

Radnor Township

Business Advisory  
Committee

Strategic Evaluation  
Project:  
Sewer System

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MARCH 2024

# Table of Contents

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Executive Summary

Our Assessment

Call for Resolution

Appendix

# Executive Summary



The Radnor Township Business Advisory Committee is comprised of qualified volunteers tasked with assessing the financial options and related community implications of special projects.



In 2024, we are focused on assessing the status, needs, and opportunities of our aging sewer system.



We have determined that there are three available options for addressing Radnor's aging sewer system and have compiled a high-level assessment of pros and cons for each; however, **we require more data for a comprehensive financial assessment and recommendation.**

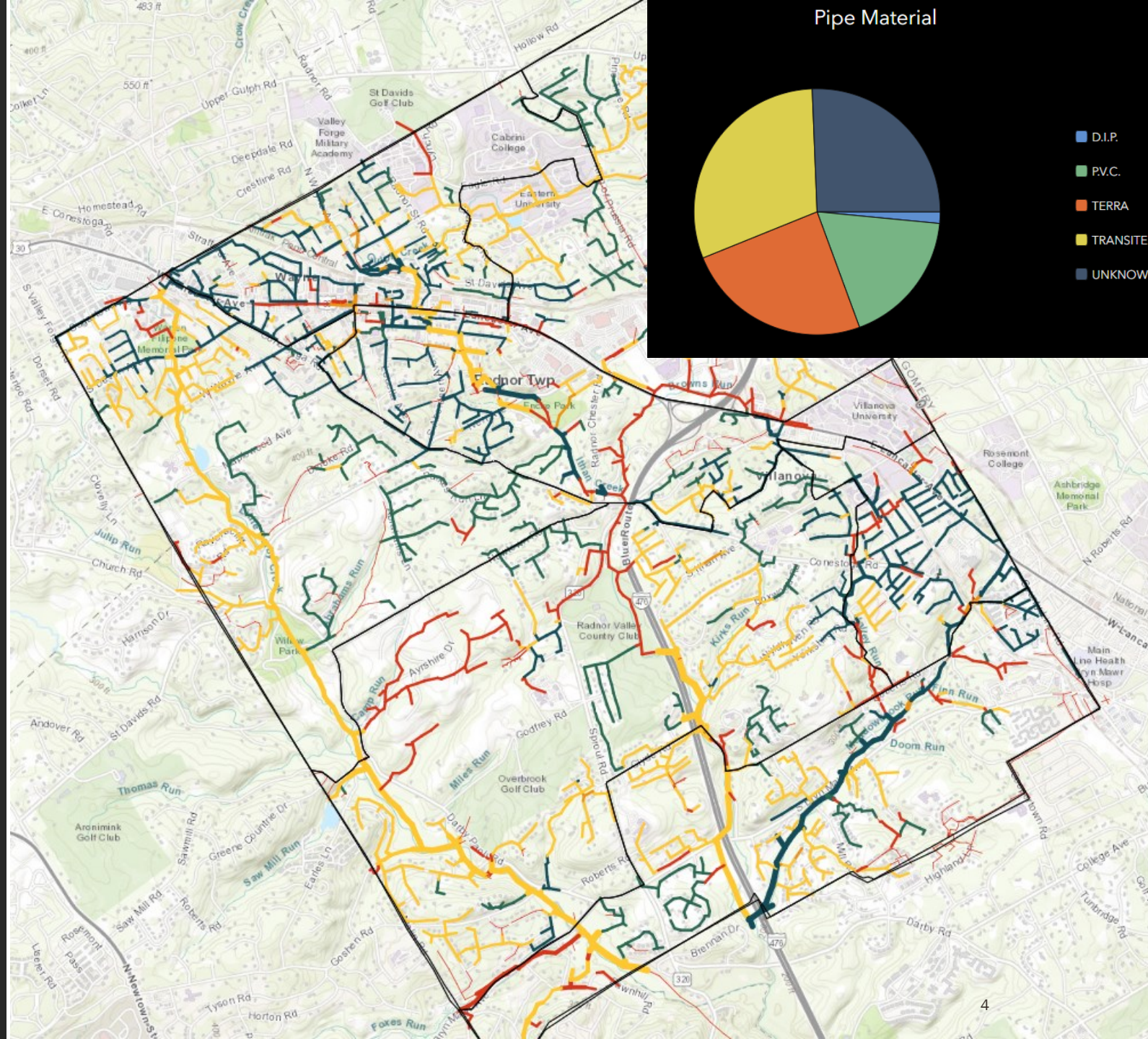


