

**Town of Thompson's Station  
Board of Mayor and Aldermen  
Work Session Meeting Agenda  
May 6, 2020**

**Discussion Items: Town Wastewater Impact Fees**

Documents:

[ORDINANCE NO. 2020-005 TO AMEND ORDINANCE 10-007 REDLINED BY KV  
5.4.20\\_VER2.PDF](#)  
[COPY OF WW IMPACT FEES\\_ \(003\).PDF](#)  
[THOMPSONS STA WSTWTR MTAS PRES 01 15 20.PDF](#)

*This meeting will be held remotely by electronic means due to the COVID-19 emergency.*

**ORDINANCE NO. 2020-005**

**AN ORDINANCE OF THE TOWN OF THOMPSON'S STATION, TENNESSEE TO  
AMEND ORDINANCE NO. 10-007 PURSUANT TO TITLE 18, CHAPTER 1 REGARDING  
WASTEWATER RECLAMATION AND REUSE**

WHEREAS, the Utility Board and Town Staff for the Town of Thompson's Station is recommending amendments to certain provisions of the Town's Ordinance No. 10-007 as authorized under Title 18, Chapter 1, Subsection 18-114 of the Municipal Code for the Town of Thompson's Station, and specifically, in consideration of the Jackson Thornton, Certified Public Accountants and Consultants study titled *Town of Thompson's Station, TN Wastewater System Development Charge Analysis*; and

WHEREAS, the Board of Mayor and Aldermen have for their consideration the adoption of amendments to Ordinance No. 10-007 as proposed herein to increase the fees as necessitated by the demand on the Town of Thompson's Station's Wastewater System; and

WHEREAS, the Board of Mayor and Alderman understand there exist growth in the population of the Town, and further, understand the occurrence of expansion of development to accommodate that growth in population, and further recognize a greater demand for wastewater treatment needs as a result of the growth and expansion; and

WHEREAS, the Board of Mayor and Alderman further believe and understand that growth should, where possible, pay for itself as to the expansion and demands on the Town of Thompson's Station's Wastewater System infrastructure; and

WHEREAS, the Board of Mayor and Alderman have further determined that it is in the best interest of the Town to amend the language of Ordinance No. 10-007 as to the components of system development fees and access/tap fees to be known as the Waste Water Impact Fee and for there to continue to be a separate Effluent Disposal Fee and

WHEREAS, the Board of Mayor and Aldermen have reviewed Ordinance No. 10-007 as developed under Title 18, Chapter 1, Subsection 18-114 and determined, based upon the considerations of the recommendations of the Utility Board, Town Staff and the study on which the recommendations were made, it is necessary and prudent to increase the Wastewater Impact Fees to \$9,757.08 toward contributions of capital for existing or planned future plant facilities necessary to meet the service needs of new and existing customers and prudent to increase the Effluent Disposal Fee to \$5,650.05 for the necessary disposal of effluents from an increase of new and existing customers;

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen of the Town of Thompson's Station, Tennessee, as follows:

**Section 1.** That the Town of Thompson's Station's Ordinance No. 10-007 is amended, as provided hereinafter, and that Ordinance No. 14-001 be repealed as provided under Title 18, Chapter 1, Section 18-114;

**Section 2.** That Ordinance No. 10-007 is amended to amend the EDU amount, and to strike and replace sentence 4, resulting in the following language for Section 3 (a):

- (a) Estimated water usage is based on calculations derived from several professional water use estimation formulas and a usage calculation worksheet is included in this ordinance as Exhibit A. An equivalent dwelling unit (EDU) is based on an estimated single-family dwelling water usage at 250 gallons per day (GPD). Water usage calculations for the purpose of calculating fees shall deem any usage less than 250 GPD as one (1) EDU and any usage calculated to exceed 250 GPD (or multiplies thereof) shall be counted as an additional EDU.

The components of system development fees and access/tap fees shall be known as Wastewater Impact Fees. There shall also be an Effluent Disposal Fee as provided hereinafter.

**Section 3.** That Ordinance No. 10-007 is amended by deleting Section 3 (b) of said ordinance in its entirety and replacing it with the following new subsection:

(b) This portion of the Ordinance shall take effect on July 1, 2020, unless otherwise provided herein, and the following shall become the Wastewater Impact Fee and the Effluent Disposal Fee amount(s) to be charged to developers, contractors, builders and/or property owners proposing to connect to the Town's Wastewater Treatment Facilities with the due dates provided herein:

Wastewater Impact Fee:	\$ 9,757.08 per EDU	Due Upon: Preliminary Plat
Effluent Disposal Fee:	\$ 5,650.05 per EDU	Due Upon: Building Permit

**Section 4.** That Ordinance No. 10-007 is amended by deleting Section 3 (c) of said ordinance in its entirety and replacing it with the following new subsection:

(c) There shall be a review of the Wastewater Impact Fee and the Effluent Disposal Fee in January of each odd year to start in 2023, with any prior enactments for review revised as provided herein

**Section 5.** After final passage, Town Staff is directed to incorporate these changes into an updated ordinance document and said document shall constitute the Wastewater Reclamation and Reuse ordinances of the Town.

