

2023-2027 Capital Improvement Plan



2023-2027

Capital Improvement Plan



Township of

FERGUSON

Pennsylvania

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Chapter 1: Introduction

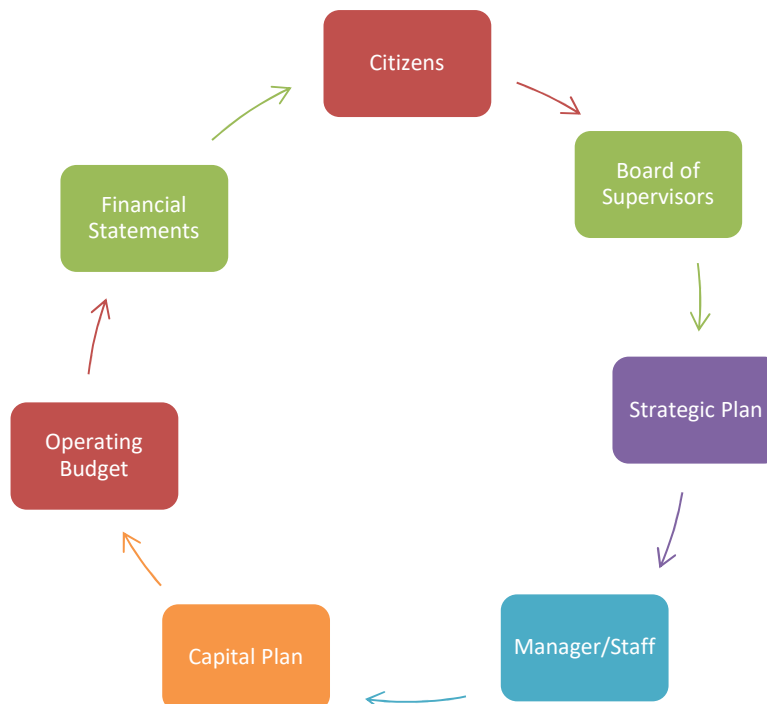
Who should read this document?



The Township's Capital Improvement Plan (CIP) is a financial guide for citizens, staff, and the Board of Supervisors. The purpose of this document is to communicate the initiatives planned for the next five years. The CIP is a financial plan rather than the official budget. It provides financial information for management to make decisions related to sustainability, future projects, and revenues. The plan accounts for the Township's anticipated revenue from various sources such as income taxes, property taxes, and intergovernmental revenue. It also reflects how these resources will be used. The reader will also find Township

background information, Vision, Mission, and Values Statements.

The financial cycle, including the Capital Improvement Plan shown below, depicts the various stages of the business cycle for the Township.



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Strategic Planning



Strategic planning is an organizational management activity used to set priorities, focus energy and resources, and strengthen operations. Strategic planning ensures that employees and other stakeholders are working toward common goals. Strategic planning establishes agreement around intended outcomes/results and assesses and adjusts the organization's direction in response to a changing environment.

It is a disciplined effort that produces fundamental decisions and actions that shape and guide what an organization is, who it serves, what it does, and why it does it, focusing on the future. Effective

strategic planning articulates where an organization is going, the actions needed to make progress, and how it will know if it is successful. Without a plan, the Township would be spinning in circles with no clear idea of how to serve the public effectively.

The Township's Strategic Plan is updated every three to five years. Given the five-year forecast that the CIP offers, the term of the Strategic Plan fits well with the goals of the Township. Given the rapid changes affecting society and service delivery demands, attempting to plan beyond five years is exceptionally difficult and subject to substantial changes and risks. The Strategic Plan is integral to the CIP and provides essential guidance for funding Township goals. Components of the Strategic Plan are incorporated throughout this document.

The Strategic Plan provides long-term direction defined by the elected officials, and the CIP is responsive to the goals and objectives established in the Strategic Plan. The Board of Supervisors periodically updates the Strategic Plan to reflect revolving priorities and new demands on public services. In 2021, the Board initiated an update to the 2017 Strategic Plan, and future governing documents such as the CIP will adapt to reflect any new or modified goals.

How does the Strategic Plan guide the preparation of the CIP?

Ultimately, the CIP is used to focus funding toward the goals of the Strategic Plan. Without this close relationship between the strategic plan and the CIP, taxpayer resources may likely be used for short-term needs rather than in conjunction with a long-term strategy.

The Strategic Plan hierarchy elements tie to the CIP in several ways.

- **Goals** are statements of vision identified by staff and elected officials as desirable outcomes for the Township.
- **Objectives** are measurable, definable achievements that must be attained before accomplishing or advancing a goal.

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Strategic Plan Goals and Objectives

Financial Stability

- Make realistic estimates of program costs. (Staff)
- Regularly compare the cost of providing services in-house with prices from private contractors, other municipalities, and other government agencies and the costs of delivering services regionally. (Staff)
- Adjust revenues (taxes, fees, etc.) to adequately fund Township programs and needs. (Staff proposes, the Board initiates)

Economic Development

- Establish an economic development advisory group (with economic development expertise).
- Consider the employment of a full-time Community Development Planner. This individual would be responsible for assisting and supporting existing businesses to help them prosper and expand in Ferguson Township. The Community Development Planner would be the Township's liaison with the business development community. It would develop an inventory of vacant commercial and industrial sites to make that information available to interested parties. This person will assist in enhancing existing and developing new programs; interact with the business community, local non-profit organizations, and State College Area School District. (Board to initiate, staff to implement)

Growth Management

- Identify and develop plans for specific small areas. (Board, Staff, Planning Commission)
- Develop a Long-Range Growth Management Plan. (Staff, Planning Commission, Board)
- Develop a Regional (or Municipal) Housing Plan to identify and provide for low, moderately, and attainably priced housing in the Township. (Staff, Regional)

Environmental Stewardship

- Identify and use existing tools to preserve the environment - Chesapeake Bay Tributary Strategy, National Pollutant Discharge Elimination System, source water protection, conservation easements, climate action plans, referendums, agricultural conservation easements, etc. (Board, Staff)
- Make sure that land development regulations and development plans are consistent with environmental values (Staff, Planning Commission, Board)
- Identify and preserve natural resources and environmentally significant areas (Staff, Board, Planning Commission, possible ad hoc advisory group)
- Develop and adhere to a green policy for buildings, vehicles, and operations (Staff, consultants)
- Update the Recreation, Parks, and Open Space Plan with a specific emphasis on green infrastructure and sustainable parkland development

Best Management Practices for Operations

- Ensure adequate staffing and resources necessary to carry out Township services and programs (Staff, Board)
- Ensure proper training and professional development (Staff, Board)
- Ensure that operational practices are fiscally responsible (Staff)

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Increase Participatory Government

- Utilize ad hoc and standing citizen advisory boards with subject matter experts from the Township and the region to address issues related to parkland development and other matters of community interest.”
- Fully utilize two-way communication and online platforms used to communicate (Staff)

Promotion of Clean Renewable Energy

- Assess the Township for opportunities for renewable energy (Staff, possible advisory group)
- Practice and promote energy conservation (Staff, Board)
- Establish zoning incentives to encourage renewable energy and energy conservation (Staff, Board, Planning Commission, possible ad hoc advisory group)
- Establish an advisory group on renewable energy (Staff, Board)

Promotion of Municipal Identity

- Develop our Sense of Place by developing a vibrant Town Center, preserving our agricultural heritage, and promoting the features that make the Township unique. (Staff)
- Develop a Marketing Strategy (possible advisory group)
- Establish and support community events with Township help/promotion (farmer’s markets, flea markets, etc.)

Partnerships and Regional Thinking

- Identify non-profits, businesses, and community groups for input on a variety of issues
- Work towards regional cooperation on issues that affect the entire Centre Region
- Increase financial stability through partnerships
- Monitor partnerships to ensure they continue to be beneficial

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What is Capital Planning, and how does it differ from Strategic Planning?

Simply put, capital planning is a component of the budgeting process. Capital items are generally considered one-time, long-term investments (rather than ongoing expenses) in costly equipment or fixed assets. Such assets improve productivity, reduce operating costs, or improve service delivery. Typically, there is an expected return on the investment for the cost to make financial sense.

Whereas the Strategic Plan identifies the desired future outcomes and Township goals, the Capital Plan puts financial resources to those objectives in order to fulfill those goals. While a few goals are entirely non-financial, the vast majority of outcomes require investment in order to see them to completion. Capital Planning attempts to assign investment to specific results. Capital planning is the basis of the Capital Improvement Plan (CIP). This plan is updated annually to maintain its relevance and prevent it from getting stale.

What is Ferguson's Capital Improvement Program Plan (CIP), and how is it different from other capital plans?

Ferguson Township's CIP is a five-year comprehensive plan forecasting the financial requirements in order to fulfill the capital and operating needs of the Township. In order to provide an accurate forecast of the Township, operational costs are included as part of the summary sections. These are not as detailed as the capital components.

The Township CIP also includes projected staffing changes since personnel costs make up approximately 50% of the General Fund budget and have a long-term impact on the finances of the Township.

Defining what is included in the CIP is critical to reducing the number of items considered during the creation and review of the plan. The Township has defined a capital asset as one with an initial cost exceeding \$2,500 each and will have a lifespan of longer than one year.

Each department head provides their department's estimates for the CIP. These estimates are subject to the department heads' knowledge, expertise, and judgment. There are limited assurances that the amounts are accurate, but they are generally reasonable based on available knowledge.

Why do we need a Capital Improvement Program Plan?

Governments are tasked with providing services to the public in a cost-efficient manner. Because public funds are used, some accountability for taxpayer funds is required. The CIP serves as a means to accomplish this goal by planning to construct and develop the Township's infrastructure asset base. The Administrative Code requires the preparation of the Capital Improvement Plan annually. In 1991, the Board of Supervisors adopted the first modern Capital Improvement Program Plan.

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Board of Supervisors



How do the Township's Mission, Vision, and Values guide the preparation of the CIP?

Staff is guided in decision-making by several documents, some of which have been outlined in detail here. The Township's ordinances, resolutions, budgets, comprehensive plan, and the CIP are all guiding documents that staff utilizes daily to help allocate resources, capital, and otherwise, to provide quality services. However, with all of these supporting documents, several questions remain.

How do we know our actions today lead to what residents want the Township to be in the coming years? How can we be sure that our resource allocation is advancing the Township's mission and vision? How are the decisions we make on a staff level related to the goals of our elected officials?

The Mission and Vision Statements help guide staff in determining the direction of the Township operations. The Mission Statement defines the general purpose of the Township. The Vision Statement explains the general philosophy of the Township. The Values guide staff inappropriate behavior as Township employees. Together, the Mission, Vision, and Values determine what is essential to the Township and how staff should allocate time and resources.

Our Mission

Ferguson Township's mission is to provide efficient, cost-effective, professional services to our residents in a fair, cooperative, ethical, and honest manner. The Township will endeavor to manage its resources allowing planned, sustainable growth while preserving the quality of life and its unique characteristics.

