

General Fund Debt Capacity Analysis Update

City of Richmond, Virginia



Executive Summary



- Davenport has prepared the General Fund Debt Capacity Analysis Update enclosed herein taking into consideration the following:
 - The City has addressed an unprecedented amount of deferred capital investment in facilities and infrastructure under Mayor Jones' administration:
 - o Four (4) new schools completed after a more than a decade without building a new facility;
 - o New Justice Center that replaces an outdated and obsolete 1960's jail;
 - o Mandated investment in an emergency 800mhz system; and
 - o Investment in essential city infrastructure and facilities (e.g. roads, fire, courts facilities, city hall, etc.).
 - The City's goal of strict adherence to the its **Debt Management and Fund Balance/Reserve Policy Guidelines**.
- Our analysis incorporates the City's projected \$336.4 million of G.O. Bond funded investment over FY 2016-FY 2020, which is based on the following:

	Description	Amount (\$millions)
1	Total Adopted CIP (FY 2016-FY 2020 Authorized G.O. Bonds/Notes)	
	G.O. Bonds	\$136.4
	G.O. Equipment Notes	13.8
2	Previously Adopted CIP Spending (Pre FY 2016 Authorized G.O. Bonds)	<u>186.2</u>
3 (1+2)	Total Projected CIP Spending (To be Financed with G.O. Bonds/Notes)	\$336.4

Executive Summary (cont.)



- Continuation of Davenport's Multi-year Plan of Finance approach that provides funding on a "just-in-time" basis so as to minimize unnecessary interest costs and budgetary impact.
 - Use of Bank of America Credit Line to fund projected monthly spending needs.
 - Permanently finance spending every 15 to 18 months.
 - Renew Credit Line or other short-term financing vehicle approximately every 18 months (Note: Renewal anticipated in next 30-60 days).
- Preliminary results based on the City's Total Projected CIP Spending and Davenport's Multi-year Plan of Finance approach are as follows:
 - Funding of the City's Projected CIP Spending Needs totaling \$336.4 million through FY 2021.
 - Additional Debt Capacity of approximately \$48.9 million through FY 2021, while maintaining compliance with the City's Financial Policy Guidelines.
 - NOTE: Self Supporting Economic Development debt (i.e. paid from non-City third party such as Stone Brewery and/or incremental special taxing districts) does not count against the City's Debt Capacity.
 - The above funding and Additional Debt Capacity can be implemented while maintaining full compliance with all Debt Management Policies.
 - After FY 2021, projected Debt Capacity for the next 5-year planning period (i.e. FY 2022 FY 2026) approximates
 \$319.5 million as the City's debt service decline begins to accelerate.
 - Projected Debt Service for the anticipated 2015 Bond issue to be issued this Fall is already built into the City's budget for debt service in the Approved FY 2017 Budget (Note: Approved FY 2017 Budget is a part of the FY 2016-2017 Biennial Budget).

Executive Summary (cont.)



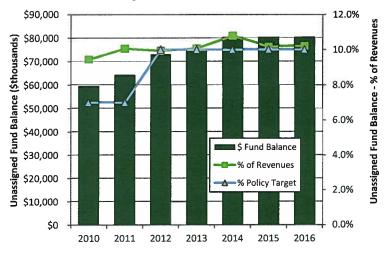
- In addition to its Debt Management Policy Guidelines, the City also has an Unassigned Fund Balance Policy which is calculated at 10% of both the General Fund and School Operating Fund budgets (less internal transfer).
 - Note: the Unassigned Fund Balance Policy was strengthened in 2012 to the above calculation. Prior to that time, the Policy target was 7.0% of General Fund budget only.
- Simultaneously with enhancing the Unassigned Fund Balance Policy, the also established a Revenue Stabilization and Contingency Fund policy which is now funded in the amount of \$10 million.
- Continued adherence to both of the above policies is critical to maintaining the City's strong "AA" range credit ratings.

Unassigned Fund Balance Policy Calculation

	Unassigned	Budgeted	Budgeted RPS	Total		
Fiscal	Fund	General Fund	Revenues Net	Budgeted	UFB	Policy
Year	Balance (1)	Revenues	of Transfer (2)	Revenues	% of Revenues	Target (3)
2010	\$59,423.1	\$629,988.0	NA	\$629,988.0	9.4%	7.0%
2011	64,062.3	637,304.3	NA	637,304.3	10.1%	7.0%
2012	72,908.9	646,848.0	87,576.4	734,424.4	9.9%	10.0%
2013	75,000.0	657,394.6	88,556.4	745,951.0	10.1%	10.0%
2014	80,394.0	653,873.4	91,542.3	745,415.7	10.8%	10.0%
2015	80,394.0	691,965.6	99,353.0	791,318.6	10.2%	10.0%
2016	80,394.0	689,260.9	98,798.1	788,059.0	10.2%	10.0%

Amounts in \$thousands

Unassigned Fund Balance Trends



⁽¹⁾ Assumes that Unassigned Fund Balance (UFB) remains the same in FY 2015 and FY 2016. Does not include \$10 million Revenue Stabilization and Contingency Fund.

⁽²⁾ Prior to 2012, budgeted RPS Revenues Net of Transfer from City were not included in the measurement base for the City's UFB Policy. RPS Revenues were included in the UFB Policy calculation beginning in 2012.

⁽³⁾ Beginning in 2012, the City also increased its UFB Policy Target to 10%, simultaneously with the inclusion of RFP Revenues in the calculation methodology.

Summary of Key Assumptions: Total Budget



■ Total Budget (Revenue Assumptions)

Fiscal Year	General Fund Budget	Plus: School Budget	Total Budget	% Change
2015	668,042,425	99,022,937	767,065,362	
2016	689,260,933	98,798,012	788,058,945	2.7%
2017	700,125,553	98,798,012	798,923,565	1.4%
2018	707,126,809	98,798,012	805,924,821	0.9%
2019	714,905,203	98,798,012	813,703,215	1.0%
2020	722,769,161	98,798,012	821,567,173	1.0%
2021	730,719,621	99,785,992	830,505,614	1.1%
2022	745,334,014	100,783,852	846,117,866	1.9%
2023	760,240,694	101,791,691	862,032,385	1.9%
2024	775,445,508	102,809,607	878,255,115	1.9%
2025	790,954,418	103,837,704	894,792,122	1.9%
2026	806,773,507	104,876,081	911,649,587	1.9%

■ Each 1% increase in the Total General Fund Budget provides approximately \$7 million of revenues, which translates into approximately \$10 million of incremental debt capacity⁽¹⁾.

(1) Amount that can be borrowed assuming approximate \$700,000 debt service payment (10% of \$7 million), 3.5% interest rate and 20 year amortization.

– Notes:

- o Revenue projections through FY 2020 for the General Fund have been provided by the City and average 1% growth per year.
- o General Fund growth for FY 2021 assumes 1.1%.
- General Fund growth for FY 2022 and beyond assumes 2.0%.
- o School budget growth assumes 0% through FY 2020.
- o School budget growth for FY 2021 and beyond assumes 1%.

Summary of Key Assumptions: Assessed Valuation



■ Total Taxable Valuation:

Fiscal				- 7.5	Supplied to the Co		Total Assessed	
Year	Real Estate	% Change	Personal Property	% Change	Machinery & Tools	% Change	Valuation	% Change
2015	20,031,295,000		1,326,029,257		588,032,927		21,945,357,184	
2016	20,492,014,785	2.3%	1,326,029,257	0.0%	585,092,762	-0.5%	22,403,136,804	2.1%
2017	20,901,855,081	2.0%	1,332,659,403	0.5%	582,167,299	-0.5%	22,816,681,783	1.8%
2018	21,110,873,632	1.0%	1,339,322,700	0.5%	579,256,462	-0.5%	23,029,452,794	0.9%
2019	21,343,093,241	1.1%	1,346,019,314	0.5%	576,360,180	-0.5%	23,265,472,735	1.0%
2020	21,577,867,267	1.1%	1,352,749,410	0.5%	573,478,379	-0.5%	23,504,095,056	1.0%
2021	22,009,424,612	2.0%	1,359,513,157	0.5%	570,610,987	-0.5%	23,939,548,757	1.9%
2022	22,449,613,105	2.0%	1,366,310,723	0.5%	567,757,932	-0.5%	24,383,681,760	1.9%
2023	22,898,605,367	2.0%	1,373,142,277	0.5%	564,919,142	-0.5%	24,836,666,786	1.9%
2024	23,356,577,474	2.0%	1,380,007,988	0.5%	562,094,547	-0.5%	25,298,680,009	1.9%
2025	23,823,709,024	2.0%	1,386,908,028	0.5%	559,284,074	-0.5%	25,769,901,126	1.9%
2026	24,300,183,204	2.0%	1,393,842,568	0.5%	556,487,654	-0.5%	26,250,513,426	1.9%

- Notes:

- o Growth for the Taxable Valuation of Real Estate through FY 2020 mirrors General Fund Revenue growth assumptions provided by the City; Growth for FY 2021 and beyond assumes 2%.
- o Personal Property and M&T Valuation reflect minimal growth.

Goals & Objectives



- Maximize capital project funding while maintaining compliance with all of the City's Financial Policy Guidelines related to Debt which include:
 - Total Debt to Total Taxable Valuation;
 - Debt Service versus Total Budgeted Revenues; and
 - 10-year Payout Ratio.
- Continuation of Davenport's Multi-year Plan of Finance approach that provides funding on a "just-in-time" basis so as to minimize unnecessary interest costs and budgetary impact.
 - Use of Bank of America Credit Line to fund projected monthly spending needs.
 - Permanently finance spending every 15 to 18 months.
 - Renew Credit Line or other short-term financing vehicle approximately every 18 months (Note: Renewal anticipated in next 30-60 days).
- Provide an estimate of the City's remaining Debt Capacity under existing Financial Policy Guidelines taking into account the following:
 - Adopted FY 2016 Budget and Approved FY 2017 Budget;
 - Revenue estimates through FY 2020 as provided by the City (1); and
 - Impact of newly created Self Supporting Parking Enterprise Fund (exclusion of certain parking revenues and related parking General Obligation Debt Service).