**Section 6.** If any section or part of the Ordinance, including any amendments thereto, is determined to be invalid for any reason, such section or part shall be deemed to be a separate and independent provision. All other sections or parts shall remain in full force and effect. If any section or part of the Ordinance is invalid in one or more of its applications, that section or part shall remain in effect for all other valid applications.

**Section 7.** This ordinance shall take effect on July 1, 2020 upon the publication of its caption in a newspaper of general circulation after final reading by the Board of Mayor and Aldermen, the public welfare requiring it.

Duly approved and adopted by the Board of Mayor and Aldermen of the Town of Thompson's Station, Tennessee, on the \_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
**Corey Napier, Mayor**

ATTEST:

\_\_\_\_\_  
Regina Fowler, Town Recorder

Passed First Reading: March 10, 2020

Passed Second Reading: May 12, 2020

APPROVED AS TO FORM AND LEGALITY:

\_\_\_\_\_  
Town Attorney

DRAFT

DRAFT

**Updated - S Banks**

*Assumptions:*

- each item is financed 100% independently
- No monies or fees received from Developments
- No current funds or est. available funds used

161 GPD	
250 GPD	
	3,290
	<b>2,120</b>

**Financing New MBR system (brings capacity to 1mil)**

Additional Capacity	530,000 gal	
Additional EDU(250/gpd)		2,120
est. Barge Design	\$	13,345,000.00
40yr term @ 2.375%	\$	7,340,004.00
Principle \$14.2m		
	\$	20,685,004.00
est Fee per EDU	<b>\$</b>	<b>9,757.08</b>

Wastewater Impact Fee to be paid by Developer

\*\* Includes total CEI cost.

**Other Budgeting Notes**

**Other Budgeting Notes**

Additional maint costs from Barge presentation  
 Membrane replacement in future years  
 Additional Certified Staff required

Barge Est	14,200,000
Less Approved Design	<u>(855,000)</u>
	13,345,000

**Financing New Drip Fields @ Alexander**

Additional Capacity	670,000 gal	
Additional EDU (250/gpd)		2,680
Alexandar Property	\$	9,769,000.00
40yr term @ 2.375%	\$	5,373,136.00
Principle \$9.769m		
	\$	15,142,136.00
est. Fee per EDU	<b>\$</b>	<b>5,650.05</b>

Wastewater Effluent Fee to be paid by Builder

**Other Budgeting Notes**

No additional staff estimated  
 Pumps will need replacement in future years

Matthew.Johnson@bargedesign.com

Apr 27, 2020, 11:39 AM (2 days ago)

to Kenneth, Paula.Harris@bargedesign.com, Jonathan.Children@bargedesign.com, me, Andrew, Kirk, Jim, Corey, Tyler, Regina, Kenny, Brandon Ken,

I do not have anything new to share at the moment regarding the Alexander property. I would like to get confirmation on the numbers from the field work and coordination with TDEC before adjusting the numbers. As of now, the numbers for that site are the same as have been previously presented to both BOMA and the utility board. Below are the numbers and attached is the presentation which was presented at the open house in February which also has these numbers. Please let me know if you need any additional information for the upcoming meeting. Also, please let us know if you would like someone from Barge Design to attend the upcoming meeting as I do not believe any from Barge have received a meeting invite.

Estimated Cost of Drip Field Improvements \$9,769,000

Estimated Capacity Added 67 acres: 670,000 gpd (As previously mentioned, this is currently being confirmed by field work.)

Estimated Cost of Treatment Plant Expansion \$14,200,000 (Of this amount, the City has already committed \$855,000 on the design of the improvements.)

Estimated Capacity Added 530,000 gpd (Total WWTP capacity will be 1,000,000 gpd)

Kenneth McLawhon

Mon, Apr 20, 3:35 PM (9 days ago)

to Vance, Matthew.Johnson, Corey, Paula.Harris, Jonathan.Children, me, Regina, Jim

On Mon, Apr 20, 2020, 3:19 PM Hamilton, Vance - RD, Nashville, TN <vvance.hamilton@usda.gov> wrote:  
Ken,

Our interest rate is now 2.375%. That rate could change July 1.

\$21,000,000 @ 2.375% = \$67,814/month x 12 months = \$813,768 annual debt service.

If you took the loan the full 40 year term, you would pay \$10,649,884 in interest.

If I can provide any additional information, please let me know.

Vance

# Town of Thompson's Station

## Wastewater Utility Revenue Sufficiency Study

With Consideration of  
Developer Contributions

Ralph Cross

Consultant

January, 2020



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## MTAS Mission

- Update and expand the multi-year financial analysis of the wastewater utility from February, 2018.
- Consider the financial impact of the updated capital improvement plan (CIP).
- Evaluate impact of new debt issued to fund the CIP.
- Evaluate the depreciation costs for the updated CIP.
- Recommend the amount of additional revenue required to comply with state mandates.



