

## **Municipal Bond Credit Report**

Fourth Quarter and Full Year 2018

February 2019

### **Key Takeaways**

- 2018 municipal issuance volumes down 21.6% from 2017; refundings as % of issuance down with the elimination of advance refundings at the end of 2017
- Outstanding stock of municipal loans down 2.3% from peak of \$191.1 billion as issuers shift back to the securities market
- Floating rate note market begins shift from LIBOR to SOFR index at the end of 2018

## **Table of Contents**

Market Summary	. 3
Charts & Data	. 10
Credits	. 24

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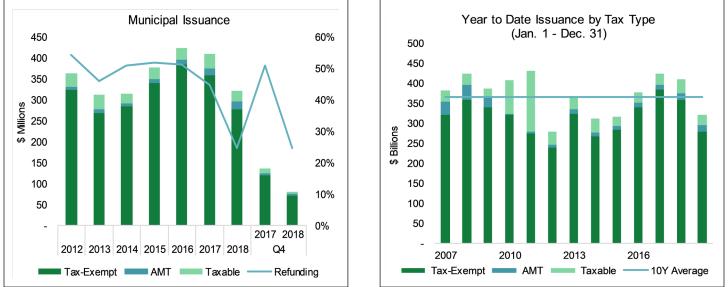
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## **Market Summary**

According to Refinitiv, long-term public municipal issuance<sup>1</sup> volume totaled \$83 billion in the fourth quarter of 2018, a decline of 2.1 percent from the prior quarter (\$83.0 billion) and a decline of 40.5 percent year-over-year (y-o-y) (\$136.4 billion). The steep drop in year-over-year volumes are due to higher than normal issuance volumes in December 2017 resulting from the impending elimination of advance refundings and then-anticipated possible elimination of private activity bonds in 2018 from the passage of the Tax Cuts and Jobs Act of 2017. For the full year, municipal issuance was \$320.2 billion, a decline of 21.6 percent from 2017, and is well under the 10-year average annual volume of \$363.8 billion. For 2019, participants in the SIFMA 2019 Municipal Issuance Survey ("SIFMA Survey") expect issuance to dip slightly to \$317.0 billion.<sup>2</sup>

Tax-exempt issuance totaled \$71.7 billion in 4Q'18, an increase of 0.1 percent quarter-over-quarter (q-o-q) but a decline of 40.0 percent y-o-y; for the full year, tax-exempt issuance totaled \$277.9 billion, a decline of 22.6 percent from 2017. For 2019, SIFMA Survey participants expect tax-exempt issuance to remain unchanged from 2018 volumes at \$275.0 billion.

Taxable issuance totaled \$5.2 billion in 4Q'18, a decline of 28.1 percent q-o-q and 54.6 percent y-o-y; for the full year taxable issuance totaled \$25.1 billion, a decline of 26.5 percent from 2017. For 2019, SIFMA Survey participants expect taxable issuance to also remain unchanged from 2018 volumes at \$25 billion.



Source: Refinitiv

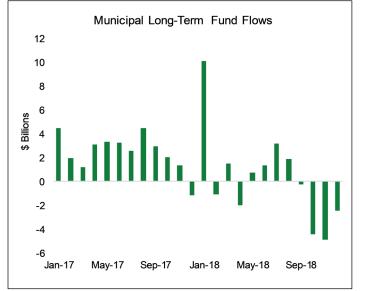
Alternative Minimum Tax (AMT) issuance was \$4.3 billion in 4Q'18, an increase of 5.0 percent q-o-q but a decline of 20.1 percent y-o-y; for the full year, AMT issuance totaled \$17.2 billion, an increase of 11.5 percent from 2017. For 2019, SIFMA Survey participants expect AMT issuance to remain unchanged at \$17 billion.

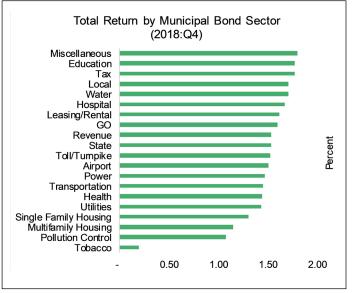
<sup>&</sup>lt;sup>1</sup> All figures and charts exclude private placements.

<sup>&</sup>lt;sup>2</sup> SIFMA 2019 Municipal Issuance Survey, <u>https://www.sifma.org/resources/research/us-municipal-issuance-survey-2019/</u>, December 19, 2018

By use of proceeds, general purpose led issuance volumes in 4Q'18 (\$18.6 billion), followed by primary and secondary education (\$13.2 billion), general acute care hospital (\$7.8 billion), water and sewer facilities (\$5.7 billion), and airports (\$4.6 billion). For the full year, general purpose led issuance volumes (\$82.0 billion), followed by primary and secondary education (\$57.3 billion), water and sewer facilities (\$25.5 billion), general acute care hospital (\$21.5 billion), and higher education (\$20.8 billion).

Refunding volumes declined slightly to 24.6 percent of issuance in 4Q'18 from 28.6 percent in the prior quarter but remain well below the averages in prior years.<sup>3</sup>





Source: ICI (left), ICE BAML (right)

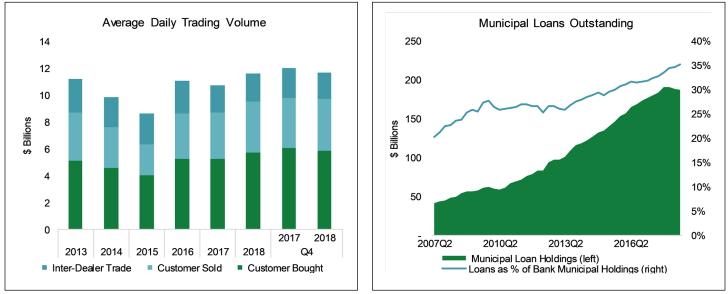
<sup>&</sup>lt;sup>3</sup> Percentages represent both full refundings and the half the dollar amount of deals that contain both refundings and new financing.

### Yields, Inflows, and Total Return

Ratios of 10-year tax-exempt AAA GOs and similar-maturity Treasuries rose slightly in the fourth quarter on a q-o-q basis, averaging 86.1 percent in 4Q'18 from 85.8 percent in 3Q'18 and 86.0 percent in 4Q'17.

According to the Investment Company Institute (ICI), fourth quarter net flow into long-term tax-exempt mutual funds was negative while flow into exchange-traded funds (ETFs) was positive: there was \$11.7 billion of net outflow in 4Q'18 in mutual funds (compared to \$4.8 billion of net inflow in 4Q'18) and \$3.6 billion of net inflow into ETFs (from \$499 million in 3Q'18).

According to the ICE BofAML indices, municipals gained 1.6 percent in total return in the fourth quarter of 2018, up from the 0.2 percent loss in 3Q'18. For the fourth quarter, education, tax, and local authorities outperformed among the individual municipal sectors (a gain of 1.78 percent, 1.77, and 1.71 percent, respectively) while tobacco, pollution control, and multifamily housing underperformed (a gain of 0.20 percent, 1.08 percent, and 1.15 percent, respectively). Build America Bonds (BABs) gained 1.70 percent in 4Q'18, outperforming similarly-rated corporate bonds (total return of 0.7 percent).



Source: EMMA MSRB (left); FDIC, Federal Reserve (right)

### **Bond Insurance**

Insured bonds remained relatively stable, rising slightly from the all time low of 5.6 percent of issuance in 2017 to 5.9 percent of issuance in 2018. At the end of 2018, \$347.03 billion of municipal bonds were insured, representing 9.6 percent of the municipal market.

## **Trading Activity**

Trading activity rose q-o-q to \$11.7 billion daily in 4Q'18, a 2.7 percent increase from 3Q'18 (\$11.4 billion) but a 2.6 percent decline from 4Q'17 (\$12.0 billion). By number of trades, trading activity increased 6.9 percent and 5.5

percent on a q-o-q and y-o-y basis. For the full year, average daily volumes were \$11.6 billion daily on 40,252 trades in 2018, an increase of 7.9 percent and 2.6 percent, respectively, from 2017.

#### **Broker-Dealers and Holdings**

Bank holdings of municipal loans declined slightly in 3Q'18 from the prior quarter to \$186.7 billion (from \$188.6 billion) while holdings of bonds also declined to \$530.7 billion (from \$544.8 billion). The third quarter marks the second decline in a row for bank loans holdings since 2010; tax reform coming into effect in early 2018 and gross-up provisions in bank loans have generally made the bank loan market less attractive to issuers compared to prior quarters.

Broker-Dealers Dropping Municipal Business Lines, 2018	Broker	Dealer
CGIS SECURITIES LLC	*	
COMMERCE STREET CAPITAL, LLC	*	
FILLMORE ADVISORS, LLC	*	
GRF CAPITAL INVESTORS, INC.	*	
HAPOALIM SECURITIES USA, INC.		
HP SECURITIES, INC.	*	
NTEGRITY BROKERAGE SERVICES, INC.	*	
NVICTA CAPITAL LLC	*	
MHA FINANCIAL CORP	*	
MIDKIFF & STONE CAPITAL GROUP, INC.	*	
MMA SECURITIES LLC	*	
MOSS ADAMS SECURITIES & INSURANCE LLC	*	
MUNDIAL FINANCIAL GROUP, LLC	*	
NATWEST MARKETS SECURITIES INC.	*	
NORTHERN LIGHTS DISTRIBUTORS, LLC		
S F SENTRY SECURITIES, INC.	*	
SILICON VALLEY SECURITIES, INC.	*	
SOUTHERN TRUST SECURITIES, INC.	*	
STERLING MONROE SECURITIES, LLC	*	
TALCOTT RESOLUTION DISTRIBUTION COMPANY,		
NC.	*	
WEEDEN & CO.L.P.	*	

Broker-Dealers Adding Municipal Business Li	nes,		
2018		Broker	Dealer
ARKADIOS CAPITAL		*	*
AXIO FINANCIAL LLC		*	*
B. RILEY FBR, INC.		*	*
COLDSTREAM SECURITIES, INC.		*	
MONEX SECURITIES, INC.		*	
PRIVATE CLIENT SERVICES, LLC			*
REVL SECURITIES, LLC		*	
WEALTHFRONT BROKERAGE LLC		*	
WHARTON MIDMARKET SECURITIES INC.		*	
WINTRUST INVESTMENTS LLC		*	
ZEUS FINANCIAL, LLC		*	
Year	2016	2017	2018
FINRA BD - Muncipal Broker Business	1214	1200	1130
FINRA BD - Municipal Dealer Business	520	528	495

446

1288

453

1273

429

1195

#### Source: FINRA

As of the end of 2018, approximately 21 broker dealers exited either the municipal broker or dealer business (not including firms that deregistered entirely from FINRA), while 11 entered either business (not including firms newly registered in 2018). Including closures throughout the year, 1,130 broker-dealers registered with FINRA were involved in the municipal broker business line, a decline of 5.8 percent y-o-y while 495 broker-dealers were involved in the municipal dealer business line, a decline of 6.3 percent, for a total of 1,195 broker-dealers involved in either business (a decline of 6.1 percent y-o-y). Figures echo the overall trend of consolidation within the industry.<sup>4</sup>

FINRA BD - Both Business Lines

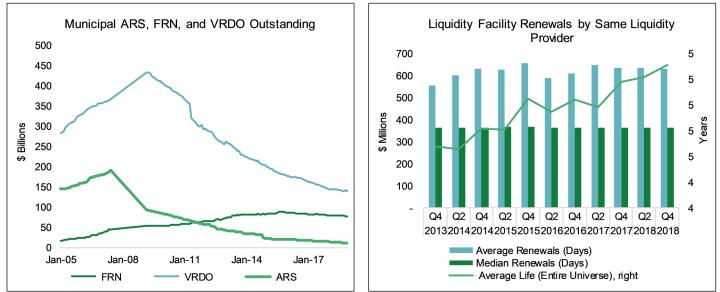
FINRA BD - Total

#### **ARS, FRN and VRDO Update**

Issuance of variable-rate demand obligations (VRDOs), puttable long-term municipal bonds with interest rates that reset periodically, picked up slightly in the fourth quarter. A total of \$2.9 billion was issued in 4Q'18, a 47.8 percent increase q-o-q and an increase of 58.3 percent y-o-y. For the full year, VRDO issuance was \$7.5 billion, a 52.0 percent increase from the low of \$4.9 billion in 2017. Participants in the SIFMA Survey expect VRDO issuance to remain at 2017 lows in 2019 (\$5 billion), however.

<sup>&</sup>lt;sup>4</sup> Figures from FINRA-registered broker-dealers. Does not include MSRB-only registered dealers.

Outstanding volumes continue to decline, with \$139.6 billion outstanding as of the end of December 2018, unchanged q-o-q and a decline of 4.1 percent from December 2017. On net, the only sectors to see growth y-o-y were general obligation (\$1.1 billion) and healthcare (\$968.4 million); however, since the peak of \$442.8 billion in November 2008, the VRDO market has over declined by 68.5 percent.



Source: EMMA MSRB, Bloomberg, SIFMA

The SIFMA Municipal Swap index, a seven-day high-grade market index comprised of tax-exempt VRDOs, ended December at 1.71 percent, averaging 1.63 percent throughout 4Q'18, 28 basis points wider than 3Q'18's average (1.35 percent) and 58 basis points wider than 4Q'17's average (1.05 percent). For the full year, the swap indexed average 1.41 percent, 57 basis points wider than 2017 (0.85 percent).

As of the end of December 2018, \$30.4 billion of VRDO liquidity facilities were scheduled to expire in 2019 with an additional \$25.3 billion in 2020 for a total of \$55.6 billion of liquidity facilities on 2,306 CUSIPs, a manageable rate given the relative stability of liquidity providers in this space: at the end of 2018, 133 bank providers provided liquidity to VRDOs compared to 141 in 2017, with several new US entrants in the market that previously only provided liquidity to municipal tender option bonds. VRDO liquidity facility renewals with the same liquidity provider on approximately 960 unique CUSIPS averaged 631.9 days from the original expiration date, falling from 634.4 days in 2Q'18. The median extension, however, continues to remain unchanged at 1 year (365 days). The average tenor of a liquidity facility of the entire universe of VRDOs was approximately 5.31 years, rising from the 5.22 year average in 2Q'18. However, excluding self-liquidity deals (which typically have an expiration date set to the bond maturity date), the average remaining tenor of liquidity facilities in the entire VRDO universe was 4.09 years, up slightly from the 4.02 years in 2Q'18.

Then	12/31/2017	And Now	12/31/201
Bank	%	Bank	C
BOA	12.1%	BOA	12.2%
JPM	11.1%	JPM	11.5%
WF	8.1%	TD	8.7%
TD	7.1%	WF	7.7%
US Bank	6.8%	US Bank	6.6%
Sumitomo Mitsui	4.9%	Sumitomo Mitsui	5.6%
Tokyo Mitsubishi UFJ	4.9%	Barclays	5.49
Barclays	4.4%	State Street	4.7%
PNC	4.2%	Citi	4.3%
Citi	4.1%	PNC	4.19
Landesbank Hessen-Thrgn	3.9%	Landesbank Hessen-Thrgn	4.0%
RBC	3.9%	Tokyo Mitsubishi UFJ	3.9%
BMO Harris	3.2%	Mizuho	2.9%
State Street	3.2%	BMO Harris	2.89
Mizuho	3.0%	RBC	2.19
Everyone Else	15.1%	Everyone Else	13.69
# of Banks	141	# of Banks	13

Source: EMMA MSRB, Bloomberg, SIFMA

Floating rate bond issuance declined quarter over quarter with \$916.2 million issued in 4Q'18, a 40.8 percent decline q-o-q but a 17.3 percent increase y-o-y. For the full year, \$4.7 billion of floating rate bonds were issued, an increase from the \$3.7 billion issued in 2017. At end-December 2018, \$76.9 billion of floating rate bonds were outstanding, a decline of 1.1 percent q-o-q and a 2.7 percent decline y-o-y. Both the LIBOR and SIFMA swap index continue to remain popular benchmark indices for floating rate issuance, although the recent SOFR deals from the Triborough Bridge and Tunnel Authority may mark a shift toward the SOFR benchmark.

Auction rate securities (ARS) continue to remain in run off mode, with \$9.7 billion of ARS outstanding end-December, a decline of 11.4 percent q-o-q and 31.8 percent y-o-y. From its peak of \$205.6 billion in December 2007, the market has declined by 95.3 percent in size since then.

### State and Government Update

Fewer states and cities experienced rating actions in the fourth quarter compared to the prior quarter:

- October 23 Moody's Investor Service downgraded the State of Vermont's GO bond ratings to Aa1 from Aaa due to low growth prospects and high leverage. Vermont was the only state GO rating to have a rating action in the fourth quarter.
- October 11<sup>th</sup> Moody's downgraded Jacksonville, FL's issuer rating to A2 from Aa2 due to the Vogtle nuclear power plant project dispute between Jacksonville's electric utility, JEA, and Municipal Energy of Georgia (MEAG).
- October 18<sup>th</sup> Standard and Poor's upgraded Atlantic City to B from CCC+ on improved fundamentals.
  Following S&P, Moody's upgraded Atlantic City to B2 from Caa3 on November 1<sup>st</sup>.
- November 27<sup>th</sup> both Standard and Poor's and Fitch downgraded Westchester County, NY due to budget shortfalls and reduced reserves.
- December 19<sup>th</sup> Fitch downgraded the IDR rating of San Antonio, TX to AA+ from AAA due to reduced financial flexibility on the passage of a city charter amendment in November 2018 permitting firefighters to call for binding arbitration during future collective bargaining agreement negotiations.

