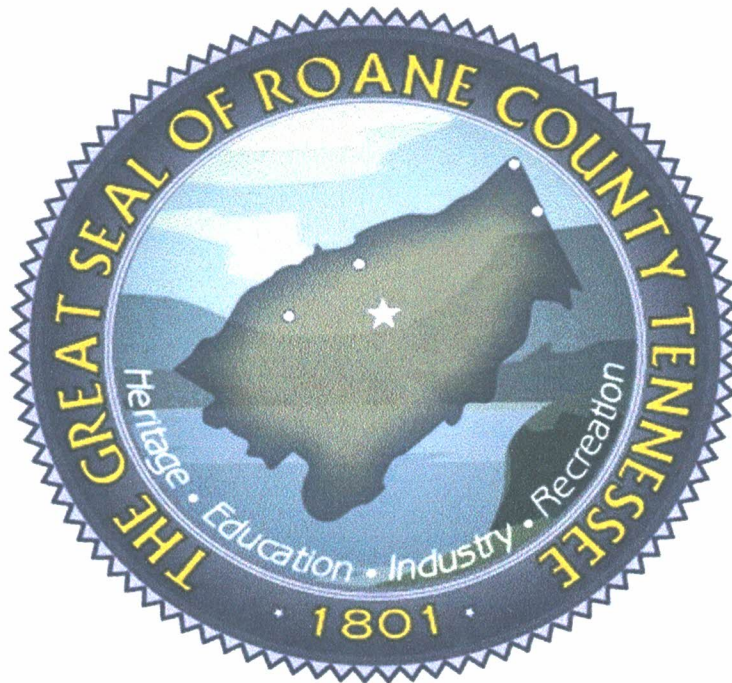


# ANNUAL DEBT REPORT

As of July 1, 2018



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  
STAKEHOLDERS



Office of the County Executive  
Roane County Courthouse

**July 1, 2018**

**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, 2018. Ratios reflect outstanding debt as of June 30, 2018. The multi-year budgets reflect estimated budget data through the year 2029.

Sincerely,

**Ronald B. Woody**

**Roane County Executive**

OBJECTIVES  
AND  
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:
  - Enhance decision-making process and provide transparency
  - 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, 2017
- 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:
  - Comply with the Roane County Fund Balance Policy, Resolution #04-11-32, adopted April 11, 2011 and amended with Resolution #07-12-07. This policy is used in preparing the multi-year budgets
  - Graph the multi-year debt budgets of Revenue, Expenditures, Ending Fund Balance, and Change in Fund Balance
  - Graph the property tax pennies needed to support the multi-year budgets
- Create and update an Input/Output Spreadsheet which will be used to:
  - Estimate Value of the Penny
  - Program total outstanding debt and net debt

- Provide benchmark data
- Calculate potential new debt cost
- 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 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 Risk**

All 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.
  - Generally for funds operating on property tax or other revenue that is not received on a monthly basis.

- 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.
  - External cost of borrowing (excluding interest rate) should be zero since debt would be issued through internal borrowing or with a bank financial institution.
  - 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 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.
  - External cost would be anticipated and fully disclosed on State Form CT- 0253 **(Attachment A)** prior to the contract to secure the funding.
  - 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:

- Cost of administration is relatively high
- Risk of an unsuccessful project is often high
- Often Tax Incremental Financing reflects a backloaded debt
- 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 Cost**

In 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:
  - Approval of the County Legislative Body by resolution.
  - Cash Flow “pro forma”
  - 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:
  - Straight line amortization repayment schedule of the proposed new debt.

- 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.
  - 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.
  - 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.
  - 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.
  - 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.

Revised with adoption of Resolution #07-12-08  
Original Resolution #03-11-23

- 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.



Revised with adoption of Resolution #07-12-08

Original Resolution #03-11-23

- 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:**

○ **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.

- **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.
- **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.

- **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%.
- **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.
- **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%.

- **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.
- **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.

- **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.
- **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:

- 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.
- 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**

- 101 General Fund between 35 – 45% of proposed appropriation
- 131 Highway Fund between 7 – 15% of proposed appropriation
- 151 General Debt Service Fund between 50 – 150% of proposed appropriation
- 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%
- 156 Education Debt Fund Balance between 50 – 150% of proposed appropriation
- All Other Special Revenue Funds – specifically noted during budget deliberation 10-100%
- Capital Project Funds – cash flow and proposed future scheduled projects – reviewed and discussed annually
- Enterprise Fund – cash flow and capital projects – reviewed and discussed annually
- 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 FY17



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

For FY 17

Description of Indebtedness	Original Amount of Issue	Outstanding 7/1/2016	Issued During Period	Paid and/or Matured During Period	Debt Refunded	Outstanding 6/30/2017
<b>GOVERNMENTAL ACTIVITIES</b>						
<b>OTHER LOANS PAYABLE</b>						
Payable through General Debt Service Fund						
Industrial Park Refunding - Sevier Co. PBA - B-3-A	3,640,000	387,736	0	387,736	0	0
Industrial Park Land - Sevier Co. PBA - B-3-A	835,000	87,264	0	87,264	0	0
Public Improvement - Blount Co. PBA - B-13-A	1,750,000	1,600,000	0	150,000	1,450,000	0
Public Improvement - Blount Co. PBA - B-20-A	750,000	750,000	0	0	0	750,000
<b>Total Other Loans Payable</b>		<b>2,825,000</b>	<b>0</b>	<b>625,000</b>	<b>1,450,000</b>	<b>750,000</b>
<b>BONDS PAYABLE</b>						
Payable through General Debt Service Fund						
General Obligation Refunding Bonds, Series 2008A	9,975,000	9,975,000	0	350,000	9,400,000	540,000
General Obligation Refunding Bonds, Series 2008B	7,410,000	6,325,000	0	750,000	0	5,575,000
General Obligation Refunding Bonds, Series 2009A	5,628,497	2,820,549	0	700,000	0	2,120,549
General Obligation Refunding Bonds, Series 2010A	3,810,000	1,298,595	0	0	0	1,298,595
General Obligation Refunding Bonds, Series 2017A	9,770,000	0	977,000	0	0	9,770,000
General Obligation Refunding Bonds, Series 2017B	1,470,000	0	147,000	0	0	1,470,000
General Obligation Bonds, Series 2009A	2,696,503	1,354,451	0	0	0	1,354,451
General Obligation Bonds, Series 2010A	3,185,000	946,405	0	300,000	0	646,405
<b>Total Bonds Payable</b>		<b>22,720,000</b>	<b>11,240,000</b>	<b>1,785,000</b>	<b>9,400,000</b>	<b>22,775,000</b>
<b>TOTAL PAYABLE THROUGH GENERAL DEBT SERVICE</b>		<b>25,545,000</b>	<b>11,240,000</b>	<b>2,410,000</b>	<b>10,850,000</b>	<b>23,525,000</b>
Payable through Rural Debt Service Fund						
Rural School Refunding, Series 2010B	1,180,000	300,000	0	100,000	0	200,000
Rural School Refunding, Series 2014	11,435,000	9,075,000	0	1,275,000	0	7,800,000
<b>TOTAL PAYABLE THROUGH RURAL DEBT SERVICE</b>		<b>9,375,000</b>	<b>0</b>	<b>1,375,000</b>	<b>0</b>	<b>8,000,000</b>
Payable through Education Debt Service Fund						
Rural School Refunding, Series 2008C	1,600,000	545,000	0	120,000	0	425,000
Rural School Bonds Series 2009B	1,325,000	550,000	0	130,000	0	420,000
<b>TOTAL PAYABLE THROUGH EDUCATION DEBT SERVICE</b>		<b>1,095,000</b>	<b>0</b>	<b>250,000</b>	<b>0</b>	<b>845,000</b>

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

For FY 17

Description of Indebtedness	Original Amount of Issue	Outstanding 7/1/2016	Issued During Period	Paid and/or Matured During Period	Debt Refunded	Outstanding 6/30/2017
<b>Operational Debt</b>						
<b>Other Loans Payable</b>						
Energy Efficient Loan, Schools 2011 Pd with transfer from 141	558,217	333,411	0	59,724	0	273,687
Energy Efficient Loan, Schools 2011 Pd with transfer from 141	385,910	260,486	0	38,592	0	221,894
<b>Total Other Loans Payable (Pd out of 141)</b>		<b>593,897</b>	<b>0</b>	<b>98,316</b>	<b>0</b>	<b>495,581</b>
<b>TOTAL GOVERNMENTAL ACTIVITIES paid from 151,152,156</b>		<b>36,608,897</b>	<b>11,240,000</b>	<b>4,133,316</b>	<b>10,850,000</b>	<b>32,865,581</b>
<b>BUSINESS-TYPE ACTIVITIES</b>						
State Revolving Loan Fund, 2011 (Pd out of 204) *	4,387,595	4,000,671	293,408	188,696	0	4,105,383
<b>Total Other Loans Payable (Pd out of 204)</b>		<b>4,000,671</b>	<b>293,408</b>	<b>188,696</b>	<b>0</b>	<b>4,105,383</b>
<b>Bonds Payable</b>						
General Obligation Bonds, Series 2010A	305,000	140,000	0	35,000	0	105,000
Water and Sewer Revenue and Tax, Series 2000	620,000	503,111	0	11,690	0	491,421
<b>Total Bonds Payable (Pd out of 204)</b>		<b>643,111</b>	<b>0</b>	<b>46,690</b>	<b>0</b>	<b>596,421</b>
<b>TOTAL BUSINESS-TYPE ACTIVITIES</b>		<b>4,643,782</b>	<b>293,408</b>	<b>235,386</b>	<b>0</b>	<b>4,701,804</b>
<b>TOTAL DEBT</b>		<b>41,252,679</b>	<b>11,533,408</b>	<b>4,368,702</b>	<b>10,850,000</b>	<b>37,567,385</b>

Information can be found in the annual financial audit under Miscellaneous Schedules L-1

# SECTION 4

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

Year-End Closing-FY18

Roane County, Tennessee  
 Schedule of Changes in Long-term Notes, Other Loans, Capital Leases, and Bonds  
 For the Year Ended June 30, 2018  
*unaudited*

For FY 18

Description of Indebtedness	Original Amount of Issue	Outstanding 7/1/2017	Issued During Period	Paid and/or Matured During Period	Debt Refunded	Outstanding 6/30/2018
<b>GOVERNMENTAL ACTIVITIES</b>						
<b>OTHER LOANS PAYABLE</b>						
Payable through General Debt Service Fund						
Public Improvement - Blount Co. PBA - B-20-A	750,000	750,000	0	0	0	750,000
<b>Total Other Loans Payable</b>	<b>750,000</b>	<b>750,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>750,000</b>
<b>BONDS PAYABLE</b>						
Payable through General Debt Service Fund						
General Obligation Refunding Bonds, Series 2008A	9,975,000.00	540,000	0	40,000	500,000	0
General Obligation Refunding Bonds, Series 2017A	9,770,000.00	9,770,000	0	200,000	0	9,570,000
General Obligation Refunding Bonds, Series 2017B	1,470,000.00	1,470,000	0	200,000	0	1,270,000
General Obligation Refunding Bonds, Series 2018	8,805,000.00	0	8,805,000	0	0	8,805,000
General Obligation Refunding Bonds, Series 2008B	7,410,000.00	5,575,000	0	1,525,000	4,050,000	0
General Obligation Refunding Bonds, Series 2009A	5,628,497.00	2,120,549	0	0	2,120,549	0
General Obligation Bonds, Series 2009A	2,696,503.00	1,354,451	0	0	1,354,451	0
General Obligation Refunding Bonds, Series 2010A	3,810,000.00	1,298,595	0	280,000	1,018,595	0
General Obligation Bonds, Series 2010A HWY	3,185,000.00	646,405	0	100,000	546,405	0
<b>Total Bonds Payable</b>	<b>22,775,000</b>	<b>22,775,000</b>	<b>8,805,000</b>	<b>2,345,000</b>	<b>9,590,000</b>	<b>19,645,000</b>
<b>TOTAL PAYABLE THROUGH GENERAL DEBT SERVICE</b>	<b>23,525,000</b>	<b>23,525,000</b>	<b>8,805,000</b>	<b>2,345,000</b>	<b>9,590,000</b>	<b>20,395,000</b>
Payable through Rural Debt Service Fund						
Rural School Refunding, Series 2010B	1,180,000	200,000	0	200,000	0	0
Rural School Refunding, Series 2014	11,435,000	7,800,000	0	1,350,000	6,450,000	0
Rural School Refunding, Series 2017C	6,450,000	0	6,450,000	0	0	6,450,000
<b>TOTAL PAYABLE THROUGH RURAL DEBT SERVICE</b>	<b>8,000,000</b>	<b>8,000,000</b>	<b>6,450,000</b>	<b>1,550,000</b>	<b>6,450,000</b>	<b>6,450,000</b>
Payable through Education Debt Service Fund						
Rural School Refunding, Series 2008C	1,600,000	425,000	0	145,000	0	280,000
Rural School Bonds Series 2009B	1,325,000	420,000	0	135,000	0	285,000
<b>TOTAL PAYABLE THROUGH EDUCATION DEBT SERVICE</b>	<b>845,000</b>	<b>845,000</b>	<b>0</b>	<b>280,000</b>	<b>0</b>	<b>565,000</b>

Roane County, Tennessee  
 Schedule of Changes in Long-term Notes, Other Loans, Capital Leases, and Bonds  
 For the Year Ended June 30, 2018  
*unaudited*

For FY 18

Description of Indebtedness	Original Amount of Issue	Outstanding 7/1/2017	Issued During Period	Paid and/or Matured During Period	Debt Refunded	Outstanding 6/30/2018
<b>Operational Debt</b>						
<b>Other Loans Payable</b>						
Energy Efficient Loan, Schools 2011 Pd with transfer from 141	558,217	273,687	0	59,724	0	213,963
Energy Efficient Loan, Schools 2011 Pd with transfer from 141	385,910	221,894	0	38,592	0	183,302
<b>Total Other Loans Payable (Pd out of 141)</b>		<u>495,581</u>	<u>0</u>	<u>98,316</u>	<u>0</u>	<u>397,265</u>
<b>TOTAL GOVERNMENTAL ACTIVITIES paid from 151,152,156</b>		<u>32,865,581</u>	<u>15,255,000</u>	<u>4,273,316</u>	<u>16,040,000</u>	<u>27,807,265</u>
<b>BUSINESS-TYPE ACTIVITIES</b>						
State Revolving Loan Fund, 2011	4,387,959	4,105,383	0	109,463	0	3,995,920
<b>Total Other Loans Payable (Pd out of 204)</b>		<u>4,105,383</u>	<u>0</u>	<u>109,463</u>	<u>0</u>	<u>3,995,920</u>
<b>Bonds Payable</b>						
General Obligation Bonds, Series 2010A	305,000	105,000	0	105,000	0	-
Water and Sewer Revenue and Tax, Series 2000	620,000	491,421	0	12,258	0	479,163
<b>Total Bonds Payable (Pd out of 204)</b>		<u>596,421</u>	<u>0</u>	<u>117,258</u>	<u>0</u>	<u>479,163</u>
<b>TOTAL BUSINESS-TYPE ACTIVITIES</b>		<u>4,701,804</u>	<u>0</u>	<u>226,721</u>	<u>0</u>	<u>4,475,083</u>
<b>TOTAL DEBT</b>		<u>37,567,385</u>	<u>15,255,000</u>	<u>4,500,037</u>	<u>16,040,000</u>	<u>32,282,348</u>

# 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 Long-term Notes, Other Loans, Capital Leases, and Bonds
- Providing benchmark ratio calculation

Helpful

Penny Value		Total	151	152	156
Penny Value to start (Input)	7/1/2018		120,000	94,000	105,400
Growth of the Penny (Input)			3%	3%	3%
Penny Value to end (Calculated)	7/1/2019		123,600	96,820	108,562

Debt Amount						Paid out of Fund 204
Total Debt Outstanding (Output)	7/1/2018	\$ 32,282,348	\$ 20,792,265	\$ 6,450,000	\$ 565,000	\$ 4,475,083
Fund Balance end of year (Output)	7/1/2018	\$ 2,640,528	\$ 1,717,165	\$ 592,935	\$ 330,427	0
Net Debt (Calculated)	7/1/2018	\$ 29,641,820	\$ 19,075,100	\$ 5,857,065	\$ 234,573	\$ 4,475,083
PAID OUT OF 151,152,156				27,807,265		
Adjustments or Transfers				\$ -		
Governmental Funds				\$ 27,807,265		
Fund Balance end of year				\$ (2,640,528)		
Net Debt of Governmental Funds				\$ 25,166,737		

Data for Benchmarking						
Assessed Value of Property (Input)	7/1/2018	1,262,901,847				
Per Capita Income (Input)	2010	33,616				
Population (Input)	2010	54,181				
Total Govt expenditure budget (101-156) (Input)		101,754,341	(Output)	(Output)	(Output)	
Debt expenditure budget (151-156) (Calculated)		5,067,264	3,121,556	1,635,465	310,243	

Potential New Debt *EXAMPLE*		
New Debt Amount (Input)		1,000,000
Term of New Debt (Input)		30
Interest Rate for New Debt (Input)		4%
Calculated Annual Amount (Output)		57,830
# of Pennies to pay New Debt (Calculated)		0.48
		0.55

