## ANNUAL DEBT REPORT

 As of July 1, 2017

Ron Woody, CPA, CGFM, CSBA, Roane County Executive Connie Cook-Aytes, Director of Accounts and Budgets Jennifer Suter, Debt Service Clerk

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# LETTER TO <br> STAKEHOLDERS 

## Office of the County Executive Roans County Courthouse

July 1, 2017

To Our Stakeholders:

## Subject: Annual Debt Report

The following report has been prepared in compliance with the Roane County Debt Policy, adopted March 11, 2011 by Resolution 03-11-23. The objectives of the policy are to assist the stakeholders in understanding Roane County's Debt, to provide a medium where decisions can be made and to assist future decision making in regards to debt management.

Financial Policies regarding Fund Balance and Capital Planning have also been adopted to assist Roane County in management of capital assets and debt related to certain capital assets.

This report reflects data known and/or estimated for the time period ending June 30, 2017. Ratios reflect outstanding debt as of June 30, 2017. The multi-year budgets reflect estimated budget data through the year 2033.

Sincerely,


Ronald B. Woody
Roans County Executive

# OBJECTIVES AND <br> METHODOLOGY 

## OBJECTIVES OF THE ANNUAL DEBT REPORT:

- To comply with the Roane County Debt Management Policy, Resolution \#03-11-23, adopted March 11, 2011, and as amended with Resolution \#07-12-08 which should:
o Enhance decision-making process and provide transparency
o Identify all estimated expenditures of principal, interest, and annual costs associated with the issuance of debt


## METHODOLOGY USED TO COMPILE THE REPORT:

- Obtain most recent Annual Audit which includes the Schedule of Changes in Long-term Notes, Other Loans, Capital Leases, and Bonds Payable dated June 30, 2016
- Create an Updated Schedule of Changes in Long-term Notes, Other Loans, Capital Leases, and Bonds Payable to include any new debt issuances and related expenditures incurred since the audit or anticipated approved projects or projects being considered by Commission through date of report
- Create a multi-year debt service budget for each debt service fund (General Debt Fund 151, Rural Debt Fund 152, Education Debt Fund 156) indicating all current debt obligations along with estimated revenues and projected beginning and ending fund balances in order:
o Comply with the Roane County Fund Balance Policy, Resolution \#04-11-32, adopted April 11, 2011 and amended with Resolution \#07-1207. This policy is used in preparing the multi-year budgets
o Graph the multi-year debt budgets of Revenue, Expenditures, Ending Fund Balance, and Change in Fund Balance
o Graph the property tax pennies needed to support the multi-year budgets
- Create and update an Input/Output Spreadsheet which will be used to:
o Estimate Value of the Penny
o Program total outstanding debt and net debt
o Provide benchmark data
o Calculate potential new debt cost
o Perform benchmark calculations
- Provide individual and consolidated graphs of the number of pennies needed to support the Debt Service Budgets
- Graph a series of benchmarks compared to Roane County's data. This series of data will include the impact of any new debt


## For New Debt:

- Create a Straight Line Loan Amortization Table
- Calculate estimated new tax needed for potential new debt based on the straight line amortization table
- Compare the straight line interest cost and tax rate to any other alternative payment schedule, if an alternative method is presented
- Combine potential new debt with existing debt to create a multi-year debt schedule
- Prepare and compare new ratios based on potential new debt


## SECTION 1

# ROANE COUNTY DEBT <br> MANAGEMENT POLICY 

Adopted with Resolution\#03-11-23
Amended with Resolution \#07-12-08

Goal/Mission: To provide management with appropriate guidelines and direction to assist in making sound debt management decisions. To further demonstrate strong financial management practices for our county citizens, outside investors, and credit agencies.

## Objectives:

1. Provide a synopsis of the types of financing available to Roane County in order to promote understanding of the transaction and related cost and risk
2. Enhance decision making process transparency
3. Identify all expenditures of principal, interest, and annual costs along with issue specific transaction costs
4. Address hiring outside professionals and any potential conflict of interest issues
5. Establish requirements and decision making checklist for new debt (Section 5)

This policy references:

- Capital Asset Policy
- Capital Asset Plan
- Fund Balance Policy
- An Annual Debt Report
- Specific New Issue Report
- Attachment A- State Form CT-0253


## 1. Synopsis of the Types of Financing Available for Roane County and Related

 Cost and RiskAll financing shall be approved by the Roane County Commission and the Tennessee Comptroller's Office within legal guidelines of Tennessee Law and regulations set forth by the comptroller's office.

## Potential Financing Methods:

- Tax/Revenue Anticipation Notes - Used for cash flow purposes until annual revenues are received for a particular fund. All borrowing is required to be fully paid back by the end of the current fiscal year. Tax/Revenue Anticipation Notes shall be used on a limited basis and if the need arises it is the county's intent to have sufficient funds available with the Trustee to meet these cash flow needs with internal borrowing from the County Trustee or among individual funds.
o Generally for funds operating on property tax or other revenue that is not received on a monthly basis.
o Interest risk would be low since term of notes would be less than one year and interest would be paid back to the county
- Lease Agreements- Not anticipated to be used.
- Grant Revenue Anticipation Notes (GRAN) - Used when a fund does not have significant cash available to maintain a positive cash balance until a reimbursable grant can be received. Due to the cumbersome nature of GRAN, Roane County may decide to use Capital Outlay Notes in lieu of Grant Revenue Anticipation Notes
- Capital Outlay Notes- Used for capital borrowings which are 12 years or less in duration. Additionally these can be funded internally (borrowing from the Trustee or individual fund) or funded by a bank financial institution as first choice. If borrowing would be from a non-bank financial institution then it would be treated in this policy the same as a Long Term Loan or Bond. Generally, Roane County's Capital Outlay Notes will be less than $\$ 1,000,000$. Capital Outlay Notes duration cannot exceed the asset's life expectancy. It is the intent of Roane County not to borrow for a dollar amount less than $\$ 400,000$. The County should be able through a capital project plan to pay for these projects with cash. Roane County's Capital Outlay Notes would generally be used for borrowing between $\$ 400,000$ and $\$ 1,000,000$. Capital Outlay Notes generally would be issued for medium capital assets as noted in the Capital Asset Policy.
o External cost of borrowing (excluding interest rate) should be zero since debt would be issued through internal borrowing or with a bank financial institution.
o Interest risk and thus interest rate would be low since time of indebtedness would be relatively short; typically, five (5) to ten (10) years or less and could be paid back to the Trustee.
- Long Term Loans and Bonds- Long term loans and bonds are generally used for indebtedness which would exceed 12 years for repayment and in a dollar amount greater than $\$ 1,000,000$. These loans, situation dependent, could be as be low as $\$ 400,000$. Funds may be borrowed from the private sector, federal or state agency loan programs. In cases of loans or bonds the county will be provided specific legal debt resolutions which shall be approved by the county legislative body. In certain cases legal and bond counsel may be hired. Information within this policy gives guidance of disclosing the cost of these services and address any potential conflicts of interest. Long term loans and bonds would be anticipated on major capital assets as noted in the Capital Asset Policy.
o External cost would be anticipated and fully disclosed on State Form CT- 0253 (Attachment A) prior to the contract to secure the funding.
o Interest risk and thus interest rate would be anticipated due to the length of the indebtedness.
- Tax Increment Financing-TIF is a financial tool that was created to assist blighted areas in acquiring funding by issuing bonds to be paid for from a specific economic district. This funding will theoretically come from the increased revenues generated from the revitalization of the area. Projects are generally to improve infrastructure.

TIF is also a method to use future gains in taxes to subsidize current improvements, which are projected to create the conditions for said gains.

Roane County shall only consider TIF on a limited basis. In most cases, Roane County would not consider TIF and TIF is generally considered prohibited; however, upon a thorough review and analysis of TIF, Roane County, with a $2 / 3$ vote, as policy, will be required for approval of a TIF.

The reasons for prohibiting Tax Increment Financing are:
o Cost of administration is relatively high
o Risk of an unsuccessful project is often high
o Often Tax Incremental Financing reflects a backloaded debt
0 Success of an investment in a project which could be funded by Tax Increment Financing would also be successful with regular original financing

## 2. Enhance transparency of decisions by way of an Annual Debt Report, Annual Budgets, and New Debt Issuance Report-as needed

Responsibilities for analysis and reporting shall be with the County Executive and the Director of Accounts and Budgets (DoAB).

To ensure transparency of decisions, the following documents shall be prepared and available for public review: annual debt reports, annual budgets, and new debt issuance reports.

The County Legislative Body may assign an ad hoc Debt Management Committee to review reports, study debt standards, and assess ability to repay debt, but in the absence of a Debt Management Committee these duties will rest with the Budget Committee.

The county shall comply with legal requirements for notice and for public meetings related to debt issuance.

This policy will be reviewed annually at a minimum to ensure adequacy and ability to meet requirements set forth by the County Legislative Body and the State Comptroller's Office.

## Annual Debt Report

An annual debt report shall be submitted to the county legislative body by June of each year, generally the report will be presented with the annual debt budget.

The annual report shall contain at a minimum:

- Multi-year annual budgets extending to the length of the longest issue. Graphical representation of: estimated revenue, expenditures, and fund balances each year.
- Net Debt Calculation (total principal outstanding less most recent year respective debt fund balance).
- Calculation of net debt per capita (net debt/population).
- Calculation of net debt as a percentage of estimated assessed value of taxable property (net debt/assessed property value).
- Ratio of debt service expenditures as a percentage of governmental fund expenditures - Funds 101-156. (Calculated as total budget expenditures of funds $151,152,156$ divided by total budget expenditures of funds 101 through 156).
- Net debt per capita as a percentage of income per capita (per capita income/net debt per capita).
- All calculations and ratios shall be compared to benchmark as stated within this policy.
- Documentation of the most recent debt rating as available.
- Reports will reflect estimated fund balances which shall comply with a fund balance policy or specific explanation of variances. Fund Balance policy approved through a separate policy and resolution.
- Percentage of fixed verses variable rate debt.


## Annual Debt Budgets

Annual Debt Budgets shall be adopted by the county legislative body and comply with legal notice and filings requirements for county budgets TCA 5-12.

## New Debt Issuance report

A new debt issuance report shall be prepared before consideration of new debt. Details of the new debt issuance report are noted in the following section 3 of this policy.

## 3. Cost of Debt- Principal, Interest, Annual Management Cost, and New Issuance

 CostIn order to assist the county in making better short and long term debt decisions and to reflect the cost of debt Roane County shall:

For internal borrowing:

- Prepare at minimum a New Debt Issuance Report for loans that have no interest risk or are obtained through internal borrowing which shall include:
o Approval of the County Legislative Body by resolution.
o Cash Flow "pro forma"
o Approval of the Director of State and Local Finance in the State Comptroller's Office.
For external borrowing:
All of the requirements for internal borrowing apply as well as:
- Prepare a multi-year budget of the current debt cost of principal, interest and estimated annual cost over the life of the existing debt. Create a graph of the multi-year budget. This graph will allow the county to determine if extra capacity exists to issue new debt, what the capacity may be or if a revenue shortage is anticipated.
- Prepare a New Debt Issuance Report for loans that have interest risk and require additional revenue for support or are obtained through external borrowing which shall include at minimum:

0 Straight line amortization repayment schedule of the proposed new debt.
o Comparison of Straight line amortization repayment schedule to any other proposed repayment schedule to determine if the alternative repayment schedule provides for advanced payment of principal or back loaded payment of principal. Comparison shall reflect the difference in interest cost.
o Any new debt cost of principal, interest and annual cost as if the debt exists by itself. This shall be an annual budget of the new debt by itself.
o This cost shall be graphed as a cost by itself and reflect the estimated tax needed to support the debt as if no other revenue or debt existed.
o The new debt annual budget proposed with the existing multi-year annual budget; thereby, determining the need for additional revenue to support the new proposed debt.
o Reflect new ratios as noted in the Annual Debt Report (income/debt per capita)

- Ensure that State Form CT- 0253 is complete for new issues.


## Cost of Issuance of New Debt

Roane County shall:

- Complete or have completed by external party State Form CT-0253 in order to compare the cost for issuance of debt prior to contracting for funding.
- Compare at least two proposals of issuance cost and estimated interest rate cost.


## 4. Hiring Professional Assistance and Conflict of Interest Issues

Roane County shall:

- From time to time hire legal counsel, a financial advisor or underwriter to assist in the issuance of debt.
- Ensure that all professionals hired to assist in the issuance of debt are fully certified by the appropriate body within their respective field and fully insured and bonded.
- Require all professionals to disclose the estimated cost to the county of their respective services including "soft" costs or compensations in lieu of direct payments.
- Require the advisor to disclose all relationships (fees and payments) to any other transaction participant including "soft" costs or compensations in lieu of direct payments.
- Require all professionals to enter into an engagement letter related to their proposed services, cost, and disclose any potential conflict of interest.
- Understand that Roane County bears sole responsibility for the development, adoption, and implementation of this policy, even when using professional assistance.
- Ensure that any legal or financial advisor may not privately bid on an issue for which they are, or have been, providing advisory services for the issuance.


## 5. Establish Requirements and Decision Making Checklist for New Debt or Refinancing of Current Debt

Certain requirements must be met prior to the issuance of new debt. The requirements used as a checklist prior to issuing additional debt are as follows:

- Annual Debt Report completed on existing debt. Section 2
- Specific Issue Report which reflects the impact on the multi-year budget, if any, with the new debt. Section 3
- Borrowing only for assets in the current Capital Outlay Plan or in emergency situations.
- Borrowing for major assets as outlined in the Capital Project Policy.
- Borrowing for medium assets as outlined in the Capital Project Policy where the assets are for emergencies or in cases that have been noted for borrowed funds in the Capital Outlay Plan.
- Amortization schedule will not exceed the useful life of the asset.
- Amortization schedule uses the straight-line method of repayment or wrapping principal which does not exceed 3 years. Any other repayment schedule must be approved by the comptroller's office in writing and fully disclose the additional interest cost compared to straight-line repayment. Section 3
- Compare the proposed repayment schedule with the straight-line method noted whether the new debt has an advanced repayment schedule, straight-line or back loaded schedule. Section 3
- Compare at least two proposals of issuances cost and estimated interest rate cost.
- Leases can be used only in very limited cases and where there is an imputed interest rate, amount, and term of the lease which is stated on the face of the document.
- Consider variable debt in the county's overall debt management plan. The county recognizes that the Trustee has investments from month to month which earn interest. Roane County also understands that the Trustee's investment interest rates fluctuate over time and the interest rate earning and interest rate debt expense should move in concert; therefore, Roane County will calculate and project the available idle funds based on fund balances. Roane County will consider that variable debt for the same amount of the invested fund should not impact the percentage of variable verse fixed rate indebtedness.
- Consider having the variable rate debt equal to the Trustee's invested idle funds, at minimum.
- Consider having variable rate debt which would not exceed $30 \%$ of total indebtedness; however, Roane County will consider the current debt market and anticipated direction of future interest rates before selecting variable rate instruments.
- In the event of variable rate debt, Roane County shall set aside an amount above the variable rate to protect the county in the event of an upswing in interest rates. Roane County shall budget at least $3 \%$ above the variable rate on the initial issuance.
- In the case of refinancing, an analysis report shall be provided which fully explains the reasons for the refinancing and the net savings and costs of the refinancing which will include not only interest charges but also the fees associated with the transaction.
- Ensure that refinanced debt will not exceed the associated asset's useful life.
- Ensure that no debt is issued which engages in interest swap agreements or complex financing arrangements.
- Complete State Form CT- 0253 prior to a new issue reflecting a preliminary estimated cost of issuance.
- Ensure all legal requirements for notice and for public meetings related to debt issuance are followed.

Preparing a multi-year budget is considered the key element in gaining an understanding of how a proposed new debt issue impacts the annual budget. The multi-year budget will be the catalyst for decision making. Upon the development of the multi-year budget, a series of graphs will be presented allowing a better understanding of the county's ability to pay future obligations and review capacity or potential revenue shortage in future years.

## 6. Debt Tax and Capital Fund Tax-Balancing

It is the intent of Roane County to purchase assets out of Capital funds, when possible, without acquiring new debt. The process of managing the Debt Service Revenue and Capital Revenues together allows the tax rates to be more constant comparing the Debt Tax and Capital Tax. An example would be 2012 General Debt Tax of $\$ 0.14$ and Capital Tax of $\$ 0.03$ equaling a total tax of $\$ 0.17$. For 2013, if the Debt Tax could be reduced by $\$ 0.04$ (must still comply with the Debt Policy); the Capital Tax would be increased by $\$ 0.04$. The total taxes for Debt and Capital for 2012 to 2013 would remain the same at $\$ 0.17$.

By electing to balance the Debt and Capital Revenue with one another, the county is establishing a system in which we invest in purchasing Capital assets instead of borrowing for their purchase. We fully understand that the system will not always balance but we are committed to establish and work the plan and only take exceptions when fully discussed, disclosed, and approved by the County Legislative Body.

## Bench Marks

Net Debt Per Capita: Total Debt of a County divided by County's population. Bench Mark as established by Roane County is a goal to have no more than $\$ 800$ (debt per capita) but to insure we do not exceed \$1,400.