(1) General Fund growth assumptions through FY 2020 provided by the City.

Projected CIP Spending Needs



- Projected CIP Spending over FY 2016 FY 2020 approximates \$336.4 million and is comprised of:
 - Adopted CIP Projects in the current FY 2016 Budget/5-year planning horizon through FY 2020; and
 - Continued spending on Previously Adopted CIP Projects as shown below:

	Adopted CIP - FY 2016-2020				
Fiscal Year	김 보이지를 가게 들었다는 그리지 못하면 하는 것은 사람이 되어 가지가 생겼다면 가게 되었다면 하고 되었다.				
			Total		
2016	\$60,401,517	\$5,200,000	\$65,601,517		
2017	34,088,424	2,300,000	36,388,424		
2018	25,319,492	2,300,000	27,619,492		
2019	7,502,500	2,000,000	9,502,500		
2020	9,095,000	2.000,000	11,095,000		
1 Total Adopted CIP (FY 2016-FY2020):	\$136,406,933	\$13,800,000	\$150,206,933		

Plus:

2 Previously Adopted CIP Projects (Pre FY 2016 Amounts to be Spent): 186,147,346

Equals:

(1+2) = 3 Projected CIP Spending (to be Financed FY 2016 - FY2020): \$336,354,279

 Note Previously Adopted CIP Projects includes projects such as: Justice Center, School Construction Program, and other general CIP Projects from prior fiscal year budgets.

Source: City of Richmond.

Assumptions: Timing of G.O. Bond/Note Issuance



- Based on the City's Projected CIP Spending Needs, Davenport's General Fund Debt Capacity Analysis and Update incorporates the following:
 - Renewal of the City's Credit Line in the Fall of 2015 This interim financing vehicle will continue to provide "just in time" funding of the City's CIP spending on a monthly basis.
 - Permanent G.O. Bond and Equipment Note Financing as shown below under Timing of Issuance columns A and B:
 - Note: FY 2016 G.O. Bond issue is anticipated to close on or about the first week of December. Equipment Notes are typically borrowed in the Spring of each fiscal year.

	Projected CIP Spe	ending - FY 2016-2	2020	Timing of	Issuance
				Α	В
Fiscal	Projected	Projected		G.O.	G.O, Equipment
Year	CIP Projects	CIP Equipment	Total	Bonds	Notes
2015 ⁽¹⁾	\$46,105,451	\$0	\$46,105,451 ·	\$0	\$ 0
2016	97,460,883	5,200,000	102,660,883	88,423,031	5,200,000
2017	79,797,281	2,300,000	82,097,281	124,224,371	2,300,000
2018	38,783,164	2,300,000	41,083,164	0	2,300,000
2019	39,407,500	2,000,000	41,407,500	62,635,211	2,000,000
2020	21,000,000	2,000,000	23,000,000	47,271,667	2,000,000
Total	\$322,554,279	\$13,800,000	\$336,354,279	\$322,554,279	\$13,800,000

Preliminary Results



- The preliminary results based on the City's Projected CIP Spending assumptions and Davenport's Multi-year Plan of Finance approach are as follows:
 - Funding of the City's Projected CIP Spending Needs totaling \$336.4 million through FY 2021.
 - Additional Debt Capacity of approximately \$48.9 million through FY 2021, while maintaining compliance with the City's Financial Policy Guidelines.
 - After FY 2021, projected Debt Capacity for the next 5-year planning period (i.e. FY 2022 FY 2026)
 approximates \$319.5 million as the City's debt service decline begins to accelerate.
 - Projected Debt Service for the anticipated 2015 Bond issue to be issued this Fall is already built into the City's budget for debt service in the Approved FY 2017 Budget (Note: Approved FY 2017 Budget is a part of the FY 2016-2017 Biennial Budget).

Preliminary Results – Timing of Additional Capacity



Based on the preliminary results, the timing of Additional Capacity is as follows:

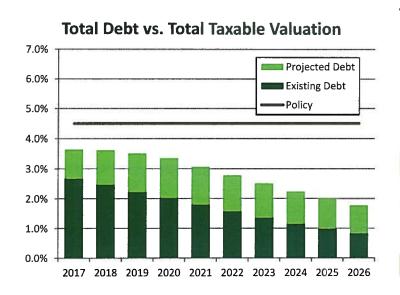
	Additional
	Capacity
Fiscal Year	per period ⁽¹⁾
	Amounts in \$millions
2017 - 2021	\$48.9 Capacity that can be allocated in any year over FY 2017-FY2021
2022	\$3.7 Additional Capacity assuming amount in prior period(s) are used
2023	\$52.8 Additional Capacity assuming amount in prior period(s) are used
2024	\$28.3 Additional Capacity assuming amount in prior period(s) are used
2025	\$136.2 Additional Capacity assuming amount in prior period(s) are used
2026	\$98.5 Additional Capacity assuming amount in prior period(s) are used
Total through FY 2026	\$368.4_

 The table above shows when the City can program additional capacity and years in which additional debt can be issued.

Preliminary Results – Debt vs Total Taxable Valuation



■ The Preliminary Results as measured by the City's Debt vs Total Taxable Valuation policy are shown below:



Fiscal Year	Existing	Projected	Total	Policy	Cumulative Additional Capacity	Additional Capacity per Period
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2017	2.7%	1.0%	3.6%	4.5%	\$196.3	\$196.3
2018	2.5%	1.1%	3.6%	4.5%	203.7	7.4
2019	2.2%	1.3%	3.5%	4.5%	231.6	27.9
2020	2.0%	1.3%	3.3%	4.5%	271.0	39.4
2021	1.8%	1.3%	3.1%	4.5%	343.0	72.0
2022	1.6%	1.2%	2.8%	4.5%	418.9	75.9
2023	1.3%	1.2%	2.5%	4.5%	494.7	75.9
2024	1.1%	1.1%	2.2%	4.5%	572.9	78.2
2025	1.0%	1.0%	2.0%	4.5%	645.5	72.6
2026	0.8%	1.0%	1.8%	4.5%	715.4	69.8

Amounts in \$millions

– Notes:

o Self Supporting Utility Enterprise Fund Debt is not included in the calculations above.

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Appendix – Detailed Debt Capacity Calculations

October 19, 2015

Debt Versus Assessed Valuation City of Richmond, Virginia

Fiscal				T V E			Total Assessed	
Year	Real Estate	% Change	Personal Property	% Change	Machinery & Tools	% Change	Valuation	% Change
2015	20,031,295,000		1,326,029,257		588,032,927		21,945,357,184	
2016	20,492,014,785	2.3%	1,326,029,257	0.0%	585,092,762	-0.5%	22,403,136,804	2.1%
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2025	23,823,709,024	2.0%	1,386,908,028	0.5%	559,284,074	-0.5%	25,769,901,126	1.9%
2026	24,300,183,204	2.0%	1,393,842,568	0.5%	556,487,654	-0.5%	26,250,513,426	1.9%
2027	24,786,186,868	2.0%	1,400,811,781	0.5%	553,705,215	-0.5%	26,740,703,865	1.9%
2028	25,281,910,606	2.0%	1,407,815,840	0.5%	550,936,689	-0.5%	27,240,663,135	1.9%
2029	25,787,548,818	2.0%	1,414,854,919	0.5%	548,182,006	-0.5%	27,750,585,743	1.9%
2030	26,303,299,794	2.0%	1,421,929,194	0.5%	545,441,096	-0.5%	28,270,670,084	1.9%
2031	26,829,365,790	2.0%	1,429,038,840	0.5%	542,713,890	-0.5%	28,801,118,520	1.9%
2032	27,365,953,106	2.0%	1,436,184,034	0.5%	540,000,321	-0.5%	29,342,137,460	1.9%
2033	27,913,272,168	2.0%	1,443,364,954	0.5%	537,300,319	-0.5%	29,893,937,441	1.9%
2034	28,471,537,611	2.0%	1,450,581,779	0.5%	534,613,818	-0.5%	30,456,733,208	1.9%
2035	29,040,968,363	2.0%	1,457,834,688	0.5%	531,940,749	-0.5%	31,030,743,800	1.9%
2036	29,621,787,731	2.0%	1,465,123,861	0.5%	529,281,045	-0.5%	31,616,192,637	1.9%
2037	30,214,223,485	2.0%	1,472,449,481	0.5%	526,634,640	-0.5%	32,213,307,605	1.9%
2038	30,818,507,955	2.0%	1,479,811,728	0.5%	524,001,466	-0.5%	32,822,321,149	1.9%
2039	31,434,878,114	2.0%	1,487,210,787	0.5%	521,381,459	-0.5%	33,443,470,360	1.9%
2040	32,063,575,676	2.0%	1,494,646,841	0.5%	518,774,552	-0.5%	34,076,997,069	1.9%
2041	32,704,847,190	2.0%	1,502,120,075	0.5%	516,180,679	-0.5%	34,723,147,944	1.9%
2042	33,358,944,134	2.0%	1,509,630,675	0.5%	513,599,776	-0.5%	35,382,174,584	1.9%
2043	34,026,123,016	2.0%	1,517,178,829	0.5%	511,031,777	-0.5%	36,054,333,622	1.9%
2044	34,706,645,477	2.0%	1,524,764,723	0.5%	508,476,618	-0.5%	36,739,886,817	1.9%