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- The Town of Thompson's Station is responsible for essential, complex, costly and highly regulated assets
  - EPA
  - TDEC
  - WWFB
- Customer base is growing.

## Where do we start?

- Review the state requirements for the financial operation of public utilities.
- Focus
  - Bonded Debt
  - Total Net Position
  - Change in Net Position

## Proprietary Fund State Funding Requirements

- Wastewater Facilities Act of 1987
  - Created a Board to oversee financially distressed water/wastewater systems
  - Financial Distress:
    - Default on debt
    - Deficit in total net position
    - 2 consecutive years of negative change to net position
  - Utilities under Board's oversight must submit a plan to eliminate losses or cure the default.

Debt

## Debt Service

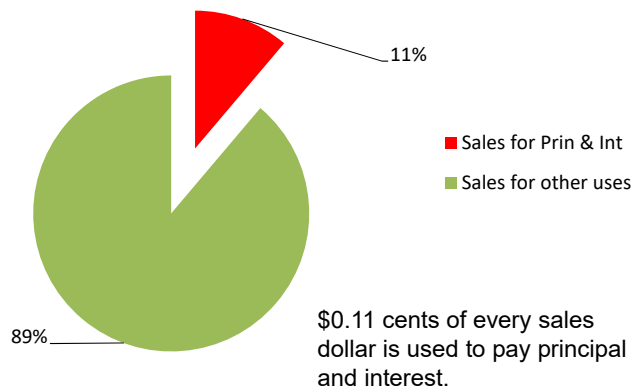
### Existing Debt Service:

Amortized principal and interest payments on outstanding debt.

### Future Debt Service:

Additional principal and interest payments projected on debt to be issued in the amount of \$13 million planned for Fiscal Year 2022-23.

## Thompson's Station Wastewater Utility % of Sales Dollar to Prin & Int Payments Fiscal Year 2018-19

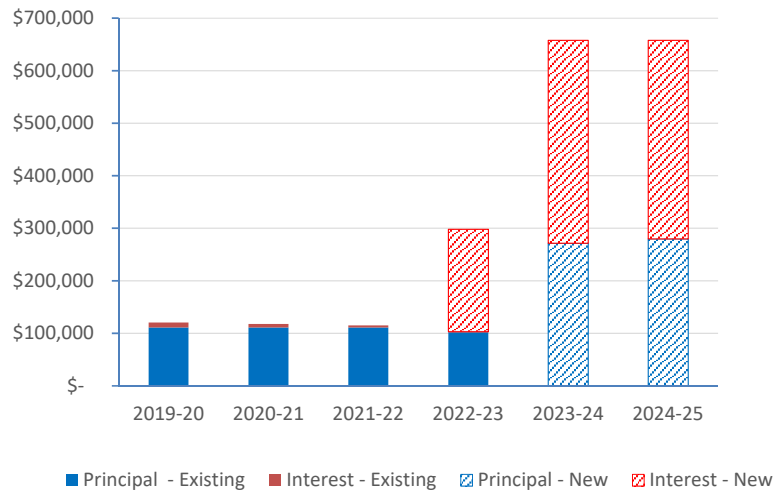


## Debt Service

TYPE	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
<b>EXISTING</b>						
Principal	\$111,111	\$111,111	\$111,111	\$101,852	\$0	\$0
Interest	\$9,415	\$6,692	\$3,970	\$1,248	\$0	\$0
<b>NEW</b>						
Principal	\$0	\$0	\$0	\$0	\$271,414	\$279,669
Interest	\$0	\$0	\$0	\$195,000	\$386,288	\$378,033

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### Thompson's Station Wastewater Utility Principal and Interest Requirements



