

## Debt Program

Union County borrows funds through the use of various debt instruments; typically general obligation bonds, installment financings (certificates of participation (COP's), limited obligation bonds (LOB's), and private placement), revenue bonds, and N.C. Clean Water Revolving Loans (NC CWRL). Principal and interest debt service payments are appropriated annually in the annual operating budget(s).

General obligation bonds are approved through voter referendum and collateralized by the full faith, credit, and taxing power of the County. Certifications regarding restrictions, covenants, budget data, and financial disclosure are reported annually for general obligation debt. Currently, there is no outstanding authorized and unissued referendum approved general obligation debt.

Installment financings are typically collateralized or secured by the assets financed and not the taxing power of the County. However, installment financings require the County to follow customary covenants including providing insurance certificates, budget data, and annual financial disclosure.

Revenue bonds are secured by the pledge of net revenues and in the County's case are derived from the water and sewer system, and require the County to follow the requirements of the revenue bond debt indentures.

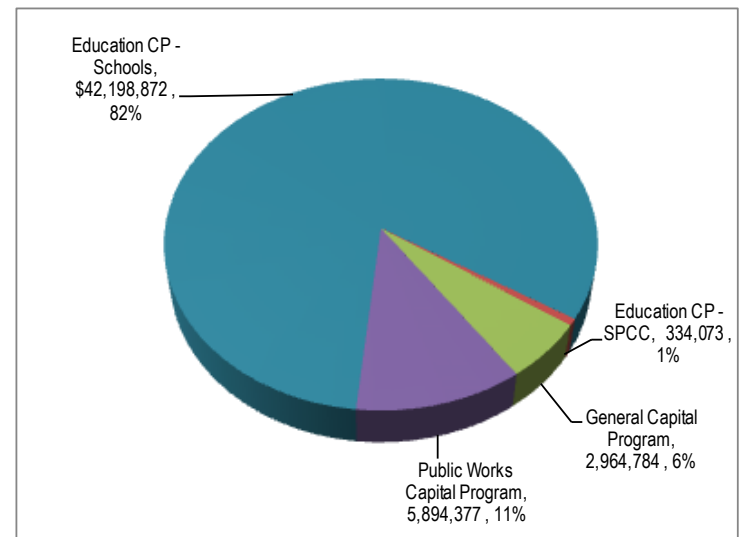
The County currently operates under indentures with U.S. Bank National Association as trustee. The Indentures authorize and secure all outstanding revenue bonds of the County's water and sewer system and contain several financial and operating covenants including rates, additional bonds, reserve funds, annual budgets, maintenance of the system, and insurance. The County is in compliance with all such covenants during the fiscal year ended June 30, 2015. The covenants are tested retrospectively annually during the audit process. It is anticipated the County, will continue to remain in compliance.

The County has two outstanding N.C. Clean Water Revolving Loans (NC CWRL) provided by the North Carolina Clean Water Revolving Loan and Grant Fund. The loans are payable over twenty years and are secured by the net revenues of the water and sewer system. Additionally the loans contain financial and operating

covenants. The County was in compliance with all such covenants as of June 30, 2014. The covenants are tested retrospectively annually during the audit process. It is anticipated the County will continue to remain in compliance.

The County has been prudent in its use of debt funds through the years. The County's total proposed debt service per capita, in FY 2016, is estimated to be \$238. This is comprised of \$195 for Union County Public Schools capital program, \$2 for South Piedmont Community College (SPCC) education capital program, \$27 for public works capital program, and \$14 for the general capital program.

Capital Program	Debt Service FY 2016	Debt Service / Capita
Education CP - Schools	\$ 42,198,872	\$ 195
Education CP - SPCC	334,073	2
General Capital Program	2,964,784	14
Public Works Capital Program	5,894,377	27
<b>Total</b>	<b>\$ 51,392,106</b>	<b>\$ 238</b>



In accordance with the provisions of the State Constitution and The Local Government Bond Act, as amended, allowing for issuance of all presently authorized bonds, the County has the statutory capacity to incur additional net debt in an approximate amount of \$1,529,214,621, the legal debt margin, as of June 30, 2014. This debt analysis does not include operating leases or other County leases as they are typically secured by the purchased asset.

### Credit Ratings

The County's most current credit ratings are as follows:

Debt Type	Moody's	Standard & Poor's	Fitch
GO Bonds	Aa1	AA+	AA+
Revenue Bonds	Aa2	AA-	AA

**Union County, North Carolina had their General Obligation Bond Rating upgraded by Standard and Poor's on June 1, 2015, from AA to AA+.**

### County Wide Debt

The table of the following page illustrates the current debt service as well as the future debt service associated with new debt issuances included in the proposed FY 2016-2021 Capital Improvement Plan.

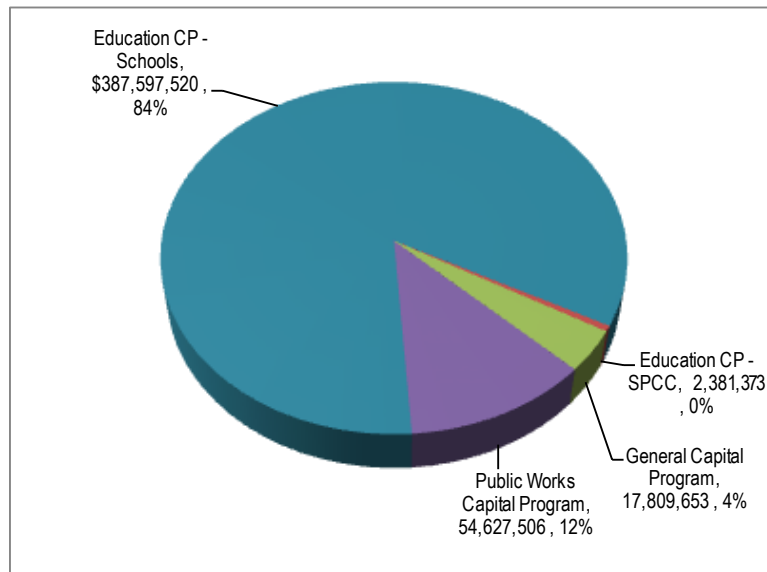
Based on the FY 2016-2021 Capital Improvement Plan new debt issuances, the County wide debt service reaches its highest point in FY 2020, due to the timing of various principal and interest payments and proposed new debt service for the education capital program (\$31.1 million), the general capital program (\$105.3 million), and the public works capital program (\$322.9 million by FY 2020). After FY 2020, the debt service begins to decline significantly through the remaining period. Within fourteen years after FY 2020, the County's debt service will be half of what it is proposed for FY 2020.