Debt Versus Assessed Valuation City of Richmond, Virginia

2016 679,826,892 94,931,491 774,758,383 55,143,304 829,901,68 2017 608,451,765 211,319,895 819,771,660 10,716,214 830,487,87 2018 568,535,782 214,629,518 783,165,300 49,499,378 832,664,67 2019 517,843,739 271,275,745 789,119,484 26,271,667 815,391,15 2020 475,601,263 311,096,220 786,697,483 0 786,697,48 2021 429,544,084 304,746,886 734,290,970 0 734,290,97 2022 381,859,207 296,539,592 678,398,799 0 678,398,79 2023 334,950,040 287,976,040 622,926,080 0 622,926,08 2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 251,539,739 262,559,919 514,099,658 0 514,099,658 2026 216,201,184 249,712,408 465,913,592 0 465,913,592 2027 182,961,513 236,321,18	Fiscal				Projected Credit	3.535-37
2016 679,826,892 94,931,491 774,758,383 55,143,304 829,901,68 2017 608,451,765 211,319,895 819,771,660 10,716,214 830,487,87 2018 568,535,782 214,629,518 783,165,300 49,499,378 832,664,67 2019 517,843,739 271,275,745 789,119,484 26,271,667 815,391,15 2020 475,601,263 311,096,220 786,697,483 0 786,697,48 2021 429,544,084 304,746,886 734,290,970 0 734,290,97 2022 381,859,207 296,539,592 678,398,799 0 678,398,79 2023 334,950,040 287,976,040 622,926,080 0 622,926,08 2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 251,539,739 262,559,919 514,099,658 0 514,099,658 2026 216,201,184 249,712,408 465,913,592 0 465,913,592 2027 182,961,513 236,321,18	Year	Existing Debt	Projected Debt	Subtotal	Line Balance	Total Debt (1)
2017 608,451,765 211,319,895 819,771,660 10,716,214 830,487,87 2018 568,535,782 214,629,518 783,165,300 49,499,378 832,664,67 2019 517,843,739 271,275,745 789,119,484 26,271,667 815,391,15 2020 475,601,263 311,096,220 786,697,483 0 786,697,48 2021 429,544,084 304,746,886 734,290,970 0 734,290,97 2022 381,859,207 296,539,592 678,398,799 0 678,398,79 2023 334,950,040 287,976,040 622,926,080 0 622,926,08 2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 251,539,739 262,559,919 514,099,658 0 514,099,65 2026 216,201,184 249,712,408 465,913,592 0 465,913,59 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766	2015	722,118,699	0	722,118,699	46,105,451	768,224,150
2018 568,535,782 214,629,518 783,165,300 49,499,378 832,664,67 2019 517,843,739 271,275,745 789,119,484 26,271,667 815,391,15 2020 475,601,263 311,096,220 786,697,483 0 786,697,48 2021 429,544,084 304,746,886 734,290,970 0 734,290,97 2022 381,859,0207 296,539,592 678,398,799 0 678,398,79 2023 334,950,040 287,976,040 622,926,080 0 622,926,08 2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 2515,539,739 262,559,919 514,099,658 0 514,099,658 2026 216,201,184 249,712,408 465,913,592 0 465,913,59 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,805,562 <	2016	679,826,892	94,931,491	774,758,383	55,143,304	829,901,687
2019 517,843,739 271,275,745 789,119,484 26,271,667 815,391,15 2020 475,601,263 311,096,220 786,697,483 0 786,697,48 2021 429,544,084 304,746,886 734,290,970 0 734,290,97 2022 381,859,207 296,539,592 678,398,799 0 678,398,79 2023 334,950,040 287,976,040 622,926,080 0 622,926,08 2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 251,539,739 262,559,919 514,099,658 0 514,099,658 2026 216,201,184 249,712,408 465,913,592 0 465,913,59 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,608 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2031 57,616,250 176,812,524 234,428,	2017	608,451,765	211,319,895	819,771,660	10,716,214	830,487,874
2020 475,601,263 311,096,220 786,697,483 0 786,697,483 2021 429,544,084 304,746,886 734,290,970 0 734,290,97 2022 381,859,207 296,539,592 678,398,799 0 678,398,79 2023 334,950,040 287,976,040 622,926,080 0 622,926,08 2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 251,539,739 262,559,919 514,099,658 0 514,099,658 2026 216,201,184 249,712,408 465,913,592 0 465,913,59 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2031 57,616,250 176,812,524 234,428,774 0 234,428,774 2032 30,280,000 160,312,445 190,592,445	2018	568,535,782	214,629,518	783,165,300	49,499,378	832,664,678
2021 429,544,084 304,746,886 734,290,970 0 734,290,97 2022 381,859,207 296,539,592 678,398,799 0 678,398,79 2023 334,950,040 287,976,040 622,926,080 0 622,926,08 2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 251,539,739 262,559,919 514,099,658 0 514,099,65 2026 216,201,184 249,712,408 465,913,592 0 465,913,59 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970	2019	517,843,739	271,275,745	789,119,484	26,271,667	815,391,151
2022 381,859,207 296,539,592 678,398,799 0 678,398,79 2023 334,950,040 287,976,040 622,926,080 0 622,926,08 2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 251,539,739 262,559,919 514,099,658 0 514,099,65 2026 216,201,184 249,712,408 465,913,592 0 465,913,59 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,379	2020	475,601,263	311,096,220	786,697,483	0	786,697,484
2023 334,950,040 287,976,040 622,926,080 0 622,926,08 2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 251,539,739 262,559,919 514,099,658 0 514,099,65 2026 216,201,184 249,712,408 465,913,592 0 465,913,59 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103	2021	429,544,084	304,746,886	734,290,970	0	734,290,970
2024 290,216,694 275,311,116 565,527,810 0 565,527,81 2025 251,539,739 262,559,919 514,099,658 0 514,099,65 2026 216,201,184 249,712,408 465,913,592 0 465,913,59 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 <td>2022</td> <td>381,859,207</td> <td>296,539,592</td> <td>678,398,799</td> <td>0</td> <td>678,398,799</td>	2022	381,859,207	296,539,592	678,398,799	0	678,398,799
2025 251,539,739 262,559,919 514,099,658 0 514,099,65 2026 216,201,184 249,712,408 465,913,592 0 465,913,59 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 <t< td=""><td>2023</td><td>334,950,040</td><td>287,976,040</td><td>622,926,080</td><td>0</td><td>622,926,080</td></t<>	2023	334,950,040	287,976,040	622,926,080	0	622,926,080
2026 216,201,184 249,712,408 465,913,592 0 465,913,592 2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78<	2024	290,216,694	275,311,116	565,527,810	0	565,527,810
2027 182,961,513 236,321,183 419,282,696 0 419,282,69 2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03	2025	251,539,739	262,559,919	514,099,658	0	514,099,658
2028 150,176,842 222,361,766 372,538,608 0 372,538,60 2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,602	2026	216,201,184	249,712,408	465,913,592	0	465,913,592
2029 116,247,171 207,808,562 324,055,733 0 324,055,73 2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,60 2040 0 16,852,377 16,852,377 0 16,852,37 2041	2027	182,961,513	236,321,183	419,282,696	0	419,282,696
2030 83,977,500 192,634,809 276,612,309 0 276,612,30 2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,60 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 <t< td=""><td>2028</td><td>150,176,842</td><td>222,361,766</td><td>372,538,608</td><td>0</td><td>372,538,608</td></t<>	2028	150,176,842	222,361,766	372,538,608	0	372,538,608
2031 57,616,250 176,812,524 234,428,774 0 234,428,77 2032 30,280,000 160,312,445 190,592,445 0 190,592,44 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,60 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,645	2029	116,247,171	207,808,562	324,055,733	0	324,055,733
2032 30,280,000 160,312,445 190,592,445 0 190,592,444 2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,60 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,645	2030	83,977,500	192,634,809	276,612,309	0	276,612,309
2033 12,500,000 143,103,970 155,603,970 0 155,603,97 2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,60 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,645	2031	57,616,250	176,812,524	234,428,774	0	234,428,774
2034 6,250,000 124,960,103 131,210,103 0 131,210,10 2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,60 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,645	2032	30,280,000	160,312,445	190,592,445	0	190,592,445
2035 0 106,042,379 106,042,379 0 106,042,37 2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,60 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,645	2033	12,500,000	143,103,970	155,603,970	0	155,603,970
2036 0 86,315,805 86,315,805 0 86,315,80 2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,60 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,64	2034	6,250,000	124,960,103	131,210,103	0	131,210,103
2037 0 65,743,781 65,743,781 0 65,743,78 2038 0 44,288,035 0 44,288,035 2039 0 26,416,602 26,416,602 0 26,416,602 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,64	2035	0	106,042,379	106,042,379	0	106,042,379
2038 0 44,288,035 44,288,035 0 44,288,03 2039 0 26,416,602 26,416,602 0 26,416,602 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,64	2036	0	86,315,805	86,315,805	0	86,315,805
2039 0 26,416,602 26,416,602 0 26,416,602 2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,64	2037	0	65,743,781	65,743,781	0	65,743,781
2040 0 16,852,377 16,852,377 0 16,852,37 2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,64	2038	0	44,288,035	44,288,035	0	44,288,035
2041 0 6,811,165 6,811,165 0 6,811,16 2042 0 3,488,645 3,488,645 0 3,488,64	2039	0	26,416,602	26,416,602	0	26,416,602
2042 0 3,488,645 3,488,645 0 3,488,64	2040	0	16,852,377	16,852,377	0	16,852,377
	2041	0	6,811,165	6,811,165	0	6,811,165
	2042	0	3,488,645	3,488,645	0	3,488,645
2043 0 0 0 0	2043	0	0	0	0	0
2044 0 0 0 0	2044	0	0	0	0	0

