
SALT LAKE COUNTY

Debt Review Committee

Debt Review Committee Meeting – Minutes (APPROVED)

Audio available: <http://slco.org/debt-review/audio/>

Wednesday, August 29, 2018, 2:00 p.m. – Salt Lake County Auditor’s Office
Salt Lake County Government Center
2001 South State Street #S3-300, Salt Lake City UT 84190

ATTENDEES

Committee Members Present:

Ralph Chamness, Chair (District Attorney’s Office)
Darrin Casper, Member (Mayor’s Office)
Wayne Cushing, Member (Treasurer’s Office)
Javaid Majid, Member (Mayor’s Office)
Jason Rose, Member (County Council)
Scott Tingley, Member (Auditor’s Office)
Jon Bronson, Ex-officio Member (Zions Bank)
Cherylann Johnson, Member (Auditor’s Office)
David Delquadro, Member (Council Rep)

Other Attendees:

Craig Wangsgard (District Attorney’s Office)
Shanell Beecher (MFA)
Rod Kitchens (MFA)
Steve VanMaren, (Citizen)
Dina Blaes (Mayor’s Office)
Joyce Peterson (District Attorney’s Office)

Committee Members Absent:

None

AGENDA

Chair, Ralph Chamness, called the meeting to order at 2:05 p.m.

1. Approval of Minutes

A motion was made by Mr. Majid to approve the May 2, 2018 and May 30, 2018 minutes with minor changes that were made prior to today’s meeting. The motion was seconded by Mr. Rose and all were in favor of approval.

2. Municipal Advisor Update

Mr. Bronson distributed a packet and referred to the Interest Rate Trend, 20 Year 20 Bond Buyer Index and Market Outlook pages. Mr. Bronson indicated that rates are higher than they were from a year ago. From January 1988 to today, rates have been lower and have been lower about 17% of the time in that time period; however rates have been lower more recently about a year ago. On the Market Outlook page one can see the MMD AAA, 10 Year; last Thursday indicated that index was a 2.44%. The week prior to that 2.43%, and the month prior was 2.42%. A year ago we were at 1.88%. Mr. Delquadro stated the 10 year Treasury is going the other way. Mr. Bronson indicated this is true and the spreads have widened which has caused a lot of discussion on why that has happened. Fund flows to municipal bond funds have been increasing for the last four consecutive weeks.

Mr. Bronson summarized the MMD Muni Bond Yields page of the handout and stated the 10 year AAA indicates 2.43%; not a substantial amount of movement at the moment in the MMD. Mr. Bronson summarized the UBS Municipal Market Minute handout and highlighted the first four bullet points: Primary Market Drivers, The Federal Reserve, Economic Drivers, and Treasuries. Jerome Powell is still on track on interest rate increases; the market is counting on one more rate increase this year. Although inflation has moved up near 2% there is no clear sign of acceleration above the target rate of inflation. New family home sales fell in July to a nine month low, a sign that the housing market is cooling and providing less support to the overall economy. This may be attributed to the higher mortgage rates. The treasury yield curve reached its flattest level since 2007. Short-term rates have been increasing; long-term rates have been pretty stable so the yield curve flattens as borrowing on the short end is a higher cost, however, on the long end, the rates have not been moving up as quickly.

Mr. Bronson highlighted the Economic Snapshot handouts pertaining to Utah and the United States and highlighted the population in Utah, employment and employment growth, U.S. unemployment (3.9%), and job growth in particular industries. Utah's population continues to grow. Utah is third in the nation in population growth. Utah's inflation is outpacing the national average. National consumer confidence remains high.

Mr. Bronson summarized the Southwest Midyear Review handout and highlighted the Utah Bond Sales for the full year and the Top Five Rankings of Senior Managers, Financial Advisors, Issuers, and Bond Counsel. The largest issuer in the State was Utah County due to the IHC conduit.

Mr. Bronson referred to the Midyear Review handout and indicated the underwriting spreads continue to decline.

Mr. Bronson referred to the attached letter dated August 6, 2018 addressed to Salt Lake County (Darrin Casper) regarding the sequestration, 6.2%.

Mr. Bronson referred to the attached email containing the Chapman Client Alert which is a summary alert of a new rule issued by the SEC. It refers to an amendment to Rule 15c2-12, disclosure rule which governs what one has to do with official statements and the continuing disclosure obligation. What the market has been concerned with, and the SEC has been trying to do for a while, is capture and disclose the terms and deals that are not done in the market and are done privately. There is concern that the private deals may have some provision in them that may give them priority over deals when market participants have been utilizing the same collateral – or they might be so large as to cause them a problem with your financials and your ability to carry debt. The SEC wants to know what you are doing and this adds to the material events if you do a direct purchase after the date this becomes effective (180 days from the date it is published). After that if you engage in any direct purchases of bonds and sell them directly without going into the market without disclosing into EMMA in the market, you have to then, update the continuing disclosure with material events notice of the terms of that deal. Mr. Casper asked if we are grandfathered in for the \$1.9M solar deal. Mr. Bronson responded yes, grandfathered in. Additionally, you do not have to do this except for continuing disclosure agreements that happen after the 180 days. The next bond issue is over \$10M and will have a continuing disclosure undertaking with it and will have to capture the material events. This is for new DP deals. Mr. Bronson stated that although you have continuing disclosure agreements now, they are not affected by this. It is only continuing disclosure agreements you enter into after this 180 days has passed and then it affects only DP deals that you do at that time or forward. The underwriter is not able to underwrite your bonds unless they have a continuing disclosure agreement in place that contains these new material events.

Mr. Casper introduced Dina Blaes, Associate Deputy Mayor. The attendees at the meeting introduced themselves to Ms. Blaes.

Mr. Bronson mentioned that the city of Chicago is contemplating as much as \$10B in pension obligation bonds which has been widely criticized by a great number of players in the market. They are talking about going out 30 years.

Mr. VanMaren asked Mr. Bronson about the significance of the 5% Utah inflation rate. Mr. VanMaren stated his sewer district is considering significant increases due to this. Mr. Bronson replied that any time the inflation rate, especially in construction materials is well above the borrowing rate, he would worry about that because it argues against PAYGO financing which Mr. Bronson likes. PAYGO financing is conservative, however, when you get that kind of inflation number, particularly in construction, it eats the project alive. Mr. Bronson gave the example of UDOT's highway construction project.

3. Review of TRANs note sale

Mr. Bronson distributed a bound handout, Salt Lake County \$55M Tax and Revenue Anticipation Notes, Series 2018. Mr. Bronson referred to Section 1, page 1, Bid Comparisons and summarized the bids. Mr. Bronson referred to Section 2, Transaction Information, page 3, and highlighted the paragraph titled Security For the Note Issue and summarized the Source and Uses of Funds section. Principal and interest on the Notes is payable December 27, 2018. Mr. Bronson summarized pages 4 and 5 and highlighted the Interest Cost section, Underwriter's Spread. Mr. Bronson indicated that the County made a verbal commitment to Moody's to set aside repayment monies by November 15. Interest started on July 26, 2018 which was also the closing date. Mr. Bronson summarized page 7, Debt Repayment Schedule; interest is calculated on the 3% coupon - \$692,083.33. The premium of the \$374K offsets more than half of that.

Mr. Bronson referred to Section 3, Tax Anticipation Note History and summarized the table and highlighted the underwriter's fees and the yield. Mr. Bronson turned to the last page of Section Three, 2018 TRAN Comparables, summarized the table and pointed out the yield spread to MIG1; that is what you want to see because it is adjusted for 6th month to the year. The TRANs sold at 6 basis points under the MIG1 rate. Salt Lake County beat all on the comparables except for the City of Berkley. Mr. Casper asked if the MMD is published in AA and AAA. Mr. Bronson confirmed that it does and one has to compare it to the MMD or the MIG1 scale as of that date. Section 4 summarizes the final set of numbers.

Mr. Bronson summarized Section 5, Moody's Rating Report, and highlighted that Salt Lake County (AAA Stable) benefits from a remarkably strong local economy. The County's socioeconomic profile is healthy, with unusually low unemployment despite income measures that are somewhat below similar rated peers. The County's well-managed finances have shown stable-to-grow reserve levels that continue to provide adequate resources for the County's annual operations. Debt and pensions are modest and manageable. Mr. Bronson also highlighted the section titled Credit Strengths.

Mr. Bronson referred to page 2 of the Moody's Investor's Service section, Credit Challenges. Reserves lag the AAA-rated county median nationally. Wealth measures lag the AAA-rated county median nationally. Mr. Bronson stated that this is the reason S&P did not give us an AAA for some time because those wealth indicators were not as high as other AAA counties. Mr. Bronson highlighted the section titled Factors that could lead to a downgrade; significant deterioration of the county's financial position, including substantial reductions in available reserves and sustained and large tax base declines that affects the county's financial stability. Mr. Bronson reviewed pages 3, 4, and 5 titled Detailed Credit Considerations, and highlighted the sections stating the region has become the preeminent cost-effective alternative for businesses looking to relocate from costly areas on the Pacific Coast. Mr. Bronson referred to the Financial Operations and Reserves section and highlighted the County continues to budget conservatively and has consistently demonstrated above budgeted expectations. Mr. Bronson referred to page 4,

and highlighted the County's general fund reserves are somewhat low relative to all AAA-rated counties nationally but compare well to other large, urban AAA-rated counties. The County has substantial financial flexibility in other governmental funds.

Mr. Bronson referred to the Liquidity paragraph. The County has conservatively managed financial operations that continue to result in sufficient financial flexibility and satisfactory liquidity for the County's operations. Actual ending cash typically meets or exceeds projections. Further, Moody's notes positively that the County intends to set-aside funds as early as November 15th. Mr. Bronson referred to the paragraph Debt and Pensions, and noted the County's debt burden is manageable; the County anticipates issuing the remaining GO authorization from the November 2016 election in 2018 or 2019. The next GO is for parks; an important consideration is we are trying to maintain that tax levy. Mr. Bronson referred to the section Pensions and OPEB and highlighted that positively Salt Lake County contributed an amount just above its "tread water" requirement in fiscal 2016. Further, in section Management and Governance, Mr. Bronson highlighted that the County has adopted prudent financial policies and practices and the County also established an OPEB trust in April 2014 to begin addressing that long-term liability and has made contributions each year to raise the funding of the plan.

4. Library Update

Mr. Casper indicated that the Library's pricing may come in at \$84M to \$85M. There are a number of factors associated with the amount. The high price of steel is a factor. The large cost increase is due to the economy, demand and tariffs; \$20M more than anticipated. Not all of the problems relate to cost overruns in the construction industry although much of it is. One of the issues is that the Library could not make a lease deal work with the West Valley Mall. The management company wanted provisions that said the Library could have space in the mall, however, the Library may have to move when asked as well as other high charges per year. The Library is looking for other options for the West Valley City Library. The mall space was \$6M; now the Library is looking at \$12M to \$14M basically due to the construction market and cost of steel. Mr. Casper indicated that they are still on track on issuing debt for this Fall. There are three projects that are far enough along that they are going forward regardless. There is a project that may need to be removed and put back into the next round. There are four scenarios that are ready to be presented to the Library Board. Mr. Casper is uncertain if the Mayor has seen the four scenarios that were presented during budget. The Mayor will make a proposal to the Council. The Council will be informed by its participation on the Library Board.

Mr. Delquadro commented about the past ZAP project and its augmentation of \$20M with steel prices going up 20% and questioned whether we hurry the projects out to the market or step back and consolidate and announce the large projects to the construction industry so they could plan their bidding. Mr. Delquadro stated he is not sure if the current environment is the same as it was back then.

Mr. Casper indicated that on a financing standpoint he thinks that making the indenture flexible enough to issue two tranches of debt for these projects. There are going to be five of six projects if you include the operations center and four or five libraries. So one way to value engineering is to put a library on hold and they can do other things as well. Either way MBA debts are already expensive relatively speaking; it is the debt that has to be used for libraries, we cannot do sales tax or GO so we can use an initial tranche to cover us for the first three priority projects and a second tranche of debt when that policy decision is decided. Proceeding with five or six projects it is difficult to meet the IRS deadline.

Mr. Bronson indicated that a draft calendar for the issue was distributed. It calls for a closing of this first tranche by December 6. The idea was to get bond counsel and the underwriter on board before the next DRC meeting. Teresa Young has an RFP and suggested to move the due date to the underwriter's RFP to September 21 so that the County is complying with the regular process. The next DRC meeting is set for September 26. The proposals from the underwriters to the RFP will have been received by that date, however, the selection may not be made by that time. A Parameter's Resolution must go before the council on October 2. Mr. Casper indicated that they are purchasing real estate with the existing budgeted appropriations. We need to reimburse ourselves so that the library fund does not go negative at the end of the year. One consideration is to delay the West Valley project to meet the budget as well as other budget solutions are being considered. Mr. Bronson indicated that it would be nice if the projects we are financing in the first tranche are known projects that will not be subject to alterations. Mr. Casper responded that those projects will probably be under contract. Mr. Casper continued to comment that there is an issue as to the collateral for MBA purposes. There is a potential problem with collateral with the new market tax credit equity owner versus the bond holders; the question is, would the bond holders accept an equivalent amount or greater amount of collateral from other sources? It is already cross-collateralized in the MBA indenture. Further, could we place the Sandy Library into the collateral mix that is already existing? Mr. Bronson responded that he was surprised that the answer was not indicated as "no" immediately. Mr. Wangsgard responded that was the answer that was given to him preliminarily. Mr. Casper commented, why would the bond holder care? Mr. Bronson responded that the bond holder does not care, it is a provision under state law that would be looked at that would prohibit one from mortgaging something that already exists that you are not financing. It is possibly listed under the Municipal Bond Act. There may be a loophole. Mr. Casper continued by stating that this is a pertinent question with the approval of the MBA, which is our financing option, we could do something else out of the MBA. A Section 108 loan was looked at. A \$3M new market tax credit contribution to the Kearns library goes a long way to that \$20M problem. The market could be tested with two tranches. The goal is to get the lowest interest rate we can get, the lowest cost financing.

5. Underwriter RFP

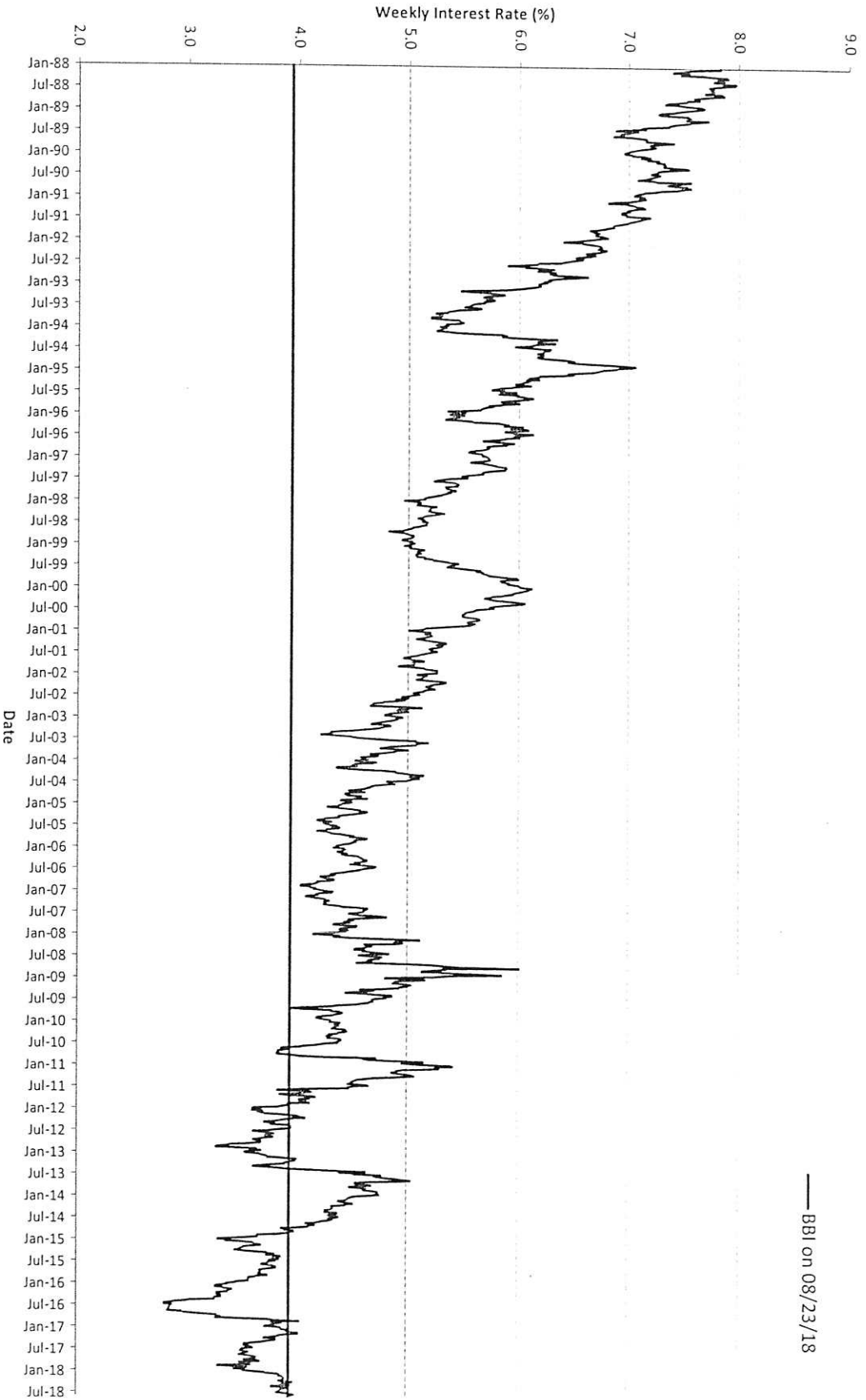
Discussion was had regarding the MBA Lease Revenue Bond for at least \$65M may increase up to \$85M in two tranches; may be issued in more than one series in separate years. The calendar calls out that the bonds be sold on or about November 20 in light of the Thanksgiving holiday which is on November 22. Some of the questions posed in the RFP are the experience with the annual appropriations debt, debt service reserve funds, ratings, and 80/20 split between the technical side of the proposal and the pricing.