Net Debt to Assessed Property Value (Net Debt/Assessed Property Value). The overall net debt should not exceed $10 \%$ of assessed value.

Ratio of Debt Expenditures to Total governmental expenditures (excludes capital and agencies funds). Calculated as total budget expenditures of funds 151, 152, 156 divided by total budget expenditures of funds 101-156. Ratio should not exceed 5\%.

Debt as a Percentage of Personal Income (per capita income/net debt per capita). Ratio should not exceed $15 \%$.

## SECTION 2

## ROANE COUNTY FUND BALANCE POLICY

Adopted with Resolution\#04-11-32
Amended with Resolution \#07-12-07

Goal/Mission: To provide management with appropriate guidelines and direction to assist in making sound decisions related to managing the fund balance of the County General Fund, Highway Fund, General Purpose School Fund, General and Education Debt Service Funds, all Special Revenue Funds, Capital Outlay Funds, Enterprise Funds, and Agency Funds.

## Objectives:

1. Provide an educational briefing: defining the fund balance, the purpose of the fund balance and recommended fund balances needed in various county operational, debt service, special revenue, capital outlay, enterprise, and agencies' funds
2. Allow decisions to be transparent
3. Provide a medium in which fund balance management decisions can be made
4. Outline steps to be taken to reach an optimal fund balance, if an optimal fund balance does not exist
5. Summarize the Fund Balance Policy

## 1. Educational Briefing

a. Fund Balance defined for this policy: Fund Balance shall be defined as all equity balances of restricted, committed, assigned, and unassigned within a fund.
b. Purpose of Fund Balance:

- To maintain sufficient funds to cash flow operations during the year until revenue is received, such as property tax.
- To have emergency funds available due to revenue short falls or unanticipated expenditures/expenses.
- To have investment funds available in order to accumulate interest to provide operating interest earnings to support operations thus limiting the need for property tax revenue.
- To reflect financial stability and strength; thereby, portraying to the investment community the county's financial management strength and public investment security and low risk. Strong financial strength and stability should reflect a lower risk and thus lower interest rate for future debt issuance.
c. Fund balance needs for various funds shall be categorized as follows:
o 101-General Fund -
The General Fund is heavily supported by property tax and, since property tax is not due until eight months into the fiscal year, must have a relatively high fund balance related to the appropriations in order to support cash flow needs. The fund balance should be sufficient to meet cash flow needs and available funds should also assist in investment planning, and is calculated at $35-45 \%$ of the current year appropriation.


## O 131 - Highway Fund -

The Highway Fund is heavily supported by monthly revenue from the State of Tennessee gasoline and motor fuel tax. The fund balance should be sufficient to meet cash flow needs and is calculated at $7-15 \%$ of the current year appropriation.

## o 141 - General Purpose School Fund -

See Fund Balance Policy adopted by Roane County Board of Education.

## Debt Service Funds in General:

The County's number one priority is to insure that funds will be available for debt obligations. The county typically will have at least one (1) year of future payments as fund balance, thereby maintaining 100\% fund balance to appropriation. The county further recognizes that as the debt service obligations are paid off the fund balance would be scheduled to fall below $100 \%$ and conversely as additional debt is being anticipated the fund balance should grow above 100\%. Further, a healthy fund balance reflects management's commitment to fiscal responsibility and should provide the investment community assurance to purchase the county's debt and thereby a low risk and low interest rate. Further, fund balances can be used as investments, thereby, providing operational revenue for the county.

## O 151 - General Debt Service Fund -

The General Debt Service Fund is the primary fund used for the depository of monies to pay for county debt. The fund can be used for Education Debt Service and does include certain education debt repayment. The General Debt Service Fund shall have an optimal fund balance between 50-150\%, typically around 100\%.

## O $\quad 152$ - Rural Debt Service Fund -

The Rural Debt Service Fund is used to pay for educational indebtedness where the debt proceeds were used only for the Roane County Schools, excluding Harriman's and Oak Ridge's sharing of proceeds and repayment of debt. Taxpayers within the cities of Harriman and Oak Ridge do not pay for the debt retirement in the fund. Since the Harriman School System merged with the county system this fund will no longer be used for future debt. The expenditure for debt incurred prior to Harriman/Roane County Schools merger is the only debt within this fund. The fund balance should be sufficient to meet the needs of the fund and be structured to decline over the remaining years of indebtedness and approach zero by the end of the debt term.

## o 156 - Education Debt Service Fund -

The Education Debt Service Fund shall be used to pay current and future education debt issued by Roane County where the proceeds of new debt are not shared with the City of Oak Ridge, nor are the residents of Oak Ridge taxed for the repayment of the debt. This debt service fund should typically have $100 \%$ fund balance and could anticipate growing if new school capital projects are scheduled which would require debt funding. The fund balance shall be used for cash flow, investments, and portray to the investment community the county's financial management plans. The optimal fund balance is between 50-150\%, typically around $100 \%$.

## o Other Special Revenue Funds -

Other Special Revenue Funds should have sufficient fund balance to support cash flow needs. These funds' fund balances could be as low as $10 \%$ and exceed $100 \%$ due to the nature, use, and total appropriation of the fund. These fund balances shall be monitored and discussed annually with the Budget Committee as the respective funds are recommended to the County Commission.

## o Capital Projects Funds -

There are three capital project funds used by Roane County:

- The 171 General Capital Project Fund for various capital improvements of the General Fund and certain special revenue funds. (The 171 General Capital Project Fund further will have restrictions established by state law which can only be used as specified in state law.)
- The 176 Highway Capital Project Fund for highway projects.
- 177 Education Capital Project Fund for Roane County school projects.

The fund balance in each of the funds shall be sufficient for cash flow purposes. Further the funds shall be allowed to accumulate fund balances for planned and anticipated future capital investments.
o Enterprise Fund -
As of 2011 Roane County operates the 204 Wastewater Treatment Enterprise Fund. The fund balance shall be sufficient for cash flow purposes and shall set aside funds for future capital replacement or expansion needs. This fund is managed by the Roane County Board of Public Utilities. Debt that is issued and repayment of such debt is the responsibility of the Roane County Board of Public Utilities.

## O Agency Funds -

Agency Funds are funds in which the county performs accounting services but the decision of use of the money falls outside county appropriations control. Fund balances in these funds are only for cash flow needs and expenditures/expenses are prohibited if the cash is not available. Certain funds may have additional control of operation which regulates their respective balances.

## 2. Decisions shall be transparent

The County Budget Committee shall recommend an annual budget to the County Commission. The annual budget shall reflect the operational activity of the county and have an Operational Statement filed with the annual budget. The County Commission's deliberation on the annual budget shall consider the Operational Statement in the adoption of the annual budget. The Operational Statement shall become a part of the annual budget. The process for adoption of the annual budget shall be a public record and all meetings shall be public meetings.
3. Method in which the Fund Balance Decisions shall be made

The management of the fund balances shall be transparent to the Commission and the public by the annual publication of an Operational Statement for each of the county funds. The Operational Statement shall reflect: Estimated Beginning Fund Balance plus Estimated Revenue less Appropriation equals Estimated Ending Fund Balance.

The estimated beginning fund balance shall be estimated during the annual budget process and shall be continuously reviewed for each fund until the budget is adopted and/or the fiscal year end is closed. After the fiscal year end is closed, the operational statement shall be recalculated reflecting the ending fund balance closing (prior year), which is the beginning fund balance for the new budget. After the annual audit is complete, the operational statement is again updated with the audited fund balance (prior year).

During the adoption of the annual budget, calculation shall be made comparing the percentage of Estimated Ending Fund Balance (for the proposed new year) with the proposed appropriation. This calculation shall be compared to the policy for compliance. Any variance outside of this policy shall be noted and explained and outline the reasoning for the variance and any proposal to comply with the policy.

Attachment A notes an example of an Operational Statement and Fund Balance percentage.

## 4. Steps To Be Taken If Fund Balance is Not Optimal

The Budget Committee and County Commission's action on the fund balance, which may be higher or lower than the policy, shall be set out as follows:

0 If the fund balance is lower than the stated policy the budget should consider increasing revenue or reducing appropriations to adjust the fund balance into an acceptable range. In the event the fund balance is in the Debt Service Fund, the policy should consider whether the Debt Service Fund anticipates future increases or decreases in annual appropriations before adjustments to revenues are made. Explanations should state why the fund balance should be increased or decreased.
o If the fund balance in the General Fund, Highway Fund, or General Purpose School Fund is greater than the stated optimal fund balance policy then the monies greater than the optimal fund balance should be used for capital expenses and possibly transferred to the respective capital project fund for capital improvements.

## 5. Summary of Fund Balance

o 101 General Fund between 35 - 45\% of proposed appropriation
o 131 Highway Fund between $7-15 \%$ of proposed appropriation
o 151 General Debt Service Fund between 50-150\% of proposed appropriation
o 152 Rural Debt Service Fund is declining to zero at the year of last payment because debt will no longer be issued and paid out of this fund 0-100\%
o 156 Education Debt Fund Balance between $50-150 \%$ of proposed appropriation
0 All Other Special Revenue Funds - specifically noted during budget deliberation 10100\%
o Capital Project Funds - cash flow and proposed future scheduled projects - reviewed and discussed annually
o Enterprise Fund - cash flow and capital projects - reviewed and discussed annually
o Agency Funds - cash flow, and at request of agency

## SECTION 3

## SCHEDULE OF CHANGES IN LONG-TERM NOTES, OTHR LOANS, CAPITAL LEASES, AND BONDS PAYABLE

Audit FY16

Roane County, Tennessee
Schedule of Changes in Long-term Notes, Other Loans, and Bonds
For the Year Ended June 30, 2016
Description of Indebtedness

|  | For FY 16 |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | Paid and/or |  |  |  |  |
| Original |  | Issued | Matured |  |  |  |
| Amount | Outstanding | During | During | Debt | Outstanding |  |

## other loans payable

Payable through General Debt Service Fund Industrial Park Refunding - Sevier Co. PBA - B-3-A Industrial Park Land-Sevier Co. PBA - B-3-A Public Improvement - Blount Co. PBA - B-13-A Public Improvement - Blount Co. PBA - B-20-A Total Other Loans Payable

## BONDS PAYABLE

Payable through General Debt Service Fund General Obligation Refunding Bonds, Series 2008A General Obligation Refunding Bonds, Series 2008B General Obligation Refunding Bonds, Series 2009A General Obligation Bonds, Series 2009A
General Obligation Refunding Bonds, Series 2010A
General Obligation Bonds, Series 2010A
Total Bonds Payable
TOTAL PAYABLE THROUGH GENERAL DEBT SERVIC

Payable through Rural Debt Service Fund
Rural School Refunding, Series 2010B
Rural School Refunding, Series 2014
total payable through rural debt service
Payable through Education Debt Service Fund
Rural School Refunding, Series $2008 C$
Rural School Bonds Series 2009B
total payable through education debt service
TOTAL PAYABLE THROUGH ALL DEBT FUNDS $(151,152,156)$

| $3,640,000$ | 387,736 | 0 | 387,736 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 835,000 | 87,264 | 0 | 87,264 | 0 | 0 |
| $1,750,000$ | $1,750,000$ | 0 | 150,000 | 0 | $1,600,000$ |
| 750,000 | $\underline{750,000}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{\underline{0} 0,000}$ |
|  | $\underline{\underline{\mathbf{2}, 975,000}}$ | $\underline{\underline{0}}$ | $\underline{\underline{\mathbf{6 2 5}, 000}}$ | $\underline{\underline{\mathbf{0}}}$ | $\underline{\underline{\mathbf{2 , 3 5 0 , 0 0 0}}}$ |

7,410,000 5,628,497 2,696,503 3,810,000 3,185,000

9,975,000


3,194,54
$1,530,45$
$1,461,99$
1,461,997
$1,083,00$
26,930,000
0
0
0
385,000

0
374,000
176,000
163,402
163,402
$\begin{array}{r}136,598 \\ \hline 235,000 \\ \hline\end{array}$
1,860,000
9,975,000
6,325,000
2,820,549
2,820,549
1,354,451
$1,354,451$
$1,298,595$
1,298,595
$\begin{array}{r}946,405 \\ 22,720,000 \\ \hline\end{array}$
$\underline{\underline{25,070,000}}$
750,000
$\underline{\underline{2,350,000}}$

| 400,000 | 0 | 100,000 | 0 | 300,000 |
| :---: | :---: | :---: | :---: | :---: |
| 10,280,000 | $\underline{\underline{0}}$ | 1,205,000 | $\underline{0}$ | 9,075,000 |
| $\underline{\underline{10,680,000}}$ | $\underline{\underline{0}}$ | $\underline{\underline{1.305,000}}$ | $\underline{\underline{0}}$ | $\underline{\underline{9,375,000}}$ |
| 665,000 | 0 | 120,000 | 0 | 545,000 |
| 675,000 | $\underline{0}$ | 125,000 | $\underline{0}$ | 550,000 |
| $\underline{\underline{1,340,000}}$ | $\underline{\underline{0}}$ | $\underline{\underline{245,000}}$ | $\underline{\underline{0}}$ | $\underline{\underline{1,095,000}}$ |
| 38,950,000 | $\underline{\underline{0}}$ | 3,410,000 | $\underline{\underline{0}}$ | 35,540,000 |

Roane County, Tennessee
Schedule of Changes in Long-term Notes, Other Loans, and Bonds
For the Year Ended June 30, 2016

|  |  |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: |
|  |  | Paid and/or |  |  |  |
|  | Original | Issued | Matured |  |  |
| Description of Indebtedness | Amount | Outstanding | During | During | Debt |

## Operational Debt

## Other Loans Payable

| Energy Efficient Loan, Schools 2011 (Pd out of 141) | 558,217 | 393,135 | 0 |  | 59,724 | 0 | 333,411 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Energy Efficient Loan, Schools 2011 (Pd out of 141) | 385,910 | 299,078 | $\bigcirc$ |  | 38,592 | 0 | 260,486 |
| Total Other Loans Payable (Pd out of 141) |  | 692,213 | $\underline{\underline{0}}$ |  | $\underline{\underline{98,316}}$ | $\underline{\underline{0}}$ | $\underline{\underline{593,897}}$ |
|  |  |  |  |  | $\underline{\underline{189,252}}$ |  |  |
| State Revolving Loan Fund, 2011 (Pd out of 204) | 4,468,000 | 3,697,576 | 396,611 | 1 | 93,516 | $\underline{0}$ | 4,000,671 |
| Total Other Loans Payable (Pd out of 204) |  | 3,697,576 | 396,611 |  | $\underline{\underline{93,516}}$ | $\underline{\underline{0}}$ | 4,000,671 |
| Bonds Payable |  |  |  |  |  |  |  |
| General Obligation Bonds, Series 2010A | 305,000 | 170,000 | 0 |  | 30,000 | 0 | 140,000 |
| Water and Sewer Revenue and Tax, Series 2000 | 620,000 | 514,260 | $\bigcirc$ |  | 11,149 | 0 | 503,111 |
| Total Bonds Payable (Pd out of 204) |  | 684,260 | $\underline{0}$ |  | 41,149 | $\underline{0}$ | 643,111 |
| total operational debt |  | 5,074,049 | 396,611 |  | $\underline{\underline{232,981}}$ | $\underline{\underline{0}}$ | 5,237,679 |
| TOTAL DEBT |  | 44,024,049 | 396,611 |  | 3,642,981 | $\underline{\underline{0}}$ | 40,777,679 |

${ }^{1}$ Total amount approved was $\$ 4,468,000$ of which 373,813 remains available to borrow as of June 30,2016 . Final maturity date will be determined after all funds have been drawn. Based on amounts borrowed to date, the loan would be retired in 2035.