Benchmark Calculations of Governmental Debt					
	Net Debt / per Capita	Total Debt / per Capita	Net Debt / Assessed Property Value	Debt as % of Personal Income	Ratio of Total Debt Exp / Total Gov't Exp
National Benchmark		\$ 1,200			
Goal	\$ 800	\$ 800	< 10%	< 15%	< 5%
Roane County	\$ 464	\$ 513	1.99%	1.53%	4.98%



# SECTION 6

## BENCHMARK COMPARISONS

Net Debt Per Capita

Total Debt Per Capita

Net Debt as a % of Assessed Property Value

Debt as a % of Personal Income

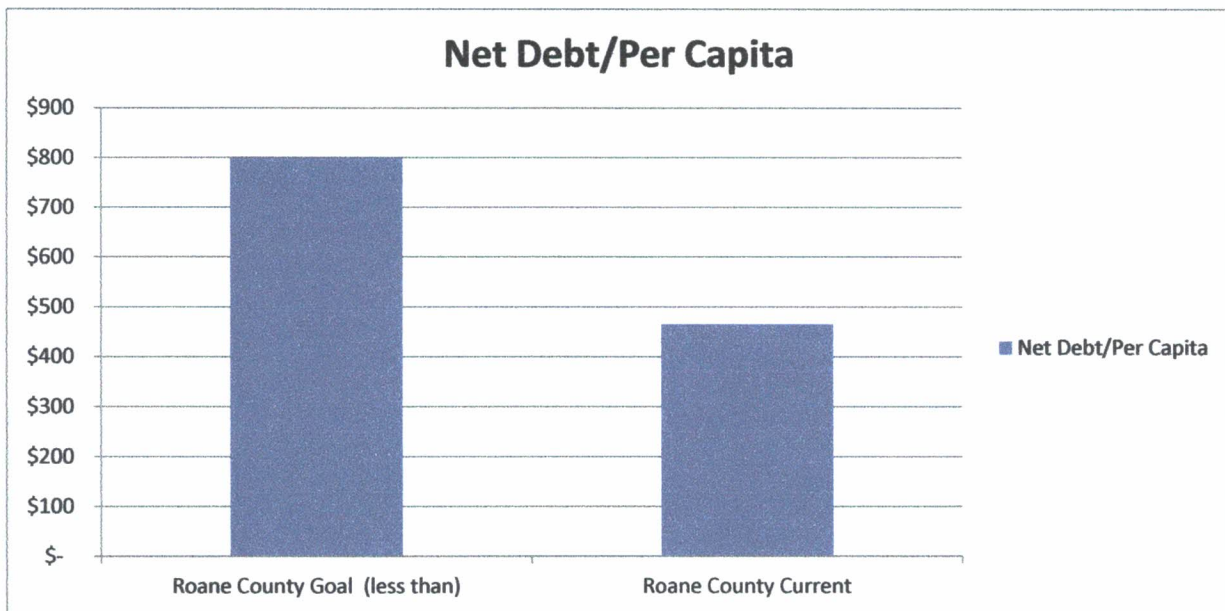
Total Debt Tax Rate as a % of Total Tax Rate

Total Debt Expenditures as a % of Total  
Operational Expenditures

## Net Debt/Per Capita

Calculation Method		
Net Debt	\$	25,166,737
Population	÷ \$	54,181
	\$	464

Roane County Goal (less than)	\$	800
Roane County Current	\$	464



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.

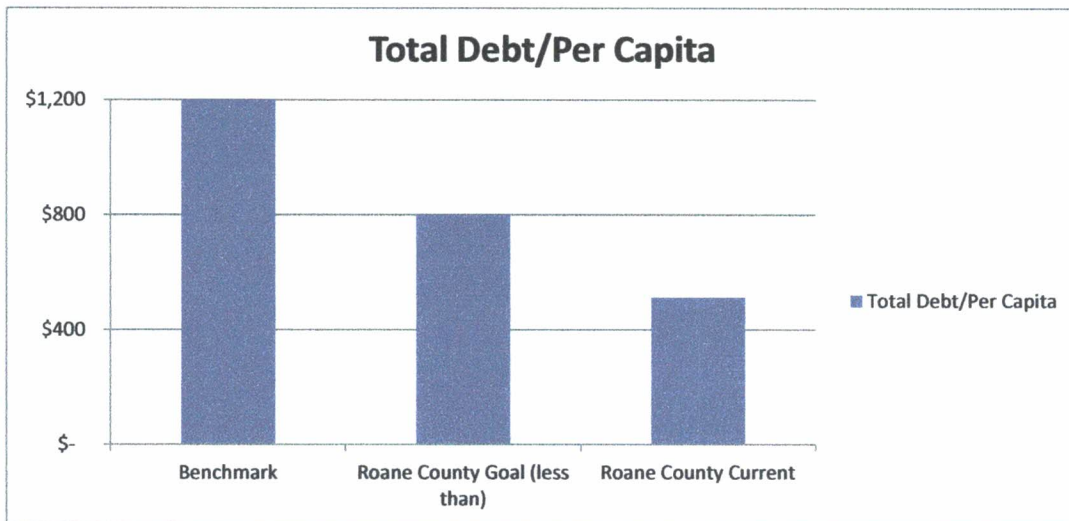
Roane County's Goal is to have Net Debt over Per Capita of less than \$800. This would equate to approximately \$43.3M in debt. This is a manageable figure based on our goal. Currently we have approximately \$37.2M.

Simply, if every citizen of Roane County handed over to the County an additional \$464 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	\$	27,807,265
Population	÷	54,181
	\$	513

Benchmark	\$	1,200
Roane County Goal (less than)	\$	800
Roane County Current	\$	513



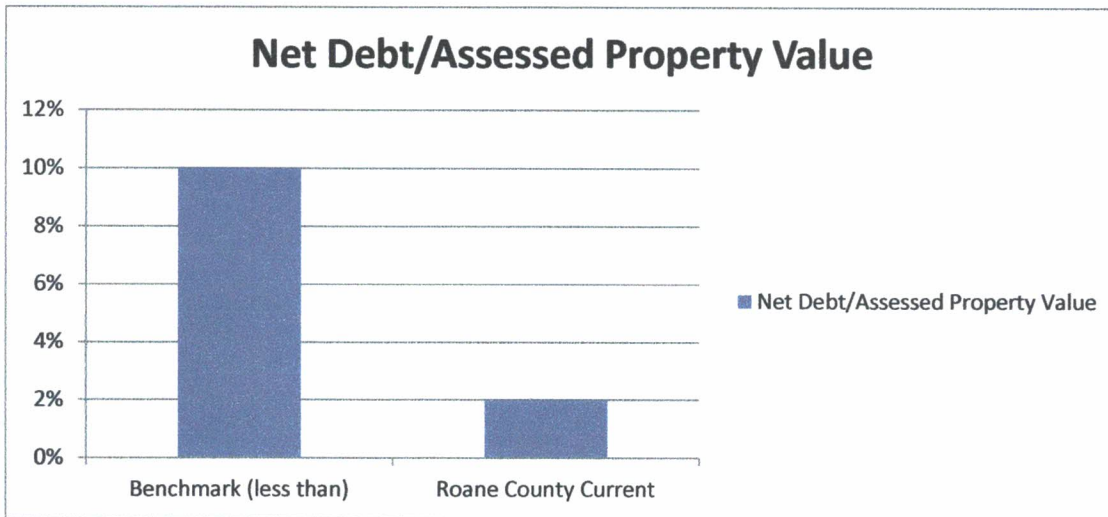
Total Debt Per Capita shows how much outstanding principal in debt the County owes in relation to the total population of the County. Total Debt is all outstanding principal payments divided by the current County population. It is the goal of Roane County to have less than \$800 principal indebtedness 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 \$513 of principal indebtedness per citizen. This number is below our goal and the national 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.

## Net Debt/Assessed Property Value

Calculation Method		
Net Debt Amount	\$	25,166,737
Assessed Property Value	÷ \$	1,262,901,847
		1.99%

Benchmark (less than)	10%
Roane County Current	1.99%



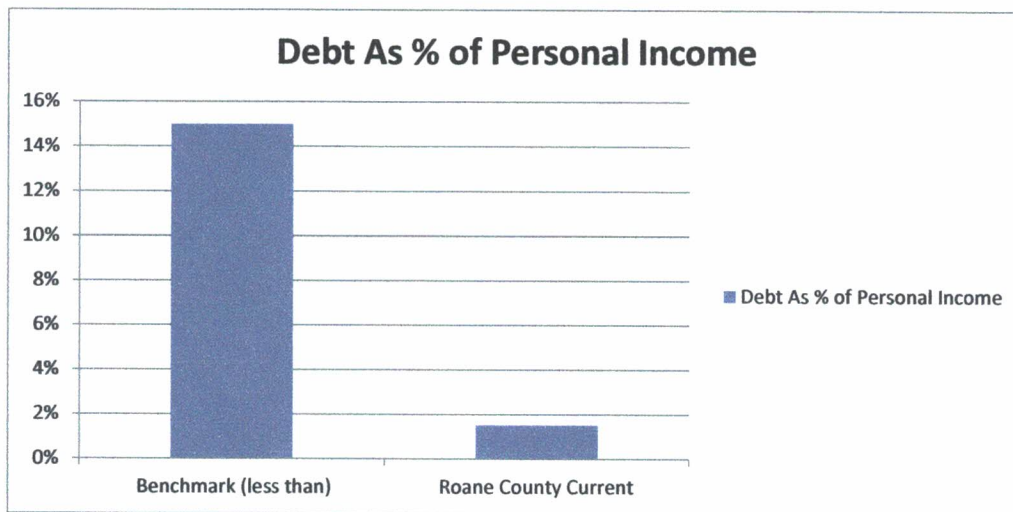
Net Debt divided by the Assessed Property Value gives a measurement of how much debt exists in relation to the ultimate tax base that must support that debt. The larger the percentage, the higher the tax rate associated with debt must be. It is the intent of Roane County to be well below the benchmark 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 1.99%. 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	÷ \$	27,807,265
Population	÷	54,181
per capita income	÷ \$	33,616
		1.53%

	Debt As % of Personal Income
Benchmark (less than)	15%
Roane County Current	1.53%



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 1.53%. 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:

	2017	2018	2019
Total Debt Tax Rate:	0.31	0.31	0.31
Total Tax Rate:	<u>2.57</u>	<u>2.57</u>	<u>2.57</u>
% of Tax Rate to Support Debt:	12.06%	12.06%	12.06%

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

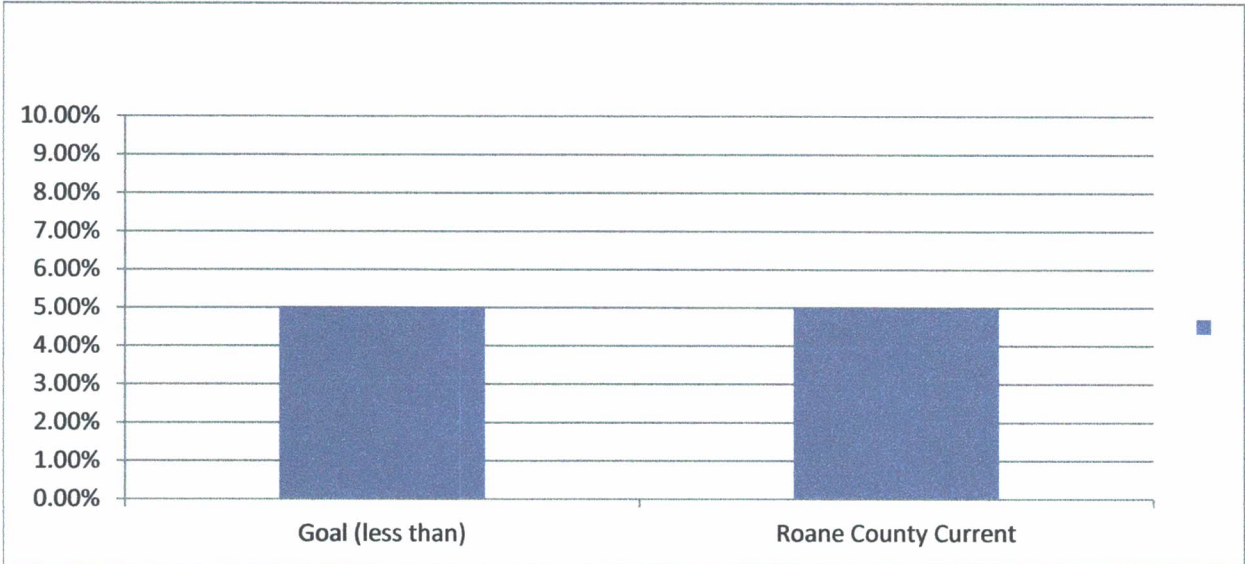
	2016	2017	2018	2018
Total Debt Expenditures:	5,087,696	5,123,604	5,555,656	5,067,264
Total Operational Expenditures:	<u>94,693,005</u>	<u>96,739,523</u>	<u>100,434,775</u>	<u>101,754,341</u>
% of Operational Costs Related to Debt:	5.37%	5.30%	5.53%	4.98%

*2018 debt expenditures reflect refinancing principle indebtedness*

### Ratio of Total Debt Exp/Total Govt Exp

Calculation Method		
Total Debt Expenditures	÷	5,067,264
Total Operational Expenditures	÷	101,754,341
		4.98%

Goal (less than)	5.00%
Roane County Current	4.98%



# 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.



# LOAN AMORTIZATION SCHEDULE

## ENTER VALUES

Loan amount	\$1,000,000.00
Annual interest rate	4.00%
Loan period in years	30
Number of payments per year	1
Start date of loan	7/1/2018

Optional extra payments \$ -

## LOAN SUMMARY

Scheduled payment	\$57,830.10
Scheduled number of payments	30
Actual number of payments	30
Total early payments	\$0.00
Total interest	\$605,391.12

LENDER NAME Bank

PMT NO	PAYMENT DATE	BEGINNING BALANCE	SCHEDULED PAYMENT	EXTRA PAYMENT	TOTAL PAYMENT	PRINCIPAL	INTEREST	ENDING BALANCE	CUMULATIVE INTEREST
1	7/1/2018	\$1,000,000.00	\$57,830.10	\$0.00	\$57,830.10	\$17,830.10	\$40,000.00	\$82,169.90	\$40,000.00
2	7/1/2019	\$982,169.90	\$57,830.10	\$0.00	\$57,830.10	\$18,543.30	\$39,286.80	\$63,626.60	\$79,286.80
3	7/1/2020	\$963,626.60	\$57,830.10	\$0.00	\$57,830.10	\$19,285.04	\$38,545.06	\$44,341.56	\$117,831.86
4	7/1/2021	\$944,341.56	\$57,830.10	\$0.00	\$57,830.10	\$20,056.44	\$37,773.66	\$24,285.13	\$155,605.52
5	7/1/2022	\$924,285.13	\$57,830.10	\$0.00	\$57,830.10	\$20,858.69	\$36,971.41	\$903,426.43	\$192,576.93
6	7/1/2023	\$903,426.43	\$57,830.10	\$0.00	\$57,830.10	\$21,693.04	\$36,137.06	\$881,733.39	\$228,713.98
7	7/1/2024	\$881,733.39	\$57,830.10	\$0.00	\$57,830.10	\$22,560.76	\$35,269.34	\$859,172.63	\$263,983.32
8	7/1/2025	\$859,172.63	\$57,830.10	\$0.00	\$57,830.10	\$23,463.19	\$34,366.91	\$835,709.43	\$298,350.23
9	7/1/2026	\$835,709.43	\$57,830.10	\$0.00	\$57,830.10	\$24,401.72	\$33,428.38	\$811,307.71	\$331,778.60
10	7/1/2027	\$811,307.71	\$57,830.10	\$0.00	\$57,830.10	\$25,377.79	\$32,452.31	\$785,929.92	\$364,230.91
11	7/1/2028	\$785,929.92	\$57,830.10	\$0.00	\$57,830.10	\$26,392.90	\$31,437.20	\$759,537.02	\$395,668.11
12	7/1/2029	\$759,537.02	\$57,830.10	\$0.00	\$57,830.10	\$27,448.62	\$30,381.48	\$732,088.40	\$426,049.59
13	7/1/2030	\$732,088.40	\$57,830.10	\$0.00	\$57,830.10	\$28,546.56	\$29,283.54	\$703,541.84	\$455,333.12
14	7/1/2031	\$703,541.84	\$57,830.10	\$0.00	\$57,830.10	\$29,688.43	\$28,141.67	\$673,853.41	\$483,474.80
15	7/1/2032	\$673,853.41	\$57,830.10	\$0.00	\$57,830.10	\$30,875.96	\$26,954.14	\$642,977.45	\$510,428.93
16	7/1/2033	\$642,977.45	\$57,830.10	\$0.00	\$57,830.10	\$32,111.00	\$25,719.10	\$610,866.45	\$536,148.03
17	7/1/2034	\$610,866.45	\$57,830.10	\$0.00	\$57,830.10	\$33,395.44	\$24,434.66	\$577,471.00	\$560,582.69
18	7/1/2035	\$577,471.00	\$57,830.10	\$0.00	\$57,830.10	\$34,731.26	\$23,098.84	\$542,739.75	\$583,681.53
19	7/1/2036	\$542,739.75	\$57,830.10	\$0.00	\$57,830.10	\$36,120.51	\$21,709.59	\$506,619.24	\$605,391.12
20	2/1/2020	\$506,619.24	\$57,830.10	\$0.00	\$57,830.10	\$37,565.33	\$20,264.77	\$469,053.91	\$625,655.89
21	3/1/2020	\$469,053.91	\$57,830.10	\$0.00	\$57,830.10	\$39,067.94	\$18,762.16	\$429,985.96	\$644,418.05
22	4/1/2020	\$429,985.96	\$57,830.10	\$0.00	\$57,830.10	\$40,630.66	\$17,199.44	\$389,355.30	\$661,617.48
23	5/1/2020	\$389,355.30	\$57,830.10	\$0.00	\$57,830.10	\$42,255.89	\$15,574.21	\$347,099.42	\$677,191.70
24	6/1/2020	\$347,099.42	\$57,830.10	\$0.00	\$57,830.10	\$43,946.12	\$13,883.98	\$303,153.29	\$691,075.67
25	7/1/2020	\$303,153.29	\$57,830.10	\$0.00	\$57,830.10	\$45,703.97	\$12,126.13	\$257,449.33	\$703,201.81
26	8/1/2020	\$257,449.33	\$57,830.10	\$0.00	\$57,830.10	\$47,532.13	\$10,297.97	\$209,917.20	\$713,499.78
27	9/1/2020	\$209,917.20	\$57,830.10	\$0.00	\$57,830.10	\$49,433.41	\$8,396.69	\$160,483.79	\$721,896.47
28	10/1/2020	\$160,483.79	\$57,830.10	\$0.00	\$57,830.10	\$51,410.75	\$6,419.35	\$109,073.04	\$728,315.82
29	11/1/2020	\$109,073.04	\$57,830.10	\$0.00	\$57,830.10	\$53,467.18	\$4,362.92	\$55,605.86	\$732,678.74
30	12/1/2020	\$55,605.86	\$57,830.10	\$0.00	\$55,605.86	\$53,381.63	\$2,224.23	\$0.00	\$734,902.97