County Wide Debt Amortization Schedule			
Fiscal Year	Principal	Interest	Total
FY2016	\$ 37,260,956	\$ 14,456,838	\$ 51,717,794
FY2017	37,289,861	14,260,195	51,550,056
FY2018	38,732,316	15,206,907	53,939,223
FY2019	38,769,347	13,935,178	52,704,525
FY2020	37,836,914	16,849,823	54,686,738
FY2021	43,399,314	30,622,688	74,022,002
FY2022	43,441,514	29,032,839	72,474,353
FY2023	43,836,714	27,202,312	71,039,026
FY2024	41,095,714	25,304,285	66,399,999
FY2025	40,713,500	23,592,841	64,306,341
FY2026	40,017,300	21,895,360	61,912,660
FY2027	38,566,800	20,213,756	58,780,556
FY2028	38,358,200	18,560,099	56,918,299
FY2029	37,002,000	17,027,349	54,029,349
FY2030	34,274,400	15,483,166	49,757,566
FY2031	31,321,100	14,216,954	45,538,054
FY2032	27,268,200	13,079,679	40,347,879
FY2033	24,771,500	12,021,965	36,793,465
FY2034	20,412,400	10,981,187	31,393,587
FY2035	19,741,800	9,975,800	29,717,600
FY2036	20,380,900	8,988,700	29,369,600
FY2037	20,785,900	7,969,700	28,755,600
FY2038	21,768,200	6,916,900	28,685,100
FY2039	22,514,100	5,828,500	28,342,600
FY2040	23,075,000	4,702,750	27,777,750
FY2041	13,912,500	3,549,000	17,461,500
FY2042	14,608,200	2,853,400	17,461,600
FY2043	15,338,500	2,123,000	17,461,500
FY2044	15,824,800	1,356,100	17,180,900
FY2045	10,463,800	550,800	11,014,600
<b>Total</b>	<b>\$ 799,558,952</b>	<b>\$ 393,623,019</b>	<b>\$ 1,193,181,971</b>



The current outstanding debt as of June 30, 2015 will be \$462.4 million as illustrated by the table of the following page. 84 percent is comprised of the education capital program debt, while 12 percent is public works capital program debt, and 4 percent is general capital program debt. The outstanding debt per capita is \$1,795 for the schools education capital program, \$11 for the SPCC education capital program, \$253 for the public works capital program and \$82 for the general capital program.

Capital Program	Outstanding at June 30, 2015	Outstanding Debt / Capita
Education CP - Schools	\$ 387,597,520	\$ 1,795
Education CP - SPCC	2,381,373	11
General Capital Program	17,809,653	82
Public Works Capital Program	54,627,506	253
<b>Total</b>	<b>\$ 462,416,052</b>	<b>\$ 2,141</b>



A portion of the local option sales tax, as prescribed by North Carolina State general statutes, is used to support the education capital program or the indebtedness incurred by the County for

Union County Public School purposes as discussed in the revenue highlights of the budget document.

- Article 40 Local Option Sales Tax is subject to an adjustment by the State Secretary to increase or decrease by a factor (published in G.S. 105-486 (b)). Union County's factor increases the value of the tax to the County by factor of 1% (1.01). The County is mandated to use 30% of the revenue received from Article 40 for Public School Capital Outlay purposes or to retire any indebtedness incurred by the County for Public School purposes.
- Article 42 Local Option Sales Tax is only subject to an adjustment by the State Secretary if the location of the sale is unknown. The County is mandated to use 60% of the revenue received from Article 42 for Public School Capital Outlay purposes (as defined in G.S. 115C-426(f)) or to retire any indebtedness incurred by the County for Public School purposes.