Recommended changes to the RFP are: portions of the project may be funded using new market tax credits which may require a portion of the bonds to be issued as taxable bonds.

6. Adjourn

The Meeting was adjourned at 3:20 p.m. The next Committee meeting is scheduled for Wednesday September 26, 2018 at 2:00 p.m.

Interest Rate Trend 20 Year 20 Bond Buyer Index January 1988 to August 2018



Since January 1988:

Interest rates have been higher than the current BBI 83.03% of the time.

Interest rates have been lower than the current BBI 16.97% of the time.

Municipal Market Outlook

August 23, 2018

RATE DATA

	Today	Week Prior	Month Prior	Year Prior
MMD AAA GO				
3 Year	1.77	1.76	1.72	0.95
5 Year	1.99	1.98	1.93	1.14
10 Year	2.44	2.43	2.42	1.88
15 Year	2.71	2.72	2.67	2.31
20 Year	2.89	2.90	2.85	2.54
30 Year	3.00	3.01	2.96	2.73
US Treasury				
2 Year	2.60	2.61	2.64	1.32
5 Year	2.70	2.73	2.83	1.76
10 Year	2.82	2.86	2.96	2.17
30 Year	2.99	3.03	3.10	2.75
Federal Funds	1.92	1.91	1.91	1.16
Prime Rate	5.00	5.00	5.00	4.25
SIFMA 7 Day	1.58	1.57	0.94	0.78

BOND BUYER AND SHORT TERM INDEXES

20 Bond GO ¹	3.94	3.95	3.83	3.53
25 Bond REV ²	4.44	4.45	4.33	3.74
Jefferies ST	1.59	1.60	0.95	0.78

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

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

ZIONS PUBLIC FINANCE — MMD Muni Bond Yields — 08/28/2018 EOD

		General Obligations					"AAA" Coupon Range			
		"AAA"	PRE-RE	INSURED	"AA"	"A"	"BAA"	"LOW"	"HIGH"	
1	2019	1.55	1.55	1.64	1.56	1.74	2.01	5.00	5.00	
2	2020	1.65	1.67	1.80	1.68	1.90	2.20	5.00	5.00	
3	2021	1.78	1.80	1.94	1.83	2.08	2.40	5.00	5.00	
4	2022	1.89	1.92	2.10	1.95	2.23	2.55	5.00	5.00	
5	2023	2.00	2.03	2.26	2.07	2.38	2.70	5.00	5.00	
6	2024	2.11	2.14	2.39	2.20	2.52	2.86	5.00	5.00	
7	2025	2.21	2.24	2.51	2.32	2.64	2.97	5.00	5.00	
8	2026	2.31	2.34	2.62	2.44	2.75	3.09	5.00	5.00	
9	2027	2.37		2.70	2.53	2.83	3.17	5.00	5.00	
10	2028	2.43		2.77	2.60	2.90	3.25	5.00	5.00	
11	2029	2.49		2.84	2.68	2.97	3.33	5.00	5.00	
12	2030	2.55		2.91	2.75	3.04	3.40	5.00	5.00	
13	2031	2.61		2.97	2.81	3.10	3.46	5.00	5.00	
14	2032	2.65		3.01	2.85	3.14	3.50	5.00	5.00	
15	2033	2.70		3.06	2.90	3.19	3.55	5.00	5.00	
16	2034	2.75		3.11	2.95	3.24	3.60	5.00	5.00	
17	2035	2.79		3.14	2.99	3.28	3.63	5.00	5.00	
18	2036	2.83		3.17	3.03	3.32	3.66	5.00	5.00	
19	2037	2.87		3.21	3.07	3.36	3.70	5.00	5.00	
20	2038	2.90		3.24	3.10	3.39	3.73	5.00	5.00	
21	2039	2.92		3.26	3.12	3.41	3.74	5.00	5.00	
22	2040	2.93		3.27	3.13	3.42	3.74	5.00	5.00	
23	2041	2.94		3.28	3.14	3.43	3.75	5.00	5.00	
24	2042	2.95		3.29	3.15	3.44	3.76	5.00	5.00	
25	2043	2.96		3.30	3.16	3.45	3.77	5.00	5.00	
26	2044	2.97		3.31	3.17	3.46	3.78	5.00	5.00	
27	2045	2.98		3.32	3.18	3.47	3.79	5.00	5.00	
28	2046	2.99		3.33	3.19	3.48	3.80	5.00	5.00	
29	2047	3.00		3.34	3.20	3.49	3.81	5.00	5.00	
30	2048	3.01		3.35	3.21	3.50	3.82	5.00	5.00	

Interpolated AAA Yields

YR	MAT	5 Mo	6 Mo	7 Mo	8 Mo	9 Mo	10 Mo	11 Mo	12 Mo	13 Mo	14 Mo	15 Mo	16 Mo
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2019	1.47	1.48	1.49	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.57	1.58
2	2020	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.67	1.68
3	2021	1.70	1.71	1.72	1.74	1.75	1.76	1.77	1.78	1.79	1.79	1.80	1.80
4	2022	1.83	1.84	1.85	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.91	1.92
5	2023	1.94	1.95	1.96	1.96	1.97	1.98	1.99	2.00	2.01	2.02	2.02	2.03
6	2024	2.05	2.06	2.07	2.07	2.08	2.09	2.10	2.11	2.12	2.13	2.13	2.14
7	2025	2.16	2.17	2.17	2.18	2.18	2.19	2.20	2.21	2.22	2.23	2.23	2.24
8	2026	2.27	2.28	2.28	2.29	2.29	2.30	2.31	2.31	2.32	2.32	2.33	2.33
9	2027	2.34	2.35	2.35	2.36	2.36	2.37	2.37	2.37	2.38	2.38	2.39	2.39
10	2028	2.40	2.41	2.41	2.42	2.42	2.43	2.43	2.43	2.44	2.44	2.45	2.45
11	2029	2.47	2.47	2.48	2.48	2.49	2.49	2.49	2.49	2.50	2.50	2.51	2.51
12	2030	2.53	2.53	2.54	2.54	2.55	2.55	2.55	2.55	2.56	2.56	2.57	2.57
13	2031	2.59	2.59	2.60	2.60	2.61	2.61	2.61	2.61	2.61	2.62	2.62	2.62

"AAA" Muni Yields as percent of US Treas Yields

06/06/2018 to 08/28/2018

09/08/2017 to 08/28/2018

Muni/Treas	CURR %	AVG %	# SD	MAX %	MIN %	AVG %	# SD	MAX %	MIN %
1 yr/1 yr	63.1	64.1	-0.53	69.4	60.2	72.3	-1.37	83.9	60.2
2 yr/2 yr	61.8	62.9	-0.50	67.8	59.7	70.1	-1.28	89.1	59.7
3 yr/3 yr	65.2	65.9	-0.34	69.1	63.0	70.6	-1.06	87.7	62.0
5 yr/5 yr	72.0	71.2	0.52	74.1	68.3	73.3	-0.36	85.6	66.3
7 yr/7 yr	77.7	77.4	0.16	80.4	74.1	77.3	0.13	86.4	71.7
10yr/10yr	84.2	84.6	-0.29	87.4	81.7	84.8	-0.28	93.1	79.3
15yr/10yr	93.6	93.1	0.33	96.2	90.1	95.8	-0.60	107.3	89.3
20yr/10yr	100.5	99.0	0.87	102.6	96.1	103.0	-0.44	119.5	94.8
30yr/10yr	104.3	102.9	0.80	106.5	99.9	107.8	-0.50	128.7	98.4
15yr/30yr	89.0	88.9	0.10	91.2	85.9	86.3	0.93	91.2	78.3
20yr/30yr	95.6	94.5	0.81	97.3	91.3	92.6	1.35	97.5	85.9
30yr/30yr	99.2	98.3	0.71	101.0	95.2	96.9	1.05	101.9	89.8

Spot Yield Summary

	1-yr	5-yr	10-yr	15-yr	20-yr	30-yr
"AAA" GO	1.55	2.00	2.43	2.70	2.90	3.01
"AA" GO	1.56	2.07	2.60	2.90	3.10	3.21
"A" GO	1.74	2.38	2.90	3.19	3.39	3.50
"A" Revenue	1.75	2.40	3.05	3.40	3.60	3.75
Insured	1.64	2.26	2.77	3.06	3.24	3.35
PreRefunded	1.55	2.03				
U.S. Treasury	2.46	2.78	2.89	2.96	3.00	3.03
"AAA" GO Grossed up by 37.0%	2.46	3.17	3.86	4.29	4.60	4.78

MIG1		YIELD	CHANGE	T-BILLS	CPN-EQV	CHANGE	AAA PRE-RES	YIELD	CHANGE
Sep-18		1.60	-	3mos	2.13	2	Feb-19	1.48	2
Oct-18		1.62	-	6mos	2.27	2	Aug-19	1.55	1
Nov-18		1.64	-	1yr*	2.46	1	Feb-20	1.61	1
Dec-18		1.65	-				Aug-20	1.67	1
Jan-19		1.66	-	T-NOTES			Feb-21	1.73	1
Feb-19		1.67	-	2yr	2.67	2	Aug-21	1.80	1
Mar-19		1.67	-	3yr	2.73	2	Feb-22	1.87	1
Apr-19		1.68	-	5yr	2.78	3	Aug-22	1.92	1
May-19		1.71	-				Feb-23	1.98	1
Jun-19		1.73	-	LIBOR			Aug-23	2.03	1
Jul-19		1.75	-	1mo	2.07	-	Feb-24	2.09	1
Aug-19		1.77	-	3mos	2.32	-	Aug-24	2.14	1
Sep-19		1.78	-	6mos	2.52	-	Feb-25	2.20	1
Oct-19		1.79	-	1yr	2.82	-	Aug-25	2.24	1

VRD Averages

	VRDO Rates		% Total	NON-AMT			AMT		
				GM	CAL	NY	GM	CAL	NY
8/28/2018	Tue	Daily	99%	1.57	1.26	1.55	1.61	1.48	1.59
8/27/2018	Mon	Daily	100%	1.56	1.25	1.54	1.61	1.46	1.59
8/24/2018	Fri	Daily	100%	1.56	1.25	1.54	1.61	1.45	1.59
8/23/2018	Thu	Daily	100%	1.56	1.25	1.54	1.61	1.45	1.56
8/22/2018	Wed	Daily	100%	1.56	1.25	1.55	1.62	1.46	1.62
8/21/2018	Tue	Daily	100%	1.58	1.25	1.58	1.63	1.48	1.66
8/20/2018	Mon	Daily	100%	1.60	1.27	1.60	1.65	1.50	1.67
8/28/2018	Tue	Weekly	100%	n/a	n/a	n/a	n/a	n/a	n/a
8/23/2018	Thu	Weekly	100%	1.69	1.57	1.82	1.69	1.57	1.84
8/22/2018	Wed	Weekly	100%	1.62	1.40	1.59	1.68	1.60	1.63
8/21/2018	Tue	Weekly	100%	n/a	n/a	n/a	n/a	n/a	n/a
8/16/2018	Thu	Weekly	100%	1.69	1.57	1.82	1.69	1.56	1.85
8/15/2018	Wed	Weekly	100%	1.61	1.39	1.59	1.67	1.59	1.62

UBS Municipal Market Minute

Week of August 27th, 2018

Key Highlights

- Primary Market Drivers.** The Federal Reserve's stated commitment to gradual rate increases, recent political developments within Trump's administration, and strength in corporate earnings results all helped drive daily market fluctuation.
- The Federal Reserve.** Chair Jerome Powell noted at Friday's speech at the Fed's annual Jackson Hole Retreat that while inflation has recently moved up near 2%, there has been no clear sign of an acceleration above target. He reiterated further gradual rate hikes are likely appropriate as the Fed sees good reason for the strong economy to continue.
- Economic Drivers.** The string of weaker housing updates continued as sales of new U.S. single-family homes unexpectedly fell in July to a nine-month low in a sign the housing market was cooling and could give less support to the overall economy. Weekly initial jobless claims remained near five-decade lows.

Treasuries. The Treasury yield curve reached its flattest level since 2007 on Friday as comments by Federal Reserve Chairman Jerome Powell affirmed expectations that the US central bank will continue raising rates. The 2/10 spread flattened by 7 bps since last Friday and is currently at 34 bps.

Municipal Market. Munis resisted the treasury market's rally, with the 30yr MMD spot ending the week only 1 bp lower in yield. The 30yr ratio widened by nearly 2% to over 101%. Various factors played in to the dampened market demand, including customers continuing to work through the previous week's heavy calendar, and sustained selling by some insurance companies and banks portfolios.

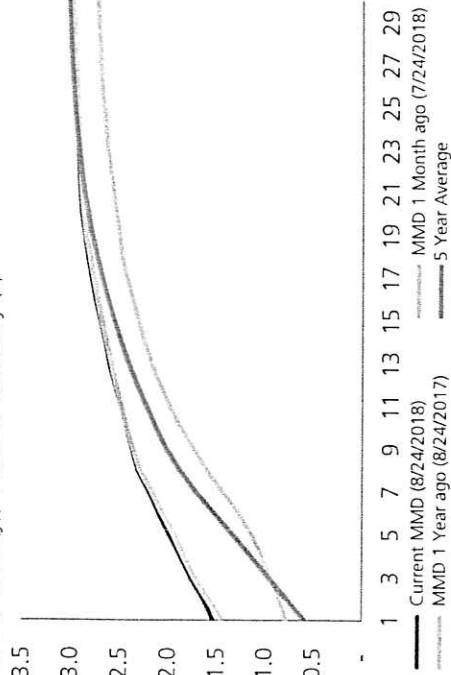
Volume. Total supply this week is estimated to be \$3.78 billion, consisting of \$2.66 billion in negotiated deals and \$1.12 billion in competitive underwritings.

Municipal bond funds saw net inflows totaling \$452 million. The four-week moving average is \$271 million of inflows.

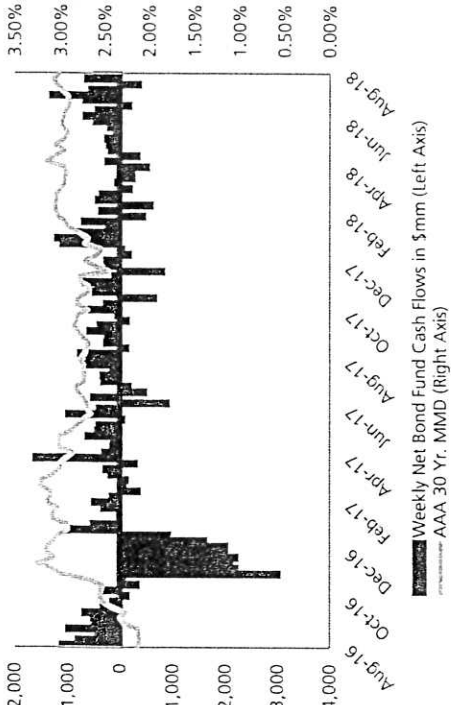
Short-Term Update. Since last Wednesday, August 22nd, 1M LIBOR reset at 2.07%, SOFR reset at 1.94% (as of 8/23), and SIFMA reset at 1.58%.

