

Office of the City Auditor

Committed to increasing government efficiency, effectiveness, accountability and transparency.

CITYWIDE FISCAL SUSTAINABILITY

Report: 2016-02

The City needs to improve its Fiscal Sustainability



Issue Date: December 1, 2015

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Office of the City Auditor

Executive Summary

December 1, 2015

The Honorable Members of the Richmond City Council The Honorable Mayor Dwight C. Jones

Subject: Citywide – Fiscal Sustainability Analysis Report

The City Auditor's Office has completed an analysis of the City's fiscal sustainability. The objective of this analysis was to provide information to City Council and the Administration on the financial health of the City.

What is working well?

- The City has stringent policies for managing debt. In addition, there is a state law that governs debt issuance by localities. Also, certain debt covenants impose restrictions on debt limits. The City is in compliance with all of these requirements.
- The City generates adequate revenues and is not reliant on grants or external funding. This indicates that in the event that external funding is reduced, the City may not be affected as much as other localities that depend on the external funding.
- The City programs are self-financed primarily through charges for services and grants. The remaining expenses not covered by these revenue sources have to be financed from taxes. Compared to the other localities, Richmond programs are self-supporting to a greater extent.

What needs improvement?

• The City's financial position has improved over the last five years. However, it can still be improved. In addition, the new governmental accounting requirements will mandate including pension and other postemployment benefits liabilities in the City's financial statements. This change will have an adverse impact on the City's financial position. It should be noted that many localities in the U.S. will be facing a similar situation. However, in the long run these governments will have to

address the issue by improving their net position. The City of Richmond should have a structured plan to address this issue in the foreseeable future.

In a recent bond rating report, Fitch considered the City's pension position to be weak. Moody's indicated that they will monitor the City's progress to achieve its goal to fund pension liability at 80%. Standard & Poor's did not express an opinion on this matter.

• Richmond is utilizing long-term debt to a greater extent than comparable governments. Accumulating large debt may result in the City having a lesser capacity to borrow. In recent bond rating reports, both Fitch and Moody's considered the City's debt burden manageable. However, Standard & Poor's considered the City's debt and contingent liability profile to be weak.

In the most recent bond rating report, the rating agencies expressed varied levels of concern related to the City's utility operation's current and future debt burden. The City Auditor's Office calculated the debt burden per capita without the utility's debt. This debt has increased substantially over the last five years.

Most of the recent increase in debt may be attributed to building a new justice center and four schools. The City must exercise caution in issuing more debt for additional facilities as they may have other infrastructure and regulatory obligations that may need additional borrowing. For each project involving a new facility, the City must conduct a life cycle cost analysis prior to approving. This analysis must include:

- Pre-construction costs
- Construction costs
- > Future routine maintenance
- > Future capital maintenance
- > Replacement of the facility after its useful life

In addition, the City must provide for ongoing operational costs for the facilities.

 The City of Richmond employs a larger number of employees compared to the benchmark localities. In addition, Richmond's revenues and expenses per capita are substantially higher than the benchmark localities. This may indicate opportunities for improving efficiencies in Richmond's operations.

Conclusion:

Richmond's overall performance based on the ratios calculated in accordance with Mead's 10-point test is ranked as follows:

Rank	2010	2011	2012	2013	2014
1 st	Chesapeake	Hampton	Chesapeake	Hampton	Hampton*
2 nd	Hampton	Chesapeake	Hampton	Chesapeake	Newport News*
3 rd	Richmond	Newport News	Richmond	Newport News	Richmond*
4 th	Newport News	Richmond	Newport News	Richmond*	Chesapeake*
5 th	Norfolk	Norfolk	Norfolk	Norfolk*	Norfolk

^{*}In 2013, both Richmond and Norfolk had the same score. Similarly, in 2014, Hampton and Newport News had the same score. In the same year, Richmond and Chesapeake also had the same score

The City Auditor's Office has discussed these results with the CAO and DCAO over Finance and Administration. In addition, the results were shared with a consultant hired by the City and revisions were made after discussions with them. A response to the report is attached to this report. Please contact me if you have any questions or comments.

Sincerely,

Umesh Dalal

Umesh Dalal, CPA, CIA, CIG City Auditor

cc: Selena Cuffee-Glenn, Chief Administrative OfficerThe Richmond City Audit CommitteeLenora Reid, Deputy Chief Administrative Officer of Finance and Administration

COMPREHENSIVE LIST OF RECOMMENDATIONS

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1	The City Council, the Mayor, and the Chief Administrative Officer need to	37
	adopt and implement a strategy to substantially increase unassigned fund	
	balance over the next five years to improve the City's short-term financial	
	position.	
2	The CAO needs to present a plan to City Council for mitigating the negative	37
	impact of recording unfunded pension and other postemployment benefits	
	liabilities.	
3	The DCAO needs to ensure that the City has sufficient liquidity to meet its	37
	short-term obligations.	
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	improve the City's capacity to borrow money in the future for capital needs	
	and improving infrastructure.	
5	The CAO needs to review overall staffing for cost reduction and improvement	37
	in operational efficiencies.	
6	The CAO needs to conduct a study on establishing a trust fund to pre-fund	37
	OPEB obligations.	
7	The CAO needs to conduct a life cycle analysis of a new capital project prior to	37
	recommending to the City Council.	
0	The CAO people to execute a recomplete ventagement of capital accepts of the their	29
8	The CAO needs to create a reserve for replacement of capital assets after their	38
	useful life is exhausted.	
9	The CAO needs to submit an annual report to City Council on the City's debt	38
	capacity, or use a pay-as-you-go methodology to fund future capital projects.	
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COMPREHENSIVE LIST OF RECOMMENDATIONS

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Introduction

The City Auditor's Office has completed an analysis of the City's fiscal sustainability. The objective of this analysis was to provide information to City Council and management on the financial health of the City.

BACKGROUND

What is Fiscal Sustainability?

The Government Accounting Standards Board (GASB) has ascertained the following general description of the term fiscal sustainability as the government's ability and willingness to:

- o maintain or improve services
- o meet financial obligations
- o achieve and maintain intergenerational equity
- o balance revenues and expenses

The Need for Studying the City's Fiscal Sustainability

The citizens have access to useful information such as the Comprehensive Annual Financial Report (CAFR) and the Adopted Budget. These documents are complex and difficult to understand especially for individuals not familiar with governmental accounting. Therefore, it is generally difficult for citizens to assess the financial condition of the City. This report attempts to present information in an easily understandable summarized format so that it can be widely used by stakeholders. This report is an attempt to enhance transparency in government. In presenting

the measures, the City Auditor's Office identified both favorable and unfavorable trends in the City's finances, and made recommendations where needed.