## SECTION 4

# UPDATED <br> SCHEDULE OF CHANGES <br> IN LONG-TERM NOTES, OTHER LOANS, CAPITAL LEASES, AND BONDS PAYABLE 

Year-End Closing-FY17

Roane County, Tennessee
Schedule of Changes in Long-term Notes, Other Loans, Capital Leases, and Bonds
For the Year Ended June 30, 2017

|  | Paid and/or |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Original |  | Issued | Matured |  |  |
|  | Amount | Outstanding | During | During | Debt | Outstanding |
| Description of Indebtedness | of Issue | 7/1/2016 | Period | Period | Refunded | 6/30/2017 |

## OTHER LOANS PAYABLE

Payable through General Debt Service Fund
Industrial Park Refunding - Sevier Co. PBA - B-3-A
Industrial Park Land - Sevier Co. PBA - B-3-A
Public Improvement - Blount Co. PBA - B-13-A
Public Improvement - Blount Co. PBA - B-20-A
Total Other Loans Payable

## BONDS PAYABLE

Payable through General Debt Service Fund
General Obligation Refunding Bonds, Series 2008A
General Obligation Refunding Bonds, Series 2017A General Obligation Refunding Bonds, Series 2017B General Obligation Refunding Bonds, Series 2008B General Obligation Refunding Bonds, Series 2009A General Obligation Bonds, Series 2009A
General Obligation Refunding Bonds, Series 2010A
General Obligation Bonds, Series 2010A
Total Bonds Payable

## TOTAL PAYABLE THROUGH GENERAL DEBT SERVICE

Payable through Rural Debt Service Fund
Rural School Refunding, Series 2010B
Rural School Refunding, Series 2014

## TOTAL PAYABLE THROUGH RURAL DEBT SERVICE

Payable through Education Debt Service Fund
Rural School Refunding, Series 2008C
Rural School Bonds Series 2009B
Rural School Bonds Series 2009B
TOTAL PAYABLE THROUGH EDUCATION DEBT SERVICE
TOTAL PAYABLE THROUGH ALL DEBT FUNDS $(156,152,156)$

| 3,640,000 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 835,000 | 0 | 0 | 0 | 0 | 0 |
| 1,750,000 | 1,600,000 | 0 | 150,000 | 1,450,000 | 0 |
| 750,000 | 750,000 | O | $\underline{0}$ | $\underline{0}$ | 750,000 |
|  | $\underline{\underline{2,350,000}}$ | $\underline{\underline{0}}$ | $\underline{150,000}$ | $\underline{\underline{1,450,000}}$ | $\underline{\underline{750,000}}$ |
| 9,975,000 | 9,975,000 | 9,770,000 | 35,000 | 9,400,000 | 540,000 |
| 9,770,000 | 0 |  | 0 | 0 | 9,770,000 |
| 1,470,000 | 0 | 1,470,000 | 0 | 0 | 1,470,000 |
| 7,410,000 | 6,325,000 | 0 | 750,000 | 0 | 5,575,000 |
| 5,628,497 | 2,820,549 | 0 | 476,000 | 0 | 2,344,549 |
| 2,696,503 | 1,354,451 | 0 | 224,000 | 0 | 1,130,451 |
| 3,810,000 | 1,298,595 | 0 | 194,300 | 0 | 1,104,295 |
| 3,185,000 | 946,405 | $\underline{0}$ | 140,700 | $\underline{0}$ | 805,705 |
|  | 22,720,000 | 11,240,000.00 | $\underline{\underline{1,820,000}}$ | $\underline{\underline{9,400,000}}$ | $\underline{\underline{22,740,000}}$ |
|  | $\underline{\underline{25,070,000}}$ | 11,240,000.00 | $\underline{1,970,000}$ | $\underline{\underline{10,850,000}}$ | $\underline{\underline{23,490,000}}$ |
| 1,180,000 | 300,000 | 0 | 100,000 | 0 | 200,000 |
| 11,435,000 | 9,075,000 | $\underline{0}$ | 1,275,000 | 0 | 7,800,000 |
|  | $\underline{\underline{9,375,000}}$ | $\underline{\underline{0}}$ | $\underline{\underline{1,375,000}}$ | $\underline{\underline{0}}$ | 8,000,000 |
| 1,600,000 | 545,000 | 0 | 120,000 | 0 | 425,000 |
| 1,325,000 | 550,000 | $\underline{0}$ | 130,000 | 0 | 420,000 |
|  | $\underline{\underline{1,095,000}}$ | $\underline{\underline{0}}$ | $\underline{\underline{250,000}}$ | $\underline{\underline{0}}$ | $\underline{\underline{845,000}}$ |
|  | $\underline{\underline{35,540,000}}$ | 11,240,000.00 | $\underline{\underline{3,595,000}}$ | $\underline{\underline{10,850,000}}$ | $\underline{\underline{32,335,000}}$ |

Roane County, Tennessee
Schedule of Changes in Long-term Notes, Other Loans, Capital Leases, and Bonds
For the Year Ended June 30, 2017

| Paid and/or |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Description of Indebtedness | Original |  | Issued | Matured |  |  |
|  | Amount | Outstanding | During | During | Debt Refunded | Outstanding |
|  | of Issue | 7/1/2016 | Period | Period | Refunded | 6/30/2017 |

Operational Debt

## Other Loans Payable

Energy Efficient Loan, Schools 2011 Pd out of 141
Energy Efficient Loan, Schools 2011 Pd out of 141
Total Other Loans Payable (Pd out of 141)

## State Revolving Loan Fund, 2011

Total Other Loans Payable (Pd out of 204)

## Bonds Payable

General Obligation Bonds, Series 2010A
Water and Sewer Revenue and Tax, Series 2000
Total Bonds Payable (Pd out of 204)

## TOTAL OPERATIONAL DEBT

TOTAL DEBT

| 558,217 | 333,411 | 0 | 59,724 | 0 | 273,687 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 385,910 | 260,486 | 0 | 38,592 | 0 | 221,894 |
|  | $\underline{\underline{593,897}}$ | $\underline{\underline{0}}$ | $\underline{\underline{98,316}}$ | $\underline{\underline{0}}$ | 495,581 |
| 4,468,000 | 4,000,671 | 366,760 | 188,696 | $\underline{0}$ | 4,178,735 |
|  | $\underline{4,000,671}$ | 366,760 | $\underline{\underline{188,696}}$ | $\underline{0}$ | $\underline{4,178,735}$ |
| 305,000 | 140,000 | 0 | 35,000 | $\underline{0}$ | 105,000 |
| 620,000 | 503,111 | $\underline{0}$ | 11,690 | 0 | 491,421 |
|  | $\underline{643,111}$ | $\underline{\underline{0}}$ | $\underline{\underline{46,690}}$ | $\underline{\underline{0}}$ | $\underline{\underline{596,421}}$ |
|  | 5,237,679 | 366,760 | $\underline{\underline{333,702}}$ | $\underline{\underline{0}}$ | 5,270,737 |
|  | 40,777,679 | 11,606,760 | 3,928,702 | $\underline{\underline{10,850,000}}$ | $\underline{\underline{37,605,737}}$ |

## SECTION 5

INPUT/OUTPUT
DATA

## Input/Output

On the following page, you will find an input/output spreadsheet which shall be used in:

- Creating the multi-year debt service budget
- Estimating the value of one penny for property tax assessment data for each fund
- Calculating a percentage growth of the value of one penny for future years in the multi-year debt budgets
- Reflecting all outstanding principal indebtedness per fund obtained from the updated Schedule of Changes in Longterm Notes, Other Loans, Capital Leases, and Bonds
- Providing benchmark ratio calculation

Helpful

| Penny Value |  |  | Total |  | 151 |  | 152 |  | 156 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Penny Value to start (Input) | 7/1/2017 |  |  |  | 119,000 |  | 94,000 |  | 104,500 |  |  |
| Growth of the Penny (Input) |  |  |  |  | 3\% |  | 3\% |  | 3\% |  |  |
| Penny Value to end (Calculated) | 7/1/2018 |  |  |  | 122,570 |  | 96,820 |  | 107,635 |  |  |
|  |  |  |  |  |  |  |  |  |  |  | out of |
| Debt Amount |  |  |  |  |  |  |  |  |  |  | d 204 |
| Total Debt Outstanding (Output) | 7/1/2017 | \$ | 37,605,737 | \$ | 23,490,000 | \$ | 8,000,000 | \$ | 845,000 | \$ | 5,270,737 |
| Fund Balance end of year (Output) | 7/1/2017 | \$ | 3,231,809 | \$ | 1,859,389 | \$ | 952,208 | \$ | 420,212 |  | 0 |
| Net Debt (Calculated) | 7/1/2017 | \$ | 34,373,927 | \$ | 21,630,611 | \$ | 7,047,792 | \$ | 424,788 | \$ | 5,270,737 |
| Data for Benchmarking |  |  |  |  |  |  |  |  |  |  |  |
| Assessed Value of Property (Input) | 7/7/2017 |  | 1,255,935,745 |  |  |  |  |  |  |  |  |
| Per Capita Income (Input) | 2010 |  | 33,616 |  |  |  |  |  |  |  |  |
| Population (Input) | 2010 |  | 54,181 |  |  |  |  |  |  |  |  |
| Total Govt expenditure budget (101-156) (Input) |  |  | 100,434,775 |  | (Output) |  | (Output) |  | (Output) |  |  |
| Debt expenditure budget (151-156) (Calculated) |  |  | 5,446,826 |  | 3,419,876 |  | 1,705,180 |  | 321,770 |  |  |
| Potential New Debt *EXAMPLE* |  |  |  |  |  |  |  |  |  |  |  |
| New Debt Amount (Input) |  |  | 1,000,000 |  |  |  |  |  |  |  |  |
| Term of New Debt (Input) |  |  | 20 |  |  |  |  |  |  |  |  |
| Interest Rate for New Debt (Input) |  |  | 3\% |  |  |  |  |  |  |  |  |
|  |  |  | bet Payment |  | ounty Wide |  |  |  | hool Debt |  |  |
| Calculated Annual Amount (Output) \# of Pennies to pay New Debt (Calculated) |  |  | 67,216 |  | 0.56 |  |  |  | 0.64 |  |  |

## Benchmark Calculations

| National Benchmark |  | $\$$ | 1,200 | $<15 \%$ | $<5 \%$ | 800 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Goal | $\$$ | 800 | $\$$ | 800 | $<10 \%$ | $2.06 \%$ |

# SECTION 6 <br> BENCHMARK COMPARISONS 

Net Debt Per Capita
Total Debt Per Capita
Net Debt as a \% of Assessed Property Value
Debt as a \% of Personal Income
Total Debt Tax Rate as a \% of Total Tax Rate Total Debt Expenditures as a \% of Total

Operational Expenditures

## Net Debt/Per Capita

| Calculation Method |
| :---: |
| Net Debt |
| Population |$\div$| $\$$ |
| :--- |
|  |


| Roane County Goal (less than) | $\$$ | 800 |
| :--- | :--- | :--- |
| Roane County Current | $\$$ | 634 |



Net Debt divided by the County's population gives us the dollar value of the outstanding debt in relation to each citizen of the County. Net Debt shows the outstanding principal owed minus the amount of money that is currently in fund balance, as that is money that we do not need to collect additionally, since we already have it.

Roane County's Goal is to have Net Debt over Per Capita of less than $\$ 800$. This would equate to approximately $\$ 43.3 \mathrm{M}$ in debt. This is a manageable figure based on our goal.
Currently we have approximately \$37.2M.

Simply, if every citizen of Roane County handed over to the County an additional \$634 it would pay off all of the outstanding debt principal. This calculation does not take into account any interest payments.

## Total Debt/Per Capita

| Calculation Method |  |  |  |
| :--- | :--- | :--- | :--- | ---: |
|  | Total Debt | $\$$ | $37,605,737$ |
|  | Population $\div$ | 54,181 |  |
|  |  | $\$$ | 694 |


| Benchmark | $\$$ | 1,200 |
| :--- | :--- | ---: |
| Roane County Goal (less than) | $\$$ | 800 |
| Roane County Current | $\$$ | 694 |



Total Debt Per Capita shows how much outstanding principal in debt the County owes in relation to the total population of the County. Total Debt is all outstanding principal payments divided by the current County population. It is the goal of Roane County to have less than $\$ 800$ principal indebtedness per citizen. The national benchmark is $\$ 1,200$ in principal indebtedness per citizen. The County believes that such a high figure will lead to additional debt problems in the future, and it is not a sustainable level of debt for Roane County. Our current level is $\$ 694$ of principal indebtedness per citizen. This number is below our goal and the nationl benchmark.

Roane County has an acceptable total debt per capita figure but it is the goal of the County to lower this figure with more stringent debt management.

| Calculation Method |  |  |
| :---: | ---: | ---: |
| Net Debt Amount | $\$$ | $34,373,927$ |
| Assessed Property Value $\div \$$ | $1,255,935,745$ |  |


| Benchmark (less than) | $10 \%$ |
| :--- | ---: |
| Roane County Current | $2.74 \%$ |



Net Debt divided by the Assessed Property Value gives a measurement of how much debt exists in relation to the ultimate tax base that must support that debt. The larger the percentage, the higher the tax rate associated with debt must be. It is the intent of Roane County to be well below the benchmark of $10 \%$. The benchmark is to have our net debt principal be less than $10 \%$ of the assessed property value for the entire county.

Currently, Roane County's debt is at $2.67 \%$. Roane County has not developed a goal for this percentage as of this time, but that will be forthcoming.

Debt As \% of Personal Income

| Calculation Method |  |  |
| ---: | :---: | ---: |
| Total Debt of County | $\div \$$ | $37,605,737$ |
| Population | $\div$ | 54,181 |
| per capita income | $\div \mathbf{\$}$ | 33,616 |
|  |  | $2.06 \%$ |


|  | Debt As \% of Personal Income |
| :--- | :---: |
| Benchmark (less than) | $15 \%$ |
| Roane County Current | $2.06 \%$ |



Debt as \% of personal income is used as an estimate to see how the county's debt load can be spread out among the residents in relation to some known benchmark. This figure is the average salary of a Roane County citizen divided by the debt load of the county per citizen. Currently, the percentage is $2.06 \%$. Roane County has not developed a goal for this percentage as we are well below the benchmark of $15 \%$.

## OTHER RATIOS

## Total Debt Tax Rate as a \% of Total Tax Rate

The 2018 Budget reflected the following:


The County has not adopted a position of what would be an acceptable or unacceptable level of debt tax levied compared to the total tax levied.

## Total Debt Expenditures as a \% of Total Operational Expenditures

The proposed 2018 Budget reflected the following:

|  | 2015 | 2016 | 2017 | 2018 |
| :---: | :---: | :---: | :---: | :---: |
| Total Debt Expenditures: | 5,198,425 | 5,087,696 | 5,123,604 | 5,446,826 |
| Total Operational Expenditures: | 95,765,779 | 94,693,005 | 96,739,523 | 100,434,775 |
| \% of Operational Costs Related to Debt: | 5.43\% | 5.37\% | 5.30\% | 5.42\% |

## Ratio of Total Debt Exp/Total Govt Exp

| Calculation Method |  |  |
| :--- | ---: | ---: |
| Total Debt Expenditures | $\div$ | $5,446,826$ |
| Total Operational Expenditures | $\div$ | $100,434,775$ |
|  |  | $5.42 \%$ |
|  |  |  |
| Goal (less than) | $5.00 \%$ |  |
| Roane County Current | $5.42 \%$ |  |



## SECTION 7

## LOAN AMORTIZATION SCHEDULE

This section is used only when new debt is being considered. The following table would reflect a straight-line amortization based on the principle amount, loan period, interest rate, and specific debt fund used to repay the debt. The cost in pennies would be calculated.
Following is an example of borrowing \$1,000,000 for 20 years at 3\% interest paid out of the General Debt Service Fund 151 and the Education Debt service Fund 156 and the corresponding cost in property tax pennies.

ENTER VALUES

| Loan amount | $\$ 1,000,000.00$ |
| :--- | ---: |
| Annual interest rate | $3.00 \%$ |
| Loan period in years | 20 |
| Number of payments per year | 1 |
| Start date of loan | $7 / 1 / 2017$ |

Optional extra payments
\$

## LOAN SUMMARY

| Scheduled payment | $\$ 67,215.71$ |
| :--- | ---: |
| Scheduled number of payments | 20 |
| Actual number of payments | 20 |
| Total early payments | $\$ 0.00$ |
| Total interest | $\$ 344,314.15$ |