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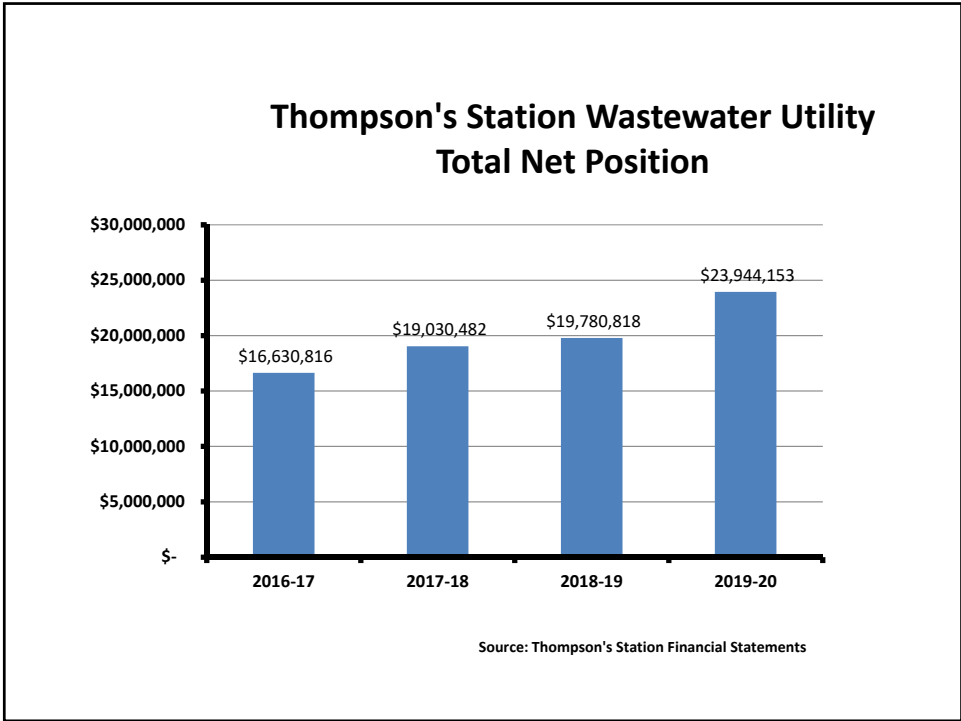
## Total Net Position

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### Review of Total Net Position

“Total Net Position”, has experienced growth for the past three fiscal years and is expected to increase again in FY 2019-20.

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## Changes in Net Position

## Review of “Changes in Net Position”

*The Governmental Accounting Standards Board (GASB) and the State of Tennessee have different definitions for the term “Changes in Net Position”.*

## GASB Definition of Change in Net Position

- Items that have a positive effect on net position:
  - Positive income from operations
  - Positive nonoperating revenue (interest earnings)
  - Grants
  - Contributions
- Items that have a negative effect on net position:
  - Negative income from operations
  - Nonoperating expenses (interest payments)
  - Transfers out

## Town of Thompson's Station Wastewater Utility Financial Review

	FY 2016-17	FY 2017-18	FY 2018-19
Operating Revenue	\$873,635	\$972,721	\$1,140,000
Operating Expenses	<u>\$1,105,810</u>	<u>\$988,163</u>	<u>\$898,274</u>
Operating Income(Loss)	(\$232,175)	(\$15,442)	\$241,726
Nonoperating Rev (Exp)	<u>(\$10,942)</u>	<u>\$22,126</u>	<u>\$6,110</u>
Income (Loss) Before Contr	(\$243,117)	\$6,684	\$247,836
Capital Contributions	\$2,750,000	\$1,861,468	\$0
Capital Contr – Tap Fees	<u>\$849,914</u>	<u>\$531,514</u>	<u>\$502,500</u>
Changes in Net Position *	\$3,356,797	\$2,399,666	\$750,336

\*Change in Net Position as defined by the  
Governmental Accounting Standards Board

Financial information from  
Town of Thompson's Station  
Audited Financial Reports

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## State of Tennessee Definition of Change in Net Position

- Items that have a positive effect on net position:
  - Positive income from operations
  - Positive nonoperating revenue (interest earnings)
  - ~~Grants~~
  - ~~Contributions~~
- Items that have a negative effect on net position:
  - Negative income from operations
  - Nonoperating expenses (interest payments)
  - Transfers out

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## Town of Thompson's Station Wastewater Utility Financial Review

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Changes in Net Position *	\$3,356,797	\$2,399,666	\$750,336

*\*Change in Net Position as defined by the State of Tennessee*

*Financial information from Town of Thompson's Station Audited Financial Reports*

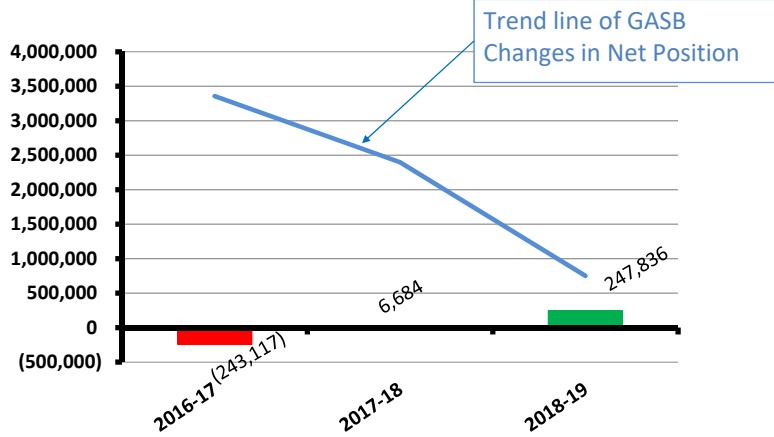
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## Comparison of the Difference in Definitions of Change in Net Position