AAA MMD Yield Curves

In %, Yield (y), Years to Maturity (x)



Municipal Bond Fund Flows



Current Rates and Ratios

Maturity Year	Current MMD	1-week Change	Current UST	1-week Change	Current MMD / UST	1-week Change	5-year Average
2 Yr.	1.64%	+1bp	2.62%	0 bps	62.60%	+0.29%	81.77%
5 Yr.	1.99%	+1bp	2.71%	-4 bps	73.43%	+1.33%	78.17%
10 Yr.	2.43%	0bps	2.81%	-6 bps	86.48%	+1.75%	91.86%
30 Yr.	3.00%	-1bp	2.96%	-7 bps	101.35%	+1.88%	100.99%

Largest Negotiated Deals of Last Week

Sale Date	Issuer	Par (\$mm)	Tax Status	Rating	First Call	Date	Coupon	Yield	Spread to MMD / UST
08/22	California Statewide Communities Development Authority	245.660	TE	NR / A / A+	03/01/2028	03/01/2048	4.000%	3.740%	+74
08/21	City & County of Denver, CO	240.000	TE	Aa3 / AA- / AA	08/01/2026	04/01/2048	5.000%	3.350%	+35
08/23	Triborough Bridge & Tunnel Authority	159.280	TE	Aa3 / AA- / AA-	11/15/2028	11/15/2038	3.375%	3.479%	+59
08/22	Santa Monica-Malibu	120.000	TE	Aaa / AA+ / NR	08/01/2023	08/01/2043	5.000%	3.100%	+21
								2.570%	-38

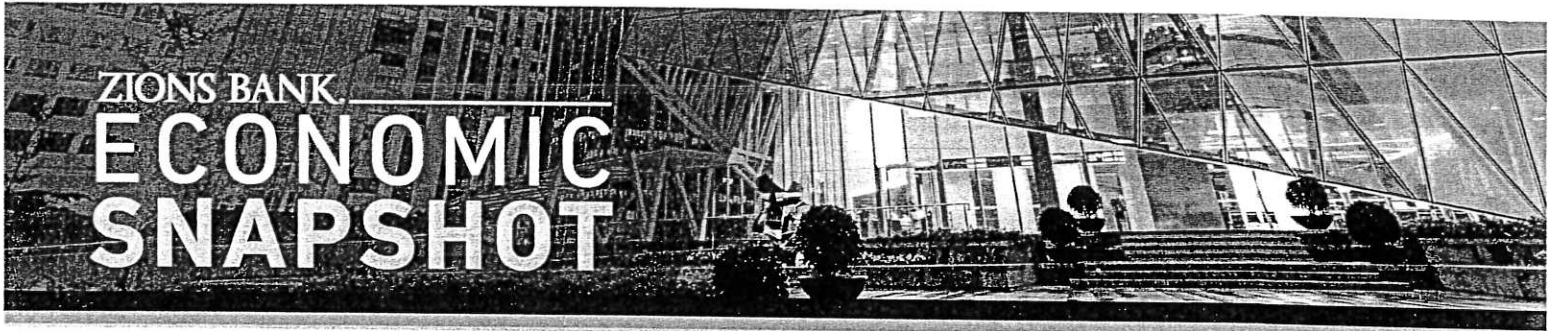


Interest Rate Forecast

MMD Yields	8/24/2018	3Q18	4Q18	1Q19	2Q19
2-Year	1.64%	1.85%	2.20%	2.35%	2.40%
5-Year	1.99%	2.25%	2.30%	2.40%	2.45%
10-Year	2.43%	2.65%	2.65%	2.80%	2.80%
30-Year	3.00%	3.20%	3.10%	3.20%	3.20%

Taxable Yields	8/24/2018	3Q18	4Q18	1Q19	2Q19
Fed Funds	1.92%	2.15%	2.40%	2.65%	2.90%
3-Month LIBOR	2.32%	2.50%	2.80%	3.10%	3.25%
2-Year T Note	2.63%	2.85%	3.05%	3.20%	3.30%
5-Year T Note	2.72%	3.00%	3.10%	3.25%	3.35%
10-Year T Note	2.83%	3.10%	3.20%	3.35%	3.40%
30-Year T Bond	2.98%	3.20%	3.25%	3.35%	3.40%

Source: J.P. Morgan Research, *US Fixed Income Markets Weekly - Municipals*, 8/24/2018, jpm.com; J.P. Morgan Research, *US Fixed Income Markets: Weekly - US Interest Rate Forecast* 8/24/2018 inmm.com; Thomson Reuters Municipal Market Data



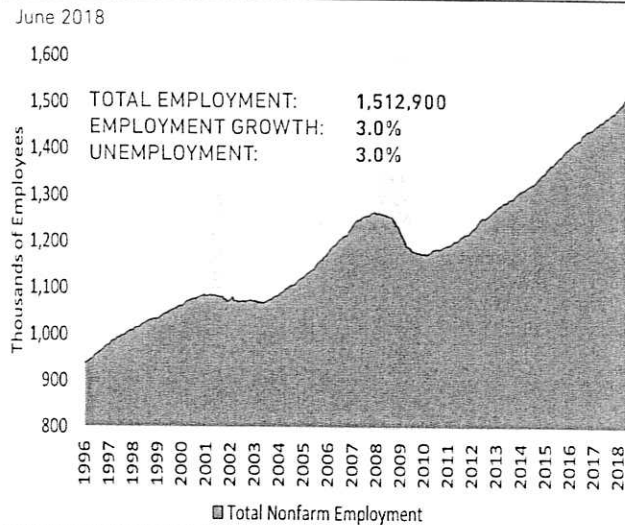
ZIONS BANK ECONOMIC SNAPSHOT

UTAH

AUGUST 2018

Utah's labor market continued to expand in June. The state's year-over-year employment growth was tied with Idaho for the highest in the nation at 3.0 percent. Utah added 47,900 jobs over the past year, with the trade, transportation, and utilities; professional and business services; and education and health services sectors experiencing the largest gains. Natural resources and mining, and information were the only sectors to experience declines in employment. The unemployment rate remained level at 3.0 percent. Inflation in Utah continues to outpace national averages, with the Zions Bank Wasatch Front Consumer Price Index increasing 5.1 percent over the last year versus 2.9 percent nationwide. Utah's strong economy was also reflected in the rise in the Utah Consumer Attitude Index from 111.9 in June to 113.4 in July.

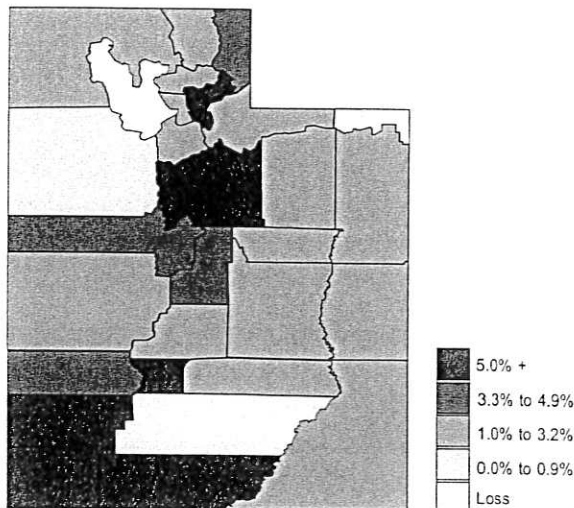
UTAH'S LABOR MARKET REMAINS ROBUST



Source: Bureau of Labor Statistics
Note: Shaded area represents recession

MANY UTAH COUNTIES SEEING EMPLOYMENT GROWTH

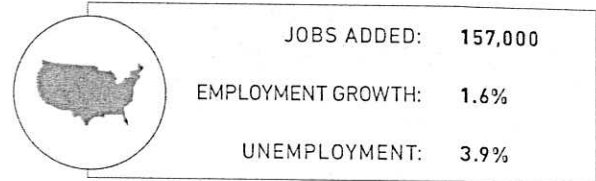
June 2017 - June 2018



Source: Utah Department of Workforce Services
Not Seasonally Adjusted, Nonfarm

UNITED STATES EMPLOYMENT FACTS

July 2018



Sources: Bureau of Labor Statistics

ECONOMIC GROWTH HIGHEST SINCE 2014

Change in U.S. Gross Domestic Product

Q3 2017	Q4 2017	Q1 2018	Q2 2018
2.8%	2.3%	2.2%	4.1%

Source: Bureau of Economic Analysis

JOB GROWTH ACROSS MOST INDUSTRIES

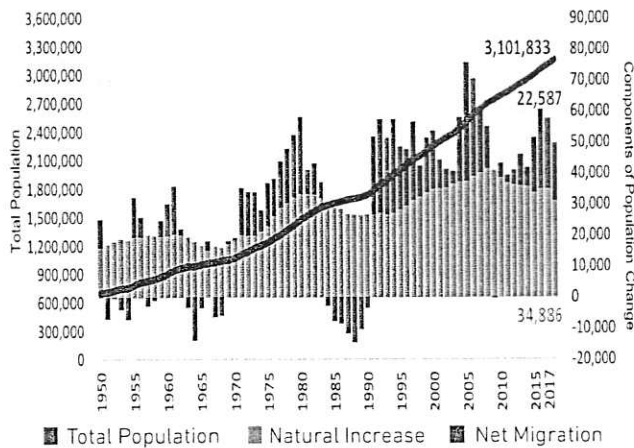
June 2017 - June 2018

INDUSTRY	12-Month Total Change	12-Month % Change
Natural Resources & Mining	-300	-3.4%
Construction	6,200	6.2%
Manufacturing	3,500	2.7%
Trade, Trans., Utilities	12,100	4.4%
Information	-500	-1.3%
Financial Activity	2,400	2.8%
Professional & Business Services	9,100	4.4%
Education & Health Services	7,200	3.7%
Leisure & Hospitality	4,300	2.9%
Other Services	200	0.5%
Government	3,700	1.5%
TOTAL	+47,900	

Source: Utah Department of Workforce Services

UTAH POPULATION CONTINUES TO RISE

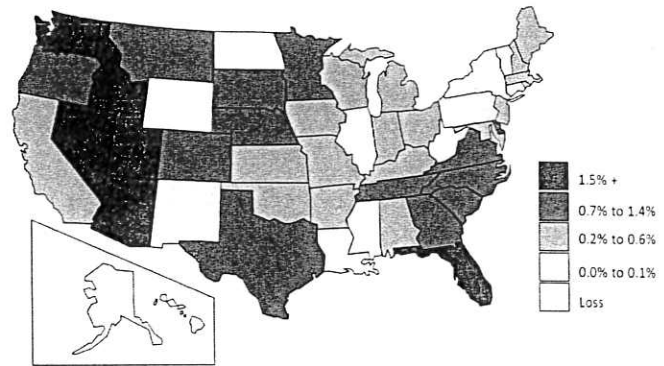
Utah Population and Components of Change



Sources: Utah Governor's Office of Management and Budget, U.S. Census Bureau
 Note: Left axis = total population; Right axis = components of population change

UTAH HAS THE 3RD FASTEST POPULATION GROWTH

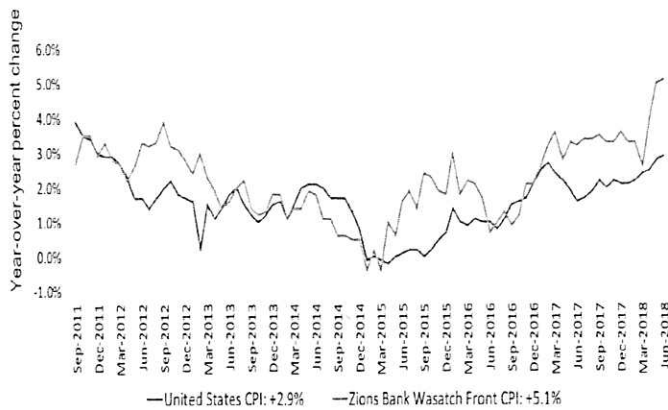
July 2016 - July 2017 Utah: 1.9% US: 0.7%



Source: U.S. Census Bureau

UTAH INFLATION OUTPACING NATIONAL AVERAGES

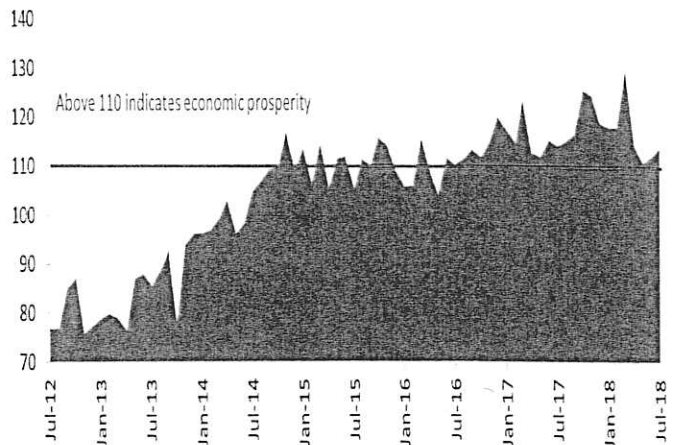
June 2018



Source: Cicero Group for Zions Bank and Bureau of Labor Statistics

UTAH CONSUMER ATTITUDE ROSE IN JULY

July 2018: Zions Bank Utah Consumer Attitude Index = 113.6



Source: Cicero Group for Zions Bank

STATE FACTS (VALUE & RANK)

- Median Household Income: \$65,977 (2016) 12th
- Annual Mean Wages & Salaries: \$44,130 (2015) 28th
- Per Capita Personal Income: \$42,043 (2017) 41st
- Personal Income (% Change): 4.4% (2016-2017) 4th
- Population Growth Rate: 1.9% (2017: 3,101,833) 3rd
- Total Fertility Rate: 2.33 (2013) 1st
- Median Age: 30.6 (2016) 1st
- Household Size: 3.17 (2015) 1st

Sources: Census Bureau, Bureau of Economic Analysis, Bureau of Labor Statistics, National Center for Health Statistics, statista.com



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As of August 3, 2018

ZIONS BANK ECONOMIC SNAPSHOT

UNITED STATES

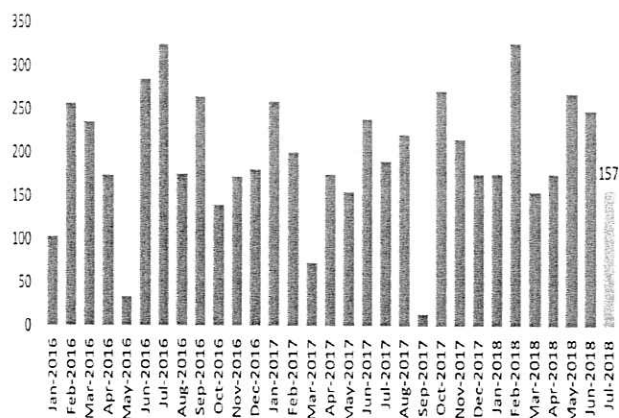
AUGUST 2018

The United States labor market slowed slightly in July, adding a fewer-than-expected 157,000 jobs. However, employment gains for May and June were revised higher, and July's growth marked the 94th consecutive month of job creation. Hiring was broad-based, with the professional and business services; education and health services; and trade, transportation, and utilities sectors adding the most jobs over the past year. The unemployment rate once again fell below 4 percent to 3.9 percent. Economic growth registered at 4.1 percent in the second quarter of 2018, marking the highest level since 2014. The strong labor market and economic growth have put upward pressure on inflation indications, leading the consumer price index to rise 2.9 percent over the last year as of June.

HIRING SLOWED SLIGHTLY IN JULY

July 2018

Employment Change (thousands)



Source: Bureau of Labor Statistics

MOST INDUSTRIES SEEING JOB GROWTH

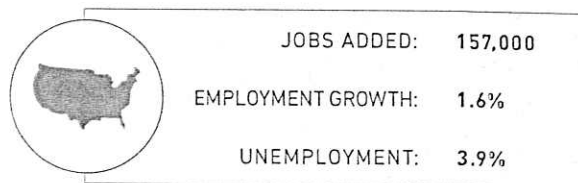
July 2017 - July 2018

INDUSTRY	12-Month Total Change	12-Month % Change
Natural Resources & Mining	53,000	7.8%
Construction	308,000	4.4%
Manufacturing	327,000	2.6%
Trade, Trans., Utilities	331,000	1.2%
Information	-21,000	-0.8%
Financial Activities	106,000	1.3%
Professional & Business Services	518,000	2.5%
Education & Health Services	427,000	1.8%
Leisure & Hospitality	254,000	1.6%
Other Services	89,000	1.5%
Government	8,000	0.0%

Source: Bureau of Labor Statistics

EMPLOYMENT QUICK FACTS

July 2018



Sources: Bureau of Labor Statistics

UNEMPLOYMENT FALLS BELOW 4%

July 2018



Source: Bureau of Labor Statistics

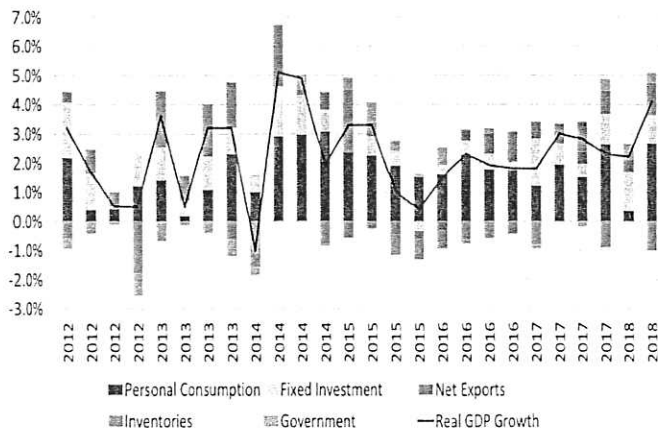
INTEREST RATES AND INFLATION

Target Effective Federal Funds Rate (August 7, 2018)	1.75%-2.00%
Prime Rate (August 7, 2018)	5.00%
10 Year U.S. Treasury (August 7, 2018)	2.94%
30 Year Mortgage Rate Fixed (August 7, 2018)	4.58%
Personal Consumption Expenditures Change (June 2017 - June 2018)	+2.2%
Consumer Price Index Change (June 2017 - June 2018)	+2.9%
Producer Price Index (June 2017 - June 2018)	+3.4%

Sources: U.S. Federal Reserve, Wall Street Journal, Bureau of Economic Analysis, Bureau of Labor Statistics

ECONOMIC GROWTH IMPROVING

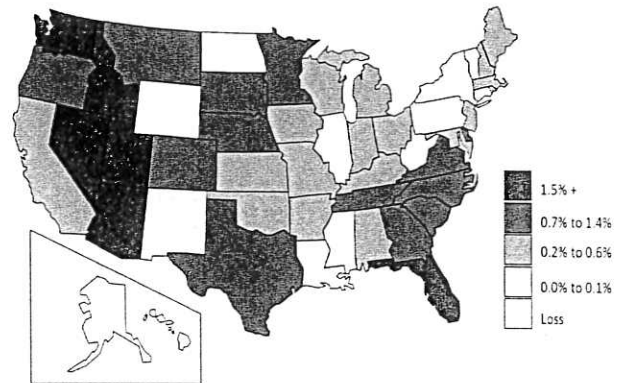
Q2 2018 Gross Domestic Product = 4.1%



Source: Bureau of Economic Analysis

DEMOGRAPHICS

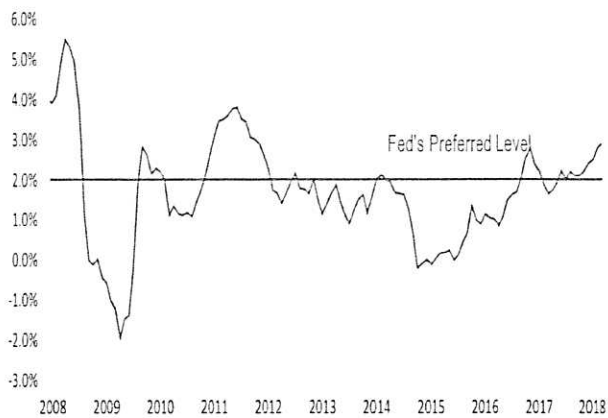
U.S. Population Growth: 2016 - 2017 = 0.7%