# 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:

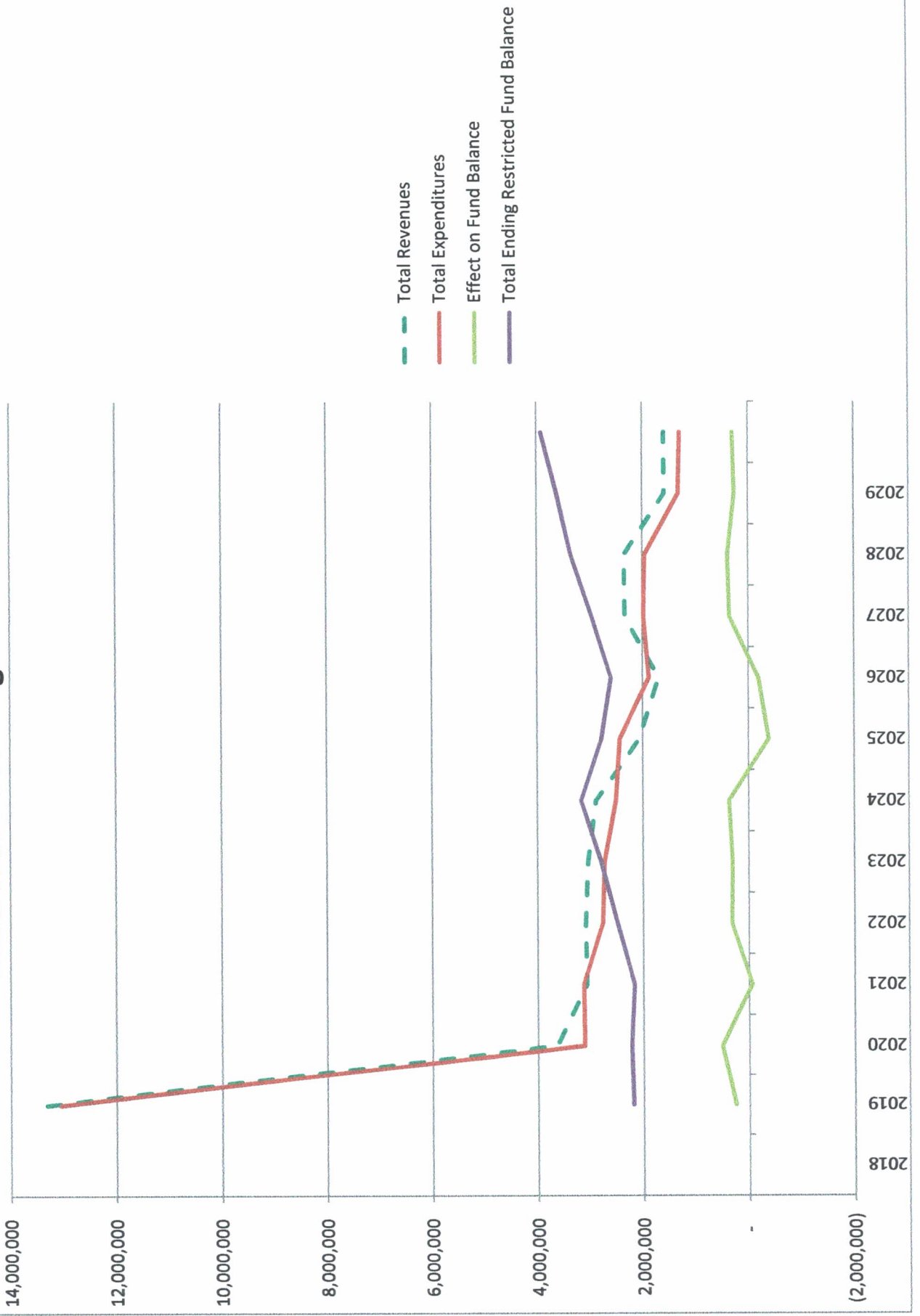
- Total Revenues, Expenditures, Fund Balance, and the effect on Fund Balance
- Number of pennies needed to support the multi-year debt service

	7/1/2017 2018 Unaudited	7/1/2018 2019 Budget	7/1/2019 2020 Budget	7/1/2020 2021 Budget	7/1/2021 2022 Budget	7/1/2022 2023 Budget	7/1/2023 2024 Budget	7/1/2024 2025 Budget	7/1/2025 2026 Budget	7/1/2026 2027 Budget	7/1/2027 2028 Budget	7/1/2028 2029 Budget
Fund 151 General Debt Service												
Expenditures												
Principal on Bonds *	40,000	-	-	-	-	-	-	-	-	-	-	-
Principal on Bonds *	200,000	195,000	200,000	250,000	250,000	925,000	950,000	1,400,000	1,500,000	1,500,000	1,200,000	1,200,000
Principal on Bonds	-	1,740,000	1,915,000	1,615,000	1,700,000	900,000	935,000	-	-	-	-	-
Principal on Bonds	1,525,000	-	-	-	-	-	-	-	-	-	-	-
Principal on Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Principal on Bonds	280,000	-	-	-	-	-	-	-	-	-	-	-
Principal on Bonds	100,000	-	-	-	-	-	-	-	-	-	-	-
Principal on Bonds	-	-	-	-	-	-	-	225,000	250,000	275,000	-	-
Principal on Bonds**	-	-	-	-	-	-	-	-	-	-	-	-
Principal on Bonds* (2017B)	200,000	195,000	210,000	200,000	200,000	240,000	225,000	-	-	-	-	-
Principal on Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Principal on Bonds	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Principal</b>	<b>2,345,000</b>	<b>2,130,000</b>	<b>2,325,000</b>	<b>2,065,000</b>	<b>2,150,000</b>	<b>2,065,000</b>	<b>2,110,000</b>	<b>1,625,000</b>	<b>1,750,000</b>	<b>1,775,000</b>	<b>1,200,000</b>	<b>1,200,000</b>
Interest on Other Loans												
Education - Contribution	98,316	98,316	98,316	98,316	68,454	33,863	-	-	-	-	-	-
Interest on Bonds *	23,320	-	-	-	-	-	-	-	-	-	-	-
Interest on Bonds *	204,155	210,900	207,000	203,000	198,000	193,000	174,500	155,500	127,500	93,750	60,000	30,000
Interest on Bonds	-	516,071	353,250	257,500	176,750	91,750	46,750	-	-	-	-	-
Refinance Accrued Interest	-	-	-	-	-	-	-	-	-	-	-	-
Interest on Bonds	246,587	-	-	-	-	-	-	-	-	-	-	-
Interest on Bonds	143,650	-	-	-	-	-	-	-	-	-	-	-
Interest on Bonds	69,094	-	-	-	-	-	-	-	-	-	-	-
Interest on Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Interest on Bonds**	-	-	-	-	-	-	-	-	-	-	-	-
Interest on Bonds *	30,177	27,765	23,865	19,665	15,665	11,265	5,625	-	-	-	-	-
Interest on Bonds	35,438	35,438	35,438	35,438	35,438	35,438	35,438	35,438	24,188	11,688	-	-
Interest on Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Interest on Bonds	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Interest</b>	<b>752,420</b>	<b>790,174</b>	<b>619,553</b>	<b>515,603</b>	<b>425,853</b>	<b>331,453</b>	<b>262,313</b>	<b>190,938</b>	<b>151,688</b>	<b>105,438</b>	<b>60,000</b>	<b>30,000</b>
Cntr w/Priv. Agencies	4,693	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Trustee's Commission	63,184	71,566	61,501	61,884	60,932	57,842	41,290	33,922	46,786	47,041	31,705	31,809
Underwriter's Discount *	16,779	-	-	-	-	-	-	-	-	-	-	-
Issuance Cost *	87,500	-	-	-	-	-	-	-	-	-	-	-
Other Debt Service	25,182	25,500	25,500	25,500	25,500	25,500	25,500	25,500	25,500	25,500	25,500	25,500
Payments to Escrow	9,661,346	-	-	-	-	-	-	-	-	-	-	-
<b>Total Other</b>	<b>9,858,685</b>	<b>103,066</b>	<b>93,001</b>	<b>93,384</b>	<b>92,432</b>	<b>89,342</b>	<b>72,790</b>	<b>65,422</b>	<b>78,286</b>	<b>78,541</b>	<b>63,205</b>	<b>63,309</b>
<b>Total Expenditures</b>	<b>13,054,421</b>	<b>3,121,556</b>	<b>3,135,870</b>	<b>2,772,303</b>	<b>2,736,738</b>	<b>2,519,657</b>	<b>2,445,102</b>	<b>1,881,360</b>	<b>1,979,974</b>	<b>1,958,979</b>	<b>1,323,205</b>	<b>1,293,309</b>
Effect on Fund Balance	256,281	512,861	(60,810)	321,907	309,840	372,430	(380,622)	(185,254)	359,350	393,084	262,066	297,160
	6/30/2018	6/30/2019	6/30/2020	6/30/2021	6/30/2022	6/30/2023	6/30/2024	6/30/2025	6/30/2026	6/30/2027	6/30/2028	6/30/2029
<b>Total Ending Restricted Fund Balance</b>	<b>2,194,870</b>	<b>2,230,026</b>	<b>2,169,216</b>	<b>2,491,123</b>	<b>2,800,963</b>	<b>3,173,393</b>	<b>2,792,770</b>	<b>2,607,517</b>	<b>2,966,867</b>	<b>3,359,951</b>	<b>3,622,016</b>	<b>3,919,176</b>
fund balance/expenditure	NA	55.0%	71.1%	78.2%	91.0%	111.2%	129.8%	148.4%	131.7%	151.4%	253.9%	280.1%

Fund 151 General Debt Service		7/1/2017	7/1/2018	7/1/2019	7/1/2020	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025	7/1/2026	7/1/2027	7/1/2028
		Unaudited	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
		Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget
<b>Beginning of Year</b>													
<b>Restricted Fund Balance Est.</b>													
Property Tax		120,000	120,000	120,000	121,200	122,412	123,636	124,872	126,121	127,382	128,656	129,943	131,242
Tax Rate		14.50	14.50	14.50	14.50	14.50	14.50	8.00	5.00	10.00	10.00	4.00	4.00
Revenue		1,938,589	1,717,165	2,230,026	2,169,216	2,491,123	2,800,963	3,173,393	2,792,770	2,607,517	2,966,867	3,359,951	3,622,016
40110	Current Property Tax	1,740,220	1,740,000	1,740,000	1,757,400	1,774,974	1,792,724	998,980	630,606	1,273,824	1,286,562	519,771	524,969
40120	Trustee PY Collection	48,007	48,000	48,000	48,000	50,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
40130	Delinquent Tax	45,886	50,000	50,000	50,000	60,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
40140	Interest & Penalty	10,141	8,000	8,000	8,000	8,300	5,000	5,000	5,000	5,000	5,000	5,000	5,000
40150	Pick-Up Taxes	922	100	100	100	1,000	500	500	500	500	500	500	500
40163	Payments-in-Lieu-of Taxes	1,229,434	1,000,000	1,000,000	1,000,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000
44110	Investment Income	218,267	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
44170	Mis. Refunds	438	-	-	-	-	-	-	-	-	-	-	-
44540	Sale of Property	13,275	-	-	-	-	-	-	-	-	-	-	-
48130	Contributions - Schools	98,316	98,316	98,316	98,316	68,454	33,863	-	-	-	-	-	-
49400	Refunding Debt *	8,805,000	-	-	-	-	-	-	-	-	-	-	-
49410	Premiums on Debt	874,438	-	-	-	-	-	-	-	-	-	-	-
49800	Transfers In	109,463	500,000	-	-	-	-	-	-	-	-	-	-
49800--HWY10	Transfers In	116,894	170,000	110,644	112,394	113,850	-	-	-	-	-	-	-
49800--RDD02	Transfers In	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenues</b>		<b>13,310,701</b>	<b>3,634,416</b>	<b>3,075,060</b>	<b>3,094,210</b>	<b>3,046,578</b>	<b>2,892,087</b>	<b>2,064,480</b>	<b>1,696,106</b>	<b>2,339,324</b>	<b>2,352,062</b>	<b>1,585,271</b>	<b>1,590,469</b>

Note:

# Multi Year Debt Budget for 151 General Debt



# 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.

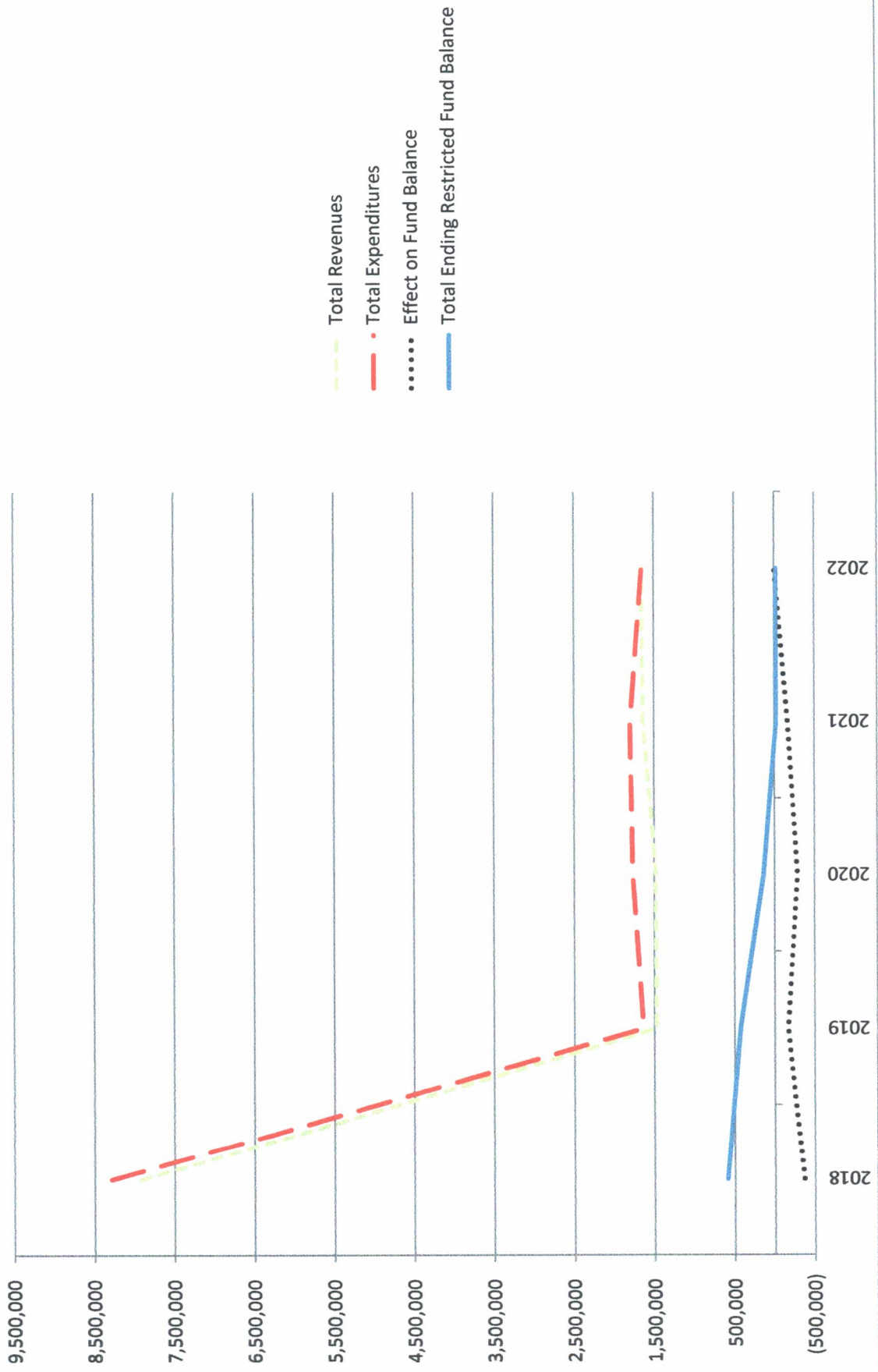
As with the General Debt Service Fund 151, a table is created that reflects a multi-year debt budget which includes all current debt payment to be paid from the Rural Debt Service Fund 152. Revenues are estimated and calculated based on a projected growth in the value of the penny, along with adjustments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