The data covers a five-year period, from fiscal year 2010 through fiscal year 2014. In some cases, such as for pension and other post-employment benefits liabilities, actuarial calculations representing future costs projections are presented in the current value of money. For the remaining data, no adjustments have been made for the time value of money.

METHODOLOGY

The Auditor's Office used a test of ten financial indicators to assess the City's financial condition. This test, which is known as the 10-Point Test, was developed by Dean Michael Mead of GASB. Mead updated the original 10-Point Test developed by Kenneth Brown in 1993. Mead's 10-point Test relies in part on information reported by governments complying with GASB's reporting requirement known as "Statement 34." This full accrual, government-wide information was not available when Brown developed the original 10-Point Test. The Auditor's Office supplemented Mead's 10-Point Test by assessing additional key indicators, including those published by the International City/County Management Association (ICMA). The 10-Point Test ratios and the additional indicators were calculated using the City's CAFR.

Richmond's financial condition was compared to other Virginia localities; namely the cities of Chesapeake, Hampton, Newport News, and Norfolk. The financial indicators were calculated using data from each locality's CAFR. Sometimes financial statements of local governments are restated for various reasons. The financial data for Richmond and the benchmark cities was not adjusted for any restatements. The financial statements were generally presented in the same way

across localities. We believe that any differences were accounted for in our calculations and that the ratios are comparable. It should be noted that since the City does not have any financial obligation for the Richmond Public Schools' (RPS') finances once the annual appropriation is made, other than computing for debt related information, RPS data is not used in our analysis.

CITY OF RICHMOND INFORMATION

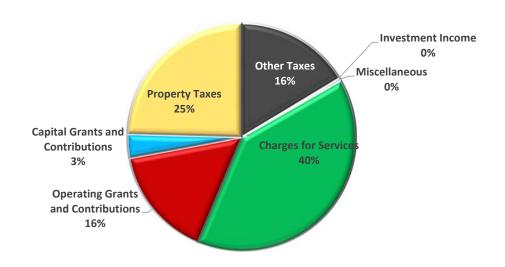
Pertinent information is presented below for the reader's use and understanding of resources available to and used by the City of Richmond.

REVENUES AND EXPENDITURES

Where does the money come from?

Richmond receives most of its resources from taxes and charges for services.

Primary Government Sources of Revenue

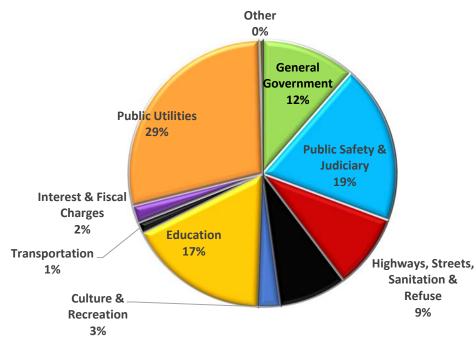


Source: City of Richmond CAFR, Statement of Activities

Where does the money go?

The City spends the majority of its resources on public utilities, public safety, and education as depicted below:

Primary Government Expenses by Function



Note: Education includes \$5.9 million in interest that the City paid on School debt. In addition, the City paid \$6.6 million in principal for School debt. This principal amount is included on the Statement of Revenues, Expenditures, and Changes in Fund Balances.

Source: City of Richmond CAFR, Statement of Activities

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Fiscal Sustainability Analysis December 2015

DEBT RATINGS

The City enjoys a strong bond rating for most of its outstanding debt.

Types	Amount Outstanding	% of City total	Moody's	Standard & Poor's	Fitch Ratings	Credit Quality
General Obligation Bonds	\$729,510,381	46.1%	Aa2	AA+	AA+	Very strong
Governmental Activities	\$605,850,339					
Business-type Activities	\$123,660,042					
Public Utility Revenue Bonds	\$723,448,457	45.8%	Aa2	AA	AA	Very strong
General Obligation Serial Notes	\$37,460,000	2.4%	Not rated			
Virginia Public Schools Authority Bonds	\$977,282	0.1%	Not rated			
Qualified Zone Academy Bonds	\$1,832,373	0.1%	Not rated			
HUD Section 108 Notes	\$10,695,000	0.7%	Not rated			
Line of Credit	\$70,000,000	4.4%	Not rated			
Lease Revenue Bond	\$6,827,905	0.4%	Not rated			
Total						

Source: City of Richmond CAFR, Obligations Note

UNFAVORABLE TRENDS

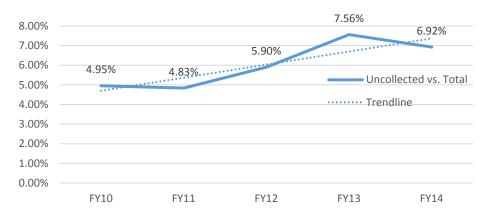
Tax Collections

The City's real estate tax levy ranged from \$234 million in 2010 to \$218 million in 2014 representing a decline of about 7%. Over the years, the collection rate of real estate taxes has exhibited a negative trend. Uncollected real estate taxes increased from approximately five percent in 2010 to approximately seven percent in 2014. Uncollected real estate taxes impact the City's cash flow unfavorably. A similar trend was observed in the collection of personal property taxes. In 2014, the total tax levy for personal property taxes was approximately \$60 million of which the City collected approximately \$51 million (15% uncollected during the year of assessment) in the year of the levy.

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Uncollected Real Estate Taxes vs. Total Real Estate Tax Levy



Source: City of Richmond CAFR, Statistical Section

Operating Results

A general fund operating surplus is computed prior to accounting for the payment of principal and interest on debt. At times, the surplus may not be sufficient to pay for debt service. For example, in FY14, the operating surplus was approximately \$59 million. However, the debt service payment in FY14 was approximately \$61 million, consisting of \$37 million in principal and \$24 million in interest. The following chart presents a decreasing trend of surplus as a percent of operating revenues. This may indicate that less resources are available to pay for the City's debt service.