As of March 2024, the Business Advisory Committee recommends that the Board of Commissioners propose a resolution to bid for an external engineering contract to inventory and televise the Township's sewer system, **including the location, size, material, age, and condition of each asset.** Only with this data can we advise on the best path forward for the infrastructure of our community.

# Radnor Township Sewer Map

Color displays material type

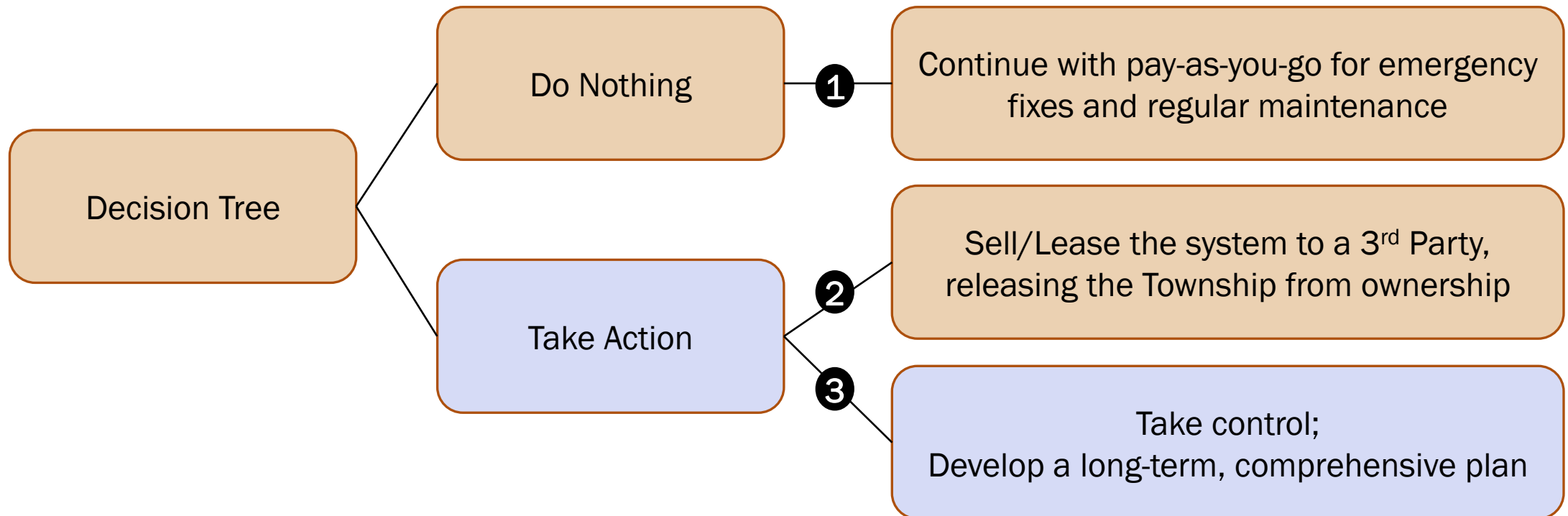
- Locations are not 100% accurate
- >25% materials unknown
- >25% terracotta; high risk



# The Options

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The Business Advisory Committee proposes that the Township has 3 options:



# Call for Resolutions

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The BAC recommends, as a critical first step in best understanding the condition of the existing sewer lines, that the Board of Commissioners commit to using money from the Sewer Fund to put out a bid for an engineering firm to inventory (location, age, size, material) and, most importantly, assess the condition of (i.e. scope/televise) the sewer system.