LENDER NAME
Bank

| PMT | PAYMENT | BEGINNING | SCHEDULED | EXTRA | TOTAL |  |  | ENDING | CUMULATIVE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NO | DATE | BALANCE | PAYMENT | PAYMENT | PAYMENT | PRINCIPAL | INTEREST | BALANCE | INTEREST |
| 1 | 7/1/2017 | \$1,000,000.00 | \$67,215.71 | \$0.00 | \$67,215.71 | \$37,215.71 | \$30,000.00 | \$962,784.29 | \$30,000.00 |
| 2 | 7/1/2018 | \$962,784.29 | \$67,215.71 | \$0.00 | \$67,215.71 | \$38,332.18 | \$28,883.53 | \$924,452.11 | \$58,883.53 |
| 3 | 7/1/2019 | \$924,452.11 | \$67,215.71 | \$0.00 | \$67,215.71 | \$39,482.14 | \$27,733.56 | \$884,969.97 | \$86,617.09 |
| 4 | 7/1/2020 | \$884,969.97 | \$67,215.71 | \$0.00 | \$67,215.71 | \$40,666.61 | \$26,549.10 | \$844,303.36 | \$113,166.19 |
| 5 | 7/1/2021 | \$844,303.36 | \$67,215.71 | \$0.00 | \$67,215.71 | \$41,886.61 | \$25,329.10 | \$802,416.75 | \$138,495.29 |
| 6 | 7/1/2022 | \$802,416.75 | \$67,215.71 | \$0.00 | \$67,215.71 | \$43,143.20 | \$24,072.50 | \$759,273.55 | \$162,567.79 |
| 7 | 7/1/2023 | \$759,273.55 | \$67,215.71 | \$0.00 | \$67,215.71 | \$44,437.50 | \$22,778.21 | \$714,836.05 | \$185,346.00 |
| 8 | 7/1/2024 | \$714,836.05 | \$67,215.71 | \$0.00 | \$67,215.71 | \$45,770.63 | \$21,445.08 | \$669,065.42 | \$206,791.08 |
| 9 | 7/1/2025 | \$669,065.42 | \$67,215.71 | \$0.00 | \$67,215.71 | \$47,143.74 | \$20,071.96 | \$621,921.68 | \$226,863.05 |
| 10 | 7/1/2026 | \$621,921.68 | \$67,215.71 | \$0.00 | \$67,215.71 | \$48,558.06 | \$18,657.65 | \$573,363.62 | \$245,520.70 |
| 11 | 7/1/2027 | \$573,363.62 | \$67,215.71 | \$0.00 | \$67,215.71 | \$50,014.80 | \$17,200.91 | \$523,348.82 | \$262,721.60 |
| 12 | 7/1/2028 | \$523,348.82 | \$67,215.71 | \$0.00 | \$67,215.71 | \$51,515.24 | \$15,700.46 | \$471,833.58 | \$278,422.07 |
| 13 | 7/1/2029 | \$471,833.58 | \$67,215.71 | \$0.00 | \$67,215.71 | \$53,060.70 | \$14,155.01 | \$418,772.88 | \$292,577.08 |
| 14 | 7/1/2030 | \$418,772.88 | \$67,215.71 | \$0.00 | \$67,215.71 | \$54,652.52 | \$12,563.19 | \$364,120.36 | \$305,140.26 |
| 15 | 7/1/2031 | \$364,120.36 | \$67,215.71 | \$0.00 | \$67,215.71 | \$56,292.10 | \$10,923.61 | \$307,828.26 | \$316,063.87 |
| 16 | 7/1/2032 | \$307,828.26 | \$67,215.71 | \$0.00 | \$67,215.71 | \$57,980.86 | \$9,234.85 | \$249,847.40 | \$325,298.72 |
| 17 | 7/1/2033 | \$249,847.40 | \$67,215.71 | \$0.00 | \$67,215.71 | \$59,720.29 | \$7,495.42 | \$190,127.11 | \$332,794.14 |
| 18 | 7/1/2034 | \$190,127.11 | \$67,215.71 | \$0.00 | \$67,215.71 | \$61,511.89 | \$5,703.81 | \$128,615.22 | \$338,497.96 |
| 19 | 7/1/2035 | \$128,615.22 | \$67,215.71 | \$0.00 | \$67,215.71 | \$63,357.25 | \$3,858.46 | \$65,257.97 | \$342,356.41 |
| 20 | 7/1/2036 | \$65,257.97 | \$67,215.71 | \$0.00 | \$65,257.97 | \$63,300.23 | \$1,957.74 | \$0.00 | \$344,314.15 |

## 151 Countywide Debt Penny

| Loan amount | $\$ 1,000,000$ |
| :--- | :---: |
| Annual interest rate | $3.00 \%$ |
| Loan period in years | 20 |
|  |  |
| Annual payment | $\$ 67,215.00$ |
|  | $\$ 119,000$ |
|  | 0.56 |

156 Education Debt Penny

| Loan amount | $\$ 1,000,000$ |
| :---: | :---: |
| Annual interest rate | $3.00 \%$ |
| Loan period in years | 20 |
|  |  |
| Annual payment | $\$ 67,215.00$ |
| Current value of penny | $\div$ |
|  | $\$ 104,500$ |

## Pennies Needed to Pay \$1M Debt



## SECTION 8

## GENERAL DEBT SERVICE FUND 151

The purpose of this fund is to pay the general debt obligation of Roane County which can also include school debt.
The following table reflects a multi-year debt budget which includes all current debt payments that are to be paid from the
General Debt Service Fund 151. Revenues are estimated and calculated based on anticipated growth in the value of the penny as noted on the input tab along with adjustments in the number of property tax pennies needed to support the budget and comply with the county's fund balance policy.
Upon preparation of the multi-year debt budget, a series of graphs are created reflecting the annual:

- Total Revenues, Expenditures, Fund Balance, and the effect on Fund Balance
- Number of pennies needed to support the multi-year debt service

*The Series 2008A and Series B-13-A Bond issuances were refinanced and are now refered to Series 2017A and Series 2017B respecitively Expenditures


Note: * The expenditures reflect various outstanding debt,
upon factoring out some of the refinancing debt, the ratio would be $61.3 \%$

|  |  | 7/1/2026 | 7/1/2027 | 7/1/2028 | 7/1/2029 | 7/1/2030 | 7/1/2031 | 7/1/2032 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fund 151 General Debt Service |  | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | total |
|  |  | Budget | Budget | Budget | Budget | Budget | Budget | Budget | PRINCIPAL |
| Beginning of Year |  |  |  |  |  |  |  |  |  |
| Restricted Fund Balance Est. |  | 1,956,718 | 1,833,984 | 2,354,512 | 2,928,548 | 4,616,033 | 4,616,033 | 4,616,033 |  |
| Property Tax |  | 155,268 | 159,926 | 164,724 | 145,000 |  |  |  |  |
| Tax Rate |  | 5.00 | 5.00 | 5.00 | 5.00 |  |  |  |  |
| Revenue |  |  |  |  |  |  |  |  |  |
| ========================== |  |  |  |  |  |  |  |  |  |
|  |  | 776,340 | 799,630 | 823,619 | 725,000 | - | - | - |  |
| 40120 | Trustee PY Collection | 45,000 | 45,000 | 45,000 | 45,000 | - | - | - |  |
| 40130 | Delinqent Tax | 45,000 | 45,000 | 45,000 | 45,000 | - | - | - |  |
| 40140 | Interest \& Penalty | 5,000 | 5,000 | 5,000 | 5,000 | - | - | - |  |
| 40150 | Pick-Up Taxes | 500 | 500 | 500 | 500 | - | - | - |  |
| 40163 | Payments-In-Lieu-of Taxes | 950,000 | 950,000 | 950,000 | 950,000 | - | - | - |  |
| 44110 | Investment Income | 20,000 | 20,000 | 20,000 | 20,000 | - | - | - |  |
| 44540 | Sale of Property | - | - | - | - | - | - | - |  |
| 48130 | Contributions - Schools | - | - | - | - |  |  |  |  |
| 49400 | Refunding Debt * | - | - | - | - |  |  |  |  |
| 49410 | Premiums on Debt | - | - | - | - |  |  |  |  |
| 49800---EQUIP | Transfers in | - | - | - | - | - | - | - |  |
| 49800---HWY10 | Transfers in | - | - | - | - | - | - | - |  |
| 49800---RDD02 | Transfers In | - | $-$ | - | - | - | - | - |  |
| Total Revenues |  | 1,841,840 | 1,865,130 | 1,889,119 | 1,790,500 | - | - | - |  |
| Note: |  |  |  |  |  |  |  |  |  |
| * The Series 2008A and Series B-13-A Bond issuances wExpenditures |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Expenditures |  |  |  |  |  |  |  |  |  |
| 82110-601--2008A | Principal on Bonds * | - | - | - | - | - | - | - | 575,000 |
| 82110-601--2017A | Principal on Bonds * | 1,500,000 | 1,200,000 | 1,200,000 | - | - | - | - | 9,770,000 |
| 82110-601--2008B | Principal on Bonds | - | - | - | - | - | - | - | 7,110,000 |
| 82110-601--2009A | Principal on Bonds | - | - | - | - | - | - | - | 6,325,000 |
| 82110-601--2010A | Principal on Bonds | - | - | - | - | - | - | - | 5,890,000 |
| 82120-601-HWY10 | Principal on Bonds | - | - | - | - | - | - | - | 1,130,000 |
| 82110-601--B-20-A | Principal on Bonds | 275,000 | - | - | - | - | - | - | 750,000 |
| 82110-612--TRI | Principal on Bonds * | - | - | - | - | - | - | - | 1,750,000 |
| 82110-612--TRI (2017B) | Principal on Bonds * | - | - | - | - |  |  |  | 1,470,000 |
| 82110-612--B3A04 | Principal on Bonds | - | - | - | - | - | - | - | 1,300,000 |
| Total Principal |  | 1,775,000 | 1,200,000 | 1,200,000 | - | - | - | - | 36,070,000 |
| 82130-612 | Interest on Other Loans |  |  |  |  |  |  |  |  |
|  | Education - Contribution |  |  |  |  |  |  |  |  |
| 82210-603--2008A | Interest on Bonds * | - | - | - | - |  |  |  | 306,458 |
| 82210-603--2017A | Interest on Bonds * | 93,750 | 60,000 | 30,000 | - |  |  |  | 1,857,305 |
| 82210-603--2008B | Interest on Bonds | - | - | - | - | - | - | - | 2,340,525 |
| 82210-603--2009A | Interest on Bonds | - | - | - | - | - | - | - | 1,949,700 |
| 82210-603-2010A | Interest on Bonds | - | - | - | - | - | - | - | 967,256 |
| 82210-613--B3A04 | Interest on Bonds | - | - | - | - | - | - | - | 261,600 |
| 82210-613--TRI | Interest on Bonds * | - | - | - | - | - | - | - | 611,700 |
| 82210-613--TRI 2017B | Interest on Bonds * | - | - | - | - |  |  |  | 134,027 |
| 82210-613--TRI B-20-A | Interest on Bonds | 11,688 | - | - | - | - | - | - | 532,000 |
| 82220-603-HWY10 | Interest on Bonds | - | - | - | - | - | - | - | 215,488 |
| Total Interest |  | 105,438 | 60,000 | 30,000 | - | - | - | - | 9,176,058 |
| 82310-312 | Cntr w/Priv. Agencies | 6,000 | 6,000 | 6,000 | 25,905 | - | - | - |  |
| 82310-510 | Trustee's Commission | 27,137 | 27,603 | 28,082 | 26,110 | - | - | - |  |
| 82310-605 | Underwriter's Discount * | - | - | - | - |  |  |  |  |
| 82310-606 | Issuance Cost * | - | - | - | - |  |  |  |  |
| 82310-699--PEAST | Other Debt Service | 25,500 | 25,500 | 25,500 | 25,500 | - | - | - |  |
| 99300-699 | Other Debt Service | 25,500 | 25,500 | 25,500 | 25,500 | - | - | - |  |
| Total Other |  | 84,137 | 84,603 | 85,082 | 103,015 | - | - | - |  |
| Total Expenditures |  | 1,964,574 | 1,344,603 | 1,315,082 | 103,015 | - | - | . |  |
| Effect on Fund Balance |  |  | 520,528 |  |  |  |  |  |  |
|  |  | 6/30/2027 | 6/30/2028 | 6/30/2029 | 6/30/2030 | 6/30/2031 | 6/30/2032 | 6/30/2033 |  |
| Total Ending Restricted Fund Balance |  | 1,833,984 | 2,354,512 | 2,928,548 | 4,616,033 | 4,616,033 | 4,616,033 | 4,616,033 |  |
| fund balance/expenditure |  | 93.4\% | 175\% | 223\% | 4481\% |  |  |  |  |
|  | Note: * The expenditures r upon factoring out so |  |  |  |  |  |  |  |  |



## SECTION 9

## RURAL SERVICE DEBT FUND 152

This fund was established to pay only school debt issued outside the cities of Harriman and Oak Ridge. Since the Harriman City School System has been merged with Roane County School System, only debt prior to the school merger exists in this fund. No further debt will be issued by Roane County and paid out of this fund.

As with the General Debt Service Fund 151, a table is created that reflects a multi-year debt budget which includes all current debt payment to be paid from the Rural Debt Service Fund 152. Revenues are estimated and calculated based on a projected growth in the value of the penny, along with adjustments in the number of property tax pennies needed to support the budget and comply with the county's fund balance policy.

|  | 7/1/2016 | 7/1/2017 | 7/1/2018 | 7/1/2019 | 7/1/2020 | 7/1/2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fund 152 Rural Debt Service | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|  | Actual | Budget | Budget | Budget | Budget | Budget |
| Beginning of Year |  |  |  |  |  |  |
| Restricted Fund Balance Est. | 1,166,075 | 952,208 | 735,428 | 518,073 | 319,077 | 184,639 |
| Property Tax | 93,000 | 94,000 | 96,820 | 99,725 | 102,716 | 105,798 |
| Tax Rate | 14.5 | 14.5 | 14.5 | 14.5 | 15.0 | 15.0 |
| Revenue |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 40110 Current Property Tax | 1,349,463 | 1,363,000 | 1,403,890 | 1,446,007 | 1,540,745 | 1,586,967 |
| 40120 Trustee Prior Year Collection | 39,297 | 45,000 | 45,000 | 50,000 | 50,000 | 50,000 |
| 40130 Delinqent Tax | 47,337 | 65,000 | 60,000 | 60,000 | 60,000 | 60,000 |
| 40140 Interest \& Penalty | 11,035 | 8,400 | 8,000 | 8,000 | 8,000 | 8,000 |
| 40150 Pick-Up Taxes | - | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| 40350 Interstate Telecom Tax | 2,691 | 2,500 | 2,000 | 2,000 | 2,000 | 2,000 |
| 44110 Investment Income | 4,000 | 3,500 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total Revenues | 1,453,823 | 1,488,400 | 1,522,890 | 1,570,007 | 1,664,745 | 1,710,967 |

Expenditures

| 82130-601--2014 | Principal on Bonds | 1,275,000 | 1,350,000 | 1,425,000 | 1,595,000 | 1,670,000 | 1,760,000 | 11,435,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 82130-601-2010B | Principal on Bonds | 100,000 | 100,000 | 100,000 |  |  |  | 765,000 |
| Total Principal |  | 1,375,000 | 1,450,000 | 1,525,000 | 1,595,000 | 1,670,000 | 1,760,000 | 12,200,000 |
| 82230-603--2014 | Interest on Bonds | 254,100 | 219,180 | 181,245 | 141,203 | 96,383 | 49,456 | 1,552,666 |
| 82230-603--2010B | Interest on Bonds | 9,250 | 6,250 | 3,250 | - | - |  | 106,950 |
| Total Interest |  | 263,350 | 225,430 | 184,495 | 141,203 | 96,383 | 49,456 | 1,659,615.50 |
| 82330-399 | Other Contracted Services | 706 | 750 | 750 | 800 | 800 | 800 | 5,312.00 |
| 82330-510 | Trustee's Commission | 28,634 | 29,000 | 30,000 | 32,000 | 32,000 | 33,000 | 213,212 |
| 82330-606 | Other Debt Issuance Charge | - | - | - | - | - | - | - |
| Total Other |  | 29,340 | 29,750 | 30,750 | 32,800 | 32,800 | 33,800 | 218,524.00 |


| Total Expenditures | 1,667,690 | 1,705,180 | 1,740,245 | 1,769,003 | 1,799,183 | 1,843,256 | 12,158,930 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Effect on Fund Balance | $(213,867)$ | $(216,780)$ | $(217,355)$ | $(198,996)$ | $(134,438)$ | $(132,289)$ |  |
|  | 6/30/2017 | 6/30/2018 | 6/30/2019 | 6/30/2020 | 6/30/2021 | 6/30/2022 |  |
| Total Ending Restricted Fund Balance | 952,208 | 735,428 | 518,073 | 319,077 | 184,639 | 52,351 | Trans to 156 |
| Fund Balance/Expenditure | 57\% | 43\% | 30\% | 18\% | 10\% | 3\% |  |

Note: This is a dead account, once the debt is paid off this fund will no longer exist.

## Multi Year Debt Budget for 152 Rural Education Debt



## SECTION 10

## EDUCATION DEBT SERVICE FUND 156

The purpose of this fund is to pay for Education Debt where the proceeds of the debt have not been shared with the city of Oak Ridge School System. No residents in the Roane County portion of Oak Ridge City are being taxed to pay for the indebtedness.

As with both the General Debt Service Fund 151 and the Rural Debt Service Fund 152, a table is created that reflects a mulit-year debt budget which includes all current debt payments to be paid from the Education Debt Service Fund 156. Revenues are estimated and calculated based on a projected growth in the value of the penny along with adjustments in the number of property tax pennies needed to support the budget and comply with the county's fund balance policy.

|  |  | 7/1/2016 | 7/1/2017 | 7/1/2018 | 7/1/2019 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fund 156 Education Debt Service |  | 2017 | 2018 | 2019 | 2020 |  |
|  |  | Actual | Budget | Budget | Budget | Totals |
| Beginning of Year |  |  |  |  |  |  |
| Undes. Fund Bal. Est. | 654,525 | 498,170 | 420,212 | 326,342 | 250,417 | 187,570 |
| Property Tax |  | 103,587 | 104,500 | 107,635 | 110,864 | 114,190 |
| Tax Rate |  | 2 | 2 | 2 | 2 | 2 |
| Revenue |  |  |  |  |  |  |
| =========================== |  |  |  |  |  |  |
| 40110 | Current Property Tax | 207,173 | 209,000 | 215,270 | 221,728 |  |
| 40120 | Trustee Prior Year Collecti | 6,538 | 8,200 | 8,000 | 8,000 |  |
| 40130 | Delinqent Tax | 6,761 | 9,000 | 10,000 | 10,000 |  |
| 40140 | Interest \& Penalty | 1,774 | 1,200 | 1,000 | 1,000 |  |
| 40150 | Pick-Up Taxes | - | - | - | - |  |
| 44110 | Investment Income | 500 | 500 | 500 | 500 |  |
| Total Revenues |  | 222,746 | 227,900 | 234,770 | 241,228 |  |

Expenditures

| 82130-601--2008C | Principal on Bonds | 120,000 | 145,000 | 140,000 | 140,000 | 1,215,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 82130-601--2009B | Principal on Bonds | 130,000 | 135,000 | 140,000 | 145,000 | 1,125,000 |
| NEW DEBT |  |  |  |  |  |  |
| NEW DEBT |  | - | - | - | - |  |
| Total Principal |  | 250,000 | 280,000 | 280,000 | 285,000 | 2,340,000 |
| 82230-601--2008C | Interest on Bonds | 25,870 | 21,250 | 14,000 | 7,000 | 268,558 |
| 82230-601- -2009B | Interest on Bonds | 18,970 | 14,420 | 9,695 | 5,075 | 192,385 |
| Total Interest |  | 44,840 | 35,670 | 23,695 | 12,075 | 460,943 |
| 82330-312 | Contracts w/Private Agen | 1,472 | 1,600 | 2,000 | 2,000 |  |
| 82330-510 | Trustee's Commission | 4,392 | 4,500 | 5,000 | 5,000 |  |
| Total Other |  | 5,864 | 6,100 | 7,000 | 7,000 |  |
| Total Expenditures |  | 300,704 | 321,770 | 310,695 | 304,075 |  |
| Effect on Fund Balance |  | $(77,958)$ | $(93,870)$ | $(75,925)$ | $(62,847)$ |  |
|  |  | 6/30/2017 | 6/30/2018 | 6/30/2019 | 6/30/2020 |  |
| Total Ending Restricted Fund Balance |  | 420,212 | 326,342 | 250,417 | 187,570 |  |
|  | fund balance/expenditure | 140\% | 101\% | 81\% | 62\% |  |



## SECTION 11

## TAX PENNIES GRAPHS

This section of the report identifies the property tax pennies needed for each Debt Services Fund, (existing debt only) over the life of the multi-year budgets.

