined.	MA, DRC
Thursday	May ~~30~~ 29	Due diligence meeting. (2:00 p.m. – County Offices)	DRC, NC, MA
Thursday	May ~~30~~ 29	Plan of Finance is presented to DRC.	DRC, MA
Friday	May 31	Plan of Finance with delegated authority is placed on County Council Agenda for June 4th meeting.	NC, CL
Tuesday	June 4	County Council adopts Plan of Finance document with delegated authority.	CC, NC, MA
Wednesday	June 5	Rating package is sent to Moody's	MA
Week of	June 10th	Rating call with Moody's (2:00 pm – Darrin Casper's Office)	By Invitation
Thursday	June 20	Rating is received.	MA
Friday	June 21	Revised POS is distributed to the market.	MA
Tuesday	July 2	Competitive Sale. (9:30 am – Offices of Zions Public Finance)	DRC, U, MA
Tuesday	July 2	Award made via delegated authority – (by 2:00 p.m.)	CFO, NC, MA
Tuesday	July 9	Draft Closing documents are distributed by Note Counsel.	NC
Tuesday	July 9	Final Official Statement is distributed.	MA
Friday	July 12	Pre-closing. (Time and place TBD)	By Invitation
Tuesday	July 16	Closing. (Offices of Note Counsel – 9:00 a.m.)	ALL

*Preliminary; subject to change