## Charts & Data

## Long-Term Municipal State Issuance, 4Q'18

lowa      669.9      245.8      424.1      -      618.9      51.0      507.6      -      146.3      120        Kanasa      661.9      1285.0      57.0      1228.0      -      127.2      14.7      127.9      -      -      50.0        Louisiana      642.3      32.8      609.5      -      604.9      37.3      383.7      -      -      256.8        Maine      305.0      77.4      227.6      -      305.0      77.3      260.8      -      57.3      130.0        Marjand      1.481.1      99.06      470.1      529.5      3.6      673.0      123.0      165.7      -      416.9      435.7        Monsota      2.377.1      89.0      1.477.5      60.8      1.233.6      162.7      1.047.7      70.0      616.5      302.8        Manssotin      1.034.3      323.9      710.4      1.022.4      8.9      566.1      -      50.6      -      -      -      -      -      -      -      -      -      -			Bond	Туре		Тах Туре			Fundin	д Туре	
State      O.O.      Revenue      Attri Tax Exemp      Tax babs      Financing Balanding      Refunction Balanding      Refunction Balanding        Atabama      83.3      6.3.1      -      577.7      553.1      -      53.3      -      -      20.4      43.3      -      53.3      -      -      20.4      43.3      -      53.3      -      53.3      -      20.4      43.4      -      50.3      -      50.3      -      20.2      22.5      20.0      -      20.0      -      20.0      20.0      -      20.0      -      20.0      -      20.0      -      20.0      -      20.0      -      20.0      -      77.66      -      20.0      -      77.67      59.67      20.0      -      77.67      59.67      20.0      -      77.7      14.00      -      77.77      14.00      77.7      14.00      77.7      14.00      77.7      14.00      77.7      14.00      77.7      14.00      77.7      14.00      77.7      12.0      77.7      <								New			
Anstan      83.3	State	Total	G.O.	Revenue	AMT	Tax-Exempt	Taxable	Financing	Refinancing		Refunding
American Sanca      503      -      503      -      503      -      2229      228.1        Atanas      382.0      96.0      286.0      -      333.9      47.1      306.7      -      24.5      50.9        Calornia      10.064.9      228.4      7.77.0      556.7      97.46.0      350.3      7.72.6      -      24.5      50.9        Calornia      10.064.9      228.4      7.77.1      556.7      30.6      1.485.0      -      227.0      1450.0        Calornia      350.4      9.2      1.362.1      2.27.5      357.7      30.0      3.055.5      112      2.7.7.2      -      2.27      35.5        Dalaxard      360.1      2.25      3.57.7      30.0      3.055.5      112      2.7.7.3      -      2.7.7      385.7        Garan      0      43.3      122.6      -      165.2      -      143.8      -      -      2.6.6      1.00.2      -      1.46.8      1.02.7      1.46.8      1.02.7      1.46.8      1.02.7      1.46.8 </td <td>Alabama</td> <td>432.8</td> <td>240.8</td> <td>192.0</td> <td>-</td> <td></td> <td>55.1</td> <td>376.4</td> <td>-</td> <td>12.0</td> <td>44.4</td>	Alabama	432.8	240.8	192.0	-		55.1	376.4	-	12.0	44.4
Areana      14009      677:1      1262.8      287.8      1518.8      34.5      1,365.9      -      222.9      252.1        California      10.064.9      2.84.8      7.770.1      559.7      9.74.0      39.9      7.725.6      -      0866      1.95.8      1.457.5      2.83.5      1.456.5      -      0.85.6      1.95.8      1.457.5      2.83.5      1.457.5      2.83.5      0.33.4      -      8.50.7      1.42.5      5.57.5      2.83.5      1.447.5      2.83.5      1.41.2      0.57.7      8.55.5      1.12.55.0      0.62.2      2.73.2.9      -      3.27.4      8.57.6      7.85.6      0.62.2      2.73.2.9      -      2.27.4      8.55.7      7.85.7      7.85.7      7.85.7      7.85.7      0.66.2      0.77.3.1      1.25.5      0.62.2      7.33.3      -      2.27.4      8.57.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.7      0.55.5.7      0.55.7      0.55.7 <td>Alaska</td> <td></td> <td>83.3</td> <td>-</td> <td>12.1</td> <td></td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>-</td>	Alaska		83.3	-	12.1		-		-	-	-
Arkanasa      3820      960      2860      -      3349      47.1      3067      -      424.5      90.90        Calierina      10.0649      2.284.8      7.77.1      555.9      97.46.0      359.3      7.72.6      -      92.66.0      359.3      7.72.6      -      92.66.0      1.95.8      Colorado      -      2.267.0      14.85.5      2.89.0      5.83.4      -      5.85.0      -      2.273.9      -      2.273.9      -      2.272.9      -      2.77.7      3.94.0      -      7.07      3.94.0      -      3.84.0      -      7.07      3.94.0      -      7.07      3.94.0      -      7.07      3.94.0      -      7.07      3.94.0      -      2.72.3      -      2.27.2      9.27.4      3.94.0      -      7.07      3.94.0      -      -      1.92.7      1.94.8      -      -      7.07      3.94.0      -      2.27.2      9.27.2      -      1.48.3      1.94.2      -      1.27.5      3.96.0      -      -      -      -      -			-		-		-		-	-	-
Catiomina      10.6649      2.594.8      7.770.1      596.7      9.746.0      356.3      7.726.6      9.86.8      1.951.4        Connecticut      1.495.6      359.3      1.136.3      9.2      1.487.5      2.89      593.4      -      286.8      -      286.8      -      286.8      -      287.4      1.7      2.26      -      583.4      -      380.4      -      386.7      1.7      1.99.9      -      -      7.73.5      9.93.4      -      383.6      -      286.8      -      1.99.9      -      -      7.72.5      -      227.4      335.7      335.7      335.7      -      227.4      335.7      -      27.4      335.7      -      27.4      335.7      -      2.27.4      335.7      -      2.27.4      335.7      -      2.27.4      335.7      -      2.27.4      345.8      1.407.2      -      1.48.3      1.407.2      -      1.46.3      31.0      2.20.7      1.48.6      31.0      2.20.7      1.48.6      31.0      2.20.7      1.48.6		1			287.6				-		
Calorado Connectual      1 9100      707.1      1 203.8      16.0      1.756.4      1385      1.495.6      287.0      1490.5        District Oclumbia      380.4      -      380.4      -      348.7      1.7      29.8      850.4      -      858.8      -      20.7      77.7        Calorado      3.601.2      22.8      3.578.7      300.6      3.059.5      181.2      2.72.2      3.27      857.7        Calorado      0.0      -      1.285.0      562.2      2.72.4      9.32.7      434.8        Calorado      0.0      -      1.285.0      562.2      2.72.4      9.40.6      9.00.8      9.44.81.8      1.01.0      2.27.2      9.44.68.3      1.02.2      1.43.8      -      -      2.25.2      0.32.7      9.46.6      60.6      9.0.6					-				-		
Connectudi      1.495,0      395,0      1.136,3      9.2      1.487,5      2.28      959,4      -      850,1      550,7        Delaware      246,6      37,0      209,6      -      246,6      -      169,9      -      77,7      732,0      -      77,7      385,7        Georgia      1.341,2      134,7      1.206,5      30,69,5      161,2      2,72,2      9,27,4      386,0      -      77,8      385,7        Georgia      1.341,2      1.347,6      4.76,0      500,8      4.461,8      1.010,1      3,217,2      -      1.48,8      1.000,7      -      1.466,9      50,0      50,6 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>									-		
District Columbia      3504      -      3504      -      348.7      1      291.6      -      68.8      -        Florida      3.6012      22.5      3.578.7      300.6      3.059.5      181.2      2.732.9      -      32.7      83.44        Garam      0.0      -      1.265.0      562.2      97.3      -      27.4      83.40        Hawaii      0.0      -      1.662.4      1.011.1      3.172.7      -      1.48.8      -      -      2.25        Illinols      6.092.6      1.374.6      4.718.0      600.8      4.48.15      1.010.1      3.317.7      -      1.48.8      1.012.2        Indiana      1.285.0      3.578.7      1.28.0      -      1.167.4      6.76      1.090.2      -      1.48.8      1.012.1      3.147.2      -      1.48.8      1.012.2      -      1.48.9      1.022.2      -      1.030.7      -      2.50.8      -      5.0.6      -      5.0.6      -      5.0.6      -      5.0.6      -      5.0.6      -									-		
Delaware      2466      370      2006      -      2466      -      1003      -      -      77.7        Gaorgin      1,341.2      134.7      1,205.5      37.7      306.3      3069.5      112.2      -      1,285.0      56.2      97.3      -      27.4      34.6        Hawaii      0.0      -      1,285.0      56.2      97.3      -      27.4      34.6      98.6        Hinois      6.062.6      1,37.4      4.718.0      600.8      4.481.8      1010.1      32.17.2      -      1,488.3      14.07.2        Illinois      6.069.9      24.6.8      42.41      -      616.9      50.76      -      146.3      160.6        Kanas      681.9      386.9      27.5      4.06      57.3      33.83.7      -      225.8        Abarian      363.0      77.4      27.76      4.07.9      -      -      6.5      30.50      -      6.61.5      18.3      2.1        Kanas      2.37.8      7.1228.6      -      13.77.7      5.			359.3		9.2				-		52.0
Pindra      3.0012      22.5      3.77.7      3.00.6      3.059.5      152.2      2.72.9      -      32.7      435.7        Guam      0.0      -      1.285.0      55.2      973.3      -      2.74      436.6        Hawaii      0.0      -      1.285.0      55.2      973.3      -      2.74      436.6        Itaho      166.2      4.33.3      12.9      -      166.2      -      143.8      -      -      2.25.5        Illinois      6.602.6      4.43.3      12.00      -      1.167.4      67.9      1.500.2      -      54.6      100.5        Gava      6.819      306.9      2.25.5      -      1.167.4      67.7      4.6      61.5      -      3.25.8      -      55.0      -      55.0      -      55.0      -      55.0      -      55.0      4.45.3      150.0      70.0      61.65      -      55.0      -      55.0      4.45.3      150.0      70.0      70.0      70.0      70.0      70.0      70.0			37.0				1.7		-	50.0	- 76 7
Georgia Gauni      134.12      134.7      1205.5      1225.0      973.3      -      27.4      340.6        Hawai      0.0      -      -      166.2      -      1428.0      -      225.5        Hinois      6.092.6      1.374.6      4.718.0      600.8      4.481.8      1.010.1      3.217.2      -      1.468.3      1.107.2        Ininian      1.235.3      224.6      1.330.7      -      1.167.4      67.9      1.090.2      55.6      997.3      -      1.268.3      99.1        Kanas      668.9      245.8      424.1      -      618.9      57.0      1.270.2      1.47      1.279.9      -      -      5.5        Louisiana      642.3      3.2.8      509.5      -      604.9      3.7.3      383.7      -      258.6        Markand      1.481.0      930.9      550.1      4.44      1.344.1      55.5      3.00.0      1.320.7      93.6      6.40.4        Markand      1.230.7      1.653.1      1.67.7      5.02.2      5.06.6      -					360.6		181.2			32.7	
Guam      0.0      43.3      122.9      -      166.2      -      143.8      -      -      22.5        Idaho      1.025.3      204.6      1.037.6      1.062.8      1.074.6      1.037.6      1.075.6      1.075.6      1.075.6      1.075.6      1.075.7      1.075.7      1.075.7      1.090.2      -      5.6.6      905.5        Kanasa      6619.9      245.5      7.0      1.225.0      -      677.2      4.6      661.5      -      1.8.3      1.107.4      1.279.9      -      -      5.5        Louisiana      642.3      32.8      600.5      -      664.9      3.7.3      383.7      -      -      25.8.6        Mayand      1.481.0      330.9      550.1      4.0      1.384.1      96.0      -      5.0      3.0.0      1.582.7      -      41.6.8      43.5.0      -		- /	-						-		
Hawaii      0.0      4.3      122.9      6.0      166.2      1.4.3      1.4.5      1.4.6.3      1.4.0.5        Hinois      6.09.26      1.3.7.4      4.7.160      600.8      4.481.8      1.0.01.1      3.2.17.2      1.4.68.3      1.407.3        Kanase      6619.9      242.6      4.24.1      -      618.9      51.0      50.76      -      14.3.3      1.007.2        Kanases      6619.9      242.6      4.24.1      -      618.9      51.0      50.76      -      14.3.3      1.02.7      -      50.0        Kantucky      1.285.0      57.0      1.22.00      -      1.270.2      1.4.7      1.279.9      -      -      50.0        Maine      305.0      77.4      22.76      -      305.0      -      52.6      1.38.3      1.8.0.2      -      42.5      3.6      873.0      123.0      790.3      -      73.3      130.0        Markand      1.494.1      34.9      1.477.5      80.8      2.137.6      10.24.7      -      4.45.5      3.24.5 <td></td> <td></td> <td></td> <td>.,</td> <td></td> <td>.,</td> <td></td> <td></td> <td></td> <td></td> <td></td>				.,		.,					
tiaho      1662      43.3      1229      -      1662      -      143.8      -      -      225        Indiana      1,235.3      204.6      1,307.0      -      1,467.4      679      1,090.2      -      56.6      905.5        Kanasa      661.9      328.9      225.6      -      677.2      4.6      661.5      -      1.8.3      1.407.2        Kanucky      1,285.0      57.0      1,228.0      -      677.2      4.6      661.5      -      1.8.3      1.2.5.0        Louisiana      642.3      32.8      600.5      -      667.3      1.333.1      -      -      -2.58.6        Masachusetts      999.6      470.1      522.5      3.6      673.0      123.0      700.3      -      7.9.3      130.0        Mchigan      2,435.2      617.5      1,477.7      659.3      1,475.9      300.0      1,582.7      -      416.8      435.3        Masseripit      491.3      344.8      1,475.5      338.3      153.0      191.2      489.3	-										
Indiana      1235.3      204.6      1030.7      1167.4      67.9      1090.2      56.6      905.2        Kansas      681.9      366.9      255.8      424.1      -      618.9      57.0      1270.2      14.7      1279.9      -      -      55.0        Kansas      681.9      328.8      600.5      -      677.2      14.6      661.5      -      143.3      22.0        Louisiana      642.3      32.8      600.5      -      604.9      37.3      383.7      -      -      2258.0      -      62.8      52.2      -      -      62.86      147.5      50.0      -      20.7      70.3      -      72.8      -      -      22.87.1      Notes at			43.3	122.9	-	166.2	-	143.8	-	-	22.5
Indiana      1,253.3      204.6      1,030.7      -      1,167.4      67.9      1,090.2      -      54.6      99.5        Kansas      661.9      386.9      295.0      -      677.2      4.6      661.5      -      146.3      10.0        Kansas      661.9      1282.0      -      1270.2      14.7      1279.9      -      -      226.8        Louislana      642.3      328.6      609.5      -      604.9      37.3      383.7      -      -      -      226.8        Mayand      1481.0      930.9      550.1      40.4      1384.1      55.5      1383.1      -      96.0      -      -      226.8      -      416.9      435.7        Mesachussinpi      2,277.1      890.6      147.7      650.8      147.5      80.8      2133.6      162.7      1.064.4      43.57      10.8      416.5      302.8      108.6      165.5      30.2.8      10.8      10.8      10.8      10.8      10.8      10.8      10.8      10.8      10.8			1,374.6	4,718.0	600.8	4,481.8	1,010.1	3,217.2	-	1,468.3	1,407.2
Kansas      6819      386.9      295.0      -      677.2      4.6      661.5      -      18.3      2.1        Kenucky      1.285.0      57.0      1.228.0      -      1270.2      14.7      1.279.9      -      -      50.0        Louisiana      642.3      32.8      609.5      -      609.6      -      365.0      -      250.8      -      250.8      -      250.8      -      250.8      -      250.8      -      460.0      -      778.3      310.0      -      778.3      180.0      -      778.3      140.0      152.5      3.6      873.0      123.0      770.4      0.6      165.5      30.0      1.582.7      -      416.9      435.7        Minssouth      1.034.3      323.9      710.4      -      1.025.6      8.9      566.1      165.5      30.2.8      50.6      44.0      7.03.9      1.50.0      1.65.5      30.2.8      50.6      44.0      7.03.9      1.50.0      1.77.1      83.0      1.65.5      30.2.8      1.66.1      -	Indiana	1,235.3	204.6	1,030.7	-	1,167.4	67.9	1,090.2	-	54.6	90.5
Kentucky      12850      57.0      1228.0      1272.0      14.7      1279.9      -      50.0        Maine      305.0      77.4      227.6      -      306.0      -      250.8      -      250.8        Maine      305.0      77.4      227.6      -      305.0      -      250.8      -      55.0      133.1      -      96.0      -      250.8      -      77.3      310.0        Massachusets      999.6      470.1      520.5      3.6      37.30      1780.3      -      76.3      130.0        Maneoda      2.377.1      899.6      1.477.5      659.3      1.475.9      300.0      1.582.7      -      74.0      0.615.5      302.8        Massauri      1.034.3      323.9      710.4      -      1.022.4      8.9      566.1      -      65.6      - <td< td=""><td>lowa</td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td>16.0</td></td<>	lowa				-				-		16.0
Louisina      642.3      3.2.8      609.5      -      60.49      37.3      33.7      -      -      256.8        Marjand      1.481.0      930.9      550.1      40.4      1.384.1      565      1.383.1      -      86.0      -        Massachusetts      930.9      470.1      529.5      3.6      673.0      123.0      790.3      -      704.0      61.5        Minnesota      2.435.2      617.5      1.817.7      659.3      1.475.9      30.00      1.582.7      -      416.9      435.7        Minnesota      2.377.1      899.6      1.477.5      80.8      2.33.8      182.7      1.044.7      -      704.0      615.5      302.8        Mississippi      491.3      342.9      710.4      -      1.025.4      8.9      566.1      -      165.5      302.8        Newska      864.5      153.3      711.2      -      849.3      152.7      74.0.9      -      56.6      64.0      175.9      -      -      -      -      -      178.7 </td <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td>18.3</td> <td></td>					-				-	18.3	
Maine      305.0      77.4      227.6      -      305.0      -      25.8      -      54.2      -        Margand      1,481.0      930.6      560.1      40.4      1,384.1      56.5      1,383.1      -      98.0      -        Minkagan      2,435.2      617.5      1,817.7      650.3      1,475.9      300.0      1,582.7      -      416.9      435.7        Minnesota      2,377.1      899.6      1,477.5      80.8      2,133.6      162.7      -      416.9      435.7        Missispipi      491.3      349.8      141.5      -      333.3      153.0      491.3      - <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td>					-				-	-	
Maryand      1.4810      930.9      550.1      40.4      1.384.1      56.5      1.383.1      -      98.0      -        Messachusetts      9996      470.1      5295      3.6      673.0      125.0      790.3      -      973.3      130.0        Michigan      2.435.2      617.5      1.817.7      659.3      1.475.9      300.0      1.582.7      -      416.9      435.7        Missociut      1.034.3      323.9      710.4      -      338.3      152.0      491.3      -					-		37.3		-	-	258.6
Massachusetts      999.6      470.1      529.5      3.6      873.0      123.0      790.3      -      79.3      130.0        Meridgan      2,437.1      899.6      1,477.5      653.3      1,475.9      300.0      1,582.7      -      704.0      618.5        Messouri      1,034.3      332.9      710.4      -      1,025.4      8.9      566.1      -      165.5      302.8        Montana      50.6      10.6      40.0      -      50.6      -							-		-		-
Michigan      2.435.2      617.5      1.817.7      6653.3      1.475.9      300.0      1.882.7      -      416.8      435.7        Minnesota      2.377.1      899.6      1.477.5      80.8      2.133.6      162.7      1.054.7      -      704.0      618.5        Mississippi      491.3      332.9      710.4      -      1.025.4      8.9      566.1      - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td>									-		-
Mamesola Mississippi      2,377.1      899.6      1,477.5      80.8      2,133.6      162.7      1,064.7      704.0      618.5        Mississippi      491.3      349.8      141.5      -      338.3      153.0      491.3      -									-		
Mississippi    491.3    349.8    141.5    -    338.3    153.0    491.3    -    -      Missouri    1,034.3    323.9    710.4    -    1,025.4    8.9    566.1    -    165.5    302.8      Nebraska    864.5    153.3    711.2    -    849.3    152.2    740.9    -    50.6    - <t< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td>-</td><td></td><td></td></t<>						-			-		
Massouri    1.034.3    32.9    710.4    -    1.025.4    8.9    566.1    -    165.5    302.8      Montana    50.6    10.8    40.0    -    50.6    -    50.6    -    <					80.8				-	704.0	018.5
Montana      506      106      400      -      506      -      506      -      -      -        Newtada      1098.6      800.4      298.2      -      1098.6      -      770.9      -      506      -      137.1      183.2        New Jampshire      176.9      85.2      91.7      -      94.4      82.6      176.9      - <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>165.5</td><td>302.8</td></td<>									-	165.5	302.8
Nebraska      884.5      153.3      711.2      -      849.3      15.2      740.9      -      56.6      64.0        Newda      1.098.6      800.4      298.2      -      1.098.6      .      778.3      -      137.1      183.2        New Jarsey      3.624.8      506.4      3.118.4      -      3.554.2      70.6      777.0      -      1078.0      1.773.8        New Jersey      3.624.8      506.4      3.118.4      -      3.554.2      70.6      773.0      -      1.078.0      1.173.8        New York      10.549.5      3.246.4      7.303.1      58.8      9.399.9      1.090.8      6.816.2      -      3.458.2      275.1        North Carolina      1.642.1      188.2      1.453.9      -      1.25      -      83.7      718.8        Orbio      2.117.4      952.1      1.166.3      -      2.03.7      83.7      1.670.1      -      318.0      122.5      -      837.0      122.7      7.55        Oregon      1.017.8      566.3      <							0.5		_	100.0	- 302.0
Newda      1.098.6      800.4      298.2      -      1.098.6      -      776.3      -      137.1      183.2        New Jarsey      3.624.8      506.4      3.118.4      -      94.4      82.6      176.9      -      18.2      1.453.9      -      -      1.578.7      63.5      810.2      -      3.458.2      275.1      -      63.7      718.3      -      2.03.7      75.5      -      63.7      118.0      122.7      75.5      -      63.6      1.45.1      -      2.01.6      146.0      -					-		15.2		-	59.6	64.0
New Jersey      3,624.8      506.4      3,118.4      -      3,554.2      70.6      773.0      -      1,078.0      1,773.8        New Mexico      322.5      17.8      304.7      -      322.5      -      310.6      -      -      11.8        New York      10.549.5      3.246.4      7.303.1      58.8      9.399.9      1.090.8      6.616.2      -      3.47      7773.8        North Carolina      1.642.1      1.88.2      1.453.9      -      1.578.7      63.5      810.2      -      34.7      797.3        North Dakota      168.1      41.4      126.7      -      168.0      -      12.5      -      83.7      71.8        Ohio      2,117.4      962.1      1.165.3      -      2.033.7      83.7      1.670.1      -      318.0      129.3        Oregon      1.017.8      566.3      451.5      -      803.0      21.4      670.2      -      201.6      146.0        Pennsykania      1.557.9      549.8      1.308.1      -      1.771					-		-		-		183.2
New Mexico      322.5      17.8      304.7      -      322.5      -      310.6      -      -      118        New York      10,549.5      3,246.4      7,303.1      58.8      9,399.9      1,090.8      6,816.2      -      3,458.2      275.1        North Carolina      1,642.1      188.2      1,453.9      -      1,578.7      63.5      810.2      -      34.7      797.3        North Dakota      168.1      41.4      126.7      -      168.0      -      12.5      -      83.7      71.8        Ohio      2,117.4      952.1      1,165.3      -      2,033.7      83.7      1,670.1      -      318.0      129.3        Oklahoma      748.2      134.6      613.6      113.4      613.5      21.2      738.0      -      2.7      7.5        Oregon      1,017.8      566.3      451.5      -      803.0      214.9      670.2      201.6      146.0        Puerto Rico      0.0      0      -      -      1,771.4      865.1      1	New Hampshire	176.9	85.2	91.7	-	94.4	82.6	176.9	-	-	-
New York      10,549.5      3,246.4      7,303.1      58.8      9,399.9      1,090.8      6,816.2      -      3,458.2      275.1        North Carolina      1,642.1      188.2      1,453.9      -      1,578.7      63.5      810.2      -      34.7      797.3        North Dakota      168.1      41.4      126.7      -      168.0      -      2.17      318.0      129.3        Okiahoma      2,117.4      952.1      1,165.3      -      2,033.7      83.7      1,670.1      -      318.0      129.3        Okiahoma      748.2      134.6      613.6      113.4      613.5      21.2      738.0      -      2.7      7.5        Oregon      1,017.8      566.3      451.5      -      803.0      214.9      670.2      201.6      146.0        Pennsykwania      1,857.9      549.8      1,308.1      -      1,771.4      865.1      -      49.8      -      -      181.3        South Carolina      1,154.6      134.7      1,019.9      -      1,140.6	New Jersey	3,624.8	506.4	3,118.4	-	3,554.2	70.6	773.0	-	1,078.0	1,773.8
North Carolina      1,642.1      188.2      1,453.9      -      1,578.7      63.5      810.2      -      34.7      797.3        North Dakota      168.1      41.4      126.7      -      166.0      -      12.5      -      33.7      71.8        Okiahoma      2.117.4      952.1      1.165.3      -      2.033.7      83.7      1.670.1      -      318.0      12.5      -      33.7      71.8        Oklahoma      748.2      134.6      613.6      113.4      613.5      21.2      738.0      -      2.7      7.5        Oregon      1.017.8      566.3      451.5      -      803.0      214.9      670.2      -      201.6      146.0        Pennsywania      1.85.7      549.8      1.308.1      -      1.771.4      86.5      1.654.1      -      122.7      81.0        Puerto Rico      0.0      0.0      -      -      486.1      32.9      519.0      -      -      -      -      -      -      -      -      -	New Mexico	322.5	17.8	304.7	-	322.5	-	310.6	-	-	11.8
North Dakota      168.1      41.4      126.7      -      168.0      -      12.5      -      83.7      71.8        Ohio      2,117.4      952.1      1,165.3      -      2,033.7      83.7      1,670.1      -      318.0      129.3        Oklahoma      748.2      134.6      613.6      113.4      613.5      21.2      738.0      -      2.7      7.5        Oregon      1,017.8      566.3      451.5      -      803.0      214.9      670.2      -      22.1      81.1        Puerto Rico      0.0      -      -      1,771.4      86.5      1,654.1      -      122.7      81.1        South Carolina      1,154.6      134.7      1,019.9      -      1,140.6      13.9      325.1      -      68.0      761.5        South Dakota      519.0      155.3      363.7      -      486.1      32.9      519.0      -      -      -      -      -      -      -      -      -      -      -      -      -      -	New York	10,549.5	3,246.4	7,303.1	58.8	9,399.9	1,090.8	6,816.2	-	3,458.2	275.1
Ohio      2,117.4      952.1      1,165.3      -      2,033.7      83.7      1,670.1      -      318.0      129.3        Oklahoma      748.2      134.6      613.6      113.4      613.5      21.2      738.0      -      2.7      7.5        Oregon      1,017.8      566.3      451.5      -      803.0      214.9      670.2      -      201.6      146.0        Pennsylvania      1,857.9      549.8      1,308.1      -      1.771.4      86.5      1,654.1      -      122.7      81.1        Puerto Rico      0.0      -      68.1      -      68.1      -      49.8      -      -      18.3        South Carolina      1,154.6      134.7      1,019.9      -      1,140.6      132.9      519.0      -      -      -      -      68.0      -      -      -      68.0      761.5      505.6      1,554.3      141.1      -      294.5      62.9      753.9      407.7      22.0      1,141.5      -      27.8      1,554.3      14					-		63.5		-		797.3
Oklahoma      748.2      134.6      613.6      113.4      613.5      21.2      738.0      -      2.7      7.5        Oregon      1,017.8      566.3      451.5      -      803.0      214.9      670.2      -      201.6      146.0        Pennsylvania      1,857.9      549.8      1,308.1      -      1,771.4      86.5      1,654.1      -      122.7      81.1        Puerto Rico      0.0      -      -      68.1      -      68.1      -      49.8      -      -      18.3        South Carolina      1,154.6      134.7      1,019.9      -      1,140.6      13.9      325.1      -      68.0      761.5        South Dakota      519.0      155.3      363.7      -      486.1      32.9      519.0      -      -      -      75.5        Texas      5,582.1      2,366.2      3,215.9      776.4      4,735.9      69.9      3,521.2      -      506.6      1,554.3        Utah      1,183.5      187.8      995.7      753.9 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td></td> <td>-</td> <td></td> <td></td>					-		-		-		
Oregon      1,017.8      566.3      451.5      -      803.0      214.9      670.2      -      201.6      146.0        Pennsyvania      1,857.9      549.8      1,308.1      -      1,771.4      86.5      1,654.1      -      122.7      81.1        Puerto Rico      0.0      -      68.1      -      68.1      -      49.8      -      -      183.3        South Carolina      1,154.6      134.7      1,019.9      -      1,140.6      13.9      325.1      68.0      761.5        South Dakota      519.0      155.3      363.7      -      4486.1      32.9      519.0      - </td <td></td> <td>'</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>		'			-				-		
Pennsylvania      1,857.9      549.8      1,308.1      -      1,771.4      86.5      1,654.1      -      122.7      81.1        Puerto Rico      0.0      68.1      -      68.1      -      68.1      -      49.8      -      -      18.3        South Carolina      1,154.6      134.7      1,019.9      -      1,140.6      13.9      325.1      -      68.0      761.5        South Dakota      519.0      155.3      363.7      -      4486.1      32.9      519.0      -					113.4				-		
Puerto Rico      0.0 <th< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></th<>					-				-		
Rhode Island      68.1      -      68.1      -      68.1      -      49.8      -      -      18.3        South Carolina      1,154.6      134.7      1,019.9      -      1,140.6      13.9      325.1      -      68.0      761.5        South Dakota      519.0      155.3      363.7      -      486.1      32.9      519.0      -      -      761.5        Tennessee      1,526.7      981.3      545.4      -      1,435.8      91.0      1,169.4      -      294.5      62.9        Texas      5,582.1      2,366.2      3,215.9      776.4      4,735.9      69.9      3,521.2      -      506.6      1,554.3        Utah      1,183.5      187.8      995.7      753.9      407.7      22.0      1,141.5      -      27.8      141.1        Vermont      58.8      15.7      43.1      5.1      49.0      4.8      58.8      -      -      -      -      -      -      -      -      -      -      -      -      -			549.8	1,308.1	-	1,771.4	86.5	1,654.1	-	122.7	81.1
South Carolina      1,154.6      134.7      1,019.9      -      1,140.6      13.9      325.1      -      68.0      761.5        South Dakota      519.0      155.3      363.7      -      486.1      32.9      519.0      -<				69.1		69.1		10 0			18.2
South Dakota      519.0      155.3      363.7      -      486.1      32.9      519.0      -      -      -        Tennessee      1,526.7      981.3      545.4      -      1,435.8      91.0      1,169.4      -      294.5      62.9        Texas      5,582.1      2,366.2      3,215.9      776.4      4,735.9      69.9      3,521.2      -      506.6      1,543.3        Varmont      1,183.5      187.8      995.7      775.9      407.7      22.0      1,141.5      -      27.8      1.41.1        Vermont      58.8      15.7      43.1      5.1      49.0      4.8      58.8      -			134 7				13.9		-	68.0	
Tennessee      1,526.7      981.3      545.4      -      1,435.8      91.0      1,169.4      -      294.5      62.9        Texas      5,582.1      2,366.2      3,215.9      776.4      4,735.9      69.9      3,521.2      -      506.6      1,554.3        Utah      1,183.5      187.8      995.7      753.9      407.7      22.0      1,141.5      -      27.8      14.1        Vermont      5.88      15.7      43.1      5.1      49.0      4.8      58.8      -					-				-		
Texas      5,582.1      2,366.2      3,215.9      776.4      4,735.9      69.9      3,521.2      506.6      1,554.3        Utah      1,183.5      187.8      995.7      753.9      407.7      22.0      1,141.5      27.8      14.1        Vermont      58.8      15.7      41.1      51      49.0      4.8      58.8      -					-				-	294.5	62.9
Utah    1,183.5    187.8    995.7    753.9    407.7    22.0    1,141.5    27.8    14.1      Vermont    58.8    15.7    43.1    5.1    49.0    4.8    58.8    -					776.4				-		1,554.3
Vermont      58.8      15.7      43.1      5.1      49.0      4.8      58.8      - </td <td>Utah</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>22.0</td> <td></td> <td>-</td> <td></td> <td></td>	Utah						22.0		-		
Virginia      1,013.2      200.2      813.0      -      868.7      144.4      588.4      -      308.5      116.3        Washington      1,523.7      935.0      588.7      -      1,469.1      54.6      1,336.1      -      137.7      49.9        West Virginia      68.3      -      68.3      -      58.3      10.0      68.3      -	Vermont	58.8	15.7	43.1		49.0	4.8	58.8	-	-	-
Washington      1,523.7      935.0      588.7      -      1,469.1      54.6      1,336.1      -      137.7      49.9        West Virginia      68.3      -      68.3      -      58.3      10.0      68.3      -	, e										
West Virginia      68.3      -      68.3      -      58.3      10.0      68.3      -      -      -        Wisconsin      1,967.4      547.3      1,420.1      -      1,828.0      139.4      1,126.6      -      578.7      262.1        Wyoming      0.0      0.0      1      23,943.8      57,257.3      4,337.7      71,659.6      5,204.1      54,674.0      0.0      13,105.5      13,422.4        QoQ      -2.1%      -16.1%      5.2%      5.0%      0.1%      -28.1%      0.5%      N/A      35.9%      -29.0%					-				-		116.3
Wisconsin      1,967.4      547.3      1,420.1      -      1,828.0      139.4      1,126.6      -      578.7      262.1        Wyoming      0.0      23,943.8      57,257.3      4,337.7      71,659.6      5,204.1      54,674.0      0.0      13,105.5      13,422.4        QoQ      -2.1%      -16.1%      5.2%      5.0%      0.1%      -28.1%      0.5%      N/A      35.9%      -29.0%			935.0		-				-	137.7	49.9
Wyoming      0.0        ALL      81,201.1      23,943.8      57,257.3      4,337.7      71,659.6      5,204.1      54,674.0      0.0      13,105.5      13,422.4        QoQ      -2.1%      -16.1%      5.2%      5.0%      0.1%      -28.1%      0.5%      N/A      35.9%      -29.0%					-				-	-	-
ALL      81,201.1      23,943.8      57,257.3      4,337.7      71,659.6      5,204.1      54,674.0      0.0      13,105.5      13,422.4        QoQ      -2.1%      -16.1%      5.2%      5.0%      0.1%      -28.1%      0.5%      N/A      35.9%      -29.0%			547.3	1,420.1	-	1,828.0	139.4	1,126.6	-	578.7	262.1
QoQ -2.1% -16.1% 5.2% 5.0% 0.1% -28.1% 0.5% N/A 35.9% -29.0%			22 0 4 2 0	E7 3E7 3	4 997 7	74 650 0	E 204.4	E4 674 0		12 405 5	12 400 4
			.,			,	-, -			.,	- /
	YoY	-2.1% -40.5%	-16.1% -51.4%	5.2% -34.3%	-20.1%	-40.0%	-28.1% -54.6%	0.5%	-100.0%	-46.6%	-29.0% -76.5%