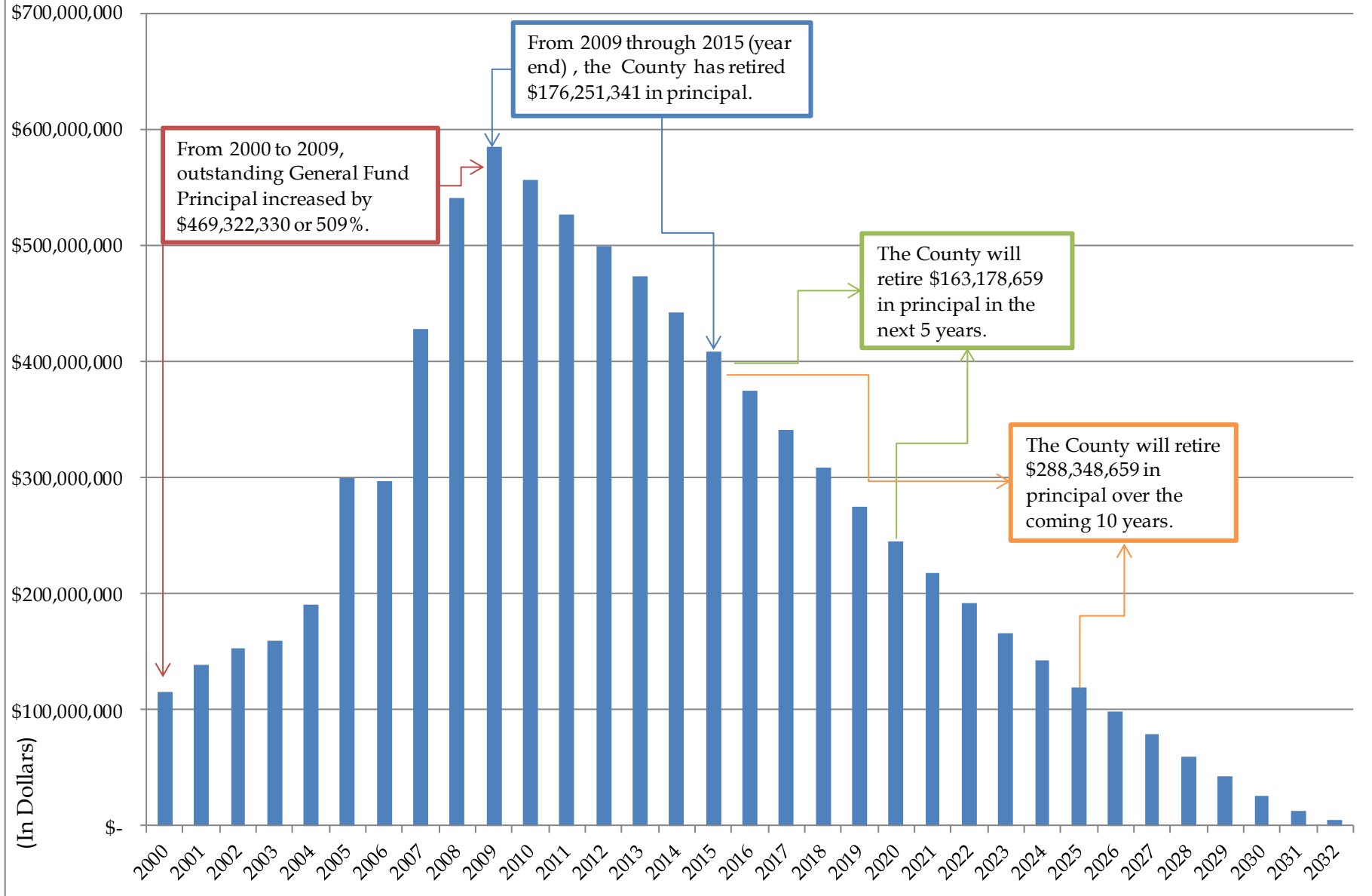
The graph on the following page indicates the *current* outstanding General Fund principal balances. These will change as new debt is added, however it illustrates the County's voracity for principal amortization. Due to this discipline, they County typically amortizes their capital projects under 20 years, however the 2006 Certificates of Participation and 2007 General Obligation Bonds required a 25 year amortization, and will mature in 2032 and 2033 respectively.

While this graph portrays the outstanding principal, it is important to understand the debt load in the coming years and the impacts on future borrowing capacity.



# Outstanding General Fund Debt Principal

(assumes current debt only)



Source: Union County Administrative Services, Finance, as of 6/30/2015



## Education Capital Program Debt

Over the past nineteen years, \$624.8 million of general obligation bonds and certificates of participation have been issued by the County to fund UCPS and SPCC land, facilities construction, and facilities improvements as delineated in the following table.

Education Capital Program Debt Issuances		
Type and Purpose	Issued	Original Issue Amount
GO Bonds - UCPS	June 1995	\$ 12,725,000
GO Bonds - UCPS	November 1996	11,260,000
GO Bonds - UCPS	September 1999	30,050,000
GO Bonds - UCPS	March 2001	56,700,000
COPs - UCPS	June 2003	8,436,943
COP's - SPCC	June 2003	4,448,730
GO BAN's - UCPS	Multiple - 2004	48,265,000
GO Bonds - UCPS	June 2005	90,000,000
COPs - UCPS	November 2006	77,640,000
GO Bonds - UCPS	September 2007	220,730,000
GO Bonds - UCPS	March 2009	64,500,000
<b>Total</b>		<b>\$ 624,755,673</b>

The debt service for the outstanding portion of the \$624.8 million will be retired by March 1<sup>st</sup>, 2033.

An additional \$31.1 million is proposed (for referendum) for two South Piedmont Community College (SPCC) projects; the renovations and expansion to create the SPCC Center for Technology and Allied Health and the new SPCC Multipurpose Facility. The annual debt service impact of the proposed \$31.1 million is projected to begin in FY 2019 and would conclude within twenty years.

The projected FY 2019 debt service for the additional \$31.1 million would equate to approximately 1.37 pennies of the projected FY 2016 ad valorem value.

The projected existing and proposed new education capital program debt service is shown in the following table.

Education Debt Amortization Schedule			
Fiscal Year	Principal	Interest	Total
FY2016	30,891,041	11,956,291	42,847,332
FY2017	30,846,174	11,974,336	42,820,510
FY2018	30,786,022	10,950,380	41,736,401
FY2019	29,988,586	9,934,263	39,922,849
FY2020	28,333,627	8,970,487	37,304,114
FY2021	26,935,527	9,651,743	36,587,270
FY2022	26,805,285	8,786,858	35,592,143
FY2023	26,880,308	7,716,336	34,596,644
FY2024	24,299,705	6,585,990	30,885,694
FY2025	23,122,158	5,669,589	28,791,747
FY2026	22,935,159	4,761,829	27,696,988
FY2027	20,989,181	3,861,119	24,850,300
FY2028	20,243,203	3,037,503	23,280,706
FY2029	19,067,919	2,362,773	21,430,692
FY2030	17,820,000	1,638,395	19,458,395
FY2031	14,315,000	1,182,239	15,497,239
FY2032	9,680,000	881,880	10,561,880
FY2033	6,580,000	689,642	7,269,642
FY2034	1,580,000	544,000	2,124,000
FY2035	1,580,000	465,000	2,045,000
FY2036	1,580,000	386,000	1,966,000
FY2037	1,580,000	307,000	1,887,000
FY2038	1,580,000	228,000	1,808,000
<b>Total</b>	<b>\$ 418,418,893</b>	<b>\$ 112,541,653</b>	<b>\$ 530,960,546</b>

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## General Capital Program Debt

During the past ten years, \$34.2 million of general obligation bonds, certificates of participation, and installment financing have been issued by the County to fund General Capital Projects such as the Judicial Center, the Agricultural Center, Library projects, Law Enforcement facilities, and E911 Radio System/Equipment.