Source: U.S. Census Bureau

INFLATION STEADILY IMPROVING

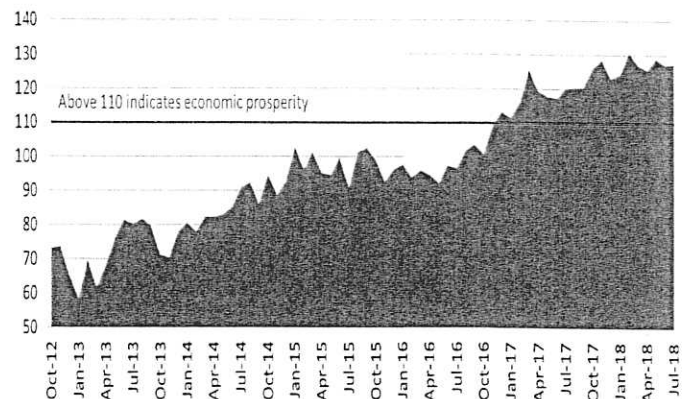
June 2018: U.S. Consumer Price Index = 2.9%



Sources: Bureau of Labor Statistics

CONSUMER CONFIDENCE REMAINS HIGH

July 2018: U.S. Consumer Confidence Index = 127.4



Source: The Conference Board

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QUICK FACTS

- Population Growth Rate: 0.7% (2017: 325,700,000)
- Total Fertility Rate: 1.86 (2013)
- Median Age: 37.9 (2016)
- Household Size: 2.65 (2015)
- Median Household Income: \$59,039 (2016)
- Annual Mean Wages & Salaries: \$48,320 (2015)
- Per Capita Personal Income: \$50,392 (2017)
- Personal Income (% Change): 3.1% (2016-2017)

Source: U.S. Census Bureau, Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, National Center for Health Statistics, statista.com

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As of August 7, 2018

Southwest Midyear Review

TEXAS: Bond Sales

	2018		2017		Change from prior period
	Volume in millions	Number of issues	Volume in millions	Number of issues	
Total	\$16,354.3	495	\$19,348.3	699	-15.5%
First Quarter	5,897.3	220	9,278.7	297	-35.4
Second Quarter	10,457.0	275	10,069.6	402	+3.8
Development	78.3	9	211.3	12	-62.9
Education	6,029.0	150	9,980.9	244	-35.6
Electric Power	323.4	3	783.3	6	-58.7
Environmental Facilities	0.0	0	0.0	0	n.m.
Healthcare	508.8	8	1,020.4	18	-50.1
Housing	515.2	14	451.3	9	+14.2
Public Facilities	595.8	24	565.5	20	+5.4
Transportation	3,116.3	34	1,697.2	38	+83.6
Utilities	3,621.8	152	2,522.0	195	+43.6
General Purpose	1,565.7	101	2,116.3	157	-25.0
Tax-Exempt	15,762.1	470	17,094.1	669	-7.8
Taxable	148.1	22	2,094.9	28	-92.9
Minimum Tax	444.2	3	159.3	2	+178.8
New-Money	12,895.3	409	9,290.4	406	-28.0
Refunding	1,581.0	57	5,278.2	248	+233.9
Combined	1,878.0	29	4,779.7	45	+154.5
Negotiated	11,675.9	217	14,347.9	327	-18.6
Competitive	3,342.9	245	4,207.3	323	-20.5
Private Placements	1,335.5	33	793.1	49	+58.4
Revenue	6,882.3	113	7,698.5	148	-10.6
General Obligation	9,472.0	382	11,649.8	551	-18.7
Fixed Rate	15,417.9	472	18,541.0	664	+20.3
Variable Rate (Short Put)	250.0	2	589.8	7	+135.9
Variable Rate (Long/No Put)	603.1	14	170.0	5	-71.8
Zero Coupon	2.1	6	47.6	23	+2166.7
Linked Rate	81.2	1	0.0	0	-100.0
Convertible	0.0	0	0.0	0	n.m.
Bond Insurance	2,883.9	46	2,129.9	62	+35.4
Letter of Credit	0.0	0	400.0	3	-100.0
Standby Purchase Agreements	1,521.7	9	1,953.4	14	-22.1
Insured Mortgages	932.6	20	496.7	26	+87.8
Guaranties	3,394.0	143	3,877.4	177	-12.5
Other Enhancements	0.0	0	0.0	0	n.m.
State Governments	0.0	0	0.0	0	n.m.
State Agencies	1,521.7	9	1,953.4	14	-22.1
Counties & Parishes	932.6	20	496.7	26	+87.8
Cities & Towns	3,394.0	143	3,877.4	177	-12.5
District	7,592.6	275	8,205.7	405	-7.5
Local Authorities	2,883.9	46	2,129.9	62	+35.4
Colleges & Universities	12.4	1	2,585.3	15	-99.5
Direct Issuer	17.1	1	0.0	0	n.m.
Bank-Qualified	684.5	160	1,508.5	304	-54.6
Build America Bonds	0.0	0	0.0	0	n.m.
Qualified Sch Construction	0.0	0	12.8	1	-100.0
Other Stimulus Program	0.0	0	0.0	0	n.m.

Private placements and municipal forwards are included, but short-term notes and remarkings are excluded. n.m. = not meaningful.
Source: Thomson Reuters (Vol. 13)

UTAH: Bond Sales

	2018		2017		Change from prior period
	Volume in millions	Number of issues	Volume in millions	Number of issues	
Total	\$1,766.4	43	\$2,661.2	53	-33.6%
First Quarter	1,071.1	19	2,077.6	28	-48.4
Second Quarter	695.3	24	583.7	25	+19.1
Development	0.0	0	8.5	1	-100.0
Education	510.1	16	814.9	16	-37.4
Electric Power	120.9	3	0.0	0	n.m.
Environmental Facilities	0.0	0	48.0	2	-100.0
Healthcare	350.0	5	0.0	0	n.m.
Housing	83.1	5	187.6	9	-55.7
Public Facilities	10.5	2	62.1	4	-83.1
Transportation	587.1	5	1,008.3	3	-41.8
Utilities	57.9	5	105.4	7	-45.1
General Purpose	46.8	2	426.5	11	-89.0
Tax-Exempt	1,723.4	38	1,318.8	44	+30.7
Taxable	43.0	5	516.2	8	-91.7
Minimum Tax	0.0	0	825.2	1	-100.0
New-Money	1,395.5	37	2,280.4	40	+63.4
Refunding	108.9	3	47.0	6	-56.8
Combined	261.8	3	333.8	7	+27.5
Negotiated	1,325.8	29	2,029.3	34	-34.7
Competitive	365.8	10	577.2	14	-36.6
Private Placements	74.9	4	54.7	5	+36.9
Revenue	1,129.9	35	2,141.8	43	-47.2
General Obligation	626.5	8	519.4	10	+22.5
Fixed Rate	1,616.4	40	2,221.4	51	+37.4
Variable Rate (Short Put)	50.0	1	19.8	1	-60.4
Variable Rate (Long/No Put)	100.0	2	0.0	0	-100.0
Zero Coupon	0.0	0	0.0	0	n.m.
Linked Rate	0.0	0	420.0	1	n.m.
Convertible	0.0	0	0.0	0	n.m.
Bond Insurance	96.1	6	71.0	4	+35.4
Letter of Credit	0.0	0	0.0	0	n.m.
Standby Purchase Agreements	50.0	1	0.0	0	n.m.
Insured Mortgages	65.2	4	119.8	6	-45.5
Guaranties	309.3	6	301.7	6	+2.5
Other Enhancements	0.0	0	0.0	0	n.m.
State Governments	343.2	1	142.1	1	+141.5
State Agencies	485.2	15	329.2	18	+47.4
Counties & Parishes	394.6	8	145.3	5	-71.9
Cities & Towns	46.1	6	1,172.0	13	-96.1
District	316.2	7	367.9	10	-14.1
Local Authorities	57.2	3	63.9	3	-10.5
Colleges & Universities	124.0	3	440.8	3	-71.9
Direct Issuer	0.0	0	0.0	0	n.m.
Bank-Qualified	3.7	1	70.9	10	-94.8
Build America Bonds	0.0	0	0.0	0	n.m.
Qualified Sch Construction	0.0	0	0.0	0	n.m.
Other Stimulus Program	0.0	0	0.0	0	n.m.

Private placements and municipal forwards are included, but short-term notes and remarkings are excluded. n.m. = not meaningful.
Source: Thomson Reuters (Vol. 13)

TEXAS: Top Five Rankings

Senior Managers			Financial Advisors		
Firm	Volume		Firm	Volume	
1 Citi	\$1,687.5		1 Hilltop Securities	\$5,824.4	
2 J.P. Morgan	1,484.9		2 Estrada Hinojosa	2,538.9	
3 Goldman Sachs	1,301.9		3 Samco Capital Mkts	1,090.7	
4 B.A. Merrill Lynch	1,277.1		4 RBC Capital Mkts	898.2	
5 Wells Fargo	1,085.6		5 Specialized Public Fin	743.1	

Issuers			Bond Counsel		
Firm	Volume		Firm	Volume	
1 Grand Parkway Trans	\$1,484.0		1 McCall Parkhurst	\$5,125.5	
2 Texas Water Dev Bd	1,181.7		2 Bracewell	3,113.7	
3 Arlington	563.0		3 Norton Rose	2,390.1	
4 Harris Co	559.9		4 Orrick Herrington	1,275.5	
5 Houston	552.9		5 Hunton Andrews	564.9	

Dollar amounts are in millions. Bond rankings are based on issues maturing in 13 months or more. Private placements, remarkings, and issues not meeting Thomson Reuters' "1-5" policy rule are excluded. In issues with multiple book-runners, each firm is credited with its actual allocation. In issues with multiple co-advisors or co-counsel, the par amount of the issue is divided equally among the firms.
Source: Thomson Reuters (Vol. 9)

UTAH: Top Five Rankings

Senior Managers			Financial Advisors		
Firm	Volume		Firm	Volume	
1 J.P. Morgan	\$593.1		1 Zions Bank	\$852.6	
2 Wells Fargo	409.3		2 George K Baum	647.7	
3 Raymond James	118.4		3 Lewis Young Robertson	47.9	
4 Robert W Baird	110.1		4 Buck Financial Adv	21.0	
5 B.A. Merrill Lynch	105.2		5 Verapath Global	18.6	

Issuers			Bond Counsel		
Firm	Volume		Firm	Volume	
1 Utah Co	\$350.0		1 Chapman and Cutler	\$311.6	
2 Utah	343.2		2 Gilmore & Ball	644.0	
3 Utah Transit Auth	199.3		3 Farnsworth Johnson	130.7	
4 Utah St Bd Regents	124.0		4 Orrick Herrington	105.2	
5 Intermountain Power Agcy	105.2				

Dollar amounts are in millions. Bond rankings are based on issues maturing in 13 months or more. Private placements, remarkings, and issues not meeting Thomson Reuters' "1-5" policy rule are excluded. In issues with multiple book-runners, each firm is credited with its actual allocation. In issues with multiple co-advisors or co-counsel, the par amount of the issue is divided equally among the firms.
Source: Thomson Reuters (Vol. 9)

Underwriting Spreads: 1999-2018

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ALL BONDS	\$7.14	\$6.68	\$6.48	\$6.17	\$5.78	\$5.58	\$5.45	\$5.59	\$5.27	\$4.89	\$6.21	\$5.94	\$5.62	\$5.52	\$5.20	\$5.00	\$4.64	\$4.65	\$4.55	\$4.28
Negotiated	7.18	6.72	6.52	6.20	5.80	5.49	5.56	5.66	5.41	4.82	6.22	6.03	5.61	5.40	5.17	5.08	4.57	4.62	4.54	4.33
Competitive	6.82	6.38	6.10	5.86	5.57	6.31	4.42	4.89	4.12	5.61	6.16	5.23	5.65	6.17	5.35	4.58	4.96	4.77	4.57	4.10
New-Money	7.41	6.68	6.65	6.27	5.85	5.65	5.71	5.60	5.37	5.47	6.39	6.05	5.98	5.57	5.25	5.36	5.05	4.96	5.05	4.38
Refunding	6.71	6.31	6.01	5.88	5.45	5.33	5.21	5.45	4.87	3.82	5.84	5.59	5.16	5.51	5.13	4.65	4.40	4.49	4.28	4.13
Combined	6.68	7.00	6.63	6.38	6.23	5.80	5.20	5.68	5.34	5.01	6.20	6.27	5.52	5.46	5.21	4.99	4.47	4.46	4.03	4.01
Development	9.28	9.49	8.02	4.79	7.33	6.43	6.74	7.04	6.39	4.88	3.65	5.07	5.55	3.43	5.73	6.67	6.58	6.13	6.73	9.73
Education	6.88	6.67	6.52	6.38	5.74	5.55	5.45	5.38	5.12	5.32	6.43	6.33	6.13	6.06	5.53	5.23	5.05	4.92	4.84	4.80
Electric Power	6.62	4.75	5.94	6.17	5.58	5.39	4.34	5.24	4.83	4.74	5.81	5.35	4.52	4.51	4.48	4.24	2.86	3.18	3.08	3.14
Environmental	5.74	5.31	5.82	5.89	5.87	5.18	4.96	4.34	4.15	4.37	5.20	4.31	5.54	5.76	5.99	5.09	3.77	5.52	4.69	5.39
Health Care	7.30	6.99	7.26	6.59	6.50	5.65	4.99	5.64	5.90	4.13	7.78	8.56	7.10	7.42	7.08	7.28	6.38	6.37	5.86	5.90
Housing	7.87	7.60	6.58	6.63	5.81	5.86	5.43	6.11	5.84	5.40	5.66	6.40	6.89	6.57	6.09	6.10	4.72	4.82	4.72	4.32
Public Facilities	7.75	8.00	7.25	6.41	6.12	5.97	6.28	6.87	5.24	5.02	7.44	6.69	6.89	6.54	5.57	6.36	5.53	6.01	5.56	4.92
Transportation	6.26	5.33	5.65	5.14	5.31	5.07	4.85	5.06	4.78	4.80	5.55	5.28	4.79	4.74	4.24	3.94	3.57	3.95	3.32	3.15
Utilities	7.33	7.00	6.26	6.45	6.07	5.48	5.73	5.22	5.53	4.63	6.00	5.88	5.74	6.21	5.62	5.02	4.73	4.11	4.05	4.16
General Purpose	7.19	6.78	6.64	6.28	5.61	5.72	5.86	6.01	5.13	5.20	5.87	5.28	4.93	4.59	4.52	4.41	4.08	4.04	3.98	3.68
Stimulus Program	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7.45	6.44	7.16	5.86	5.88	8.05	4.87	4.86	4.38	1.51

Note: Amounts represent dollars per \$1,000 face value of bond issues. Underwriting spreads include managers' fees, underwriting fees, average take-downs, and expenses. Private placements, short-term notes maturing in under 13 months, and remarketings of variable-rate securities are excluded. Source: Thomson Reuters (Jul. 11)

Taxable Bonds: First Half

	2018		2017		Percent Change
	Volume (\$ mill)	# Issues	Volume (\$ mill)	# Issues	
Total	\$13,800.2	523	\$18,311.3	526	-24.6%
First Quarter	4,978.2	201	7,794.0	218	-35.1
Second Quarter	8,822.0	322	10,517.2	308	-16.1
Development	896.7	50	1,958.0	58	-54.2
Education	3,134.4	223	6,011.4	201	-47.9
Electric Power	63.2	8	83.5	4	-24.3
Environmental Facilities	0.0	0	124.8	6	-100.0
Healthcare	1,000.5	20	793.8	24	+26.1
Housing	1,502.0	31	2,165.6	43	-30.6
Public Facilities	691.0	30	333.3	15	+107.3
Transportation	644.7	21	1,553.9	19	-58.5
Utilities	345.8	19	957.7	26	-63.9
General Purpose	5,521.9	121	4,329.2	129	+27.6
Tax-Exempt	0.0	0	0.0	0	n.m.
Taxable	13,800.2	523	18,311.3	526	-24.6
Minimum-Tax	0.0	0	0.0	0	n.m.
New-Money	7,969.5	373	8,796.0	322	-9.4
Refunding	3,170.0	127	5,782.8	168	-45.2
Combined	2,660.7	23	3,732.5	36	-28.7
Negotiated	10,019.0	279	13,960.4	357	-28.2
Competitive	2,655.9	183	2,760.7	99	-3.8
Private Placements	1,125.3	61	1,590.2	70	-29.2
Revenue	7,086.5	229	12,985.6	277	-45.4
General Obligation	6,713.7	294	5,325.6	249	+26.1
Fixed Rate	13,311.6	508	16,037.9	497	-17.0
Variable Rate (Short Put)	361.6	10	877.5	14	-58.8
Variable Rate (Long/No Put)	0.0	0	316.6	3	-100.0
Zero Coupon	27.0	4	0.5	1	+5300.0
Linked Rate	100.0	1	1,078.7	11	-90.7
Convertible	0.0	0	0.0	0	n.m.
Bond Insurance	716.7	49	842.0	68	-14.9
Letter of Credit	106.3	3	369.9	4	-71.3
Standby Purchase Agreements	44.4	2	43.9	2	+1.1
Insured Mortgages	0.0	0	163.4	4	-100.0
Guaranties	278.0	16	338.2	28	-17.8
Other Enhancements	0.0	0	0.0	0	n.m.
State Governments	2,873.4	12	2,590.9	13	+10.9
State Agencies	3,317.8	77	6,259.8	118	-47.0
Counties & Parishes	1,062.3	31	742.4	30	+43.1
Cities & Towns	2,367.3	121	2,109.5	120	+12.2
District	986.3	164	886.7	117	+11.2
Local Authorities	2,209.4	90	1,987.2	94	+11.2
Colleges & Universities	888.2	23	3,727.2	33	-76.2
Direct Issuer	95.6	5	7.6	1	+1157.9
Tribal Government	0.0	0	0.0	0	n.m.
Build America Bonds	0.0	0	0.0	0	n.m.
Qualified Sch Construction	0.0	0	123.6	8	-100.0
Other Stimulus Program	0.0	0	92.0	11	-100.0

Note: Figures are based on issues maturing in 13 months or longer. Private placements and municipal forwards are included, but remarketings are excluded. n.m. — not meaningful. Source: Thomson Reuters (Jul. 11)