⁽¹⁾ Includes Short-term Notes; Parking and Stone Debt

Debt Versus Assessed Valuation City of Richmond, Virginia

Fiscal	Existing Debt vs	Projected Debt vs	Total Debt		Remaining
Year	Total AV	Total AV	vs AV	Policy	Capacity
2015	3.3%	0.2%	3.5%	4.5%	219,316,924
2016	3.0%	0.7%	3.7%	4.5%	178,239,469
2017	2.7%	1.0%	3.6%	4.5%	196,262,807
2018	2.5%	1.1%	3.6%	4.5%	203,660,698
2019	2.2%	1.3%	3.5%	4.5%	231,555,122
2020	2.0%	1.3%	3.3%	4.5%	270,986,794
2021	1.8%	1.3%	3.1%	4.5%	342,988,724
2022	1.6%	1.2%	2.8%	4.5%	418,866,880
2023	1.3%	1.2%	2.5%	4.5%	494,723,925
2024	1.1%	1.1%	2.2%	4.5%	572,912,791
2025	1.0%	1.0%	2.0%	4.5%	645,545,893
2026	0.8%	1.0%	1.8%	4.5%	715,359,512
2027	0.7%	0.9%	1.6%	4.5%	784,048,978
2028	0.6%	0.8%	1.4%	4.5%	853,291,233
2029	0.4%	0.7%	1.2%	4.5%	924,720,626
2030	0.3%	0.7%	1.0%	4.5%	995,567,844
2031	0.2%	0.6%	0.8%	4.5%	1,061,621,559
2032	0.1%	0.5%	0.6%	4.5%	1,129,803,741
2033	0.0%	0.5%	0.5%	4.5%	1,189,623,214
2034	0.0%	0.4%	0.4%	4.5%	1,239,342,891
2035	0.0%	0.3%	0.3%	4.5%	1,290,341,092
2036	0.0%	0.3%	0.3%	4.5%	1,336,412,864
2037	0.0%	0.2%	0.2%	4.5%	1,383,855,061
2038	0.0%	0.1%	0.1%	4.5%	1,432,716,417
2039	0.0%	0.1%	0.1%	4.5%	1,478,539,565
2040	0.0%	0.0%	0.0%	4.5%	1,516,612,491
2041	0.0%	0.0%	0.0%	4.5%	1,555,730,493
2042	0.0%	0.0%	0.0%	4.5%	1,588,709,211
2043	0.0%	0.0%	0.0%	4.5%	1,622,445,013
2044	0.0%	0.0%	0.0%	4.5%	1,653,294,907

Existing and Projected Payout Ratio City of Richmond, Virginia

Fiscal		Existing 10 Year	Projected 10 Year
Year	Total Existing (1)	Payout Ratio	Payout Ratio
	681,383,699		
2016	42,291,806	63.1%	63.1%
2017	40,140,127	66.2%	62.6%
2018	39,915,983	69.5%	60.0%
2019	41,192,042	73.1%	62.8%
2020	42,242,476	77.6%	63.5%
2021	46,057,179	82.3%	64.8%
2022	47,684,877	86.6%	68.1%
2023	46,909,167	92.1%	71.9%
2024	44,733,346	96.3%	75.0%
2025	38,676,955	97.8%	76.8%
2026	35,338,555	100.0%	79.4%
2027	33,239,671	100.0%	81.5%
2028	32,784,671	100.0%	84.3%
2029	33,929,671	100.0%	88.1%
2030	32,269,671	100.0%	91.8%
2031	26,361,250	100.0%	93.9%
2032	27,336,250	100.0%	97.1%
2033	17,780,000	100.0%	98.2%
2034	6,250,000	100.0%	100.0%
2035	6,250,000	100.0%	100.0%
2036	0	0.0%	100.0%
2037	0	0.0%	100.0%
2038	0	0.0%	100.0%
2039	0	0.0%	100.0%
2040	0	0.0%	100.0%
2041	0	0.0%	100.0%
2042	0	0.0%	100.0%
2043	0	0.0%	100.0%
2044	0	0.0%	0.0%
2045	0	0.0%	0.0%

⁽¹⁾ Excludes Short-term Notes

Existing and Projected Payout Ratio - Calculations City of Richmond, Virginia

1	2016	3	2017		2018	3	201	9	2020
Fiscal									
Year	Issue 1	Projected Payout	Issue 2	Projected Payout	Issue 3	Projected Payout	Issue 4	Projected Payout	Issue 5
	94,931,491		120,848,858		10,300,000		65,887,915		50,217,100
2016	0	0.0%	0	0.0%	0	0.0%	C	0.0%	0
2017	4,460,454	62.6%	0	62.6%	0	62.6%	C	62.6%	0
2018	5,194,838	65.5%	1,795,539	60.0%	0	60.0%	C	60.0%	0
2019	5,613,944	68.7%	3,001,434	63.1%	626,310	62.8%	C	62.8%	0
2020	5,347,960	72.6%	3,363,792	66.6%	648,961	66.3%	1,035,911	63.5%	0
2021	2,687,084	76.8%	1,482,884	70.4%	672,485	70.1%	1,130,172	67.1%	376,709
2022	1,662,235	80.6%	1,878,989	74.1%	696,917	73.7%	2,328,921	. 70.5%	1,640,233
2023	1,724,212	85.5%	1,970,186	78.5%	722,296	78.1%	2,432,374	74.6%	1,714,484
2024	3,066,238	89.2%	5,019,268	82.1%	246,443	81.6%	2,540,759	77.9%	1,792,216
2025	3,198,525	90.9%	5,202,705	84.1%	258,765	83.6%	2,217,608	79.8%	1,873,594
2026	3,336,297	93.3%	5,393,937	86.8%	271,703	86.3%	2,323,489	82.5%	1,522,084
2027	3,479,788	94.3%	5,593,296	88.8%	285,289	88.3%	2,434,663	84.7%	1,598,189
2028	3,629,241	95.7%	5,801,128	91.5%	299,553	91.1%	2,551,396	87.6%	1,678,098
2029	3,784,910	97.8%	6,017,794	95.3%	314,531	94.8%	2,673,966	91.5%	1,762,003
2030	3,947,061	98.1%	6,243,667	98.7%	330,257	98.3%	2,802,665	95.3%	1,850,103
2031	4,115,969	98.8%	6,479,140	99.2%	346,770	98.9%	2,937,798	97.2%	1,942,608
2032	4,291,924	100.0%	6,724,621	100.0%	364,109	100.0%	3,079,688	100.0%	2,039,739
2033	4,475,228	100.0%	6,980,534	100.0%	382,314	100.0%	3,228,672	100.0%	2,141,726
2034	4,861,196	100.0%	7,247,324	100.0%	401,430	100.0%	3,385,106		2,248,812
2035	5,060,156	100.0%	7,525,453	100.0%	421,501	100.0%	3,549,361		2,361,252
2036	5,267,453	100.0%	7,815,401	100.0%	442,576	100.0%	3,721,829	100.0%	2,479,315
2037	5,483,443	100.0%	8,117,673	100.0%	464,705	100.0%	3,902,921	100.0%	2,603,281
2038	5,708,503	100.0%	8,432,792	100.0%	487,940	100.0%	4,093,067	100.0%	2,733,445
2039	1,434,957	100.0%	8,761,302	100.0%	512,337	100.0%	4,292,720	100.0%	2,870,117
2040	1,510,292	100.0%	0	100.0%	537,954	100.0%	4,502,356	100.0%	3,013,623
2041	1,589,582	100.0%	0	100.0%	564,852	100.0%	4,722,474	100.0%	3,164,304
2042	0	0.0%	0	0.0%	0	0.0%	0		3,322,519
2043	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3,488,645
2044	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
2045	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Existing and Projected Payout Ratio - Calculations City of Richmond, Virginia

		2023	L	202	2	2023		
Fiscal Year	Projected Payout	Issue 6	Projected Payout	Issue 7	Projected Payout	Issue 8	Projected Payout	Total Projected Debt
		0	==ic= ==68	()	0		
2016	0.0%	0	0.0%	(0.0%	0	0.0%	0
2017	62.6%	0	62.6%	(62.6%	0	62.6%	4,460,454
2018	60.0%	0	60.0%	(60.0%	0	60.0%	6,990,377
2019	62.8%	0	62.8%	(62.8%	0	62.8%	9,241,688
2020	63.5%	0	63.5%	(63.5%	0	63.5%	10,396,625
2021	64.8%	0	64.8%	(64.8%	0	64.8%	6,349,334
2022	68.1%	0	68.1%	(68.1%	0	68.1%	8,207,295
2023	71.9%	0	71.9%	(71.9%	0	71.9%	8,563,552
2024	75.0%	0	75.0%	(75.0%	0	75.0%	12,664,924
2025	76.8%	0	76.8%	(76.8%	0	76.8%	12,751,197
2026	79.4%	0	79.4%	(79.4%	0	79.4%	12,847,511
2027	81.5%	0	81.5%	(81.5%	0	81.5%	13,391,225
2028	84.3%	0	84.3%	(84.3%	0	84.3%	13,959,417
2029	88.1%	0	88.1%	(88.1%	0	88.1%	14,553,204
2030	91.8%	0	91.8%	(91.8%	0	91.8%	15,173,752
2031	93.9%	0	93.9%	(93.9%	0	93.9%	15,822,285
2032	97.1%	0	97.1%	(97.1%	0	97.1%	16,500,080
2033	98.2%	0	98.2%	(98.2%	0	98.2%	17,208,474
2034	100.0%	0	100.0%	(100.0%	0	100.0%	18,143,867
2035	100.0%	0	100.0%	(100.0%	0	100.0%	18,917,724
2036	100.0%	0	100.0%	(100.0%	o O	100.0%	19,726,575
2037	100.0%	0	100.0%	C	100.0%	0	100.0%	20,572,023
2038	100.0%	0	100.0%	C	100.0%	0	100.0%	21,455,747
2039	100.0%	0	100.0%	(100.0%	0	100.0%	17,871,433
2040	100.0%	0	100.0%	C	100.0%	0	100.0%	9,564,225
2041	100.0%	0	100.0%	(100.0%	0	100.0%	10,041,212
2042	100.0%	0	100.0%	C	100.0%	0	100.0%	3,322,519
2043	100.0%	0	100.0%	C	100.0%	0	100.0%	3,488,645
2044	0.0%	0	0.0%	C	0.0%	0	0.0%	0
2045	0.0%	0	0.0%	C	0.0%	0	0.0%	0