	<u>FY 2016-17</u> Audit	<u>FY 2017-18</u> Audit	<u>FY 2018-19</u> Audit
<b><u>State of TN</u></b>	(\$243,117)	\$6,684	\$247,836
<b><u>GASB</u></b>	\$3,356,797	\$2,399,666	\$750,336

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### Thompson's Station Wastewater Utility Changes in Net Position (State of Tennessee Definition)



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### OBSERVATION

*Thompson's Station Wastewater Utility has experienced an upward trend in income while changes in net position, as defined by GASB, show a significant decline for the last two fiscal years.*

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*Looking to the future ....*

*Capital improvements needed for the  
wastewater system are prioritized.*

## Town of Thompson's Station Wastewater Utility Capital Projects

DESCRIPTION	PROJ COST FY 2019-20	PROJ COST FY 2020-21	PROJ COST FY 2021-22	PROJ COST FY 2022-23	PROJ COST FY 2023-24
1) Plant	\$3,101,500	\$4,000,000	\$4,000,000	\$13,000,000	\$0
3) Equipment					
- 20 year life	\$0	\$0	\$0	\$0	\$0
- 10 year life	\$566,435	\$0	\$50,000	\$0	\$50,000

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*Depreciation is forecast based on the  
Capital Improvement Program.*

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## Depreciation Projections

TYPE	Fiscal Year 2020-21	Fiscal Year 2021-22	Fiscal Year 2022-23	Fiscal Year 2023-24	Fiscal Year 2024-25
Existing	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000
Improvements	\$134,181	\$136,681	\$139,181	\$666,681	\$669,181
<b>TOTAL</b>	<b>\$584,181</b>	<b>\$586,681</b>	<b>\$589,181</b>	<b>\$1,116,681</b>	<b>\$1,119,181</b>

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### *CASE STUDY 1*

*Five Year Financial Forecast  
Without Consideration of Rate Adjustments*

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## Revenue Assumptions – Case 1

- 8.5% annual growth in customer base
- No appreciable decline in sewer usage
- No rate increases
- Developers make significant contributions

FY 2019-20  
\$3,400,000

FY 2020-21  
\$3,200,000

## Expense Assumptions – Case 1

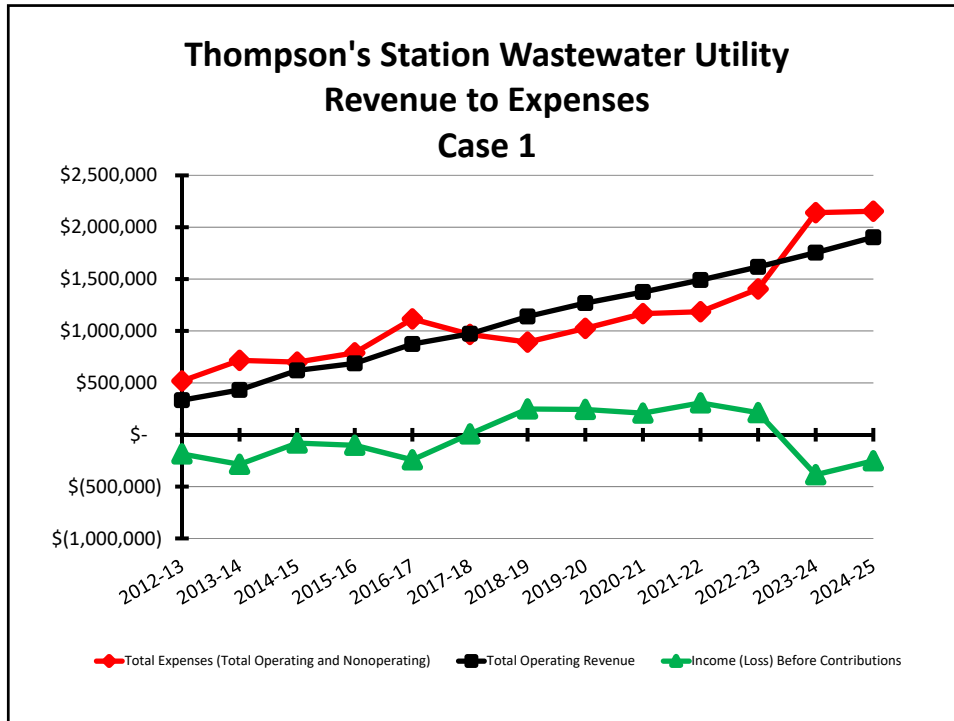
- Capital projects move forward as proposed (increasing depreciation expense)
- Additional debt issued in FY 2022-23
- Administration overhead expenses are applied
- Annual growth in expenses projected as follows:
  - Salaries ..... 3%
  - Benefits ..... 8%
  - Utilities ..... 5%
  - Business Insurance ..... 4%
  - Other ..... 3%

## Financial Review – Case 1

1. The wastewater utility has experienced significant annual growth in the customer base over the past few fiscal years.
2. The utility experienced a loss in FY 2016-17, but rebounded in FY 2017-18 and FY 2018-19, recovering from the loss and realizing positive income.
3. Expenses are projected to rise due to additional depreciation and demands for service.