Fund 152 Rural Debt Service		7/1/2017	7/1/2018	7/1/2019	7/1/2020	7/1/2021	TOTAL
		2018	2019	2020	2021	2022	
		Unaudited	Budget	Budget	Budget	Budget	
Beginning of Year		Actual					
<b>Restricted Fund Balance Est.</b>		<b>959,295</b>	<b>592,935</b>	<b>428,470</b>	<b>140,585</b>	<b>(20,111)</b>	
Property Tax		94,000	94,000	94,940	95,889	96,848	
Tax Rate		14.5	14.5	14.5	16.0	16.0	
Revenue							
=====							
40110	Current Property Tax	1,368,367	1,363,000	1,376,630	1,534,230	1,549,573	
40120	Trustee Prior Year Collection	39,810	45,000	40,000	40,000	40,000	
40130	Delinquent Tax	45,886	50,000	50,000	50,000	50,000	
40140	Interest & Penalty	8,290	9,000	9,000	9,000	9,000	
40150	Pick-Up Taxes	922	1,000	1,000	1,000	1,000	
40350	Interstate Telecom Tax	-	-	-	-	-	
44110	Investment Income	11,270	3,000	3,000	3,000	3,000	
49400	Refunding Debt Issued	6,450,000	-	-	-	-	
<b>Total Revenues</b>		<b>7,924,546</b>	<b>1,471,000</b>	<b>1,479,630</b>	<b>1,637,230</b>	<b>1,652,573</b>	
=====							
Expenditures							
=====							
82130-601-2017C	Principal on Bonds	-	1,497,000	1,652,000	1,710,000	1,591,000	6,450,000
82130-601--2014	Principal on Bonds Refinance	-	-	-	-	-	-
82130-601--2014	Principal on Bonds	1,350,000	-	-	-	-	2,625,000
82130-601--2010B	Principal on Bonds	200,000	-	-	-	-	300,000
<b>Total Principal</b>		<b>1,550,000</b>	<b>1,497,000</b>	<b>1,652,000</b>	<b>1,710,000</b>	<b>1,591,000</b>	<b>2,925,000</b>
82130-601-2017C	Interest on Bonds	69,716	107,715	82,715	55,127	26,570	341,842
82230-603--2014	Interest on Bonds	101,512	-	-	-	-	355,612
82230-603--2010B	Interest on Bonds	6,250	-	-	-	-	15,500
<b>Total Interest</b>		<b>177,477</b>	<b>107,715</b>	<b>82,715</b>	<b>55,127</b>	<b>26,570</b>	<b>371,112</b>
82330-399	Other Contracted Services	706	750	800	800	800	4,562
82330-510	Trustee's Commission	28,722	30,000	32,000	32,000	33,000	184,356
82330-530-2014	Fines, Assessments, & Penalties	64,500	-	-	-	-	-
82330-606-2014	Other Debt Issuance Charge	19,500	-	-	-	-	-
99300-699	Payments to Escrow	6,450,000	-	-	-	-	-
<b>Total Other</b>		<b>6,563,428</b>	<b>30,750</b>	<b>32,800</b>	<b>32,800</b>	<b>33,800</b>	<b>188,918</b>
<b>Total Expenditures</b>		<b>8,290,905</b>	<b>1,635,465</b>	<b>1,767,515</b>	<b>1,797,927</b>	<b>1,651,370</b>	<b>18,445,245</b>
<b>Effect on Fund Balance</b>		<b>(366,360)</b>	<b>(164,465)</b>	<b>(287,885)</b>	<b>(160,696)</b>	<b>1,203</b>	
		6/30/2018	6/30/2019	6/30/2020	6/30/2021	6/30/2022	
		1,840,905					
<b>Total Ending Restricted Fund Balance</b>		<b>592,935</b>	<b>428,470</b>	<b>140,585</b>	<b>(20,111)</b>	<b>(18,908)</b>	<b>Trans to 156</b>
<b>Fund Balance/Expenditure</b>		NA	36%	24%	8%	-1%	

Note: 1. This is a dead account, once the debt is paid off this fund will no longer exist.

2. During the Fiscal Year 2017/2018 2014 bonds were refinanced causing a higher amount in expenditures of \$6,450,000

# Multi Year Debt Budget for 152 Rural Education Debt





# SECTION 10

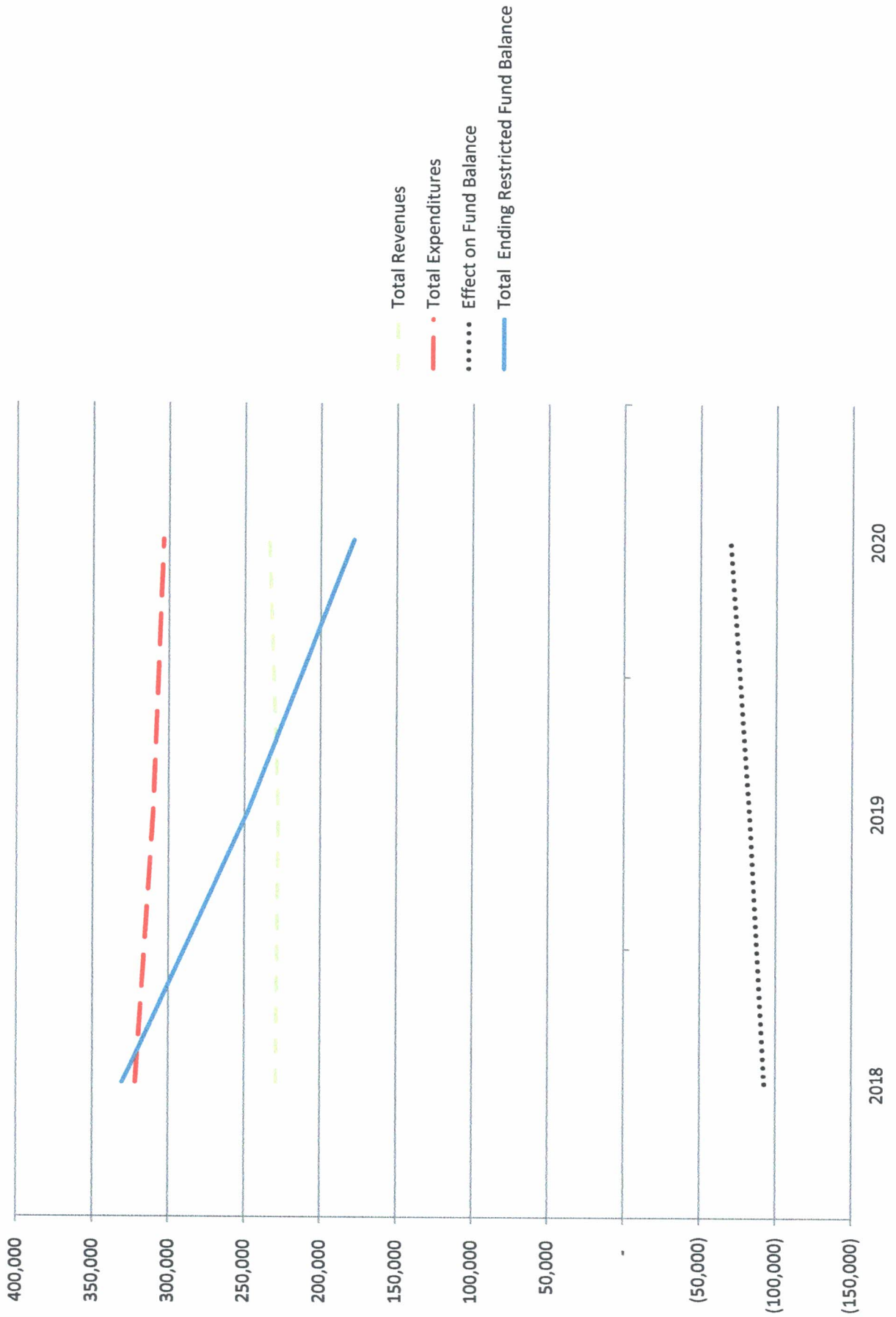
## EDUCATION DEBT SERVICE FUND 156

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 multi-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.

Fund 156 Education Debt Service		7/1/2017 2018 Unaudited Actual	7/1/2018 2019 Budget	7/1/2019 2020 Budget	Totals
<b>Beginning of Year</b>					
<b>Undes. Fund Bal. Est.</b>		<b>423,032</b>	<b>330,427</b>	<b>247,984</b>	<b>178,351</b>
Property Tax		104,960	105,400	108,562	111,819
Tax Rate		2	2.0	2.0	-
Revenue					
=====					
40110	Current Property Tax	209,919	210,800	217,124	
40120	Trustee Prior Year Collection	6,709	8,000	8,000	
40130	Delinquent Tax	6,326	7,300	7,300	
40140	Interest & Penalty	1,338	1,200	1,200	
40150	Pick-Up Taxes	127	-	-	
44110	Investment Income	4,651	500	500	
<b>Total Revenues</b>		<b>229,071</b>	<b>227,800</b>	<b>234,124</b>	
Expenditures					
82130-601- -2008C	Principal on Bonds	145,000	140,000	140,000	545,000
82130-601- -2009B	Principal on Bonds	135,000	140,000	145,000	550,000
<b>Total Principal</b>		<b>280,000</b>	<b>280,000</b>	<b>285,000</b>	<b>1,095,000</b>
82230-601- - 2008C	Interest on Bonds	21,250	14,000	7,000	68,120
82230-601- - 2009B	Interest on Bonds	14,420	9,695	5,075	48,160
<b>Total Interest</b>		<b>35,670</b>	<b>23,695</b>	<b>12,075</b>	<b>116,280</b>
82330-312	Contracts w/Private Agencies	1,597	2,000	2,000	
82330-510	Trustee's Commission	4,409	4,548	4,682	
<b>Total Other</b>		<b>6,006</b>	<b>6,548</b>	<b>6,682</b>	
<b>Total Expenditures</b>		<b>321,676</b>	<b>310,243</b>	<b>303,757</b>	
<b>Effect on Fund Balance</b>		<b>(92,605)</b>	<b>(82,443)</b>	<b>(69,633)</b>	
		6/30/2018	6/30/2019	6/30/2020	
<b>Total Ending Restricted Fund Balance</b>		<b>330,427</b>	<b>247,984</b>	<b>178,351</b>	
	fund balance/expenditures	132%	107%	82%	

# Multi Year Debt Budget for 156 Education Debt



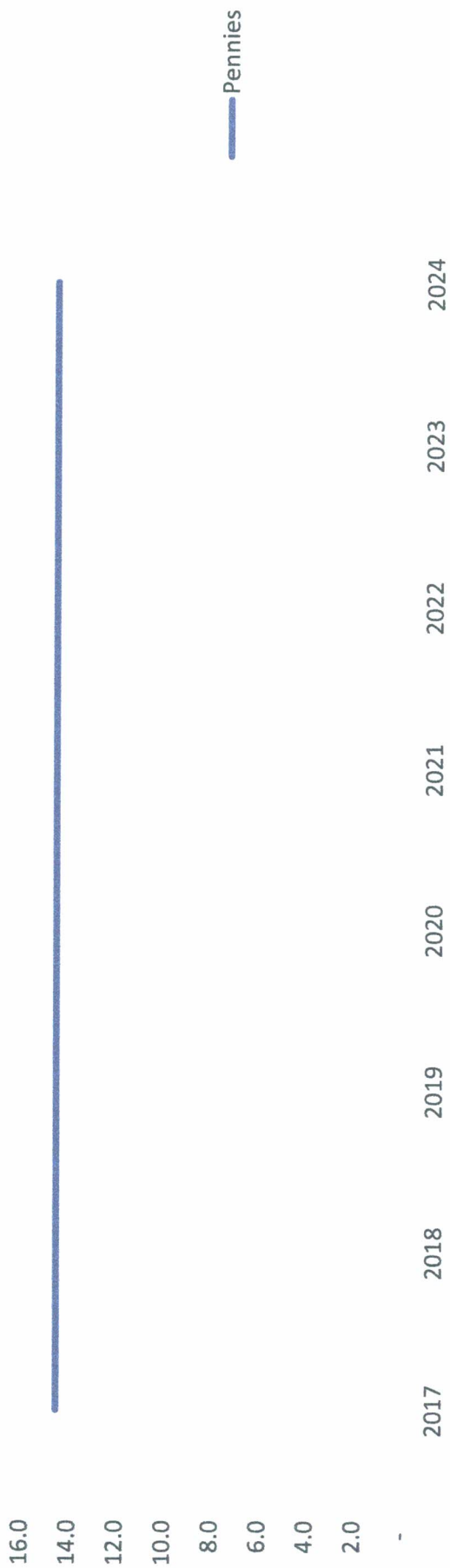
# SECTION 11

## TAX PENNIES GRAPHS

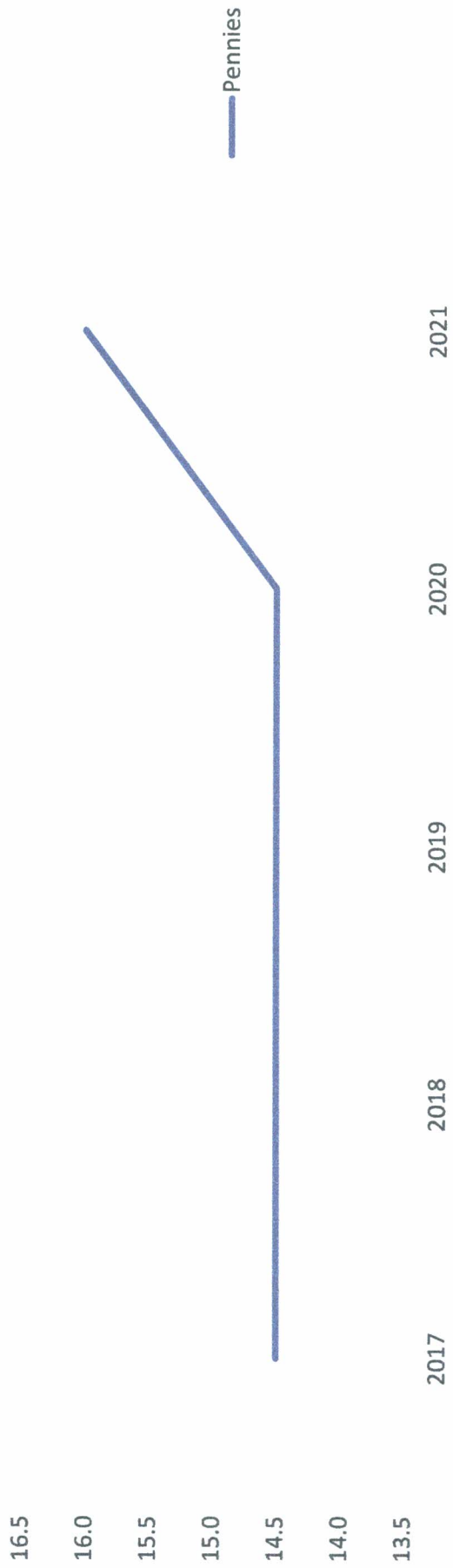
This section of the report identifies the property tax pennies needed for each Debt Services Fund, (existing debt only) over the life of the multi-year budgets.