Largest Taxable Issues

Date	Issuer	Amt (\$mill)	Manager(s)
Apr-17	California (State), GOs, (tax) (nm/ref)	\$2,147.0	Various firms
Mar-13	NYS Dorm Authority, (tax) (cpt)	1,329.7	Wells Fargo
Jun-19	Georgia (State), GOs, (tax) (cpt)	1,228.5	J.P. Morgan
May-22	Regents of the Univ of California, (tax)	1,227.7	BA Merrill Lynch/Ramirez & Co Inc
Mar-6	Oklahoma Dev Finance Auth, (tax)	1,162.3	BA Merrill Lynch/Citi
Apr-11	New York City-New York, GOs, (tax) (cpt)	1,100.0	J.P. Morgan Securities LLC
May-15	NYC Transitional Finance Auth, (tax) (cpt) (ref)	1,100.0	UBS Financial Services Inc
Feb-22	New York City-New York, GOs, (tax) (cpt)	950.0	Jefferies LLC
May-16	San Francisco City & Co Airport Comm, (tax)	881.8	Citi/BA Merrill Lynch
Jan-23	Port Authority of NY & NJ, GOs, (tax) (ref)	832.3	BA Merrill Lynch

Key to abbreviations: neg — negotiated; nm — new-money; pt — private placement; ref — refunding. Source: Thomson Reuters (Jul. 11)

Taxable Bonds

Senior Managers: First Half 2018

Manager	Amt (\$mill)
1 J.P. Morgan	\$2,090.9
2 Citi	1,618.5
3 BA Merrill Lynch	1,509.9
4 RBC Capital Mkts	1,230.2
5 Wells Fargo	759.1
6 Morgan Stanley	735.4
7 Goldman Sachs	722.2
8 Raymond James	537.3
9 Barclays	379.7
10 Stifel Nicolaus	340.2

Private placements, short-term notes, and remarketings are excluded. In issues with multiple book-runners, the par amount of the issue is divided equally among the firms. Source: Thomson Reuters (Jul. 11)

Taxable Bonds

Financial Advisors: First Half 2018

Advisor	Amt (\$mill)
1 Public Resources Adv	\$3,238.1
2 PFM Financial Adv	1,186.6
3 KNN Public Fin	731.3
4 Swap Financial	601.5
5 Hilltop Securities	417.8
6 Acacia Financial	377.8
7 Columbia Cap Mgmt	306.3
8 CSG Advisors Inc	299.5
9 KeyBanc Capital Mkts	251.0
10 Hammond Hanlon	214.0

Private placements, short-term notes, and remarketings are excluded. In issues with co-advisors, the par amount of the issue is divided equally among the firms. Source: Thomson Reuters (Jul. 11)

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Cover: Adobe Stock



August 06, 2018

Salt Lake County
 Darrin Casper
 Chief Financial Officer/Deputy Mayor
 2001 S State St
 Salt Lake, UT 84190

dcasper@slco.org

Dear Darrin,

On June 21, 2018, the Internal Revenue Service (“IRS”) announced a new sequester reduction in amounts paid to issuers of direct pay bonds for federal fiscal year 2019 (October 1, 2018 through September 30, 2019). The reduction includes certain direct pay bonds including Build America Bonds, Qualified School Construction Bonds, Qualified Zone Academy Bonds, New Clean Renewable Energy Bonds, and Qualified Energy Conservation Bonds. Our records show that Salt Lake County has direct pay subsidies that will be reduced as a result of federal fiscal year 2019 sequestration.

This means that refund payments processed on or after October 1, 2018 and on or before September 30, 2019 will be reduced by the federal fiscal year 2019 sequestration rate of 6.2%, irrespective of when the amounts claimed by an issuer on any Form 8083–CP was filed with the IRS.

Below, is the original amount of your subsidy, by issue, and the reduction due to the federal fiscal year 2018 sequestration, and the resulting subsidy you can expect to receive from the U.S. Treasury.

Issue	Interest Payment Date	Original Subsidy Amount	6.2% Reduction	New Subsidy Amount
Series 2009B \$18,625,000 GO BAB	12/15/2018	\$162,752.18	\$10,090.64	\$152,661.54
	6/15/2019	\$162,752.18	\$10,090.64	\$152,661.54
Series 2010B \$14,450,000 GO BAB	12/15/2018	\$119,521.06	\$7,410.31	\$112,110.75
	6/15/2019	\$112,346.06	\$6,965.46	\$105,380.60
Series 2010B \$57,635,000 Revenue BAB	2/15/2019	\$397,143.82	\$24,622.92	\$372,520.90
	8/15/2019	\$397,143.82	\$24,622.92	\$372,520.90
Series 2010D \$33,020,000 Sales Tax BAB	11/1/2018	\$217,815.28	\$13,504.55	\$204,310.73
	5/1/2019	\$211,252.78	\$13,097.67	\$198,155.11
Series 2009B \$58,390,000 Lease Revenue BAB	12/1/2018	\$548,735.42	\$34,021.60	\$514,713.82
	6/1/2019	\$516,629.05	\$32,031.00	\$484,598.05

On the required Form 8038–CP that is sent to the U.S. Treasury 45 days before the subsidy payment is due, ***you should still be requesting the total amount of the original subsidy.*** You should then be notified through correspondence that a portion of the requested payment was subject to the sequester reduction.

The sequestration reduction rate will be applied unless and until a law is enacted that cancels or otherwise affects the sequester, at which time the sequestration reduction rate is subject to change.

The IRS publication may be found at <https://www.irs.gov/tax-exempt-bonds/fy2018-update-effect-of-sequestration-on-state-local-government-filers-of-form-8038-cp>.

Yearly Sequestration Rate Reduction

Fiscal Year (October 1 through September 30)	Sequestration Rate Reduction
2019	6.2%
2018	6.6%
2017	6.9%
2016	6.8%
2015	7.3%
2014	7.2%
2013	8.7%

Jon Bronson

From: Chapman And Cutler LLP <bdaehler@news.chapman.com>
Sent: Monday, August 27, 2018 1:46 PM
To: Jon Bronson
Subject: Client Alert from Chapman and Cutler LLP

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Chapman and Cutler LLP

Chapman Client Alert

August 27, 2018

Current Issues Relevant to Our Clients

SEC Adopts Amendments to Rule 15c2-12

On August 20, 2018, the Securities and Exchange Commission (the "SEC") issued Release No. 34-83885 (the "Release") adopting amendments (the "Amendments") to Rule 15c2-12 (the "Rule") under the Securities Exchange Act of 1934, as amended. The Amendments add two new events to the list of reportable events for which an issuer or obligated person* must provide notice to the Municipal Securities Rulemaking Board's Electronic Municipal Market Access (EMMA) website. Under the Amendments, reportable event disclosures under the Rule will be required for:

- 1) (a) the incurrence of a financial obligation of the obligated person, if material, or
(b) an agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the obligated person, any of which affect security holders, if material; and
- 2) a default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of an obligated person, any of which reflect financial difficulties.

The Amendments also add a definition of "financial obligation" to the Rule. The Amendments do not amend any of the existing provisions of the Rule and total approximately eleven lines of new text.

While the text of the Amendments is short, the Amendments have significant implications for obligated persons and underwriters of publicly-offered municipal securities as well as financial institutions that enter into direct purchases, private placements, bank loans, municipal leases, derivatives and other types of financial obligations with obligated persons. The SEC has stated it believes the Amendments will provide investors access to important information relating to obligated persons and enhance transparency in the municipal securities market by increasing the amount of information that is publicly disclosed about material financial obligations incurred by obligated persons.

The Amendments as adopted are substantially the same as proposed by the SEC in March, 2017, with some modifications to address issues raised during the required comment period. See our March 27, 2017 [Client Alert](#) for a summary of the amendments as originally proposed.

The compliance date for the Amendments is 180 days after the Release is published in the Federal Register.

Background

In the Release, the SEC reiterated that since 2009 the volume of direct purchases of municipal securities and direct loans ("*Direct Placements*") has grown as an alternative to publicly-offered municipal securities. However, prior to the Amendments, Direct Placements have been disclosed on the MSRB's EMMA system by obligated persons only on a voluntary basis. Therefore, the SEC indicated that investors may not have had any access or timely access to disclosure about the incurrence of certain financial obligations, such as Direct Placements, and, to the extent disclosure was available, that disclosure may have lacked material information about the obligations. The SEC further indicated that investors may not have had "any access or timely access" to disclosure of the occurrence of events under Direct Placements that reflect financial difficulties. The SEC adopted the Amendments to address this perceived lack of investor access to material information.

The Amendments

Under the Amendments, underwriters are required to reasonably determine that an obligated person has agreed in a written undertaking to provide prompt notice of new financial obligations and their terms, and certain events, if material, under new or pre-existing financial obligations as described above. The Release provides that event disclosures are required for:

- a new financial obligation, if it is "material" (see below for a discussion of materiality considerations),
- any covenants, events of default, remedies, priority rights or similar terms under a new financial obligation which affect the holders of outstanding municipal securities of the obligated person, if material, and
- a default, acceleration, termination, modification of terms or similar event under a new or pre-existing financial obligation which reflects financial difficulties of the obligated person.

Under the Amendments, the term "financial obligation" means:

- a debt obligation,
- a derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, and
- a guarantee of a debt obligation or a derivative.

The terms "debt obligation," "derivative instrument" and "guarantee" are broadly construed under the Amendments. Consistent with the stated purpose of the Amendments, a "financial obligation" does not include a municipal security that is issued under an official statement that has been posted on EMMA.

In the Release, the SEC provided guidance on the meaning of "financial obligation":

- a "debt obligation" includes both short-term and long-term debt obligations of an obligated person under the terms of an indenture, loan agreement, lease, or similar contract regardless of the length of the repayment period of the debt obligation,
- leases that "operate as vehicles to borrow money" (i.e. financing leases) are debt obligations, but operating leases are not,
- a "derivative instrument" includes a swap, a security-based swap, a futures contract, a forward contract, an option or similar instrument (or combination) to which an obligated person is a counterparty,
- a "guarantee" includes any guarantee provided by an obligated person (as a guarantor) for the benefit of itself or a third party, which guarantees payment of a financial obligation,
- the materiality of a financial obligation or its terms is determined under general securities law standards (i.e., would the information be important to a reasonable investor in making an investment

decision?), particularly with regard to any rights given to the holder of the financial obligation that are prior to the rights of the holders of the obligated persons outstanding municipal securities,

- the material terms of a financial obligation that should be disclosed include the following:
 - date incurred,
 - principal amount,
 - maturity dates and amortization,
 - interest rate, if fixed, or method of computation, if variable, and default rates, and
 - such other terms as are appropriate under the circumstances,
- a default, acceleration, termination, modification or similar event under a financial obligation "reflects financial difficulties" of an obligated person and should be reported if the information is relevant to investors in making an assessment of the current financial condition of the obligated person, and
- the term "default" includes both payment and non-payment defaults, but distinguishes between those that do not reflect financial difficulties (such as failure to provide timely notice of a change in address) and those that do (such as a failure to replenish a debt service reserve fund).

Considerations for Market Participants

As described above, the additional events provided in the Amendments will now be added to the continuing disclosure undertaking delivered by the obligated person in a primary offering of municipal securities in order for an underwriter to meet its obligations under the Rule. As with the fourteen existing reportable events, notice of the new reportable events must be given promptly and not later than ten business days of the occurrence of the event.

Disclosure of New Financial Obligations

The Amendments could apply to any number of documents and agreements which could potentially be considered financial obligations requiring disclosure, if material. Accordingly, an obligated person will first have to determine if a new contract or agreement is a financial obligation for purposes of the Amendments and, if so, will then have to determine whether that financial obligation is material. While numerous comment letters requested guidance on the materiality standards that should be applied under the Amendments, the SEC declined to provide any new guidance, reiterating its previous statements that "materiality determinations should be based on whether the information would be important to the total mix of information made available to the reasonable investor."

If a particular contract or agreement is determined to be a financial obligation that is material to investors, an obligated person is then required to make a separate materiality determination regarding which terms and conditions of the financial obligation require disclosure. The Release and the text of the Amendments make it clear that the SEC views any terms of a financial obligation that give its holder preferential or priority rights over the obligated person's publicly-held bonds as material information that must be disclosed. The final determination an obligated person will need to make with respect to the disclosure of a new financial obligation is whether to disclose its material terms in summary form or by posting the entire contract or agreement to EMMA. In this regard, the SEC stated that an agreement that is posted to EMMA may be redacted to exclude confidential information such as contact information, account numbers and other personally-identifiable information, but did not indicate that commercially-sensitive information (such as the interest rate or interest rate spread under a Direct Placement) could be redacted if that information is material to investors.

When entering into a financial obligation, the obligated person and, in some circumstances, the other party (e.g., a lender, lessor, swap provider, vendor, counterparty or other financial institution) will need to consider whether the material terms of a material financial obligation should be summarized in the reportable event filing or whether copies of the transaction documents (with permitted redactions) should be posted to EMMA. If the material terms of the transaction are to be summarized, the obligated person will need to ensure that the summaries are accurate and complete.

Disclosure of Defaults and Other Events

Under the Amendments, obligated persons are further required to disclose defaults, accelerations, terminations and other adverse events under both new and pre-existing financial obligations, if the event

"reflects financial difficulties" of the obligated person. The SEC stated in the Release that whether a particular event constitutes a "default" or an "event of default" under a financial obligation is not determinative as to whether disclosure is required, and stated its belief that "there are defaults that may reflect financial difficulties even if they do not qualify as 'events of default' under transaction documents."

The "reflecting financial difficulties" concept is embedded in the existing reportable events under the Rule for unscheduled draws on debt service reserves and credit enhancement facilities. The SEC stated in the Release that this concept is intended to "target the disclosure of information relevant to investors in making an assessment of the current financial condition of the issuer or obligated person." Accordingly, obligated persons will need to make a further determination as to whether a default or other adverse event under, or a modification of the terms of, a financial obligation reflect financial difficulties such that disclosure is required in a reportable event notice.

Modifications and waivers of terms of a financial obligation provided by lenders to obligated persons raise particular concerns and questions. For example, if an obligated person is unable to meet a particularly strict financial covenant and the lender agrees to waive the covenant because other financial ratios and covenants meet their lending guidelines, the obligated person will need to make a determination as to whether this type of waiver should be disclosed. Under these circumstances or similar situations, it is possible that a lender will hesitate to accommodate obligated persons (whether the obligated person is financially sound or in financial distress) if the obligated person is required or advised to disclose the full details of the waiver or accommodation.

Considerations for Obligated Persons

The multiple determinations required to be made by an obligated person under the Amendments discussed above will present a range of challenges. Whether a particular financial obligation, its terms or an event under a financial obligation is "material" is a mixed question of law and fact. The obligated person will need to determine the personnel who are authorized and qualified to make these determinations, and consultation with legal counsel or a municipal advisor may be necessary. Obligated persons with municipal securities disclosure policies and procedures should review them for updating in light of the Amendments, and obligated persons without disclosure policies and procedures should give consideration to developing and implementing them. Additional training of the personnel that will make disclosure determinations and formulate the actual text of the required disclosures for an obligated person should also be considered, particularly with regard to materiality considerations. Some obligated persons may have agreed in existing continuing disclosure undertakings to comply with the Rule as it may be amended from time to time. In these cases, the existing undertakings should be reviewed to determine if amendments are required to include the Amendments or if the Amendments are automatically included by the terms of the existing undertakings.

Considerations for Underwriters

The Amendments require underwriters to perform additional due diligence with respect to an obligated person's compliance with the Amendments. An underwriter will need to make a determination as to the universe of instruments that could constitute financial obligations that it will request from the obligated person when performing its due diligence. Among other things, an underwriter will need to make its own determinations with respect to whether a particular instrument is a financial obligation, whether it is a material obligation and which of its terms are material to investors. Further, an underwriter will need to make determinations as to whether the occurrence of certain events under the terms of a financial obligation of an obligated person reflect financial difficulties. These determinations will require additional time, and underwriters will need to ensure that they begin their financial obligation review early in the due diligence process.

Given the lack of any bright-line standards regarding materiality, it is entirely possible that an underwriter's determinations with respect to financial obligation disclosure may be different from those previously made by an obligated person. In these circumstances, the parties may need to also determine whether a remedial reportable event filing needs to be posted on EMMA, and whether disclosure needs to be made in the official statement with respect to the obligated person's failure to timely file a reportable event notice when the financial obligation was incurred.

Timing of Application of Amendments

Compliance with the Amendments is required for continuing disclosure undertakings that are entered into in connection with primary offerings of municipal securities that close on or after 180 days after the Amendments are published in the Federal Register.

The SEC press release dated August 20, 2018, is available [here](#) and Release NO. 34-83885 is available [here](#).

For More Information

If you would like further information concerning the matters discussed in this Client Alert, please contact a member of the Public Finance Group or visit us online at chapman.com.

*The term "obligated person" is used in the Amendments and in this Client Alert to refer to both an issuer of bonds and an "obligated person" under the Rule (e.g., a tax-exempt 501(c)(3) organization).

This document has been prepared by Chapman and Cutler LLP attorneys for informational purposes only. It is general in nature and based on authorities that are subject to change. It is not intended as legal advice. Accordingly, readers should consult with, and seek the advice of, their own counsel with respect to any individual situation that involves the material contained in this document, the application of such material to their specific circumstances, or any questions relating to their own affairs that may be raised by such material.

To the extent that any part of this summary is interpreted to provide tax advice, (i) no taxpayer may rely upon this summary for the purposes of avoiding penalties, (ii) this summary may be interpreted for tax purposes as being prepared in connection with the promotion of the transactions described, and (iii) taxpayers should consult independent tax advisors.