## Long-Term Municipal State Issuance, 4Q'18, continued

					Coupon Type			
							Mandalala	
				Linked	Variable	Variable	Variable Rate Short	
State	Total	Convertible	Fixed Rate	Rate	Rate Long	Rate No Put	(VRDO)	Zero
Alabama	432.8	-	432.8	-	, -	-	-	-
Alaska	83.3	-	83.3	-	-	-	-	-
American Samoa	50.3	-	50.3	-	-	-	-	-
Arizona	1,840.9	-	1,745.3	50.5	45.1	-	-	-
Arkansas	382.0	-	382.0	-	-	-	-	-
California	10,664.9	-	9,439.8	82.4	906.5	-	129.9	106.3
Colorado	1,910.9	-	1,886.3	-	-	-	20.0	4.7
Connecticut	1,495.6	-	1,398.0	-	38.3	-	59.3	-
District of Columbia	350.4		350.4	-	-	-	-	-
Delaware	246.6		246.6	-	-	-	-	-
Florida	3,601.2	42.0	3,382.8	74.0	36.0	-	66.5	-
Georgia	1,341.2	-	1,142.0	-	71.0	-	128.2	-
Guam	0.0							
Hawaii	0.0							
ldaho	166.2		166.2		-	-	-	-
Illinois	6,092.6	-	5,883.1	51.4	27.3	-	130.8	-
Indiana	1,235.3	-	1,194.6	32.7	-	-	-	8.0
lowa	669.9	-	440.2	-	-	-	229.7	-
Kansas	681.9	-	656.0	-	-	-	25.8	-
Kentucky	1,285.0	-	432.1	100.4	752.5	-	-	-
Louisiana	642.3	-	629.3	-	13.0	-	-	-
Maine	305.0	-	305.0	-	4.7	-	-	-
Maryland	1,481.0	-	1,470.2	6.1		-	-	-
Massachusetts	999.6 2,435.2	-	911.2 2,435.2	33.7	20.8	-	34.0	-
Michigan Minnesota	2,435.2	-	2,435.2	- 35.0	- 74.9	- 20.0	- 387.0	-
	491.3	-	457.3	35.0	34.0	20.0	307.0	-
Mississippi Missouri	1,034.3	7.4	457.3	-	34.0	-	-	-
Montana	1,034.3	7.4	50.6	-	-	-	-	-
Nebraska	864.5	-	864.5	-	-	-	-	-
Nevada	1,098.6	-	1,098.6	-	-	-	-	-
New Hampshire	176.9	1 1	96.9				80.0	
New Jersey	3,624.8	-	3,515.2	-	109.6	_		-
New Mexico	322.5	-	322.5	-		-	-	-
New York	10,549.5	-	9,939.3	-	184.0	-	411.3	15.0
North Carolina	1,642.1	-	1,226.5	100.0	115.6	_	200.0	-
North Dakota	168.1	-	168.0	-	-	-		-
Ohio	2.117.4	-	1.948.4	50.0	24.4	-	94.6	-
Oklahoma	748.2	-	735.6	-	12.5	-	-	-
Oregon	1,017.8		767.9	-	40.5	-	187.0	22.5
Pennsylvania	1,857.9	-	1,735.1	70.0	25.9	-	26.9	-
Puerto Rico	0.0							
Rhode Island	68.1		68.1	-	-	-	-	-
South Carolina	1,154.6	-	972.0	-	7.5	-	175.0	-
South Dakota	519.0	-	519.0	-	-		-	-
Tennessee	1,526.7	-	1,486.8	-	40.0	-	-	-
Texas	5,582.1	-	4,992.6	30.0	233.6	-	325.0	0.9
Utah	1,183.5		1,183.5	-	-	-	-	-
Vermont	58.8		58.8	-	-	-	-	-
Virgin Islands	0.0							
Virginia	1,013.2		963.1	-	50.0	-	-	-
Washington	1,523.7		1,261.4	200.0	62.4	-	-	-
WestVirginia	68.3		68.3	-	-	-	-	-
Wisconsin	1,967.4	-	1,791.5	-	-	-	175.9	-
Wyoming	0.0							
ALL	81,201.1	49.4	74,241.4	916.2	2,930.1	20.0	2,886.9	157.4
QoQ	-2.1%	N/A	-2.1%	-40.8%	-14.9%	N/A	47.8%	-22.3%
YoY	-40.5%	8.6%	-43.1%	17.3%	9.4%	-55.4%	58.3%	-72.7%

## Long-Term Municipal State Issuance, 2018

		Bond	Туре		Tax Type			Fundin	g Type	
									Refunding	
							New		& New	
State	Total	G.O.	Revenue	AMT		Taxable	Financing	Refinancing		Refunding
Alabama	4,551.4	1,238.6	3,312.8	-	4,290.5	260.9	4,068.9	-	158.3	324.2
Alaska	547.8	380.0	167.8	12.1	445.7	90.0	251.1	-	296.8	-
American Samoa Arizona	50.3 4,199.2	- 1,384.1	50.3 2,815.1	- 287.6	50.3 3,797.9	- 113.7	50.3 3,332.2	-	- 287.4	- 579.6
Arkansas	4,199.2	710.3	2,815.1	207.0	1,552.6	54.5	5,552.2	-	775.2	579.0 144.1
California	45.700.2	16.056.9	29.643.3	3.848.1	36,449,3	5.402.9	26.363.1	-	9.441.6	9.895.6
Colorado	9,752.4	2,661.8	7,090.6	2,379.0	6,778.3	595.2	4,883.1		1,153.0	3,716.3
Connecticut	6,431.6	3,555.4	2,876.2	170.5	5,646.8	614.3	3,926.9	-	1,201.0	1,303.7
District of Columbia	2,179.6	515.7	1.663.9	558.4	1.561.9	59.3	713.6	-	1.132.9	333.1
Delaware	831.0	278.6	552.4	-	584.8	246.2	717.9	-	20.6	92.4
Florida	10,262.7	966.7	9,296.0	418.2	8,722.2	1,122.3	6,818.6	-	839.0	2,605.1
Georgia	6,815.1	2,044.9	4,770.2	54.3	5,991.2	769.6	5,467.5	-	604.4	743.2
Guam	71.4	-	71.4	23.1	30.0	18.3	71.4	-	-	-
Hawaii	2,024.1	1,250.7	773.4	388.6	1,359.1	276.4	1,374.6	-	467.4	182.1
Idaho	980.6	224.9	755.7	-	743.3	237.3	534.7	-	165.5	280.4
Illinois	12,562.6	5,974.3	6,588.3	743.6	9,598.5	2,220.5	6,090.4	-	1,556.9	4,915.3
Indiana	3,532.8	528.5	3,004.3	6.3	3,396.6	129.8	2,925.2	-	110.5	497.0
lowa	2,533.2	1,375.1	1,158.1	74.3	2,303.7	155.2	2,087.7	-	273.5	171.9
Kansas	2,325.5	1,272.6	1,052.9	-	2,296.5	29.1	1,919.8	-	183.2	222.5
Kentucky	5,020.9	217.6	4,803.3	17.9	4,752.9	250.1	4,405.9	-	353.4	261.7
Louisiana Maine	1,505.2 1,240.5	213.9 446.6	1,291.3 793.9	58.3 10.0	1,345.4 1,184.2	101.4 46.3	905.6 1,183.0	-	237.7 54.2	361.8 3.3
Maryland	5,840.9	3,428.1	2,412.8	48.9	5,607.6	184.4	5,487.9	-	236.5	3.3 116.5
Massachusetts	7,637.3	4,189.1	3,448.2	160.0	7,135.2	342.2	5,649.1		977.1	1.011.0
Michigan	6,489.0	2,691.7	3,797.3	789.0	5,181.4	518.6	4,358.3	-	921.1	1,209.6
Minnesota	7,579.7	4,686.0	2,893.7	110.7	7,062.7	406.3	5,709.1	-	947.5	923.1
Mississippi	1,052.5	593.9	458.6	-	884.9	167.6	931.1	-	16.9	104.6
Missouri	3,369.9	1,090.0	2,279.9	-	3,251.6	118.3	2,233.1	-	485.9	651.0
Montana	726.9	244.1	482.8	-	673.1	53.9	499.4	-	207.7	19.8
Nebraska	2,115.4	422.6	1,692.8	32.0	2,067.1	16.3	1,704.0	-	204.6	206.7
Nevada	3,524.0	2,170.3	1,353.7	3.0	3,499.1	21.9	2,755.4	-	137.1	631.5
New Hampshire	689.2	201.0	488.2	106.8	496.9	85.4	437.0	-	-	252.1
New Jersey	11,212.3	2,197.0	9,015.3	430.5	10,464.6	317.1	3,579.0	-	4,299.6	3,333.7
New Mexico	1,674.0	409.2	1,264.8	2.5	1,658.3	13.2	1,010.3	-	225.8	437.9
New York	41,420.2	12,853.0	28,567.2	2,410.6	34,419.0	4,590.6	30,049.3	-	6,103.8	5,267.1
North Carolina	4,874.9	1,684.8	3,190.1	13.1	4,654.0	207.8	3,299.4	-	47.8	1,527.7
North Dakota	905.0	203.5	701.5	-	846.1	58.8	576.2	-	83.7	245.0
Ohio	7,721.4	3,397.5	4,323.9	103.6	7,272.6	345.2	6,134.5	-	744.9	841.9
Oklahoma	4,096.3	1,310.9	2,785.4	113.4	3,138.7	844.2	3,936.9	-	110.5	49.0
Oregon Pennsylvania	3,608.2 12,950.5	2,063.3	1,544.9	240.3 23.5	3,095.5 12,036.4	272.4 890.6	3,103.2 9,363.5	-	315.8 1,235.5	189.2 2,351.5
Puerto Rico	12,950.5	4,224.8	8,725.7	23.5	12,030.4	690.6	9,303.5	-	1,235.5	2,351.5
Rhode Island	701.4	226.4	475.0	86.2	491.4	123.8	562.2		76.0	63.3
South Carolina	3,513.8	765.0	2,748.8	325.0	3,108.7	80.1	2,413.0	-	232.8	868.0
South Dakota	687.7	194.3	493.4	020.0	636.3	51.4	571.8	_	99.0	16.9
Tennessee	4,941.1	2,294.5	2,646.6	119.3	4,698.2	123.6	3,999.3	-	522.9	418.9
Texas	31,415,5	17.542.2	13.873.3	1.531.4	28.861.0	1.023.1	22,972.0	-	3.265.4	5.178.1
Utah	3,010.0	798.3	2,211.7	753.9	2,212.8	43.4	2,617.9	-	269.1	123.1
Vermont	233.2	98.5	134.7	42.2	148.4	42.6	198.2	-	35.0	-
Virgin Islands	0.0									
Virginia	5,572.4	1,593.8	3,978.6	30.0	5,103.0	439.4	3,658.4	-	1,069.3	844.7
Washington	8,792.9	3,982.3	4,810.6	557.3	7,980.5	255.1	6,883.1	-	391.2	1,518.5
West Virginia	2,045.0	800.0	1,245.0	73.5	1,889.5	82.0	1,517.2	-	-	527.9
Wisconsin	7,288.7	3,240.5	4,048.2	16.1	6,684.6	588.0	4,832.5	-	1,301.1	1,155.0
Wyoming	152.0		152.0	-	152.0	-	74.6	-	77.3	-
ALL	320,566.6	120,893.8	199,672.8	17,173.1	278,292.9	25,100.6	219,896.2	0.0	43,953.4	56,716.6