Further, each individual Debt Service penny need is then combined to reflect the required total debt tax which is levied countywide.



156 Education Debt Service Fund
Property Tax Pennies Needed to Support Annual Multi-Year Budget


# SECTION 12 

## BOND RATINGS

This section of the report identifies the most recent bond rating for Roane County, provided by Standard \& Poors, based on the county's continued tax base growth and improved financial position.

# S\&P Global Ratings 

# RatingsDirect ${ }^{\circ}$ 

## Summary:

# Roane County, Tennessee; General Obligation 

## Primary Credit Analyst:

Joyce Jung, Centennial 303) 721 4189; joyce.jung@spglobal.com
Secondary Contact:
Jennifer K Garza (Mann), Dallas (1) 214-871-1422; jennifer.garza@spglobal.com
Table Of Contents
Rationale
Outlook
Related Research

## Summary:

# Roane County, Tennessee; General Obligation 

| Credit Profile |  |
| :---: | :---: |
| US $\$ 9.925$ mil GO rfdg bnds ser 2017A due 06/01/2029 |  |
| Long Term Rating AA/Stable | New |
| US\$1.5 mil GO rfdg bnds (federally taxable) ser 2017B due 06/01/2024 |  |
| Long Term Rating AA/Stable | New |

## Rationale

S\&P Global Ratings assigned its 'AA' long-term rating to Roane County, Tenn.'s series 2017 general obligation (GO) refunding bonds. At the same time, S\&P Global Ratings affirmed its 'AA' long-term rating on the county's existing GO bonds. The outlook on all ratings is stable.

The county's unlimited ad valorem taxes levied on all property within the county's corporate limits secure the 2017 bonds. We understand that bond proceeds will be used to refund the county's outstanding debt for savings.

The ratings reflect our opinion of the county's:

- Adequate economy, with access to a broad and diverse metropolitan statistical area (MSA), yet a concentrated employment base;
- Strong management, with good financial policies and practices under our Financial Management Assessment methodology;
- Strong budgetary performance, with an operating surplus in the general fund and a slight operating surplus at the total governmental fund level in fiscal 2016;
- Very strong budgetary flexibility, with an available fund balance in fiscal 2016 of $40 \%$ of operating expenditures;
- Very strong liquidity, with total government available cash at $59.9 \%$ of total governmental fund expenditures and 3.7 x governmental debt service, and access to external liquidity that we consider strong;
- Adequate debt and contingent liability position, with debt service carrying charges at $16.2 \%$ of expenditures and net direct debt that is $115.1 \%$ of total governmental fund revenue, as well as low overall net debt at less than $3 \%$ of market value and rapid amortization, with $83.4 \%$ of debt scheduled to be retired in 10 years; and
- Very strong institutional framework score.


## Adequate economy

We consider the county's economy adequate. Roane County, with an estimated population of 52,459 , is located in the Knoxville MSA, which we consider to be broad and diverse. The county has a projected per capita effective buying income of $91 \%$ of the national level and per capita market value of $\$ 85,891$. Overall, the county's market value was stable over the past year at $\$ 4.5$ billion in 2017. Weakening Roane County's economy is a concentrated employment base, with the professional and business service sector accounting for more than $30 \%$ of total county employment. The county unemployment rate was $6.6 \%$ in 2015.

Roane County is located in eastern Tennessee, approximately 36 miles west from Knoxville. The county's tax base is

## SECTION 13

PRINCIPAL<br>AMORTIZATION TABLES

## \$9,975,000

Roane County, Tennessee
General Obligation Refunding Bonds, Series 2008A

## Debt Service

| Date | Principal | Coupon | Interest | Total $\mathrm{P} \div \mathrm{I}$ | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12/01/2016 | - | - | - | - | - |
| 06/01/2017 | $35,000.00$ | 3.800\% | 12,325.00 | 47,325.00 | - |
| 06/30/2017 | - | - | - | - | 47,325.00 |
| 12/01/2017 | - | - | 11,660.00 | 11,660.00 | - |
| 06/01/2018 | 40,000.00 | 3.800\% | 11,660.00 | 51,660.00 | - ${ }^{-}$ |
| 06/30/2018 | - | - | - | - | 63,320.00 |
| 12/01/2018 | - | - | 10,900.00 | 10,900.00 | - |
| 06/01/2019 | 50,000.00 | 3.800\% | 10,900.00 | 60,900.00 | - |
| 06/30/2019 | - | - | - | - | 71,800.00 |
| 12/01/2019 | - | - | 9,950.00 | 9,950.00 |  |
| 06/01/2020 | 50,000.00 | 3.800\% | 9,950.00 | 59,950.00 | 6900- |
| 06/30/2020 | - | - | - | - | 69,900.00 |
| 12/01/2020 | - | - | 9,000.00 | 9,000.00 | - |
| 06/01/2021 | 200,000.00 | 4.500\% | 9,000.00 | 209,000.00 | 18000- |
| 06/30/2021 | - | - | - | - | 218,000.00 |
| 12/01/2021 | - | - | 4,500.00 | 4,500.00 | - |
| 06/01/2022 | 200,000.00 | 4.500\% | 4,500.00 | 204,500.00 | 209,000-0 |
| 06/30/2022 | , | - | - | - | 209,000.00 |
| Total | \$575,000.00 | - | \$104,345.00 | \$679,345.00 | - |


| Date And Term Structure |  |
| :---: | :---: |
| Dated. | 12/01/2016 |
| First Coupon Date. | 6/01/2017 |
| Frequency of Interest Payments. | 2 Per Year |
| First Serial Maturity Date. | 6/01/2017 |
| Yield Statistics |  |
| Average Coupon.. | 4.3888538\% |
| Weighted Average Maturity. | 4.135 Years |
| Bond Year Dollars.. | \$2,377.50 |
| Bond Yield for Arbitrage Purposes. | 4.3841531\% |
| True Interest Cost (TIC)... | $4.3841531 \%$ |

Cumberland Securities Company, Inc.
Tennessee Public Finance - SPG

## \$9,975,000

Roane County, Tennessee
General Obligation Refunding Bonds, Series 2008A

## Debt Service

Part 1 of 2

| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06/01/2011 | - | - | - | - |  |
| 12/01/2011 | - | - | 226,762.50 | 226,762.50 |  |
| 06/01/2012 | - | - | 226,762.50 | 226,762.50 |  |
| 06/30/2012 | - | - | - | - | 453,525.00 |
| 12/01/2012 | - | . | 226,762.50 | 226,762.50 |  |
| 06/01/2013 | - | - | 226,762.50 | 226,762.50 |  |
| 06/30/2013 | - | - | - | , | 453,525.00 |
| 12/01/2013 | - | - | 226,762.50 | 226,762.50 |  |
| 06/01/2014 | - | - | 226,762.50 | 226,762.50 |  |
| 06/30/2014 | - | - | - | - | 453,525.00 |
| 12/01/2014 | - | - | 226,762.50 | 226,762.50 | 4,525.00 |
| 06/01/2015 | - | - | 226,762.50 | 226,762.50 | - |
| 06/30/2015 | : | - | - | . - | 453,525.00 |
| 12/01/2015 | - | - | 226,762.50 | 226,762.50 | 4,525.00 |
| 06/01/2016 | - | - | 226,762.50 | 226,762.50 | - |
| 06/30/2016 | . | - | , | 226, 22.50 | 453,525.00 |
| 12/01/2016 | - | - | 226,762.50 | 226,762.50 |  |
| 06/01/2017 | 35,000.00 | 3.800\% | 226,762.50 | 261,762.50 | - |
| 06/30/2017 | - | - | 226,76.50 | 261,72.50 | 488,525.00 |
| 12/01/2017 | -- | - | 226,097.50 | 226,097.50 |  |
| 06/01/2018 | 40,000.00 | 3.800\% | 226,097.50 | 266,097.50 | - |
| 06/30/2018 | - | - | - | ,67.50 | 492,195.00 |
| 12/01/2018 | - | - | 225,337.50 | 225,337.50 | , |
| 06/01/2019 | 50,000.00 | 3.800\% | 225,337.50 | 275,337.50 | - |
| 06/30/2019 | - | - | - | - | 500,675.00 |
| 12/01/2019 | - | - | 224,387.50 | 224,387.50 | 500,675.00 |
| 06/01/2020 | 50,000.00 | 3.800\% | 224,387.50 | 274,387.50 | - |
| 06/30/2020 | . | - | , 87. | 27,387.50 | 498,775.00 |
| 12/01/2020 | 200,000- | - | 223,437.50 | 223,437.50 | ,75.00 |
| 06/01/2021 | 200,000.00 | 4.500\% | 223,437.50 | 423,437.50 | - |
| 06/30/2021 | - | - | , | 23, 37.50 | 646,875.00 |
| 12/01/2021 | 200, - | - | 218,937.50 | 218,937.50 | 646,875.00 |
| 06/01/2022 | 200,000.00 | 4.500\% | 218;937.50 | 418,937.50 | - |
| 06/30/2022 | - | - | , | , | 637,875.00 |
| 12/01/2022 | - | - | 214,437.50 | 214,437.50 | 63,875.00 |
| 06/01/2023 | 700,000.00 | 4.500\% | 214,437.50 | 914,437.50 | - |
| 06/30/2023 | - | - | - | - | 1,128,875.00 |
| 12/01/2023 | - |  | 198,687.50 | 198,687.50 | 1,128,875.00 |
| 06/01/2024 | 725,000.00 | 4.500\% | 198,687.50 | 923,687.50 | . |
| 06/30/2024 | - | - | - | ,68.50 | 1,122,375.00 |
| 12/01/2024 | - | - | 182,375.00 | 182,375.00 | 1,122,375.00 |
| 06/01/2025 | 750,000.00 | 4.500\% | 182,375.00 | 932,375.00 | - |
| 06/30/2025 | - | - | 165,500-0 | - | 1,114,750.00 |
| 12/01/2025 | - | - | 165,500.00 | 165,500.00 | - |
| 06/01/2026 | 775,000.00 | 4.500\% | 165,500.00 | 940,500.00 | - |
| 06/30/2026 | - - | - | - | - | 1,106,000.00 |

Morgan Keegan - 865-777-5840
Knoxville Fublic Finance - SPG

## $\$ 9,975,000$

## Roane County, Tennessee

General Obligation Refunding Bonds, Series 2008A

| Debt Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Part 2 of 2 |
| Date | Principal | Coupon | Interest | Total P4I | Fiscal Tatal |
| 12/01/2026 | - | - | 148,062.50 | 148,062.50 | - |
| $06 / 01 / 2027$ | 800,000.00 | 4.500\% | 148,062.50 | 948,062.50 | - |
| (16/30/2027 | - | - | - . | , | 1,096,125,00 |
| 12/01/2027 | - | - | 130,062.50 | 130,062.50 | - |
| 06/01/2028 | 850,000.00 | 4.750\% | 130,052.50 | 988,062.50 | - |
| 06/3022028 | . | . | - - | - | 1,110,125,00 |
| 12/01/2028 | 875000- | - | 109,875.00 | 109,875.00 | 1,70,2s.0. |
| 06/01/2029 | 875,00000 | 4.500\% | 109,875.00 | 984,875.00 | - |
| 06/30/2029 | . | , | - | , | 1,094,750.00 |
| 12/01/2029 | - | - | 90,187,50 | 90,187.50 | - |
| 06/01/2030 | 925,000 00 | 4.500\% | 90,187.50 | 1,015,187.50 | - |
| 06/30/2030 | - | - | , | 1. ${ }^{\text {a }}$, | 1,105,375.00 |
| 12/01/2030 | 10000000 | - | 69,375.00 | 69,375.00 | 1, |
| 06/01/2031 | 1,000,000,00 | 4625\% | 69,375.00 | 1,069,375.00 | - |
| 06/30/2031 | 1, | - | , | - | 1,138,750.00 |
| 12/01/2031 |  | - | 46,250.00 | 46,250.00 | 1,18, 70.0 |
| 06/01/2032 | 1,000,000.00 | 4625\% | 46,250,00 | 1,046,250.00 | - |
| 06/30/2032 | - | - | - | - | 1,092,500.00 |
| 12/01/2032 | - | - | 23,125.00 | 23,125.00 | $1,02,80.00$ |
| 06/01/2033 | 1,000,000.00 | $4.625 \%$ | 23,125.00 | 1,023,125.00 | - |
| 06/30/2033 |  | - | - | - | 1,046,250.00 |
| Total | \$9,975,000 00 | - | \$7,713,420.00 | \$17,688,420.00 | - |


| Date And Term Structure |  |
| :---: | :---: |
| Dated. | $6.01 / 2011$ |
| First Coupon Date, | 12/01/2011 |
| Frequency of Interest Payments. | 2 Per Year |
| First Scrial Maturity Date. | 6/01/2017 |
| Yield Statistics |  |
| Average Coupon. | 4.5623991\% |
| Average life | 16.949 Years |
| Weighted Average Maturity. | 16.949 Years |
| Bond Yield for Arhitrage Purposes | 4.5583774\% |
| Bond Year Dollars. | \$169,065.00 |

Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG

# \$9,770,000 <br> Roane County, Tennessee General Obligation Refunding Bonds, Series 2017A 

## Debt Service

| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05/19/2017 | - | - | - | - |  |
| 11/01/2017 | - | - | 96,705.00 | 96,705.00 | - |
| 05/01/2018 | 200,000.00 | 2.000\% | 107,450.00 | 307,450.00 | - |
| 06/01/2018 | - | - | - | - | 404,155.00 |
| 11/01/2018 | - | - | 105,450.00 | 105,450.00 | - |
| 05/01/2019 | 195,000.00 | 2.000\% | 105,450.00 | 300,450.00 | - |
| 06/01/2019 | - | - | - | - | 405,900.00 |
| 11/01/2019 | 200,000- | - | 103,500.00 | 103,500.00 |  |
| 05/01/2020 | 200,000.00 | 2.000\% | 103,500.00 | 303,500.00 | - |
| 06/01/2020 | - | - | - | - | 407,000.00 |
| 11/01/2020 | - | - | 101,500.00 | 101,500.00 |  |
| 05/01/2021 | 250,000.00 | 2.000\% | 101,500.00 | 351,500.00 | - |
| 06/01/2021 | - | - | - | - | 453,000.00 |
| 11/01/2021 | - | - | 99,000.00 | 99,000.00 | - |
| 05/01/2022 | 250,000.00 | 2.000\% | 99,000.00 | 349,000.00 | - |
| 06/01/2022 | - | - | - | - | 448,000.00 |
| 11/01/2022 | - | - | 96,500.00 | 96,500.00 | - |
| 05/01/2023 | 925,000.00 | 2.000\% | 96,500.00 | 1,021,500.00 | - |
| 06/01/2023 | - | - | - | 1,21.00. | 1,118,000.00 |
| 11/01/2023 | - | - | 87,250.00 | 87,250.00 | - |
| 05/01/2024 | 950,000.00 | 2.000\% | 87,250.00 | 1,037,250.00 | - |
| 06/01/2024 | - | - | - | - | 1,124,500.00 |
| 11/01/2024 | - | - | 77,750.00 | 77,750.00 | - |
| 05/01/2025 | 1,400,000.00 | 2.000\% | 77,750.00 | 1,477,750.00 | - |
| 06/01/2025 | - | - | - | - | 1,555,500.00 |
| 11/01/2025 | - | - | 63,750.00 | 63,750.00 | - |
| 05/01/2026 | 1,500,000.00 | 2.250\% | 63,750.00 | 1,563,750.00 | - |
| 06/01/2026 | - | - | - | - | 1,627,500.00 |
| 11/01/2026 | - | - | 46,875.00 | 46,875.00 | - |
| 05/01/2027 | 1,500,000.00 | 2.250\% | 46,875.00 | 1,546,875.00 | - |
| 06/01/2027 | - | - | - | - | 1,593,750.00 |
| 11/01/2027 | - | - | 30,000.00 | 30,000.00 | - |
| 05/01/2028 | 1,200,000.00 | 2.500\% | 30,000.00 | 1,230,000.00 | - |
| 06/01/2028 | - | - | - | - | 1,260,000.00 |
| 11/01/2028 | - | - | 15,000.00 | 15,000.00 | - |
| 05/01/2029 | 1,200,000.00 | 2.500\% | 15,000.00 | 1,215,000.00 | - |
| 06/01/2029 | - | - | - | - | 1,230,000.00 |
| Total | \$9,770,000.00 | - | \$1,857,305.00 | \$11,627,305.00 | - |