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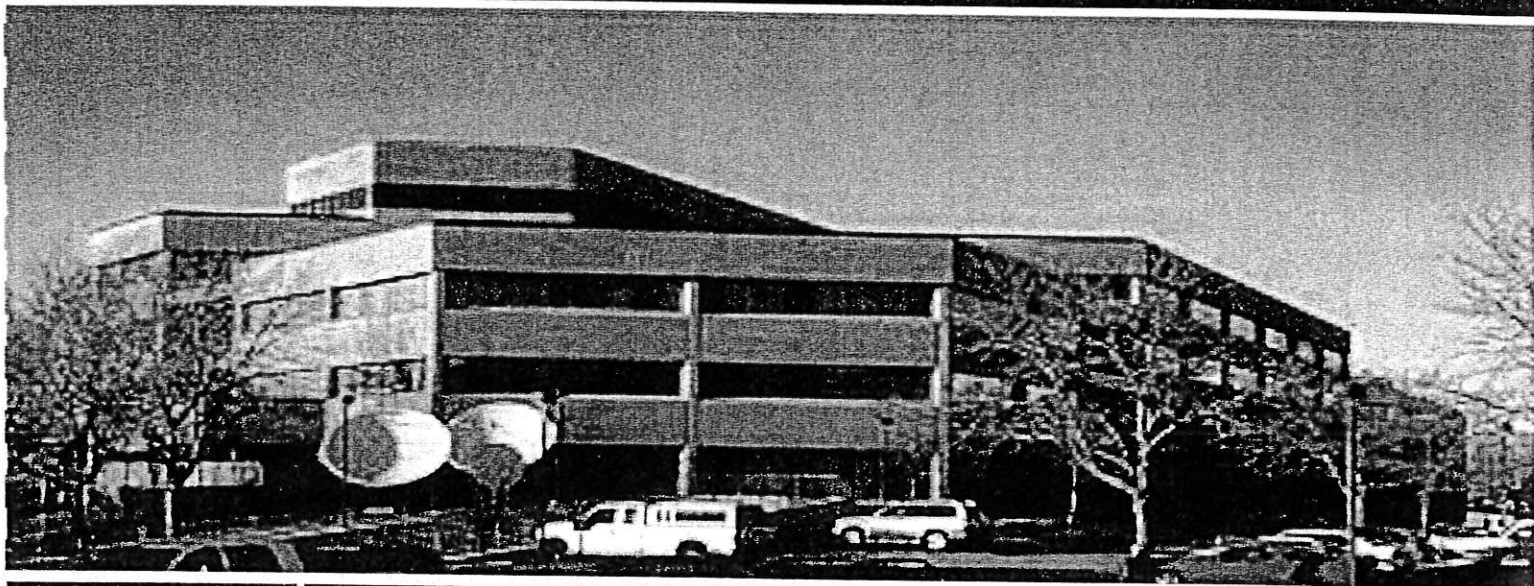


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SALT LAKE COUNTY, UTAH
\$55,000,000
TAX AND REVENUE ANTICIPATION NOTES,
SERIES 2018



Submitted by
Jon Bronson,
Sr. Vice President/Director of Public Finance
July 10, 2018



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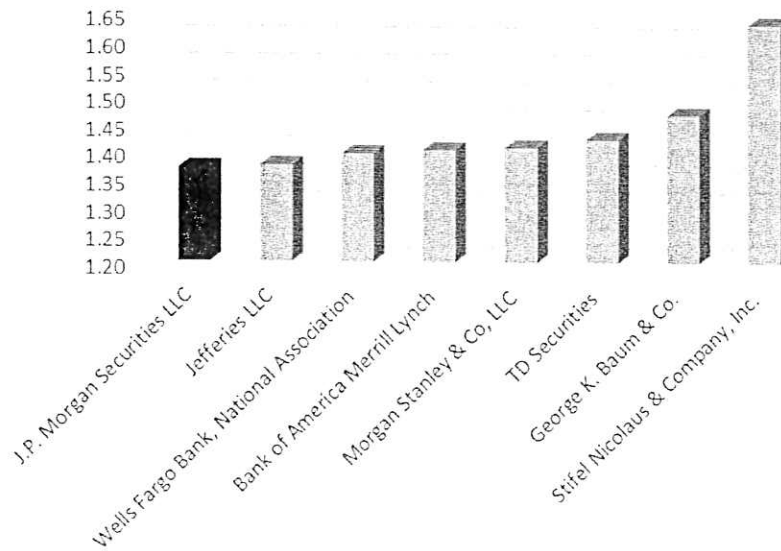
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SECTION 1
SUMMARY OF BID RESULTS



BID COMPARISON

Par Amount	\$55,000,000
Dated Date	July 26, 2018
Delivery Date	July 26, 2018
Final Maturity Date	December 27, 2018
Moody's	MIG 1

UNDERWRITERS	TIC BID	DIFFERENCE FROM WINNING BID
J.P. Morgan Securities LLC	1.370250	-
Jefferies LLC	1.374921	0.004671
Wells Fargo Bank, National Association	1.396479	0.026229
Bank of America Merrill Lynch	1.403634	0.033384
Morgan Stanley & Co, LLC	1.408404	0.038154
TD Securities	1.422715	0.052465
George K. Baum & Co.	1.468047	0.097797
Stifel Nicolaus & Company, Inc.	1.632829	0.262579

10:05:04 a.m. MDST Upcoming Calendar Overview Compare Summary

Bid Results

**Salt Lake County
\$55,000,000 Tax and Revenue Anticipation Notes, Series 2018**

The following bids were submitted using **PARITY**[®] and displayed ranked by lowest TIC.
Click on the name of each bidder to see the respective bids.

	Amount Awarded (M)	Bidder Name	TIC	Bid Amount
Reoffering	55,000	J.P. Morgan Securities LLC	1.370250	55,000M
		Jefferies LLC	1.374921	55,000M
		Wells Fargo Bank, National Association	1.396479	55,000M
		Bank of America Merrill Lynch	1.403634	55,000M
		Morgan Stanley & Co. LLC	1.408404	55,000M
		TD Securities	1.422715	55,000M
		George K. Baum & Co.	1.468047	55,000M
		Stifel Nicolaus & Company, Inc.	1.632829	55,000M

Awarded Totals	55,000M			440,000M
Issue Size	55,000M			

Save

*Awarding the Bonds to a specific bidder will provide you with the Reoffering Prices and Yields.

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Upcoming Calendar	Overview	Result	Excel
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J.P. Morgan Securities LLC - New York , NY's Bid



**Salt Lake County
\$55,000,000 Tax and Revenue Anticipation Notes, Series 2018**

For the aggregate principal amount of \$55,000,000.00, we will pay you \$55,374,000.00, plus accrued interest from the date of issue to the date of delivery. The Bonds are to bear interest at the following rate:

Maturity Date	Amount \$	Coupon %	Yield %	Dollar Price
12/27/2018	55,000M	3.0000	1.3500	100.688

Bid: 100.680000
 Premium: \$374,000.00
 Net Interest Cost: \$318,083.33
 TIC: 1.370250
 Time Last Bid Received On:07/10/2018 9:27:32 MDST

This proposal is made subject to all of the terms and conditions of the Official Bid Form, the Official Notice of Sale, and the Preliminary Official Statement, all of which are made a part hereof.

Bidder: J.P. Morgan Securities LLC, New York , NY
 Contact: David Elmquist
 Title: Vice President
 Telephone:212-834-7182
 Fax: 917-456-3554

Issuer Name: Salt Lake County Company Name: _____

Accepted By: _____ Accepted By: _____

Date: _____ Date: _____

Z	P
F	I

SECTION 2
TRANSACTION INFORMATION



TRANSACTION INFORMATION

PURPOSE OF THE NOTE ISSUE

The County’s 2018 Tax and Revenue Anticipation Notes are being issued in anticipation of the collection of property taxes and other revenues for Fiscal Year 2018, for the purpose of payment of current and necessary expenses of the County, and for other purposes for which funds of the County may be legally expended.

SECURITY FOR THE NOTE ISSUE

The 2018 Tax Notes will be issued pursuant to applicable law in anticipation of the collection of taxes to be levied and yet to be collected for the fiscal year beginning January 1, 2018 and ending December 31, 2018 (the “Fiscal Year 2018”). The County Council will levy taxes in Fiscal Year 2018 on all taxable property within the County sufficient to pay principal of and interest on the 2018 Notes as the same fall due.

RESULTS OF COMPETITIVE SALE

On July 10, 2018 at 9:30 a.m. (MDT), the County offered the Notes at a competitive, sealed-bid sale using the Parity© electronic platform. There were 8 bids received with J.P. Morgan Securities LLC submitting the bid with a coupon rate of 3.00 percent and a true interest cost of 1.37%.

SOURCES AND USES OF FUNDS

SOURCES	
Par Amounts of Notes	\$55,000,000.00
Reoffering Premium	378,400.00
TOTAL SOURCES	\$55,378,400.00

USES	
Deposit to Project Construction Fund	\$55,374,000.00
Total Underwriter’s Discount (0.008%)	4,400.00
TOTAL USES	\$55,378,400.00

STRUCTURE OF THE NOTE ISSUE

The Notes are fixed rate obligations. All principal and interest on the Notes is payable on Thursday, December 27, 2018. Interest on the Notes shall be computed on the basis of a 360-day year comprised of



twelve, 30-day months. The Salt Lake County Treasurer is the Note Registrar and Paying Agent for the Notes under the Resolution.

INTEREST COST

The Issuer's interest costs are generally expressed using three measures: the average coupon, the net interest cost (NIC), and the true interest cost (TIC).

AVERAGE COUPON

The average coupon is a weighted average of each coupon rate used in the issue. It represents the average rate to be paid by the issuer. The proposed average coupon for this issue is 3.000%.

NET INTEREST COST

The NIC is a more accurate measure of the issuer's borrowing cost than the average coupon because the NIC includes, as a cost of financing, any underwriter's discount or original issue premium or discount from par associated with the issue. The proposed NIC for this issue is 1.378%.

TRUE INTEREST COST

The TIC is similar to the NIC in that it includes any underwriter's discount or original issue premium or discount from par in the cost of the financing. The TIC, however, more accurately measures of the issuer's borrowing cost because it also takes into account the time value of money. The TIC is the present value of all principal and interest payments associated with the bond issue, discounted to the net amount actually received by the issuer for the bonds. The proposed TIC for this issue is 1.374%.

AVERAGE LIFE

The average life is the point in time (measured in years) at which half of the principal of the bond issue will have been redeemed, assuming no bonds are called prior to maturity. It reflects the average length of time the bond issue will be outstanding and is calculated as a weighted average of the principal amount of bonds scheduled to mature each year. The proposed Average Life of this bond issue is 0.419 years.

CALL FEATURES

The Notes are not subject to call and redemption prior to maturity.

NOTE RATINGS

There are three major municipal note rating agencies: Moody's Investors Service, S & P Global, and Fitch Ratings. They each analyze the security of the note issue and establish a rating to be used by buyers of



the notes. These ratings reflect the agencies' opinions concerning the relative credit worthiness of each note issue.

The County approached Moody's for a rating on the Notes. Moody's has assigned this issue the following rating:

Moody's "MIG 1"

NOTE INSURANCE

Note insurance was not purchased for this issue.

UNDERWRITER'S SPREAD

The underwriter's spread or underwriter's discount is the income earned by the underwriter for selling the notes to the investing public in the initial offering. The spread is the difference between the price paid to the issuer, and the price at which the notes are reoffered to investors. The underwriter's spread on the County's Series 2018 Tax and Revenue Anticipation Notes is \$0.08 per \$1,000 of bonds issued, or \$4,400.00.

COSTS OF ISSUANCE

Costs of issuance include all costs of completing the note issue other than the underwriter's spread. For this note issue, the Costs of Issuance budget includes note counsel fees, municipal advisory fees, rating fees, costs of preparing and printing the official statement, and any out-of-pocket costs incurred by your municipal advisor or note counsel.

DATED DATE

The dated date of a note issue is the date from which interest begins to accrue. The dated date for the Series 2018 Tax and Revenue Anticipation Notes is Thursday, July 26, 2018.

CLOSING DATE

The closing date, also known as the delivery date, is the date on which the underwriter or buyer pays the issuer for the notes and takes delivery of them. This is the date of most of the legal documentation relating to the notes issue. The Closing Date for the Series 2018 Note issue is Thursday, July 26, 2018.

FINANCE TEAM

The financing team for this issue consists of the following entities:

Municipal Advisor:	Zions Public Finance Inc
Underwriter:	J.P. Morgan Securities LLC
Notes Counsel:	Chapman and Cutler LLP
Notes Registrar/Paying Agent:	Salt Lake County Treasurer

SUMMARY

The following is a summary of the terms and structure of the Salt Lake County's Tax and Revenue Anticipation Notes, Series 2018:

Dated Date:	Thursday, July 26, 2018
Closing Date:	Thursday, July 26, 2018
Average Coupon:	3.00%
Net Interest Cost:	1.378%
True Interest Cost:	1.374%
Average Life:	0.419 Years
Notes Rating:	Moody's "MIG 1"
Underwriter's Discount:	\$0.08 per \$1,000 or \$4,400.00



DEBT REPAYMENT SCHEDULE

Salt Lake County, Utah

\$55,000,000 Tax and Revenue Anticipation Notes
 Series 2018
 (Final Numbers)

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
07/26/2018	-	-	-	-	-
12/27/2018	55,000,000.00	3.000%	692,083.33	55,692,083.33	55,692,083.33
Total	\$55,000,000.00	-	\$692,083.33	\$55,692,083.33	-

Yield Statistics

Bond Year Dollars	\$23,069.44
Average Life	0.419 Years
Average Coupon	3.0000000%

Net Interest Cost (NIC)	1.3788079%
True Interest Cost (TIC)	1.3749436%
Bond Yield for Arbitrage Purposes	1.3557417%
All Inclusive Cost (AIC)	1.3749436%

IRS Form 8038

Net Interest Cost	1.3504440%
Weighted Average Maturity	0.419 Years



SECTION 3
MARKET INFORMATION

TAX ANTICIPATION NOTE HISTORY

BOND BUYER INDEX-NOTE

MMD

BOND BUYER ARTICLE

COMPARABLE ISSUES

Salt Lake County, Utah Tax Anticipation Note History

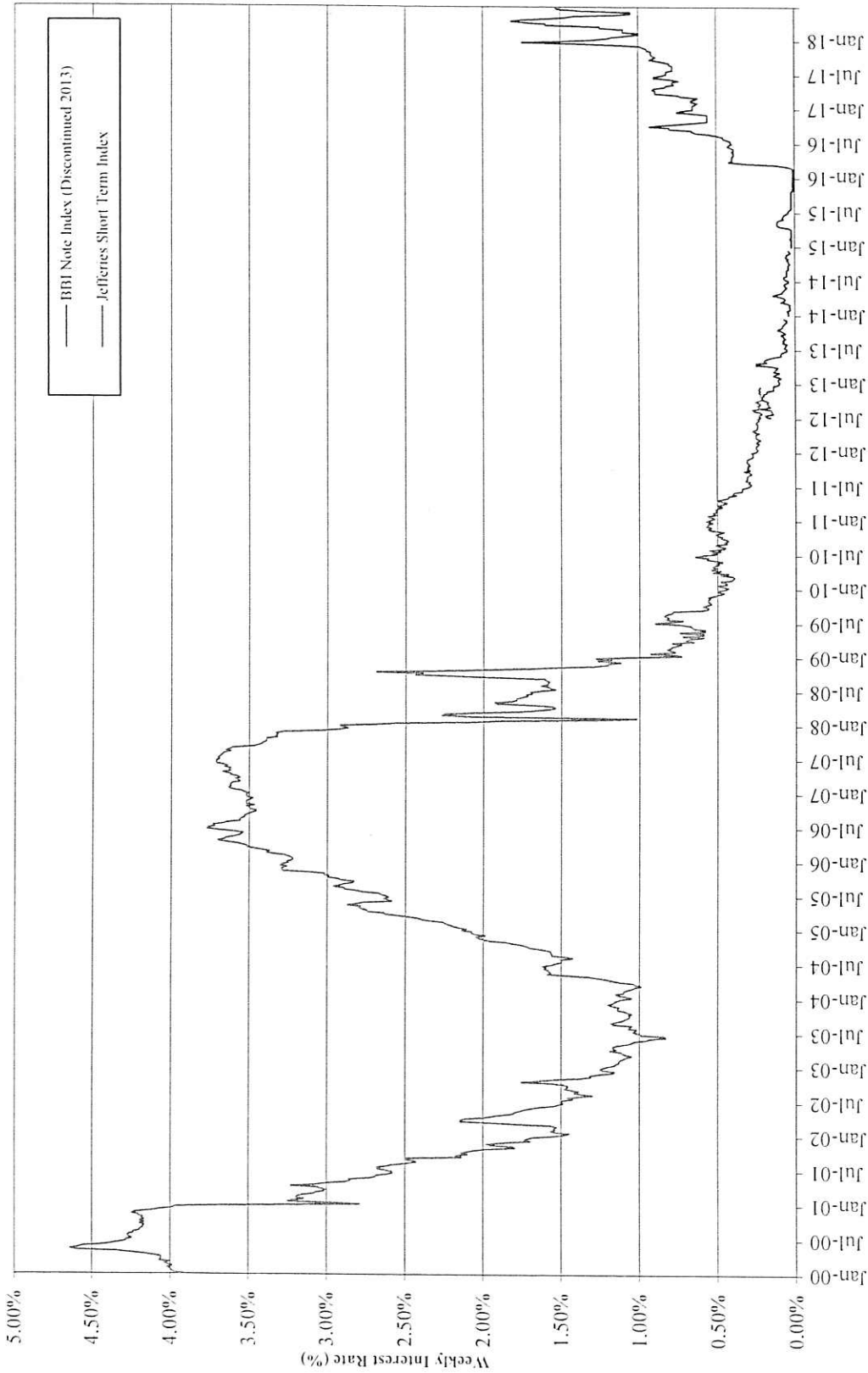
Year	Par Amount	Week of Sale	Yield	Underwriter	Underwriter Fee/\$1,000
2018	\$ 55,000,000	10-Jul	1.35%	JP Morgan Securities	\$ 0.08
2017	60,000,000	12-Jul	0.83%	Citigroup Global Markets Inc.	0.05
2016	47,000,000	11-Aug	0.48%	JP Morgan Securities	0.01
2015	43,000,000	12-Aug	0.05%	JP Morgan Securities	0.01
2014	65,000,000	30-Jul	0.08%	George K. Baum & Co.,	-
2013	67,000,000	24-Jun	0.16%	BofA/ML	-
2012	50,000,000	25-Jun	0.15%	JP Morgan/Wells Fargo	0.08
2011	35,000,000	27-Jun	0.12%	BofA/ML	0.11
2010	45,000,000	17-Jun	0.21%	JP Morgan Securities	0.04
2009	45,000,000	24-Sep	0.54%	JP Morgan Securities	0.47
2004	32,500,000	15-Jun	1.40%	CIBC World Markets	0.23
2003	40,000,000	16-Jun	0.84%	CIBC World Markets	0.23
2002	45,000,000	17-Jun	1.42%	CIBC World Markets	0.23
2001	77,000,000	12-Jun	2.65%	CIBC World Markets	0.23
2000	57,000,000	13-Jun	4.38%	Banc One Capital Markets	0.24
1999	47,000,000	29-Jun	3.45%	First Security	0.24
1998	30,000,000	23-Jun	3.57%	Oppenheimer	0.25
1997	40,000,000	16-Jun	3.65%	Oppenheimer	0.25