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

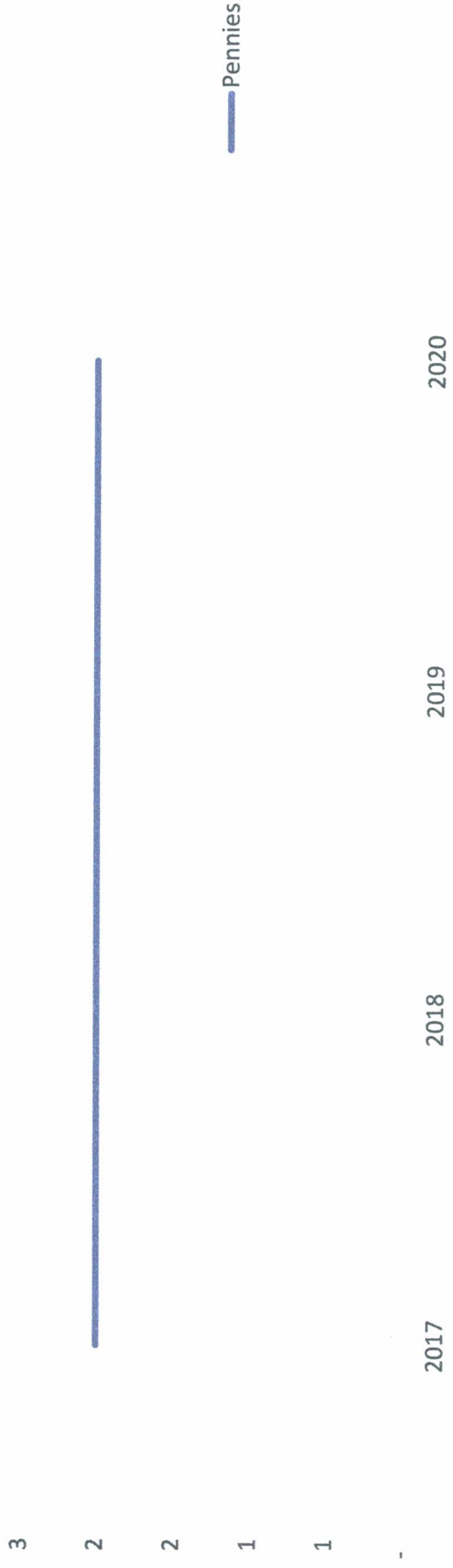
151 General Debt Service Fund  
 Property Tax Pennies Needed To Support Annual Multi-Year Budget



152 Rural Debt Service Fund  
Property Tax Pennies Needed To Support Annual Multi-Year Budget



156 High School 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 and Moody's Investors Service, based on the county's continued tax base growth and improved financial position.



# RatingsDirect®

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**Summary:**

## Roane County, Tennessee; General Obligation

**Primary Credit Analyst:**

Joyce Jung, Centennial 303) 721 4189; joyce.jung@spglobal.com

**Secondary Contact:**

Joshua Travis, Dallas 972-367-3340; joshua.travis@spglobal.com

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Rationale

Outlook

Related Research

## Summary:

# Roane County, Tennessee; General Obligation

### Credit Profile

US\$9.925 mil GO rfdg bnds ser 2018 due 06/01/2025

*Long Term Rating*

AA/Stable

New

Roane Cnty GO

*Long Term Rating*

AA/Stable

Affirmed

## Rationale

S&P Global Ratings assigned its 'AA' long-term rating to Roane County, Tenn.'s series 2018 general obligation (GO) refunding bonds. At the same time, S&P Global Ratings affirmed its 'AA' long-term rating and underlying rating (SPUR) on the county's existing GO bonds. The outlook on all ratings is stable.

The bonds are secured by unlimited ad valorem taxes levied on all property within the county's corporate limits. We understand that bond proceeds will be used to refund a portion of the county's outstanding debt for interest savings.

The ratings reflect our opinion of the county's:

- Weak economy, with access to a broad and diverse metropolitan statistical area (MSA), but a concentrated employment base;
- Strong management, with good financial policies and practices under our Financial Management Assessment (FMA) 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 3.7x governmental debt service, and access to external liquidity 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 103.8% of total governmental fund revenue, as well as low overall net debt at less than 3% of market value and rapid amortization, with 87.9% of debt scheduled to be retired in 10 years; and
- Very strong institutional framework score.

### Weak economy

We consider the county's economy weak. Roane County, with an estimated population of 52,282, is located in the Knoxville, Tenn. MSA, which we consider to be broad and diverse. The county has a projected per capita effective buying income of 81.3% of the national level and per capita market value of \$88,158. Overall, the county's market value grew by 2.3% over the past year to \$4.6 billion in 2017. Weakening Roane County's economy is a concentrated employment base, with a single sector accounting for more than 30% of total county employment. The county unemployment rate was 5.6% in 2016.

Roane County is located in eastern Tennessee, approximately 36 miles west of Knoxville. The county is part of the

growing and diversifying Knoxville MSA, which we consider to be broad and diverse. Although the county's tax base is diverse, with the leading taxpayers accounting for approximately 7.8% of 2017 assessed value (AV), its employment is concentrated in the professional and business service sector, at approximately 52%. Located in Roane County is a portion of the city of Oak Ridge, where the U.S. Department of Energy (DOE) operates two facilities: the Oak Ridge National Laboratory and the Y-12 National Security Complex. The DOE's production facilities employ over 11,000 in positions such as engineering and research. Officials expect continued concentrated employment and slow diversification in the next several years. Additionally, the county has approximately 4,455 acres zoned for industrial parks, and the county continues to attract industrial businesses due to its access to the main highways and low tax structure.

The county's AV has been stable, and officials expect moderate tax base growth for the next two years. The county current has 20 single-family homes under construction and expect higher-than-average residential development for the next two years.

### **Strong management**

We view the county's management as strong, with good financial policies and practices under our FMA methodology, indicating financial practices exist in most areas, but that governance officials might not formalize or monitor all of them on a regular basis.

Management uses three years of revenues and expenditures to forecast annual revenue and expenditure assumptions. In preparing its annual budget, management obtains the latest economic information from the county assessor and the leading taxpayer. Officials budget conservatively and have historically outperformed the budgets. The county provides budget-to-actual reports to the county commission and amends the budget as needed. The county adheres to the conservative and highly liquid state investment statutes and provides monthly investment reports with holdings and earnings. Furthermore, it has a formalized long-term capital policy, a reserve policy, and a debt management policy. The county provides specific guidelines in its long-term capital plan and currently has a formalized 20-year plan that is reviewed annually. The county's reserve policy requires the county to maintain 35% to 45% of operating expenditures in the general fund, which it currently meets. Moreover, the county's formalized debt policy is comprehensive with quantitative limitation on debt issuance (e.g., variable-rate exposure makes up less than 30% of total outstanding debt). The county currently lacks a long-term financial plan because budgeting is done on yearly basis.

### **Strong budgetary performance**

Roane County's budgetary performance is strong in our opinion. The county had surplus operating results in the general fund of 8.1% of expenditures, and slight surplus results across all governmental funds of 0.5% in fiscal 2016. Our assessment accounts for our expectation that budgetary results could deteriorate somewhat from 2016 results in the near term.

Our view of the county's budgetary performance reflects adjustments made to include recurring transfers out to general capital projects funds.

The county historically maintained strong budgetary performance, and based on the unaudited fiscal 2017 results, we expect the county to maintain strong budgetary performance for the next two years. The county's primary revenue source is local taxes (63% of general fund revenue). The general fund revenue and expenditures have remained

relatively stable with minor increases in the last three fiscal years. As a result of the strong surplus in fiscal 2016, the county transferred larger-than-average funds to the capital projects funds in fiscal 2017. Therefore, the county expects to report a nearly break-even result in the general fund.

For fiscal 2018, the county adopted a deficit budget of \$1.8 million. However, the county historically budgets conservatively and has consistently outperformed the budget in the last three fiscal years. Given the historical evidence and conservative expenditures assumptions, we expect the county to maintain strong budgetary performance for the next two years. The county reported minor deficits ranging between 0.5% and 2.5% in the total governmental funds and expects similar results in total governmental funds in fiscals 2017 and 2018.

### **Very strong budgetary flexibility**

Roane County's budgetary flexibility is very strong, in our view, with an available fund balance in fiscal 2016 of 40% of operating expenditures, or \$6.6 million. We expect the available fund balance to remain above 30% of expenditures for the current and next fiscal years, which we view as a positive credit factor.

Roane County has maintained very strong reserves during the past three fiscal years. The county has a formalized reserve policy of maintaining 35%-45% of operating expenditures in order to meet its cash flow needs and to provide additional support for future capital projects. Since the county does not have major plans to draw down the reserves, we expect it to maintain very strong budgetary flexibility for the next two years.

### **Very strong liquidity**

In our opinion, Roane County's liquidity is very strong, with total government available cash at 59.9% of total governmental fund expenditures and 3.7x governmental debt service in 2016. In our view, the county has strong access to external liquidity if necessary.

In our opinion, the county has strong access to external liquidity, based on the various types of debt issued in the past decade. The county has historically maintained a very strong liquidity position; given current levels, we believe liquidity will remain very strong during the next two years. Roane County's investment portfolio is conservative and highly liquid, mostly invested in State Treasurers Investment Pool.

The county has a privately placed debt issuance with First Tennessee Bank Assn., which represents approximately 4% of total direct debt, or \$1.35 million. The debt has a fixed rate of 2.8%, and all debt will mature by June of 2018. We believe that the county does not have contingent liability risk due to the fixed-rate term, the lack of permissive events of default, and no acceleration of payment as a remedy or cross default provisions.

### **Adequate debt and contingent liability profile**

In our view, Roane County's debt and contingent liability profile is adequate. Total governmental fund debt service is 16.2% of total governmental fund expenditures, and net direct debt is 115.1% of total governmental fund revenue. Overall net debt is low at 1% of market value, and approximately 83.4% of the direct debt is scheduled to be repaid within 10 years, which are in our view positive credit factors.

The county's net direct debt burden has been adjusted to account for self-supporting debt from the enterprise fund. In addition to the enterprise revenue-only debt, the county has combination and GO revenue debt for which, based on three years of evidence, user charges have provided full coverage to support obligations.

Following this issuance, the county plans to issue approximately \$20 million for various capital projects in the two to five years.

Roane County's combined required pension and actual other postemployment benefit (OPEB) contributions totaled 7.1% of total governmental fund expenditures in 2016. Of that amount, 4.5% represented required contributions to pension obligations, and 2.6% represented OPEB payments. The county made its full annual required pension contribution in 2016.

The county participates in Tennessee Consolidated Retirement System (TCRS), a multiemployer defined-benefit pension plan. Roane County made its full annual required pension contribution in the last three fiscal years, and officials do not expect material increases to pension contributions for the next two years. The plan is well funded, at 105%, and the county currently has net pension asset of \$2.7 million. For this reason, we do not expect long-term liabilities to place significant budgetary pressure on the district's finances. Additionally, the county provides OPEBs on a pay-as-you-go basis.

### Very strong institutional framework

The institutional framework score for Tennessee counties is very strong.

## Outlook

The stable outlook reflects S&P Global Ratings' opinion that Roane County will maintain its very strong budgetary flexibility and strong financial position, supported by good management practices and policies. The stable outlook also reflects the county's stable but growing tax base. For these reasons, we are unlikely to change the ratings during our two-year outlook period.

### Upside scenario

All else being equal, we could raise the ratings if the county's tax base expanded significantly, increasing wealth and income levels we consider commensurate with those of its higher-rated peers.

### Downside scenario

We could lower the ratings if the county were to experience a substantial weakening of budgetary performance, leading to a deterioration of reserves and liquidity.

## Related Research

- Alternative Financing: Disclosure Is Critical To Credit Analysis In Public Finance, Feb. 18, 2014
- 2017 Update Of Institutional Framework For U.S. Local Governments

### Ratings Detail (As Of March 2, 2018)

Roane Cnty GO (ASSURED GTY)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Many issues are enhanced by bond insurance.		

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at [www.standardandpoors.com](http://www.standardandpoors.com) for further information. Complete ratings information is available to subscribers of RatingsDirect at [www.capitaliq.com](http://www.capitaliq.com). All ratings affected by this rating action can be found on the S&P Global Ratings' public website at [www.standardandpoors.com](http://www.standardandpoors.com). Use the Ratings search box located in the left column.

**ISSUER COMMENT**

29 June 2018

**RATING**
**General Obligation (or GO Related) <sup>1</sup>**

Aa3 No Outlook

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**Roane County, TN**
**Annual Comment on Roane County**
**Issuer Profile**

Roane County is located in east central Tennessee and the county seat of Kingston is approximately 30 miles west of Knoxville. The county has a population of 52,983 and a moderate population density of 147 people per square mile. The county's median family income is \$56,424 (3rd quartile) and the April 2018 unemployment rate was 3.3% (2nd quartile) <sup>2</sup>. The largest industry sectors that drive the local economy are professional/scientific/technical services, health services, and retail trade.

**Credit Overview**

Roane County has a strong credit position, and its Aa3 rating is slightly weaker than the median rating of Aa2 for counties nationwide. Notable credit factors include a healthy financial position, a negligible debt burden and a moderate pension liability. The credit position also reflects a solid tax base and an adequate wealth and income profile.

**Finances:** The financial position of the county is strong and is slightly favorable when compared to the assigned rating of Aa3. Cash balance as a percent of operating revenues (22.9%) is under the US median, and decreased between 2013 and 2017. Additionally, fund balance as a percent of operating revenues (20.3%) falls short of the US median.

**Debt and Pensions:** The debt burden of the county is negligible and is quite favorable in comparison to its Aa3 rating. Net direct debt to full value (0.7%) is consistent with the US median, but fell modestly from 2013 to 2017. However, Roane County has a mid-ranged pension liability, which is slightly unfavorable relative to the assigned rating of Aa3. Moody's-adjusted net pension liability to operating revenues (1.3x) is on par with the US median.

**Economy and Tax Base:** The economy and tax base of the county are strong and are in line with its Aa3 rating. Total full value (\$4.6 billion) is below the US median, but remained the same between 2013 and 2017. Also, full value per capita (\$86,904) is roughly equivalent to the US median. Lastly, median family income equates to only 83.1% of the US level.

**Management and Governance:** Tennessee counties have an Institutional Framework score <sup>3</sup> of Aaa, which is high compared to the nation. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. The sector has one or more major revenue sources that are not subject to any caps. Unpredictable revenue fluctuations tend to be moderate, or between 5-10% annually. Across the sector, fixed and mandated costs are generally less than 25% of expenditures. Tennessee is a Right to Work state, providing significant expenditure-cutting ability. Unpredictable expenditure fluctuations tend to be minor, under 5% annually.

# SECTION 13

## PRINCIPAL AMORTIZATION TABLES



# ROANE COUNTY, TENNESSEE

## Summary of Outstanding Debt

For Fiscal Year Beginning July 01, 2018

Prepared By:

Cumberland Securities Company, Inc.

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CUMBERLAND SECURITIES

SINCE 1931

\* May not include all outstanding notes or leases

# Roane County, Tennessee

## Summary of Debt

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**\$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**

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
06/01/2018	-	-	-	-	-
12/01/2018	-	-	17,718.75	17,718.75	-
06/01/2019	-	-	17,718.75	17,718.75	-
06/30/2019	-	-	-	-	35,437.50
12/01/2019	-	-	17,718.75	17,718.75	-
06/01/2020	-	-	17,718.75	17,718.75	-
06/30/2020	-	-	-	-	35,437.50
12/01/2020	-	-	17,718.75	17,718.75	-
06/01/2021	-	-	17,718.75	17,718.75	-
06/30/2021	-	-	-	-	35,437.50
12/01/2021	-	-	17,718.75	17,718.75	-
06/01/2022	-	-	17,718.75	17,718.75	-
06/30/2022	-	-	-	-	35,437.50
12/01/2022	-	-	17,718.75	17,718.75	-
06/01/2023	-	-	17,718.75	17,718.75	-
06/30/2023	-	-	-	-	35,437.50
12/01/2023	-	-	17,718.75	17,718.75	-
06/01/2024	-	-	17,718.75	17,718.75	-
06/30/2024	-	-	-	-	35,437.50
12/01/2024	-	-	17,718.75	17,718.75	-
06/01/2025	225,000.00	5.000%	17,718.75	242,718.75	-
06/30/2025	-	-	-	-	260,437.50
12/01/2025	-	-	12,093.75	12,093.75	-
06/01/2026	250,000.00	5.000%	12,093.75	262,093.75	-
06/30/2026	-	-	-	-	274,187.50
12/01/2026	-	-	5,843.75	5,843.75	-
06/01/2027	275,000.00	4.250%	5,843.75	280,843.75	-
06/30/2027	-	-	-	-	286,687.50
<b>Total</b>	<b>\$750,000.00</b>	<b>-</b>	<b>\$283,937.50</b>	<b>\$1,033,937.50</b>	<b>-</b>

**Date And Term Structure**

Dated.....	6/01/2018
First Coupon Date.....	12/01/2018
Frequency of Interest Payments.....	2 Per Year
First Serial Maturity Date.....	6/01/2025

**Yield Statistics**

Average Coupon.....	4.6931818%
Weighted Average Maturity.....	8.067 Years
Bond Year Dollars.....	\$6,050.00
Bond Yield for Arbitrage Purposes.....	4.6988572%
True Interest Cost (TIC).....	4.6988572%

**\$9,770,000**  
 Roane County, Tennessee  
 General Obligation Refunding Bonds, Series 2017A

**Debt Service**

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
05/01/2018	-	-	-	-	-
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	-	-	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	-	-	-	-	1,118,000.00
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
<b>Total</b>	<b>\$9,570,000.00</b>	<b>-</b>	<b>\$1,653,150.00</b>	<b>\$11,223,150.00</b>	<b>-</b>

**Date And Term Structure**

Dated.....	5/01/2018
First Coupon Date.....	11/01/2018
Frequency of Interest Payments.....	2 Per Year
First Serial Maturity Date.....	5/01/2019