General Capital Program Debt Issuances		
Type and Purpose	Issued	Original Issue Amount
COP's - Judicial Center	June 2003	\$ 15,464,022
COP's - Ag. Center	June 2003	4,845,379
COP's - Library	June 2003	2,737,323
GO BAN's - Firearms Range	Multiple - 2004	525,000
GO BAN's - Jail Expansion	Multiple - 2004	467,500
GO BAN's - Animal Shelter	Multiple - 2004	742,500
Installment Financing - E911 Radio System	June 2009	9,390,000
<b>Total</b>		<b>\$ 34,171,724</b>

An additional \$2.4 million of installment financing is proposed in FY 2017 for the replacement of the Tax Assessment and Administration Software. The annual debt service impact of the proposed \$2.4 million is projected to begin in FY 2018 and would conclude within seven years.

Also, an additional \$105.2 million of referendum approved general obligation bonds are proposed for the following programs.

General Capital Program Proposed Debt Issuances	
Type and Purpose	Issue Amount
4H Pavilion and Ancillary Facilities	\$ 5,697,353
Emergency Management - E911 Center	10,566,000
Jail and Sheriff's Office Replacement and Expansion	55,558,444
Jessie Helms Park Development	7,500,249
Library Expansion and Development	25,857,894
<b>Total</b>	<b>\$ 105,179,940</b>

General obligation bonds of \$105.2 million are proposed to be issued in FY 2018. The annual debt service of the proposed general obligation bonds will begin within the year of issuance and would retire within twenty years.

The projected debt service for the additional \$105.2 million would equate to approximately 5.94 pennies of the projected FY 2016 ad valorem value.

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The projected existing and proposed additional general capital program debt service is shown in the following table.

General Government Debt Amortization Schedule			
Fiscal Year	Principal	Interest	Total
FY2016	2,401,106	574,979	2,976,085
FY2017	2,404,991	503,795	2,908,786
FY2018	2,761,295	552,755	3,314,049
FY2019	3,460,762	452,142	3,912,904
FY2020	2,287,087	348,025	2,635,112
FY2021	6,815,187	5,554,803	12,369,990
FY2022	6,805,429	5,227,662	12,033,091
FY2023	6,705,406	4,902,676	11,608,082
FY2024	6,101,010	4,589,752	10,690,761
FY2025	6,432,842	4,269,903	10,702,745
FY2026	5,429,841	3,977,003	9,406,844
FY2027	5,420,819	3,709,315	9,130,134
FY2028	5,411,797	3,441,832	8,853,629
FY2029	5,402,081	3,174,555	8,576,636
FY2030	5,290,000	2,907,500	8,197,500
FY2031	5,290,000	2,643,000	7,933,000
FY2032	5,290,000	2,378,500	7,668,500
FY2033	5,290,000	2,114,000	7,404,000
FY2034	5,290,000	1,849,500	7,139,500
FY2035	5,290,000	1,585,000	6,875,000
FY2036	5,290,000	1,320,500	6,610,500
FY2037	5,290,000	1,056,000	6,346,000
FY2038	5,290,000	791,500	6,081,500
FY2039	5,290,000	527,000	5,817,000
FY2040	5,250,000	262,500	5,512,500
<b>Total</b>	<b>\$ 110,159,653</b>	<b>\$ 57,133,197</b>	<b>\$ 173,374,350</b>

**Public Works Capital Program Debt**

During the past nineteen years, \$99.0 million of revenue bonds, general obligation bonds, and N.C. Clean Water Revolving Loans (NC CWRL) have been utilized by the County to fund water and wastewater infrastructure projects. These are delineated in the following table.

Public Works Capital Program Debt Issuances		
Type	Issued	Original Issue Amount
GO Bonds	June 1995	\$ 5,000,000
Revenue Bonds	May 1996	21,245,000
NC CWRL	June 1998	4,673,933
Revenue Bonds	June 2003	33,130,000
NC CWRL	June 2008	15,000,000
Revenue Bonds	June 2009	20,000,000
<b>Total</b>		<b>\$ 99,048,933</b>

An additional \$322.9 million of water and waste water revenue bonds is proposed over several years to fund the water and wastewater system improvement and expansion projects. Proposed issuance timing and amount are shown below.

Public Works Capital Program Proposed Debt Issuances		
Type	Timing	Revenue Bond Amount
Revenue Bonds	FY 2016	\$ 76,782,274
Revenue Bonds	FY 2018	83,175,800
Revenue Bonds	FY 2019	163,004,000
<b>Total</b>		<b>\$ 322,962,074</b>

The annual debt service impact of the three proposed additional revenue bond issuances totaling \$322.9 million is projected to begin in FY 2017, FY 2019 and FY 2020 respectively; and would conclude within twenty years for each issuance. The projected existing and proposed additional public works capital program debt service is shown in the following table.