Interest Rate Trend

Bond Buyer Note Index and Jefferies Short Term Index

January 2000 to July 2018



ZIONS PUBLIC FINANCE – MMD Muni Bond Yields – 07/09/2018 EOD

		General Obligations					"AAA" Coupon Range			
		"AAA"	PRE-RE	INSURED	"AA"	"A"	"BAA"	"LOW"	"HIGH"	
1	2019	1.49	1.51	1.59	1.51	1.69	1.96	5.00	5.00	
2	2020	1.64	1.66	1.80	1.67	1.89	2.19	5.00	5.00	
3	2021	1.77	1.79	1.94	1.82	2.07	2.39	5.00	5.00	
4	2022	1.87	1.90	2.10	1.94	2.22	2.54	5.00	5.00	
5	2023	1.97	2.00	2.24	2.05	2.36	2.68	5.00	5.00	
6	2024	2.08	2.12	2.37	2.18	2.50	2.84	5.00	5.00	
7	2025	2.20	2.24	2.51	2.32	2.64	2.97	5.00	5.00	
8	2026	2.31	2.35	2.64	2.46	2.77	3.11	5.00	5.00	
9	2027	2.38		2.72	2.55	2.85	3.19	5.00	5.00	
10	2028	2.43		2.78	2.61	2.91	3.26	5.00	5.00	
11	2029	2.47		2.82	2.66	2.95	3.31	5.00	5.00	
12	2030	2.51		2.87	2.71	3.00	3.36	5.00	5.00	
13	2031	2.55		2.91	2.75	3.04	3.40	5.00	5.00	
14	2032	2.59		2.95	2.79	3.08	3.44	5.00	5.00	
15	2033	2.63		2.99	2.83	3.12	3.48	5.00	5.00	
16	2034	2.67		3.03	2.87	3.16	3.52	5.00	5.00	
17	2035	2.71		3.06	2.91	3.20	3.55	5.00	5.00	
18	2036	2.74		3.08	2.94	3.23	3.57	5.00	5.00	
19	2037	2.76		3.10	2.96	3.25	3.59	5.00	5.00	
20	2038	2.78		3.12	2.98	3.27	3.61	5.00	5.00	
21	2039	2.80		3.14	3.00	3.29	3.62	5.00	5.00	
22	2040	2.82		3.16	3.02	3.31	3.63	5.00	5.00	
23	2041	2.83		3.17	3.03	3.32	3.64	5.00	5.00	
24	2042	2.84		3.18	3.04	3.33	3.65	5.00	5.00	
25	2043	2.85		3.19	3.05	3.34	3.66	5.00	5.00	
26	2044	2.86		3.20	3.06	3.35	3.67	5.00	5.00	
27	2045	2.87		3.21	3.07	3.36	3.68	5.00	5.00	
28	2046	2.88		3.22	3.08	3.37	3.69	5.00	5.00	
29	2047	2.89		3.23	3.09	3.38	3.70	5.00	5.00	
30	2048	2.90		3.24	3.10	3.39	3.71	5.00	5.00	

Interpolated AAA Yields

YR	MAT	6 Mo JAN	7 Mo FEB	8 Mo MAR	9 Mo APR	10 Mo MAY	11 Mo JUN	12 Mo JUL	13 Mo AUG	14 Mo SEP	15 Mo OCT	16 Mo NOV	17 Mo DEC
1	2019	1.39	1.41	1.43	1.44	1.46	1.48	1.49	1.50	1.51	1.52	1.53	1.54
2	2020	1.57	1.58	1.59	1.61	1.62	1.63	1.64	1.65	1.65	1.66	1.66	1.67
3	2021	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.78	1.78	1.79	1.79
4	2022	1.83	1.84	1.84	1.85	1.85	1.86	1.87	1.88	1.88	1.89	1.89	1.90
5	2023	1.92	1.93	1.94	1.94	1.95	1.96	1.97	1.98	1.99	1.99	2.00	2.01
6	2024	2.03	2.04	2.05	2.05	2.06	2.07	2.08	2.09	2.10	2.11	2.12	2.13
7	2025	2.16	2.17	2.17	2.18	2.18	2.19	2.20	2.21	2.22	2.22	2.23	2.24
8	2026	2.27	2.28	2.28	2.29	2.29	2.30	2.31	2.31	2.32	2.32	2.33	2.33
9	2027	2.35	2.36	2.36	2.37	2.37	2.38	2.38	2.38	2.39	2.39	2.40	2.40
10	2028	2.40	2.41	2.41	2.42	2.42	2.43	2.43	2.43	2.44	2.44	2.45	2.45
11	2029	2.45	2.45	2.46	2.46	2.47	2.47	2.47	2.47	2.48	2.48	2.49	2.49
12	2030	2.49	2.49	2.50	2.50	2.51	2.51	2.51	2.51	2.52	2.52	2.53	2.53
13	2031	2.53	2.53	2.54	2.54	2.55	2.55	2.55	2.55	2.55	2.56	2.56	2.56

"AAA" Muni Yields as percent of US Treas Yields

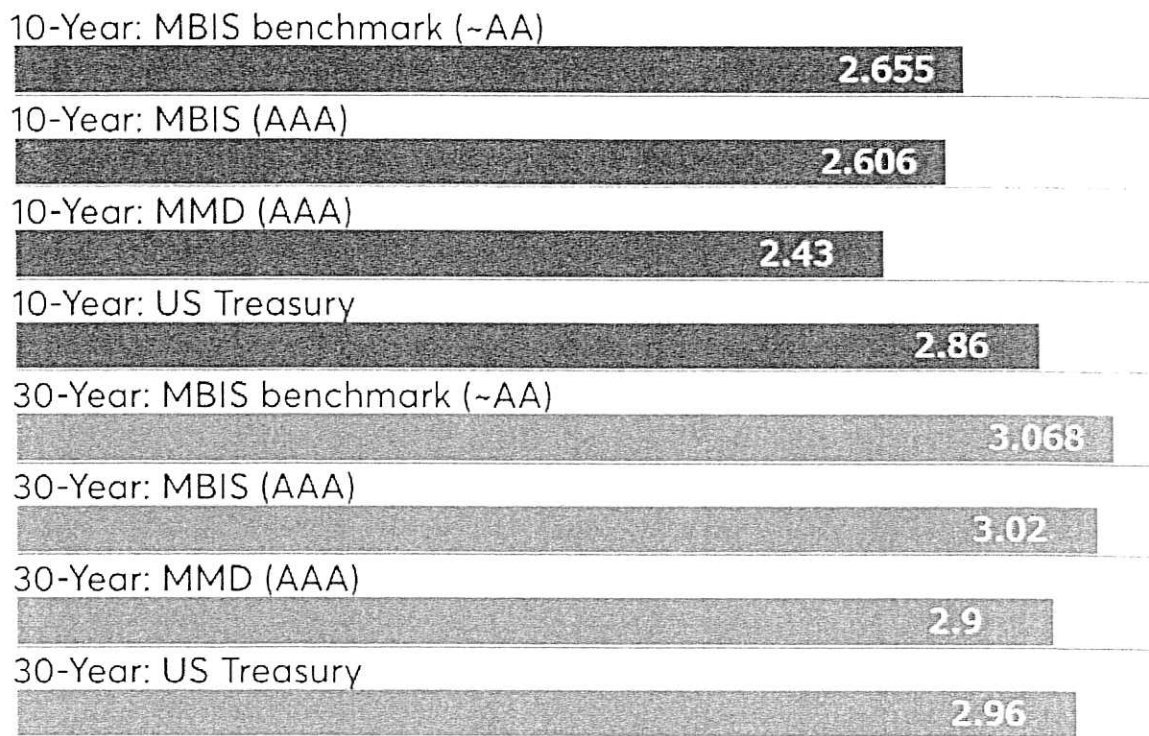
Muni/Treas	CURR %	04/17/2018 to 07/09/2018				07/19/2017 to 07/09/2018			
		AVG %	# SD	MAX %	MIN %	AVG %	# SD	MAX %	MIN %
1 yr/1 yr	66.1	73.4	-1.16	80.8	64.0	72.9	-1.13	83.9	60.4
2 yr/2 yr	64.0	70.0	-1.40	76.8	64.0	70.8	-1.19	89.1	61.7
3 yr/3 yr	66.5	70.9	-1.45	77.0	66.5	70.8	-0.88	87.7	62.0
5 yr/5 yr	71.7	73.5	-0.78	78.6	70.4	72.6	-0.19	85.6	63.3
7 yr/7 yr	78.0	78.2	-0.20	81.5	75.3	76.6	0.42	86.4	69.7
10yr/10yr	85.1	84.2	0.60	87.4	81.3	85.0	0.02	93.1	79.3
15yr/10yr	92.1	92.1	-0.03	94.8	89.3	97.6	-1.13	109.0	89.3
20yr/10yr	97.3	97.8	-0.32	100.9	94.8	105.3	-1.16	120.1	94.8
30yr/10yr	101.5	101.8	-0.18	105.3	98.4	110.8	-1.07	129.3	98.4
15yr/30yr	88.8	87.6	0.88	90.2	85.3	85.4	1.20	90.7	78.3
20yr/30yr	93.8	93.0	0.61	95.7	91.0	92.0	0.90	97.5	85.9
30yr/30yr	97.9	96.9	0.69	99.9	94.6	96.7	0.53	101.9	89.8

THE BOND BUYER

Mass. SBA, Colo. deals sell

By

- Chip Barnett
- July 10 2018, 12:17pm EDT



MBIS indices are updated hourly on the Bond Buyer Data Workstation

Municipal bond buyers were seeing the first of the week's deals come to market as two big competitive issues sold.

Primary market

In the competitive arena, the Massachusetts School Building Authority sold \$200 million of Series 2018B subordinated dedicated sales tax revenue bonds on Tuesday.

Bank of America Merrill Lynch won the bonds with a true interest cost of 4.0306%.

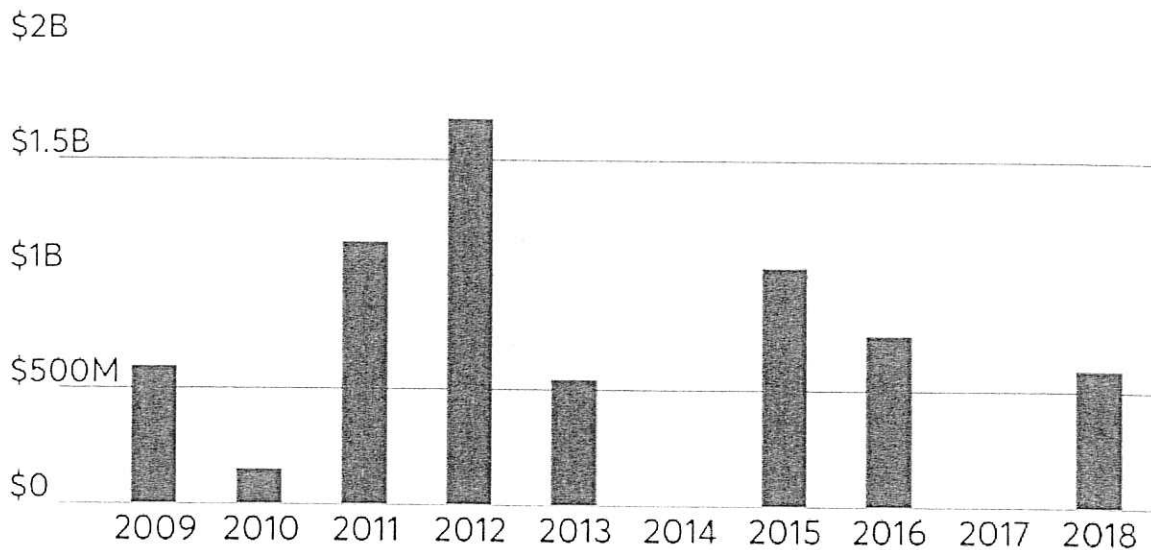
The deal is rated Aa3 by Moody's Investors Service, AA by S&P Global Ratings and AA-plus by Fitch Ratings.

The financial advisor is Acacia Financial Group; the bond counsel is Mintz Levin.

Since 2009, the SBA has sold about \$6.5 billion of debt, with the most issuance occurring in 2012 when it sold \$1.68 billion. The authority did not come to market in 2014 or 2017.

Spotty attendance

Massachusetts School Building Authority municipal issuance



Source: Thomson Reuters

In the short-term competitive sector, Colorado sold \$310 million of Series 2018A education loan program tax and revenue anticipation notes.

Three groups won the TRANs, including Wells Fargo Securities, BAML and Morgan Stanley.

The deal is rated MIG1 by Moody's and SP1-plus by S&P.

The financial advisor is Kutak Rock and the bond counsel is RBC Capital Markets.

In the negotiated sector, Citigroup is set to price Atlanta's \$279 million of Series 2018B water and wastewater revenue and refunding bonds on Tuesday.

Citi is also set to price the Mesquite Independent School District, Texas' \$125 million of Series 2018 unlimited tax school building bonds, backed by the Permanent School Fund guarantee program.

Tuesday's sales

Massachusetts:

[Click here for the SBA deal](#)

Bond Buyer 30-day visible supply at \$11.08B

The Bond Buyer's 30-day visible supply calendar increased \$325.9 million to \$11.08 billion on Tuesday. The total is comprised of \$5.01 billion of competitive sales and \$6.07 billion of negotiated deals.

Secondary market

Municipal bonds were stronger on Tuesday, according to a midday read of the MBIS benchmark scale. Benchmark muni yields fell as much as one basis point in the one- to 30-year maturities.

High-grade munis were stronger as well, with yields calculated on MBIS' AAA scale falling as much as one basis point all across the curve.

Municipals were weaker on Municipal Market Data's AAA benchmark scale, which showed the 10-year muni general obligation yield rising as much as one basis point and the 30-year muni maturity yield gaining as much as two basis points.

Treasury bonds were little changed as stocks traded higher.

On Monday, the 10-year muni-to-Treasury ratio was calculated at 85.1% while the 30-year muni-to-Treasury ratio stood at 97.9%, according to MMD. The muni-to-Treasury ratio

compares the yield of tax-exempt municipal bonds with the yield of taxable U.S. Treasury with comparable maturities. If the muni/Treasury ratio is above 100%, munis are yielding more than Treasury; if it is below 100%, munis are yielding less.

Previous session's activity

The Municipal Securities Rulemaking Board reported 40,814 trades on Monday on volume of \$9.02 billion.

California, New York and Texas were the states with the most trades, with the Golden State taking 16.558% of the market, the Empire State taking 12.073% and the Lone Star State taking 10.684%.

Data appearing in this article from **Municipal Bond Information Services**, including the **MBIS municipal bond index**, is available on **The Bond Buyer Data Workstation**. [Click here](#) for a brief tour of the **Workstation**, or contact **Vanessa Kim** at **212-803-8474** for more information.

Chip Barnett

Chip Barnett is a journalist with more than 40 years of experience. Barnett is currently Senior Market Reporter for The Bond Buyer.