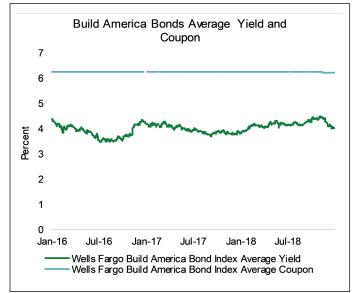
## Long-Term Municipal State Issuance, 2018, continued

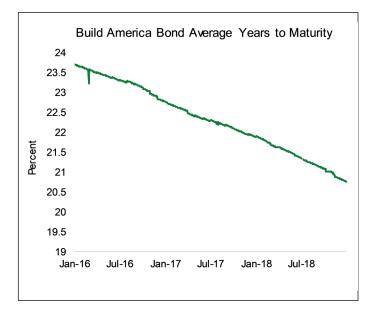
					Coupon Type			
							Variable	
				Linked	Variable	Variable	Rate Short	
State	Total	Convertible	Fixed Rate	Rate	Rate Long	Rate No Put	(VRDO)	Zero
Alabama	4,551.4	-	2,298.7	571.3	1,681.4	-	-	-
Alaska	547.8	-	457.8	-	-	-	90.0	-
American Samoa	50.3	-	50.3	-	-	-	-	-
Arizona	4,199.2	-	4,103.6	50.5	45.1	-	-	-
Arkansas	1,607.2	-	1,591.1	-	16.0	-	-	-
California	45,700.2	59.8	42,613.2	679.7	1,230.1	-	885.8	231.8
Colorado	9,752.4	3.2	9,178.4	37.9	157.4	-	282.4	93.2
Connecticut	6,431.6	-	6,194.0	-	38.3	-	199.3	-
District of Columbia	2,179.6	-	2,145.2	-	34.4	-	-	-
Delaware	831.0	-	831.0	-	-	-	-	-
Florida	10,262.7	42.0	10,025.1	74.0	55.1	-	66.5	-
Georgia	6,815.1	-	4,516.1	665.0	1,496.3	-	137.7	-
Guam	71.4		71.4	-	-	-	-	-
Hawaii	2,024.1		2,024.1	-	-	-	-	
Idaho	980.6		906.9	-	-	-	73.8	-
Illinois	12,562.6		12,302.2	51.4	32.3	-	160.8	15.9
Indiana	3,532.8	-	3,467.6	32.7	7.2	-	17.2	8.0
lowa	2,533.2	-	2,255.9	35.0	12.6	-	229.7	-
Kansas	2,325.5	-	2,152.7	147.0	-	-	25.8	-
Kentucky	5,020.9	-	2,347.8	100.4	2,571.5	-	1.3	-
Louisiana	1,505.2	-	1,476.8	-	13.0	-	-	15.3
Maine	1,240.5	-	1,225.5	-	15.0	-	-	-
Maryland	5,840.9	-	5,821.6	6.1	4.7	-	8.5	-
Massachusetts	7,637.3	-	7,327.6	63.7	20.8	-	225.2	-
Michigan	6,489.0	-	6,348.8	-	-	-	140.2	-
Minnesota	7,579.7	-	6,815.7	70.0	181.5	20.0	387.0	105.5
Mississippi	1,052.5	-	941.6	-	41.0	-	70.0	-
Missouri	3,369.9	7.4	3,149.8	-	58.7	-	154.0	-
Montana	726.9	-	641.9	19.8	-	-	65.3	-
Nebraska	2,115.4	-	2,036.8	-	-	-	78.6	-
Nevada	3,524.0	-	3,449.2	-	-	-	-	74.8
New Hampshire	689.2	-	526.6	82.5	-	-	80.0	-
New Jersey	11,212.3	-	11,026.9	-	185.3	-	-	-
New Mexico	1,674.0	-	1,674.0	-	-	-	-	-
New York	41,420.2	-	38,975.6	100.0	831.3	-	1,498.3	15.0
North Carolina	4,874.9	-	4,443.8	100.0	131.1	-	200.0	-
North Dakota	905.0	-	895.5	-	-	-	9.4	-
Ohio	7,721.4		7,077.0	74.2	253.7	-	315.5	1.1
Oklahoma	4,096.3		4,061.0	-	35.4	-	-	- 1
Oregon	3,608.2		3,122.1	-	40.5	-	217.0	228.7
Pennsylvania	12,950.5		11,957.7	793.9	110.0	-	88.8	- 1
Puerto Rico	0.0							
Rhode Island	701.4		701.4	-	-	-	-	- 1
South Carolina	3,513.8		2,502.2	100.3	736.4	-	175.0	- 1
South Dakota	687.7		687.7	-	-	-	-	- 1
Tennessee	4,941.1	-	4,115.4	-	703.8	-	121.9	-
Texas	31,415.5		29,669.8	279.1	886.6	-	575.0	5.0
Utah	3,010.0	-	2,860.0	-	100.0	-	50.0	-
Vermont	233.2		233.2	-	-	-	-	-
Virgin Islands	0.0							
Virginia	5,572.4		5,023.1	-	294.7	-	254.6	-
Washington	8,792.9	-	8,273.2	428.8	62.4	-	28.6	-
West Virginia	2,045.0		1,833.1	-	73.5	-	138.5	- 1
Wisconsin	7,288.7		6,502.9	199.4	231.6	-	354.8	-
Wyoming	152.0		112.5	20.0	_	-	19.5	- 1
ALL	320,566.6	112.4	295,043.1	4,782.7	12,388.7	20.0	7,426.0	794.3

## Long Term Municipal Issuance by General Use of Proceeds

Use of Proceeds	4Q'17	3Q'18	4Q'18	Q-o-Q	Y-o-Y	2018
Airports	3,342.3	5,209.4	4,577.1	-12.1%	36.9%	16727.1
Assisted Living	544.6	82.9	479.3	478.2%	-12.0%	757.8
Bridges	1,040.3	1,015.7	578.1	-43.1%	-44.4%	2362.3
Childrens hospital	870.6				-100.0%	330.7
Churches Temples and Mosques			12.1			12.1
Civic & convention centers	760.5	2,329.1	711.5	-69.5%	-6.4%	3777.9
Combined utilities	217.6	98.2	586.0	496.7%	169.3%	1311.5
Cont Care Retirement Community	2,087.9	1,479.6	1,470.2	-0.6%	-29.6%	3871.4
Correctional facilities	479.8	373.0	361.4	-3.1%	-24.7%	1340.5
Economic development	4,554.8	1,324.9	1,555.4	17.4%	-65.9%	4951.3
Fire stations & equipment	65.2	66.4	194.8	193.4%	198.8%	444.8
Flood control	516.2	75.0	64.6	-13.9%	-87.5%	368.7
Gas	1,426.8	2,365.0	2,342.6	-0.9%	64.2%	9973.2
General acute care hospital	11,810.4	6,306.8	7,808.0	23.8%	-33.9%	21541.1
General Medical	250.2	115.1	40.4	-64.9%	-83.9%	168.6
General purpose /public improvement	35,647.3	21,059.8	18,602.6	-11.7%	-47.8%	81995.5
Government buildings	670.8	443.5	210.8	-52.5%	-68.6%	1584.4
Higher education	12,299.9	4,267.2	3,870.9	-9.3%	-68.5%	20835
Industrial development	777.3	88.9	237.6	167.3%	-69.4%	750.4
Libraries & museums	255.5	329.6	181.8	-44.8%	-28.8%	733.3
Mass transportation	8,226.8	2,041.6	4,238.2	107.6%	-48.5%	11935.3
Multi family housing	2,879.6	963.3	2,437.6	153.0%	-15.3%	6771.6
Nursing homes	12.5	10.3		-100.0%	-100.0%	50.8
Office buildings		302.4		-100.0%		324.9
Other education	295.1	70.3	48.0	-31.7%	-83.7%	500.5
Other recreation	49.9	162.3	195.4	20.4%	291.6%	561
Parking facilities	183.0	230.9	3.7	-98.4%	-98.0%	337.4
Parks, Zoos & Beaches	350.4	207.3	436.0	110.3%	24.4%	838.4
Police stations & equipment	24.8	38.4	12.7	-66.9%	-48.8%	168.1
Pollution control	208.8	417.1	138.2	-66.9%	-33.8%	836.2
Primary & secondary education	18,268.9	12,983.7	13,169.7	1.4%	-27.9%	57255.6
Public power	4,106.5	868.1	1.664.0	91.7%	-59.5%	5988.9
Sanitation	148.0	46.0	144.3	213.7%	-2.5%	286.5
Seaports /marine terminals	596.1	1,143.0	759.1	-33.6%	27.3%	3901.8
Single family housing	3.378.2	3.537.6	3.288.4	-7.0%	-2.7%	11080.9
Single speciality hospital	312.2	568.7	162.4	-71.4%	-48.0%	785.9
Solid waste	482.7	252.3	625.0	147.7%	29.5%	964.4
Stadiums & sports complexes	776.7	107.1	205.0	91.4%	-73.6%	1729.1
Student loans	167.0	259.1	149.5	-42.3%	-10.5%	1159.4
Telecommunications	79.1	32.4	0.6	-98.1%	-99.2%	201.2
Theatres	79.1	8.6	0.0	-100.0%	-100.0%	152.6
Toll roads, highways & streets	8,053.6	2.629.9	3.947.3	50.1%	-51.0%	15291.9
	0,000.0		3,847.3	-100.0%	-01.0%	91.7
Veterans (excluding housing) Water & sewer facilities	10 12F 7	91.7 8,951.6	5,690.9	-100.0%	-43.8%	25514.4
ALL	10,125.7			-30.4%		
ALL	136,418.4	82,953.8	81,201.2	-2.1%	-40.5%	320,566.1

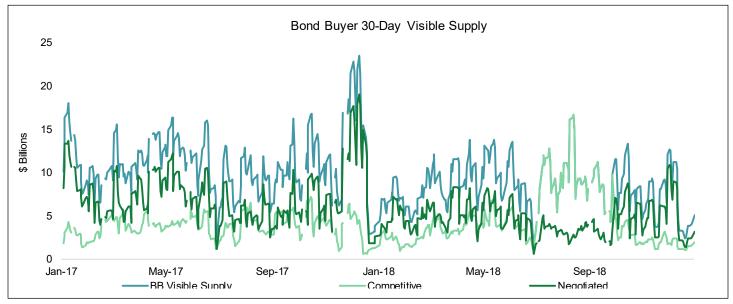
#### **Build America Bonds**



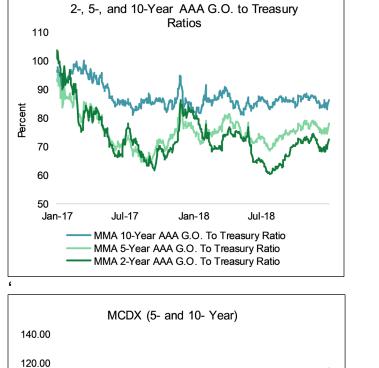


Source: Wells Fargo

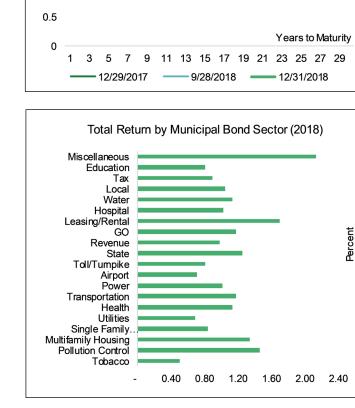
## Supply, Yield Curves, Total Return, Spreads & Ratios



Source: Bond Buyer



### Supply, Yield Curves, Total Return, Spreads & Ratios, continued



MMA Yield Curves

3.5

3

2.5

2 Hercent 1.5

1

Source: MMA (top), Markit (bottom left), ICE BAML (bottom right)

Jul-18

Sep-18

10 Year

Nov-18

Mar-18 May-18

5 Year

100.00

00.08

لم 60.00

40.00

20.00

0.00

Jan-18

## **Trading Summary**

## **Total Number of Trades**

		# of T	rades				Par Amount	(Millions)			
-	Customer Bought	Customer Sold	Inter-Dealer Trade	All Trades	Custo	mer Bought	Customer Sold	Inter-Dealer Trade	All Trades		
2018:Q3	944,571	520,394	925,959	2,390,924	\$	367,099 \$	224,460	\$ 126,305 \$	717,864		
2018:Q4	1,007,238	607,515	982,657	2,597,410	\$	374,323 \$	245,504	\$ 129,197 \$	749,024		
%Change	6.63%	16.74%	6.12%	8.64%		1.97%	9.38%	2.29%	4.34%		
			# of Trades					Par Amount (Millio	ons)		
-	0 - 100,000	100,001 - 500,000	500,001 - 1,000,000	1,000,000+		All Trades	0 - 100,000	100,001 - 500,000 00,001	- 1,000,000	1,000,000+	All Trades
2018:Q3	81%	13%	2%	4%		2,390,924	9%	10%	6%	75% \$	717,864.00
2018:Q4	80%	14%	2%	4%		2,597,410	9%	11%	7%	73% \$	749,024.00
		# of T	rades			-	Par Amount	(Millions)			
	Customer Bought		rades Inter-Dealer Trade	All Trades	Custo	omer Bought		: (Millions) Inter-Dealer Trade	All Trades		
2017	Customer Bought 3,920,928			All Trades 9,845,208	Custo \$	omer Bought 1,319,730 \$		Inter-Dealer Trade	All Trades 2,700,713		
2017 2018		Customer Sold	Inter-Dealer Trade		_		Customer Sold	Inter-Dealer Trade \$ 523,759 \$			
	3,920,928 3,935,555	Customer Sold 2,102,913	Inter-Dealer Trade 3,821,367	9,845,208	_	1,319,730 \$	Customer Sold 857,224	Inter-Dealer Trade \$ 523,759 \$ \$ 522,239 \$	2,700,713		
2018	3,920,928 3,935,555	Customer Sold 2,102,913 2,319,330	Inter-Dealer Trade 3,821,367 3,888,595	9,845,208 10,143,480	_	1,319,730 \$ 1,439,786 \$	Customer Sold 857,224 963,782	Inter-Dealer Trade \$ 523,759 \$ \$ 522,239 \$	2,700,713 2,925,807 8.33%		
2018	3,920,928 3,935,555	Customer Sold 2,102,913 2,319,330 10.29%	Inter-Dealer Trade 3,821,367 3,888,595 1.76%	9,845,208 10,143,480	\$ \$	1,319,730 \$ 1,439,786 \$	Customer Sold 857,224 963,782 12.43%	Inter-Dealer Trade        \$ 523,759      \$        \$ 522,239      \$        -0.29%      \$	2,700,713 2,925,807 8.33%	1,000,000+	All Trades
2018	3,920,928 3,935,555 0.37%	Customer Sold 2,102,913 2,319,330 10.29%	Inter-Dealer Trade 3,821,367 3,888,595 1.76% # of Trades	9,845,208 10,143,480 3.03%	\$	1,319,730 \$ 1,439,786 \$ 9.10%	Customer Sold 857,224 963,782 12.43%	Inter-Dealer Trade \$ 523,759 \$ \$ 522,239 \$ -0.29% Par Amount (Millio	2,700,713 2,925,807 8.33%	1,000,000+ 71% \$	All Trades 2,700,713.00

### **Trades by Sector**

	Education	Health	Utility	Various Purpose	Transportation	Tax-Revenue	Other	Total (Millions)
2018:Q3	15%	10%	11%	10%	8%	9%	33%	\$717,864.00
2018:Q4	16%	12%	11%	10%	10%	9%	32%	\$749,024.00
	Education	Health	Utility	Various Purpose	Transportation	Tax-Revenue	Other	Total (Millions)
2017		Health 11%	Utility 11%	Various Purpose 11%	Transportation 9%	Tax-Revenue 9%	Other 30%	Total (Millions) \$2,700,713.00

## **Trades by Maturity**

			5+ Years to 10	10+ Years to 20		
	1 Year or Less	1+ Year to 5 Years	Years	Years	20+ Years	Total (Millions)
2018:Q3	9%	12%	13%	32%	33%	\$717,864.00
2018:Q4	8%	11%	14%	33%	33%	\$749,024.00
			5+ Years to 10	10+ Years to 20		
	1 Year or Less	1+ Year to 5 Years		10+ Years to 20 Years	20+ Years	Total (Millions)
2017	1 Year or Less 5%	1+ Year to 5 Years 11%				Total (Millions) \$2,700,713.00

## **Trades by Source of Repayment**

		General			
	Revenue	Obligation	Double Barrel	Not Available	Total (Millions)
2018:Q3	67%	25%	2%	6%	\$717,864
2018:Q4	69%	24%	2%	5%	\$749,024
		General			
		General			
	Revenue	Obligation	Double Barrel	Not Available	Total (Millions)
2017	Revenue 69%		Double Barrel 2%	Not Available 0%	Total (Millions) \$2,700,713

## Trades by Coupon Type

	Fixed Rate	Variable Rate	Zero Coupon	Not Available	Total (Millions)
2018:Q3	64%	34%	2%	0%	\$717,864
2018:Q4	68%	30%	2%	0%	\$749,024
	Fixed Rate	Variable Rate	Zero Coupon	Not Available	Total (Millions)
2017	Fixed Rate 63%	Variable Rate 33%	Zero Coupon 4%	Not Available 0%	Total (Millions) \$2,700,713