Further, we recommend the BoC consider the benefits of an independent Sewer Authority for governance and oversight over one of the Township's largest assets, given this could be a multi-year project.

# Appendix

# Approach

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## Milestones

## Target Date

- Define the problem, scope and objective outcome of the project January 2024
- Meet with Township Staff and BoC to understand: Jan/Feb 2024
  - the problem (engineering, consultants, etc.)
  - economic and political concerns (management, commissioners, etc.)
  - Review approach with individual BoC Members
- Identify options to address the problem Jan/Feb 2024
- Present status update to the Board of Commissioners March 2024
- Present proposal to the Board of Commissioners TBD



# Background

A 2019 engineering study from Gannett Fleming concluded:

- Township needs to adopt a Capital Management Plan to repair/maintain our aging sewer system.
- Nearly 50% of our sewer pipe is past its useful life and should be replaced.
- Total cost to replace sewer pipe beyond its useful life and make other miscellaneous replacements/improvements was estimated at \$47 million over 10 years.

**Table 7: Opinion of Probable Cost Summary\***

Item	Cost
Gravity Sewer Replacement (Including Manholes)	\$45,492,200
Pumping Stations	\$887,700
Force Mains	\$261,000
Televsual Inspection Program	\$881,700
<b>Total</b>	<b>\$47,522,600</b>

**Table 8: 10 Year Schedule and Cost of Program (Gravity Sewer).**

YEAR	REPLACEMENT COST	TV COST	TOTAL	AREA REPLACED	AREA TV'D	APP # OF MH
2021	\$ 4,979,114.00	\$304,959.00	\$ 5,284,073.00	C/C1	B1/B17/B4/B12/B18/B3/B/A4/A5/A6/A7/B19/B5/B11/B14/B15	237
2022	\$ 5,390,215.00	\$310,835.00	\$ 5,701,050.00	C1	B20/B22/B21/B6/B24/B23/B7/B26/B8/B9/A8/B25	174
2023	\$ 4,070,770.00	\$265,909.00	\$ 4,336,679.00	C2/B	B10/C3/C4/C5/D1/A9/A15/A16/A14/A13/A11/A12	138
2024	\$ 5,059,370.00		\$ 5,059,370.00	A		105
2025	\$ 4,158,007.00		\$ 4,158,007.00	A1/A2		195
2026	\$ 3,008,623.00		\$ 3,008,623.00	A3/A5/B11		125
2027	\$ 3,408,970.00		\$ 3,408,970.00	B12		150
2028	\$ 4,485,274.00		\$ 4,485,274.00	B13/B14		202
2029	\$ 4,764,459.00		\$ 4,764,459.00	B15/B16/B19		206
2030	\$ 2,912,694.00		\$ 2,912,694.00	B23/D2/B2/D3/D4		118
2031	\$ 3,704,904.00		\$ 3,704,904.00	A10/B22/B24/C5		148
<b>SUM</b>	<b>\$ 45,942,400.00</b>	<b>\$881,703.00</b>	<b>\$46,824,103.00</b>			<b>1798</b>

# The Problem

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## **Problem:**

We have an aging sanitary sewer system, a critical part of our community's infrastructure, and no long-term plan.

## **Timing:** Reasons this issue is imperative to address now:

1. Aging system (some parts >110 years old) with an estimated 50% exceeding its designed useful life
2. Potential regulatory and insurance risks for both township and citizens
3. While emergency repairs have been infrequent, they cost >3x normal planned rates
4. Capacity constraints limiting development opportunities

# Option 1: Do Nothing, Continue the pay-as-you-go maintenance

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Radnor currently operates its sewer system under a general “pay as you go” format, where the major emphasis is on routine maintenance and supplemented by repairs or replacements on an as-needed basis for emergencies or major problems that surface.

- Principal benefits include a history of adequate overall system performance and material regulatory compliance, and minimal disruption to the budget
- Principal drawbacks include increasing risks of a major breakdown or regulatory non-compliance due to significant system aging, and the cost and management inefficiencies which arise from addressing ad hoc repairs or other problems

Preliminary BAC Conclusion: The Township should consider replacing the current reactive, pay-as-you-go practice, which has deferred the necessary improvements to the system while exposing the Township to greater operating and legal risk.