Our Vision

The Township will strive to appropriate staff and resources to maintain the infrastructure in acceptable conditions, provide exemplary service, keep operations financially stable, and keep pace with technology. As a result, the Township can continue to be a leader and model for the Centre Region and other Home Rule municipalities.

The Township is considered a 'Best Place to Live' due to the high quality of life created in part through a sense of place achieved through the development of a vital town center, a robust and diversified community, an effective transportation system, a rural/small-town atmosphere and the location and availability of open space. The Township will continue to preserve environmentally sensitive areas.

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We Value

Competent, efficient, and professional services to our residents. Residents, elected and appointed officials expect the highest quality service delivery from Township staff. Our mission is to meet and exceed those expectations in our daily work.

Preserving the unique character of the Township. The Township proudly boasts a diverse community of all ages and professions, including farmers, scholars, small and large business employers, employees, professionals, and students. Each group gives the area a character all its own. Our responsibility is to ensure that policies and service delivery are directed at maintaining that character for generations to come.

Maintaining a healthy and safe environment. Every resident and guest deserves to live, work, study, and recreate in a high-quality environment. Therefore, we are responsible for properly maintaining and providing for the safety of our community's neighborhoods, streets, parks, and common areas.

Managing our resources wisely. It is recognized that resources, including tax revenue, public utilities such as water and sewer, and services such as police and fire, are finite and must be allocated most efficiently. It is our responsibility to continuously review and refine our practices to improve the management of public resources to provide the highest quality service delivery.

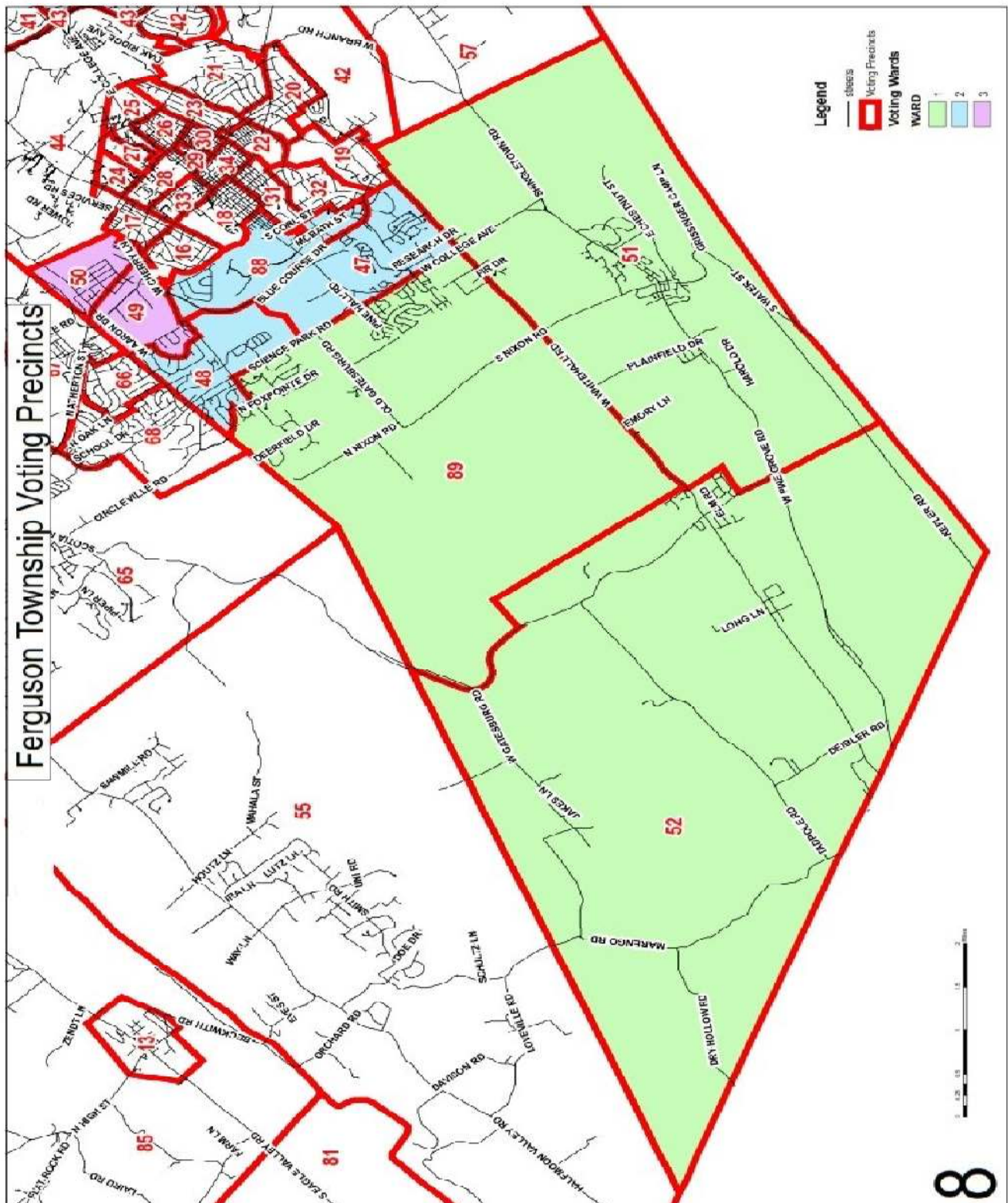
Collaborating with our neighboring municipalities to deliver cost-effective services. The Centre Region is home to one of the premier and oldest Council of Governments in the Commonwealth. For decades, the municipalities that comprise the Centre Region have recognized the benefits of regional cooperation to improve the effectiveness and efficiency of service delivery. Our responsibility is to maintain our commitment to the Centre Region Council of Governments and neighboring municipalities for programs where regional cooperation maximizes our return on investment.

Ethical and honest behavior. As elected officials and employees of the Township, every official, employee, and service provider to the Township is directly accountable to conduct themselves ethically and honestly. Our responsibility is to ensure that all who perform work for the Township operate with the highest standards of ethical and honest behavior.

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VOTING WARDS

Following is a map of the Township voting wards representing the residents.



TOWNSHIP OFFICIAL MAP



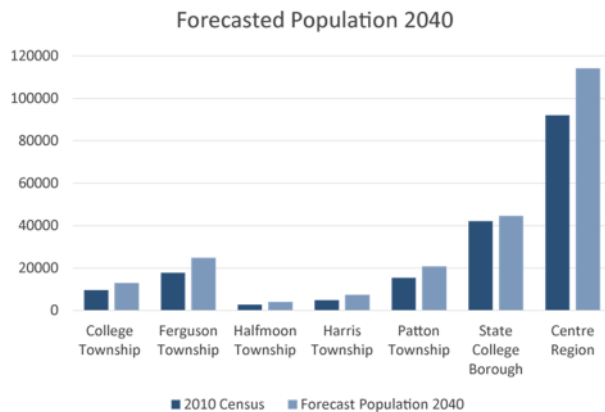
Chapter 2: Summary

Plan Summary

This section provides an overview of fund balances, revenues, and expenditures for all funds except pension funds. The summary breaks out capital expenditures from operations. Operational costs are included in this section in an effort to project the effects on fund balances over the term of the plan. The program would not be feasible without sufficient financial resources and fund balances.

For the five years ending in 2027, the Township proposes spending **\$109 Million (including \$18 Million in interfund transfers) \$91 Million net** for all governmental funds. Since interfund transfers are internal transfers between funds, they can be deducted from the total in summary reports. Government funds do not include pension trust funds nor the Tom Tudek Memorial Trust Fund (even though the Township provides some funding for park projects).

Demographics

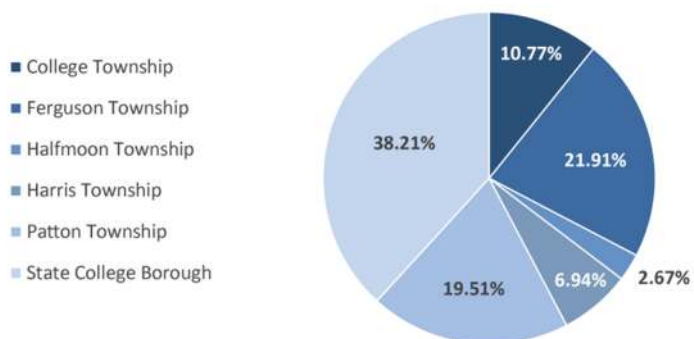


The Township encompasses approximately 52 square miles and is home to 19,009 residents based on 2020 Census data. Several high-tech industries have found a home in Ferguson Township over the years, including Penn State, AccuWeather, Minitab, and Sound Technologies. The Township is also home to major research facilities of The Pennsylvania State University, one of the nation's premier agricultural and engineering institutions. The demographics significantly impact the tax revenues collected and the cost of operations.

Without a growing community, Township revenues would flatten while operating costs would continue to increase, leading to a strain on Township resources. However, relentless growth is unhealthy in the long term. By smartly managing growth, the Township will continue to operate soundly for many years to come.

Since tax revenues are driven by population and age, identifying the demographics and trends provides important data for revenue projections.

Percentage of Units by Municipality



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The following tables depict the Township population estimates and age groups.

Population Estimates	2022	2023	2024	2025	2026	2027
Based on Preliminary 2020 Census Data	19,391	19,585	19,781	19,979	20,179	20,381

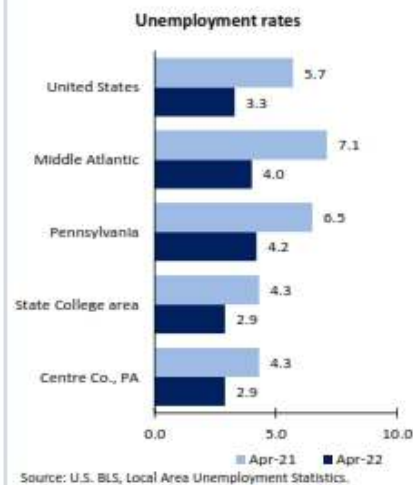
Following is a current map of Centre County as of July 2021. This data provides valuable information when planning for the near future economics.

State College area Economic Summary

Updated June 02, 2022

This summary presents a sampling of economic information for the area; supplemental data are provided for regions and the nation. Subjects include **unemployment, employment, wages, prices, spending, and benefits**. All data are not seasonally adjusted and some may be subject to revision. Area definitions may differ by subject. For more area summaries and geographic definitions, see www.bls.gov/regions/economic-summaries.htm.