Existing and Projected Payout Ratio - Debt Assumptions

City of Richmond, Virginia

Projected Bond Principal

2016 2016 2017 2018 2019 2020 2022 2023 **Fiscal Total Projected** Year LT Issue 1 LT Issue 2 LT Issue 3 LT Issue 5 LT Issue 6 LT Issue 7 LT Issue 8 LongTerm (LT) LT Issue 4 0 66,731,491 23,000,000 118,548,858 8,000,000 63.887.915 48,217,100 ō 0 0 0 0 0 0 2016 0 0 0 2017 3,005,635 0 0 0 0 0 465,535 0 3,471,170 0 0 0 2018 3,690,847 489,976 1,362,323 0 0 5,543,146 2019 0 0 0 4,058,878 515,699 2,555,222 193,095 7,322,895 2020 3.739.836 542,774 2,904,194 202,749 659,202 0 0 0 8,048,755 2021 742,162 0 0 0 3,559,645 1,023,830 571,269 1,009,497 212,887 2022 1.060.974 601,261 1,391,401 223,531 1,929,270 1,252,223 0 0 6,458,659 0 0 2023 632,827 234,708 2,020,733 1,314,834 7,264,673 1,091,385 1,970,186 0 0 11.829.295 2024 2,400,187 666,051 5,019,268 246,443 2,116,770 1,380,575 0 2,217,608 1,449,604 12,327,207 2025 2,497,507 701,018 5,202,705 258,765 0 0 12,847,511 2026 2,598,476 737,822 5,393,937 271,703 2,323,489 1,522,084 0 0 13,391,225 2027 285,289 2,434,663 1,598,189 2,703,231 776,557 5,593,296 0 0 2028 817,327 299,553 2,551,396 1,678,098 13,959,417 2,811,915 5,801,128 2029 860,236 314,531 2,673,966 1,762,003 0 0 14,553,204 2,924,674 6,017,794 2,802,665 1,850,103 0 0 15,173,752 2030 3,041,662 905,399 6,243,667 330,257 0 2031 6,479,140 346,770 2,937,798 1,942,608 0 15,822,285 3,163,037 952,932 0 3,079,688 2.039.739 0 16,500,080 2032 364,109 3,288,963 1,002,961 6,724,621 3,228,672 0 0 17,208,474 2033 1,055,616 6,980,534 382,314 2,141,726 3,419,612 3,385,106 2.248.812 0 0 18,143,867 401,430 2034 3,750,160 1,111,036 7,247,324 0 0 18,917,724 3,549,361 2,361,252 2035 3,890,791 1,169,366 7,525,453 421,501 3,721,829 2,479,315 0 0 19.726,575 442,576 2036 4.036,695 1,230,757 7,815,401 0 0 20,572,023 3,902,921 2,603,281 464,705 2037 4.188.071 1,295,372 8,117,673 0 487,940 4,093,067 2,733,445 21,455,747 2038 4,345,124 1.363.379 8,432,792 0 0 17,871,433 4,292,720 2,870,117 2039 0 1.434.957 8.761.302 512,337 0 0 9,564,225 2040 0 1,510,292 0 537,954 4,502,356 3,013,623 0 0 10,041,212 2041 0 1,589,582 0 564.852 4,722,474 3,164,304 0 3,322,519 0 3,322,519 2042 0 0 0 0 0 0 0 0 3,488,645 0 0 3,488,645 2043 0 0 0 0 0 0 0 2044 0 0 0 0 0 0 0 0 2045 0 0 0 0 0

Existing and Projected Payout Ratio - Debt Assumptions

City of Richmond, Virginia

Projected Equipment Principal

Total Projected Equipment **Fiscal** Year Equip Issue 4 (Equip) Equip Issue 1 Equip Issue 2 Equip Issue 3 Equip Issue 5 Equip Issue 6 5,200,000 2,300,000 2,300,000 2,000,000 2,000,000 989,284 989,284 1,014,016 433.216 1,447,231 446,212 1,039,366 433,216 1,918,794 1,065,350 459,598 446,212 376,709 2,347,870 473,386 1,091,984 459,598 388,010 376,709 2,789,688 487,588 473,386 399,651 388,010 1,748,635 487,588 411,640 399,651 1,298,879 423,989 411,640 835,630 423,989 423,989

Existing and Projected Debt Assumptions City of Richmond, Virginia

Fiscal				Projected	Projected	TOTAL Existing
Year	Existing Debt	Plus: Notes	Total Existing	Long-Term Debt	Equipment Debt	& Projected Debt
2015	681,383,699	40,735,000	722,118,699	0	0	722,118,699
2016	639,091,892	40,735,000	679,826,892	89,731,491	5,200,000	
2017			· · · · ·	•	- ·	774,758,383
2017	598,951,765	9,500,000	608,451,765	204,809,179	6,510,716	819,771,660
2018	559,035,782	9,500,000	568,535,782	207,266,033	7,363,485	783,165,300
	517,843,739	0	517,843,739	263,831,053	7,444,691	789,119,484
2020	475,601,263	0	475,601,263	303,999,398	7,096,822	786,697,483
2021	429,544,084	0	429,544,084	300,439,753	4,307,133	734,290,970
2022	381,859,207	0	381,859,207	293,981,094	2,558,498	678,398,799
2023	334,950,040	0	334,950,040	286,716,421	1,259,619	622,926,080
2024	290,216,694	0	290,216,694	274,887,126	423,989	565,527,810
2025	251,539,739	0	251,539,739	262,559,919	(0)	514,099,658
2026	216,201,184	0	216,201,184	249,712,408	(0)	465,913,592
2027	182,961,513	0	182,961,513	236,321,183	(0)	419,282,696
2028	150,176,842	0	150,176,842	222,361,766	(0)	372,538,608
2029	116,247,171	0	116,247,171	207,808,562	(0)	324,055,733
2030	83,977,500	0	83,977,500	192,634,809	(0)	276,612,309
2031	57,616,250	0	57,616,250	176,812,524	(0)	234,428,774
2032	30,280,000	0	30,280,000	160,312,445	(0)	190,592,445
2033	12,500,000	0	12,500,000	143,103,970	(0)	155,603,970
2034	6,250,000	0	6,250,000	124,960,103	(0)	131,210,103
2035	0	0	0	106,042,379	(0)	106,042,379
2036	0	0	0	86,315,805	(0)	86,315,805
2037	0	0	0	65,743,781	(0)	65,743,781
2038	0	0	0	44,288,035	(0)	44,288,035
2039	0	0	0	26,416,602	(0)	26,416,602
2040	0	0	0	16,852,377	(0)	16,852,377
2041	0	<i>O</i>	0	6,811,165	(0)	6,811,165
2042	0	0	0	3,488,645	(0)	3,488,645
2043	0	0	0	0	(O)	0
2044	0	0	0	0	(0)	0

Existing and Projected Debt Assumptions City of Richmond, Virginia

Include:

	1	1	1	1	1	1	1	1	
Fiscal									Total Projected
Year	LT Issue 1	LT Issue 2	LT Issue 3	LT Issue 4	LT Issue 5	LT issue 6	LT Issue 7	LT Issue 8	Long-Term (LT)
2015	0	0	0	0	0	0	0	0	0
2016	66,731,491	23,000,000	0	0	0	0	0	0	89,731,491
2017	63,725,856	22,534,465	118,548,858	0	0	0	0	0	204,809,179
2018	60,035,009	22,044,489	117,186,535	8,000,000	0	0	0	0	207,266,033
2019	55,976,131	21,528,790	114,631,312	7,806,905	63,887,915	0	0	0	263,831,053
2020	52,236,294	20,986,016	111,727,118	7,604,156	63,228,713	48,217,100	0	0	303,999,398
2021	51,212,464	20,414,747	110,717,621	7,391,269	62,486,552	48,217,100	0	0	300,439,753
2022	50,151,490	19,813,486	109,326,220	7,167,738	60,557,282	46,964,877	0	0	293,981,094
2023	49,060,105	19,180,659	107,356,034	6,933,031	58,536,549	45,650,044	0	0	286,716,421
2024	46,659,918	18,514,608	102,336,766	6,686,588	56,419,779	44,269,468	0	0	274,887,126
2025	44,162,411	17,813,590	97,134,062	6,427,822	54,202,170	42,819,864	0	0	262,559,919
2026	41,563,935	17,075,768	91,740,125	6,156,119	51,878,681	41,297,780	0	0	249,712,408
2027	38,860,704	16,299,211	86,146,829	5,870,830	49,444,018	39,699,591	0	0	236,321,183
2028	36,048,789	15,481,885	80,345,700	5,571,277	46,892,621	38,021,493	0	0	222,361,766
2029	33,124,115	14,621,649	74,327,907	5,256,746	44,218,655	36,259,490	0	0	207,808,562
2030	30,082,453	13,716,250	68,084,240	4,926,489	41,415,990	34,409,387	0	0	192,634,809
2031	26,919,416	12,763,318	61,605,100	4,579,719	38,478,193	32,466,779	0	0	176,812,524
2032	23,630,453	11,760,357	54,880,479	4,215,610	35,398,505	30,427,040	0	0	160,312,445
2033	20,210,841	10,704,741	47,899,945	3,833,296	32,169,833	28,285,314	0	0	143,103,970
2034	16,460,682	9,593,704	40,652,621	3,431,867	28,784,727	26,036,502	0	0	124,960,103
2035	12,569,891	8,424,339	33,127,169	3,010,365	25,235,366	23,675,250	0	0	106,042,379
2036	8,533,196	7,193,582	25,311,767	2,567,789	21,513,537	21,195,935	0	0	86,315,805
2037	4,345,124	5,898,209	17,194,094	2,103,084	17,610,616	18,592,654	0	0	65,743,781
2038	0	4,534,830	8,761,302	1,615,144	13,517,550	15,859,209	0	0	44,288,035
2039	0	3,099,874	0	1,102,806	9,224,830	12,989,092	0	0	26,416,602
2040	0	1,589,582	0	564,852	4,722,474	9,975,469	0	0	16,852,377
2041	0	(O)	0	0	0	6,811,165	0	0	6,811,165
2042	0	(O)	0	0	0	3,488,645	0	0	3,488,645
2043	0	(O)	0	0	0	0	0	0	0
2044	0	(0)	0	0	0	0	0	0	0