Salt Lake County, Utah

2018 TRAN Comparables

Issuer	Type	Sale Date	Per Amount	Dated Date	Maturity Date	Term (Days)	Coupon	Yield	MIG1 Rate on Day of Sale	Yield Spread to MIG1	Rating
Salt Lake County, UT	TRAN	7/10/2018	\$ 55,000,000	7/26/2018	12/27/2018	154	3.00	1.35	1.41	(0.06)	MIG1
State of Colorado Education Loan Program, CO	TRAN	7/10/2018	\$ 310,000,000	7/18/2018	6/27/2019	344	5.00	1.56	1.58	(0.02)	MIG1/SP-1+
City of Berkeley, CA	TRAN	7/10/2018	\$ 14,000,000	7/18/2018	7/17/2019	364	3.00	1.45	1.59	(0.14)	MIG1
Salt Lake City, UT	TRAN	6/27/2018	\$ 17,000,000	7/18/2018	6/28/2019	345	4.00	1.68	1.58	0.10	SP-1+
City of St. Louis, MO	TRAN	6/21/2018	\$ 66,000,000	7/10/2018	5/30/2019	324	3.00	1.76	1.55	(0.01)	MIG1/SP-1+/F1+
State of Idaho	TAN	6/20/2018	\$ 54,000,000	7/2/2018	6/28/2019	361	4.00	1.55	1.56	(0.11)	MIG1
County of Santa Cruz, CA	TRAN	6/13/2018	\$ 45,000,000	7/2/2018	7/1/2019	364	4.00	1.45	1.56	(0.11)	SP-1+
Riverside County, CA	TRAN	6/6/2018	\$ 340,000,000	7/2/2018	6/28/2019	361	4.00	1.55	1.60	(0.05)	SP-1+

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SECTION 4
FINAL PRICING NUMBERS

Salt Lake County, Utah

\$55,000,000 Tax and Revenue Anticipation Notes

Series 2018

(Final Numbers)

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Salt Lake County, Utah

\$55,000,000 Tax and Revenue Anticipation Notes

Series 2018

(Final Numbers)

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
07/26/2018	-	-	-	-	-
12/27/2018	55,000,000.00	3.000%	692,083.33	55,692,083.33	55,692,083.33
Total	\$55,000,000.00	-	\$692,083.33	\$55,692,083.33	-

Yield Statistics

Bond Year Dollars	\$23,069.44
Average Life	0.419 Years
Average Coupon	3.0000000%
Net Interest Cost (NIC)	1.3788079%
True Interest Cost (TIC)	1.3749436%
Bond Yield for Arbitrage Purposes	1.3557417%
All Inclusive Cost (AIC)	1.3749436%

IRS Form 8038

Net Interest Cost	1.3504440%
Weighted Average Maturity	0.419 Years

Salt Lake County, Utah

\$55,000,000 Tax and Revenue Anticipation Notes

Series 2018

(Final Numbers)

Pricing Summary

Maturity	Type of Bond	Coupon	Yield	Maturity Value	Price	Dollar Price
12/27/2018	Serial Note	3.000%	1.350%	55,000,000.00	100.688%	55,378,400.00
Total	-	-	-	\$55,000,000.00	-	\$55,378,400.00

Bid Information

Par Amount of Bonds	\$55,000,000.00
Reoffering Premium or (Discount)	378,400.00
Gross Production	\$55,378,400.00
Total Underwriter's Discount (0.008%)	\$(4,400.00)
Bid (100.680%)	55,374,000.00
Total Purchase Price	\$55,374,000.00
Bond Year Dollars	\$23,069.44
Average Life	0.419 Years
Average Coupon	3.0000000%
Net Interest Cost (NIC)	1.3788079%
True Interest Cost (TIC)	1.3749436%

Salt Lake County, Utah

\$55,000,000 Tax and Revenue Anticipation Notes

Series 2018

(Final Numbers)

Sources & Uses

Dated 07/26/2018 | Delivered 07/26/2018

Sources Of Funds

Par Amount of Notes	\$55,000,000.00
Reoffering Premium	378,400.00
Total Sources	\$55,378,400.00

Uses Of Funds

Deposit to Project Construction Fund	55,374,000.00
Total Underwriter's Discount (0.008%)	4,400.00
Total Uses	\$55,378,400.00



SECTION 5
RATING AGENCY REPORT

MOODY'S RATING REPORT

CREDIT OPINION
 22 June 2018

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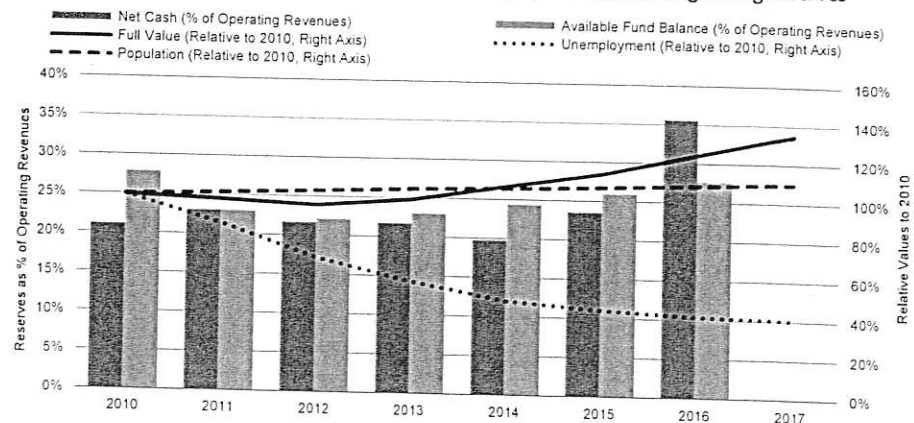
Salt Lake (County of) UT

Update to credit analysis

Summary

Salt Lake County, Utah (Aaa stable) benefits from a remarkably strong local economy as the economic, political and cultural center of the State of Utah (Aaa stable). The county's socioeconomic profile is healthy, with unusually low unemployment, despite income measures that are somewhat below similarly rated peers. The county's well-managed finances have shown stable-to-growing reserve levels that continue to provide adequate resources for the county's annual operations. Debt and pensions are modest and manageable, and positively the county contributes above our calculation of their tread water indicator, or the amount of contributions required to maintain the same net pension liabilities under reported assumptions.

On June 21, 2018, we assigned a MIG 1 rating to the county's \$55 million Tax and Revenue Anticipation Notes, Series 2018.

Exhibit 1
Economic growth continues to provide notable strength, with stable-to-growing reserves


Source: Moody's Investors Service

Credit strengths

- » Massive tax base supported by a solid socioeconomic profile
- » Strong management team drives structurally balanced financial operations and satisfactory reserve levels.
- » Debt and pension liabilities are modest and manageable.

Credit challenges

- » Reserves lag the Aaa-rated county median nationally.
- » Wealth measures lag the Aaa-rated county median nationally.

Rating outlook

The stable outlook reflects Moody's expectations that the county's economy, tax base, and finances will remain strong and that its debt and pension liabilities will remain manageable.

Factors that could lead to an upgrade

- » Not applicable

Factors that could lead to a downgrade

- » Significant deterioration of the county's financial position, including substantial reductions in available reserves
- » Sustained and large tax base declines that affects the county's financial stability.

Key indicators

Exhibit 2

Salt Lake (County of) UT	2012	2013	2014	2015	2016
Economy/Tax Base					
Total Full Value (\$000)	\$101,436,535	\$105,166,338	\$113,170,421	\$120,691,889	\$131,759,984
Population	1,032,226	1,048,314	1,063,670	1,078,958	1,092,518
Full Value Per Capita	\$98,270	\$100,320	\$106,396	\$111,860	\$120,602
Median Family Income (% of US Median)	107.8%	108.5%	109.1%	109.1%	110.6%
Finances					
Operating Revenue (\$000)	\$290,853	\$316,128	\$327,485	\$329,499	\$346,309
Fund Balance (\$000)	\$64,303	\$72,776	\$79,902	\$85,526	\$95,857
Cash Balance (\$000)	\$62,980	\$68,701	\$64,624	\$77,649	\$123,289
Fund Balance as a % of Revenues	22.1%	23.0%	24.4%	26.0%	27.7%
Cash Balance as a % of Revenues	21.7%	21.7%	19.7%	23.6%	35.6%
Debt/Pensions					
Net Direct Debt (\$000)	\$315,492	\$497,334	\$521,916	\$500,493	\$506,238
3-Year Average of Moody's ANPL (\$000)	\$403,780	\$384,826	\$317,227	\$342,430	\$347,537
Net Direct Debt / Full Value (%)	0.3%	0.5%	0.5%	0.4%	0.4%
Net Direct Debt / Operating Revenues (x)	1.1x	1.6x	1.6x	1.5x	1.5x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	0.4%	0.4%	0.3%	0.3%	0.3%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	1.4x	1.2x	1.0x	1.0x	1.0x

Source: Moody's Investors Service

Profile

Salt Lake County, located in north central portion of Utah (Aaa stable), covers 737 square miles and is the largest county in the state, with 1.1 million residents, or 37% of the state's 3.1 million residents. The county includes the state capital and largest city, [Salt Lake City](#) (Aaa stable).

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Detailed credit considerations

Economy and tax base: Utah's cultural, economic and political center

Salt Lake County is home to one of the youngest and fastest-growing populations in the country, which will be a key driver in the long-term economic health of the already-strong metropolitan area. In addition to the traditional economic drivers of the University of Utah (Aa1 stable) and the Church of Jesus Christ of Latter Day Saints, the diverse local economy also includes several major multinational firms, which continue to grow their presence. The region has become the preeminent cost-efficient alternative for businesses looking to relocate from costly areas on the Pacific Coast, according to Moody's economy.com. Adobe (A3 stable) moved their headquarters from Silicon Valley to just south of the county a few years ago, and Goldman Sachs (A3 stable) now employs 7% of their global workforce in the metro region.

Job growth will continue to be strong, with incomes rising as competition for workers heats up with the metro area benefiting from more job openings than workers to fill them. Despite the tightening of the labor market, the pace of job creation is still well ahead of national and regional averages, due in part to strong population gains. Unemployment is a remarkably low 3.0% in April 2018 (not seasonally adjusted), the most recent available figure, compared to 3.7% for the US in the same month. Educational attainment is slightly better in Salt Lake County than in national measures (according to the 2016 American Community Survey, ACS), with 32.8% of the population 25 years and over possessing at least a bachelor's degree; this compares to 30.3% for the US measure.

Wealth measures will improve with continued economic growth, though they are somewhat muted relative to the median Aaa-rated county nationally. Median family income was 110.6% of the US measure as of 2016 ACS data, which is improving year-over-year. Median household income is even stronger, at 116.8% of the US measure. Full value per capita, a proxy measure for wealth, is a healthy \$130,687.

The tax base will continue to expand as housing demand remains strong. Full market value grew 8.4% in 2017 to \$142.8 billion based on non-final information. The county's large tax base is diverse, with the ten largest taxpayers representing approximately 7.5% of 2017 taxable values, led by Kennecott Utah Copper (2.8%), which declined slightly due to centrally assessed valuation methods.

Financial operations and reserves: Structurally balanced with solid reserve levels

Given its consistent structural balance and healthy reserve levels, the county's financial profile is a credit strength. The county has been structurally balanced in each of the last four audited fiscal years (2013-2016), with deficits in 2011 and 2012 eliminated by a large 16.2% property tax increase in 2013, the first in more than a decade. The sizeable rate increase reflected management's view that the county's property tax revenues had lost too much ground to inflation, a problem that had been masked by significant growth over the same period.

In addition to property taxes, which constituted 51% of 2016 operating funds revenues (in this case, Moody's defines operating funds as the General Fund and Debt Service Fund), the county also relies on sales taxes (20% of revenues), charges for services (7%), and other revenues. The county's heavy reliance on property taxes, which are received in November and December, require it to rely on a small cash-flow note starting in July each year.

Revenue growth slightly outpaced expenditure growth in fiscal 2017 (year-end December 31), with an estimated surplus in the General Fund of nearly \$6 million, or a surplus equal to about 1.5% of revenues. Management consistently budgets revenues conservatively and produces expenditure savings each year.

So far in fiscal 2018, sales tax revenues are outpacing projected growth in most categories, and the county revised expectations slightly higher for the remainder of the year in June 2018. Budgeted expenditures were also revised slightly higher for 2018, though the revision in expenditures was smaller than the revenue revisions. The county continues to budget conservatively and has consistently demonstrated performance above budgeted expectations.

Primary expenses are for public safety (46% in 2016), followed by education, recreation, and culture (16%), and general government (14%). The county budgeted increased spending on major policy initiatives in 2018, however revenue growth easily covers the growth in expenditures. Other cost pressures, in both the medium and long-term, are personnel costs, especially those related to the competitive hiring environment.

The county's general fund reserves are somewhat low relative to all Aaa-rated counties nationally, but compare well to other large, urban Aaa-rated counties. The county has a 10% unreserved/unassigned fund balance policy, and state law limits larger counties, including Salt Lake County, to an unreserved fund balance of 20%. Audited 2016 financial figures show an ending available General Fund balance of \$64.6 million, or 20.2% of general fund revenues (unassigned fund balance alone is below the state limit at 16%). Across the operating funds, reserves are a healthy \$95.9 million, or 27.7% of revenues. Notably, the county has substantial financial flexibility in other governmental funds, including \$27.8 million in its tax rate funds (funds where it could lower tax rates to provide additional support elsewhere) and \$48.3 million in available resources in other governmental funds.

LIQUIDITY

Audited 2016 financial figures show an ending net cash position of \$123.3 million in the operating funds (General and Debt Service funds), which is substantially higher than prior years and represents 35.6% of operating funds revenues.

The county issues tax and revenue anticipation notes (TRAN, rated MIG 1) at mid-year to meet cash-flow needs, since property taxes are received in November and December. Notes expected to be issued in July 2018 for \$55 million are supported by the county's strong ending cash position, positive projected cash margin at maturity, and the composition of pledged receipts from the county's General, Tax Administration and Library funds. In addition, conservatively managed financial operations continue to result in sufficient financial flexibility and satisfactory liquidity for the county's operations, and actual ending cash typically meets or exceeds projections.

The July 2018 borrowing equates to a moderate 12.7% of projected 2018 combined receipts, which is in-line with amounts borrowed in prior years. The county covenants to appropriate taxes and revenues sufficient to repay the notes on or prior to December 1, 2018, resulting in a dollar-weighted average set-aside of just under one month. Positively, the county intends to set-aside funds as early as November 15th; the county has numerous other funds, not pledged to the 2018 notes, that also receive property tax receipts in amounts more than sufficient prior to this date, as well as the covenanted set aside date. The note proceeds will be held by the county and invested so as to be readily available. The county's funds are invested according to stringent requirements set forth by the Utah Money Management Act; Moody's believes this poses limited risk to note repayment.

Debt and pensions: Modest debt burden and manageable, largely stable pensions

The county's debt burden is manageable, with net direct debt equal to just 0.37% of 2017 full value and 1.5 times operating funds revenues. In addition to \$191.3 million in general obligation bonds (as of July 2018), the county has \$58.4 million in lease revenue bonds issued through its Municipal Building Authority which were used to finance the construction of a public works building, a senior center, and a library, all of which are cross-collateralized under a master lease indenture. Current debt service on these lease revenue bonds is approximately \$7 million per year, or a manageable 2% of 2016 general fund revenues. Although the lease payments are subject to annual appropriation, given the importance of the leased assets and the affordable nature of the payments, Moody's views the risk of non-appropriation as low; additionally, a reserve fund of \$7 million provides added security.

The county's other outstanding debt consists of \$139.2 million in sales tax revenue bonds, \$63.5 million in transportation tax revenue bonds, and \$33.5 million in excise tax transportation bonds, none of which are rated by Moody's. In 2017, the county issued \$44.2 million in bonds supported by tourism-related sales and use taxes (restaurant, motor vehicle rental, and hotel room); the outstanding amount is \$42.3 million as of June 2018. The county anticipates issuing the remaining GO authorization from the November 2016 election (\$46 million) in 2018 or 2019. An additional \$40-\$65 million of lease revenue bonds for the construction of libraries in 2018 or 2019 is possible.

DEBT STRUCTURE

The county's debt consists of fixed-rate obligations that amortize in full by 2037.

DEBT-RELATED DERIVATIVES

The county has no debt-related derivatives.

PENSIONS AND OPEB

The county offers multiple pension plans through the Utah Retirement System (URS). The county's 3-year average of Moody's adjusted net pension liability (ANPL) is \$347.5 million, or a modest 0.2% of 2017 full value and 1.0-times operating revenues. Moody's ANPL reflects certain adjustments we make to improve comparability of reported pension liabilities. The adjustments are not intended to replace the county's or URS's reported liability information, but to improve comparability with other rated entities.

Pension contributions grew 33% since 2012, to \$33.3 million in 2016 across all of the county's operations, however roughly \$14.2 million is paid from enterprise or self-supporting funds. The net pension contributions represent a manageable 5.5% of operating funds revenues in 2016. Combined with debt service, the county's fixed costs represent a manageable 21% of operating revenues.

Positively, Salt Lake County contributed an amount just above its "tread water" requirement in fiscal 2016. This indicator measures the annual government contribution required to prevent the reported net pension liability from growing, under reported assumptions. Contributions above this level cover all net pension liability interest plus the pay down of some principal; this is stronger from a credit perspective compared to contributions below this level.

Management and governance: High institutional framework; prudent policies and practices

Utah Counties have an Institutional Framework score of Aa, which is high. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. The sector's major revenue source is from property taxes. Property tax revenues may be increased by holding a "truth in taxation" hearing. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed and mandated costs are generally less than 25% of expenditures. Utah is a Right to Work state, providing significant expenditure-cutting ability. Unpredictable expenditure fluctuations tend to be minor, under 5% annually.

The county has adopted prudent financial policies and practices. These include a 10% unassigned general fund reserve, as well as a policy of not using derivative products and limiting the use of variable rate products for refunding escrows. The county also established an OPEB trust in April 2014 to begin addressing that long-term liability and has made contributions each year to raise the funding of the plan.

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REPORT NUMBER 1130730

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Japan	81-3-5408-4100
EMEA	44-20-7772-5454

MOODY'S

INVESTORS SERVICE

Rating Action: Moody's assigns MIG 1 to Salt Lake County, UT's TRAN, Series 2018

21 Jun 2018

New York, June 21, 2018 -- Moody's Investors Service has assigned a MIG 1 rating to Salt Lake County, Utah's \$55 million Tax and Revenue Anticipation Notes, Series 2018.

RATINGS RATIONALE

The MIG 1 rating reflects the county's strong general credit characteristics, reasonable cash flow projections, and a manageable borrowing amount.

RATING OUTLOOK

Outlooks are not applicable to short-term cash-flow notes.

FACTORS THAT COULD LEAD TO AN UPGRADE

- Not applicable.

FACTORS THAT COULD LEAD TO A DOWNGRADE

- Deterioration of the county's cash position
- Weakening of the county's general credit profile

LEGAL SECURITY

The notes are secured by the full faith, credit, and resources of all taxable property within the limits of the county.

USE OF PROCEEDS

Note proceeds will be used to support the operating cash-flow needs of county.

PROFILE

Salt Lake County, located in north central portion of Utah (Aaa stable), covers 737 square miles and is the largest county in the state, with 1.1 million residents, or 37% of the state's 3.1 million residents. The county includes the state capital and largest city, Salt Lake City (Aaa stable).

METHODOLOGY

The principal methodology used in this rating was Short-Term Cash Flow Notes published in April 2013. Please see the Rating Methodologies page on www.moody.com for a copy of this methodology.

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