## Date And Term Structure

| Dated. | 5/19/2017 |
| :---: | :---: |
| First Coupon Date. | 11/01/2017 |
| Frequency of Interest Payments. | 2 Per Year |
| First Serial Maturity Date. | 5/01/2018 |
| Yield Statistics |  |
| Average Coupon.. | 2.2526030\% |
| Weighted Average Maturity. | 8.434 Years |
| Bond Year Dollars. | \$82,451.50 |
| Bond Yield for Arbitrage Purposes. | 2.0870662\% |
| True Interest Cost (TIC). | 2.2032612\% |

Cumberland Securities Company, Inc.
Tennessee Public Finance - SPG

## \$7,410,000

Roane County, Tennessee
General Obligation Refunding Bonds, Series 2008B
Debt Service

| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06/01/2011 | - | - | - | - | - |
| 12\%01/2011 | - | - | 153,49375 | 153,493.75 |  |
| $06 / 01 / 2012$ | 100,000.00 | 3.500\% | $153,493.75$ | 253,493 75 | - |
| 06/3012012 | - | - | - | - | 406,987.50 |
| 12/01/2012 | - | - | 151,743.75 | 151,743.75 | - |
| 06/01/2013 | 100,009,00 | $3500 \%$ | 151,743.75 | 251,743.75 | - |
| 06/30/2013 | - | - | - | - | 403,487.50 |
| 12/01/2013 | - | - | 149,993.75 | 149,993.75 | - |
| 06\%01/2014 | 102,000.00 | 4.000\% | 149,993.75 | 249,993.75 | - |
| 06/302014 | - | - | - | - | 399,987.50 |
| 12/01/2014 | - | - | 147,993.75 | 147,993.75 | . |
| 06/01/2015 | 100,000.00 | 4.000\% | 147,993.75 | 247,993.75 | - |
| 06/3012015 | - | - | - | - | 395,987.50 |
| 12/01/2015 | - | - | 145,993.75 | 145,993.75 | - |
| 06/01/2016 | 385,000.00 | 4.000\% | 145,993.75 | 530,993 75 | - |
| 06/302016 | - | - | - | - | 676,987.50 |
| 12/61/2016 | - | - | 138,293.75 | 138,293.75 |  |
| 06/01/2017 | 750,000.00 | 4.000\% | 138,293.75 | 888,293.75 | - |
| 06/302017 | - | - | - | - | 1,026,587.50 |
| 12/01/2017 | - | - | 123,293,75 | 123,293.75 | - |
| 06/01/2018 | 1,525,000,00 | 5.000\% | 123,293.75 | 1,648.293.75 | - |
| 06/30/2018 | - | . | - | - | 1,771,587.50 |
| 1201/2018 | - | - | 85,168,75 | 85,168.75 |  |
| 0601/2019 | 1,550,000.00 | 4500\% | 85,16875 | 1,635,168.75 |  |
| 06/30/2019 | - | - | - | - | 1,720,337.50 |
| 12/01/2019 | - | * | 50,293.75 | 50,293.75 |  |
| 06\%1/2020 | 1,725,000.00 | $4000 \%$ | 50,29375 | 1,775,293.75 | $\cdot$ |
| 06/30/2020 | - | - | - | - | 1,825,587.50 |
| 12/01/2020 | - | - | 15,793,75 | 15,393.75 | - |
| 06101/2021 | 375,000.00 | 4.050\% | 15,793,75 | 390,793.75 |  |
| 06/3012021 | - | - | - | - | 406,587.50 |
| 12/01/2021 | $\cdot$ | - | 8,200.00 | 8,200.00 |  |
| 06/01/2022 | 400,000.00 | 4.100\% | $8,200.00$ | 408,200.00 | - |
| 06/30/2022 | - | - | - | - | 416,400.00 |
| Total | \$7,110,000.00 | - | \$2,340,525.00 | \$9,450,525,00 |  |


| Date And Term Structure |  |
| :---: | :---: |
| Dated | 6/01/2011 |
| First Coupon Date. | 12/01/2011 |
| Frequency of interest Payments | 2 Per Year |
| First Serial Maturity Date. | 601/2012 |
| Yield Statistics |  |
| Average Coupon... | 4.3203046\% |
| Average Life., | 7.620 Years |
| Weighted Average Maturity.... | 7.620 Years |
| Bond Yield for Arbitrage Purposes. | 4.3237977\% |
| Bond Year Dollars... | \$54,175.00 |

Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG
$\$ 8,325,000$
Roane County, Tennessee General Obligation Bonds, Series 2009A

## Debt Service

| Date | Principal | Coupon | Interest | Total P-1 | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $06 / 01 / 2011$ | - | - | $\cdot$ | - | - |
| 1201/2011 | $\checkmark$ | - | 1109.200 .00 | 109,700.00 | - |
| 05\%012012 | 1,050,000.00 | 2000\% | 109,700,00 | 1,159,700,00 | - |
| 06302012 | . | - | - | - | 1,269.400.00 |
| 1261/2012 | . ${ }^{\text {a }}$ | . | 99,200,00 | 99,200000 | . |
| 06/01/2013 | 550,000.00 | 2.500\% | 99,200,00 | . 649,200000 | - |
| 06302013 | . . | . | . | - | 748,400.00 |
| 12012013 | - | . | 92,325,00 | 92,32500 | . |
| 06/01/2014 | - | - | 92,325.00 | 92,325.00 | - |
| 063020114 | - | - | - | - | 184,650,00 |
| 12012014 | - | - | 92,325.00 | 92,32500 | . |
| $0601 / 2015$ | - | - | 42,325,00 | 92,325,00 | - |
| 05302015 | - | - | - | - | 184,650.00 |
| 1201/2015 | - | - | 92,325.c0 | 92,325,00 | - |
| 06012016 | 550,000.00 | 3.000\% | 92,32500 | 642,325.00 | - |
| 063022016 | - | - - | - | - | 734,650.00 |
| 12012016 | - | - | 84,075,00 | 84.075.00 | - |
| 06:012017 | 700.000.00 | 3.500\% | 84,075:00 | 784.075.00 | - |
| 061302017 | - | . | - | - | 868,150,00 |
| 12\%1/2017 | - | - | 71,825.00 | 71,825.00 | - |
| 06012018 | - | - | 71,825,00 | 71.82500 | - |
| 06/30/2018 | - | - | - | - | 143,650,00 |
| 12012018 | - | . | 71,825:00 | 71,825.00 | - |
| 0601/2019 | - | - | 71,825.00 | 71.825 .00 | - |
| 06/302019 | - | - | - | - | 143,650 00 |
| 12/01/2019 | - | - | 71,825,00 | 71,82500 | , |
| 0601/2020 | - | - | 71,82500 | 71,825.00 | - |
| 06/30/2020 | . | . | , |  | 143,650,00 |
| 1201/2020 | - ${ }^{-}$ | - | 71,82500 | 71,825.00 | . |
| 0601/2021 | 850,000.00 | 3700\% | 71,825:00 | 921,825.00 | - |
| 06/3012021 | - | . | - | - | 993,650.06 |
| 12/61/2021 | - | - | 56,100.00 | 56.100.00 | - . |
| 06.012022 | 900,000,00 | 3.800\% | 56.100 .00 | 956,100,00 | - |
| 06302022 | - | - | - | - | 1,012,200,00 |
| 12/01/2022 | - | - | 39,000.00 | 39,000,00 | - |
| $06 \% 1 / 2023$ | 825,00000 | 4000\% | 39,00000 | 864,000.00 | - |
| 06/30/2023 | - - | - | - | - | . 903,000,00 |
| 12\%1/2023 | - | - | 22,500.00 | 22,500.00 | - |
| 06012024 | 900.000 .00 | 5000\% | 22,500:00 | 922,500.00 | $\cdot$ |
| 06\%302024 | - | - | - | . | 945,000.00 |
| Total | \$6,325,000.00 | $\because$ | \$1,949, 20000 | \$8,274,700,00 | - |


| Date And Tern Structure |  |
| :---: | :---: |
| Dated... | $6701 / 2011$ |
| First Courpon Date. | 12/01/2011 |
| Frequency of Interest Payments......................................................................................................................................... 2 Per Year |  |
|  |  |
| Yield Statistics |  |
| Average Coupon. | 3.9708758\% |
| Average Life. | 3.763 Years |
| Weighted Average Maturity... | 7.763 Years |
| Bond Yield for Arbitrage Purpose | 3.9367683\% |
| Bond Year Dollars | \$49,100,00 |

Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG

## $\$ 7,300,000$ <br> Roane County, Tennessee General Obligation Bonds, Series 2010A <br> Includes 2010 A and HWY 10 and wip HWY 10 on separate sheet Exulp on Diff. Sheot

Debt Service

| Date | Principal | Coupon | inferest | Total P+1 | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $0601 / 2011$ | - | - | - | - |  |
| 12/01/2011 | - | - | 104,746.88 | 104,746.88 | - |
| 06:01/2012 | 375,000.00 | 3,000\% | 104,746.88 | 479.746 .88 | * - |
| $0630 / 2012$ | - | . | - | . - | 584,493.76 |
| 12/01/2012 | - | - | 99,121.88 | . 99,121.88 | . . |
| 06/01/2013 | 870,000,00 | 2.000\% | 99.121 .88 | 969.121 .88 | - |
| 06/30:2013 | - | . | - | - | 1,068.243.76 |
| - 12/01/2013 |  | - | 90,421.88 | 90,421.88 | - |
| 06:01/2014 | 1,500,000,00 | 3.000\% | $90,421.88$ | 1,590,421.88 | - |
| $06 / 302014$ | - | * | $\therefore$ - | ... | 1,680,843.76 |
| 12/01/2014. |  | $\cdots$ | 67,921.88 | 67,421.88 | - |
| $06 / 01 / 3015$ | 1,560,000,00 | $3000 \%$ | 67,921.88 | 1,627,921.88 | - |
| 06/30/2015 | - | - | - | - | 1.695.543.76 |
| $12 / 01 / 2015$ | - ${ }^{\circ}$ | - | 44,521.88 | 44,521.88 | - |
| 06/01/2016 | 330,000.00 | 3.000\% | 44,521.88 | 374,521.88 | - |
| 06/302016 | . - | - | - | - | 419,043.76 |
| 12/01/2016 | - - | . - | 39,571,88 | 39,571.88 | - |
| 06/01/201? | . 335,000000 | $30000 \%$ | 39,571.88 | 374,571.88 | - |
| 06/30/2017 | - | - | . - | . | 414,143.76 |
| 12/51/2017 |  | - | 34,546.88 | 34,546.88 | (1) |
| 06/01/2018 | 310.00000 | 3.000\% | 34.546.88 | 344,546,88 | - |
| 06/30 2018 | - | - | - | - | 379,093.76 |
| 12/01/2018 |  | - | 29,896.88 | 29,896.88 | , |
| 06/01/2019 | 360,000.00 | 3.250\% | 29,896.88 | 389,896.38 | - |
| 66/30/2019 | - | . | - | . | 419,793.76 |
| 12/01/2019 | - | - | 24,046.88 | 24,046.88 | , 793 |
| 06イ122020 | 285,000.00 | 3.250\% | 24,04688 | 309,046.88 | - |
| 06/30/2020 | . | - | , | , | 333,093.76 |
| $12 / 01 / 2020$ |  | 3.375\% | 19,415.63 | 19,415,63 | - |
| 06/01/2021 | 230,000,00 | 3.375\% | 19,4156.3 | 299,415.63 | - |
| 06/30/2021 | - | - | - | - | 318,831.26 |
| 12/01/2021 |  | - | 14,690.63 | 14,690.63 | 18,831. |
| 06/01/2022 | 285,000,00 | 3.500\% | 14,690.63 | 299,600.63 | - |
| 06/30:2022 | - | - | . | , | 314,381.26 |
| 12/01/2022 | - | - | 9,703.13 | 9,703.13 | -178126 |
| $06 / 01 / 2023$ | 125,000 00 | 3.500\% | $9,703.13$ | 134,703.13 | - |
| 06/3022023 | - | - | . | - | 144,406.26 |
| 12/0172023 | - | - | 7,515.63 | 7,515,63 | . - |
| 06/01:2024 | 125,000,00 | 3.625\% | 7,515.63 | 132,515.63 | - |
| 0613022024 | - | - | . | - | 140,031.26 |
| 12\%1/2024 | - | - | 5,250,00 | 5,250.00 | - |
| 06\%1/2025 | 280,000.00 | 3.750\% | 5,25000 | 285,2.50.00 | * |
| 06/3022025 | - | - | - | - | 290,500.00 |
| Total | \$7,020,000,00 | $-$ | \$1.182,743,88 | \$8,202.743.88 | - |


| Date And Term Structure |  |
| :---: | :---: |
| Dated. | 6,01/2011 |
| First Coupon Dite | 12/01/2011 |
| Prequency of $\ln$ erest Paymentas. | 2 Per Year |
| First Serial Maturity Date. | $6.01 / 2012$ |
| Yield Statistir |  |
| Average Coupo | 3.1871298\% |
| Average Life. | 5.286 Years |
| Weighed Aver: $1 \times$ Materity... | 5.241 Years |
| Bond Yield for tcitrge Purposes | $2.7778131 \%$ |
| Bond Year Dol i's. | \$37:110,00 |

Morgan Ke : tan -865-777-5840
Knoxville I blic Finance - SPG

## \$7,300,000 (\$1,245,000 Roads)

Roane County, Tennessee
General Obligation Bonds, Series 2010A
HWY 10
Roads
Debt Service - Road Portion

| Date | Principal | Coupon | Interest | Total P +1 | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06/01/2011 | - |  | - |  |  |
| 12/01/2011 | - | . | 17,171.88 | 17,171.88 |  |
| 06/01/2012 | 115,000.00 | 3.000\% | 17,171.88 | 132,171.88 |  |
| 06/30/2012 | - | - | - |  | 149,343.76 |
| 12/01/2012 | - | - | 15,446.88 | 15,446.88 |  |
| 06/01/2013 | 100,000.00 | 2.000\% | 15,446.88 | 115,446.88 |  |
| 06/30/2013 | - | - |  |  | 130,893.76 |
| 12/01/2013 | - | ${ }^{-}$ | 14,446.88 | 14,446.88 |  |
| 06/01/2014 | 100,000.00 | 3.000\% | 14,446.88 | 114,446.88 |  |
| 06/30/2014 | - | - |  |  | 128,893.76 |
| 12/01/2014 | - | - | 12,946.88 | 12,946.88 |  |
| 06/01/2015 | 100,000.00 | 3.000\% | 12,946.88 | 112,946.88 |  |
| 06/30/2015 | - | - |  | , 11.8 | 125,893.76 |
| 12/01/2015 |  | - | 11,446.88 | 11,446.88 |  |
| 06/01/2016 | 100,000.00 | 3.000\% | 11,446.88 | 111,446.88 |  |
| 06/30/2016 | - | . | - |  | 122,893.76 |
| 12/01/2016 | - | - | 9,946.88 | 9,946.88 |  |
| 06/01/2017 | 100,000.00 | 3.000\% | 9,946.88 | 109,946.88 |  |
| 06/30/2017 | - | - |  | - | 119,893.76 |
| 12/01/2017 | - | - | 8,446.88 | 8,446.88 |  |
| 06/01/2018 | 100,000.00 | 3.000\% | 8,446.88 | 108,446.88 |  |
| 06/30/2018 | - | - | - | - | 116,893.76 |
| 12/01/2018 |  | - | 6,946.88 | 6,946.88 |  |
| 06/01/2019 | 100,000.00 | 3.250\% | 6,946.88 | 106,946.88 |  |
| 06/30/2019 | - | - | - | - | 113,893.76 |
| 12/01/2019 | - | -. | 5,321.88 | 5,321.88 |  |
| 06/01/2020 | 100,000.00 | 3.250\% | 5,321.88 | 105,321.88 |  |
| 06/30/2020 | $\because$ | - | - | - | 110,643.76 |
| 12/01/2020 |  | - | 3,696.88 | 3,696.88 |  |
| 06/01/2021 | 105,000.00 | 3.375\% | 3,696.88 | 108,696.88 |  |
| 06/30/202I | - | - |  | , 06.88 | 112,393.76 |
| 12/01/2021. | - | - | 1,925.00 | 1,925.00 |  |
| 06/01/2022 | 110,000.00 | 3.500\% | 1,925.00 | 111,925.00 |  |
| 06/30/2022 | - | - | , | 11,25.00 | 113,850.00 |
| Total | \$1,130,000.00 | - | \$215,487.60. | \$1,345,487.60 | - |