**Public Works Debt Amortization Schedule**

Fiscal Year	Principal	Interest	Total
FY2016	3,968,810	1,925,567	5,894,377
FY2017	4,038,697	1,782,064	5,820,760
FY2018	5,185,000	3,703,772	8,888,772
FY2019	5,320,000	3,548,772	8,868,772
FY2020	7,216,200	7,531,311	14,747,511
FY2021	9,648,600	15,416,142	25,064,742
FY2022	9,830,800	15,018,319	24,849,119
FY2023	10,251,000	14,583,300	24,834,300
FY2024	10,695,000	14,128,543	24,823,543
FY2025	11,158,500	13,653,350	24,811,850
FY2026	11,652,300	13,156,528	24,808,828
FY2027	12,156,800	12,643,322	24,800,122
FY2028	12,703,200	12,080,764	24,783,964
FY2029	12,532,000	11,490,021	24,022,021
FY2030	11,164,400	10,937,271	22,101,671
FY2031	11,716,100	10,391,715	22,107,815
FY2032	12,298,200	9,819,299	22,117,499
FY2033	12,901,500	9,218,323	22,119,823
FY2034	13,542,400	8,587,687	22,130,087
FY2035	12,871,800	7,925,800	20,797,600
FY2036	13,510,900	7,282,200	20,793,100
FY2037	13,915,900	6,606,700	20,522,600
FY2038	14,898,200	5,897,400	20,795,600
FY2039	15,644,100	5,152,500	20,796,600
FY2040	16,425,000	4,370,250	20,795,250
FY2041	13,912,500	3,549,000	17,461,500
FY2042	14,608,200	2,853,400	17,461,600
FY2043	15,338,500	2,123,000	17,461,500
FY2044	15,824,800	1,356,100	17,180,900
FY2045	10,463,800	550,800	11,014,600
<b>Total</b>	<b>\$ 258,820,406</b>	<b>\$ 222,480,669</b>	<b>\$ 481,301,076</b>

All future debt issuance projections have been calculated on generally accepted repayment methods, with interest rates of 5% or higher.

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## Debt Management and Debt Ratios

As a result of growth, there was pressure to expand a variety of needs within the County. As such, the County tries to provide a service that is appropriate, equitable and fiscally conscious. Some of the reasons Union County drew people and benefitted from growth were: the tax rate, schools, availability of homes, and nearby jobs.

In 2000 Union County ranked 49<sup>th</sup> in highest tax rate within the state, at \$0.66 per \$100 of assessed value, today we rank 24<sup>th</sup>. Over that same period 57 (of 100) counties increased their tax rate, while the balance either decreased or stayed the same. Union County's rate increase was the 8<sup>th</sup> largest in the state.

The County has identified key debt ratios that are used in determining the creditworthiness. The County is responsible for annual updates with the three rating agencies, and use our information and that of other Counties to weigh ourselves against other issuers.

More appropriately, Union County is compared against the Counties whose population is greater than 100,000, to get a better idea of those that are similar in size and dealing with similar issues. The following is a comparison of the 26 North Carolina counties that fit that description.

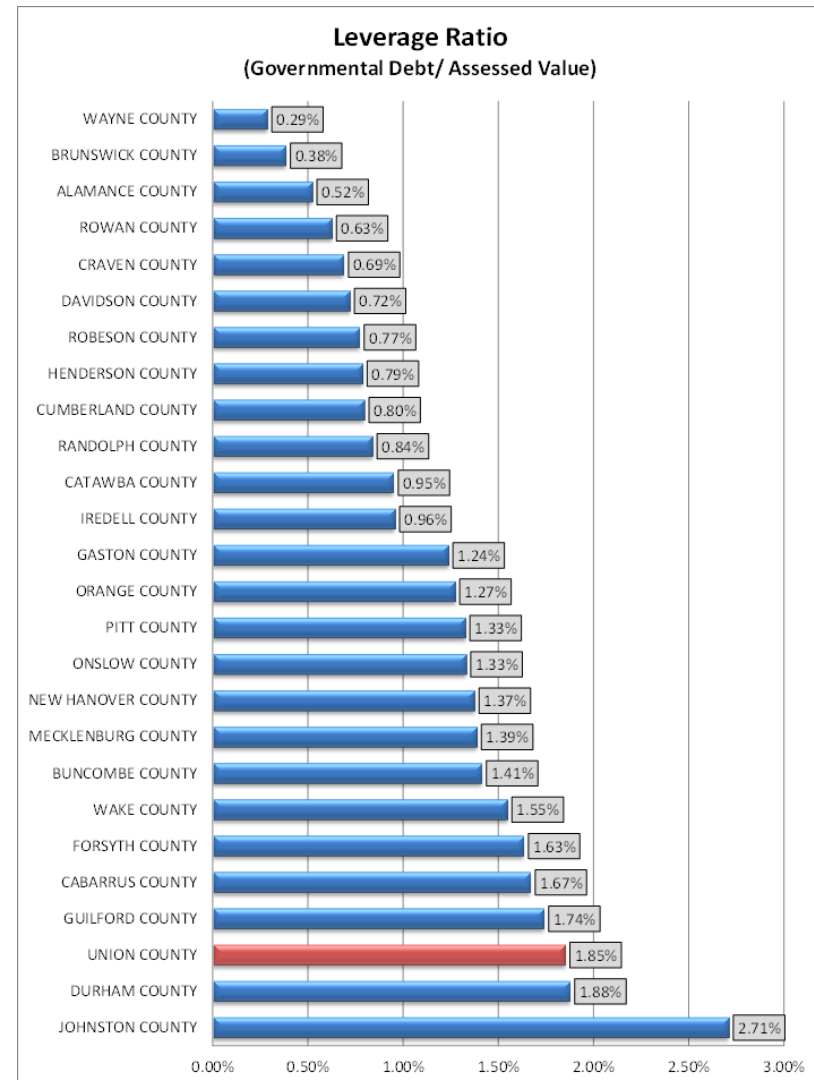
The following ratios are laid out in Section C, Readers Guide and Policies:

- Debt as a percentage of assessed value
- Debt Per Capita
- Debt Per Capita as a percentage of income
- Debt Service as a percentage of general fund expenditures
- General Fund Balances as a percentage of General Fund Operating Expenses

Furthermore, the tax rate has been graphed against the same group of Counties with population over 100,000.