## Financial Review – Case 1 (continued)

4. Projections indicate, due to the steady growth in customers, that operating revenues will continue to exceed expenses until FY 2023-24.
5. At that time, the aggressive increase in depreciation expense (*which must be funded as additions to the plant go online*) and interest expense (*due to the issuance of additional debt to fund the CIP*) cause expenses to far exceed revenue.





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## Observations for Funding Requirements of Case 1

1. The State of Tennessee's *new definition* of Change in Net Position requires the Town to address the financial condition of the Wastewater Utility without consideration of grants or contributions.
2. Projections indicate an inconsistent trend to Changes in Net Position until FY 2023-24 when the full impact of the rising costs of depreciation and interest expenses are realized.

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Municipal Technical Advisory Service  
INSTITUTE for PUBLIC SERVICE

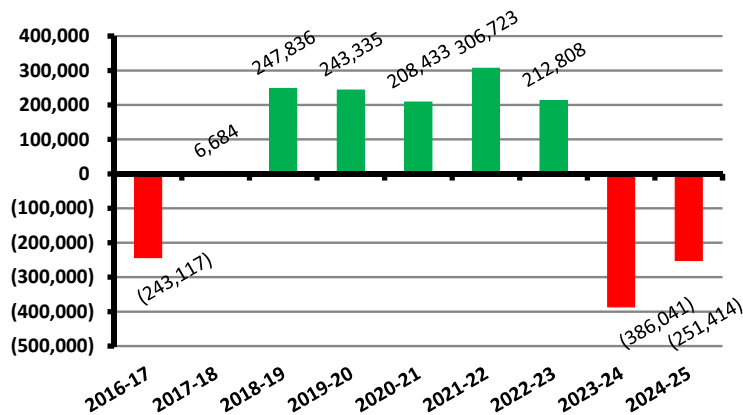
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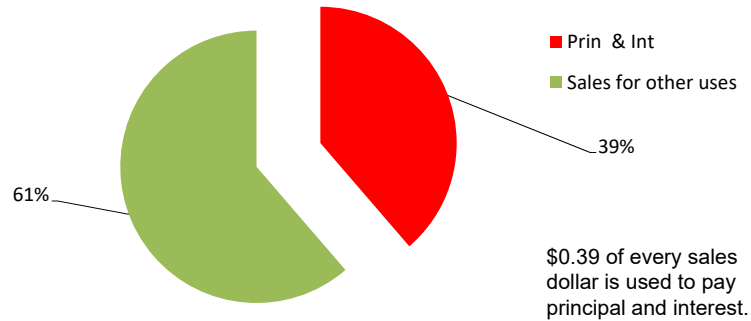
## Observations for Funding Requirements of Case 1

3. Higher levels of expenses for depreciation and interest will result in a significant negative change to net position beginning in FY 2023-24.
4. MTAS recommends the Town be sensitive to negative changes to net position throughout the study period. Two consecutive years of negative change to net position will trigger compliance issues for the utility with the Wastewater Facilities Act of 1987.