Unemployment rates for the nation and selected areas



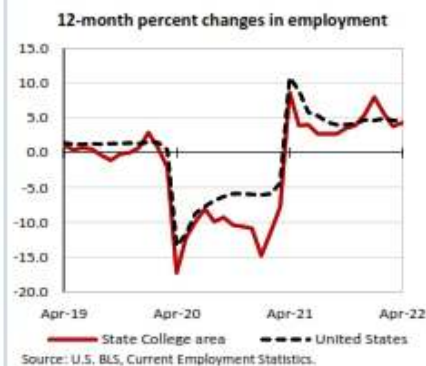
Average weekly wages for all industries by county

State College area, third quarter 2021

(U.S. = \$1,251; Area = \$1,126)



Over-the-year changes in employment on nonfarm payrolls and employment by major industry sector

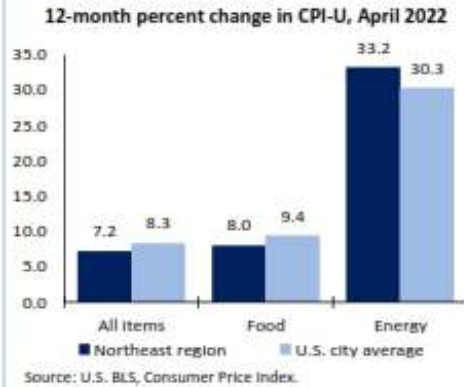


State College area employment (number in thousands)	Apr. 2022	Change from Apr. 2021 to Apr. 2022	
		Number	Percent
Total nonfarm	77.0	3.2	4.3
Mining, logging, and construction	-	-	-
Manufacturing	4.5	0.2	4.7
Trade, transportation, and utilities	9.5	0.2	2.2
Information	-	-	-
Financial activities	-	-	-
Professional and business services	6.0	0.1	1.7
Education and health services	9.2	0.1	1.1
Leisure and hospitality	6.3	0.6	10.5
Other services	-	-	-
Government	32.0	1.4	4.6

Source: U.S. BLS, Current Employment Statistics.

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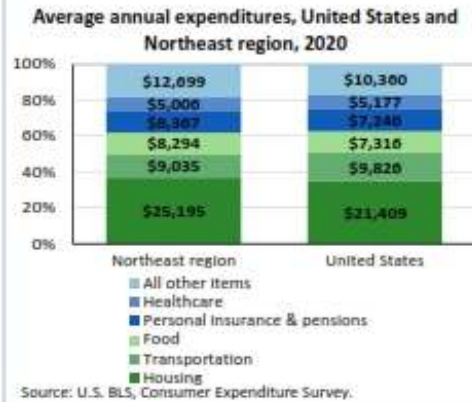
Over-the-year change in the prices paid by urban consumers for selected categories



Over-the-year changes in the selling prices received by producers for selected industries nationwide



Average annual spending and percent distribution for selected categories



Average hourly wages for selected occupations

Occupation	State College area	United States
All occupations	\$26.53	\$28.01
General and operations managers	48.02	55.41
Accountants and auditors	35.75	40.37
Office clerks, general	19.39	18.75
Customer service representatives	16.36	18.79
Stockers and order fillers	13.97	15.87
Food preparation workers	13.43	13.85

Source: U.S. BLS, Occupational Employment and Wage Statistics, May 2021.

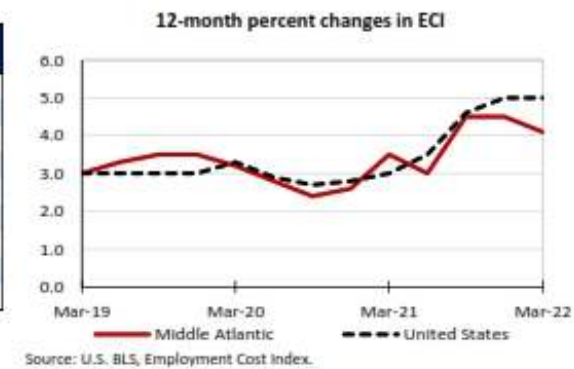
Employer costs per hour worked for wages and selected employee benefits by geographic division

Private industry, December 2021	Middle Atlantic	United States
Total compensation	\$42.49	\$38.07
Wages and salaries	29.34	26.86
Total benefits	13.15	11.22
Paid leave	3.36	2.83
Vacation	1.68	1.46
Supplemental pay	1.45	1.32
Insurance	3.42	2.87
Retirement and savings	1.66	1.32
Legally required benefits	3.25	2.86

(1) The states that compose the Middle Atlantic census division are NJ, NY, and PA.

Source: U.S. BLS, Employer Costs for Employee Compensation.

Over-the-year changes in wages and salaries



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Fund Groups Defined

Governments use Fund Accounting, which is different from for-profit accounting in several ways. Most importantly, governments are accountable to the taxpayers and have public service goals rather than a profit motive. With this in mind, governments, including the Township, create funds to separate assets for specific purposes. Separating funds improves accountability and removes the risk that funds are not comingled with other general funds. Funds are classified into Fund Groups, which summarize the individual funds by type. The funds are described below:

The General Fund

The General Fund is the primary operating fund of the Township. The majority of revenues are deposited into this fund, and the majority of expenditures are spent out of this fund. This includes interfund transfers to other funds, making up a large portion of those funds' revenue.

The General Obligation Fund

The General Obligation Fund is used for the debt service for the Township. Payments include any direct bond or loan obligations. Indirect fees, such as the COG park and pool debt, are not included in the General Obligation Fund. These payments are made from the General Fund and the Regional Capital Recreation Projects Fund.

The Capital Projects Funds

Capital Projects funds are reserved for projects restricted for specific purposes. Some funds have external restrictions (restrictions by outside parties), such as the Pine Grove Mills Street Light Fund. In contrast, others have Board of Supervisors restrictions, such as the Capital Reserve fund, the Regional Capital Recreation Projects Fund, and the Transportation Improvement Fund.

The Special Revenue Funds

Those funds have a special assessment to obtain revenue rather than general taxes. The Township adds a separate real estate assessment for street lighting and fire hydrants and the Stormwater Fund beginning in 2022. The state requires the township to maintain a segregated Liquid Fuels Fund to account for a state fuel tax providing funding to local governments for road maintenance.

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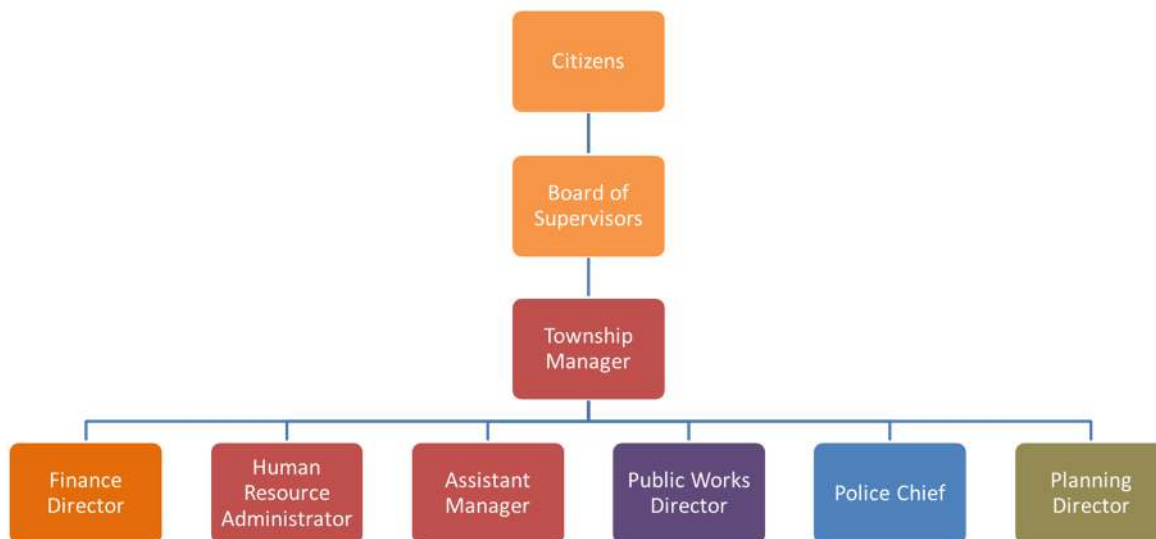
Fund and Department Relationships

The Township follows the PA State Chart of Accounts format. Pennsylvania recommends this format as explained below:

The account numbers and descriptions of accounts used in the DCED form DCED-CLGS-30, the annual audit, and the financial report, are based on this chart of accounts. These account numbers and descriptions also are used in the Department of Transportation Form (DOT) MS-903, Treasurer Account Book, Form MS-965, Actual Use Report of State Funds, and Form MS-991, County Liquid Fuels Tax Fund Report. Both DCED and the DOT encourage the use of accounting systems based on the Chart of Accounts presented in this publication

The PA state chart of accounts dictates our fund and department layout. With this in mind, the Township assigns specific state funds and departments to specific individuals.

The Township Manager and department heads are responsible for all the Township activities and funds. This section describes the relationships of the departments with the funds.



It is best to organize the departments by the responsible person rather than the reverse. As the organization chart depicts, the senior staff is shown here

The responsible department heads are Administration & Human Resources, Finance & Tax, Public Works & Engineering, Police, and Planning Zoning. These individuals are responsible for all the accounts within the entire budget and funds.

The following table breaks down the responsibilities of the department heads

*Legend: GF=General Fund, CR=Capital Reserve Fund, TIF=Transportation Improvement Fund, PI=Park Improvement Fund, SW=Stormwater Fund, LF=Liquid Fuels

Responsible Department	Funds	Responsible Area
Township Manager	All	Responsible for the final document, Administration, Parks & Recreation, Tudek Park
Assistant Manager	GF, CR, PI	Assists Manager in reviewing Administration, Parks & Recreation
Human Resource Administrator	GF	Assists in estimating salaries, wages, and benefits