**Yield Statistics**

Average Coupon.....	2.2593276%
Weighted Average Maturity.....	7.646 Years
Bond Year Dollars.....	\$73,170.00
Bond Yield for Arbitrage Purposes.....	2.2552620%
True Interest Cost (TIC).....	2.2552620%

Cumberland Securities Company, Inc.  
 Tennessee Public Finance

**\$1,470,000**  
 Roane County, Tennessee  
 General Obligation Refunding Bonds, Series 2017B (Federally Taxable)

Debt Service

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
05/01/2018	-	-	-	-	-
11/01/2018	-	-	13,882.50	13,882.50	-
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	-
05/01/2020	210,000.00	2.000%	11,932.50	221,932.50	-
06/30/2020	-	-	-	-	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	-
06/30/2021	-	-	-	-	219,665.00
11/01/2021	-	-	7,832.50	7,832.50	-
05/01/2022	200,000.00	2.200%	7,832.50	207,832.50	-
06/30/2022	-	-	-	-	215,665.00
11/01/2022	-	-	5,632.50	5,632.50	-
05/01/2023	240,000.00	2.350%	5,632.50	245,632.50	-
06/30/2023	-	-	-	-	251,265.00
11/01/2023	-	-	2,812.50	2,812.50	-
05/01/2024	225,000.00	2.500%	2,812.50	227,812.50	-
06/30/2024	-	-	-	-	230,625.00
<b>Total</b>	<b>\$1,270,000.00</b>	<b>-</b>	<b>\$103,850.00</b>	<b>\$1,373,850.00</b>	<b>-</b>

**Date And Term Structure**

Dated.....	5/01/2018
First Coupon Date.....	11/01/2018
Frequency of Interest Payments.....	2 Per Year
First Serial Maturity Date.....	5/01/2019

**Yield Statistics**

Average Coupon.....	2.2749179%
Weighted Average Maturity.....	3.594 Years
Bond Year Dollars.....	\$4,565.00
Bond Yield for Arbitrage Purposes.....	2.2718501%
True Interest Cost (TIC).....	2.2718501%

**\$8,805,000**  
 Roane County, Tennessee  
 General Obligation Refunding Bonds, Series 2018

Debt Service

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
03/29/2018	-	-	-	-	-
12/01/2018	-	-	295,945.83	295,945.83	-
06/01/2019	1,740,000.00	5.000%	220,125.00	1,960,125.00	2,256,070.83
12/01/2019	-	-	176,625.00	176,625.00	-
06/01/2020	1,915,000.00	5.000%	176,625.00	2,091,625.00	2,268,250.00
12/01/2020	-	-	128,750.00	128,750.00	-
06/01/2021	1,615,000.00	5.000%	128,750.00	1,743,750.00	1,872,500.00
12/01/2021	-	-	88,375.00	88,375.00	-
06/01/2022	1,700,000.00	5.000%	88,375.00	1,788,375.00	1,876,750.00
12/01/2022	-	-	45,875.00	45,875.00	-
06/01/2023	900,000.00	5.000%	45,875.00	945,875.00	991,750.00
12/01/2023	-	-	23,375.00	23,375.00	-
06/01/2024	935,000.00	5.000%	23,375.00	958,375.00	981,750.00
<b>Total</b>	<b>\$8,805,000.00</b>	<b>-</b>	<b>\$1,442,070.83</b>	<b>\$10,247,070.83</b>	<b>-</b>

**Date And Term Structure**

Dated.....	3/29/2018
First Coupon Date.....	12/01/2018
Frequency of Interest Payments.....	2 Per Year
First Serial Maturity Date.....	6/01/2019

**Yield Statistics**

Average Coupon.....	5.0000000%
Weighted Average Maturity.....	3.276 Years
Bond Year Dollars.....	\$28,841.42
Bond Yield for Arbitrage Purposes.....	4.9952602%
True Interest Cost (TIC).....	4.9952602%

**Roane County, Tennessee**

**Total Combined Outstanding General Obligation Debt Service**

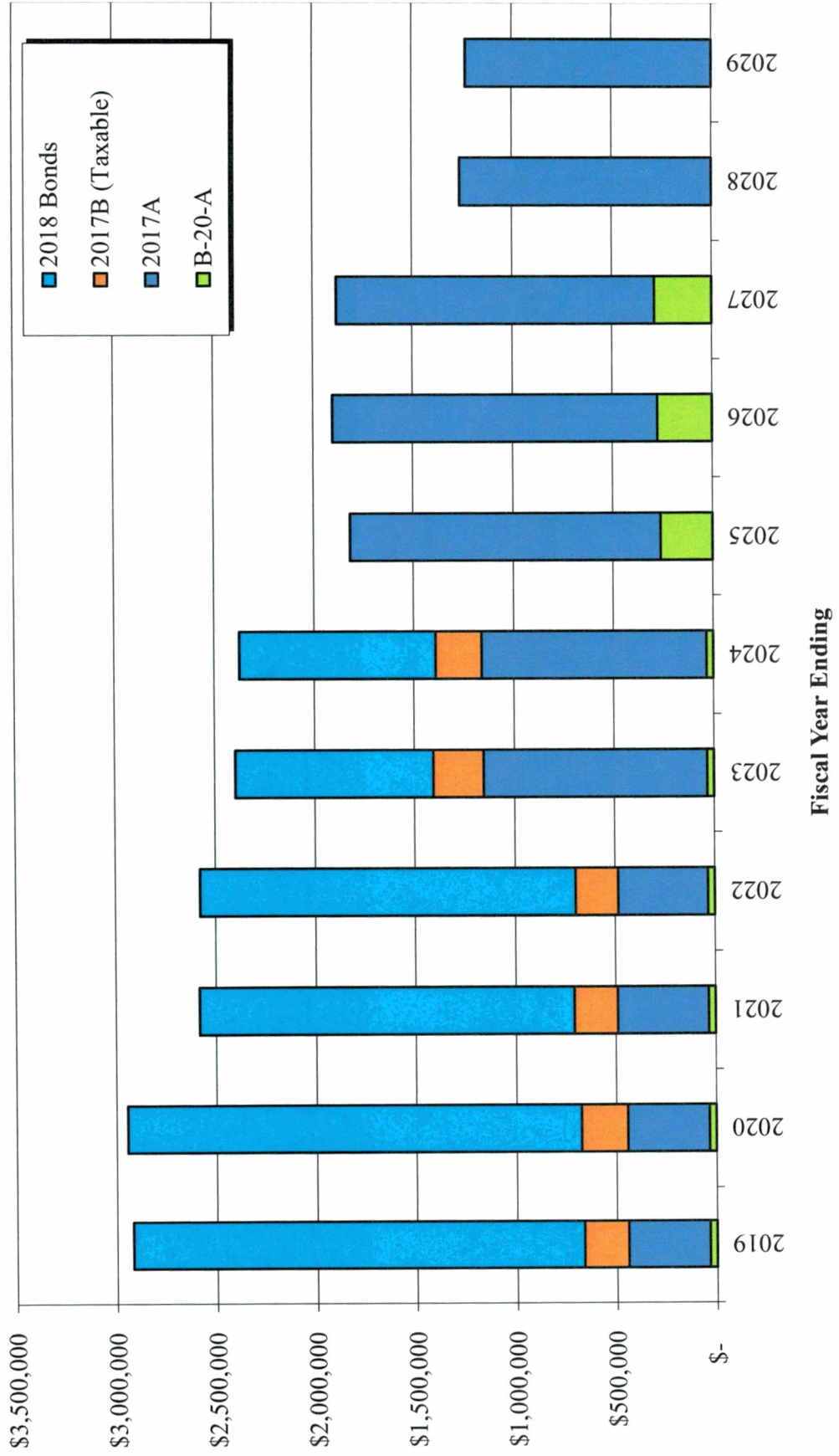
**Aggregate Debt Service**

Date	Principal	Interest	Total P+I
06/30/2018	-	-	-
06/30/2019	2,130,000.00	790,173.33	2,920,173.33
06/30/2020	2,325,000.00	619,552.50	2,944,552.50
06/30/2021	2,065,000.00	515,602.50	2,580,602.50
06/30/2022	2,150,000.00	425,852.50	2,575,852.50
06/30/2023	2,065,000.00	331,452.50	2,396,452.50
06/30/2024	2,110,000.00	262,312.50	2,372,312.50
06/30/2025	1,625,000.00	190,937.50	1,815,937.50
06/30/2026	1,750,000.00	151,687.50	1,901,687.50
06/30/2027	1,775,000.00	105,437.50	1,880,437.50
06/30/2028	1,200,000.00	60,000.00	1,260,000.00
06/30/2029	1,200,000.00	30,000.00	1,230,000.00
<b>Total</b>	<b>\$20,395,000.00</b>	<b>\$3,483,008.33</b>	<b>\$23,878,008.33</b>

**Par Amounts Of Selected Issues**

B-20-A - 6-1-2020 @ Par.....	750,000.00
2017A - 2008A - 5-1-2023.....	9,570,000.00
2017B Taxable - B-13-A - 5-1-2023.....	1,270,000.00
GO 2018 - NC.....	8,805,000.00
<b>TOTAL.....</b>	<b>20,395,000.00</b>

## Roane County, Tennessee Total Combined Outstanding General Obligation Debt Service





**\$944,127 (Combined)**  
 Roane County, Tennessee  
 EESI Loans, Series 2012 and Series 2013  
 Payable by Schools through General Debt Service

Debt Service

Date	Principal	Coupon	Total P+I
06/30/2018	-	-	-
06/30/2019	98,316.00	-	98,316.00
06/30/2020	98,316.00	-	98,316.00
06/30/2021	98,316.00	-	98,316.00
06/30/2022	73,383.00	-	73,383.00
06/30/2023	28,934.00	-	28,934.00
Total	\$397,265.00	-	\$397,265.00

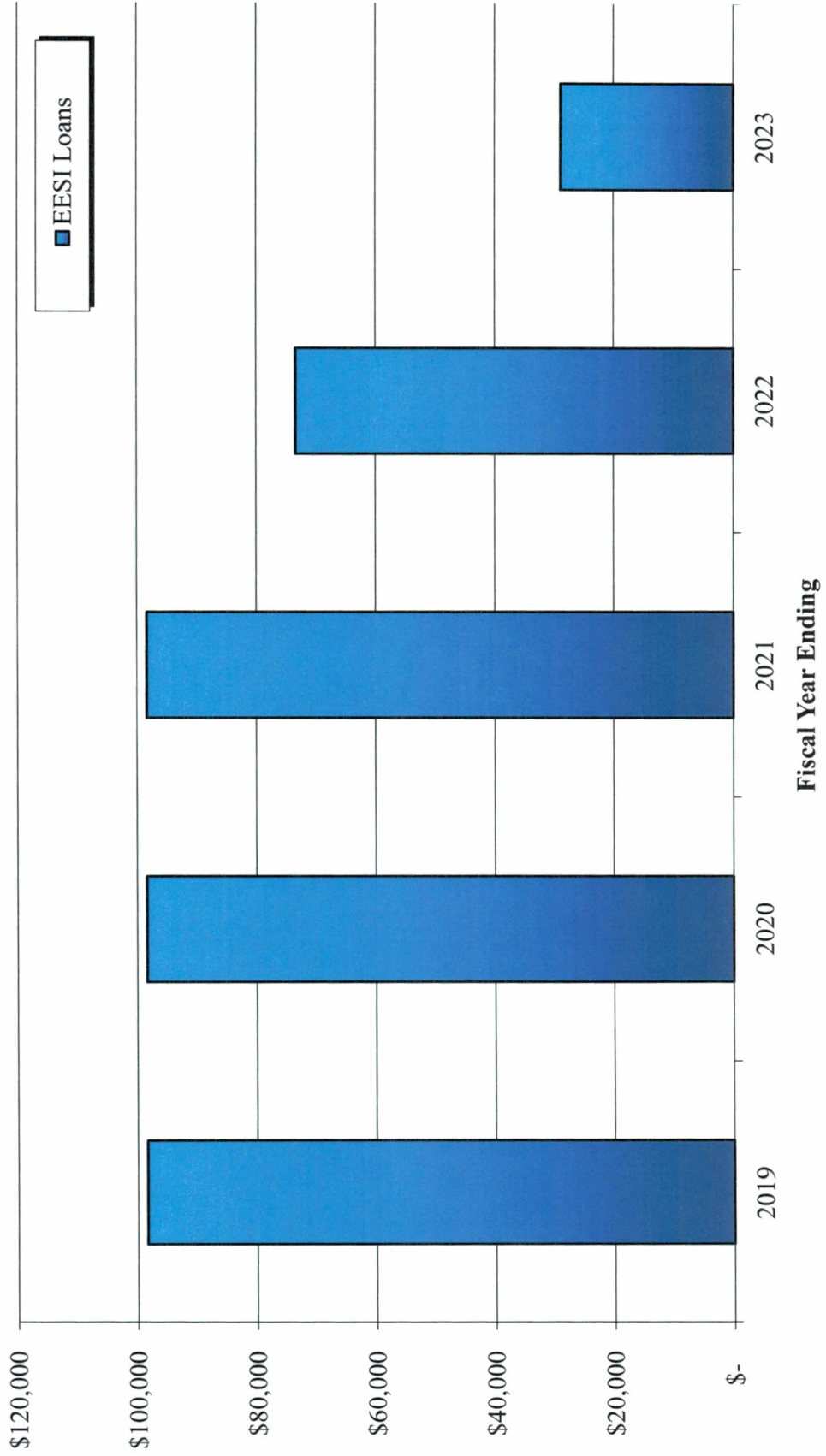
**Date And Term Structure**

Dated.....	6/01/2018
First Coupon Date.....	6/01/2019
Frequency of Interest Payments.....	1 Per Year
First Serial Maturity Date.....	6/01/2019

**Yield Statistics**

Average Coupon.....	-
Weighted Average Maturity.....	2.588 Years
Bond Year Dollars.....	\$1,028.10
Bond Yield for Arbitrage Purposes.....	3.51E-11
True Interest Cost (TIC).....	3.51E-11

**Roane County, Tennessee**  
**Total Combined Outstanding General Purpose School Debt Service**



**\$6,450,000**  
 Roane County, Tennessee  
 Rural School Refunding Bonds, Series 2017C

**Debt Service**

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
05/01/2018	-	-	-	-	-
11/01/2018	-	-	53,857.50	53,857.50	-
05/01/2019	1,497,000.00	1.670%	53,857.50	1,550,857.50	-
06/30/2019	-	-	-	-	1,604,715.00
11/01/2019	-	-	41,357.55	41,357.55	-
05/01/2020	1,652,000.00	1.670%	41,357.55	1,693,357.55	-
06/30/2020	-	-	-	-	1,734,715.10
11/01/2020	-	-	27,563.35	27,563.35	-
05/01/2021	1,710,000.00	1.670%	27,563.35	1,737,563.35	-
06/30/2021	-	-	-	-	1,765,126.70
11/01/2021	-	-	13,284.85	13,284.85	-
05/01/2022	1,591,000.00	1.670%	13,284.85	1,604,284.85	-
06/30/2022	-	-	-	-	1,617,569.70
<b>Total</b>	<b>\$6,450,000.00</b>	<b>-</b>	<b>\$272,126.50</b>	<b>\$6,722,126.50</b>	<b>-</b>

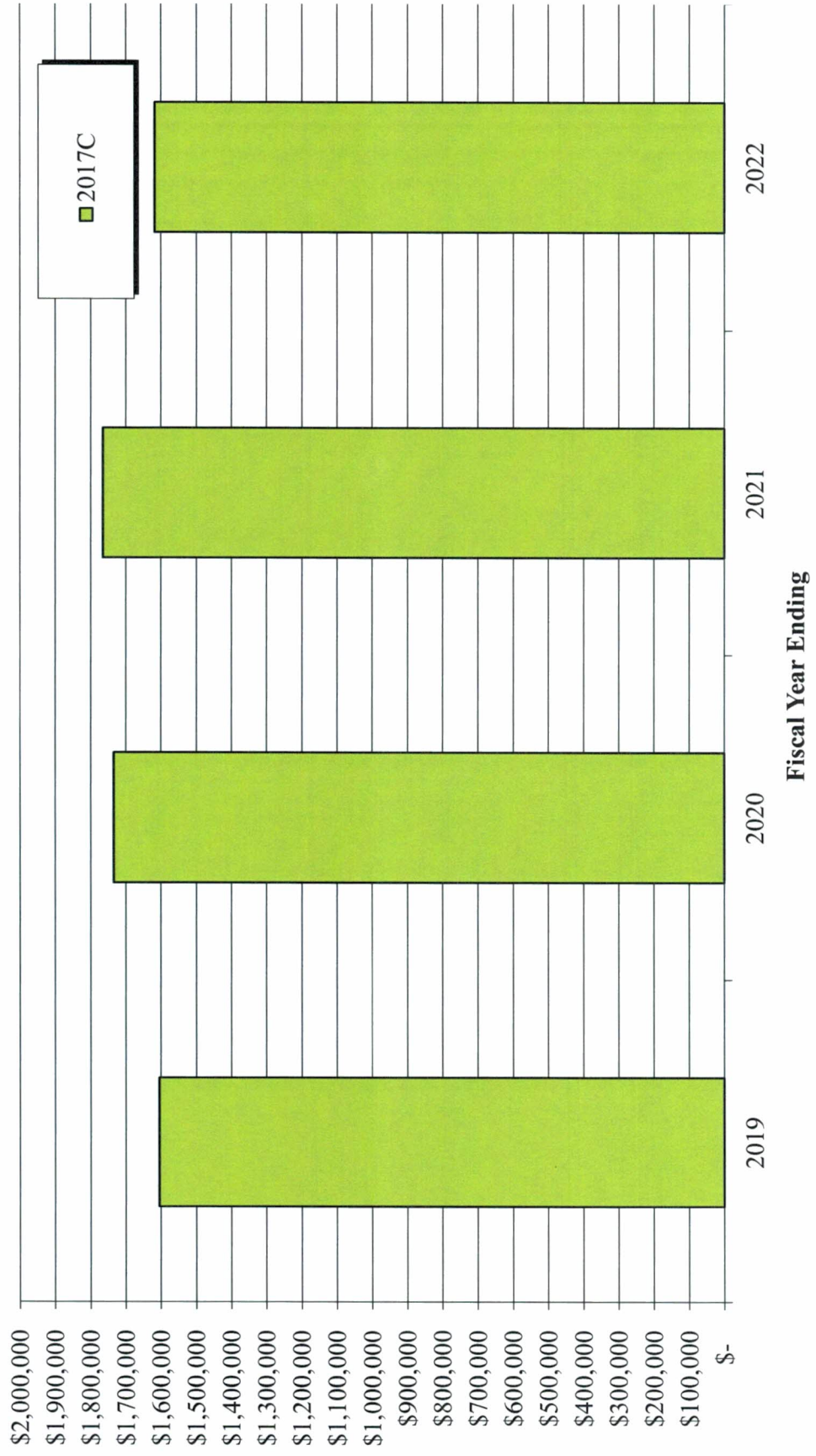
**Date And Term Structure**

Dated.....	5/01/2018
First Coupon Date.....	11/01/2018
Frequency of Interest Payments.....	2 Per Year
First Serial Maturity Date.....	5/01/2019