General Fund Operating Deficit/Surplus vs. **Net Operating Revenues** 20.00% 17.69% 15.00% 11.90% 11.48% 10.00% 9.25% Deficit/Surplus vs. Revenues 5.00% 4.25% ····· Trendline 0.00% FY10 FY11 FY12 FY13 FY14

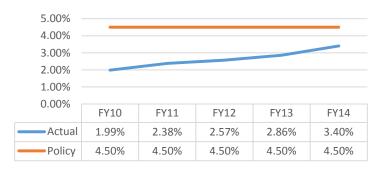
Source: City of Richmond CAFR, Statement of Revenues, Expenditures, and Changes in Fund Balances

COMPLIANCE WITH CITY DEBT POLICIES, STATE LAW, AND DEBT COVENANT City's Debt Policies

The City has the following three debt management policies:

- 1. Total tax supported debt shall not exceed 4.5% of the combined total assessed valuation of taxable real estate, personal property, and machinery & tools.
- 2. Debt Service to be paid on total debt shall not exceed 10% of the General Fund and Richmond Public Schools (RPS) budget, less the transfer portion RPS receives from the City's General Fund to prevent double counting in the calculation.
- 3. The City's ten-year payout ratio of the City's total debt (i.e. the principal amount of debt retired within ten years) shall not be less than 60%.
 - The City Auditor's Office could not verify compliance with the third policy as needed information was not readily available. Compliance with the other two policies was verified as follows:
- 1. The City has complied with the policy of tax supported debt not exceeding 4.5% of the total assessed taxable valuation for the last five years. Over this period, the tax supported debt has gradually increased and is approaching the debt limit established by City policy. If the City's tax supported debt further increases and/or the total taxable valuation decreases, there may be a risk of non-compliance with this policy. Therefore, additional analysis may be needed prior to future debt issuance.

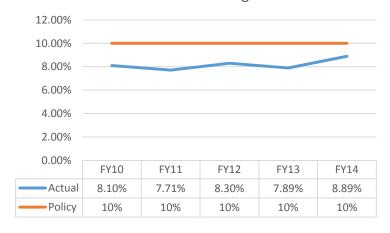
Governmental Activities Debt vs. Total Taxable Valuation



Source: City of Richmond CAFR, Statistical Section

2. The City has complied with the policy of debt service paid on tax supported debt not exceeding 10% of the total General Fund and RPS budget. During the five year period, the ratio of debt service to total budgeted revenues remained relatively constant. Specifically, the percentage ranged from a low of 7.71% in FY11 to a high of 8.89% in FY14. It should be noted that there may be a need for exercising caution in issuing further debt in order to stay in compliance with this policy.

Total Debt Service vs. Total Budgeted Revenues



Source: Davenport & Company, Public Finance Department

State Law Requirements

The Constitution of Virginia stipulates that the legal debt limit for municipalities is ten percent of the assessed valuation of the taxable real estate in the City. Total net debt applicable to the limit excludes self-supporting public utility revenue bonds and lease revenue bonds. The percentage of debt applicable to the limit ranged from 2.99% in FY10 to 4.34% in FY14. Thus, the City's debt is well below the legal debt limit.

Debt vs. Assessed Value of Real Estate 12.00% 10.00% 8.00% 6.00% 4.00% 2.00% 0.00% FY10 FY11 FY12 FY13 FY14 Actual 2.99% 3.54% 3.56% 3.86% 4.34% Legal Debt Limit 10% 10% 10% 10% 10%

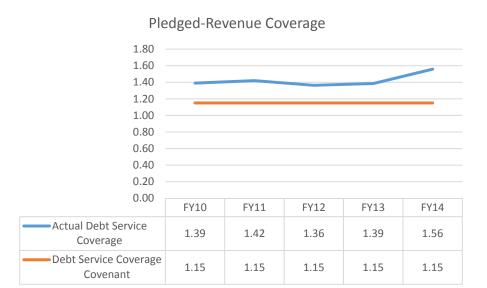
Source: City of Richmond CAFR, Statistical Section

Debt Covenant

According to the debt service coverage covenant, net revenues and balances available for the payment of debt service will be at least 1.15 times the debt service requirement in each fiscal year. As illustrated below, the City's revenue coverage ranged from a low of 1.36 in FY12 to a high of 1.56 in FY14. Therefore, the City has generated sufficient revenue for the payment of debt service.

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Source: City of Richmond CAFR, Statistical Section

Measures Used and Results At-a-Glance

The following table lists the measures used, and the City Auditor's opinion about what these measures represent. The following table rates the risks using traffic light:

Legend =



Represents risks that are not tolerable and the City must act to mitigate them.



Represents risks that could become intolerable if the City does not take mitigating action. These are the risks where the City needs to exercise caution.



Represents issues where the City's processes are working well and no further action is necessary.

Measure	What does it mean?	Results	Favorable/ Unfavorable
Short-term Financial Position	A high ratio suggests larger reserves for dealing with unexpected resource needs in the near term.	FY14 ratio is in line with benchmarks, but history is not favorable. Consistency in discipline to keep adequate unreserved general fund balance is desired.	
Liquidity	A high ratio suggests a greater capacity for paying off short-term obligations.	Needs improvement, significantly below benchmarks. Overall, citywide liquidity is below acceptable limit.	
Financial Asset Performance	A high ratio indicates annual costs are being adequately financed and financial condition is improving.	Inconclusive	
Solvency	A low ratio suggests outstanding obligations can be more easily met with annual revenues.	Needs improvement compared to benchmarks. Richmond's liabilities were higher compared to the benchmark localities for the resources available to repay them.	

Primary Government Revenues	A low ratio means that the government is not heavily reliant on intergovernmental aid.	Richmond's performance is better than benchmarks. Lower reliance on funding received from other governments puts the City in a better position to manage its operations with greater flexibility.	
Governmental Activities Revenue	A low ratio indicates that basic government services are more self-sufficient through charges, fees, and categorical grants and less reliant on general tax support.	Richmond's performance is better than benchmarks. Richmond's governmental activities are more self- reliant.	
Primary Government Debt Burden per Capita	A low ratio means less burden on taxpayers and greater capacity to borrow.	Needs improvement, significantly higher than benchmarks. Accumulating large debt can result in the City having a reduced capacity to borrow money.	
Governmental Funds Debt Coverage	A low ratio suggests that general government long-term debt can be more easily repaid when it comes due.	Richmond's performance is better than benchmarks. This suggests that Richmond has sufficient revenue sources to repay outstanding debt when it comes due.	
Enterprise Funds Debt Coverage	A high ratio suggests greater resource availability for repaying debts of enterprise activities as they come due.	Inconclusive as the City's enterprise funds are not comparable to those of the four benchmark cities.	
Capital Assets	A high ratio suggests that government is keeping pace, on average, with the aging of its capital assets and replenishing them.	Inconclusive as the City has adjusted capital asset values frequently.	

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Number of Employees per 1,000 population	All governments generally provide similar services and number of employees are expected to be consistent if they are providing services with similar efficiencies.	Streamlining employee base could improve inefficiencies.	
Revenues and Expenses Per Capita	Significantly larger revenues may indicate higher taxes and charges for services and substantially higher spending may indicate inefficiencies.	Significantly higher revenues and expenses may indicate: 1. Higher taxes and fees, 2. The possibility of inefficiencies, or 3. Higher demand for services. There may be a combination of the above possibilities.	