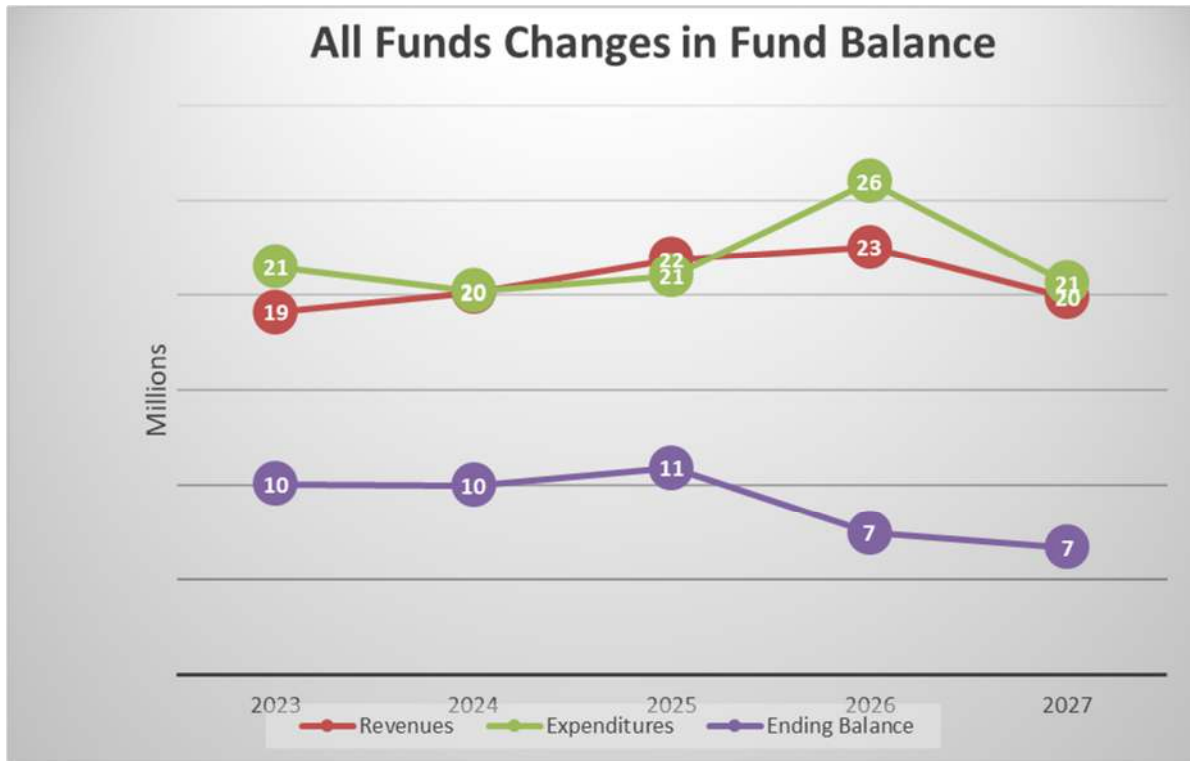
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Finance Director	All	Finance, Tax, IT, COG, Salaries & Benefits, Insurance, Pension plans
Police Chief	GF, CR	Police
Public Works Director	GF, CR, TIF, SW, LF	Engineering, Public Works Road Crew, Arborist, Buildings & Grounds
Planning & Zoning Director	GF, CR	Planning & Zoning

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Fund Balances

Over the years, the Township has maintained sound fund balances for operations and present and future capital expenditures. The Township uses cash reserves to purchase equipment and long-term investments rather than debt.



All Funds	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	12,475,998	10,066,149	10,008,000	10,908,378	7,459,528	12,475,998
Revenues	19,081,491	20,127,020	21,896,367	22,537,479	19,854,879	103,497,236
Expenditures	-21,491,339	-20,185,169	-20,995,988	-25,986,329	-20,608,781	-109,267,607
Net Change	-2,409,849	-58,149	900,379	-3,448,850	-753,901	-5,770,371
Ending Balance	10,066,149	10,008,000	10,908,378	7,459,528	6,705,627	6,705,627
Fund Balance % of Expenditures	47%	50%	54%	36%	33%	

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Sinking Funds

The Township uses “sinking funds” to accumulate money for various specific needs. These sinking funds are bank accounts with funding rather than just funds assignments. As such, the money is segregated from other funds of the Township, much like having a designated fund. These sinking funds are subsets of the fund in which they are located. It is important to note that while the funds are segregated from the other funds, any spending out of the sinking funds will need to be budgeted.

According to the Financial Dictionary, a sinking fund is a fund or account into which a person or company regularly deposits money to repay some debt or other liability that will come due in the future. For example, if one has a loan with a balloon maturity of seven years, one may put money into a sinking fund for seven years to be ready to pay off the principal when it comes due. Some bonds have sinking fund provisions, requiring the issuer to put money aside to repay bondholders at maturity.

Such sinking funds include, but are not limited to, the Building Equipment Replacement Fund, the Public Works Equipment Replacement Fund, and the Wellness Fund.

Committed Fund Balances

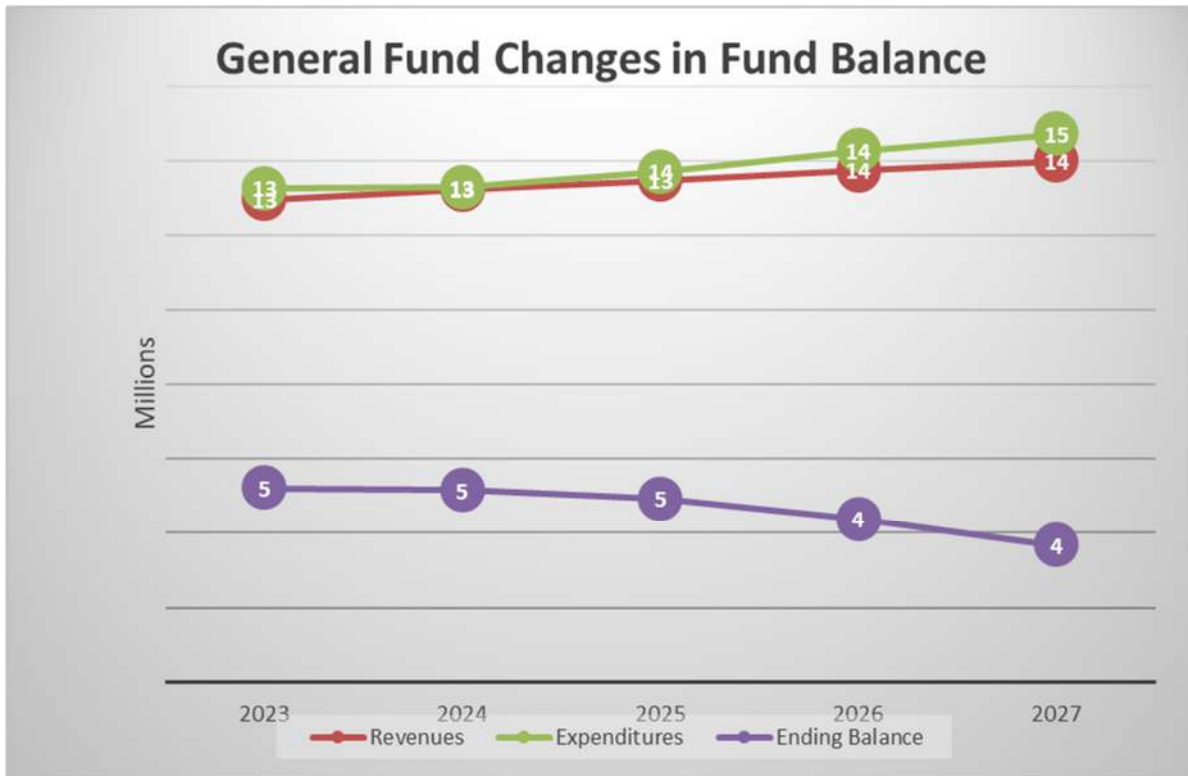
The Township uses Committed Fund balances for certain replacement funds, such as Public Works Equipment replacements and Building Equipment replacements. These replacement accounts are included in the total fund balance for the Capital Reserve Fund. The township reserves these funds for the replacement of existing equipment as needed. Sinking funds will appear in the Operating Budget as Committed Fund Balances to properly account for their total amounts.

Restricted Fund Balances

The Township uses Restricted Funds for those monies that have external restrictions by law or outside agency. Fee in lieu funds often have restrictions on the use of funds that the township must abide by. The state places restrictions on liquid fuels funding. The federal government restricts American Rescue Act and CARES Act funding as well. Since the township cannot remove these restrictions, they are accounted for as Restricted Fund Balances.

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General Fund



General Fund (01)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	5,499,753	5,215,900	5,149,881	4,913,536	4,374,622	5,499,753
Revenues	12,974,106	13,224,354	13,479,999	13,741,167	14,007,990	67,427,615
Expenditures	-13,257,959	-13,290,373	-13,716,343	-14,280,082	-14,721,817	-69,266,574
Net Change	-283,853	-66,020	-236,344	-538,914	-713,828	-1,838,958
Ending Balance	5,215,900	5,149,881	4,913,536	4,374,622	3,660,795	3,660,795
Fund Balance % of Expenditures	39%	39%	37%	32%	25%	

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Capital Projects Funds

Ag Preservation Fund (19)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	7,524	7,524	7,524	7,524	7,524	7,524
Revenues	0	0	0	0	0	0
Expenditures	0	0	0	0	0	0
Net Change	0	0	0	0	0	0
Ending Balance	7,524	7,524	7,524	7,524	7,524	7,524
Capital Reserve Fund (30)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	1,817,126	1,314,955	1,272,790	3,759,895	760,430	1,817,126
Revenues	984,600	1,243,578	3,834,600	1,169,479	984,600	8,216,857
Expenditures	-1,486,772	-1,285,743	-1,347,495	-4,168,944	-861,447	-9,150,400
Net Change	-502,172	-42,165	2,487,105	-2,999,465	123,153	-933,543
Ending Balance	1,314,955	1,272,790	3,759,895	760,430	883,583	883,583
Reg Cap Rec Projects Fund (31)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	1,295,843	1,175,843	1,055,843	935,843	815,843	1,295,843
Revenues	0	0	0	0	0	0
Expenditures	-120,000	-120,000	-120,000	-120,000	-120,000	-600,000
Net Change	-120,000	-120,000	-120,000	-120,000	-120,000	-600,000
Ending Balance	1,175,843	1,055,843	935,843	815,843	695,843	695,843
Transportation Imp Fund (32)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	2,399,721	2,591,482	2,756,705	1,244,592	708,347	2,399,721
Revenues	1,680,761	2,401,223	1,477,887	4,256,755	1,485,829	11,302,455
Expenditures	-1,489,000	-2,236,000	-2,990,000	-4,793,000	-2,160,000	-13,668,000
Net Change	191,761	165,223	-1,512,113	-536,245	-674,171	-2,365,545
Ending Balance	2,591,482	2,756,705	1,244,592	708,347	34,176	34,176
PGM Streetlight Fund (33)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	20,748	20,948	21,148	21,348	21,548	20,748
Revenues	200	200	200	200	200	1,000
Expenditures	0	0	0	0	0	0
Net Change	200	200	200	200	200	1,000
Ending Balance	20,948	21,148	21,348	21,548	21,748	21,748
Park Improvement Fund (34)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	-256,067	-502,067	-507,067	-487,067	-157,067	-256,067
Revenues	700,000	560,000	400,000	400,000	400,000	2,460,000
Expenditures	-946,000	-565,000	-380,000	-70,000	-10,000	-1,971,000
Net Change	-246,000	-5,000	20,000	330,000	390,000	489,000
Ending Balance	-502,067	-507,067	-487,067	-157,067	232,933	232,933