Existing and Projected Debt Assumptions City of Richmond, Virginia

Include:

	1	1	1	1	1	1	
Fiscal							Equipment
Year	Equip Issue 1	Equip Issue 2	Equip Issue 3	Equip Issue 4	Equip Issue 5	Equip Issue 6	(Equip)
2015	0	0	0	0	0	0	0
2016	5,200,000	0	0	ō	o	0	5,200,000
2017	4,210,716	2,300,000	0	0	0	Ō	6,510,716
2018	3,196,701	1,866,784	2,300,000	0	0	ō	7,363,485
2019	2,157,334	1,420,573	1,866,784	2,000,000	0	0	7,444,691
2020	1,091,984	960,974	1,420,573	1,623,291	2,000,000	0	7,096,822
2021	(0)	487,588	960,974	1,235,280	1,623,291	0	4,307,133
2022	(0)	0	487,588	835,630	1,235,280	0	2,558,498
2023	(0)	0	0	423,989	835,630	0	1,259,619
2024	(0)	0	0	0	423,989	0	423,989
2025	(0)	0	0	0	0	0	(0)
2026	(O)	0	0	0	0	0	(O)
2027	(O)	0	0	0	0	0	(0)
2028	(O)	0	0	0	0	0	(O)
2029	(0)	0	0	0	0	0	(0)
2030	(O)	0	0	0	0	0	(O)
2031	(O)	0	0	0	0	0	(O)
2032	(O)	0	0	0	0	0	(0)
2033	(0)	0	0	0	0	0	(O)
2034	(0)	0	0	0	0	0	(0)
2035	(0)	0	. 0	0	0	0	(0)
2036	(O)	0	0	0	0	0	(0)
2037	(O)	0	0	0	0	0	(0)
2038	(O)	0	0	0	0	0	(0)
2039	(0)	0	0	0	0	0	(0)
2040	(0)	0	0	0	0	0	(0)
2041	(0)	0	0	0	0	0	(0)
2042	(0)	0	0	0	0	0	(0)
2043	(0)	0	0	0	0	0	(0)
2044	(0)	0	0	0	0	0	(0)

Debt Service Versus Budget City of Richmond, Virginia

Fiscal Year	General Fund Budget	Plus: School Budget	Total Budget	% Change	Total Existing Debt Service (D.S.) (1)	Projected D.S.	Total Debt D.S.
2015	668,042,425	99,022,937	767,065,362		62,179,685	0	62,179,685
2016	689,260,933	98,798,012	788,058,945	2.7%	63,881,340	974,609	64,855,949
2017	700,125,553	98,798,012	798,923,565	1.4%	60,041,135	8,223,296	68,264,431
2018	707,126,809	98,798,012	805,924,821	0.9%	58,101,395	14,878,379	72,979,773
2019	714,905,203	98,798,012	813,703,215	1.0%	57,833,921	16,757,706	74,591,627
2020	722,769,161	98,798,012	821,567,173	1.0%	57,221,842	20,448,987	77,670,829
2021	730,719,621	99,785,992	830,505,614	1.1%	61,400,284	18,052,177	79,452,461
2022	745,334,014	100,783,852	846,117,866	1.9%	61,071,594	19,672,865	80,744,459
2023	760,240,694	101,791,691	862,032,385	1.9%	58,776,659	19,675,925	78,452,584
2024	775,445,508	102,809,607	878,255,115	1.9%	54,588,311	23,401,934	77,990,245
2025	790,954,418	103,837,704	894,792,122	1.9%	46,683,300	22,937,655	69,620,955
2026	806,773,507	104,876,081	911,649,587	1.9%	41,587,408	22,473,375	64,060,783
2027	822,908,977	105,924,841	928,833,818	1.9%	37,894,366	22,445,805	60,340,171
2028	839,367,156	106,984,090	946,351,246	1.9%	35,877,402	22,418,235	58,295,637
2029	856,154,499	108,053,931	964,208,430	1.9%	35,506,286	22,390,665	57,896,951
2030	873,277,589	109,134,470	982,412,059	1.9%	32,254,049	22,363,094	54,617,143
2031	890,743,141	110,225,815	1,000,968,956	1.9%	24,999,613	22,335,524	47,335,136
2032	908,558,004	111,328,073	1,019,886,077	1.9%	24,792,938	22,307,954	47,100,891
2033	926,729,164	112,441,354	1,039,170,518	1.9%	19,027,170	22,280,383	41,307,553
2034	945,263,747	113,565,767	1,058,829,514	1.9%	6,703,125	22,447,813	29,150,938
2035	964,169,022	114,701,425	1,078,870,447	1.9%	6,453,125	22,412,930	28,866,055
2036	983,452,403	115,848,439	1,099,300,842	1.9%	0	22,378,047	22,378,047
2037	1,003,121,451	117,006,923	1,120,128,374	1.9%	0	22,343,165	22,343,165
2038	1,023,183,880	118,176,993	1,141,360,872	1.9%	0	22,308,282	22,308,282
2039	1,043,647,557	119,358,763	1,163,006,320	1.9%	0	17,765,333	17,765,333
2040	1,064,520,508	120,552,350	1,185,072,859	1.9%	0	8,626,675	8,626,675
2041	1,085,810,919	121,757,874	1,207,568,792	1.9%	0	8,621,675	8,621,675
2042	1,107,527,137	122,975,452	1,230,502,589	1.9%	0	3,663,078	3,663,078
2043	1,129,677,680	124,205,207	1,253,882,887	1.9%	0	3,663,078	3,663,078
2044	1,152,271,233	125,447,259	1,277,718,492	1.9%	0	0	0

⁽¹⁾ Excludes Parking; Stone Debt

Existing and Projected Debt Assumptions City of Richmond, Virginia

Include:

	1	1	1	1	1	1	
Fiscal				le Tolk Notes II			Equipment
Year	Equip Issue 1	Equip Issue 2	Equip Issue 3	Equip Issue 4	Equip Issue 5	Equip Issue 6	(Equip)
2015							
2015 2016	5,200,000	0	0	0	0	0	0
2016	4,210,716	2,300,000	0	0	0	0	5,200,000
2017	3,196,701	1,866,784	2,300,000	0	0	0	6,510,716
2019	2,157,334	1,420,573	1,866,784	2,000,000	0	0	7,363,485 7,444,691
2020	1,091,984	960,974	1,420,573	1,623,291	2,000,000	0	7,096,822
2021	(0)	487,588	960,974	1,235,280	1,623,291	0	4,307,133
2022	(0)	0	487,588	835,630	1,235,280	0	2,558,498
2023	(0)	0	0	423,989	835,630	0	1,259,619
2024	(0)	0	0	0	423,989	0	423,989
2025	(0)	0	0	0	0	0	(0)
2026	(0)	0	0	0	0	0	(0)
2027	(0)	0	0	0	0	0	(0)
2028	(0)	0	0	0	0	0	(0)
2029	(0)	0	0	0	0	0	(0)
2030	(0)	0	0	0	0	0	(0)
2031	(0)	0	0	0	0	0	(O)
2032	(O)	0	0	0	0	0	(O)
2033	(O)	0	0	0	0	0	(O)
2034	(0)	0	0	0	0	0	(0)
2035	(0)	0	0	0	0	0	(O)
2036	(0)	0	0	0	0	0	(O)
2037	(0)	0	0	0	0	0	(0)
2038	(O)	0	0	0	0	0	(0)
2039	(0)	0	0	0	0	0	(0)
2040	(0)	0	0	0	0	0	(0)
2041	(0)	0	0	0	0	0	(0)
2042	(0)	0	0	0	0	0	(0)
2043	(0)	0	0	0	0	0	(0)
2044	(0)	0	0	0	0	0	(0)

Debt Service Versus Budget City of Richmond, Virginia

Fiscal Year Г	General Fund Budget	Plus: School Budget	Total Budget	% Change	Total Existing Debt Service (D.S.) (1)	Projected D.S.	Total Debt D.S.
2015	668,042,425	99,022,937	767,065,362	1,3769	62,179,685	0	62,179,685
2016	689,260,933	98,798,012	788,058,945	2.7%	63,881,340	974,609	64,855,949
2017	700,125,553	98,798,012	798,923,565	1.4%	60,041,135	8,223,296	68,264,431
2018	707,126,809	98,798,012	805,924,821	0.9%	58,101,395	14,878,379	72,979,773
2019	714,905,203	98,798,012	813,703,215	1.0%	57,833,921	16,757,706	74,591,627
2020	722,769,161	98,798,012	821,567,173	1.0%	57,221,842	20,448,987	77,670,829
2021	730,719,621	99,785,992	830,505,614	1.1%	61,400,284	18,052,177	79,452,461
2022	745,334,014	100,783,852	846,117,866	1.9%	61,071,594	19,672,865	80,744,459
2023	760,240,694	101,791,691	862,032,385	1.9%	58,776,659	19,675,925	78,452,584
2024	775,445,508	102,809,607	878,255,115	1.9%	54,588,311	23,401,934	77,990,245
2025	790,954,418	103,837,704	894,792,122	1.9%	46,683,300	22,937,655	69,620,955
2026	806,773,507	104,876,081	911,649,587	1.9%	41,587,408	22,473,375	64,060,783
2027	822,908,977	105,924,841	928,833,818	1.9%	37,894,366	22,445,805	60,340,171
2028	839,367,156	106,984,090	946,351,246	1.9%	35,877,402	22,418,235	58,295,637
2029	856,154,499	108,053,931	964,208,430	1.9%	35,506,286	22,390,665	57,896,951
2030	873,277,589	109,134,470	982,412,059	1.9%	32,254,049	22,363,094	54,617,143
2031	890,743,141	110,225,815	1,000,968,956	1.9%	24,999,613	22,335,524	47,335,136
2032	908,558,004	111,328,073	1,019,886,077	1.9%	24,792,938	22,307,954	47,100,891
2033	926,729,164	112,441,354	1,039,170,518	1.9%	19,027,170	22,280,383	41,307,553
2034	945,263,747	113,565,767	1,058,829,514	1.9%	6,703,125	22,447,813	29,150,938
2035	964,169,022	114,701,425	1,078,870,447	1.9%	6,453,125	22,412,930	28,866,055
2036	983,452,403	115,848,439	1,099,300,842	1.9%	0	22,378,047	22,378,047
2037	1,003,121,451	117,006,923	1,120,128,374	1.9%	0	22,343,165	22,343,165
2038	1,023,183,880	118,176,993	1,141,360,872	1.9%	0	22,308,282	22,308,282
2039	1,043,647,557	119,358,763	1,163,006,320	1.9%	0	17,765,333	17,765,333
2040	1,064,520,508	120,552,350	1,185,072,859	1.9%	0	8,626,675	8,626,675
2041	1,085,810,919	121,757,874	1,207,568,792	1.9%	0	8,621,675	8,621,675
2042	1,107,527,137	122,975,452	1,230,502,589	1.9%	0	3,663,078	3,663,078
2043	1,129,677,680	124,205,207	1,253,882,887	1.9%	0	3,663,078	3,663,078
2044	1,152,271,233	125,447,259	1,277,718,492	1.9%	0	0	0