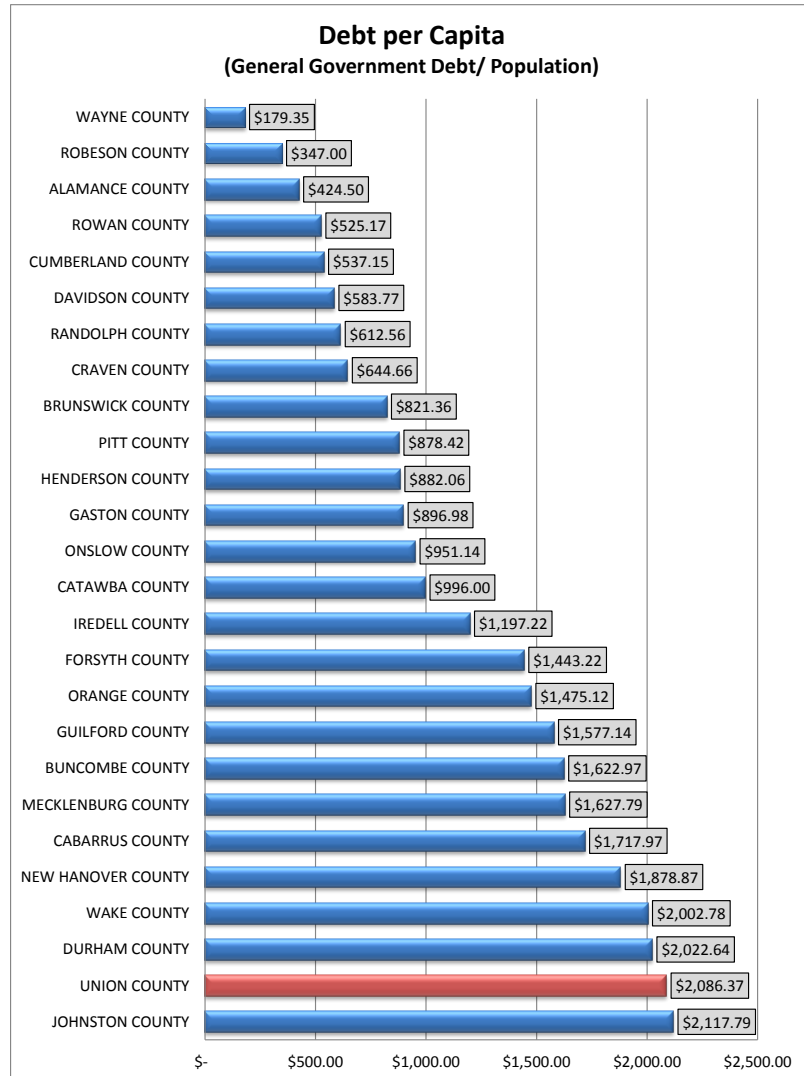
## Debt as a Percentage of Assessed Value

This is commonly referred to as leverage ratio in municipal governments and it measures the extent by which a government entity relies on tax supported debt. The calculation relies on all tax supported, long term debt and is divided by the assessed value.



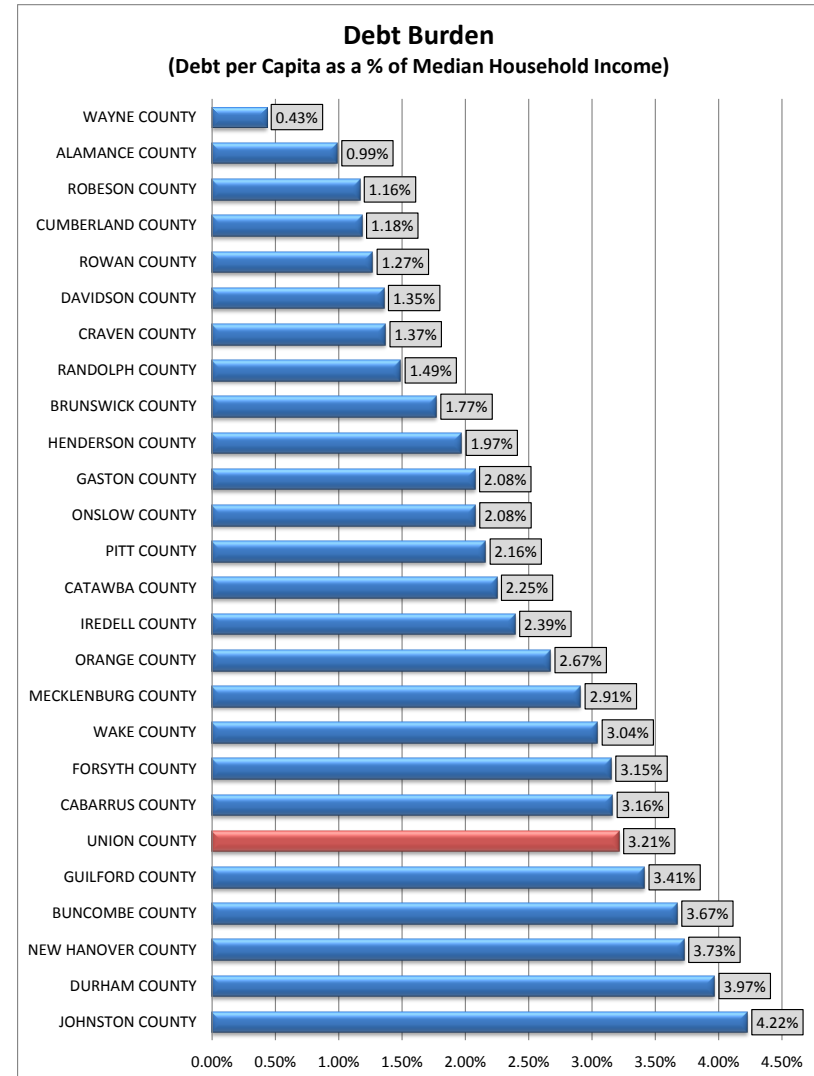
## Debt per Capita

This is a measure of County debt on a personal basis, and it represents an individual's share of the County wide debt load. The calculation relies on all tax supported, long term debt and is divided by the annual population (provided by the State demographer).