2023-2027 Capital Improvement Plan

Special Revenue Funds

Streetlight Fund (02)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	13,890	20,119	26,125	31,881	37,359	13,890
Revenues	26,704	27,505	28,330	29,180	30,055	141,774
Expenditures	-20,475	-21,499	-22,574	-23,702	-24,887	-113,137
Net Change	6,229	6,006	5,756	5,478	5,168	28,637
Ending Balance	20,119	26,125	31,881	37,359	42,527	42,527
Hydrant Fund (03)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	41,787	66,164	88,399	108,286	125,602	41,787
Revenues	168,000	173,040	178,231	183,578	189,085	891,935
Expenditures	-143,623	-150,804	-158,345	-166,262	-174,575	-793,609
Net Change	24,377	22,236	19,887	17,316	14,511	98,326
Ending Balance	66,164	88,399	108,286	125,602	140,113	140,113
Stormwater Fund (20)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	833,650	-416,861	-257,611	-91,844	269,817	833,650
Revenues	1,266,000	1,266,000	1,266,000	1,266,000	1,266,000	6,330,000
Expenditures	-2,516,511	-1,106,750	-1,100,232	-904,339	-1,037,054	-6,664,887
Net Change	-1,250,511	159,250	165,768	361,661	228,946	-334,887
Ending Balance	-416,861	-257,611	-91,844	269,817	498,763	498,763
Liquid Fuels Fund (35)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	330,349	100,469	-77,411	-7,291	23,829	330,349
Revenues	660,120	610,120	610,120	610,120	610,120	3,100,600
Expenditures	-890,000	-788,000	-540,000	-579,000	-618,000	-3,415,000
Net Change	-229,880	-177,880	70,120	31,120	-7,880	-314,400
Ending Balance	100,469	-77,411	-7,291	23,829	15,949	15,949

General Obligation Fund

General Obligation Fund (16)	2023	2024	2025	2026	2027	TOTAL
Beginning Balance	471,674	471,674	471,674	471,674	471,674	471,674
Revenues	621,000	621,000	621,000	881,000	881,000	3,625,000
Expenditures	-621,000	-621,000	-621,000	-881,000	-881,000	-3,625,000
Net Change	0	0	0	0	0	0
Ending Balance	471,674	471,674	471,674	471,674	471,674	471,674

Chapter 3: Revenue Details

Revenue Projections

Township revenues comprise tax collections, assessments, payments-in-lieu of taxes, grant receipts, loan proceeds, permitting and license fees, fines, departmental earnings, interest, and other miscellaneous receipts. Overall, the revenue changes are a combination of these items and are represented in the table below

The Liquid Fuels fund revenue growth is expected to be flat as the state is concerned about lower gas sales due to electric vehicles. The state is unlikely to make any changes in the law to offset this reduction under current circumstances. The Hydrant and Street Light Funds revenues are adjusted following expenditures to maintain a positive fund balance, considering the spending out of those funds.

Fund Group Summary	2023	2024	2025	2026	2027	TOTAL
General Fund (01)	12,974,106	13,224,354	13,479,999	13,741,167	14,007,990	67,427,615
Capital Projects Funds	3,365,561	4,205,001	5,712,687	5,826,434	2,870,629	21,980,312
Special Revenue Funds	2,120,824	2,076,665	2,082,681	2,088,878	2,095,261	10,464,309
General Obligation Fund (16)	621,000	621,000	621,000	881,000	881,000	3,625,000
Total	19,081,491	20,127,020	21,896,367	22,537,479	19,854,879	103,497,236
Group change %	7.2%	5.5%	8.8%	12.0%	-9.3%	
General Fund change %	2.6%	1.9%	1.9%	3.9%	3.9%	
Other General Fund Revenue	2,423,765	2,496,478	2,571,373	2,648,514	2,727,969	12,868,100
Capital Projects Funds Summary	2023	2024	2025	2026	2027	TOTAL
Ag Preservation (19)						0
Capital Reserve (30)	984,600	1,243,578	3,834,600	1,169,479	984,600	8,216,857
Regional Capital Rec Projects (31)	0	0	0	0	0	0
Transportation Improvement (32)	1,680,761	2,401,223	1,477,887	4,256,755	1,485,829	11,302,455
Pine Grove Mills Street Lights (33)	200	200	200	200	200	1,000
Park Improvement (34)	700,000	560,000	400,000	400,000	400,000	2,460,000
Total	3,365,561	4,205,001	5,712,687	5,826,434	2,870,629	21,980,312
Special Revenue Funds	2023	2024	2025	2026	2027	TOTAL
Street Light (02)	26,704	27,505	28,330	29,180	30,055	141,774
Hydrant (03)	168,000	173,040	178,231	183,578	189,085	891,935
Stormwater Fund (20)	1,266,000	1,266,000	1,266,000	1,266,000	1,266,000	6,330,000
Liquid Fuels (35)	660,120	610,120	610,120	610,120	610,120	3,100,600
Total	2,120,824	2,076,665	2,082,681	2,088,878	2,095,261	10,464,309
Grant/Loan Summary by Fund	2023	2024	2025	2026	2027	TOTAL
General Fund (01)	77,649	77,649	77,649	77,649	77,649	388,245
GOA Fund (16)	0	0	0	0	0	0
Stormwater Fund (20)	0	0	0	0	0	0
Capital Reserve Fund (30)	9,600	268,578	2,859,600	194,479	9,600	3,341,857
Regional Capital Rec Projects (31)	0	0	0	0	0	0
Transportation Improvement Fund (32)	116,000	1,071,000	132,000	2,895,000	108,000	4,322,000
Park Improvement Fund (34)	300,000	160,000	0	0	0	460,000
Liquid Fuels Fund (35)	660,120	610,120	610,120	610,120	610,120	3,100,600
Total	1,163,369	2,187,347	3,679,369	3,777,248	805,369	11,612,702

2023-2027 Capital Improvement Plan

Interfund Transfers

Funding for many of the capital funds is derived from transfers from the General Fund and debt proceeds from the General Obligation Fund. Whether mandated or not, these transfers directly impact the General Fund balance and the associated capital funds. The following table details the projected transfers during the term of the CIP.

Interfund Transfers In (from GF)	2023	2024	2025	2026	2027	TOTAL
General Obligation Fund (16)	621,000	621,000	621,000	881,000	881,000	3,625,000
Ag Preservation (19)	25,000	0	25,000	0	25,000	75,000
Stormwater Fund (20)	0	0	0	0	0	0
Capital Reserve (30)	975,000	975,000	975,000	975,000	975,000	4,875,000
Transportation Improvement Fund (32)	1,564,761	1,330,223	1,345,887	1,361,755	1,377,829	6,980,455
Park Improvement Fund (34)	400,000	400,000	400,000	400,000	400,000	2,000,000
Liquid Fuels (35)	0	0	0	0	0	0
Total	3,585,761	3,326,223	3,366,887	3,617,755	3,658,829	17,555,455

Tax Revenue Projections

The tax revenues make up some 65% of the total Township revenue on average, depending on if there are any loan proceeds.

The General Fund revenue projections include annual increases based on revenue source. Each source has a different projected growth. Earned income taxes are expected to increase by 2.0%, Real Estate, and Local Services taxes by 1.0%, and Transfer taxes with 1% projected increases.

Tax Revenue	2023	2024	2025	2026	2027	TOTAL
Real Estate Taxes	1,488,813	1,503,701	1,518,738	1,533,925	1,549,264	7,594,441
Earned Income Taxes	7,203,128	7,347,190	7,494,134	7,644,017	7,796,897	37,485,366
Transfer Taxes	1,515,000	1,530,150	1,545,452	1,560,906	1,576,515	7,728,023
Local Services Taxes	343,400	346,834	350,302	353,805	357,343	1,751,685
Total	10,550,341	10,727,875	10,908,626	11,092,653	11,280,020	54,559,515
Average EIT per Resident	367.79	371.43	375.10	378.81	382.56	
Average Total Tax per Resident	538.69	542.33	546.00	549.71	553.46	
Percentage of Total Revenue	55.3%	53.3%	49.8%	49.2%	56.8%	

2023-2027 Capital Improvement Plan

Tax Considerations

The Township works to maintain a fiscally responsible approach to budgeting. Increases in tax rates have not occurred on any frequent basis. Instead, the Township relies on annual revenue increases from a growing tax base. Given the implementation of the stormwater fee, there is no tax increase included in the CIP. The local economic conditions continue to be positive, leading to increased Earned Income Tax and Transfer Tax revenues. The Township is also actively pursuing state and federal grant funding. Such grant revenue has been very beneficial to the Township's finances. Combined with fiscal restraint, the Township maintains a solid financial footing.

Grant Revenue Projections

Grant revenue assists the Township in many ways. It is one way to provide additional revenue for projects without raising taxes or cutting expenditures elsewhere. Many federal grants are administered by the state and doled out to local governments under federal mandates. One such grant is the DUI grant that police receive to offset the costs of checkpoints and DUI enforcement.

The state provides special funding from its tax collections, such as the Liquid Fuels grants or DCNR recycling grants. Additionally, the state provides funding for parks and open space and to preserve farmland from development.

The Township works hard to take advantage of grant money available to provide additional benefits to the residents without raising local taxes to pay for them. However, many of these grants are competitive and cannot be relied upon as guaranteed revenue sources yearly.

Other contributions include loan proceeds, developer payments for the Regional Capital Recreation Projects, and several Right of Way agreements.

Other Grant Funding Efforts

As allowed by the funding agency, either annually, bi-annually, or as announced, staff seeks and applies for grant funding from various agencies.

County Liquid Fuels Grant: Every year, public works staff apply for a County Liquid Fuels Grant, typically around \$50,000, to assist with a capital paving project. The grant is generally awarded every other year.

Automated Red Light Enforcement Grant: ARLE funding is uncertain for the current CIP. In 2022, the Township should complete the installation of new hardware and software through an ARLE grant that will allow traffic signal performance to be monitored and optimized more frequently.

Green-Light Go Grant: Staff will continue to apply for GLG grant funding as it is available for traffic signal improvements.

Recycling Grant Act 101 Section 902 Recycling Program Grant: This program administered by PADEP provides funding to municipalities for recycling equipment. When grants are available, the Township will apply to reduce taxpayers' public works equipment costs. Applicants can use it every other year; the fund match is typically 90 percent state and 10 percent local.