**Yield Statistics**

Average Coupon.....	1.6700000%
Weighted Average Maturity.....	2.526 Years
Bond Year Dollars.....	\$16,295.00
Bond Yield for Arbitrage Purposes.....	1.6700000%
True Interest Cost (TIC).....	1.6700000%

**Roane County, Tennessee  
Total Combined Outstanding Rural School Debt Service**



**\$1,600,000**  
 Roane County, Tennessee  
 Rural School Refunding Bonds, Series 2008C

Debt Service

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
06/01/2018	-	-	-	-	-
12/01/2018	-	-	7,000.00	7,000.00	-
06/01/2019	140,000.00	5.000%	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
<b>Total</b>	<b>\$280,000.00</b>	<b>-</b>	<b>\$21,000.00</b>	<b>\$301,000.00</b>	<b>-</b>

**Date And Term Structure**

Dated.....	6/01/2018
First Coupon Date.....	12/01/2018
Frequency of Interest Payments.....	2 Per Year
First Serial Maturity Date.....	6/01/2019

**Yield Statistics**

Average Coupon.....	5.0000000%
Weighted Average Maturity.....	1.500 Years
Bond Year Dollars.....	\$420.00
Bond Yield for Arbitrage Purposes.....	5.0000000%
True Interest Cost (TIC).....	5.0000000%

**\$1,325,000**  
 Roane County, Tennessee  
 Rural School Bonds, Series 2009B

**Debt Service**

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
06/01/2018	-	-	-	-	-
12/01/2018	-	-	4,847.50	4,847.50	-
06/01/2019	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%	2,537.50	147,537.50	-
06/30/2020	-	-	-	-	150,075.00
<b>Total</b>	<b>\$285,000.00</b>	<b>-</b>	<b>\$14,770.00</b>	<b>\$299,770.00</b>	<b>-</b>

**Date And Term Structure**

Dated.....	6/01/2018
First Coupon Date.....	12/01/2018
Frequency of Interest Payments.....	2 Per Year
First Serial Maturity Date.....	6/01/2019

**Yield Statistics**

Average Coupon.....	3.4348837%
Weighted Average Maturity.....	1.509 Years
Bond Year Dollars.....	\$430.00
Bond Yield for Arbitrage Purposes.....	3.4341403%
True Interest Cost (TIC).....	3.4341403%

**Roane County, Tennessee**  
 Total Combined Outstanding Education Fund Debt Service

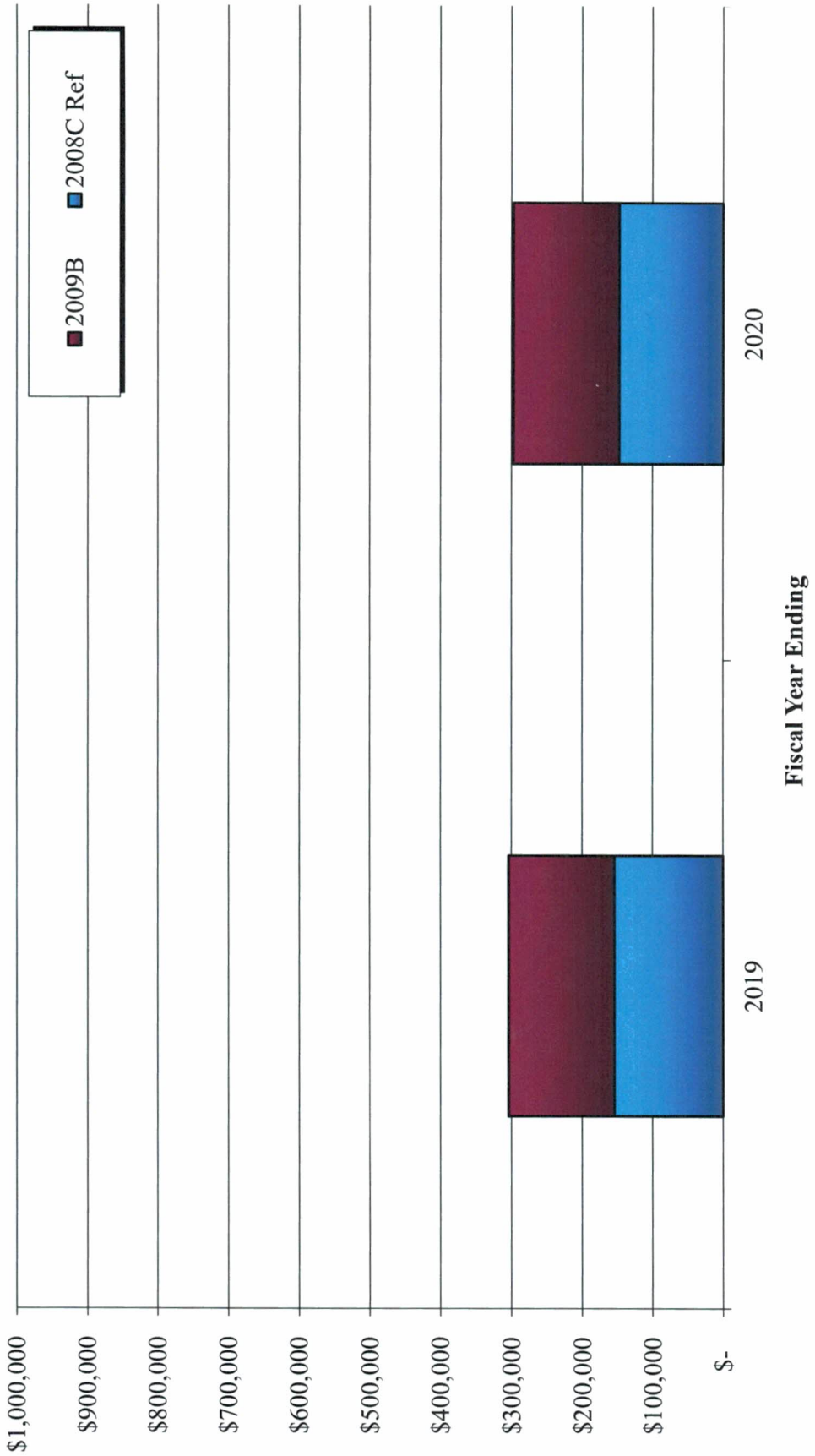
Aggregate Debt Service

Date	Principal	Interest	Total P+I
06/30/2018	-	-	-
06/30/2019	280,000.00	23,695.00	303,695.00
06/30/2020	285,000.00	12,075.00	297,075.00
<b>Total</b>	<b>\$565,000.00</b>	<b>\$35,770.00</b>	<b>\$600,770.00</b>

**Par Amounts Of Selected Issues**

EDS 2008C Ref - 6-1-2018 @ Par.....	280,000.00
EDS - 2009B - 6-1-2018 @ Par.....	285,000.00
<b>TOTAL.....</b>	<b>565,000.00</b>

**Roane County, Tennessee  
Total Combined Outstanding Education Debt Service**





**\$620,000**  
 Roane County, Tennessee  
 Wastewater Revenue and Tax Bonds, Series 2000  
 Dated: June 20, 2002

**Debt Service**

Date	Principal	Coupon	Interest	Total P+I
06/30/2018	-	-	-	-
06/30/2019	12,853.00	4.750%	22,760.24	35,613.24
06/30/2020	13,477.00	4.750%	22,149.73	35,626.73
06/30/2021	14,131.00	4.750%	21,509.57	35,640.57
06/30/2022	14,817.00	4.750%	20,838.35	35,655.35
06/30/2023	15,537.00	4.750%	20,134.54	35,671.54
06/30/2024	16,291.00	4.750%	19,396.53	35,687.53
06/30/2025	17,082.00	4.750%	18,622.71	35,704.71
06/30/2026	17,911.00	4.750%	17,811.31	35,722.31
06/30/2027	18,781.00	4.750%	16,960.54	35,741.54
06/30/2028	19,692.00	4.750%	16,068.44	35,760.44
06/30/2029	20,648.00	4.750%	15,133.07	35,781.07
06/30/2030	21,651.00	4.750%	14,152.29	35,803.29
06/30/2031	22,702.00	4.750%	13,123.87	35,825.87
06/30/2032	23,804.00	4.750%	12,045.53	35,849.53
06/30/2033	24,960.00	4.750%	10,914.84	35,874.84
06/30/2034	26,171.00	4.750%	9,729.24	35,900.24
06/30/2035	27,442.00	4.750%	8,486.11	35,928.11
06/30/2036	28,774.00	4.750%	7,182.62	35,956.62
06/30/2037	30,171.00	4.750%	5,815.85	35,986.85
06/30/2038	31,636.00	4.750%	4,382.73	36,018.73
06/30/2039	33,172.00	4.750%	2,880.02	36,052.02
06/30/2040	27,460.00	4.750%	1,304.35	28,764.35
<b>Total</b>	<b>\$479,163.00</b>	<b>-</b>	<b>\$301,402.48</b>	<b>\$780,565.48</b>

**Date And Term Structure**

Dated.....	6/20/2018
First Coupon Date.....	6/20/2019
Frequency of Interest Payments.....	1 Per Year
First Serial Maturity Date.....	6/20/2019

**Yield Statistics**

Average Coupon.....	4.7500003%
Weighted Average Maturity.....	13.242 Years
Bond Year Dollars.....	\$6,345.32
Bond Yield for Arbitrage Purposes.....	4.6948952%
True Interest Cost (TIC).....	4.6948952%

**\$4,468,000**

Roane County, Tennessee

Wastewater Revenue and Tax Bonds, Series 2011 (SRF Loan)

Dated: June 24, 2011 - Estimated Payments

**Debt Service**

Date	Principal	Coupon	Interest	Total P+I
06/30/2018	-	-	-	-
06/30/2019	196,356.00	1.850%	72,187.87	268,543.87
06/30/2020	199,860.00	1.850%	68,525.58	268,385.58
06/30/2021	203,424.00	1.850%	64,797.95	268,221.95
06/30/2022	207,060.00	1.850%	61,003.77	268,063.77
06/30/2023	210,744.00	1.850%	57,141.93	267,885.93
06/30/2024	214,512.00	1.850%	53,211.21	267,723.21
06/30/2025	218,340.00	1.850%	49,210.28	267,550.28
06/30/2026	222,240.00	1.850%	45,137.92	267,377.92
06/30/2027	226,200.00	1.850%	40,992.92	267,192.92
06/30/2028	230,232.00	1.850%	36,774.02	267,006.02
06/30/2029	234,348.00	1.850%	32,479.82	266,827.82
06/30/2030	238,524.00	1.850%	28,108.98	266,632.98
06/30/2031	242,784.00	1.850%	23,660.17	266,444.17
06/30/2032	247,116.00	1.850%	19,131.93	266,247.93
06/30/2033	251,532.00	1.850%	14,522.83	266,054.83
06/30/2034	256,020.00	1.850%	9,831.45	265,851.45
06/30/2035	260,580.00	1.850%	5,056.41	265,636.41
06/30/2036	132,172.00	1.850%	714.12	132,886.12
<b>Total</b>	<b>\$3,992,044.00</b>	<b>-</b>	<b>\$682,489.16</b>	<b>\$4,674,533.16</b>

**Date And Term Structure**

Dated.....	6/01/2018
First Coupon Date.....	7/01/2018
Frequency of Interest Payments.....	12 Per Year
First Serial Maturity Date.....	7/01/2018

**Yield Statistics**

Average Coupon.....	1.849998%
Weighted Average Maturity.....	9.241 Years
Bond Year Dollars.....	\$36,891.31
Bond Yield for Arbitrage Purposes.....	1.8571447%
True Interest Cost (TIC).....	1.8571447%

**Roane County, Tennessee**  
Total Combined Outstanding Sewer Fund Debt Service

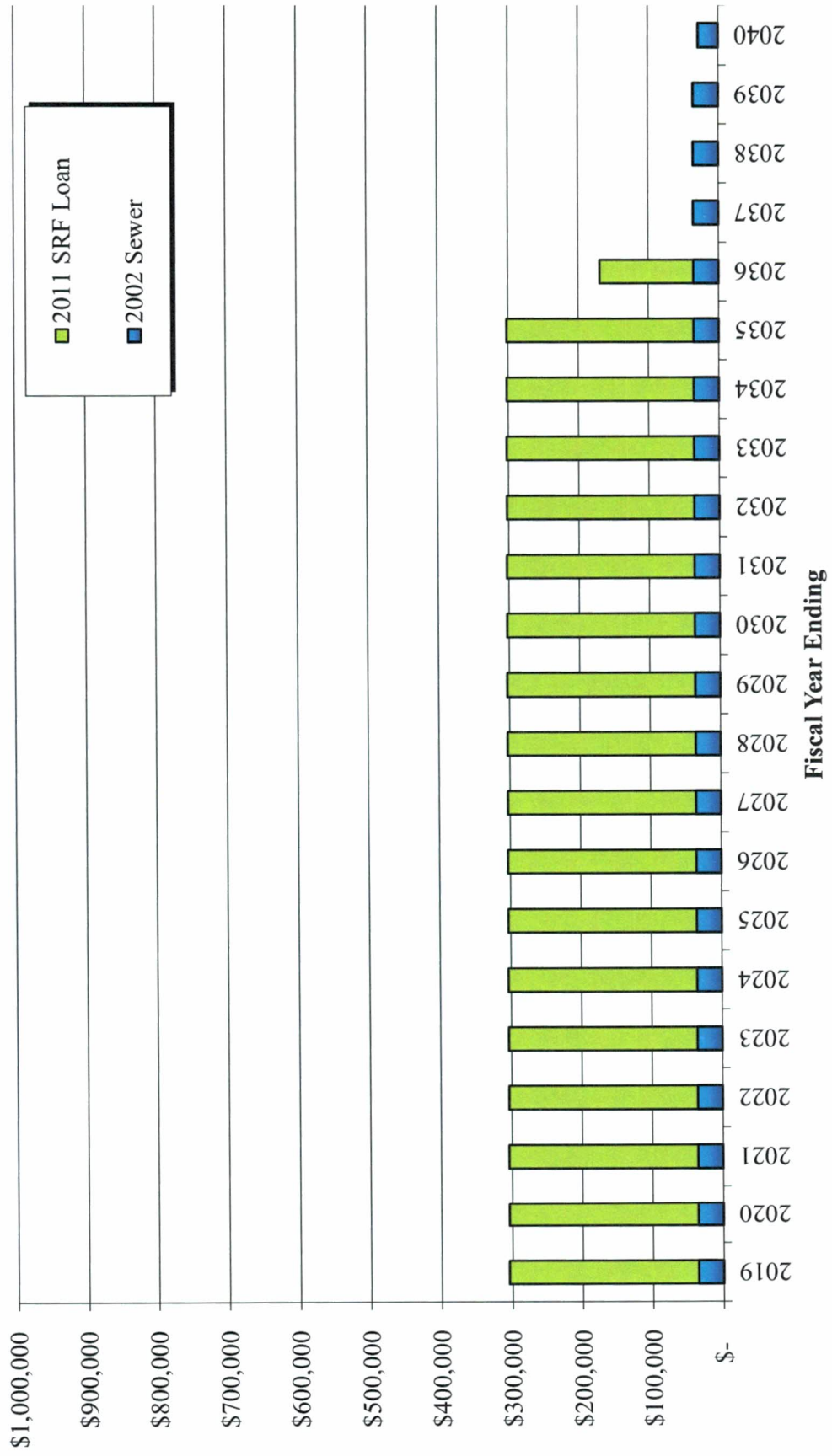
Aggregate Debt Service

Date	Principal	Interest	Total P+I
06/30/2018	-	-	-
06/30/2019	209,209.00	94,948.11	304,157.11
06/30/2020	213,337.00	90,675.31	304,012.31
06/30/2021	217,555.00	86,307.52	303,862.52
06/30/2022	221,877.00	81,842.12	303,719.12
06/30/2023	226,281.00	77,276.47	303,557.47
06/30/2024	230,803.00	72,607.74	303,410.74
06/30/2025	235,422.00	67,832.99	303,254.99
06/30/2026	240,151.00	62,949.23	303,100.23
06/30/2027	244,981.00	57,953.46	302,934.46
06/30/2028	249,924.00	52,842.46	302,766.46
06/30/2029	254,996.00	47,612.89	302,608.89
06/30/2030	260,175.00	42,261.27	302,436.27
06/30/2031	265,486.00	36,784.04	302,270.04
06/30/2032	270,920.00	31,177.46	302,097.46
06/30/2033	276,492.00	25,437.67	301,929.67
06/30/2034	282,191.00	19,560.69	301,751.69
06/30/2035	288,022.00	13,542.52	301,564.52
06/30/2036	160,946.00	7,896.74	168,842.74
06/30/2037	30,171.00	5,815.85	35,986.85
06/30/2038	31,636.00	4,382.73	36,018.73
06/30/2039	33,172.00	2,880.02	36,052.02
06/30/2040	27,460.00	1,304.35	28,764.35
<b>Total</b>	<b>\$4,471,207.00</b>	<b>\$983,891.64</b>	<b>\$5,455,098.64</b>