## Considerations:

- Annual cost
- Funding
- Repair analysis
- Starting point
- Political implications
- Resident optics
- Use outside consulting firms

## Option 2: Sale (or lease) of the System

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Following a Pennsylvania statutory liberalization in 2016, many municipalities have sold or considered selling their sewer systems, principally to private utilities.

- Principal benefits include use of transaction proceeds, freedom from operating a complex, resource-intensive operation, and better liability management
- Principal drawbacks include unpredictable rate increases, lack of control over future operations, and history of political controversies over several sales

Preliminary BAC Conclusion: Given the ongoing contentious environment for sales and the rate uncertainty under private ownership, we recommend not pursuing this option for now.

### Considerations:

- Valuation
- Cost
- Legal issues
- Political implications
- Comparable transactions
- Professional advice (PFM)

## Option 3: Maintain System ownership

### Establish a full inventory and long-term plan based on professional risk assessment

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Radnor's sewer system is one of its largest assets. In 2019, an assessment was commissioned but no action was taken. That report is understood now to be incomplete and outdated (data accuracy <80%).

- Principal benefits include decreased risks of major breakdown or regulatory non-compliance due to significant system aging, decreased cost and management inefficiencies which arise from addressing ad hoc repairs or other problems
- Principal drawbacks include increased costs resulting in increased sewer rates

Preliminary BAC Conclusion: We recommend the Commissioners raise a resolution to commission a full-scale sewer system inventory (location, material, age, size, condition) to yield sufficient data for an assessment and plan for repair, replacement, and improvement. A financial assessment of best options can only be as complete and accurate as the data upon which it is based. Using CCTV to scope/televise the system is a standard procedure.

#### Considerations:

- Annual cost
- Funding
- Repair analysis
- Starting point
- Political implications
- Resident optics
- Use outside consulting firms

# Options: Pros & Cons Summary

Sewer Options	Pros	Cons
<b>1</b> Do nothing, continue Pay-as-you-Go	<ul style="list-style-type: none"> <li>Financial decisions remain township responsibility (political and economic implications)</li> </ul>	<ul style="list-style-type: none"> <li>Lack of holistic System assessment</li> <li>Cost of emergency repairs have been &gt;3x normal</li> <li>Citizen optics, complaints</li> <li>Unplanned street closures</li> <li>Third-party contractors on case-by-case basis</li> </ul>
<b>2</b> Do something: Sell the System	<ul style="list-style-type: none"> <li>Financial decisions passed to new owner (political and economic implications)</li> </ul>	<ul style="list-style-type: none"> <li>Loss of control over System management ((political and economic implications)</li> <li>Expect significant increases to the taxpayers (numerous local examples of negative experiences)</li> <li>Potential delays in sale from litigation, etc. while System continues to age and break</li> </ul>
<b>3</b> Do something: Establish a Long-term Assessment & Repair Program	<ul style="list-style-type: none"> <li>Holistic system assessment by Board-selected, qualified engineers</li> <li>Financial decisions remain township responsibility (political and economic implications)</li> <li>Time- and risk- based multi-year program to assess and fix/replace units based on priority</li> <li>Ability to control the narrative</li> <li>Opportunity to select dedicated third-party contracting firm to be responsible the project end-to-end</li> </ul>	<ul style="list-style-type: none"> <li>Political spotlight; direct responsibility to the community for communicating the rational of cost increases</li> <li>Expect increases to the taxpayers (not as large as if sold)</li> </ul>

BAC's tentative recommendation

## Complementary Recommendation: Establish a Sewer Authority

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If the Township chooses to maintain ownership of the system, the Township should consider implementing a Sewer Authority to whom it would convey assets and delegate power to Township-appointed members to operate the system for Governance & Oversight.