SHORT-TERM FINANCIAL POSITION

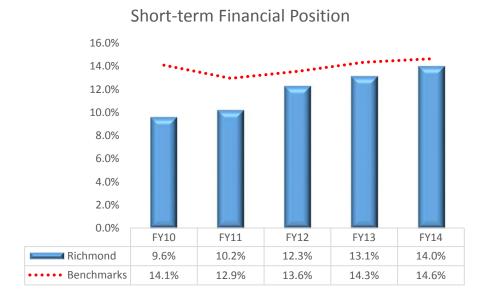
Richmond's short-term financial position appears to have improved over the five years ending June 30, 2014, to be in line with the benchmark localities. The City's financial policy to set aside rainy day funds is fiscally prudent and a good start. Setting aside additional reserves would improve the City's financial position. A high ratio for this measure would indicate that the City has funding to deal with unexpected financial needs. This measure was calculated using the following formula:



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The following is the comparison of Richmond's short-term financial position with the benchmarks.



Note: Richmond's "unreserved" fund balance includes revenue stabilization amounts. Chesapeake's "unreserved" fund balance includes cash flow emergencies and operating emergencies amounts.

Source: Locality CAFRs, Balance Sheet – Governmental Funds & Statement of Revenues, Expenditures and Changes in Fund Balances

Richmond's ratio remained below the benchmark localities. However, Richmond has made significant progress in improving its short-term financial position. The ratio for Richmond ranged from 9.6% to 14.0%. This means that the City has had the ability to sustain its operations for a range of 35 days in FY10 through 51 days in FY14, if no other resources are available.

LIQUIDITY

Liquidity is a measurement of the City's ability to pay short-term obligations from its liquid assets. The trend of the ratio of liquid assets to current liabilities is not favorable. An organization should have a ratio of at least one, which means that

the organization has just enough cash and other liquid assets, such as investments, to pay for its current liabilities. This ratio is computed as follows:

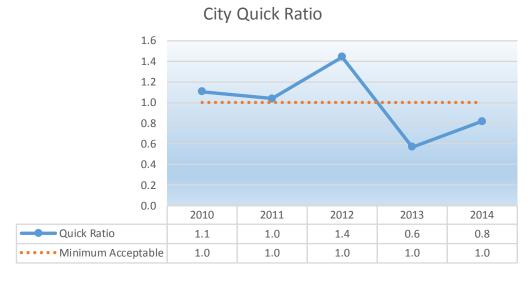


As the following chart depicts, Richmond's general fund liquidity is significantly lower than the benchmark localities. It should be noted that for both FY13 and FY14, the liquidity or quick ratio is right at one. This means that the City barely meets the minimum requirements.



Source: Locality CAFRs, Balance Sheet – Governmental Funds

The City Auditor's Office also calculated the quick ratio using the government-wide financial statements. These statements include information on the City's governmental and business-type activities. Specifically, the City of Richmond's governmental activities include general government, public safety and judiciary, highways, street, sanitation and refuse, human services, culture and recreation, education, and transportation. The business-type activities include the City's gas, water, wastewater, stormwater, coliseum, and cemeteries. The results indicated that the ratio fell below one for FY13 and FY14. This indicates that the City may have trouble repaying its current liabilities using liquid assets.



Source: City of Richmond CAFR, Statement of Net Position

In recent bond rating reports, Standard & Poor's considered the City's liquidity to be very strong, while Moody's considered it to be satisfactory, and Fitch did not comment on the City's liquidity position. However, the rating agencies computed the liquidity position using a different calculation based on cash as a percentage of general fund revenues or governmental fund expenditures. Therefore, this calculation cannot be compared with the one suggested by ICMA.

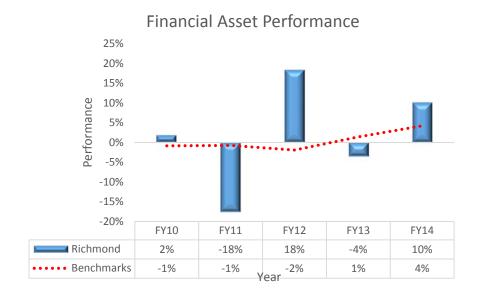
FINANCIAL ASSET PERFORMANCE

This ratio measures the rate of growth/decrease of the City's resources. This measure considers the governmental activities net position and annual change therein for activities generally financed through taxes and intergovernmental revenues. A high ratio generally indicates that the City is effectively balancing revenues and expenses each year. However, a very high ratio indicates that the City is raising too much revenues or not spending enough on needed services. This ratio is computed as follows:



The following results portray dramatic changes in Richmond's ratio and demonstrate that it's very high compared to the benchmark governments in FY12 and FY14. In FY11, the ratio is significantly low¹.

¹ Note: The above variation is likely a result of a dramatic increase of \$42.6 million in Highway, Street, Sanitation and Refuse expenses in FY11 and an increase of \$67 million in FY12. These changes have not been explained in the respective financial statements.



Source: Locality CAFRs, Statement of Activities

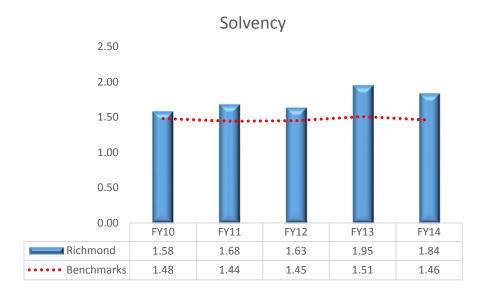
SOLVENCY

This ratio measures the City's overall capacity to repay all of its outstanding obligations. A lower ratio indicates a better ability to satisfy outstanding liabilities. This indicates a sufficiency of revenues to repay the liabilities.



The following results simply indicate that the benchmark localities had a better ability to meet their obligations. It also can be stated that Richmond's liabilities

were higher compared to the benchmark localities for the resources available to repay them.



Source: Locality CAFRs, Statement of Net Position & Statement of Activities

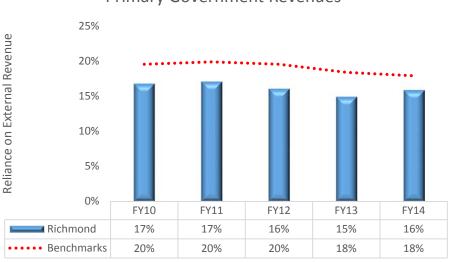
The above results indicate that there is an opportunity for the City to reduce its liabilities and improve financial condition. At the very least, it may be a good idea not to increase liabilities unless there are proportionate, additional resources available to pay for them.