2023-2027 Capital Improvement Plan

GRANT/LOAN TABLE								
Grant/Loan/Contributions Detail	Fund	Type	2023	2024	2025	2026	2027	TOTAL
ARLE Grant	TIF	G		247,000				247,000
Buckle Up Program	GF	G	4,500	4,500	4,500	4,500	4,500	22,500
Cecil Ivin Park Improvements	PI	G		160,000				160,000
CR Codes Rent of Fire Trailer	CR	C	9,600	9,600	9,600	9,600	9,600	48,000
Drive Safe Program	GF	G	3,000	3,000	3,000	3,000	3,000	15,000
DUI Enforcement	GF	G	43,435	43,435	43,435	43,435	43,435	217,175
Green Light Go Green grant	TIF	G	116,000	124,000	132,000	142,000	108,000	622,000
Liquid Fuels	LF	G	565,000	565,000	565,000	565,000	565,000	2,825,000
Liquid Fuels Turnback	LF	G	45,120	45,120	45,120	45,120	45,120	225,600
Loan Proceeds for new fire station	CR	L			2,850,000			2,850,000
One time loan Infusion for PW equipment	CR	L						0
TASA grant	TIF	G		700,000				700,000
DEP State grant for one-person leaf collector (90%)	CR	G		258,978				258,978
DEP State grant for rear steer brush collector (90%)	CR	G				184,879		184,879
County Liquid Fuels Grant	LF	G	50,000					50,000
Veterans Memorial @ Louis E Silvi Field	PI	G	50,000					50,000
Northern ITS Cable Right of Way	GF	C	22,144	22,144	22,144	22,144	22,144	110,720
Northland Mobility Study Grant	TIF	G				2,753,000		2,753,000
Suburban Park Improvements	PI	G	250,000					250,000
Sunehsis Right of Way	GF	C	4,570	4,570	4,570	4,570	4,570	22,850
Tudek Park Phase 3A	PI	G						0
Total			1,163,369	2,187,347	3,679,369	3,777,248	805,369	11,612,702
Grant/Loan Summary by Fund	Fund		2023	2024	2025	2026	2027	TOTAL
General Fund (01)	GF		77,649	77,649	77,649	77,649	77,649	388,245
GOA Fund (16)	GOA		0	0	0	0	0	0
Stormwater Fund (20)	SW		0	0	0	0	0	0
Capital Reserve Fund (30)	CR		9,600	268,578	2,859,600	194,479	9,600	3,341,857
Regional Capital Rec Projects (31)	RCRP		0	0	0	0	0	0
Transportation Improvement Fund (32)	TIF		116,000	1,071,000	132,000	2,895,000	108,000	4,322,000
Park Improvement Fund (34)	PI		300,000	160,000	0	0	0	460,000
Liquid Fuels Fund (35)	LF		660,120	610,120	610,120	610,120	610,120	3,100,600
Total			1,163,369	2,187,347	3,679,369	3,777,248	805,369	11,612,702
Grant/Loan Summary by Type	Type		2023	2024	2025	2026	2027	TOTAL
Grants	G		1,127,055	2,151,033	793,055	3,740,934	769,055	8,581,132
Contributions	C		36,314	36,314	36,314	36,314	36,314	181,570
Loans	L		0	0	2,850,000	0	0	2,850,000
Total			1,163,369	2,187,347	3,679,369	3,777,248	805,369	11,612,702

2023-2027 Capital Improvement Plan

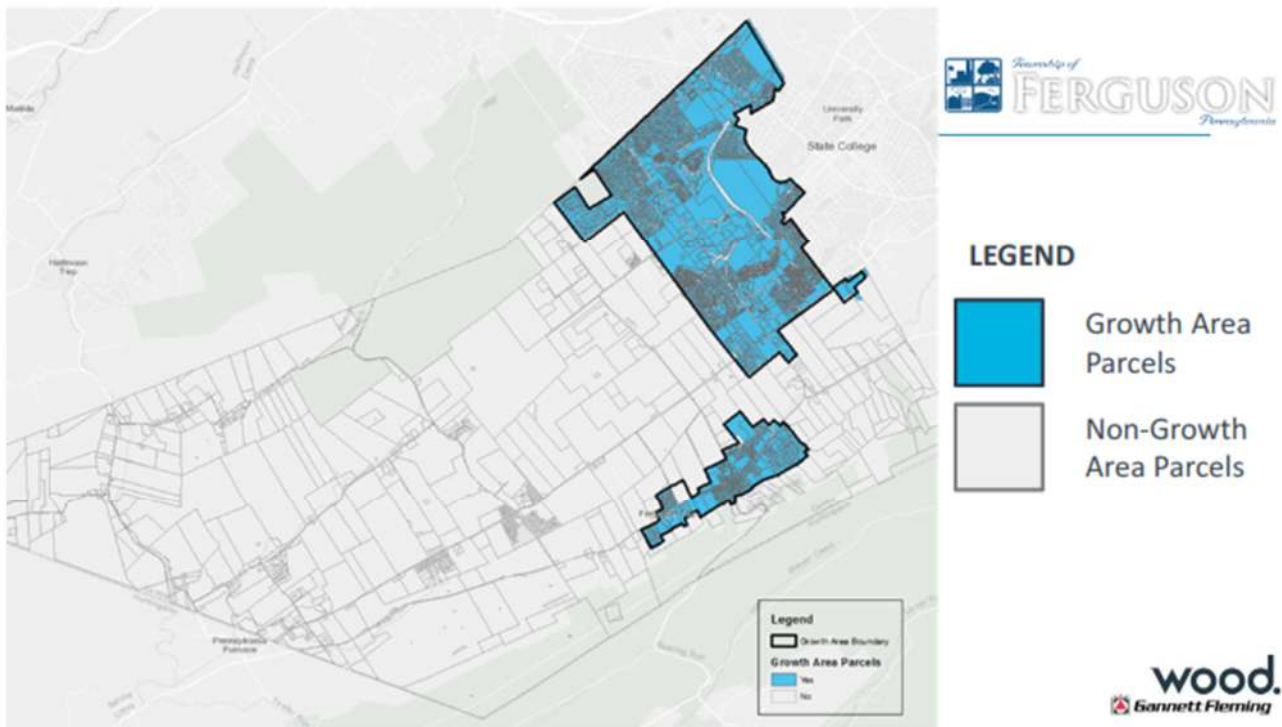
Stormwater Fee

Ferguson Township's stormwater liabilities are substantial, equating to approximately \$1.5 million per year for capital projects, maintenance obligations, compliance with state and federal permit requirements, and more. Beginning in 2022, the Township established a Stormwater Management Utility Fee to provide a stable revenue stream to fund these obligations and stabilize the Township's financial position for the foreseeable future. The fee is equitable and assessed to all property owners in the Township. It is segregated from other cost centers of the Township to properly account for the revenue and provide transparency and accountability to our residents.

The fee is based on ERU (equivalent residential unit) methodology. All residential properties are assessed with one ERU. An ERU is equal to 3,097 square feet. Other properties are assessed based on their impervious area and converted to ERUs for billing. Property owners are charged, regardless of property use or taxable status, based on their impervious area and the level of service in which they reside. For example, properties outside the Regional Growth Boundary, which typically have a reduced level of service related to stormwater management, are assessed at a lower rate than other properties within the Regional Growth Boundary. Programs exist that allow property owners to apply for credits or exemptions. Approval of credits and exemptions is based on meeting specific criteria.

The standard fee for 2022 is \$119 per ERU for the growth area and \$75 per ERU for the non-growth areas. Each property has a fee based on the location and the number of ERUs less any credits or exemptions.

Credits help the township at large with the reduction in stormwater entering the system as residents and businesses implement beneficial projects that reduce the demand on the stormwater system



Chapter 4: Expenditure Details

Expenditure Projections Summary

Fund Group	2023	2024	2025	2026	2027	TOTAL
General Fund (01)	13,257,959	13,290,373	13,716,343	14,280,082	14,721,817	69,266,574
Capital Projects Funds	4,041,772	4,206,743	4,837,495	9,151,944	3,151,447	25,389,400
Special Revenue Funds	3,570,609	2,067,053	1,821,151	1,673,303	1,854,517	10,986,633
Debt Service (16)	621,000	621,000	621,000	881,000	881,000	3,625,000
Total	21,491,339	20,185,169	20,995,988	25,986,329	20,608,781	109,267,607

Capital Projects	2023	2024	2025	2026	2027	TOTAL
Ag Preservation (19)						0
Capital Reserve (30)	1,486,772	1,285,743	1,347,495	4,168,944	861,447	9,150,400
Regional Capital Rec Projects (31)	120,000	120,000	120,000	120,000	120,000	600,000
Transportation Improvement (32)	1,489,000	2,236,000	2,990,000	4,793,000	2,160,000	13,668,000
Pine Grove Mills Street Lights (33)	0	0	0	0	0	0
Park Improvement (34)	946,000	565,000	380,000	70,000	10,000	1,971,000
Total	4,041,772	4,206,743	4,837,495	9,151,944	3,151,447	25,389,400

Capital Reserve Fund (30)	2023	2024	2025	2026	2027	TOTAL
Administration	110,500	0	0	30,000	0	140,500
Finance	40,690	27,250	27,250	27,250	27,250	149,690
IT	158,570	130,270	88,789	111,358	39,858	528,845
Buildings New	140,927	153,615	494,761	2,859,293	9,415	3,658,011
Buildings Replacements	103,804	31,697	18,232	4,558	106,782	265,073
Police Vehicles	161,000	195,000	180,000	135,000	130,000	801,000
Police Equipment	104,795	92,295	97,895	117,895	92,295	505,175
Planning	0	0	75,000	100,000	0	175,000
Public Works New Equipment	84,798	19,504	111,760	41,550	32,551	290,163
Public Works Replacements	288,855	591,051	205,363	690,044	367,570	2,142,883
Arborist	31,833	34,061	36,445	38,996	41,726	183,060
Total	1,225,772	1,274,743	1,335,495	4,155,944	847,447	8,839,400

Roads & Other	2023	2024	2025	2026	2027	TOTAL
Liquid Fuels (35)	890,000	788,000	540,000	579,000	618,000	3,415,000
Capital Reserve (30)	261,000	11,000	12,000	13,000	14,000	311,000
Transportation Improvement (32)	1,489,000	2,236,000	2,990,000	4,793,000	2,160,000	13,668,000
Total	2,640,000	3,035,000	3,542,000	5,385,000	2,792,000	17,394,000

Stormwater Fund Detail (20)	2023	2024	2025	2026	2027	TOTAL
Salaries & Benefits						0
New Staffing & Benefits	148,190	153,491	158,997	164,717	170,659	796,055
Total	148,190	153,491	158,997	164,717	170,659	796,055

Special Revenue	2023	2024	2025	2026	2027	TOTAL
Street Light (02)	20,475	21,499	22,574	23,702	24,887	113,137
Hydrant (03)	143,623	150,804	158,345	166,262	174,575	793,609
Stormwater Fund (20)	2,516,511	1,106,750	1,100,232	904,339	1,037,054	6,664,887
Liquid Fuels (35)	890,000	788,000	540,000	579,000	618,000	3,415,000
Total	3,570,609	2,067,053	1,821,151	1,673,303	1,854,517	10,986,633

2023-2027 Capital Improvement Plan

Department Capital Requests

Each department request represents individual department forecasted needs for equipment or projects. The scope or the timing of the requests may change as more current information is obtained, the technology changes, or the direction of the plan changes. These requests are the best estimates of the future costs given available information at the time of the printing.