Source: EMMA MSRB

## Municipal CDS Yield Curve as of December 31, 2018

									QoQ 6M %	QoQ 10Y %
	6M	1Y	2Y	3Y	4Y	5Y	7Y	10Y	Change	Change
CA California	12.6	14.9	19	21.8	26.5	32	43.6	58.4	18%	2%
CT Connecticut	38.2	51.8	64.2	74	83.4	96.2	123.6	158.9	0%	0%
DE Delaware	17.7	20.7	25.3	27	28.4	29.8	37.8	49.9	3%	1%
FL Florida	6.8	10.2	15.9	22.3	28.4	34.2	45.3	57.4	6%	-2%
MA Massachusetts	12.1	13.9	18.1	22.9	28.5	35.1	48.1	61.5	4%	-8%
MD Maryland	7.2	9.8	14.9	22	29.5	36	45	53.3	-4%	-4%
MI Michigan	4	6.1	11.9	19.5	27.5	35.5	51.8	69	-25%	-4%
MN Minnesota	12.6	14.2	18.4	21.4	26.3	32.1	42.7	50.5	-3%	-13%
NC North Carolina	16.8	18.7	24.5	29.3	31.4	34.2	44.3	63.4	1%	0%
NJ New Jersey	15.5	23.3	40.8	51.4	32.2	71.6	86.6	101.4	-4%	-3%
NV Nevada	16.6	19.4	25.3	31	35.6	42.2	54.2	63.4	2%	2%
NY New York	9.3	12.8	17.6	22	26.9	32.2	42.6	51.9	16%	-2%
OH Ohio	11	13.1	18	24.6	29.5	34.5	44.9	55	-11%	-9%
PA Pennsylvania	22.5	27.7	40.5	50.3	56.1	64.6	84.2	113.9	-6%	-5%
RI Rhode Island	11.6	18	30.4	36	37.9	43.3	61.4	86	15%	-3%
SC South Carolina	5.6	9.7	14.9	21.7	27.4	31.5	40.2	49	-2%	-2%
TX Texas	4.6	5.4	11.5	19.5	27	35.2	49.7	68.1	-50%	6%
UT Utah	10.3	13.7	18.9	23.1	27.7	31.7	38.9	44.7	21%	4%
VA Virginia	19.8	21.4	24.4	27	29.2	31.8	39.8	55.3	1%	0%
WA Washington	10.1	13.3	18.9	26.1	32.1	36.5	45.9	56.7	-10%	-8%
WI Wisconsin	19.3	19.1	22.9	28.2	33.4	40.5	54.8	68.9	21%	16%
New York City	11.3	15.8	21.6	27.1	33.4	40.5	52.2	62.2	8%	-7%
Los Angeles	6.7	9.9	15.6	27.1	29.4	40.3	48	60.1	0%	-7 % -1%
	6.7 103.4	9.9 125.1	163.1	22.4 207.7	29.4 244.1	30.4 271.5	48 323.5	400.3	0% 34%	-1% 39%
Chicago		125.1	163.1	207.7	244.1	271.5	323.5	400.3	34%	39

Source: CMA Datavision

## **Current State General Obligation Rating**

State	Moody's	S&P	Fitch	KBRA
Alabama	Aa1	AA	AA+	
Alaska	Aa3	AA	AA	
American Samoa				
Arizona				
Arkansas	Aa1	AA		
California	Aa3	AA-	AA-	
Colorado				
Connecticut	A1	A	A+	AA-
District of Columbia	Aaa	AA+	AA+	
Delaware	Aaa	AAA	AAA	AAA
Florida	Aaa	AAA	AAA	
Georgia	Aaa	AAA	AAA	
Guam		BB-		
Hawaii	Aa1	AA+	AA	
Idaho				
Illinois	Baa3	BBB-	BBB	
Indiana				
lowa				
Kansas				
Kentucky	Aa3	A+		
Louisiana	Aa3	AA-	AA-	
Maine	Aa2	AA		
Maryland	Aaa	AAA	AAA	
Massachusetts	Aa1	AA	AA+	
Michigan	Aa1	AA	AA	
Minnesota	Aa1	AAA	AAA	
Mississippi	Aa2	AA	AA	
Missouri	Aaa	AAA	AAA	

KBRA State S&P Fitch Moody's Montana Aa1 AA AA+ Nebraska Nevada Aa2 AA AA+ New Hampshire Aa1 AA AA+ New Jersey A3 A-A A New Mexico Aa2 AA AA+ New York Aa1 AA+ AA+ North Carolina Aaa AAA AAA North Dakota Ohio AA+ AA+ Aa1 Oklahoma Aa2 AA AA+ Oregon Aa1 AA+ Pennsylvania Aa3 A+ AA-Puerto Rico Са D D Rhode Island Aa2 AA AA South Carolina AA+ AAA Aaa South Dakota Tennessee Aaa AAA AAA Texas Aaa AAA AAA AAA AAA AAA Utah Aaa Vermont Aa1 AA+ AAA Virgin Islands Virginia AAA AAA Aaa Washington AA+ Aa1 AA+ West Virginia Aa2 AA-AA Wisconsin AA Aa1 AA+ Wyoming AA+

Source: Moody's, Standard and Poor's, Fitch Ratings, KBRA

## **Outstanding Municipal Debt**

#### Outstanding by Type, Maturity and Security Type<sup>5</sup> \$ Millions

State	Total Outstanding	G.O.	Revenue	Due in 13 Months	Long-Term	2018:Q3 Total Outstanding	% Change
AK Alaska	J	2,405,3	7,777,4	458.0	9,724.7	10,279.6	-0.9%
AL Alabama	37,492.8	7,042.6	30,450.3	1,672.5	35,820.3	37,757.3	-0.7%
AR Arkansas	14.300.8	6.438.4	7.862.3	608.3	13.692.5	14.600.0	-2.0%
AS American Samoa	124.1	0,400.4	124.1	000.0	124.1	73.8	68.2%
AZ Arizona	53.179.1	11,122.8	42,056.2	3,174.8	50,004.3	52,763.0	0.8%
CA California	573,912.9	218,276.9	355,636.0	25,034.2	548,878.8	579,945.2	-1.0%
CO Colorado	68,923.2	16,974.9	51,948.3	3,112.1	65,811.2	70,669.8	-2.5%
CT Connecticut	52,074.3	27,198.7	24,875.7	3,701.8	48,372.6	52,129.7	-0.1%
DC District of Columbia	31,027.6	4,831.7	26,195.9	587.2	30,440.4	32,206.5	-3.7%
DE Delaware	7,604.7	2,930.2	4,674.5	330.7	7,274.0	7,716.2	-1.4%
FL Florida	141,254.1	15,600.3	125,653.8	6,985.3	134,268.8	145,055.1	-2.6%
GA Georgia	74,582.1	16,895.4	57,686.7	4,346.8	70,235.3	74,750.7	-0.2%
GU Guam	3,255.7	234.4	3,021.3	70.4	3,185.3	3,300.3	-1.4%
HI Hawaii	20,770,1	13.299.3	7.470.8	1.053.5	19,716,6	21,387.9	-2.9%
IA lowa	21,978.2	6,913.5	15,064.7	1,308.1	20,670.1	21,631.7	1.6%
ID Idaho	7,181.7	2,122.4	5,059.3	780.1	6,401.6	7,335.8	-2.1%
IL Illinois	169,070.1	79,735.3	89,334.8	8,812.5	160,257.5	171,862.5	-1.6%
IN Indiana	47,099.8	1,437.3	45,662.5	3,265.5	43,834.3	47,367.4	-0.6%
KS Kansas	26,094.9	12,337.4	13,757.5	1,736.3	24,358.6	26,470.9	-1.4%
KY Kentucky	36,522.2	1,999.8	34,522.5	2,102.7	34,419.6	36,273.0	0.7%
LA Louisiana	36,354.9	7,720.1	28,634.8	2,270.4	34,084.5	37,245.3	-2.4%
MAMassachusetts	103,955.3	41,977.4	61,977.9	7,622.5	96,332.8	106,678.0	-2.6%
MD Maryland	60,286.0	33,065.5	27,220.5	3,721.1	56,565.0	60,117.9	0.3%
ME Maine	8,458.0	2,161.7	6,296.3	515.4	7,942.6	8,805.5	-3.9%
MI Michigan	75,715.4	24,506.4	51,209.0	4,156.2	71,559.2	76,481.2	-1.0%
MN Minnesota	56,172.0	29,581.1	26,590.9	3,845.7	52,326.3	55,476.1	1.3%
MO Missouri	48,513.1	10,569.4	37,943.7	2,254.7	46,258.4	48,930.6	-0.9%
MS Mississippi	17,500.0	6,621.6	10,878.4	830.4	16,669.6	17,486.1	0.1%
MT Montana	4,258.4	1,516.6	2,741.9	180.9	4,077.6	4,307.1	-1.1%
NC North Carolina	52,077.9	12,479.3	39,598.6	2,843.2	49,234.7	52,517.7	-0.8%
ND North Dakota	6,309.1	2,167.8	4,141.2	303.4	6,005.6	6,388.3	-1.2%
NE Nebraska	20,858.7	6,036.4	14,822.3	1,212.9	19,645.8	20,626.2	1.1%
NH New Hampshire	8,122.5	2,223.0	5,899.5	476.6	7,645.9	8,174.7	-0.6%
NJ New Jersey	117,780.9	25,094.3	92,686.5	12,693.2	105,087.7	119,436.9	-1.4%
NM New Mexico	13,928.0	3,447.6	10,480.4	1,018.6	12,909.4	13,795.7	1.0%
NVNevada	26,876.9	14,358.5	12,518.4	1,037.5	25,839.4	26,186.6	2.6%
NY New York	408,195.6	75,793.3	332,402.3	26,775.7	381,419.9	410,067.3	-0.5%
OH Ohio	110,103.3	32,785.3	77,318.0	5,833.0	104,270.3	112,619.6	-2.2%
OK Oklahoma	22,222.7	4,231.9	17,990.8	1,943.9	20,278.8	21,856.6	1.7%
OR Oregon	42,019.7	24,281.5	17,738.2	1,908.3	40,111.4	42,463.5	-1.0%
OT Other Territories	10,163.8	50.0	10,113.8	559.2	9,604.5	10,899.1	-6.7%
PA Pennsylvania	136,697.9	46,181.3	90,516.6	6,622.6	130,075.3	138,288.7	-1.2%
PR Puerto Rico	97,442.8	12,128.8	85,314.0	3,074.9	94,367.9	99,022.7	-1.6%
RI Rhode Island	11,266.1	1,811.7	9,454.5	517.8	10,748.4	11,399.8	-1.2%
SC South Carolina	39,598.0	10,200.5	29,397.5	2,846.4	36,751.7	40,267.4	-1.7%
SD South Dakota	6,039.5	1,321.5	4,718.0	237.7	5,801.8	5,690.7	6.1%
TN Tennessee	42,612.1	17,229.2	25,383.0	2,498.2	40,113.9	43,636.4	-2.3%
TT Trust Territories	103.4	69.7	33.7		103.4	105.0	-1.5%
TXTexas	369,155.7	184,612.0	184,543.7	20,861.3	348,294.4	371,104.0	-0.5%
UT Utah	25,080.2	6,719.1	18,361.1	1,192.4	23,887.8	24,519.0	2.3%
VA Virginia	67,421.6	14,800.4	52,621.1	3,191.0	64,230.6	68,558.8	-1.7%
VI Virgin Islands	2,115.1		2,115.1	61.2	2,053.9	2,193.7	-3.6%
VT Vermont	4,290.6	748.1	3,542.5	158.4	4,132.2	4,431.7	-3.2%
WAWashington	90,495.4	45,145.6	45,349.8	4,685.2	85,810.2	92,170.0	-1.8%
WI Wisconsin	59,754.8	26,498.3	33,256.5	3,778.3	55,976.5	59,032.8	1.2%
WV West Virginia	11,712.9	1,409.4	10,303.5	514.3	11,198.6	12,002.7	-2.4%
WY Wyoming	2,196.3	108.6	2,087.6	56.9	2,139.3	2,269.4	-3.2%
TOTAL (12/31/2018)	3,612,485.9	1,177,449.3	2,435,036.6	201,439.9	3,411,046.0	3,648,829.0	-1.0%
TOTAL (9/30/2018)	3,648,829.0	1,190,030.4	2,458,798.6	208,976.2	3,439,852.8		
% Change	-1.0%	-1.1%	-1.0%	-3.6%	-0.8%		

Source: Bloomberg

<sup>&</sup>lt;sup>5</sup> Data prior to 1Q'17 excludes refunded debt from general totals. "Due in 13 months" looks at original maturity and will not include securities with short puts unless original maturity is within 13 months. Differences between this data and the Federal Reserve Flow of Funds are due to underlying database differences (Fed: Mergent; these tables: Bloomberg) as well as the growth of the municipal direct loan market. Fixed rate debt does not include those multimodal bonds that are currently in long-term fixed rate mode.

# Outstanding by Tax Status and Coupon \$ Millions

State	Total Outstanding	Tax-Exempt	BQ	AMT	Taxable	Fixed	Zero	FRN	Other
AK Alaska	Total Outstanding				1,232.6	7,905.7		344.7	
	27 400 0	8,568.0	35.6	346.5			157.4		1,774.9
AL Alabama	37,492.8	29,658.2	3,526.7	773.7	3,534.3	28,053.3	949.2	908.4	7,581.9
AR Arkansas	14,300.8	9,864.8	3,102.5	260.2	1,073.4	13,195.1	240.1	528.2	337.4
AS American Samoa	124.1	94.5	704.0	4 474 0	29.6	124.1	00.0	700.4	-
AZ Arizona	53,179.1	47,256.6	784.0	1,474.6	3,663.9	47,150.1	29.8	706.4	5,292.8
CA California	573,912.9	459,185.3	9,420.2	20,278.3	85,029.1	436,566.1	67,289.2	9,494.8	60,562.8
CO Colorado	68,923.2	53,330.1	2,539.2	4,683.7	8,370.1	56,271.4	5,166.1	1,686.2	5,799.5
CT Connecticut	52,074.3	40,732.6	1,388.9	1,279.9	8,673.0	43,932.0	454.9	1,756.9	5,930.7
DC District of Columbia	31,027.6	24,410.9	2.0	3,373.8	3,240.8	21,497.0	5,575.6	733.3	3,221.7
DE Delaware	7,604.7	5,773.7	62.0	183.8	1,585.2	6,278.2	0.000.4		1,326.5
FL Florida	141,254.1	114,430.7	920.6	11,266.9	14,635.9	121,763.0 56,503.9	2,892.1	2,140.8 1,701.3	14,458.2
GA Georgia	74,582.1	59,624.4	1,219.4	3,084.3	10,654.0		1,975.4	1,701.3	14,401.5
GU Guam	3,255.7	3,025.2		187.0	43.5	3,140.2	115.5	404.7	-
HI Hawaii	20,770.1	16,577.4	4 507 5	1,393.9	2,798.8	20,004.4	6.5	464.7	294.6
IA lowa	21,978.2	14,924.3	4,597.5	552.3	1,904.1	18,499.0	551.8	659.8	2,267.6
ID Idaho	7,181.7	5,594.8	306.1	175.8	1,105.0	6,502.4	32.8	359.5	287.1
IL Illinois	169,070.1	118,847.5	10,120.7	5,463.0	34,638.8	137,967.6	19,705.9	1,651.1	9,745.4
IN Indiana	47,099.8	35,465.1	3,262.1	3,356.2	5,016.4	38,078.7	748.0	789.3	7,483.8
KS Kansas	26,094.9	18,512.3	3,761.6	305.2	3,515.9	24,894.3	264.3	198.2	738.0
KY Kentucky	36,522.2	26,943.8	3,681.6	1,263.1	4,633.8	29,308.6	345.1	1,664.2	5,204.4
LALouisiana	36,354.9	29,371.4	1,476.1	1,948.1	3,559.3	30,125.8	1,037.4	1,178.3	4,013.5
MAMassachusetts	103,955.3	88,718.6	3,403.9	3,363.2	8,469.4	90,702.1	1,009.3	2,555.6	9,688.3
MD Maryland	60,286.0	51,782.3	175.2	1,469.1	6,859.4	55,229.3	118.8	26.1	4,911.8
ME Maine	8,458.0	6,676.6	573.6	421.3	786.5	8,039.8		15.0	403.2
MI Michigan	75,715.4	56,933.1	4,302.6	2,940.3	11,539.5	58,949.9	6,689.2	2,953.5	7,122.9
MN Minnesota	56,172.0	41,737.5	7,397.2	1,234.5	5,802.7	49,644.2	938.8	698.3	4,890.7
MO Missouri	48,513.1	32,643.7	5,233.1	711.2	9,925.0	38,032.6	779.2	4,045.5	5,655.7
MS Mississippi	17,500.0	12,469.6	1,514.9	193.4	3,322.1	13,141.4	3.0	225.1	4,130.6
MT Montana	4,258.4	3,151.6	570.8	132.2	403.9	3,582.8	8.9	342.5	324.3
NC North Carolina	52,077.9	44,755.3	286.9	935.0	6,100.6	44,071.8	274.6	2,429.5	5,301.9
ND North Dakota	6,309.1	4,767.0	937.3	117.8	487.0	5,990.8		42.7	275.6
NE Nebraska	20,858.7	15,373.2	3,366.5	519.6	1,599.4	18,621.8	5.9	205.9	2,025.1
NH New Hampshire	8,122.5	5,848.4	288.6	513.5	1,471.9	6,658.1	61.7	631.7	771.1
NJ New Jersey	117,780.9	91,221.9	5,729.7	5,599.2	15,230.0	99,330.3	11,587.2	1,581.5	5,281.8
NM New Mexico	13,928.0	11,671.6	781.7	302.2	1,172.6	11,840.4	5.5	1,034.4	1,047.6
NV Nevada	26,876.9	22,456.4	197.2	1,462.1	2,761.2	22,667.2	1,182.5	146.7	2,880.5
NY New York	408,195.6	329,317.2	6,805.6	18,610.0	53,462.9	341,312.5	15,490.3	6,295.9	45,096.9
OH Ohio	110,103.3	84,067.9	5,967.0	2,282.1	17,786.3	86,623.8	8,389.9	883.5	14,206.1
OK Oklahoma	22,222.7	16,714.7	1,496.7	826.2	3,185.1	20,881.2	45.5	654.6	641.4
OR Oregon	42,019.7	29,715.4	1,314.5	1,152.5	9,837.3	35,863.6	3,933.9	340.7	1,881.5
OT Other Territories	10,163.8	5,582.6		4,534.3	46.9	911.4			9,252.4
PAPennsylvania	136,697.9	106,195.0	11,707.7	4,860.5	13,934.7	116,608.9	3,741.6	5,423.9	10,923.5
PR Puerto Rico	97,442.8	80,781.5		203.9	16,457.4	53,620.7	37,196.1	1,656.9	4,969.2
RI Rhode Island	11,266.1	9,526.1	203.6	586.1	950.3	8,861.1	1,542.3	555.8	307.0
SC South Carolina	39,598.0	33,811.0	619.1	1,224.6	3,943.4	32,966.3	2,377.7	1,908.4	2,345.5
SD South Dakota	6,039.5	4,329.8	773.7	121.6	814.5	5,751.0		136.5	152.1
TN Tennessee	42,612.1	33,714.3	2,526.9	966.0	5,404.9	36,317.9	396.7	749.0	5,148.5
TT Trust Territories	103.4	69.7		33.7	-	103.4			-
TX Texas	369,155.7	287,769.5	25,445.6	16,045.2	39,895.4	310,392.5	14,705.8	9,003.5	35,053.9
UT Utah	25,080.2	18,044.2	590.1	1,741.8	4,704.2	20,934.8	110.3	2,041.8	1,993.3
VA Virginia	67,421.6	55,214.4	208.0	2,797.0	9,202.2	61,105.7	1,429.0	131.3	4,755.6
VI Virgin Islands	2,115.1	1,991.8		23.0	100.3	2,067.0	48.1	1,343.7	(1,343.7)
VT Vermont	4,290.6	3,223.2	20.7	352.1	694.5	3,576.5		959.7	(245.6)
WAWashington	90,495.4	73,172.4	2,877.3	4,156.0	10,289.6	84,143.3	1,563.3	877.5	3,911.3
WI Wisconsin	59,754.8	42,642.5	7,604.8	1,722.9	7,784.6	54,032.1	1,222.7	50.2	4,449.7
WV West Virginia	11,712.9	7,425.0	313.4	626.2	3,348.3	8,323.7	2,042.5	20.0	1,326.7
WY Wyoming	2,196.3	1,619.2	52.1	378.8	146.2	1,516.5			679.8
TOTAL (12/31/2018)	3,612,485.9	2,837,325.8	153,492.9	144,809.5	476,857.6	2,960,177.4	224,437.2	76,932.8	350,938.5
TOTAL (9/30/2018)	3,648,829.0	2,867,355.9	156,282.3	145,045.2	480,145.5	2,991,479.6	228,815.3	77,771.1	350,763.0
% Change	-1.0%	-1.0%	-1.8%	-0.2%	-0.7%	-1.0%	-1.9%	-1.1%	0.1%