PRIMARY GOVERNMENT REVENUES

This is a measurement of the flexibility of the City's revenues. It considers the City's reliance on funding received from other governments and other sources. In addition, it accounts for revenues from governmental and business-type activities. It basically measures the City's reliance on this type of funding. Obviously, lower reliance on funding received from external sources puts the City in a better position to manage its operations with greater flexibility. This ratio is calculated as follows:



Richmond has consistently maintained a lower ratio compared to the benchmark localities. This is a positive indicator of the City's lower reliance on external revenues. This means that if grants or other external funding diminishes, the City is not likely to be affected as significantly as other comparable governments in Virginia.



Primary Government Revenues

Note: Unrestricted aid (i.e. grants and contributions not restricted to specific programs) is not identified on the Statement of Activities for Hampton.

Source: Locality CAFRs, Statement of Activities

The above results could also mean that Richmond is collecting relatively more revenues in charges for services and taxes from its residents compared to other similar jurisdictions.

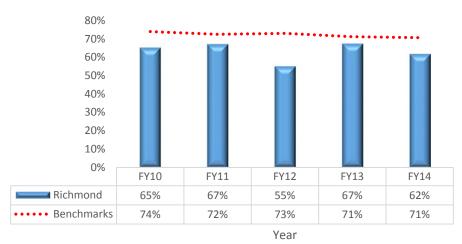
GOVERNMENTAL ACTIVITIES REVENUES

This ratio considers the degree to which the government programs are self-financed primarily through charges for services and grants. The remaining expenses not covered by these revenue sources have to be financed from taxes. A low ratio suggests that services and programs are self-supporting to a greater extent. This ratio is computed as follows:



The results below demonstrate that Richmond's governmental activities are more self-reliant. The ratio is consistently lower compared to the other benchmark localities.





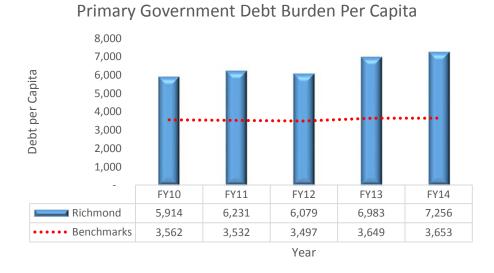
Source: Locality CAFRs, Statement of Activities

PRIMARY GOVERNMENT DEBT BURDEN PER CAPITA

This analysis considers all governmental and business-type activities. The ratio evaluates the debt burden imposed on taxpayers. A low ratio represents a lower debt burden on residents and may indicate a greater capacity for additional borrowing. The ratio is computed as follows:



As the following information presents, Richmond consistently has a higher debt burden per capita, which is almost twice as much as the average of the benchmark localities.



Source: Locality CAFRs, Statistical Section

This may indicate that Richmond is utilizing long-term debt to a greater extent than comparable governments. Accumulating large debt may result in the City having a lesser capacity to borrow. In recent bond rating reports, both Fitch and Moody's considered the City's debt burden manageable. However, Standard & Poor's considered the City's debt and contingent liability profile to be weak.

Most of the business-type activities debt is supported by the net operating revenues of the City's water, sewer, and gas utility systems. Therefore, it can be argued that this debt should not be included in the above calculation. While the City's General Fund may not be liable, the City is still ultimately responsible for all debt including the business-type activities. In its 2013 Utility credit rating report for the City, Fitch indicated that the debt burden of \$2,300 per customer was higher than the median for retail-only utility systems rated 'AA' category of \$1,828. The

debt burden was projected to rise with the addition of approximately \$560 million in new debt over the next five years. Fitch projected debt per customer would approach \$4,000 by the end of the current capital improvement plan (CIP), which was high. However, Fitch expected the City's long-standing track record of successfully managing a large capital program while maintaining a strong financial profile to continue.

Moody's indicated that combined sewer overflows (CSO) expenditures have future requirements estimated between \$350 million to \$420 million (2006 dollars) over the next two to three decades. The rating agency further indicated, "While the combined utility's debt position is well above average with a debt ratio of 64.6%, Moody's expects the ratio to increase due to future borrowing needs, but should remain manageable and not weaken the utility's credit position."

In Standard & Poor's view, the utility system has maintained a strong financial risk profile while managing an ongoing and sizable CIP. However, they stated, "We believe that offsetting these strengths somewhat is a six-year (2013-2018) \$734.4 million CIP, of which up to 84% could be debt-financed, and above-average water and wastewater rates. We consider the utility's leverage as moderately high."

In addition to the above analysis, the City Auditor's Office calculated debt burden per capita for governmental activities debt without the business-type activities debt. This governmental activities debt has increased substantially over the past five years as follows:

Year	Richmond	Benchmarks	Excess		% Excess
FY10	\$2,265	\$2,241		\$24	1.09%
FY11	\$2,696	\$2,199		\$497	22.61%
FY12	\$2,673	\$2,212		\$461	20.83%
FY13	\$2,881	\$2,203		\$679	30.81%
FY14	\$3,368	\$2,205		\$1,163	52.74%

Source: Locality CAFRs, Statistical Section

Most of the recent increase in the above debt may be attributed to building the new justice center and four schools. The City must exercise caution in issuing more debt for additional facilities as they may have other infrastructure and regulatory obligations that could require additional borrowing. For each project involving a new facility, the City needs to conduct a life cycle cost analysis prior to approving. This analysis should include:

- Pre-construction costs
- Construction costs
- Future routine maintenance
- Future capital maintenance
- Replacement of the facility after its useful life

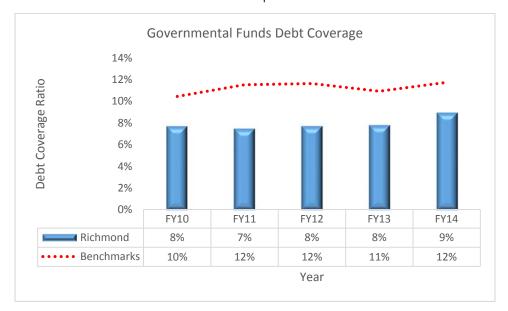
In addition, the City must provide for ongoing operational costs for the facilities.

GOVERNMENTAL FUNDS DEBT COVERAGE

The City has seven governmental funds, three of which are major funds — the General Fund, Debt Service Fund, and Capital Projects Fund. The governmental funds debt coverage ratio indicates if the available revenues are sufficient for repayment of debt. A low ratio indicates a greater capacity of governmental funds' revenue to repay outstanding debt as it comes due. The ratio is calculated as follows:



By excluding capital expenditures, this measure describes how actual operating expenditures compare to debt service. The following data indicates that Richmond has been in a comfortable position to repay its debt in comparison with the benchmark localities. This is a desirable position.