- Principal benefits include the focused expertise of the authority and its greater political flexibility to examine and act on difficult budgetary and operational issues that confront the Township
- Principal drawbacks include lack of taxing power, questionable need to create an authority structure and absence of initial action plan

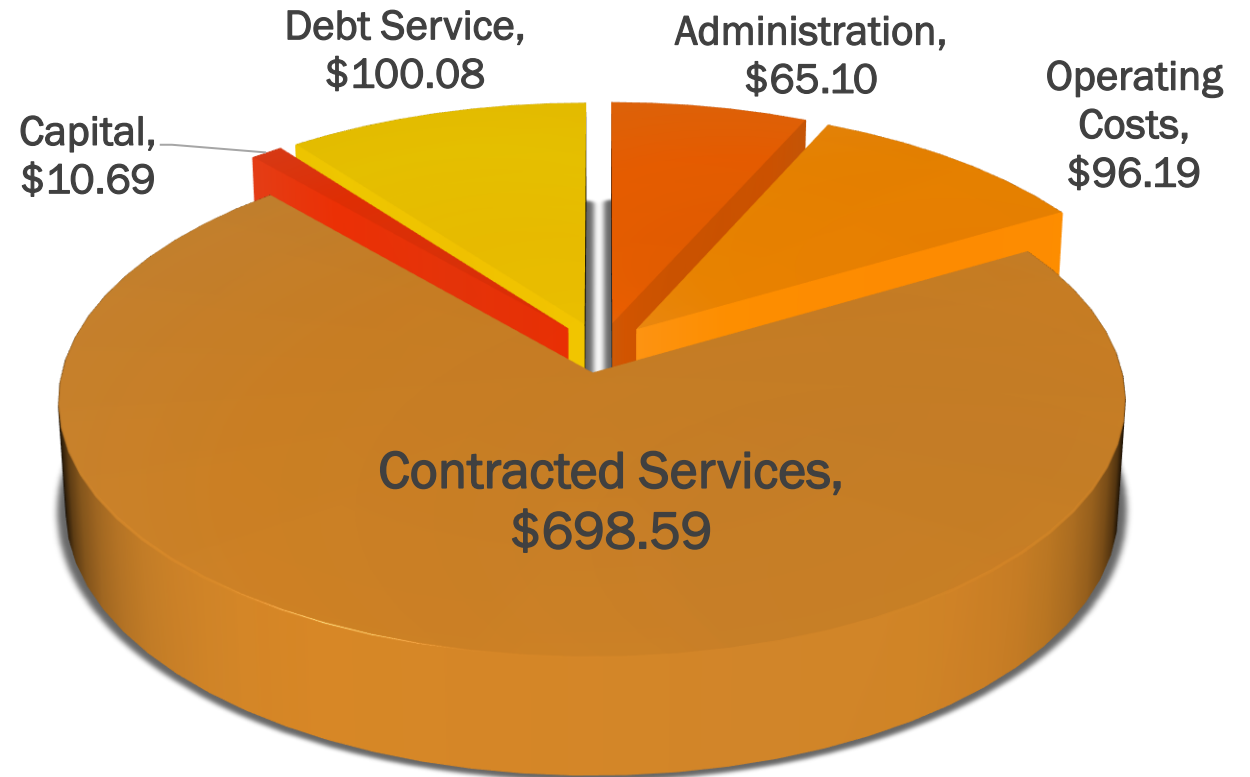
Preliminary BAC Conclusion: Consider continuing to study benefits/drawbacks of this proposed organizational structure, and determine where it best fits in the overall Township org chart

# Average Sewer Bill: \$970

According to Township Administration:

Operating costs include payments to Lower Merion Township for the flow that goes through their sewer system, as well as uniforms, credit card fees, gas, maintenance, rentals, etc.

Contracted Services include the utilities and wastewater treatment services (Delcora); these costs are out of the Township's control and have been the reason for rising costs in the last several years.





# Business Advisory Committee

Chair	Lauren Mulqueen (member since 2021)
Secretary	Bill Lawlor (member since 2020)
Advisor	Tony Mendicino (member since 2019)
Advisor	Al Murphy (member since 2018)
Advisor	Jay Osterholm (member since 2019; past Chairman)