Source: Bloomberg, Thomson Reuters, EMMA

# Addendum Tables – Build America Bonds, Prerefunded, Derivatives and Insured (\$ Millions)

State	Total Outstanding	BAB Only	VRDO Only	ARS Only	Prerefunded Only	All Refunded	Derivatives Only	Insured
AK Alaska		346.7	1,607.9		640.6	754.2	130.9	455.6
AL Alabama	37,492.8	543.0	2,236.4	342.2	1,780.8	2,133.7	757.7	6,286.2
AR Arkansas	14,300.8	22.4	292.0	0.12.12	276.3	323.0		1,609.3
AS American Samoa	124.1	22.4	202.0		210.0	020.0		1,000.0
AZ Arizona	53.179.1	1.860.5	1.591.5	89.7	3.058.9	4.428.0	1.136.7	5.801.9
CA California	573,912.9	37,040.8	18,634.0	1,078.3	33,360.6	48,784.9	18,180.1	78,017.8
CO Colorado	68,923.2	3,917.8	2,404.8	1,078.3	3,062.8	6,123.1	3,687.9	6,282.6
CT Connecticut	52,074.3	1,793.8	2,404.8 1,830.8	262.9	3,062.8	1,860.6	3,007.9	3,243.2
DC District of Columbia		1,793.8			664.8		1,179.0	
DE Delaware	31,027.6	473.2	1,175.9 484.7	120.0 2,290.9	523.8	988.5 655.6	410.4	2,200.6 78.5
FL Florida	7,604.7	473.2 5,301.9		2,290.9				78.5 12,950.1
GA Georgia	141,254.1 74,582.1	3,592.6	4,735.4 3,038.5	100.5	8,772.1 4,513.4	11,348.0 6,982.7	5,341.9 1,916.6	6,043.3
GU Guam	3,255.7	3,392.0	3,030.5		646.8	653.4	29.0	410.9
HI Hawaii	20,770.1	1,125.9	19.8		2,841.1	3,484.2	29.0 319.9	159.7
IA lowa		429.8		00.4			319.9	
	21,978.2		1,776.0	88.4	1,483.7	1,775.5		1,282.2
ID Idaho	7,181.7	154.9	289.5		297.7	406.3	91.3	238.8
IL Illinois	169,070.1	9,170.1	5,775.7	41.4	6,212.2	15,127.6	7,468.4	28,497.9
IN Indiana	47,099.8	1,728.9	2,415.8	45.0	2,321.8	3,066.0	1,113.9	3,471.5
KS Kansas	26,094.9	1,364.7	501.4	45.0	1,580.6	2,453.4	347.7	2,770.7
KY Kentucky	36,522.2	1,840.6	1,107.4		1,884.4	2,227.6	398.6	3,242.6
LALouisiana	36,354.9	574.5	2,977.2	265.3	2,952.5	4,568.5	684.8	5,539.9
MAMassachusetts	103,955.3	4,773.6	4,534.2	551.0	7,837.3	8,867.2	3,664.7	6,731.9
MD Maryland	60,286.0	3,122.5	2,007.6	13.4	5,047.9	6,138.3	1,039.9	781.6
ME Maine	8,458.0	62.0	315.7		355.0	609.2	25.3	356.7
MI Michigan	75,715.4	1,365.8	3,126.7		1,791.8	2,960.1	3,130.2	9,583.6
MN Minnesota	56,172.0	865.3	2,027.5	125.5	2,512.1	3,977.7	365.6	1,268.7
MO Missouri	48,513.1	2,707.7	1,949.0	330.5	1,227.4	2,662.6	1,885.3	2,426.4
MS Mississippi	17,500.0	764.9	3,077.1		1,439.1	1,512.4	92.3	1,574.5
MT Montana	4,258.4	26.2	39.8		103.3	113.1	256.6	80.2
NC North Carolina	52,077.9	1,400.8	2,593.3	45.6	4,367.7	5,468.9	1,045.6	2,322.7
ND North Dakota	6,309.1	18.0	141.2		101.0	127.8	83.4	558.5
NE Nebraska	20,858.7	877.4	592.4		1,053.5	1,808.8	457.7	306.6
NH New Hampshire	8,122.5	343.4	534.9		881.3	892.4	110.9	295.6
NJ New Jersey	117,780.9	6,480.0	1,389.8	69.5	5,275.1	8,278.0	3,475.4	21,126.7
NM New Mexico	13,928.0	195.7	260.6		509.8	666.6	299.6	414.9
NV Nevada	26,876.9	2,102.8	1,606.3		713.8	1,292.7	983.0	1,913.8
NY New York	408,195.6	20,226.3	30,911.5	1,199.1	15,466.9	24,570.4	14,451.7	21,923.6
OH Ohio	110,103.3	6,471.4	4,457.6	235.2	5,884.3	7,001.5	2,294.5	6,011.7
OK Oklahoma	22,222.7	493.0	165.5	66.9	829.8	927.1	274.2	852.6
OR Oregon	42,019.7	912.2	819.7	235.0	2,611.7	2,861.3	293.0	4,961.9
OT Other Territories	10,163.8						7,656.5	100.0
PAPennsylvania	136,697.9	4,775.4	3,891.0	22.5	10,966.9	13,450.2	5,330.9	25,611.5
PR Puerto Rico	97,442.8	765.3	156.5		12.9	3,379.6	1,084.4	22,263.6
RI Rhode Island	11,266.1	000 5	452.2		731.3	974.9	59.5	1,393.2
SC South Carolina	39,598.0	822.5	512.7	10.5	2,598.8	3,431.7	1,325.9	2,147.2
SD South Dakota	6,039.5	270.9	104.0	10.0	283.7	484.0	108.5	117.3
TN Tennessee	42,612.1	1,744.4	1,736.1		2,322.7	3,252.7	711.3	2,379.0
TT Trust Territories	103.4	10.055.6	40.007.1	4 500 6	00.446.5	00 50 4 5	0.070 0	00.070.5
TXTexas	369,155.7	16,255.9	12,067.1	1,529.9	20,113.4	26,594.3	6,976.8	30,676.0
UT Utah	25,080.2	2,803.0	1,372.3	391.1	1,703.0	2,627.7	706.4	1,639.6
VA Virginia	67,421.6	3,303.2	1,789.3	15.1	6,731.4	8,337.3	998.2	888.0
VI Virgin Islands	2,115.1	37.3						285.6
VT Vermont	4,290.6	115.4	74.0		168.9	172.2	16.6	118.6
WA Washington	90,495.4	5,677.5	1,732.2		6,296.6	6,948.5	2,027.6	3,093.6
WIWisconsin	59,754.8	1,376.1	1,252.6		5,232.5	7,049.0	1,787.7	3,517.6
WV West Virginia	11,712.9	88.2	589.3		376.9	446.2	67.9	625.5
WY Wyoming	2,196.3	121.6	574.1		56.9	59.6	20.0	94.8
TOTAL (12/31/2018)	3,612,485.9	164,458.1	139,591.8	9,676.9	193,693.0	276,088.9	108,079.5	347,026.8
TOTAL (9/30/2018)	3,648,829.0	166,281.0	139,644.2	10,927.0	220,019.7	334,559.0	103,127.7	361,980.5
% Change	-1.0%	-1.1%	0.0%	-11.4%	-12.0%	-17.5%	4.8%	-4.1%

Source: Bloomberg

### Addendum Tables – Sector<sup>6</sup> (\$ Millions)

Industry	2018Q4	2018Q3	QoQ Change	YoY Change
Other	536.5	622.53	-13.8%	-2.7%
Appropriations	102,756.4	108,812.56	-5.6%	-10.1%
Airport	101,570.2	104,081.45	-2.4%	4.0%
Airport Tax-Guaranteed	97.6	85.82	13.8%	12.9%
Assisted Living Ad Valorem Backed Lease Revenue	2,207.1 9,045.0	2,146.81 8,349.43	2.8%	12.6% 28.7%
Bond Bank	9,045.0	11,969.93	-2.0%	-8.8%
Continuing Care Retirement	32,875,8	32,474,69	1.2%	-0.0%
Community Development	7,192.3	6,931.99	3.8%	5.1%
Charter Schools	16,350.3	15,386.63	6.3%	13.4%
Community College District	40,478.6	40, 192.63	0.7%	-0.2%
Other	7.2	7.20	0.0%	0.0%
Economic/Induistrial Development	84,892.8	81,292.55	4.4%	-3.5%
Secondary Education	29,263.6	30,687.24	-4.6%	3.3%
Secondary Education - Lease Backed		54,253.30	1.0%	0.4%
Gas Contract General Obligation	28,167.6	26,413.88	6.6% -2.1%	43.1%
General Obligation Districts (Other)	674,684.9 25,546.3	689,230.25 25,473.38	-2.1%	-2.9%
General Obligation Hospital	8,061.2	7,551.06	6.8%	-4.0%
Government Paid Lease	88,646.9	88,500.75	0.2%	3.1%
General Revenue Tax-Guaranteed	14,740.9	15,671.79	-5.9%	-10.8%
Higher Education	238,247.2	243.170.84	-2.0%	-3.2%
Healthcare (General) Tax-Guaranteed	2,128.6	1,928.82	10.4%	6.9%
Hospital	252,994.3	258,376.70	-2.1%	-3.8%
Hotel Occupancy	6,907.5	6,524.13	5.9%	29.3%
Housing Tax- Guarnteed	1,098.3	1,173.00	-6.4%	-4.7%
Intergovernmental Lease	5,258.9	5,308.36	-0.9%	-3.3%
Income Tax	78,590.5	77,306.30	1.7%	7.3%
Independent Living	8.1	8.10	0.0%	0.0%
Correctional Facilities	2,408.9	2,538.59	-5.1%	-9.3%
Local multifamily housing	35,375.0	34,343.86	3.0%	1.8%
Loan Pool	20,552.9	20,168.58	1.9%	51.6%
Lottery	4,376.7 2.098.1	4,075.71 2,165.99	7.4% -3.1%	-9.2% -10.9%
Local Single Family Housing Metro Development	2,098.1	2,165.99	-3.1%	-10.9%
Melloroos	11,895.1	11,891.80	0.2%	-1.6%
Miscellaneous	39,232.3	38,711.72	1.3%	-6.6%
Miscellaneous Tax	58,977.1	60,183.42	-2.0%	-13.0%
Mobile Home	714.3	717.44	-0.4%	-3.3%
Tobacco	85,624.0	85,636.45	0.0%	-0.4%
Municipal Utilities	57,467.6	56,922.10	1.0%	-7.6%
Not for Profit Cultural	6,816.1	7,034.27	-3.1%	-11.8%
Not for Profit Foundation	1,072.1	1,118.26	-4.1%	0.6%
Not for Profit Human Service Provider	3,527.4	3,574.35	-1.3%	-14.3%
Not for Profit Membership Organizatio	491.0	483.33	1.6%	-7.4%
Not for Profit Research	3,468.0	3,536.68	-1.9%	5.6%
Non-Toll Highway	38,563.8	43,202.61	-10.7%	-1.4%
Nuclear Power Nursing Home	16,438.0 2,529.6	16,643.88 2,566.23	-1.2% -1.4%	-3.2% -15.4%
Pension	17,810.6	18,023.57	-1.4%	-15.4%
Payment in Lieu of Taxes	7.648.5	8.033.27	-1.2%	-4.9%
Parking Facility	3,169.8	3,246.47	-4.6%	-0.3%
Parking Facility - Guaranteed	1,110.9	1,162.54	-4.4%	-5.3%
Port/Marinas	40,512.0	41,330.46	-2.0%	2.0%
Public Power Systems	78,101.9	83,395.55	-6.3%	-8.4%
Public Transportation	37,472.0	39,021.20	-4.0%	0.3%
Private Religious School	2,300.4	2,329.06	-1.2%	-13.1%
Sales	111,488.8	110,309.88	1.1%	3.9%
School Districts	412,880.5	412,457.16	0.1%	0.0%
Self Appropriation	19,446.7	14,567.62	33.5%	80.5%
Shell Record	1,092.5	1,091.92	0.1%	-1.6%
State Multifamily Housing	39,946.2	39,421.05	1.3%	2.4%
Solid Waste	5,379.2	5,583.21	-3.7% 0.6%	17.2%
Special Assessment State Single family Housing	5,690.7 44,529.6	5,657.80 43,642.48	2.0%	8.3% 4.8%
State Single-family Housing Student Housing	44,529.6 12.312.1	43,642.48 11.240.91	2.0%	4.8%
Student Loan Revenue	21,153.0	22,139.48	9.5%	-13.7%
Telecom	21,153.0 1,056.9	22,139.48	-4.5% -0.8%	-13.7%
Tax Increment Financing	28,411.2	29,186.99	-0.8%	-12.1%
Toll Roads	132.184.8	129.641.13	2.0%	-0.8%
Indian Tribal	1,294.3	1,158.73	11.7%	-6.0%
Municipal Utility District	10,504.5	10,162.79	3.4%	4.0%
Water & Sewer Guaranteed	3,096.7	3,222.13	-3.9%	-9.6%
Water & Sewer	257,363.4	266,735.19	-3.5%	-6.1%
Total	3,612,485.9	3,648,829.0	-1.0%	-1.4%

Source: Bloomberg

<sup>&</sup>lt;sup>6</sup> Rating based on the lowest long-term rating assigned to the bond by Fitch Ratings, Moody's Investor Services, or Standard and Poor's; split-rated debt are therefore included in the HY category.