General Fund Expenditures

The following table represents the expenditure details for the general fund. The General Fund expenditures are the major operating costs in the CIP. The interfund transfers out are also displayed for your reference.

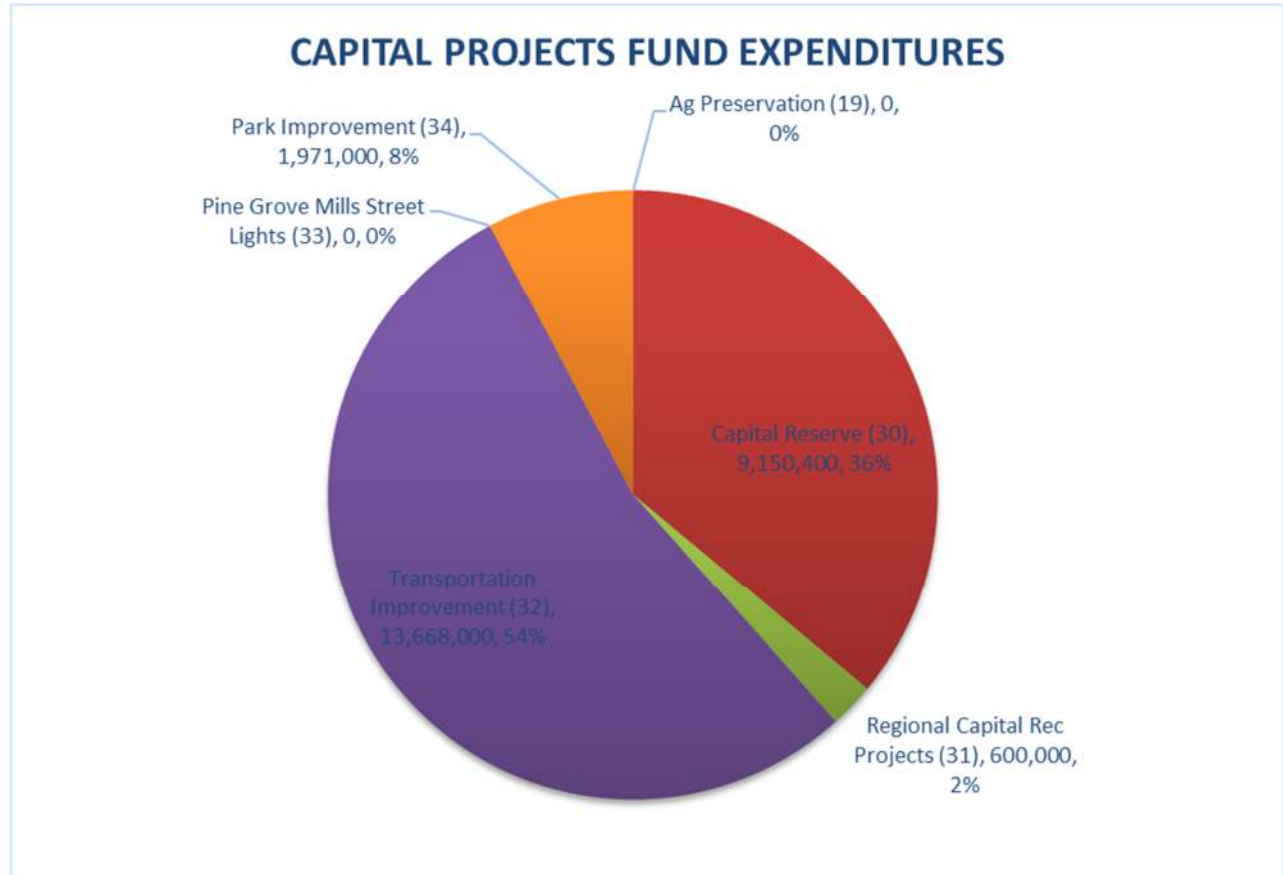
General Fund Detail (01)	2023	2024	2025	2026	2027	TOTAL
Salaries & Benefits	5,638,513	5,807,668	5,981,898	6,161,355	6,346,196	29,935,631
New Staffing & Benefits	367,355	380,162	477,948	494,674	590,305	2,310,444
COG Programs	2,054,752	2,116,395	2,179,886	2,245,283	2,312,641	10,908,957
Other Expenses	1,611,578	1,659,925	1,709,723	1,761,015	1,813,845	8,556,086
Transfers Out	3,585,761	3,326,223	3,366,887	3,617,755	3,658,829	17,555,455
Total	13,257,959	13,290,373	13,716,343	14,280,082	14,721,817	69,266,574

Interfund Transfers

General Fund Transfers Out (01)	2023	2024	2025	2026	2027	TOTAL
General Obligation Fund (16)	621,000	621,000	621,000	881,000	881,000	3,625,000
Ag Preservation (19)	25,000		25,000		25,000	75,000
Stormwater Fund (20)						0
Capital Reserve (30)	975,000	975,000	975,000	975,000	975,000	4,875,000
Transportation Improvement Fund (32)	1,564,761	1,330,223	1,345,887	1,361,755	1,377,829	6,980,455
Park Improvement Fund (34)	400,000	400,000	400,000	400,000	400,000	2,000,000
Liquid Fuels (35)						0
Total	3,585,761	3,326,223	3,366,887	3,617,755	3,658,829	17,555,455

2023-2027 Capital Improvement Plan

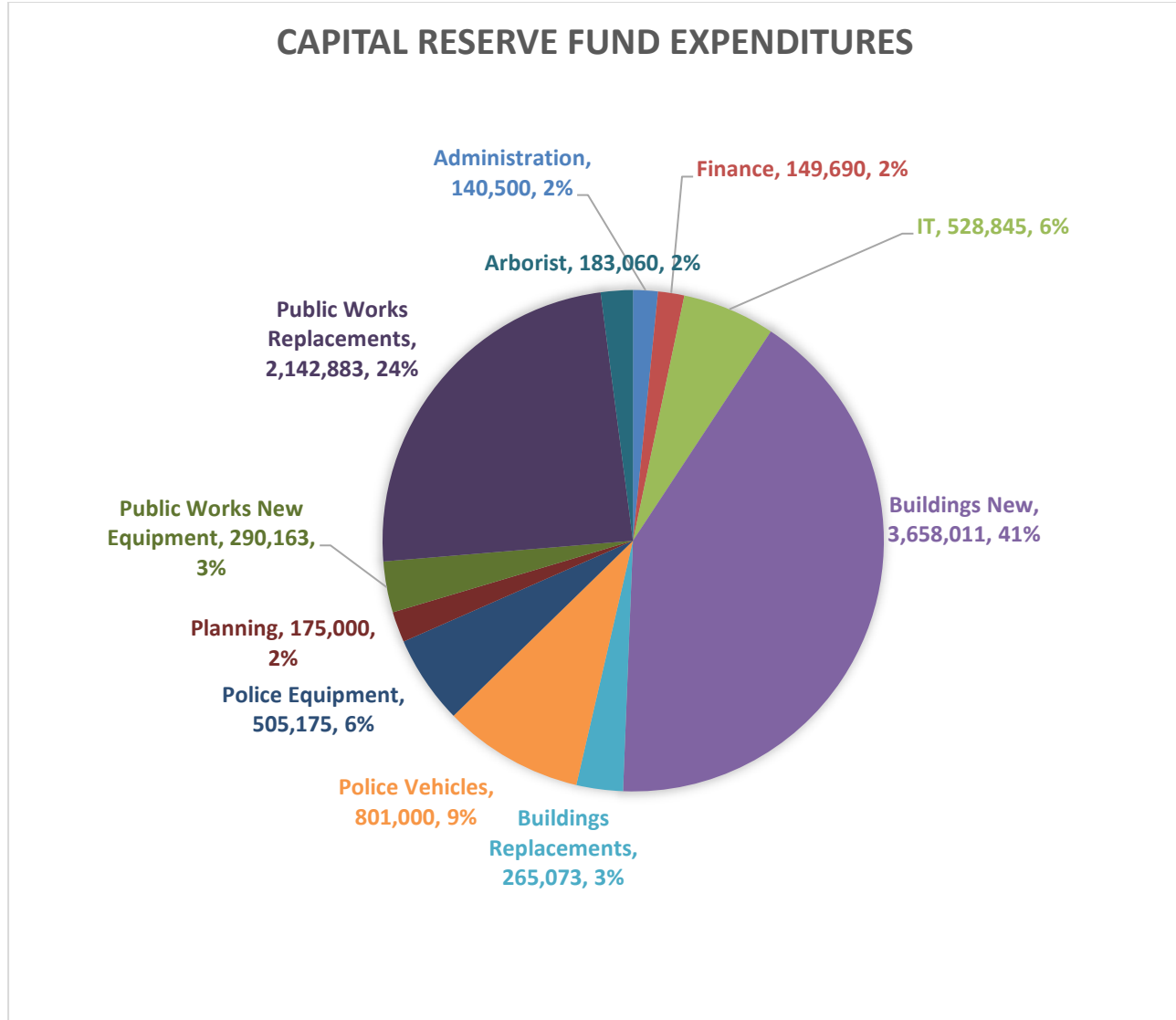
As mentioned previously, the **Capital Projects Funds** are reserved for projects restricted for specific purposes. Some funds have external restrictions, such as the Pine Grove Mills Street Light Fund, while others have Board of Supervisors restrictions, such as the Capital Reserve fund, the Regional Capital Recreation Projects Fund, and the Transportation Improvement Fund



2023-2027 Capital Improvement Plan

Capital Reserve Fund Expenditures

The Capital Reserve Fund represents the proposed Capital Equipment Expenditures over the five years of the Capital Improvement plan broken down by department.



2023-2027 Capital Improvement Plan

Staffing

The number of Township “Full-time Equivalents,” a measure of employment based on the number of hours paid for all staff, helps determine the rate of change in the staffing levels of the Township. One FTE is equivalent to 2080 hours worked. The proposed table is included for your reference. The resident per FTE provides information on the relative size of the Township staff for the number of residents served. It can be used as a benchmark against other municipalities to compare staffing levels and related costs.