Date And Term Structure


Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG

## $\$ 2,250,000$ ( $\$ 750,000$ Roane County Portion)

Roane County, Tennessee
Local Government Public Improvement Bonds, Series B-20-A
Tri-County Industrial Park
TRI 10
Debt Service
Part 1 of 2

| Date | Principal | Coupon | Interest | Total P +1 | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06/01/2011 | - | - | : | - | - |
| 12/01/2011 | - | - | 17,718.75 | 17,718.75 |  |
| 06/01/2012 | - | . | 17,718.75 | 17,718.75 | - |
| 06/30/2012 | - | - |  | (18.75 | 35,43750 |
| 12/01/2012 | - | - | 17,718.75 | 17.718 .75 | - |
| 06/01/2013 | - | - | 17,718.75 | 17,718.75 | - |
| 06/30/2013 | - | - | - | - | 35,437.50 |
| 12/01/2013 | - | - | 17,718.75 | 17,718 75 | , |
| 06/01/2014 | - | - | 17,718.75 | 17,718.75 | - |
| $06 / 302014$ | - | - - | - | - | 35,437.50 |
| 12/01/2014 | - | - | 17.718 .75 | 17,718.75 |  |
| 06/01/2015 | - | - | 17,718.75 | 17,718,75 | - |
| 06/30/2015 | - | - | - | . | 35,437.50 |
| 12/01/2015 | - | - | 17,718.75 | 17.718.75 | 35.37 |
| 06/0:/2016 | - | - | 17,718.75 | 17.718.75 | - |
| 06/3022016 | - | - | , | -7 | 35,437.50 |
| 12/01/2016 | - | - | 17,718.75 | 17,718.75 | - |
| 06/01/2017 | - | - | 17,718,75 | 17,718.75 | - |
| 06/3012017 | . | - | - | ,718.75 | 35,437.50 |
| 12/01/2017 | - | - | 17,71875 | 17,718.75 | - |
| 06/01/2018 | - | - | 17,718.75 | 17,718,75 | . |
| 06/30/2018 | - | - | - | - | 35,43750 |
| 12/01/2018 | - | - | 17,718.75 |  | 5, |
| 06/01/2019 | . | - | 17,718.75 | 17,718.75 | - |
| 06/30/2019 | - | - | (1) | 1,7185 | 35,437,50 |
| 12/01/2019 | . | - | 17,718.75 | 17,718.75 | 3, |
| 06/01/2020 | - | - | 17,718.75 | 17,718.75 | . |
| $06 / 30 / 2020$ | - | - |  | , | 35,437,50 |
| 12/01/2020 | - | . | 17,718,75 | 17,718.75 | 35,37 |
| 06/01/2021 | . | - | 17,718.75 | 17,71875 | . |
| $06 / 3012021$ | . | - | - | -18. | 35,437.50 |
| 12/01/2021 | . | . | 17,71875 | 17,718.75 | ) |
| 06/01/2022 | . | - | 17,718.75 | 17,718.75 | . |
| 06/30/2022 | - | - | - | , 718.7 | 35,437.50 |
| 12/01/2022 | . | . . | 17,718.75 | 17.718.75 | -5, 3 \%. 5 |
| 06/01/2023 | - | - | 17,718.75 | 17,718.75 | - |
| $06 / 30 / 2023$ | - | - | , | 17,718.75 | 35,437.50 |
| 12/01/2023 | - | - | 17,718.75 | 17,718.75 | 3, 37.50 |
| 06/01/2024 | - | - | 17,718.75 | 17.718.75 | - |
| 06/30/2024 | . | . | , | (7) | 35,437.50 |
| 12/01/2024 | - ${ }^{-}$ | - | 17,718.75 | 17,718.75 | 35,37.50 |
| 06/01/2025 | 225,000.00 | 5.000\% | 17,718.75 | 242,718.75 | - |
| 0663012025 | - | - | - | -18.05 | 260,437 50 |
| 12/01/2025 | - - | - | 12,093.75 | 12,093.75 | 260, |
| 06/01/2026 | 250,000.00 | 5.000\% | 12,093.75 | 262,093.75 | - |
| 06/30/2026 |  |  |  | , | 274,187,50 |

Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG

## $\$ 2,250,000$ ( $\$ 750,000$ Roane County Portion)

Roane County, Tennessee
Local Government Public Improvement Bonds, Series B-20-A
Tri-County Industrial Park

| Debt Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | . |  | Part 2 of 2 |
| Date | Principal | Coupon | Interest | Total P+1 | Fiscal Total |
| 12/01/2026 | - | - | $5,843.75$ | 5,843.75 | n |
| $06 / 01 / 2027$ | 275,000.00 | $4250 \%$ | 5,843.75 | $280,843.75$ | - |
| 06/30/2027 | - | - | , | . | 286,687.50 |
| Total | \$750,000.00 | - | \$532,000.00 | \$1,282,000.00 | * |


| Date And Term Structure |  |
| :---: | :---: |
| Dated. | 6/01/2011 |
| First Coupon Date. | 12/01/2011 |
| Frequency of Interest Payments | 2 Per Year |
| First Serial Muturity Date. | 6/01/2025 |
| Yield Statistics |  |
| Average Coupon. | 4.70796.46\% |
| Average Life. | 15.067 Years |
| Weighted Average Maturity. | 15040 Years |
| Bond Yield for Arbitrage Purpose | 4.2938676\% |
| Bond Year Dollars. | \$11,300.00 |

Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG

## \$1,750,000

Roane County, Tennessee
Local Government Public Improvement Bonds, Series B-13-A (Taxable)
Plateau Partners Industrial Park - Budget Rate
$\qquad$


[^0]Morgan Megan - 865-777-5840
Knoxville Public Finance - SPC

## \$1,470,000

Roane County, TennesseeGeneral Obligation Refunding Bonds, Series 2017B (Federally Taxable)

| Debt Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total |
| 05/19/2017 | - | - | - | - | - |
| 11/01/2017 | - | - | 14,294.25 | 14,294.25 | - |
| 05/01/2018 | 200,000.00 | 2.000\% | 15,882.50 | 215,882.50 | - |
| 06/30/2018 | - | - | , | -82.50 | 230,176.75 |
| 11/01/2018 | - | - | 13,882.50 | 13,882.50 | 230,176.75 |
| $05 / 01 / 2019$ | 195,000.00 | 2.000\% | 13,882.50 | 208,882.50 | - |
| $06 / 30 / 2019$ | - | - | , | , | 222,765.00 |
| $11 / 01 / 2019$ | - | - | 11,932.50 | 11,932.50 | ,765.00 |
| 05/01/2020 | 210,000.00 | 2.000\% | 11,932.50 | 221,932.50 | - |
| 06/30/2020 | - | - | 11, | 232.50 | 233,865.00 |
| 11/01/2020 | - - | - | 9,832.50 | 9,832.50 | , |
| 05/01/2021 | 200,000.00 | 2.000\% | 9,832.50 | 209,832.50 | - |
| 06/30/202 1 | - | - | - | - | 219,665.00 |
| $11 / 01 / 2021$ | - | - | 7,832.50 | 7,832.50 | , 665.00 |
| $05 / 01 / 2022$ | 200,000.00 | 2.200\% | 7,832.50 | 207,832.50 | - |
| 06/30/2022 | , | - | 7. |  | 215,665.00 |
| 11/01/2022 | - | - | 5,632.50 | 5,632.50 | 215,665.00 |
| 05/01/2023 | 240,000.00 | 2.350\% | 5,632.50 | 245,632.50 | - |
| 06/30/2023 | ,00.00 | - | 5 | , 632.50 | 251,265.00 |
|  | - | - | 2,812.50 | $2,812.50$ | 251,265.00 |
| 05/01/2024 | 225,000.00 | 2.500\% | 2,812.50 | 227,812.50 | - |
| 06/30/2024 | - | - | , |  | 230,625.00 |
| Total | \$1,470,000.00 | - | \$134,026.75 | \$1,604,026.75 | - |


| Date And Term Structure |  |
| :---: | :---: |
| Dated. | 5/19/2017 |
| First Coupon Date. | 11/01/2017 |
| Frequency of Interest Payments. | 2 Per Year |
| First Serial Maturity Date. | 5/01/2018 |
| Yield Statistics |  |
| Average Coupon. | 2.2482051\% |
| Weighted Average Maturity. | 4.048 Years |
| Bond Year Dollars. | \$5,961.50 |
| Bond Yield for Arbitrage Purposes | 2.1515763\% |
| True Interest Cost (TIC). | 2.2796426\% |

Cumberland Securities Company, Inc.
Tennessee Public Finance - SPG


Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG

BOND DEBT SFRVICE
ROANE COUNTY, TENNESSEF
© $11.435,010$ REFLNTING BOND- 8 YEARS
TENNESSE MUNICIPALBOND FUND
FXED RATE LOAN PROGRAM

*     * BASED ON NIBQ INTICATIVE RAIE* $* *$
fRRMCIPAL PAYABLE ANNUALLY
INIEREST PAYABLE SEMIANNUALLY
Dated date: May 1, 2014
REFLNDING OF RLRA SCHOOL REFUNDNG BONDS, SERIES 2004 MATURIFG MAY 1, 2015 THROUGH MAY 1.2022

| Period Ending | Principal | Coupon | Interest | Debr Service | Annual <br> Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05/01/2014 |  |  |  |  |  |
| 11/61/2014 |  |  | 160,661.75 | $160,561.75$ |  |
| 05\%1/2015 | 1.155,000 | 2.810\% | $160,661.75$ | 1,315,661.75 | 1.476,323.50 |
| 11/01/2015 |  |  | 144,434.00 | 144,434.00 |  |
| 05/01/2016 | 1,245,000 | 2.810\% | 144,434.00 | 1,349.434.00 | 1,493,868.00 |
| 11/01/2016 |  |  | 127,503.75 | 127.503.75 |  |
| 05/01/2017 | 1,275,000 | 2.810\% | 127,503.75 | 1,402,503.75 | 1,530,007.50 |
| 11:01/2017 |  |  | 109,590.00 | 109,590.03 |  |
| 05101/2018 | 1,350,000 | 2.810\% | 109,590.00 | 1,459,590.00 | 1,569,180.00 |
| 11012218 |  |  | 90,622.50 | 90,622.50 |  |
| 05/01/2019 | 1,425,000 | 2.810\% | 90.622 .50 | 1,515,622.50 | 1,606,245.00 |
| 1101/2019 |  |  | 70,601.25 | 70.601 .25 |  |
| 05\%1/2020 | 1,595,000 | 2.810\% | 70.601 .25 | 1.665,601.25 | 1,736,202.50 |
| 11/01/2020 |  |  | 48,191.50 | 48,191.50 |  |
| 05:01/2021 | 1,670,000 | 2.810\% | 48.19:.50 | 1,718,191.50 | 1.766,383.00 |
| 1:,01/2021 |  |  | 24,728.00 | 24,728.50 |  |
| 05101/2022 | 1.760,000 | 2.810\% | 24,728.00 | 1,784,728.09 | 1,809,456.00 |
|  | 11,435,000 |  | 1.552,665.50 | 12,987,665.50 | 12,987,665.50 |

[^1]
## Rural School Fund - Closed Fund

\$1,180,000
Roane County, Tennessee
Rural School Refunding Bonds, Series 2010B

|  |  | Debt Service |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |

Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG

## \$1,600,000

Roane County, Tennessee
Rural School Refunding Bonds, Series 2008C

## Debt Service

| Date | Principal | Coupon | Interest | Total P+1 | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06701/2011 | - | - | . | - | - |
| 1201/2011 | - | - | 25,176,25 | 25,176,25 | - |
| 06/01/2012 | 155,000,00 | 3.500\% | 25,176.25 | 180,176.25 | - |
| $06 / 3012012$ | - | - | - | - | 205,352.50 |
| 12\%01/2012 | - | - | 22,463.75 | 22,463.75 | , |
| 06\%1/2013 | 150,000,00 | 3,500\% | 22,463.75 | 172,463.75 | - |
| 06/30/2013 | - | - | - | - | 194,927.50 |
| 12/01/2013 | - | - | 19,838.75 | 19,838.75 | . |
| $0601 / 2014$ | 125,00000 | 3.750\% | 19,838.75 | 144,838.75 | - |
| 06/30/2014 | - | - | - | - | 164,677.50 |
| 12\%1/2014 | - | - | 17,495.00 | 17,495.00 | , |
| $06601 / 2015$ | 120,000000 | 3.750\% | 17,495.00 | 137,495.00 | - |
| 06/30/2015 | - | - | - | - | 154,990.00 |
| 12/01/2015 | - | - | 15,245.00 | 15,245.00 | - |
| 06/01/2016 | $120,000.00$ | 3.850\% | 15,245,00 | 135,245.00 | - |
| 06/30/2016 | . | - | - | - | 150,490.00 |
| 12\%1/2016 | - | - | 12,935.00 | 12,935.00 | 150.80. |
| 06/01/2017 | 120,000.00 | 3.850\% | 12,935.00 | 132,935.00 | - |
| 06/30/2017 | - | - | - | - | 145,870.00 |
| 12/01/2017 | - | - | 10,625.00 | 10,625.00 | - |
| 06/01/2018 | 145,000,00 | 5.000\% | 10,625.00 | 155,625,00 | - |
| 06/3012018 |  | - | - |  | 166,250.00 |
| 12/01/2018 | - | - | 7,000.00 | 7,000.00 | . |
| 06/01/2019 | 140,00000 | 5000\% | 7,000.00 | 147,000.00 | - |
| 06/30/2019 | - | - | , | , | 154,000.00 |
| 12/01/2019 | - | - | 3,500.00 | 3,500.00 | , |
| 06/01/2020 | 140,000,00 | 5.000\% | 3,500.00 | 143,500.00 | - |
| 06/30/2020 | . | - | - |  | 147,000.00 |
| Total | \$1,215,000,00 | - | \$268,557.50 | \$1,483,557,50 | - |

\footnotetext{
Date And Term Structure
Der

........... $12 / 01 / 201$


## Yield Statistics

| Average Coupon. | 4.4573859\% |
| :---: | :---: |
| Average Life. | 4.959 Years |
| Weighted Average Maturity.. | 4.959 Years |
| Bond Yield for Arbitrage Purposes | 4.4307586\% |
| Bond Year Dollars.. | \$6,025.00 |

Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG

Education Debt Service Fund
$\$ 1,325,000$
Roane County, Tennessee
Rural School Bonds, Series 2009B

## Debt Service

| Date | Principal | Coupon | Interest | Total P+1 | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $06101 / 2011$ | - | - | - | - |  |
| 12101/2011 | - | - | 17,022.50 | 17,022.50 | - |
| 06/01/2012 | 105,000.00 | 2.000\% | 17,022,50 | 122,022.50 | - |
| 06/3012012 | - | - | . | - - | 139,045.00 |
| 12/01/2012 | - | - | 15,972.50 | 15,972.50 | - |
| 08/01/2013 | 110,000.00 | 2.500\% | 15,972.50 | 125,972.50 | - |
| $06 / 302013$ | - | - | - | - | 141,945.00 |
| 12/01/2013 | - | - | 14,597,50 | 14,597.50 | - |
| 05/01/2014 | 115,000.00 | 2.500\% | 14,597.50 | 129,597.50 | - |
| 08/302014 | . | - | - | - | 144,195.00 |
| 12/01/2014 | - | - | 13,16000 | 13,160.00 | - |
| 06\%1/2015 | 120,000.00 | 3.000\% | 13,160.00 | 133,160.00 | - |
| 06/302015 | - | - | - | - | 146,320.00 |
| 12/01/2015 | - | - | 11,360.00 | 11,360.00 | - |
| 06/01/2016 | 125,060.00 | 3.000\% | 11,360.00 | 136,360.00 | - |
| 06/302016 | - | - | - | - | 147,720.00 |
| 12/01/2016 | - | - | 9,485.00 | 9,48500 | - |
| 06/01/2017 | 130,000,00 | 3.500\% | 9,485.00 | 139,48500 | - |
| 06/30/2017 | - | - | - | - | 148,970,00 |
| 12/01/2017 | - | - | 7,210.00 | 7,210.00 | - |
| 06/01/2018 | 135,000.00 | 3.500\% | 7,210.00 | 142,210,00 | - |
| 06/30/2018 | - | - | - | - | 149,420.00 |
| 12/01/2018 | - | - | 4,847.50 | 4,847.50 | - |
| 06\%1/2019 | 140,000,00 | 3.300\% | 4,847.50 | 144,847.50 | - |
| 06/30/2019 | - | - | - | - | 149,695.00 |
| 12/01/2019 | - | - | 2,537.50 | 2,537.50 | . |
| 06/01/2020 | 145,000.00 | 3.500\% | 2,53750 | 147,537.50 | - |
| 06/30/2020 | - | - | - | - | 150,075.00 |
| Total | \$1,125,000.00 | - | \$192,385.00 | \$1.317,385.00 | - |


| Date And Term Structure |  |
| :---: | :---: |
| Dated. | 6/01/2011 |
| First Coupon Date. | 12\%1/2011 |
| Frequency of Interest Payments. | 2 Per Year |
| First Serial Maturity Date. | 6/01/2012 |
| Yield Statisties |  |
| Average Coupon. | 3.2470042\% |
| Average Life. | 5.267 Years |
| Weighted Average Maturity. | 5.267 Years |
| Bond Yield for Arbitrage Purpos | 3.2367391\% |
| Rond Year Dollars. | 85,925.00 |