Source: Locality CAFRs, Statement of Revenues, Expenditures and Changes in Fund Balances

ENTERPRISE FUNDS (BUSINESS-TYPE ACTIVITIES) DEBT COVERAGE

Richmond has the following major enterprise funds, which are managed by the Department of Public Utilities:

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- Water
- Wastewater
- Stormwater
- Gas

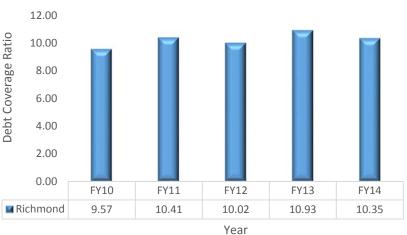
It is expected that the expenses of these funds are paid for by the fees and charges for services. Generally, a higher ratio is desirable as it means that the enterprise funds have a greater capacity to repay the debt. The ratio is computed as follows:



This analysis shows Richmond's enterprise funds have a consistent performance related to their debt coverage over the five-year period. The City Auditor's Office could not compare this ratio with other localities as not all localities have Utility Services comparable to Richmond.

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Source: City of Richmond CAFR, Statement of Net Position – Proprietary Funds

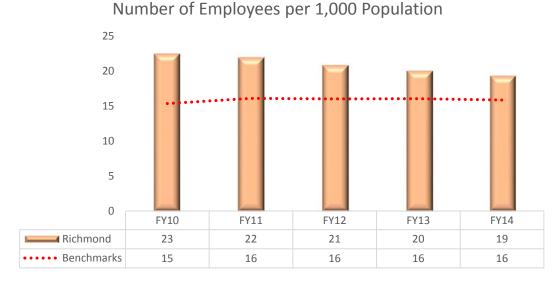
CAPITAL ASSETS

The construction work-in-progress accounts are used for the City's capital projects prior to the asset being put in use. Once the asset is in use, the cost of the construction of the asset is required to be capitalized and booked as a capital asset. However, when preparing the FY14 financial statements, the Finance Department discovered that the Department of Public Works had not capitalized several assets that were put in use in previous fiscal years. All of these assets were capitalized in FY14, which skews the calculation of this ratio. In addition, the City has adjusted its capital assets value five times in the last five years. This may have some impact in the comparison to the benchmark localities. Therefore, this ratio is not computed.

ADDITIONAL FINANCIAL CONDITION INDICATORS

NUMBER OF CITY EMPLOYEES PER 1,000 POPULATION

The City of Richmond employs a larger number of employees compared to the benchmark localities. This may indicate opportunities for improving efficiencies in Richmond's operations.

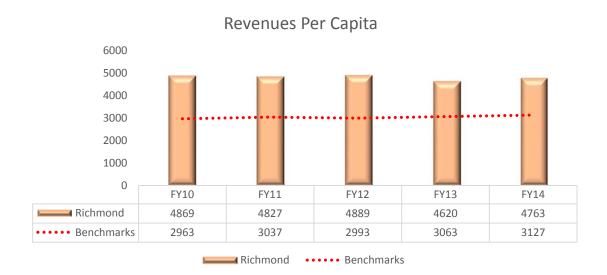


Source: Locality CAFRs, Statistical Section

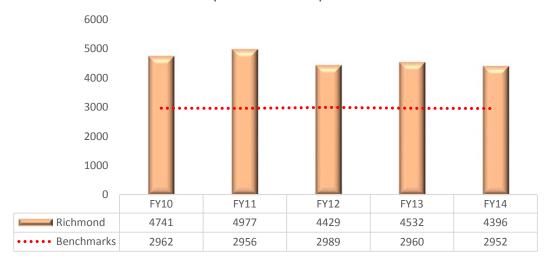
REVENUES AND EXPENSES PER CAPITA

Richmond's revenues and expenses per capita are larger than the benchmark localities. This indicates that the City is collecting a larger amount in taxes and charges for services from its residents. In addition, a larger amount of spending may indicate either additional services are provided by the City that are not provided by the benchmark localities or the City may have to improve efficiencies in providing services to its residents.

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Expenses Per Capita



Source: Locality CAFRs, MD&A

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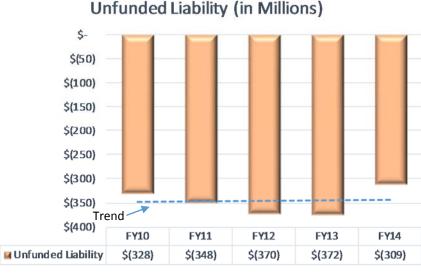
FUTURE LIABILITIES NOT ON BOOKS

In addition to current and long-term liabilities recorded in the City's accounting records, certain future liabilities have not been recorded as the City is not yet required to record them. However, these are actual liabilities that the City will have to pay and in some cases record in the future. The estimates of these liabilities are as follows:

Description	Details	Estimate
Unfunded Pension Liability	The City annually contributes an actuarially-determined amount to the Richmond Retirement System. However, the actuarial value of assets is less than the actuarial accrued liability for the plan. Beginning in FY15, the City will be required to report the net pension liability on its financial statements.	\$309 Million
Other Postemployment Benefits (OPEB) Liability	The City provides continuous medical insurance coverage for full-time employees who retire directly from the City. Dental insurance also continues after retirement at the retiree rate. The City pays for postemployment healthcare benefits on a pay-as-you-go basis. As a result, the actuarial accrued liability for promised benefits associated with past services is unfunded. Beginning in FY18, the City will be required to report the total OPEB liability on its financial statements.	\$68 Million
Roadway Maintenance	In 2011, the City Auditor's Office quantified the maintenance backlog on the City's roadways. Since then, the City has invested additional money in this area. However, a substantial liability still remains.	\$250 Million (Estimate)
Stormwater Pollution Mitigation	The EPA requires that certain pollutants be eliminated from storm water by the year 2028. The estimated liability for this task is estimated using a Chesterfield study.	\$100 Million (Estimate)
	Total	\$727 Million

UNFUNDED PENSION LIABILITY

Richmond has had a significant unfunded pension liability over the five year period ending June 30, 2014. Although during the past economic downturn many pension plans lost a significant value of their investments, the City will still have to pay for the pension liabilities when due. Beginning in FY15, the City will be required to record this liability on its books. For FY14, the City had an unrestricted net position for primary government of \$152 million. Recording this liability, which is estimated at \$309 million, will result in a negative unrestricted net position.