### Thompson's Station Wastewater Utility Projected Changes in Net Position Case 1 (State of Tennessee Definition)



**Thompson's Station Wastewater Utility  
% of Sales Dollar to Prin & Int Payments  
Fiscal Year 2023-24  
Case 1**

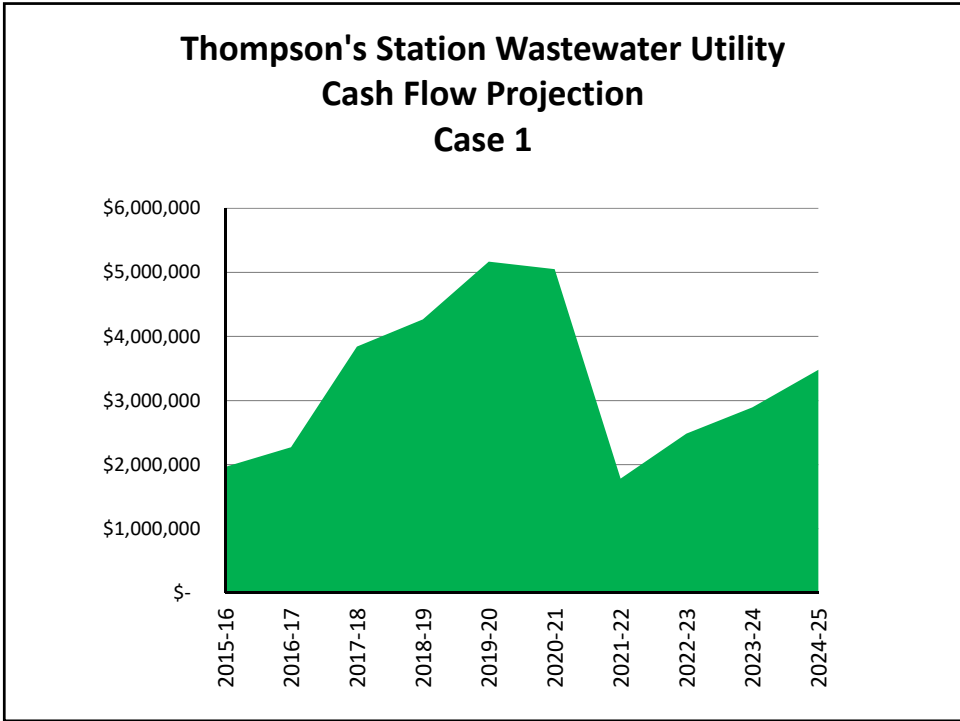


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**Cash Flow Observations for  
Case 1**

1. If the developer contributions are received as expected and \$13 million of additional debt is issued in FY 2022-23, the cash balance is projected to remain positive throughout the study period.
2. Aggressive spending on the CIP plan will deplete the developer's capital contributions by the end of FY 2021-22.

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## *CASE STUDY 2*

*Five Year Financial Forecast  
With Consideration of Rate Adjustments*

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Municipal Technical Advisory Service  
INSTITUTE for PUBLIC SERVICE

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## Revenue Assumptions – Case 2

- 8.5% growth in customer base
- No appreciable decline in sewer usage
- Developers make significant contributions

FY 2019-20

\$3,400,000

FY 2020-20

\$3,200,000

- Revenue increases are applied as follows:

### Annual Wastewater Revenue Increases:

<u>07/01/20</u>	<u>07/01/21</u>	<u>07/01/22</u>	<u>07/01/23</u>	<u>07/01/24</u>
3%	3%	3%	3%	3%

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## Expense Assumptions – Case 2

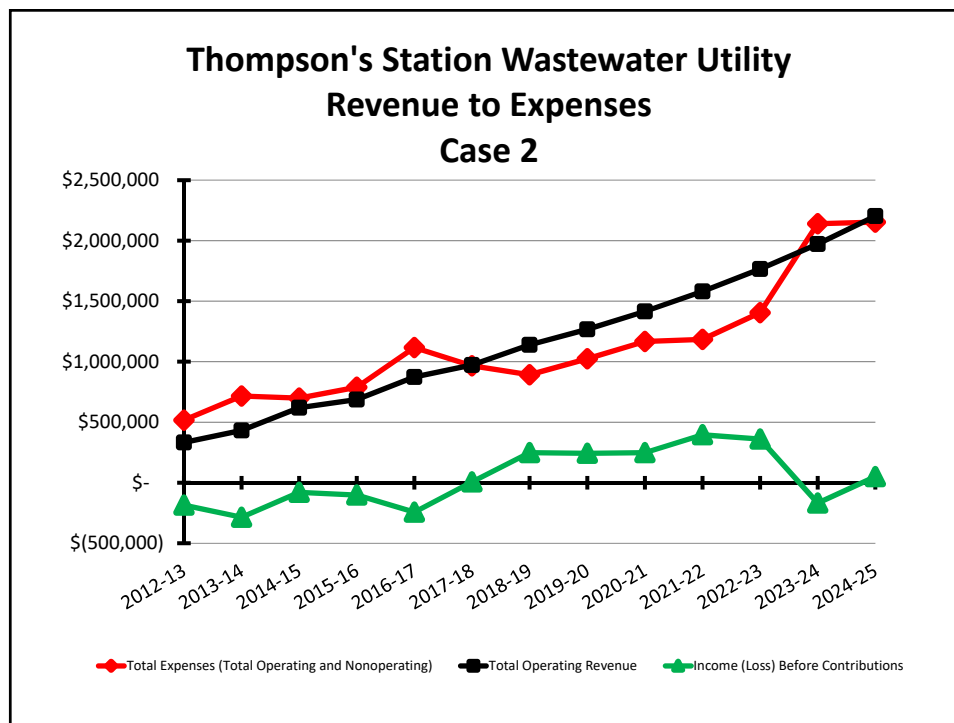
- Capital projects move forward as proposed (increasing depreciation expense)
- Additional debt is issued in FY 2022-23
- Administration overhead expenses are applied
- Annual growth in expenses projected as follows:
  - Salaries ..... 3%
  - Benefits ..... 8%
  - Utilities ..... 5%
  - Business Insurance ..... 4%
  - Other ..... 3%

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## Financial Review – Case 2

1. The same financial conditions hold as previously described for Case 1.
2. The implementation of annual adjustments to revenue provides for a gradual improvement of revenue performance over expenses during the study period.
3. Given the annual adjustments to revenue, the aggressive rise in expenses in FY 2023-24 is much more manageable.