**Par Amounts Of Selected Issues**

2002 Rev.....	479,163.00
2011 Rev - SRF Loan.....	3,992,044.00
<b>TOTAL.....</b>	<b>4,471,207.00</b>

## Roane County, Tennessee Total Combined Outstanding Sewer Debt Service



**Roane County, Tennessee**  
Total Combined Outstanding General Obligation Debt Service

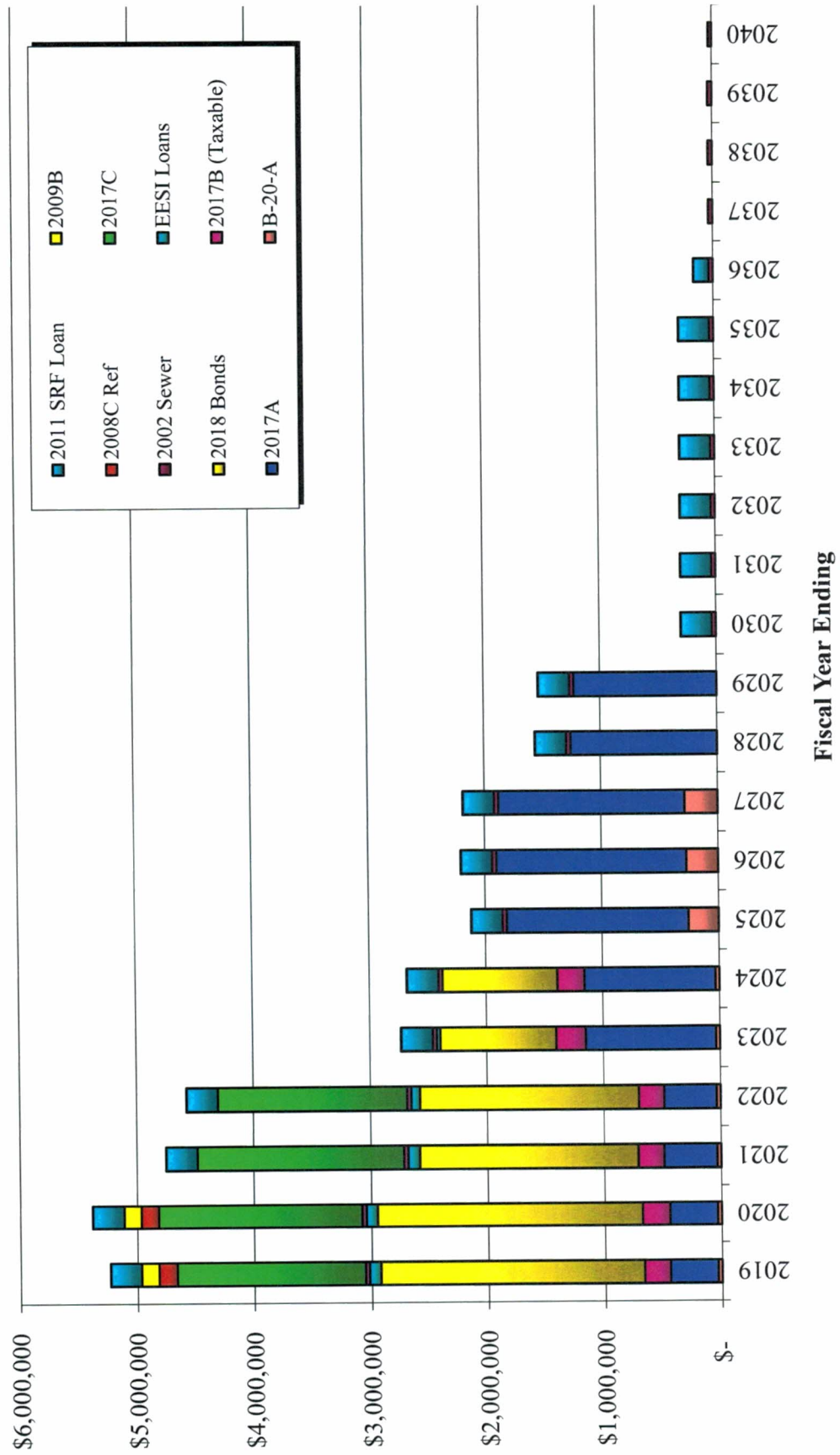
**Aggregate Debt Service**

Date	Principal	Interest	Total P+I
06/30/2018	-	-	-
06/30/2019	4,214,525.00	1,016,531.44	5,231,056.44
06/30/2020	4,573,653.00	805,017.91	5,378,670.91
06/30/2021	4,090,871.00	657,036.72	4,747,907.72
06/30/2022	4,036,260.00	534,264.32	4,570,524.32
06/30/2023	2,320,215.00	408,728.97	2,728,943.97
06/30/2024	2,340,803.00	334,920.24	2,675,723.24
06/30/2025	1,860,422.00	258,770.49	2,119,192.49
06/30/2026	1,990,151.00	214,636.73	2,204,787.73
06/30/2027	2,019,981.00	163,390.96	2,183,371.96
06/30/2028	1,449,924.00	112,842.46	1,562,766.46
06/30/2029	1,454,996.00	77,612.89	1,532,608.89
06/30/2030	260,175.00	42,261.27	302,436.27
06/30/2031	265,486.00	36,784.04	302,270.04
06/30/2032	270,920.00	31,177.46	302,097.46
06/30/2033	276,492.00	25,437.67	301,929.67
06/30/2034	282,191.00	19,560.69	301,751.69
06/30/2035	288,022.00	13,542.52	301,564.52
06/30/2036	160,946.00	7,896.74	168,842.74
06/30/2037	30,171.00	5,815.85	35,986.85
06/30/2038	31,636.00	4,382.73	36,018.73
06/30/2039	33,172.00	2,880.02	36,052.02
06/30/2040	27,460.00	1,304.35	28,764.35
<b>Total</b>	<b>\$32,278,472.00</b>	<b>\$4,774,796.47</b>	<b>\$37,053,268.47</b>

**Par Amounts Of Selected Issues**

B-20-A - 6-1-2020 @ Par.....	750,000.00
2017A - 2008A - 5-1-2023.....	9,570,000.00
2017B Taxable - B-13-A - 5-1-2023.....	1,270,000.00
GO 2018 - NC.....	8,805,000.00
EESI Loans - Paid by Schools.....	397,265.00
2017C - 2014.....	6,450,000.00
EDS 2008C Ref - 6-1-2018 @ Par.....	280,000.00
EDS - 2009B - 6-1-2018 @ Par.....	285,000.00
2002 Rev.....	479,163.00
2011 Rev - SRF Loan.....	3,992,044.00
<b>TOTAL.....</b>	<b>32,278,472.00</b>

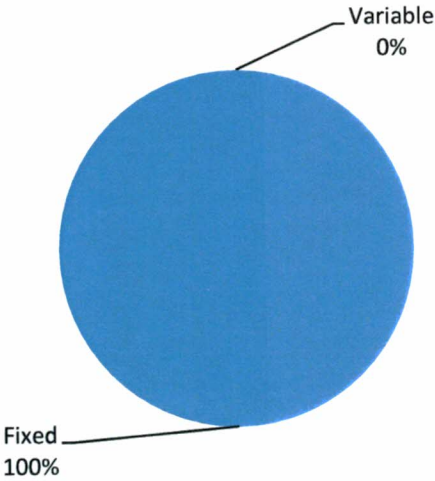
## Roane County, Tennessee Total Combined Outstanding Debt Service - All Funds



# Roane County, Tennessee

## Fixed Rate Ratio vs Variable Rate Ratio

	<u>Amount Outstanding</u>
Fixed	\$32,278,472
Variable	\$0
<b>Total</b>	<b>\$32,278,472</b>



**\$8,805,000 (\$380,000 Road Portion)**  
 Roane County, Tennessee  
 General Obligation Refunding Bonds, Series 2018

Debt Service

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
03/29/2018	-	-	-	-	-
12/01/2018	-	-	12,772.22	12,772.22	-
06/01/2019	90,000.00	5.000%	9,500.00	99,500.00	112,272.22
12/01/2019	-	-	7,250.00	7,250.00	-
06/01/2020	90,000.00	5.000%	7,250.00	97,250.00	104,500.00
12/01/2020	-	-	5,000.00	5,000.00	-
06/01/2021	100,000.00	5.000%	5,000.00	105,000.00	110,000.00
12/01/2021	-	-	2,500.00	2,500.00	-
06/01/2022	100,000.00	5.000%	2,500.00	102,500.00	105,000.00
<b>Total</b>	<b>\$380,000.00</b>	<b>-</b>	<b>\$51,772.22</b>	<b>\$431,772.22</b>	<b>-</b>

**Date And Term Structure**

Dated.....	3/29/2018
First Coupon Date.....	12/01/2018
Frequency of Interest Payments.....	2 Per Year
First Serial Maturity Date.....	6/01/2019

**Yield Statistics**

Average Coupon.....	4.9999998%
Weighted Average Maturity.....	2.725 Years
Bond Year Dollars.....	\$1,035.44
Bond Yield for Arbitrage Purposes.....	4.9944180%
True Interest Cost (TIC).....	4.9944180%



CWO 2011-285

Roane County

		<u>12 payments</u>	<u>5 payments</u>	<u>1 payment</u>			
		\$ 3,786,612.00	\$ 1,078,555.00	\$ 21,664.20			
PRINCIPAL							
PRINCIPAL	3,916,131.20						
RATE OF INTEREST	1.77%						
MONTHS	240						
MONTHLY DEBT SERVICE	\$ 21,699.00						
TOTAL INTEREST	\$ 640,656.00	\$ 639,984.00	\$ 640.00	\$ 32.00			
TOTAL DEBT SERVICE	5213637.2						
ADMINISTRATIVE FEE	8%						
PERIOD	BEGINNING PRINCIPAL BALANCE	MONTHLY PRINCIPAL REQUIREMENT	MONTHLY INTEREST REQUIREMENT	TOTAL DEBT SERVICE REQUIREMENT (PER MONTH)	ADMINISTRATIVE FEE DUE (PER MONTH)	TOTAL PAYMENT DUE (PER MONTH)	ENDING PRINCIPAL BALANCE
July - 2018 TO June - 2019	\$ 3,916,131.20	\$ 16,052.00	\$ 5,647.00	\$ 21,699.00	\$ 255.00	\$ 21,954.00	\$ 3,723,507.20
July - 2018 TO June - 2020	3,723,507.20	16,339.00	5,360.00	21,699.00	242.00	21,941.00	3,527,439.20
July - 2018 TO June - 2021	3,527,439.20	16,631.00	5,068.00	21,699.00	229.00	21,928.00	3,327,867.20
July - 2018 TO June - 2022	3,327,867.20	16,927.00	4,772.00	21,699.00	216.00	21,915.00	3,124,743.20
July - 2018 TO June - 2023	3,124,743.20	17,229.00	4,470.00	21,699.00	202.00	21,901.00	2,917,995.20
July - 2018 TO June - 2024	2,917,995.20	17,537.00	4,162.00	21,699.00	188.00	21,887.00	2,707,551.20
July - 2018 TO June - 2025	2,707,551.20	17,850.00	3,849.00	21,699.00	174.00	21,873.00	2,493,351.20
July - 2018 TO June - 2026	2,493,351.20	18,168.00	3,531.00	21,699.00	160.00	21,859.00	2,275,335.20
July - 2018 TO June - 2027	2,275,335.20	18,492.00	3,207.00	21,699.00	145.00	21,844.00	2,053,431.20
July - 2018 TO June - 2028	2,053,431.20	18,822.00	2,877.00	21,699.00	130.00	21,829.00	1,827,567.20
July - 2018 TO June - 2029	1,827,567.20	19,158.00	2,541.00	21,699.00	115.00	21,814.00	1,597,671.20
July - 2018 TO June - 2030	1,597,671.20	19,500.00	2,199.00	21,699.00	99.00	21,798.00	1,363,671.20
July - 2018 TO June - 2031	1,363,671.20	19,848.00	1,851.00	21,699.00	84.00	21,783.00	1,125,495.20
July - 2018 TO June - 2032	1,125,495.20	20,202.00	1,497.00	21,699.00	68.00	21,767.00	883,071.20
July - 2018 TO June - 2033	883,071.20	20,563.00	1,136.00	21,699.00	51.00	21,750.00	636,315.20
July - 2018 TO June - 2034	636,315.20	20,930.00	769.00	21,699.00	35.00	21,734.00	385,155.20
July - 2018 TO June - 2035	385,155.20	21,303.00	396.00	21,699.00	18.00	21,717.00	129,519.20
July - 2035 November - 2035	129,519.20	21,571.00	128.00	21,699.00	63.00	21,762.00	21,664.20
FINAL PAYMENT DECEMBER - 2035	21,664.20	21,664.20	32.00	21,696.20	1.00	21,697.20	-

Roane County		Energy Efficient Incentive School Loan (1)				
PRINCIPAL	\$	208,986.43				
RTE OF INTEREST		1.77%				
MONTHS		240				
MONTHLY DEBT SERVICE		59,724				
		BEGINNING	MONTHLY	MONTHLY	TOTAL	TOTAL
		PRINCIPAL	PRINCIPAL	INTEREST	DEBT SERVICE	PAYMENT
		BALANCE	REQUIREMENT	REQUIREMENT	REQUIREMENT	DUE
PERIOD					(PER MONTH)	(PER MONTH)
7/1/2018 - 6/30/2019	\$	213,963.43	\$ 4,977.00	\$ -	\$ 4,977.00	\$ 59,724.00
7/1/2019 - 6/30/2020		154,239.43	4,977.00	-	4,977.00	\$ 59,724.00
7/1/2020 - 6/30/2021		94,515.43	4,977.00	-	4,977.00	\$ 59,724.00
7/1/2021 - 12/30/2022		34,791.43	4,977.00	-	4,977.00	\$ 24,885.00
Final Payment 1/1/2022		4,929.43	4,929.43	-	4,929.43	\$ 4,929.43
						ENDING
						PRINCIPAL
						BALANCE
						\$ 154,239.43
						94,515.43
						34,791.43
						4,929.43
						(0.00)

Roane County		Energy Efficient Incentive School Loan (2)				
PRINCIPAL	\$	151,142.00				
RTE OF INTEREST		1.77%				
MONTHS		240				
MONTHLY DEBT SERVICE		38,592				
		BEGINNING	MONTHLY	MONTHLY	TOTAL	TOTAL
		PRINCIPAL	PRINCIPAL	INTEREST	DEBT SERVICE	PAYMENT
		BALANCE	REQUIREMENT	REQUIREMENT	REQUIREMENT	DUE
PERIOD					(PER MONTH)	(PER MONTH)
7/1/2018 - 6/1/2019	\$	183,302.00	\$ 3,216.00	\$ -	\$ 3,216.00	\$ 38,592.00
7/1/2019 - 6/1/2020		144,710.00	3,216.00	-	3,216.00	\$ 38,592.00
7/1/2020 - 6/1/2021		106,118.00	3,216.00	-	3,216.00	\$ 38,592.00
7/1/2021 - 6/1/2022		67,526.00	3,216.00	-	3,216.00	\$ 16,080.00
7/1/2022 - 2/1/2023		28,934.00	3,216.00	-	3,216.00	\$ 16,080.00
Final Payment 3/1/2022		28,934.00	3,206.00	-	3,206.00	\$ 3,206.00
						ENDING
						PRINCIPAL
						BALANCE
						\$ 144,710.00
						106,118.00
						67,526.00
						28,934.00
						3,206.00
						-