Source: City of Richmond CAFR, Retirement Plans Note

The City has been contributing the required contribution based on the actuarial computation. Effective July 1, 2013, Richmond City Council amended the City Code and adopted an ordinance to effect a Voluntary Retirement Incentive Plan (VRIP) which provided a benefit enhancement to incentivize early retirement for eligible employees. The implementation of this program resulted in an \$8,705,940 increase in the pension plan's unfunded liability.

Due to improvement in investment market conditions and additional contributions by the City, the available pension assets have increased in value. Therefore, the unfunded pension liability has decreased slightly. The increase in the value of pension assets is depicted by the following chart which presents that more assets are available to pay for pension benefits as they become due.

Pension Plan Assets vs. Annual Pension
Benefits Paid

10.00

8.00

6.81

6.59

4.00

Assets vs. Benefits Paid

2.00

Trendline

0.00

FY10

FY11

FY12

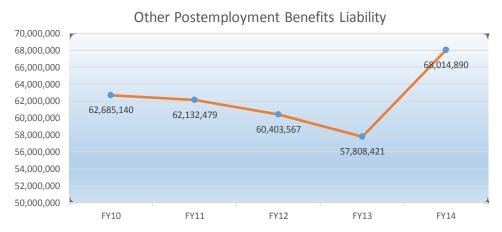
FY13

FY14

Source: Richmond Retirement System CAFR, Statement of Changes in Fiduciary Net Position

OTHER POSTEMPLOYMENT BENEFITS (OPEB) LIABILITY

The City pays for postemployment healthcare benefits on a pay-as-you-go basis. As a result, the actuarial accrued liability for promised benefits associated with past services is unfunded. Beginning in FY18, the City will be required to recognize this unfunded OPEB liability on the face of its financial statements. The new accounting standards do not require that OPEB benefits be funded. However, the Government Finance Officers Association (GFOA) advises pre-funding an OPEB liability as a best practice. Over time, pre-funding should result in a lower total liability for providing postemployment benefits. According to the 2014 CAFR, the City is currently studying the establishment of a trust fund that would be used to accumulate and invest assets necessary to pay for any accumulated liability on an actuarial basis. This note has been included in the City's CAFR since FY08.



Source: City of Richmond CAFR, Retirement Plans Note

IMPACT OF THE NEW ACCOUNTING REQUIREMENTS

The addition of the net pension liability (in FY15) and the net OPEB liability (in FY18) to the statement of net position will reduce the unrestricted net position. Below is an illustration of the projected impact of these liabilities:



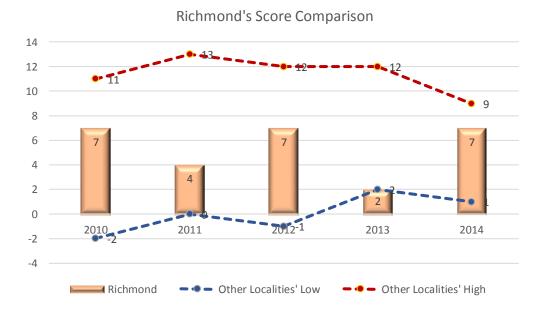
Source: City of Richmond CAFR, Statement of Net Position

It should be noted that many localities in the U.S. will be facing a similar situation. However, in the long run, these governments will have to address the issue by improving their net position. The City of Richmond should have a structured plan to address this issue in the foreseeable future. In a recent credit rating report, Fitch

considered the City's pension funded levels to be weak. Moody's indicated that they will monitor the City's progress in funding their pension liability and achieving their goal of 80% funded status by 2022. Standard & Poor's did not express an opinion on this matter.

RICHMOND'S SCORE COMPARISON

The CAFRs of Richmond and four similarly-sized cities (Chesapeake, Hampton, Newport News, and Norfolk) were used to calculate eight of the ten ratios in Mead's 10-Point Test. The other two ratios could not be used due to lack of comparability with benchmarks. The ratios computed for each indicator were compared by calculating quartiles using Excel. Two points were awarded for each ratio that fell in the top quartile of the comparison group. One point was given for each in the second quartile, and no points for a ratio in the third quartile. A point was subtracted for a ratio in the lowest quartile. The points awarded for each of the eight ratios were then totaled for each year of the analysis period. The below graph shows Richmond's score in relation to the other tested cities' high and low scores.



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The above chart indicates that Richmond's overall performance based on the ratios calculated in accordance with guidance is ranked as follows:

Rank	2010	2011	2012	2013	2014
1 st	Chesapeake	Hampton	Chesapeake	Hampton	Hampton*
2 nd	Hampton	Chesapeake	Hampton	Chesapeake	Newport News*
3 rd	Richmond	Newport News	Richmond	Newport News	Richmond*
4 th	Newport News	Richmond	Newport News	Richmond*	Chesapeake*
5 th	Norfolk	Norfolk	Norfolk	Norfolk*	Norfolk

^{*}In 2013, both Richmond and Norfolk had the same score. Similarly, in 2014, Hampton and Newport News had the same score. In the same year, Richmond and Chesapeake also had the same score.

RECOMMENDATIONS

- 1. The City Council, the Mayor, and the Chief Administrative Officer need to adopt and implement a strategy to substantially increase unassigned fund balance over the next five years to improve the City's short-term financial position.
- The CAO needs to present a plan to City Council for mitigating the negative impact of recording unfunded pension and other postemployment benefits liabilities.
- 3. The DCAO needs to ensure that the City has sufficient liquidity to meet its short-term obligations.
- 4. The CAO needs to ensure that the City's long-term liabilities are reduced to improve the City's capacity to borrow money in the future for capital needs and improving infrastructure.
- 5. The CAO needs to review overall staffing for cost reduction and improvement in operational efficiencies.
- 6. The CAO needs to conduct a study on establishing a trust fund to pre-fund OPEB obligations.
- 7. The CAO needs to conduct a life cycle analysis of a new capital project prior to recommending to the City Council.

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- 8. The CAO needs to create a reserve for replacement of capital assets after their useful life is exhausted.
- 9. The CAO needs to submit an annual report to City Council on the City's debt capacity, or use a pay-as-you-go methodology to fund future capital projects.