### Charts & Data

# Addendum Tables – Rating<sup>7</sup> (\$ Millions)

NK Harka      B0226      2453      67711      24787      1460      222847        A Nahama      133027      7783      17833      10957      10955      25833        AR Mananas      1241      1244      -	State	Total Outstanding	Rated	AAA	AA	А	BBB	НҮ
A. Abanan      37.492.8      33.27.1      17.803      17.803.2      10.935.7      10.905.5      2.265.4        AK Arkansas      11.430.0      12.288.7      216.5      9.265.8      2.102.5      53.3      53.3        AS Merican Samoa      12.41      1.765.4      9.265.8      2.127.7      1.554.4        CA California      57.391.2.9      471.811.0      15.776.7      316.835.4      96.127.9      2.242.4      2.262.4      2.262.4      2.262.4      2.262.4      2.262.4      2.262.4      2.262.4      2.262.4      2.262.4      2.262.4      2.262.4      2.263.3      2.473.5      2.493.3      3.866.7      1.03.93.2      5.56.03      5.137.2      2.485.4      1.03.2.1      8.35.2      177.5      2.485.4      1.03.2.1      8.35.2      177.5      3.148.2      1.042.1      8.35.2      1.05.2      4.06.0      1.04.90.5      1.02.0.1      1.35.4      1.05.2      4.06.0      1.04.90.5      1.04.90.5      1.04.90.5      1.04.90.5      1.04.90.5      1.04.90.5      1.04.90.5      1.04.90.5      1.04.90.5      1.04.90.5      1.04.90.5      1.04.90.5      <								
AR Akanasas      14.300.8      12.288.7      27.65      92.85.8      2.100.2      97.39      52.3        AS American Samoa      12.41      12.41      -		27 102 0						
As American Samoa      124.1      -      -      -      -      -        CA Zwizona      53.179.1      44.103.1      1786.4      29.340.1      92.55.9      2.277.7      1.594.1        CA California      573.912.9      47.181.0      15.778.7      316.835.4      98.127.9      2.297.15.8      11.353.2        CO Colorado      68.923.2      53.897.0      3.0653.5      2.207.6      6.99.4.3      62.202.6      2.282.4      2.282.4      2.282.6      2.282.4      2.282.6      2.880.2      2.880.2      2.880.2      3.057.7      2.852.8      1.082.4      1.75.6      2.499.1      -      1.343.2      1.155.4      1.082.4      1.155.4      1.082.4      1.155.4      1.082.4      1.155.4      1.082.4      1.155.4      1.082.4      1.155.4      1.080.4      1.014.4      1.014.4      1.114.5      1.155.4      1.080.4      1.291.7      1.188.4      1.016.4      1.016.4      1.016.4      1.016.4      1.016.4      1.017.4      1.016.4      1.017.4      1.026.2      1.042.4      1.187.4      1.016.4      1.017.4      1.016.4      1.017.4								
AZ Atoona      53,179.1      44,103.2      1,786.4      29,340.1      92,559      2,127.7      1,594.1        CA California      573,912.9      471,810.1      15,778.7      30,953.5      12,265.0      6,994.3      122,62      6,994.3      122,62      6,994.3      122,62      6,994.3      220,795      2,262.4      256.0        C Connecticut      52,074.3      44,093.3      10,436.6      6,986.3      2,407.5      2,248.2      308.6        D D District of Columbia      7,604.7      6,806.6      2,300.9      2,300.5      1,062.11      8,355.6      1,155.4        GA Georgia      74,582.1      57,061.3      14,906.5      1,354.4      2,634.9      462.0      1040.4        I Nava      2,177.8      1,869.5      1,354.4      2,634.9      462.0      1040.4        I Nordiana      12,070.1      16,887.7      13,564.5      2,634.9      462.2      14,665.9      1,845.4      6,816.3      1,919.1      16,852.6      16,842.3      1,919.1      16,852.6      16,842.3      1,919.1      16,852.6      16,842.3      1,919.1      16,852.6 <td></td> <td></td> <td></td> <td></td> <td>9,200.0</td> <td>2,100.2</td> <td>575.5</td> <td>52.5</td>					9,200.0	2,100.2	575.5	52.5
CACationnia      573 912.9      47.1811.0      15.7787      316.835.4      991.127      29.715.8      11.352.2        CO Colorado      68.923.2      53.897.0      30.953.5      12.265.0      6.994.3      522.074.3      48.093.7      10.496.6      6.058.3      22.079.5      2.282.4      228.02.4      228.02.4      236.05.0        DE Delawiar Of Columbia      7.004.7      6.806.6      2.379.7      2.382.5      882.8      1.082.4      7.73.2        FL Forda      141.254.1      111127.5      12.061.1      10.052.1      10.62.1      11.052.1      2.852.6      10.05.4      1.052.4      11.05.4        H Hawaii      20.770.1      16.887.7      13.69.0      7.477.2      5.405.1      40.03.0      2.546.0      10.05.2      10.62.1      1.05.2      1.06.2      1.06.2      1.06.4      1.02.6      1.05.2      1.06.4      1.05.2      1.06.4      1.02.6      1.06.4      1.02.6      1.06.4      1.02.6      1.06.4      1.02.6      1.06.4      1.02.6      1.06.4      1.02.6      1.06.4      1.02.6      1.06.4      1.02.6      1.06.4					20 240 1	0.255.0	- 2 127 7	1 504 1
CO Colorado      68,823.2      53,897.0      30,87.3      30,87.3      30,87.3      30,87.3      20,87.5      22,82.4      226.7        CT Connectut      31,027.6      23,83.3      281.7      16,018.8      4,47.5      2,48.2      38.6        DC District of Columbia      76,04.7      6,306.6      23.77      2,382.5      882.8      1,002.4      77.3        FL Fondia      1411,254.1      111,275.1      12,611.0      37,093.2      55,603.3      5,137.2      824.6      2,034.9      1,442.0      1,002.4      1,035.2      1,155.4      2,459.1      -      -      -      1,343.2      1,155.6      2,034.9      1,442.0      1,002.4      1,055.2      1,054.1      4,033.2      2,546.8      1,173.9      3,658.2.1      3,717.5      51,895.2      16,463.4      1,172.6      10,303.2      11,826.0      1,852.4      686.16      1,873.9      3,658.2.1      3,717.5      51,895.2      16,343.4      2,204.87      11,790.4      7,023.4      468.8      181.1      1,874.4      2,874.8      2,944.2      1,845.4      2,874.4      2,856.9      3,972.								1
CT Connecticut      52.2074.3      48.0937      10.436.6      6.058.3      29.079.5      2.282.4      288.0        DC District OCtombia      7.604.7      6.806.6      2.379.7      2.382.5      88.473.5      2.493.2      386.6        DE Delaware      7.260.47      6.806.6      2.379.7      2.382.5      56.608.3      51.37.2      825.4        CA Georgia      74.4582.1      111.275.1      12.611.0      3.758.7      2.469.1      -      -      -      1.8352.4      175.6        U Guam      2.252.7      2.469.1      -      -      -      1.8352.4      1.66.03      2.689.9      1.971.5      15.895.2      16.46.6        U Ianoi      16.907.1      1.47.08.9      3.65.5      4.191.8      2.0137.1      11.826.0      1.852.4      4661.6        L Illinois      16.997.0      1.127.8      10.396.2      14.665.9      2.422.0      63.41.9      2.032.6      3.072.0      1.370.1        L Illinois      16.998.3      3.867.66      10.979.3      65.320.1      7.339.9      4.422.0      63.47.3      3.66.6      1.6								
DC District of Columbia      31.027.6      23.633.3      261.7      16.018.8      44.73.5      24.93.2      336.024      79.93        FL Fionda      114.254.1      111.275.1      12.611.0      37.093.2      55.603.3      55.137.2      82.8      10.082.1      78.95        GU Guam      3.255.7      2.459.1      -      1.345.2      11.65.1      14.906.5      2.305.2      10.621.1      83.52.8      11.95.1        Hi Hawait      2.077.0      16.857.7      16.6      2.309.9      7.477.2      5.405.1      10.63.3      2.549.8      10.93.3      2.549.8      10.93.3      2.549.8      10.93.3      2.662.9      10.977.5      5.405.1      10.852.4      6.64.32      10.977.5      5.405.1      10.852.4      6.64.32      10.977.5      5.65.92.0      17.977.5      5.51.895.2      16.465.5      12.77.1      10.80.0      1.466.5      2.422.0      6.80.4      6.81.3      12.77.1      10.80.0      1.466.5      2.422.0      6.80.4      6.81.4      1.466.5      2.422.0      6.80.4      6.80.4      1.466.5      2.422.0      6.80.4      6.80.4								
DE Delware      7,604.7      6,806.6      2,379.7      2,382.5      882.8      1,082.4      773.2        EA Georgia      74,582.1      157,061.3      114,906.5      23,005.2      10,82.1      83,52.8      175.6        GA Georgia      74,582.1      16,887.7      136.9      13,544.5      2,543.9      442.0      104.9        Hi Hawaii      20,770.1      16,887.7      136.9      13,544.5      2,543.9      442.0      104.3      2,549.8        ID Idaho      7,718.7      5,508.0      600.3      2,263.9      199.41      165.2      646.8        ID Idaho      7,718.7      5,508.0      600.3      2,268.9      1,70.47      7,023.4      466.8      1811        KY Kentucky      36,522.2      3,2272.4      989.1      6,514.3      2,036.6      3,072.0      1,370.1        LAL Louisiana      36,354.9      2,2145.3      1,127.8      10,030.2      14,665.9      2,422.0      6,614.72.3      5,647.4      2,855.8      3,90.0      6,514.3      2,035.4      3,916.5      1,505.7      5,515.4      2,422.0      6,614.								
F. Honda      11412751      1226110      370.032      55.080.3      51.372      82324        GA Georgia      74.5827      157.061.3      14.906.5      23.0032      15.080.3      51.372      8352.8        GU Guam      3.255.7      2.459.1      -      -      -      1.343.2      11115        Hawa      21.978.2      18.216.3      2.380.9      7.477.2      5.645.1      49.05.1      49.05.2        Ik Indiana      47.099.8      36.655.4      19.794.1      165.2      64.4        KS Kansas      20.049.9      21.152.3      2.044.7      11.790.4      7.023.4      468.6      161.43        KY Kentucky      36.522.2      32.272.4      989.1      6.514.3      20.282.9      3.072.0      1.370.1        LALoustiana      36.354.9      29.154.3      1.17.78      10.308.2      1.665.4      3.242.0      16.472.3      5.647.4      2.885.8      3.94.6        M Makingan      77.57.5      60.237.0      4.053.9      38.076.6      10.049.1      1.445.4      2.712.0        M Mokingan      77.57.5								
CA Georgia      74,582.1      57,061.3      14,906.5      23,055.2      10,261.1      8,352.8      175.8        HI Hawaii      20,770.1      16,887.7      136.9      13,544.5      2,640.1      40.3      2,549.8        IA bowa      21,972.2      18,216.3      2,380.9      7,477.2      5,640.5      403.3      2,549.8        IA bowa      21,972.2      18,216.3      2,380.9      7,477.2      5,640.5      403.3      2,549.8        IN indiana      47,099.8      38,655.5      4,118.1      20,043.7      11,820.0      1,852.4      661.6        KY Kentucky      36,552.2      32,272.4      989.1      65,144.3      20,326.9      3,072.0      1,370.1        IAA Massachusetts      103,955.3      88,766.8      10,073.9      65,320.1      7,339.9      4,587.3      50.0      667.7        NM Minesota      75,715.4      62,337.0      4,053.9      38,076.6      16,049.1      1,445.4      2,712.2      182.6        NM Minesota      52,077.9      43,271.4      111.73      27,708.0      63,504.9      98,81.5      1,775.								
CU Cuam      3.255.7      2.459.1      -      -      -      1.34.32      1.1155        IH Hawai      20.770.1      16,887.7      136.9      13.544.5      2.283.9      442.0      109.4        IA lowa      21.978.2      18.216.3      2.380.9      7.477.2      5.606.1      403.3      2.549.8        ID Idaho      7.181.7      5.508.0      600.3      2.683.9      1.994.1      1165.2      64.6        KS kansas      2.0094.9      21.512.3      2.044.7      11.704.7      7.023.4      468.6      161.43        KY Kenucky      36.522.2      3.272.4      989.1      6.514.3      2.025.9      3.072.0      1.370.1        MA Massachusets      103.955.3      88.786.8      10.973.9      65.820.1      7.339.9      4.587.3      565.6        M Manigan      75.715.4      62.337.0      40.93.8      38.766.6      16.0491.1      4.454.2      2.712.0        M Minssi      11.817.3      27.708.0      6.350.4      931.6      15.047.4      2.855.8      991.4      1.569.7      12.242.8      6865.0								175.8
Hi Hawaii      20.770.1      16.887.7      136.9      13.544.5      25.49.9      442.0      10.0        Io Idaho      7,181.7      5.508.0      600.3      2.683.9      1.97.72      5.40.51      403.3      2.548.8        Io Idaho      7,181.7      5.508.0      600.3      2.683.9      1.99.41      1652.2      64.64        IL Ilinois      168.9070.1      147.968.9      5.137.9      36.582.1      37.917.5      51.895.2      16.436.2        KY Kentucky      36.522.9      32.272.4      98.9      6.514.3      20.328.9      3.072.0      1.370.1        LA Louisiana      36.354.9      2.9154.3      1.127.8      10.308.2      14.865.9      2.422.0      630.0        M Massachusetts      10.9355.3      88.768.6      10.973.9      65.320.1      7.339.9      4.557.3      50.0      687.9        M M Minesota      55.17.0      47.717.1      14.053.9      38.076.6      10.049.1      1.4454      2.271.2        M M Minesota      56.00      7.444      111.4      4.989.7      1.905.3      50.0      6.350.4	-			-	-	-		
IA kowa      21 978.2      18 2163.2      2380.9      7477.2      5406.1      403.3      2.548.8        ID daho      7.117      55080.6      600.3      2.688.9      1.994.1      165.2      64.6        IL Illinois      169.070.1      147,988.9      5.137.9      36.582.1      37.917.5      51.895.2      16.436.2        KS kansas      26.094.9      21.512.3      2.048.7      11.790.4      7.023.4      4668.6      1681.1        KY kenucky      36.552.2      32.272.4      989.1      6.514.3      2.0326.9      3.072.0      1.370.1        LA Louisiana      36.555.3      88.766.8      10.973.9      66.320.1      7.339.9      4.587.3      5665.6        M Massachusetts      103.955.3      88.766.8      10.973.3      25.07      4.0653.9      330.766.6      16.049.1      1.445.4      2.712.0        M Mohigan      75.715.4      62.370.1      4.053.9      30.766.6      16.049.1      1.454.4      2.712.0        M Mohigan      17.500.0      14.340.2      224.6      10.052.9      1.968.0      1.312.2      182.2 </td <td></td> <td></td> <td></td> <td>136.9</td> <td>13.544.5</td> <td>2.634.9</td> <td></td> <td>109.4</td>				136.9	13.544.5	2.634.9		109.4
ID daho      7.181.7      5.508.0      600.3      2.683.9      1.994.1      1.952.2      6.46        IL Illinois      166070.1      147.969.9      5.137.9      36.652.1      37.917.5      51.862.1      681.6        KY Kentucky      36.555.2      2.272.4      989.1      6.514.3      20.326.9      3.072.0      1.377.0        LA Louisiana      36.354.9      2.91.64.3      1.0308.2      1.4665.9      2.422.0      633.0        MA Massachusetts      103.095.5      88.768.6      10.077.9      65.320.1      7.339.9      4.567.3      566.6        MD Maryand      60.286.0      49.822.2      24.622.0      163.04.9      1.446.4      2.712.0        NM Messouri      66.172.0      47.319.7      11.817.3      2.7706.0      6.350.4      331.6      512.4        MO Missouri      48.613.1      39.94.13      2.877.8      2.4378.8      9.991.4      1.569.7      722.36        NC Moth Carolina      52.077.9      43.271.4      13.160.9      1.222.4      182.2        ND Moth Dakota      63.091      5.476.6      33.36								
Lillinois      149.070.1      147.966.9      5.137.9      36.562.1      7.917.5      51.895.2      16.436.2        KN Indiana      47.099.8      38.655.5      4.191.8      20.013.7      11.826.0      1.852.4      6861.4        KS Kansas      26.094.9      32.272.4      989.1      6.514.3      0.2326.9      3.072.0      1.370.1        LALouisiana      36.522.1      32.272.4      989.1      6.514.3      0.2326.9      3.072.0      6.530.0        MD Maryland      60.226.0      48.858.0      1.775.4      6.432.1      7.39.9      4.587.3      566.6        MM Menigan      75.715.4      62.337.0      4.053.9      30.76.6      16.041.1      1.444.4      2.717.0      0.350.4      9.914      1.569.7      7223.6        NM Monigan      75.715.4      62.337.0      4.053.9      30.76.6      1.604.1      1.444.4      2.717.0      0.350.4      9.914      1.569.7      723.6        NM Monigan      17.500.0      11.309.41.3      2.877.8      2.437.8      9.914      1.569.7      723.23        NM Nokisisisippi      17	ID Idaho							64.6
ISS Kansas      26,094.9      21,512.3      2,048.7      11,700.4      7,023.4      468.8      181.1        KY Kentucky      36,524.9      32,272.4      989.1      6,514.3      20,326.9      3,072.0      13,070.1        MA Massachusetts      103,955.3      88,786.8      10,973.9      65,520.1      7,339.9      4,567.3      566.6        M Maksachusetts      103,955.3      88,786.8      10,973.9      65,520.1      7,339.9      4,567.3      560.6        M Makingan      75,715.4      62,337.0      4,053.9      8,076.6      16,049.1      1,445.4      2,712.0        NN Minnesota      56,172.0      47,319.7      11,817.3      27,708.0      6,350.4      9,91.4      1,569.7      7,212.0        NN Minssouri      44,813.1      39,421.1      3,676.3      10,652.9      1,968.0      1,312.2      182.6        ND North Dakota      5,001.1      1,842.1      1,954.7      1,569.7      122.2      182.6      6,819.5      3,361.0      1,224.8      685.0      617.7      145.6      1,857.4      2,892.4      2,828.7      1,120.0	IL Illinois		147,968.9	5,137.9	36,582.1		51,895.2	16,436.2
ivY Kentucky      36,622.2      32,272.4      988.1      6,614.3      20,328.9      30,72.0      1,370.1        LALouisiana      36,354.9      29,154.3      1,127.8      10,308.2      14,665.9      2,422.0      630.0        MM Massachusets      100,3955.3      88,786.8      100,73.9      6,65.20.1      7,33.9      4,587.3      5665.6        MD Maryland      60,226.0      44,822.2      24,622.0      16,472.3      5,647.4      2,685.8      394.6        MM Minseota      56,172.0      47,319.7      11,817.3      27,708.0      6,350.4      931.6      512.4        NM Minnesota      52,077.9      43,247.4      13,166.0      19,947.9      8,243.2      1,802.4      218.2        ND North Carolina      52,077.9      43,271.4      13,166.0      12,924.8      6850.6      61.7        ND North Dakota      6,309.1      5,476.0      343.6      3,160.9      1,224.8      688.0      61.7        NJ New Jersey      11,770.9      10,453.1      7,44.9      13,664.8      4,277.1      2,43.3        NM New Maxo      2,656.7	IN Indiana	47,099.8	38,565.5	4,191.8	20,013.7	11,826.0	1,852.4	681.6
LALouisiana      66,354.9      29,154.3      11,27.8      10,308.2      14,665.9      2,242.0      63,04        MA Massachusetts      103,955.3      88,766.8      10,973.9      65,320.1      7,339.9      4,587.3      565.6        MD Maryland      60,286.0      49,822.2      24,622.0      16,472.3      5,647.4      2,685.8      394.6        MI Mchigan      75,715.4      62,337.0      4,053.9      38,076.6      16,049.1      1,445.4      2,712.0        NM Minnesota      56,172.0      47,319.7      11,817.3      27,708.0      6,350.4      991.4      1,569.7      723.6        MS Mississippi      17,500.0      14,340.2      224.6      10,652.9      1,968.0      1,312.2      188.2        ND North Dakota      6,309.1      5,476.0      343.6      3,109.9      1,224.8      668.0      667.7        ND New Hampshire      8,122.5      6,819.5      658.8      3,671.3      1,657.4      598.7      2,213.9        NJ New Hampshire      8,122.7      19,014.53.1      7,414.9      18,470.4      30,664.8      4,2,771.2      2,133	KS Kansas	26,094.9	21,512.3	2,048.7	11,790.4	7,023.4	468.8	181.1
LALouisiana      66,354.9      29,154.3      11,27.8      10,308.2      14,665.9      2,242.0      63,04        MA Massachusetts      103,955.3      88,766.8      10,973.9      65,320.1      7,339.9      4,587.3      565.6        MD Maryland      60,286.0      49,822.2      24,622.0      16,472.3      5,647.4      2,685.8      394.6        MI Mchigan      75,715.4      62,337.0      4,053.9      38,076.6      16,049.1      1,445.4      2,712.0        NM Minnesota      56,172.0      47,319.7      11,817.3      27,708.0      6,350.4      991.4      1,569.7      723.6        MS Mississippi      17,500.0      14,340.2      224.6      10,652.9      1,968.0      1,312.2      188.2        ND North Dakota      6,309.1      5,476.0      343.6      3,109.9      1,224.8      668.0      667.7        ND New Hampshire      8,122.5      6,819.5      658.8      3,671.3      1,657.4      598.7      2,213.9        NJ New Hampshire      8,122.7      19,014.53.1      7,414.9      18,470.4      30,664.8      4,2,771.2      2,133								1,370.1
ND Rayland      60.286.0      49.822.2      24.622.0      16.47.3      5.647.4      2.668.8      39.40        ME Maine      8.458.0      7.744.4      111.4      4.999.7      1.905.3      50.0      687.5        M Mchigan      75.715.4      62.337.0      4.053.9      38.076.6      16.049.1      1.445.4      51.72.0        NM Minnesota      56.172.0      47.319.7      11.817.3      27.708.0      6.350.4      991.4      1.569.7      723.6        MS Mississippi      17.500.0      14.340.2      224.6      10.652.9      1.968.0      1.312.2      182.6        NC North Carolina      52.077.9      43.271.4      13.166.0      9.243.2      1.892.4      2.82.3      1.892.4      2.82.8        ND North Dakota      6.309.1      5.476.0      343.6      3.160.9      1.224.8      668.0      617.1        NJ New Jersey      117.780.9      101.455.1      7.414.9      18.470.4      30.664.8      42.771.2      2.313.1        NV New Marko      130.292.0      12.951.2      1.33.0      9.801.7      1.123.3      63.25.1 <t< td=""><td></td><td></td><td></td><td>1,127.8</td><td></td><td></td><td></td><td>630.4</td></t<>				1,127.8				630.4
NE Raine      8,458.0      7,744.4      1114.4      498.7      1.905.3      50.0      687.9        MI Mchigan      75,715.4      62,337.0      4,053.9      38,076.6      16,049.1      1,445.4      2,712.0        MV Minnesota      56,172.0      47,319.7      118,17.3      27,708.0      6,350.4      991.4      1,569.7      722.6        MO Missouri      48,513.1      39,541.3      2,877.8      29,378.8      9,991.4      1,569.7      723.6        MT Montana      4,2584      3,890.3      119.1      1,854.5      1,757.1      159.5      -        NC North Catolina      52,077.9      43,271.4      13,166.0      19,947.9      8,243.2      1,882.4      21.8        ND North Dakota      6,809.1      54,76.0      343.6      3,160.9      1,224.8      688.0      61.71.2      2,131.9        NJ New Jersey      117,780.9      101,453.1      7,414.9      18,470.4      30,664.8      42,771.2      2,131.9        NV Nevada      26,876.9      22,219.9      194.4      13,606.7      7,245.5      63,625.1      16,715.7 <td>MAMassachusetts</td> <td>103,955.3</td> <td>88,786.8</td> <td>10,973.9</td> <td>65,320.1</td> <td>7,339.9</td> <td>4,587.3</td> <td>565.6</td>	MAMassachusetts	103,955.3	88,786.8	10,973.9	65,320.1	7,339.9	4,587.3	565.6
Michigan      75,715.4      62,337.0      4,453.9      38,076.6      16,049.1      1,445.4      2,712.0        MN Minnesota      56,172.0      47,319.7      11,817.3      27,708.0      6,350.4      931.6      512.4        MO Missouri      48,513.1      39,541.3      2,877.8      24,378.8      9,991.4      1,569.7      7223.6        MS Mississippi      17,500.0      14,340.2      224.6      10,652.9      1,968.0      1,312.2      182.6        MT Montana      4,258.4      3890.3      119.1      1,854.5      1,757.1      159.5      -<	MD Maryland	60,286.0	49,822.2	24,622.0	16,472.3	5,647.4	2,685.8	394.6
NN Minnesota      56,172.0      47,319.7      11,817.3      27,708.0      6,350.4      931.6      512.4        MO Missouri      445,13.1      39,541.3      2,877.8      2,4378.8      9,991.4      1,669.7      723.6        MT Montana      4,2564      3,890.3      119.1      1,854.5      1,767.1      159.5      -        NC North Carolina      52,077.9      43,271.4      13,166.0      9,47.9      8,243.2      1,892.4      21.8        ND North Dakota      6,399.1      5,476.0      343.6      3,160.9      1,224.8      668.50      61.7.7        NE Nebraska      20,858.7      16,085.3      333.2      9,801.2      4,404.4      1,522.8      22.42.3        NM New Jersey      117,780.9      101,453.1      7,414.9      18,470.4      30,664.8      42,771.2      2,131.9        NV Nevada      28,876.9      22.219.9      194.4      13,606.8      7,246.3      765.5      416.9        NV Nevada      28,272.7      19,031.7      2,433.9      242,262.5      63,625.1      15,515.7      3,117.9        OH Onio	ME Maine	8,458.0	7,744.4	111.4	4,989.7	1,905.3	50.0	687.9
MO Missouri      48,513.1      39,541.3      2,877.8      24,378.8      9,991.4      1,569.7      723.6        MS Mississippi      17,500.0      14,340.2      224.6      10,652.9      1,968.0      1,312.2      182.0        NC North Carolina      52,077.9      43,271.4      13,166.0      19,947.9      8,243.2      1,892.4      21.8        ND North Dakota      6,309.1      5,476.0      343.6      3,610.9      1,224.8      685.0      61.7        ND North Dakota      20,858.7      16,055.3      333.2      9,801.2      4,404.4      1,522.8      23.8        NH New Hampshire      8,122.5      6,819.5      6568.8      3,671.3      1,657.4      589.7      242.3        NN New Mixico      13,328.0      12,951.2      1,330.4      9,851.7      1,123.3      63.82.1      7.60        OK Oklahoma      22,227.7      19,031.7      2,453.3      8,795.1      5,515.7      3,117.5        OK Oklahoma      22,227.7      19,031.7      2,453.3      8,795.1      5,539.8      952.6      1,490.9        OR Oregon      42,	MI Michigan	75,715.4	62,337.0	4,053.9	38,076.6	16,049.1	1,445.4	2,712.0