⁽¹⁾ Excludes Parking; Stone Debt

Debt Service Versus Budget City of Richmond, Virginia

Fiscal Year	Existing D.S. vs Budget	Projected D.S. vs Budget	Total D.S. vs Budget	Policy	Remaining Payment Capacity	Equivalent Borrowing Capacity - 20 year Bonds @ 4%
1					Capacity	501140 € 170
2015	8.1%	0.0%	8.1%	10.0%	14,526,851	48,900,000
2016	8.1%	0.1%	8.2%	10.0%	13,949,945	48,900,000
2017	7.5%	1.0%	8.5%	10.0%	11,627,926	48,900,000
2018	7.2%	1.8%	9.1%	10.0%	7,612,709	48,900,000
2019	7.1%	2.1%	9.2%	10.0%	6,778,694	48,900,000
2020	7.0%	2.5%	9.5%	10.0%	4,485,888	48,900,000
2021	7.4%	2.2%	9.6%	10.0%	3,598,101	48,900,000
2022	7.2%	2.3%	9.5%	10.0%	3,867,327	52,560,000
2023	6.8%	2.3%	9.1%	10.0%	7,750,655	105,335,000
2024	6.2%	2.7%	8.9%	10.0%	9,835,266	133,665,000
2025	5.2%	2.6%	7.8%	10.0%	19,858,257	269,880,000
2026	4.6%	2.5%	7.0%	10.0%	27,104,175	368,355,000
2027	4.1%	2.4%	6.5%	10.0%	32,543,211	442,275,000
2028	3.8%	2.4%	6.2%	10.0%	36,339,487	493,865,000
2029	3.7%	2.3%	6.0%	10.0%	38,523,892	523,550,000
2030	3.3%	2.3%	5.6%	10.0%	43,624,063	592,865,000
2031	2.5%	2.2%	4.7%	10.0%	52,761,759	717,050,000
2032	2.4%	2.2%	4.6%	10.0%	54,887,717	745,940,000
2033	1.8%	2.1%	4.0%	10.0%	62,609,498	850,885,000
2034	0.6%	2.1%	2.8%	10.0%	76,732,013	1,042,815,000
2035	0.6%	2.1%	2.7%	10.0%	79,020,990	1,073,920,000
2036	0.0%	2.0%	2.0%	10.0%	87,552,037	1,189,860,000
2037	0.0%	2.0%	2.0%	10.0%	89,669,673	1,218,640,000
2038	0.0%	2.0%	2.0%	10.0%	91,827,805	1,247,970,000
2039	0.0%	1.5%	1.5%	10.0%	98,535,299	1,339,125,000
2040	0.0%	0.7%	0.7%	10.0%	109,880,611	1,493,315,000
2041	0.0%	0.7%	0.7%	10.0%	112,135,204	1,523,955,000
2042	0.0%	0.3%	0.3%	10.0%	119,387,181	1,622,510,000
2043	0.0%	0.3%	0.3%	10.0%	121,725,211	1,654,285,000
2044	0.0%	0.0%	0.0%	10.0%	127,771,849	1,736,460,000

Existing and Projected Debt Service City of Richmond, Virginia

			Total Existing D.S.		N - 5 115 125 - 1		
Fiscal	Existing G.O. Debt		(Excludes Note	Projected	Projected Credit	Projected	TOTAL Existing
Year	Service (D.S.)	Less: Parking D.S.	Principal)	Long-Term D.S.	Line Debt Service	Equipment D.S.	& Projected D.S.
2015	69,365,146	(7,185,461)	62,179,685	0	0	0	62,179,685
2016	71,138,958	(7,257,618)	63,881,340	0	974,609	0	64,855,949
2017	67,293,013	(7,251,878)	60,041,135	5,508,066	1,595,946	1,119,284	68,264,431
2018	65,441,994	(7,340,600)	58,101,395	12,481,216	775,663	1,621,499	72,979,773
2019	65,237,007	(7,403,086)	57,833,921	13,845,841	788,150	2,123,715	74,591,627
2020	64,708,511	(7,486,669)	57,221,842	17,468,564	420,000	2,560,424	77,670,829
2021	66,886,305	(5,486,021)	61,400,284	15,055,044	0	2,997,133	79,452,461
2022	66,549,413	(5,477,819)	61,071,594	17,795,016	0	1,877,849	80,744,459
2023	63,728,659	(4,952,000)	58,776,659	18,300,291	0	1,375,634	78,452,584
2024	59,537,436	(4,949,125)	54,588,311	22,528,516	0	873,418	77,990,245
2025	51,636,425	(4,953,125)	46,683,300	22,500,946	0	436,709	69,620,955
2026	46,540,908	(4,953,500)	41,587,408	22,473,375	0	0	64,060,783
2027	42,844,366	(4,950,000)	37,894,366	22,445,805	0	0	60,340,171
2028	40,829,527	(4,952,125)	35,877,402	22,418,235	0	0	58,295,637
2029	40,460,536	(4,954,250)	35,506,286	22,390,665	0	0	57,896,951
2030	37,209,924	(4,955,875)	32,254,049	22,363,094	0	0	54,617,143
2031	29,951,238	(4,951,625)	24,999,613	22,335,524	0	0	47,335,136
2032	29,748,813	(4,955,875)	24,792,938	22,307,954	0	0	47,100,891
2033	19,027,170	0	19,027,170	22,280,383	0	0	41,307,553
2034	6,703,125	0	6,703,125	22,447,813	0	0	29,150,938
2035	6,453,125	0	6,453,125	22,412,930	0	0	28,866,055
2036	0	0	0	22,378,047	0	0	22,378,047
2037	0	0	0	22,343,165	0	0	22,343,165
2038	0	0	0	22,308,282	0	0	22,308,282
2039	0	0	0	17,765,333	0	0	17,765,333
2040	0	0	0	8,626,675	0	0	8,626,675
2041	0	0	0	8,621,675	0	0	8,621,675
2042	0	0	0	3,663,078	0	0	3,663,078
2043	0	0	0	3,663,078	0	0	3,663,078
2044	0	0	0	0	0	0	0

Excludes Parking Excludes Parking

Existing and Projected Debt Service City of Richmond, Virginia

Include:

	1	0	1	0	1	1	1	1	
Fiscal Year	LT Issue 1	LT Issue 2	LT Issue 3	LT Issue 4	LT Issue 5	LT issue 6	LT Issue 7	LT Issue 8	Total Projected Long-Term (LT)
	CIP S	tone \$23mm Excludec	CIP	Stone \$8mm Excluded	CIP	CIP			
2015	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0
2017	5,508,066	0	0	0	0	0	0	0	5,508,066
2018	6,080,566	0	6,400,650	0	0	0	0	0	12,481,216
2019	6,310,191	0	7,535,650	0	0	0	0	0	13,845,841
2020	5,838,941	0	7,776,025	0	3,853,597	0	0	0	17,468,564
2021	2,982,691	0	5,757,900	0	3,903,597	2,410,855	0	0	15,055,044
2022	2,981,441	0	6,096,900	0	5,053,597	3,663,078	0	0	17,795,016
2023	2,972,066	0	6,616,550	0	5,048,597	3,663,078	0	0	18,300,291
2024	4,239,941	0	9,581,900	0	5,043,597	3,663,078	0	0	22,528,516
2025	4,247,254	0	9,552,017	0	5,038,597	3,663,078	0	0	22,500,946
2026	4,254,566	0	9,522,134	0	5,033,597	3,663,078	0	0	22,473,375
2027	4,261,879	0	9,492,251	0	5,028,597	3,663,078	0	0	22,445,805
2028	4,269,191	0	9,462,369	0	5,023,597	3,663,078	0	0	22,418,235
2029	4,276,504	0	9,432,486	0	5,018,597	3,663,078	0	0	22,390,665
2030	4,283,816	0	9,402,603	0	5,013,597	3,663,078	0	0	22,363,094
2031	4,291,129	0	9,372,720	0	5,008,597	3,663,078	0	0	22,335,524
2032	4,298,441	0	9,342,837	0	5,003,597	3,663,078	0	0	22,307,954
2033	4,305,754	0	9,312,955	0	4,998,597	3,663,078	0	0	22,280,383
2034	4,508,066	0	9,283,072	0	4,993,597	3,663,078	0	0	22,447,813
2035	4,508,066	0	9,253,189	0	4,988,597	3,663,078	0	0	22,412,930
2036	4,508,066	0	9,223,306	0	4,983,597	3,663,078	0	0	22,378,047
2037	4,508,066	0	9,193,423	0	4,978,597	3,663,078	0	0	22,343,165
2038	4,508,066	0	9,163,540	0	4,973,597	3,663,078	0	0	22,308,282
2039	0	0	9,133,658	0	4,968,597	3,663,078	0	0	17,765,333
2040	0	0	0	0	4,963,597	3,663,078	0	0	8,626,675
2041	0	0	0	0	4,958,597	3,663,078	0	0	8,621,675
2042	0	0	0	0	0	3,663,078	0	0	3,663,078
2043	0	0	0	0	0	3,663,078	0	0	3,663,078
2044	0	0	0	0	0	0	0	0	0