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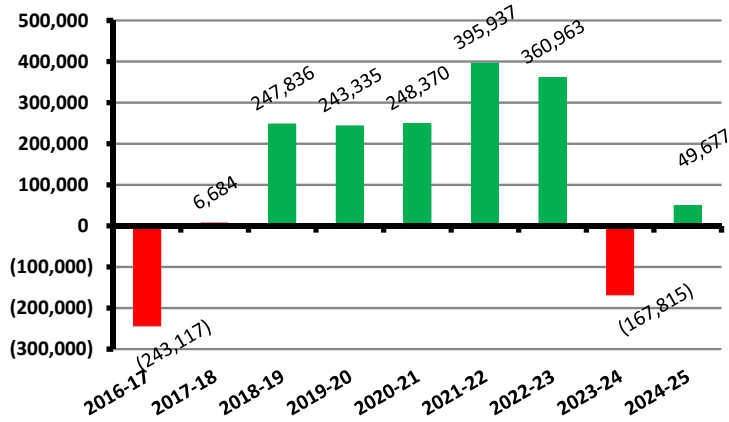
## Observations for Funding Requirements for Case 2

1. Projections indicate the application of annual revenue adjustments moderates the inconsistent trend to Changes in Net Position during the study period.
2. MTAS recommends the Town monitor the financial performance of the Wastewater Utility in FY 2022-23 in an attempt to achieve a positive change in net position.

## Observations for Funding Requirements for Case 2

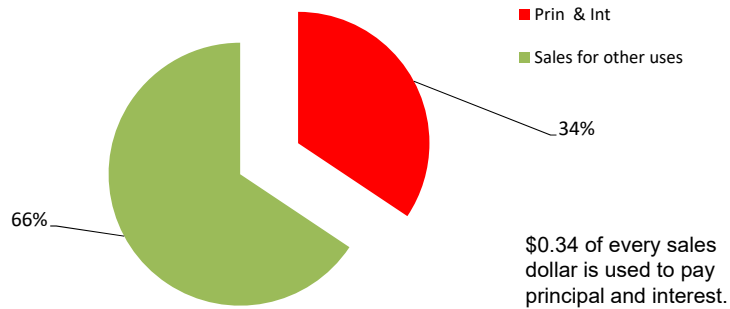
3. When the full impact of the rising costs of depreciation and interest expenses are realized in FY 2023-24, a negative change in net position is all but unavoidable.
4. If both FY 2022-23 and FY 2023-24 both have negative changes to net position, this would trigger compliance issues with the Wastewater Facilities Act of 1987.
5. MTAS recommends the Town attempt to avoid this situation.

**Thompson's Station Wastewater Utility  
Projected Changes in Net Position  
Case 2  
(State of Tennessee Definition)**



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**Thompson's Station Wastewater Utility  
% of Sales Dollar to Prin & Int Payments  
Fiscal Year 2023-24  
Case 2**

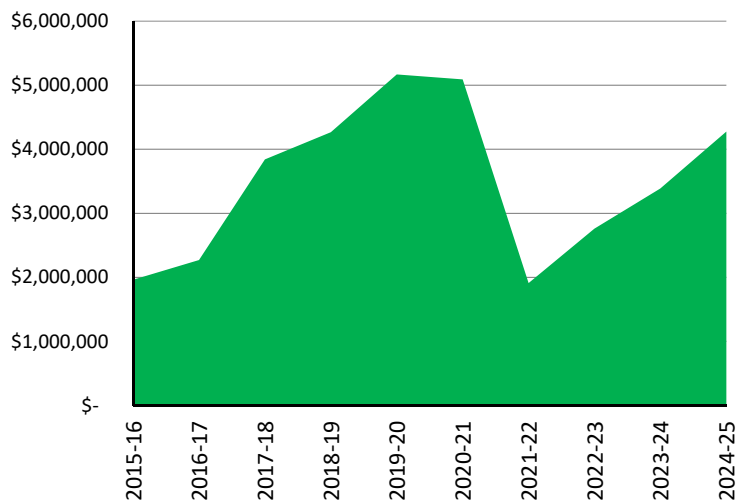


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## Cash Flow Observations for Case 2

1. If the developer contributions are received as expected and \$13 million of additional debt is issued in FY 2022-23, the cash balance is projected to remain positive throughout the study period.
2. Aggressive spending on the CIP plan will deplete the developer's capital contributions by the end of FY 2021-22.

## Thompson's Station Wastewater Utility Cash Flow Projection Case 2





## Comments

1. To remain in compliance with the Wastewater Facilities Act of 1987, municipal utilities must have a positive change to net position at least every other year.
2. Current projections indicate, if revenue adjustments are enacted and the Town actively manages expenses, the Wastewater Utility can reasonably expect compliance within the state guidelines.
3. MTAS recommends the Town be sensitive to the financial performance of the Wastewater Utility.

*Thank you for the opportunity  
to work with you!*