Morgan Keegan - 865-777-5840
Knoxville Public Finance - SPG


[^2]

[^3]| $\begin{aligned} & \text { Payment } \\ & \text { Number } \end{aligned}$ | Date | Payment Amount | Prin. | Interest | Balance | Yeang Pion. | Yearly Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 133 | 7/20/13 | 2,945,00 | 826.81 | 2,118,99 | 534,205.23 |  |  |
| 134 | $8 / 20113$ | 2,945.00 | 830.08 | 2,114.92 | 533,455.15 |  |  |
| 135 | 920/13 | 2,945.00 | 833.37 | 2,111.63 | 532,631.78 |  |  |
| 136 | 10/20/13 | 2,045,00 | 836.67 | 2,108.33 | 531,795.11 |  |  |
| 137 | $11 / 20 / 13$ | 2,945.00 | 239.98 | 2,105.02 | 530,955.14 |  |  |
| 138 | 12120113 | 2,945.00 | 343.30 | 2,101.70 | 530111.83 |  | 4 |
| 139 | 1/20/14 | 2,945.00 | 846.64 | 2,098.35 | 529,265.19 |  |  |
| 140 | 2120/14 | 2,94.5.00 | 849.99 | 2,095.01 | 528,415,20 |  |  |
| 141 | $3 / 2014$ | 2,94.5.00 | 853.36 | 2,091.64 | 527,561.84 |  |  |
| 142 | 420114 | 2,945.00 | 856.73 | 2,088.27 | $526,705.11$ |  |  |
| 143 | 5/20/1. | 2,945.00 | 860.13 | 2,084.87 | 525,844,98 | Prin. | Interest |
| 1.4 | 6/20/14 | 2,945.00 | 863.53 | 2,081.47 | 524,981.45 | 10,140.58 | 25,199,42 |
| 145 | 7/20/14 | 2,845.00 | 866.95 | 2,078,05 | 524,114.51 |  |  |
| 146 | 8/20/4 | 2,545.00 | 370.38 | 2,074.62 | 523,244.13 |  |  |
| 147 | 9/20/14 | 2,945.00 | 873.83 | 2,071.17 | 522,370.30 |  |  |
| 148 | 10/20/14 | 2,945.00 | 877.28 | 2,067.72 | 521,493.02 |  |  |
| 149 | 11/20/14 | 2,945.00 | 880.76 | 2,064.24 | $520,642.26$ |  |  |
| 150 | 12/20114 | 2,945.00 | 884.24 | 2,060.76 | 519,728.02 |  |  |
| 151 | 1/20/15 | 2,945.00 | 887.74 | 2,057.26 | 518,840.27 |  |  |
| 152 | 212015 | 2,945.00 | 891.26 | 2,053,74 | 54,949.02 |  |  |
| 153 | 3/20/15 | 2,545,00 | 894.79 | 2,050.29 | 517,054,23 |  |  |
| 154 | 4/20/15 | 2,945.00 | 898.33 | 2,048.67 | 516,155.90 |  |  |
| 155 | $5 / 20115$ | 2,945.00 | 901.88 | 2,043.12 | $515,254.02$ | Prin. | interest |
| 156 | $6 / 20 / 15$ | 2,345.00 | 905. 4.5 | 2,039.55 | 514,348.57 | 10,532.89 | 24,707.11 |
| 157 | 7120115 | 2,945.00 | 309.04 | 2,035.96 | 513,439.53 |  |  |
| 158 | 8120/15 | 2,945.00 | 912.64 | 2,032.36 | 512,526.90 |  |  |
| 159 | 9/20/15 | 2,945.00 | 816.25 | 2,028.75 | 511,610.65 |  |  |
| 160 | 1020/15 | 2,945.00 | 919.87 | 2,025.13 | 510,690.77 |  |  |
| 161 | $11 / 20115$ | 2,985.00 | \$23.52 | 2,021.45 | 509,767.26 |  |  |
| 182 | $1220 / 15$ | 2,9455,00 | 927.17 | 2,017.83 | 508,840.09 |  |  |
| 163 | 1/20/16 | 2,945.00 | 930.84 | 2,014.16 | 507,909.25 |  |  |
| 164 | 2120115 | 2,945.00 | 934.53 | 2,010.47 | 506,974.72 |  |  |
| 165 | 3/20/16 | 2,945.00 | 938.23 | 2,006.77 | 506,036.49 |  |  |
| 166 | 4120/10 | 2,945.00 | 941.94 | 2,003.08 | 505,094.56 |  |  |
| 167 | 5120/15 | 2,945.00 | 945.67 | 1,999.33 | 504,148.69 | Prin. | interest |
| 168 | 6120/16 | 2,945.00 | 949.41 | 1,995.59 | 503,199.48 | 11,149.09 | 24,190.91 |
| 169 | 7120/16 | 2,245.00 | 953.17 | 1,991.83 | 502,246.31 |  |  |
| 170 | 8/20/16 | 2,945.00 | 956.94 | 1,988.06 | 501,289.37 |  |  |
| 171 | 9/20/16 | 2,945.00 | 960.73 | 1,984.27 | 500,328.64 |  |  |
| 172 | 10/20/16 | 2,945.00 | 964.53 | 1,980.47 | 499,364.11 |  |  |
| 173 | 11/20/46 | 2,945.00 | 968.35 | 1,976.65 | 498,395.75 | 17 |  |
| 174 | 12/20/16 | 2,945.00 | 972.18 | 1,972.82 | 497,423.57 |  |  |
| 175 | 120117 | 2,945.00 | 976.03 | 1,958.97 | 496,447.54 |  |  |
| 176 | $2120 / 17$ | 2,545.00 | 979.90 | 1,985. 10 | 495,467.64 |  |  |
| 177 | 3120147 | 2,945.00 | 983.77 | 1,951.23 | 494,483.87 |  |  |
| 178 | $4 / 20117$ | 2,945.00 | \$87.67 | 1,957.33 | 4,93,496.20 |  |  |
| 179 | 5120117 | 2,845.00 | 991.58 | 1,953.42 | 492,504.62 | Prin. | interest |
| 180 | 6/20/17 | 2,945.00 | 995.50 | 1,949.50 | 491,509.12 | 11,680.36 | 23,649.64 |

## RDDO2

| Paymemt Number | Date | Payment Amount | Pm. | interest | Balance | Yeanly Prin | Yeafty |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 85 | 2,7120109 | 2,945.00 | 683.99 | 2.261 .01 | 570.517.57 |  | Interest |
| 88 | 8/20/09 | 2,945.00 | 685.70 | 2,258.30 | 569,830.97 |  |  |
| 87 | \%,0000 | 2,945,00 | 689.42 | 2,255,58 | $569,141.55$ |  |  |
| 88 | -10,20109 | 2,045.00 | 692.15 | 2,252.85 | 588,449.40 |  |  |
| 90 | 17/20109 | 2,945.00 | 694.89 | 2,250.11 | 537,75\%.52 |  |  |
| 91 | \% 1/20110 | 2,945,00 | 597.54 | 2,247.36 | 567,056.88 |  |  |
| 92 | $\checkmark 220110$ | 2,945.00 | 700.40 | 2,244.60 | 566,356.48 |  |  |
| 93 | $\sqrt{3} / 20$ | 2,945.00 | 703.17 | 2,241.83 | 565,653.30 |  |  |
| 96 | $\checkmark 420 / 10$ | 2,945.00 | 705.96 | 2,239,04 | 564,947.35 |  |  |
| 95 | $\checkmark 5 / 20110$ | 2,945,00 | 708.75 | 2,236.25 | 564,238.60 |  |  |
| 96 | $\sqrt{6 / 20110}$ | $2,945,00$ 2,94500 | 711.55 | 2,233.4.4 | 563,527.04 | Prin. | Interest |
| 97 | * $7 / 20110$ | 2,945.00 | -714.3.7 | 2,230.63 | 562,812.67 | 8,388.99 | 28,951.01 |
| 98 | V82010 | 2,945.00 | -720.04 | 2,224,96 | 502, 095.41 |  |  |
| 99 | 9/20110 | 2,945.00 | 722.89 | 2,222.11 | 560,652.54 |  |  |
| 100 | V10/20110 | 2,945.00 | 72.5.75 | 2,219.25 | $559,926.79$ |  |  |
| 101 | $1120 / 10$ | 2,945.00 | 728.62 | 2,216.35 | 559,198.17 |  |  |
| 102 | $12120 / 10$ | 2,945.00 | 731.51 | 2,213.49 | 558,466.85 |  |  |
| 103 | $120 / 11$ | 2,945.00 | 734.40 | 2,210.60 | 557,732.26 |  | , |
| 104 | 22011 | 2,945.00 | 737.31 | 2,207.69 | 556,994.95 |  |  |
| 105 | 320/11 | 2,545.00 | 740.23 | 2,204.77 | 556,254.72 |  |  |
| 106 | 4/20111 | 2,945,00 | 743.16 | 2,201.84 | 555,511.56 |  |  |
| 107 | 5/20/11 | 2,645.00 | 745.10 | 2,198,90 | 554,765,46 | Prin. | Interest |
| 108 | 6/20/11 | 2,545.00 | 749.05 | 2,195.95 | 554.016 .41 | 8.736 .26 | 26.54374 |
| 109 | $7120 / 11$ | 2,945.00 | 75.02 | 2.192 .98 | 553,204,39 | 8,130.26 | 6,3+3.74 |
| 110 | $8 / 20 / 11$ | \$985.00 | 755.00 | 2,100.00 | 552,509,40 |  |  |
| 11. | 9/20111 | 2,S寺.00 | 757.98 | 2,187.02 | 551,751.41 |  |  |
| 112 | 10 2011 1 | 2,945.00 | 760.98 | 2,184.02 | 550,990.43 |  |  |
| 113 | $11 / 20 / 11$ | 2,945.00 | 764.00 | 2,181.00 | $550,226.43$ |  |  |
| $15 \%$ | 12/20114 | 2,945.00 | 767.02 | 2,177.98 | 549,459.41 |  |  |
| 115 | - $1120 / 12$ | 2,945.00 | 770.06 | 2,174.94 | 548,689.36 |  |  |
| 116 | - $2120 / 12$ | 2,945.00 | 773,10 | 2,171.90 | 547,916.25 |  |  |
| 117 | $28 / 20 / 12$ | 2,945.00 | 776.16 | 2,468.84 | 547,140.09 |  |  |
| 118 | 220\%\%2 | 2,345.00 | 779.24 | 2,165,76 | 546,350.85 |  |  |
| 119 | 512012 | 2,945.00 | 782.32 | 2,162.6㝝 | 545,578.53 | Prin. | Interest |
| 120 | $6 / 20 / 12$ | 2,945.00 | 785.42 | 2,159,58 | 544,793,11 | 9,223.30 | 26,116.70 |
| 121 | 7120112 | 2,945.00 | 788.53 | 2,156.47 | 544,004.58 |  |  |
| 122 | - 6120112 | 2,945:00 | 791:65 | 2,153.35 | 54,3,212.93 |  |  |
| 123 | 9/20/12 | 2,945.00 | 794.78 | 2.150 .22 | 542,418.15 |  |  |
| 124 | $10 / 20112$ | 2,945.00 | 797.93 | 2,147.07 | 541,620.22 |  |  |
| 125 | $1120 / 12$ | 2,945.00 | 801.09 | 2,143.91 | 540,819,14 |  |  |
| 126 | 1220142 | 2,945.00 | 804.26 | 2,140.74 | 540,014.88 |  |  |
| 127 | 1120193 | 2,945.00 | 807.44 | 2,137.55 | 535,207,44 |  |  |
| 128 | 2120113 | 2,985,00 | 810.64 | 2,134.36 | 538,396,80 |  |  |
| 129 | 3/20/13 | 2,985.00 | 813.85 | 2,131.15 | 537.582 .95 |  |  |
| 130 | 4/20/13 | 2,945.00 | 817.07 | 2,127.93 | 536,765,89 |  |  |
| 131 | 5/20/13 | 2,945.00 | 820.30 | 2,124.70 | 535,945.59 | Prin. | Interest |
| 132 | 6/20/13 | 2,945.00 | 823.55 | 2,121.45 | 535,122,04 | 9,671,07 | 25,658.93 |

$\$ 305,000$
Roane County, Tennessee General Obligation Bonds, Series 2010A

Wastewater System
EQuip
Debt Service

| - Date | Priacipal | Coupan: | Interest | Total P+I | Fiscal lotal |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 051052010 | - | - | - |  |  |
| 12/01/2010 | - | - | 5,164.31 | 5.164.31 |  |
| 06/01/2011 | 20,000,00 | 3.000\% | 4,512,50 | 5.164 .31 $24,512.50$ | - |
| 05/30/2011 | ,010.00 | 3.00\% | 4,512.50 | 24,512.50 | 20,676.81 |
| 12/01/2011 | - | - | 4,212.50 | 4,212,50 | 29,676.81 |
| $05101 / 2012$ | 25,000.00 | 3.000\% | 4,212.50 | 29,212.50 | $\cdot$ |
| 051302012 | - | - |  |  | 33.42500 |
| $1201 / 2012$ | 30,009 | - | 3,837.50 | 3,837.50 | 33,42500 |
| 0501/2013 | 30,000,00 | 2.000\% | 3,837.50 | 33,837.50 |  |
| 05/3012013 | - | - | - | 33, ${ }^{\text {a }}$ | 376750 |
| 1201:2013 | - | . | 3,537.50 | 3,537,50 | 37,675.00 |
| 06/012014 | 30,000.00 | 3.000\% | 3,537.50 | 33,537.50 | - |
| 06/30/2014 | - | - | - | 33,537.50 | 37,075.00 |
| 12/01/2014 | - | - | 3,087.50 | 3,087.50 | 37,075.00 |
| $05 / 01 / 2015$ | 30,000,00 | 3.000\% | 3,087,50 | 33,087.50 | - |
| 06/30/2015 | - | - | , | 3,087.50 | 36.175 .00 |
| 12/01/2015 | - | - | 2,637.50 | 2,637.50 | 36,175.00 |
| 06/01/2015 | 30,000.00 | 3.000\% | 2,637.50 | 32,637.50 | - |
| 06/30/2016 | - | . - | - | 32,037.50 | 3577500 |
| 12/01/2016 | $\checkmark$ | - | 2,187.50 | 2,187.50 | 35,275,00 |
| 06/01/2017 | 35,000.00 | 3.000\% | 2,187.50 | 37,187.50 | - |
| 06/30/2017 | - | - | 2,187. | 3,287.50 | 39,375.00 |
| 12/01/2017 | - | $\sim$ | 1,652.50 | 1,662.50 | 39,375.00 |
| 05/01/2018 | 35,000.00 | 3.000\% | 1,652.50 | 36,662.50 | - |
| 05/3022018 | - | - | 1,52.50 | 36,62.50 | 38,325.00 |
| 12\%0:/2018 | - | - | 1.137.50 | 1,137.50 | 38,325.00 |
| 05/01/2019 | 35,000.00 | 3750\% | 1,137.50 | 36,137.50 | - |
| 06/302019 | - | - | - | , 13.50 | 37,275.00 |
| 12/01/2019 | - | - | 568.75 | 568.75 | 3T,2700 |
| 06/01/2020 | 35,000.00 | 3.250\% | 568.75 | 35,568.75 | - |
| 06/30/2020 | - | - | - | , | 36,137.50 |
| Toral | \$305,000,00 | - | \$55,414.31 | \$360,414.31 | - |


| Date And Term Structure |  |
| :---: | :---: |
| Dated |  |
| First Coupon Date... | 5/05/2010 |
| Frecuency of Interest Payments. | 12/01/2010 |
| First Serial Maturity Date........ | $\begin{aligned} & 2 \text { Pes Year } \\ & 6 / 01 / 2011 \end{aligned}$ |
| Yield Statistics |  |
| Average Coupon. |  |
| Weigbled Average Maturity, |  |
| Bond Yield for Abitrago Purpose |  |
| Bond Year Dotlars. | \$1,82203 |

Morgan Keegan \& Company, Inc - 865-777-5840
Knoxville Public Finance - SPG


[^0]:    Date And Term Structure
    
    
    Frequency of Interest Payments......... ................................................................................................................................................ Per Year
    
    Yield Statistics
    
    
    
    
    

[^1]:    Jan 2, 2014 $1: 11$ pm Papered by TMBF/TCSLP

[^2]:    * Please note that the final payment may differ slightly from the regularly scheduled monthly payment.

[^3]:    Please note that the final paymem may difer slighty from the regulariy scheduled monthly paymeat.