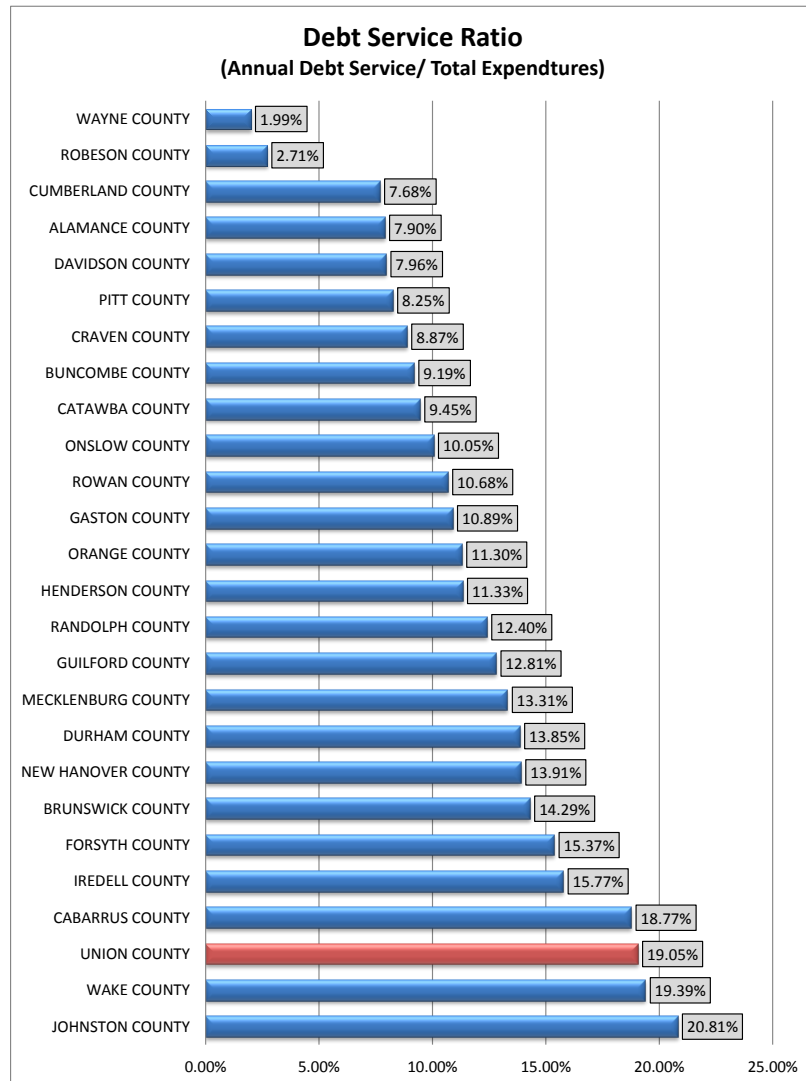
## Debt per Capita as a percentage of income

This is a measure of debt per capita as a percentage of income, and measures affordability. This measure is commonly known as debt burden. The calculation relies on all tax supported, long term debt, and is divided by the annual population (provided by the State demographer).



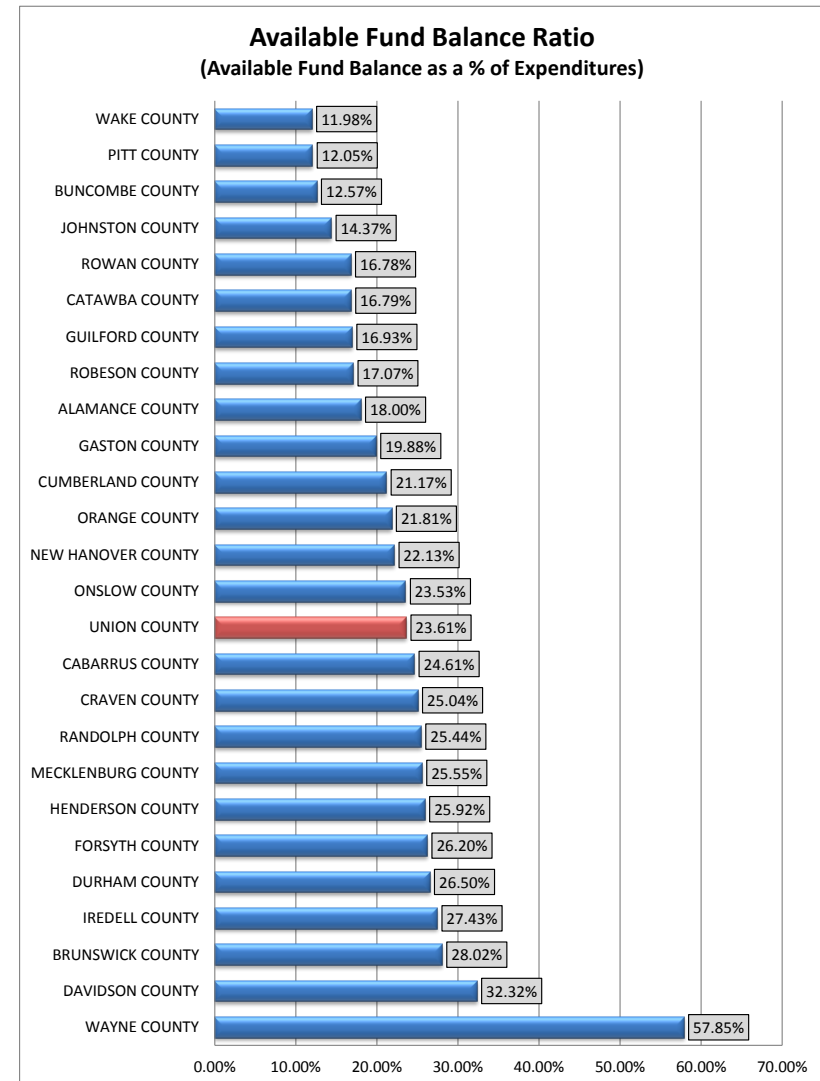
## Debt Service Ratio

This is a measure of annual debt service, considering the total expenses of the governmental unit. The calculation provides feedback on flexibility of expenditures within the unit, whereby the higher the percentage, the less flexible the unit becomes.