Existing and Projected Debt Service City of Richmond, Virginia Include:

	1	1	1	1	1	1	
Fiscal Year	Equip Issue 1	Equip Issue 2	Equip Issue 3	Equip Issue 4	Equip Issue 5	Equip Issue 6	Total Projected Equipment (Equip)
rear	Equip issue 1	Lquip issue 2	Equip issue 5	Equip issue 4	Equip issue 5	Equip issue 0	(Equip)
2015	<u> </u>	0	0	0	0	0	0
2016	١	0	0	0	0	0	0
2017	1,119,284	0	0	0	0	Ö	1,119,284
2018	1,119,284	502,216	0	0	0	0	1,621,499
2019	1,119,284	502,216	502,216	0	0	0	2,123,715
2020	1,119,284	502,216	502,216	436,709	0	0	2,560,424
2021	1,119,284	502,216	502,216	436,709	436,709	0	2,997,133
2022	0	502,216	502,216	436,709	436,709	0	1,877,849
2023	0	0	502,216	436,709	436,709	0	1,375,634
2024	0	0	0	436,709	436,709	0	873,418
2025	0	0	0	0	436,709	0	436,709
2026	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	0
2029	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0
2031	0	0	0	0	0	0	0
2032	0	0	0	0	0	0	0
2033	0	0	0	0	0	0	0
2034	0	0	0	0	0	0	0
2035	0	0	0	0	0	0	0
2036	0	0	0	0	0	0	0
2037	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0
2039	0	0	0	0	0	0	0
2040	0	0	0	0	0	0	0
2041	0	0	0	0	0	0	0
2042	0	0	0	0	0	0	0
2043 2044	0 0	0 0	0 0	0	0	0	0
2044		U			U	U	U

		ctual / cted		All Other CIF	Riverfront Plan	GRTC BRT (Pulse)	Public Housing	Voting Machines	Train Shed	Transportation Paving	Heritage / Lumpkin	Schools Cap Maintenance	School Construction	New 800 MHZ Project	Dove School	Justice Center	
		inded ending			500329 101526	(New)	500453 102062	(New)	Allega and Land	500286 100546,101294, 101295,	500573 102750	500492 102335 , 102339	500160 100233, 100234,100235	500250 100221	500494 102341 , 103033	500125 100201	vard# oject#
\$110 GO Bond issue (Series 2014/										101296, 102808			100237 100239				Nov-14
Issued 12/23/2014		32,876		1,624,34	5,486	-	-	-		1,191,331	-	-	2,826,484	-	5	1,715,235	Dec-14
	Planned Bond	78,189 91,192		3,855,61 1,485,29	62,343 102,980	• -	-	<u>-</u>		1,814,389 228,456	-	2,035,516	2,039,424 1,264,113	- -	-	570,906 10,350	Jan-15 Feb-15
	Issues	35,182		3,375,17	67,757	-	-	-		10,802	-	40,980	2,263,739	-	-	1,476,725	иаг-15
Renew \$150M Line of Credit (24 mont		294.73	4,405	3,104,40	1,096	-		-		74,563	=	222,564	733,158	-	11,938	531,570	\pr-15
	08,017		2,229,67	935	-		-		415,409	-	340,400	699,808	-	4,863	116,931	lay-15	
		992.46 015 41,779,744	6,466	2,026,46	-	-		-		373,625	-	898,233	1,002,919	-	2,292	921,458	un-15
		30.25	0,000	2,500,00	744,121		416,667	204,434	197,763	333,333		1,034,203	250,000	250,000	31,409		Jul-15
		30.25		2,500,00	744,121		416,667	204,434	197,763	333,333		1,034,203	250,000	250,000	31,409		ug-15
		30.25		2,500,00 2,500,00	744,121 744,121		416,667 416,667	204,434	197,763 197,763	333,333 333,333		1,034,203 1,034,203	250,000 250,000	250,000 250,000	31,409 31,409		p-15
.53 \$55.0 Million Tax Exempt GO Bond	65.423.030.	196.25 196.25		2,500,00	744,121		416,667		197,763	333,333		1,034,203	250,000	250,000	31,409		ov-15
- 1. \$23.0 Million Taxable GO Bond	18	196.25		2,500,00	744,121		416,667		197,763	333,333		1,034,203	250,000	250,000	31,409		ec-15
Renew \$125M Line of Credit (24 month		885.14		2,500,00	744,121	316,667	416,667		197,763	333,333	447,222	1,034,203	1,000,000	250,000	31,409		an-16
		3 85.14 71,385		2,500,00 2,500,00	744,121 744,121	316,667 316,667	416,667 416,667		197,763 197,763	333,333 333,333	447,222 447,222	1,034,203 1,034,203	1,000,000 1,000,000	250,000 250,000	31,409 31,409		eb-16 lar-16
		71,385		2,500,00	744,121	316,667	416,667		197,763	333,333	447,222	1,034,203	1,000,000	250,000	31,409		pr-16
		1,385		2,500,00	744,121	316,667	416,667		197,763	333,333	447,222	1,034,203	1,000,000	250,000	31,409		ay-16
		1,385	0,000	2,500,00	744,121	316,667	416,667		197,763	333,333	447,222	1,034,203	1,000,000	250,000	31,409		un-16
		78,786,590 08,107	0.000	2,500,00		316,667				87,301	447,222	416,667	1,000,000	1,340,250			Jul-16
		08,107		2,500,00		316,667				87,301	447,222	416,667	1,000,000	1,340,250			ug-16
		08,107	0,000	2,500,00		316,667				87,301	447,222	416,667	1,000,000	1,340,250			p-16
		08,107		2,500,00		316,667				87,301	447,222	416,667	1,000,000	1,340,250			Oct-16
		08,107		2,500,00		316,667				87,301	447,222	416,667	1,000,000	1,340,250			ov-16
		08,107 08,107		2,500,00 2,500,00		316,667 316,667				87,301 87,301	447,222 447,222	416,667 416,667	1,000,000 1,000,000	1,340,250 1,340,250			ec-16 an-17
		08,107		2,500,00		316,667				87,301	447,222	416,667	1,000,000	1,340,250			b-17
		08,107		2,500,00		316,667				87,301	447,222	416,667	1,000,000	1,340,250			ar-17
116,224,371 \$125M Bond Issue (Spring 2017)	08,107		2,500,00		316,667				87,301	447,222	416,667	1,000,000	1,340,250			pr-17	
	98,107 98,107		2,500,00 2,500,00		316,667 316,667				87,301 87,301	447,222 447,222	416,667 416,667	500,000	1,340,250 1,340,250			ay-17 un-17	
	71,797,281	0,000	2,000,00		316,667				41,667		133,333		747,347			ul-17	
	13.67		2,000,00		316,667				41,667		133,333		747,347			ug-17	
		113.67 113.67		2,000,00 2,000,00		316,667 316,667				41,667 41,667		133,333 133,333		747,347 747,347			p-17 ct-17
- 2. \$8.0M Taxable Bond Issue	13.67		2,000,00		316,667				41,667		133,333		747,347			v-17	
	13.67		1,500,00		316,667				41,667		133,333		747,347			c-17	
	80.33		1,500,00						41,667		133,333		747,347	885,833		an-18	
		80.33 80.33		1,500,00 1,500,00						41,667 41,667		133,333 133,333		747,347 747,347	885,833 885,833		b-18 ar-18
	80.33		1,500,00						41,667		133,333		747,347	885,833		pr-18	
	80.33		1,500,00						41,667		133,333		747,347	885,833		ay-18	
	80.33 018 38,783,164	0,000	1,500,00						41,667		133,333		747,347	885,833		un-18	
	3,958	0,000	1,500,00						83,333		130,167		903,792	666,667		lul-18	
	3,958	0,000	1,500,00						83,333		130,167		903,792	666,667		g-18	
62,635,211 \$65.0M Bond Issue (Fall 2018)	62 626 2	3,958		1,500,00 1,500,00						83,333 83,333		130,167 130,167		903,792	666,667 666,667		ep-18 ct-18
	02,030,2	3,958		1,500,00						83,333		130,167 130,167		903,792 903,792	666,667		ct-18 ov-18
		3,958	0,000	1,500,00						83,333		130,167		903,792	666,667		ec-18
	3,958		1,500,00						83,333		130,167		903,792	666,667		an-19	
	3,958 3,958		1,500,00 1,500,00						83,333 83,333		130,167 130,167		903,792 903,792	666,667 666,667		eb-19 ar-19	
	3,958	0,000	1,500,00						83,333		130,167		903,792	666,667		pr-19	
		3,958	0,000	1,500,00						83,333		130,167		903,792	666,667		ay-19
		3,958 39,407,500		1,500,00						83,333		130,167		903,792	666,667		ın-19
		60,000 60,000		1,500,00 1,500,00						125,000 125,000		125,000 125,000					Jul-19 ug-19
		0,000		1,500,00						125,000		125,000					ep-19
		0,000		1,500,00						125,000		125,000					ct-19
		0,000 0,000		1,500,00 1,500,00						125,000 125,000		125,000 125,000					v-19 c-19
	0,000		1,500,00						125,000		125,000					an-20	
	0,000	0,000	1,500,00						125,000		125,000					b-20	
	0,000 0,000		1,500,00 1,500,00						125,000 125,000		125,000 125,000					ar-20	
		0,000		1,500,00						125,000		125,000					\pr-20 lay-20
\$50.0M Bond Issue (Spring 2020)	47,271,6	20 21,000,000		1,500,00						125,000		125,000					un-20
79 Without Stone	291,554,2 31,000,0	4,279	0,966	134,200,96	9,170,054	7,600,000	5,000,000	613,302	2,373,153	12,156,189	8,050,000	25,610,131	28,829,645	38,896,664	13,710,999	5,343,175	_