MANAGEMENT RESPONSE FORM 2016-02 Fiscal Sustainability Audit

#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
1	The City Council, the Mayor and the Chief Administrative Officer need to adopt and implement a strategy to increase unassigned fund balance over the next five years to improve the City's short-term financial position.	Y	The CAO will ensure that the budgeted revenues and expenditures are such that the City remains in compliance with its financial policies. The City will continue to implement the suggestions provided by the Bond Rating Agencies. The CAO and the Mayor will explore the feasibility of recommending to City Council changes to the City's financial policies.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	CAO		Annually and March 2016
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
			The City remains in compliance with its financial policies and has grown the unassigned fund balance over the past 5+ years
#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
2	The CAO needs to present a plan to City Council for mitigating the negative impact of recording unfunded pension and other postemployment benefits liabilities.		The City has to record the unfunded pension and postemployment benefits liabilities in accordance with Accounting Principles Generally Accepted in the United States. However, the City will continue to work with the Richmond Retirement System on the already established plan to increase the funding status. The CAO and the Mayor will explore the feasibility of recommending to City Council changes to the City's financial policies.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	CAO		FY 2022 is the projected goal of reaching 80% funded status and March 2016
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
			The plan is already in plant to provide a first term of the
			The plan is already in place to grow the funding status of the Richmond Retirement System by FY2022
#	RECOMMENDATION	CONCUR Y/N	
3	RECOMMENDATION The DCAO needs to ensure that the City has sufficient liquidity to meet its short-term obligations.	Y/N	Richmond Retirement System by FY2022 ACTION STEPS The CAO will ensure that the budgeted revenues and expenditures are such that the City remains in compliance with its financial policies. The City will continue to implement the
	The DCAO needs to ensure that the City has sufficient liquidity to meet its short-term obligations. TITLE OF RESPONSIBLE PERSON	Y/N	ACTION STEPS The CAO will ensure that the budgeted revenues and expenditures are such that the City remains in compliance with its financial policies. The City will continue to implement the suggestions provided by the Bond Rating Agencies. The matter of liquidity is discussed in the comments of the rating agencies. The CAO and the Mayor will explore the feasibility of recommending
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	The DCAO needs to ensure that the City has sufficient liquidity to meet its short-term obligations. TITLE OF RESPONSIBLE PERSON	Y/N	ACTION STEPS The CAO will ensure that the budgeted revenues and expenditures are such that the City remains in compliance with its financial policies. The City will continue to implement the suggestions provided by the Bond Rating Agencies. The matter of liquidity is discussed in the comments of the rating agencies. The CAO and the Mayor will explore the feasibility of recommending to City Council changes to the City's financial policies. TARGET DATE
3	The DCAO needs to ensure that the City has sufficient liquidity to meet its short-term obligations. TITLE OF RESPONSIBLE PERSON CAO IF IN PROGRESS, EXPLAIN ANY DELAYS	Y/N	ACTION STEPS The CAO will ensure that the budgeted revenues and expenditures are such that the City remains in compliance with its financial policies. The City will continue to implement the suggestions provided by the Bond Rating Agencies. The matter of liquidity is discussed in the comments of the rating agencies. The CAO and the Mayor will explore the feasibility of recommending to City Council changes to the City's financial policies. TARGET DATE Continuous IF IMPLEMENTED, DETAILS OF IMPLEMENTATION The City remains in compliance with its financial policies and March 2016
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#	The DCAO needs to ensure that the City has sufficient liquidity to meet its short-term obligations. TITLE OF RESPONSIBLE PERSON CAO IF IN PROGRESS, EXPLAIN ANY DELAYS RECOMMENDATION The CAO needs to ensure that the City's long-term liabilities are reduced to improve the City's capacity to borrow money in the future for capital	Y/N Y CONCUR Y/N	ACTION STEPS The CAO will ensure that the budgeted revenues and expenditures are such that the City remains in compliance with its financial policies. The City will continue to implement the suggestions provided by the Bond Rating Agencies. The matter of liquidity is discussed in the comments of the rating agencies. The CAO and the Mayor will explore the feasibility of recommending to City Council changes to the City's financial policies. TARGET DATE Continuous IF IMPLEMENTED, DETAILS OF IMPLEMENTATION The City remains in compliance with its financial policies and March 2016 ACTION STEPS The CAO will ensure that the budgeted revenues and expenditures are such that the City remains in compliance with its financial policies. The City will continue to implement the suggestions provided by the Bond Rating Agencies. Long-term
#	The DCAO needs to ensure that the City has sufficient liquidity to meet its short-term obligations. TITLE OF RESPONSIBLE PERSON CAO IF IN PROGRESS, EXPLAIN ANY DELAYS RECOMMENDATION The CAO needs to ensure that the City's long-term liabilities are reduced to improve the City's capacity to borrow money in the future for capital needs and improving infrastructure.	Y/N Y CONCUR Y/N	ACTION STEPS The CAO will ensure that the budgeted revenues and expenditures are such that the City remains in compliance with its financial policies. The City will continue to implement the suggestions provided by the Bond Rating Agencies. The matter of liquidity is discussed in the comments of the rating agencies. The CAO and the Mayor will explore the feasibility of recommending to City Council changes to the City's financial policies. TARGET DATE Continuous IF IMPLEMENTED, DETAILS OF IMPLEMENTATION The City remains in compliance with its financial policies and March 2016 ACTION STEPS The CAO will ensure that the budgeted revenues and expenditures are such that the City remains in compliance with its financial policies. The City will continue to implement the suggestions provided by the Bond Rating Agencies. Long-term liabilities are a direct result of Capital Projects.
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MANAGEMENT RESPONSE FORM 2016-02 Fiscal Sustainability Audit

#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
5	The CAO needs to review overall staffing for cost reduction and improvement in operational efficiencies.	Y	The CAO will review overall staffing for cost reduction and improvement in operational efficiencies.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	CAO		30-Jun-17
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
6	The CAO needs to conduct a study on establishing a trust fund to pre-fund OPEB obligations.	Y	The CAO will conduct a study on the feasibility of establishing a trust fund to pre-fund OPEB obligations.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	CAO		31-Dec-16
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
7	The CAO needs to conduct life cycle analysis of a new capital project prior to recommending to the City Council.	Y	The CAO will conduct a life cycle analysis of new capital projects prior to recommending to the City Council.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	CAO		Fiscal Year 2018 (as the 2017 capital budget is already adopted).
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
		CONCUR	A CHIVAN CHIVING
#	RECOMMENDATION	Y/N	ACTION STEPS
8	The CAO needs to create a reserve for replacement of capital assets after their useful life is exhausted.	Y	The CAO will create an account for reserve for replacement of capital assets after their useful life is exhausted.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	CAO		Fiscal Year 2018 (as the 2017 budget is already adopted).
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR	ACTION STEPS
#		Y/N	ACTION STEPS
9	The CAO needs to submit an annual report to City Council on the City's debt capacity, or use a payas-you-go methodology to fund future capital projects.	Y	The City will submit an annual report to City Council on the City's debt capacity and/or use a pay-as-you-go methodology to fund future capital projects.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	CAO		Annually
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
			The City's financial advisors (Davenport & Company) presented City Council with a report on the City's Debt Capacity on October 19, 2015 at the City Council Retreat