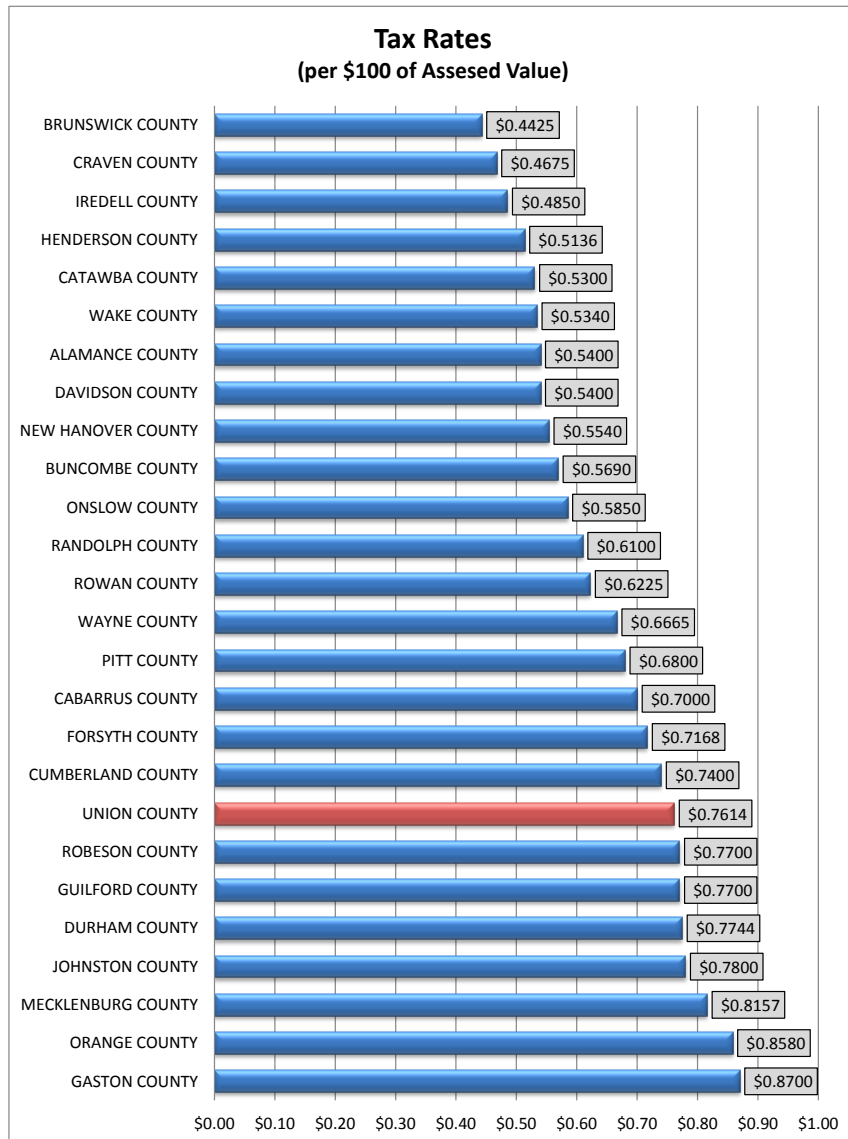
## Available Fund Balance Ratio

This is a measure of the solvency of a government unit. The calculation measures a County's ability to address long term obligations if revenues are not available. This is an important ratio that measures the time in which a unit could cover expenses. For Union County, it means the County has approximately 86 days of available funds.



## Tax Rates

The tax rate is the posted rate by which the unit of government is going to tax assessed property in the current year. There is no calculation, and the information can be found within each entity's operating budget. Some County's, have bifurcated their tax rates between purposes, as Union County has done. The following rates were for FY 2014-2015.



In summary, we have reviewed the major ratios and have good data available from not only the Counties, but also the State of North Carolina to be able to measure our fiscal health against other, similar sized units of government.

The County has been, and continues to be, active in searching for better solutions to the debt portfolio, having refunded over \$300 million in governmental (non-enterprise) debt since 2010. This is evident as Governmental funds debt service has dropped from \$52,367,596 in FY 2012 to \$47,348,877 in FY 2014.

The County continues to remain strong, yet challenged by being above average with our tax rate, which will likely increase as a result of the revaluation that concluded in FY 2015. The County pays the third greatest amount of debt service as a percentage of expenditures in the state, at 19.05% in FY 2014. FY 2014 was however the low water mark, as the County has averaged over 22% over the last four fiscal years, well above the average in North Carolina, and considered high by the rating agencies. The County remains the second highest in debt per capita and only dropped below the highest, Johnson County, in FY 2013, after several years topping the list.

The debt burden will remain high, in contrast to the County remaining one of the top five highest Median Household Incomes in the State. The debt to assessed value remains the third highest in the state, and is not likely to change in the near future given the assessed valuation of the County recently decreased, which will increase the percentage.

The County has strengthened the fund balance policy, increased strategic reserves, and lowered the annual debt service through refunding opportunities. This has acted as an offset to the amount of debt, proving the County's willingness to hold a greater level of fund balance in order to maintain the debt ratings. **As a result, the County was rewarded with an upgrade by Standard and Poor's on June 1, 2015 to AA+, the second highest municipal credit rating available.**