MS Mississippi      17,500.0      14,340.2      224.6      10,652.9      1,968.0      1,312.2      182.6        MT Montana      4,258.4      3,890.3      119.1      1,864.5      1,757.1      159.5      -        NC North Carolina      52,077.9      43,271.4      13,166.0      19,947.9      82.42.2      1,892.4      128.6      665.0      617.7        NE Neth Taxista      20,858.7      16,085.3      333.2      9,801.2      4,404.4      1,522.8      23.8        NJ New Jersey      117,780.9      101,453.1      7,414.9      18,470.4      30,664.8      42,771.2      2,131.9        NM New Mexico      13,928.0      12,951.2      1,330.4      9,851.7      1,123.3      638.2      7.6        NV Newda      26,876.9      22,219.9      194.4      13,606.8      7,246.3      755.5      14.90.9        OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      592.6        OK Cklahoma      22,222.7      19,031.7      2,453.3      8,795.1      5,533.8      952.6      1,490.9	MN Minnesota	56,172.0	47,319.7	11,817.3	27,708.0	6,350.4	931.6	512.4
MT Montana      4.258.4      3,890.3      119.1      1,854.5      1,757.1      159.5        NC North Carolina      52,077.9      43,271.4      13,166.0      19,947.9      8,243.2      1,892.4      21.8        ND North Dakota      6,309.1      5,476.0      343.6      3,160.9      1,224.8      685.0      61.7        NE Nebraska      20,858.7      16,085.3      333.2      9,801.2      4,404.4      1,522.8      228.8        NH New Hampshire      8,122.5      6,819.5      655.8      3,671.3      1,657.4      589.7      242.3        NM New Mexico      13,928.0      12,951.2      1,330.4      9,851.7      1,123.3      638.2      7.6        NV New Vork      4008,195.6      346,655.1      22,13.9      242,262.5      63,625.1      15,157.7      3,17.9        OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      59,286.6        OK Oklahoma      22,227.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      1,490.5        OT Other Territories <td< td=""><td>MO Missouri</td><td>48,513.1</td><td>39,541.3</td><td>2,877.8</td><td>24,378.8</td><td>9,991.4</td><td>1,569.7</td><td>723.6</td></td<>	MO Missouri	48,513.1	39,541.3	2,877.8	24,378.8	9,991.4	1,569.7	723.6
NC North Carolina      52,077.9      43,271.4      13,166.0      19,947.9      8,243.2      1,892.4      21.8        ND North Dakota      6,309.1      5,476.0      343.6      3,160.9      1,224.8      665.0      61.7        NE Nebraska      20,685.7      16,085.3      333.2      9,801.2      4,404.4      1,522.8      23.8        NH New Hampshire      8,122.5      6,819.5      658.8      3,671.3      1,657.4      589.7      242.3        NM New Jersey      117,780.9      101,453.1      7,414.9      18,470.4      30,664.8      42,771.2      2,131.9        NV Newada      26,876.9      22,219.9      194.4      13,606.8      7,246.3      755.5      416.50        OH Ohio      110,103.3      85309.2      9,172.1      43,818.3      22,124.9      4,2652.2      5928.6        OK Oklahoma      22,227.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      1,490.5        OR Oregon      42,019.7      37,802.6      3,397.9      29,911.2      3,860.2      562.2      71.1        OT Other Territ	MS Mississippi	17,500.0	14,340.2	224.6	10,652.9	1,968.0	1,312.2	182.6
ND North Dakota      6,309.1      5,476.0      343.6      3,160.9      1,224.8      665.0      61.7        NE Nebraska      20,658.7      16,085.3      333.2      9,801.2      4,404.4      1,522.8      23.8        NH New Hampshire      8,122.5      6,819.5      658.8      3,671.3      1,657.4      59.87      242.3        NJ New Jersey      117,780.9      101,453.1      7,414.9      18,470.4      30,664.8      42,771.2      2,131.9        NV Nevada      26,876.9      22,219.9      194.4      13,606.8      7,246.3      7,555.5      4169.5        NY New York      408,195.6      346,655.1      22,133.9      242,262.5      63,625.1      15,515.7      3,117.9        OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      59,286.6        OK Oklahoma      22,222.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      1490.9        OK Oklahoma      22,222.7      19,31.7      2,453.3      8,795.1      5,348.4      2,656.2      77.1      13.3      - <td></td> <td>4,258.4</td> <td>3,890.3</td> <td>119.1</td> <td>1,854.5</td> <td>1,757.1</td> <td></td> <td>-</td>		4,258.4	3,890.3	119.1	1,854.5	1,757.1		-
NE Nebraska      20,858.7      16,085.3      333.2      9,801.2      4,404.4      1,522.8      23.8        NH New Hampshire      8,122.5      6,819.5      658.8      3,671.3      1,657.4      589.7      242.3        NJ New Jersey      117,780.9      101,453.1      7,414.9      18,470.4      30,664.8      42,771.2      2,131.9        NM New Mexico      13,928.0      12,951.2      1,330.4      9,851.7      1,123.3      638.2      7.6        NV Newada      26,876.9      22,219.9      194.4      13,606.8      7,246.3      755.5      416.9        OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      5,928.6        OK Oklahoma      22,222.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      14,90.9        OR Oregon      42,019.7      37,802.6      3,397.9      29,911.2      3,860.2      562.2      71.1        OR Oregon      42,019.7      37,802.6      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        PA Pennsylvania <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>21.8</td>								21.8
NH New Hampshire      8,122.5      6,819.5      658.8      3,671.3      1,657.4      589.7      242.3        NJ New Jersey      117,780.9      101,453.1      7,414.9      18,470.4      30,664.8      42,771.2      2,131.9        NM New Mexico      13,928.0      12,951.2      1,330.4      9,851.7      1,123.3      638.2      7,6        NV Nevada      26,876.9      22,219.9      194.4      13,806.8      7,246.3      755.5      416.9        NY New York      408,195.6      346,655.1      22,133.9      242,262.5      63,625.1      15,515.7      3,117.9        OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      5,928.6        OK Oklahoma      22,222.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      1,490.9        OR Oregon      42,019.7      37,802.6      3,397.9      29,911.2      3,860.2      662.2      71.1        OT Other Territories      10,163.8      8,942.4      1,963.1      6,788.2      27.7      163.3      -        PR Puerto								
NJ New Jersey      117,780.9      101,453.1      7,414.9      18,470.4      30,664.8      42,771.2      2,131.9        NM New Mexico      13,928.0      12,951.2      1,330.4      9,851.7      1,123.3      638.2      7.6        NV Nevada      26,876.9      22,219.9      194.4      13,606.8      7,246.3      755.5      416.9        NY New York      408,195.6      346,655.1      22,133.9      242,262.5      63,625.1      15,515.7      3,117.9        OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      5,928.6        OK Oklahoma      22,222.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      1,490.3        OT Other Territories      10,163.8      8,942.4      1,963.1      6,788.2      27.7      163.3      -        PA Pennsylvania      136,697.9      115,855.4      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0								
NM New Mexico      13,928.0      12,951.2      1,330.4      9,851.7      1,123.3      638.2      7.6        NV Newada      26,876.9      22,219.9      194.4      13,606.8      7,246.3      755.5      416.9        NY New York      408,195.6      346,655.1      22,13.9      242,262.5      63,625.1      15,515.7      3,117.9        OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      5,928.6        OK Oklahoma      22,222.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      1,490.9        OR Oregon      42,019.7      37,802.6      3,397.9      29,911.2      3,860.2      562.2      7.1.1        OT Other Territories      10,163.8      8,942.4      1,963.1      6,788.2      27.7      163.3      -        PA Pennsylvania      136,697.9      115,855.4      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0        SD								
NV Nevada      26,876.9      22,219.9      194.4      13,606.8      7,246.3      755.5      416.9        NY New York      408,195.6      346,655.1      22,133.9      242,262.5      63,625.1      15,515.7      3,117.9        OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      5,928.6        OK Oklahoma      22,222.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      1,490.9        OR Oregon      42,019.7      37,802.6      3,397.9      29,911.2      3,860.2      562.2      71.1        OT Other Territories      10,163.8      8,942.4      1,963.1      6,788.2      27.7      163.3      -        PA Pennsylvania      136,697.9      115,855.4      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TT							,	
NY New York      408,195.6      346,655.1      22,133.9      242,262.5      63,625.1      15,515.7      3,117.9        OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      5,928.6        OK Oklahoma      22,222.7      19,031.7      37,802.6      3,397.9      29,911.2      3,860.2      562.2      71.1        OT Other Territories      10,163.8      8,942.4      1,963.1      6,788.2      27.7      163.3      -        PA Pennsylvania      136,697.9      115,855.4      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        PR Puerto Rico      97,442.8      74,518.0      143.2      60.7      -      84.9      74,229.3        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,6464.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TT rust Territories      103.4      33.7      -      -      -      33.7      -      -								
OH Ohio      110,103.3      85,309.2      9,172.1      43,818.3      22,124.9      4,265.2      5,928.6        OK Oklahoma      22,222.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      1,409.9        OR Oregon      42,019.7      37,802.6      3,397.9      29,911.2      3,860.2      562.2      71.1        OT Other Territories      10,163.8      8,942.4      1,963.1      6,788.2      27.7      163.3      -        PA Pennsylvania      136,697.9      115,855.4      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        PR Puerto Rico      97,442.8      74,518.0      143.2      60.7      -      84.9      74,229.3        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TT trust Territories      103.4      33.7      -      -      -      -      337.7        TE exas      369,155.7 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
OK Oklahoma      22,222.7      19,031.7      2,453.3      8,795.1      5,339.8      952.6      1,409.9        OR Oregon      42,019.7      37,802.6      3,397.9      29,911.2      3,860.2      562.2      71.1        OT Other Territories      10,163.8      8,942.4      1,963.1      6,788.2      27.7      163.3      -        PA Pennsylvania      136,697.9      115,855.4      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        PR Puerto Rico      97,442.8      74,518.0      143.2      60.7      -      84.9      74,229.3        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TN Tennessee      42,612.1      35,869.7      3,373.6      22,185.4      6,265.5      4,013.4      31.8        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Virgin Islands <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
OR Oregon      42,019.7      37,802.6      3,397.9      29,911.2      3,860.2      562.2      71.1        OT Other Territories      10,163.8      8,942.4      1,963.1      6,788.2      27.7      163.3      -        PA Pennsylvania      136,697.9      115,855.4      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        PR Puerto Rico      97,442.8      74,518.0      143.2      60.7      -      84.9      74,229.3        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TN Tennessee      42,612.1      35,869.7      3,373.6      22,185.4      6,265.5      4,013.4      31.8        TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,2434.6        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Virginia </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
OT Other Territories      10,163.8      8,942.4      1,963.1      6,788.2      27.7      163.3      -        PA Pennsylvania      136,697.9      115,855.4      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        PR Puerto Rico      97,442.8      74,518.0      143.2      60.7      -      84.9      74,229.3        R Rhode Island      112,66.1      9,864.4      783.1      4,430.8      2,110.8      820.9      1,78.8        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TN Tenessee      42,612.1      35,869.7      3,373.6      22,185.4      6,265.5      4,013.4      31.8        TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,243.4        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Virginia<								
PA Pennsylvania      136,697.9      115,855.4      3,039.5      30,114.2      72,868.4      6,516.6      3,316.8        PR Puerto Rico      97,442.8      74,518.0      143.2      60.7      -      84.9      74,229.3        RI Rhode Island      11,266.1      9,864.4      783.1      4,430.8      2,110.8      820.9      1,718.8        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,646.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TN Tennessee      42,612.1      35,869.7      3,373.6      22,185.4      6,265.5      4,013.4      31.8        TT Trust Territories      103.4      33.7      -      -      -      -      33.7        TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,243.4        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Virgini Islands								71.1
PR Puerto Rico      97,442.8      74,518.0      143.2      60.7      -      84.9      74,229.3        RI Rhode Island      11,266.1      9,864.4      783.1      4,430.8      2,110.8      820.9      1,718.8        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TN Tennessee      42,612.1      35,869.7      3,373.6      22,185.4      6,265.5      4,013.4      31.8        TT Trust Territories      103.4      33.7      -      -      -      -      33.7        TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,243.4        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Virginia      67,421.6      55,865.1      14,931.9      31,874.1      2,854.7      3,719.8      2,484.6        W Wisconsin      59,754.8								2 216 0
RI Rhode Island      11,266.1      9,864.4      783.1      4,430.8      2,110.8      820.9      1,718.8        SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TN Tennessee      42,612.1      35,869.7      3,373.6      22,185.4      6,265.5      4,013.4      31.8        TT Trust Territories      103.4      33.7      -      -      -      33.7        TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,243.4        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Virginia      67,421.6      55,865.1      14,919.9      31,874.1      2,854.7      3,719.8      2,484.6        VI Vermont      4,290.6      3,811.1      48.4      2,822.7      1,280.2      183.8      16.0        WA Washington      90,495.4						12,000.4		
SC South Carolina      39,598.0      30,955.4      1,503.2      12,437.6      16,464.7      446.9      103.0        SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TN Tennessee      42,612.1      35,869.7      3,373.6      22,185.4      6,265.5      4,013.4      31.8        TT Trust Territories      103.4      33.7      -      -      -      33.7        TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,243.4        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Virginia      67,421.6      55,865.1      14,931.9      31,874.1      2,854.7      3,719.8      2,484.6        VI Virgin Islands      2,115.1      1,561.8      -      -      95.9      189.7      1,276.2        WA Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        WI Wisconsin      59,754.8						- 2 110 P		
SD South Dakota      6,039.5      5,327.2      1,395.1      2,054.6      1,810.5      15.9      51.1        TN Tennessee      42,612.1      35,869.7      3,373.6      22,185.4      6,265.5      4,013.4      31.8        TT Trust Territories      103.4      33.7      -      -      -      -      33.7        TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,243.4        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      855.7        VA Virginia      67,421.6      55,865.1      14,931.9      31,874.1      2,854.7      3,719.8      2,484.6        VI Virgin Islands      2,115.1      1,566.1.8      -      -      95.9      189.7      1,276.2        VT Vermont      4,290.6      3,811.1      48.4      2,282.7      1,280.2      183.8      16.0        WW Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        WW Wisconsin      59,754.8								
TN Tennessee      42,612.1      35,869.7      3,373.6      22,185.4      6,265.5      4,013.4      31.8        TT Trust Territories      103.4      33.7      -      -      -      -      33.7        TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,243.4        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Virginia      67,421.6      55,865.1      14,931.9      31,874.1      2,854.7      3,719.8      2,484.6        VI Virgin Islands      2,115.1      1,561.8      -      -      95.9      189.7      1,276.2        VT Vermont      4,290.6      3,811.1      48.4      2,282.7      1,280.2      183.8      16.0        WA Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        WW Wisconsin      59,754.8      44,877.6      2,114.9      32,369.9      7,992.4      1,760.8      639.7        WY Wyoming      2,196.3								
TT Trust Territories      103.4      33.7      -      -      -      33.7        TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,243.4        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Virginia      67,421.6      55,865.1      14,931.9      31,874.1      2,854.7      3,719.8      2,484.6        VI Virgin Islands      2,115.1      1,561.8      -      -      95.9      189.7      1,276.2        VI Vermont      4,290.6      3,811.1      48.4      2,282.7      1,280.2      183.8      16.0        WA Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        WW Wisconsin      59,754.8      44,877.6      2,114.9      32,369.9      7,992.4      1,760.8      639.7        WY Wyoming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      268.8        TOTAL (12/2/1/2018)      3,648,829.0      2,990,522.3 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>31.8</td>								31.8
TX Texas      369,155.7      309,714.5      139,559.3      96,255.6      53,635.1      16,021.0      4,243.4        UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Vrginia      67,421.6      55,865.1      14,931.9      31,874.1      2,854.7      3,719.8      2,484.6        VI Virgin Islands      2,115.1      1,561.8      -      95.9      189.7      1,276.2        VT Vermont      4,290.6      3,811.1      48.4      2,282.7      1,280.2      183.8      16.0        WA Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        WW west Virginia      11,712.9      10,309.0      246.8      1,701.1      4,399.1      1,399.5      2,562.5        WY woming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      268.8        TOTAL (12/3/1/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2						-	-	33.7
UT Utah      25,080.2      21,007.6      6,594.2      10,138.8      3,893.0      296.2      85.5        VA Vrginia      67,421.6      55,865.1      14,931.9      31,874.1      2,854.7      3,719.8      2,484.6        VI Virgin Islands      2,115.1      1,561.8      -      95.9      189.7      1,276.2        VT Vermont      4,290.6      3,811.1      48.4      2,282.7      1,280.2      183.8      16.0        WA Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        WI Wisconsin      59,754.8      44,877.6      2,114.9      32,369.9      7,992.4      1,760.8      639.7        WV West Virginia      11,712.9      10,309.0      246.8      1,701.1      4,399.1      1,399.5      2,562.5        WY Wyoming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      268.8        TOTAL (12/31/2018)      3,612,485.9      3,006,297.1      375,015.9      1,513,774.1      723,019.2      242,640.9      151,722.8        TOTAL (9/30/2018)      <				139.559.3	96,255.6	53.635 1	16.021.0	
VA Virginia      67,421.6      55,865.1      14,931.9      31,874.1      2,854.7      3,719.8      2,484.6        VI Virgin Islands      2,115.1      1,561.8      -      95.9      189.7      1,276.2        VT Vermont      4,290.6      3,811.1      48.4      2,282.7      1,280.2      183.8      16.0        WA Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        WI Wisconsin      59,754.8      44,877.6      2,114.9      32,369.9      7,992.4      1,760.8      6399.7        WV West Virginia      11,712.9      10,309.0      246.8      1,701.1      4,399.1      1,399.5      2,562.5        WY woming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      26.8        TOTAL (12/3/1/2018)      3,612,485.9      3,006,297.1      375,015.9      1,513,774.1      723,019.2      242,640.9      151,722.8        TOTAL (9/30/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2								4,243.4
VI Virgin Islands      2,115.1      1,561.8      -      -      95.9      189.7      1,276.2        VT Vermont      4,290.6      3,811.1      48.4      2,282.7      1,280.2      183.8      16.0        WA Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        WI Wisconsin      59,754.8      44,877.6      2,114.9      32,369.9      7,992.4      1,760.8      6397.7        WV West Virginia      11,712.9      10,309.0      246.8      1,701.1      4,399.1      1,399.5      2,562.5        WY woming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      26.8        TOTAL (12/3/1/2018)      3,612,485.9      3,006,271.1      375.015.9      1,513,774.1      723.019.2      242,640.9      151,722.8        TOTAL (9/30/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2								2,484.6
VT Vermont      4,290.6      3,811.1      48.4      2,282.7      1,280.2      183.8      16.0        WA Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        Wi Wisconsin      59,754.8      44,877.6      2,114.9      32,369.9      7,992.4      1,700.8      639.7        WV West Virginia      11,712.9      10,309.0      246.8      1,701.1      4,399.1      1,399.5      2,562.5        WY Wooming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      26.8        TOTAL (12/31/2018)      3,612,485.9      3,006,297.1      375,015.9      1,513,774.1      723,019.2      242,640.9      151,722.8        TOTAL (9/30/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2				-	-			1,276.2
WA Washington      90,495.4      80,936.1      4,653.8      63,868.1      10,225.7      2,043.6      144.9        WW Wisconsin      59,754.8      44,877.6      2,114.9      32,369.9      7,992.4      1,700.8      639.7        WV West Virginia      11,712.9      10,309.0      246.8      1,701.1      4,399.1      1,399.5      2,562.5        WY Wyoming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      268.9        TOTAL (12/21/2018)      3,612,485.9      3,006,297.1      375,015.9      1,513,774.1      723,019.2      242,640.9      151,722.8        TOTAL (9/30/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2				48.4	2.282.7			16.0
WI Wisconsin      59,754.8      44,877.6      2,114.9      32,369.9      7,992.4      1,760.8      639.7        WV West Virginia      11,712.9      10,309.0      246.8      1,701.1      4,399.1      1,399.5      2,562.5        WY Wyoming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      26.8        TOTAL (12/31/2018)      3,612,485.9      3,006,297.1      375,015.9      1,513,774.1      723,019.2      242,640.9      151,722.8        TOTAL (9/30/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2				-				144.9
WV West Virginia      11,712.9      10,309.0      246.8      1,701.1      4,399.1      1,399.5      2,562.5        WY Wyoming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      26.8        TOTAL (12/31/2018)      3,612,485.9      3,006,297.1      375,015.9      1,513,774.1      723,019.2      242,640.9      151,722.8        TOTAL (9/30/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2	· ·							639.7
WY Wyoming      2,196.3      2,123.0      196.8      983.6      871.3      44.6      26.8        TOTAL (12/31/2018)      3,612,485.9      3,006,297.1      375,015.9      1,513,774.1      723,019.2      242,640.9      151,722.8        TOTAL (9/30/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2								2,562.5
TOTAL (12/31/2018)      3,612,485.9      3,006,297.1      375,015.9      1,513,774.1      723,019.2      242,640.9      151,722.8        TOTAL (9/30/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2								26.8
TOTAL (9/30/2018)      3,648,829.0      2,990,522.3      377,753.3      1,477,371.3      741,294.5      232,876.2      161,153.2						723,019.2	242,640.9	151,722.8
			2,990,522.3	377,753.3	1,477,371.3	741,294.5	232,876.2	161,153.2
% Change      -1.0%      0.5%      -0.7%      2.5%      -2.5%      4.2%      -5.9%	% Change	-1.0%	0.5%	<u>-0.7</u> %	2.5%	<u>-2.5</u> %	4.2%	-5.9%

Source: Bloomberg

<sup>&</sup>lt;sup>7</sup> Rating based on the lowest long-term rating assigned to the bond by Fitch Ratings, Moody's Investor Services, or Standard and Poor's; split-rated debt are therefore included in the HY category.

## Credits

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## Contributors

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