FERGUSON TOWNSHIP FULL TIME EQUIVALENTS					
Residents/FTE	2023	2024	2025	2026	2027
Population	19,585	19,781	19,979	20,179	20,381
FTES (including new staff)					
Elected Officials	2.50	2.50	2.50	2.50	2.50
Administration	4.00	4.00	4.00	4.00	4.00
Finance	4.00	4.00	4.00	4.00	4.00
Buildings & Grounds	3.00	3.00	3.00	3.00	3.00
Engineering	6.00	6.00	6.00	6.00	6.00
Police	25.00	25.00	25.00	25.00	25.00
Police OT	1.00	1.00	1.00	1.00	1.00
Planning & Zoning	5.50	5.50	5.50	5.50	5.50
Public Works/Arborists	21.00	21.00	21.00	21.00	21.00
Public Works OT	0.50	0.50	0.50	0.50	0.50
Stormwater	1.00	1.00	1.00	1.00	1.00
New Employees	6.00	7.00	8.00	8.00	9.00
Total	79.50	80.50	81.50	81.50	82.50
NEW STAFF					
Administration	2.00				
Police					1.00
Planning		1.00			
Public Works	2.00		1.00		
Stormwater	2.00				
Total	6.00	1.00	1.00	-	1.00
Residents per Employee	246	246	245	248	247

2023-2027 Capital Improvement Plan

CIP New Personnel Summary						
New Personnel General Fund	2023	2024	2025	2026	2027	TOTAL
Administration	195,463	202,182	209,149	216,373	223,865	1,047,031
Finance & IT	0	0	0	0	0	0
Police	0	0	0	0	78,276	78,276
Planning	100,678	104,201	111,602	115,417	119,372	551,269
Public Works	71,215	73,779	157,197	162,884	168,794	633,868
Total	367,355	380,162	477,948	494,674	590,305	2,310,444
New Personnel Stormwater Fund	2023	2024	2025	2026	2027	TOTAL
Stormwater	148,190	153,491	158,997	164,717	170,659	796,055

Changes in the number of personnel are included in the budget due to the cost of additional staffing. Not only does salary to be considered, but also payroll taxes, health-related costs, other insurances, and pensions. Only additional positions are specifically mentioned. Current staffing is included in the operational projections. Staffing also includes new part-time staffing since such staffing represents labor requirements to fulfill Township service delivery. Overtime is also included in the FTE (full-time equivalent) calculations. It is important to know that overtime indicates additional staffing needs, usually insufficient to merit an additional position.

This section consolidates the various personnel requests of the various departments in one location.

Since personnel costs are technically operating expenses rather than capital, it makes sense to exclude them from the capital section and include them elsewhere. By having them included in one place, the cost estimates can be more consistent, and total costs are easier to identify.

2023-2027 Capital Improvement Plan

ADMINISTRATION

Executive Administrator

The administration department requests to return the Executive Administrative position to the organization in 2023 to continue such functions after the Human Resources Administrator position was created. Current staff moved to the HR position leaving an opening in this position.

Information Technology Specialist

The IT specialist is a new position in 2023 responsible for analyzing, troubleshooting, and evaluating technology issues for all departments. This role will support and assist users of the Township email accounts, a virtual private network (VPN), "software as a service" (SAAS), and help improve employee productivity. Additionally, this role will maintain IT inventory and Laserfiche form modules and assist with maintenance contracts as the liaison between staff and Hinton and Associates.

FERGUSON TOWNSHIP						
2023 – 2027 CIP STAFFING						
ADMINISTRATION NEW STAFFING						
Direct Costs Estimate	2023	2024	2025	2026	2027	Total
Salary	125,000	128,750	132,613	136,591	140,689	663,642
Health	46,000	48,300	50,715	53,251	55,913	254,179
Dental	1,200	1,200	1,200	1,200	1,200	6,000
Vision	400	400	400	400	400	2,000
Life/ADD	250	250	250	250	250	1,250
Short Term Disability	300	300	300	300	300	1,500
Pension	12,500	12,875	13,261	13,659	14,069	66,364
Employer Taxes	9,563	9,849	10,145	10,449	10,763	50,769
Workers Comp	250	258	265	273	281	1,327
Total	195,463	202,182	209,149	216,373	223,865	1,047,031

POLICE

The police department is estimating that an additional administrative assistant may be needed near the end of this CIP due to the demands of data input and recordkeeping.

FERGUSON TOWNSHIP						
2023 – 2027 CIP STAFFING						
POLICE NEW STAFFING						
Direct Costs Estimate	2023	2024	2025	2026	2027	Total
Salary					40,000	40,000
Health					27,957	27,957
Dental					600	600
Vision					200	200
Life/ADD					125	125
Short Term Disability					150	150
Pension					4,000	4,000
Employer Taxes					3,060	3,060
Workers Comp					2,184	2,184
Total	0	0	0	0	78,276	78,276

2023-2027 Capital Improvement Plan

2023 - 2027	
If an officer retires or leaves the department for other employment, we seek funding to send a replacement candidate to the police academy. The budget includes tuition, rooming, clothing, and equipment. Typically, the Municipal Police Officers Education and Training Commission provides partial reimbursement to departments for costs associated with sending a candidate to the academy. This line item is to maintain the department's current staffing level.	\$25,000
Total	\$25,000

PLANNING

FERGUSON TOWNSHIP						
2023 – 2027 CIP STAFFING						
PLANNING NEW STAFFING						
Direct Costs Estimate	2023	2024	2025	2026	2027	Total
Salary	65,000	66,950	68,959	71,027	73,158	345,094
Health	23,000	24,150	25,358	26,625	27,957	127,090
Dental	600	400	400	400	400	2,200
Vision	200	200	400	400	400	1,600
Life/ADD	125	250	250	250	250	1,125
Short Term Disability	150	300	300	300	300	1,350
Pension	6,500	6,695	6,896	7,103	7,316	34,509
Employer Taxes	4,973	5,122	5,275	5,434	5,597	26,400
Workers Comp	130	134	3,765	3,878	3,994	11,902
Total	100,678	104,201	111,602	115,417	119,372	551,269

The Department of Planning & Zoning would suggest adding staff consistent with the 2017 Strategic Plan. To follow the Board of Supervisors' lead in implementing the Ferguson Township Strategic Plan through the CIP Process, under the Goal of Economic Development, establish a Township Economic Advisory Group.

Community Development Planner (2023)

Effective community development planning takes a comprehensive approach to meeting community needs—an approach that recognizes the interrelationship of economic, physical, and social development. The purpose of the Community Development Planner is to support the mission and goals identified in the Pine Grove Mills Small Area Plan, Regional Housing Plan, Long-Range Growth Management Plan, and the Township's Strategic Plan by assisting in the management of the Township's economic, housing, recreation, and other initiatives. This person will assist in enhancing existing and developing new programs; interact with the business community, local non-profit organizations, and State College Area School District. They will assist in developing, coordinating, implementing, and supporting new and existing neighborhood partnerships, associations, and collaborations.

2023-2027 Capital Improvement Plan

PUBLIC WORKS

FERGUSON TOWNSHIP						
2023 – 2027 CIP STAFFING						
PUBLIC WORKS NEW STAFFING						
Direct Costs Estimate	2023	2024	2025	2026	2027	Total
Salary	40,000	41,200	82,436	84,909	87,456	336,001
Health	23,000	24,150	51,795	54,385	57,104	210,435
Dental	600	600	1,200	1,200	1,200	4,800
Vision	200	200	400	400	400	1,600
Life/ADD	125	125	250	250	250	1,000
Short Term Disability	150	150	300	300	300	1,200
Pension	4,000	4,120	8,244	8,491	8,746	33,600
Employer Taxes	3,060	3,152	6,306	6,496	6,690	25,704
Workers Comp	80	82	6,265	6,453	6,647	19,527
Total	71,215	73,779	157,197	162,884	168,794	633,868

The Public Works Department requests consideration for the following staff positions in the next five years:

2023 – Administrative Assistant This position is expected to support the public works staff, specifically the Director, Road Superintendent, Arborist, Building and Asset Superintendent, and work on special tasks and projects. Duties will include data entry related to time sheets for work orders and asset management in TRAISR, tracking expenses related to uniforms, clothing allowances, purchasing functions, assisting with correspondence, setting up meetings, phone calls, and department email. The current administrative assistant position will continue to support the front desk staff, including supporting the finance department and planning department, assisting with walk-ins, supporting the engineering section including filing, contract administrative duties, correspondence/mailings, and setting up capital projects in Laserfiche, a document management system, and updating the public works portion of the web page.

2023 - Tree Trimmer, or municipal tree specialist, was approved in the 2020 operating budget. Due to COVID, limited selection pool, and turnover of Township Arborist, the position (while funded) was not filled. It is expected the job will be filled in 2023. The tree trimmer assists the arborist in maintaining the assets of our urban forest. The municipal tree specialist will spend their time in the field pruning trees, caring for street tree cares, performing tree injections, removals, stump grinding, and inventory and assessment

2025 – Tree Trimmer - A second tree specialist is requested at this time to make the tree crew more self-sufficient and productive as the urban forest continues to grow. Some contracted services may then be performed in-house.

2023-2027 Capital Improvement Plan

FERGUSON TOWNSHIP						
2023 – 2027 CIP STAFFING						
STORMWATER NEW STAFFING						
Direct Costs Estimate	2023	2024	2025	2026	2027	Total
Part Time Wages		0	0	0	0	0
Full Time Salary	80,000	82,400	84,872	87,418	90,041	424,731
Health	46,000	48,300	50,715	53,251	55,913	254,179
Dental	1,200	1,200	1,200	1,200	1,200	6,000
Vision	400	400	400	400	400	2,000
Life/ADD	250	250	250	250	250	1,250
Short Term Disability	300	300	300	300	300	1,500
Pension	8,000	8,240	8,487	8,742	9,004	42,473
Employer Taxes	6,120	6,304	6,493	6,687	6,888	32,492
Workers Comp	5,920	6,098	6,281	6,469	6,663	31,430
Total	148,190	153,491	158,997	164,717	170,659	796,055

2023 – Stormwater laborer/operator As outlined in the cost of service summary for the stormwater fee program, two stormwater workers are programmed to augment the current public works labor force to address immediate and ongoing maintenance needs of the stormwater system, including inlet repairs and stormpipe repairs. These individuals' primary responsibility will be the day-to-day maintenance of the stormwater system and capital projects as approved in the budget.

2023-2027 Capital Improvement Plan

Departmental Expenditures

ADMINISTRATION DEPARTMENT

The Administration Department proposes to spend **\$140,500 or 1.6% of the Capital Reserve Fund Requests** during the term of this capital plan.

Following is the proposed Organizational Chart for the department.



Department Activities

The Administration Department provides support, guidance, and direction for the Township's governmental and operational responsibilities. Coordinating the various long-range plans with the Capital Improvement Program Budget is a critical function of the Department.

The Administration Department's mission is to advance professional management through open and accountable government leadership dedicated to providing sound financial management, public safety, responsible planning, recreational opportunities, and quality community infrastructure. We aim to continue as a progressive, healthy, and livable community for future generations.

Managing the Township organization and related services requires foresight to anticipate trends and new technology while meeting the residents' and businesses' basic service needs. Federal and state mandates often affect the Township, requiring the Township to absorb additional costs while maintaining current staffing levels. The Township must deliver services that many residents, businesses, and visitors have come to expect.

2022 Accomplishments

- Accepted the appointment of and successfully transitioned to the leadership of Township Manager Centrice Martin.
- Successfully negotiated collective bargaining agreement with Public Works Teamsters Union.
- Concluded implementation of the first Stormwater Management Utility fee billing cycle.
- Conducted a Vulnerability Assessment addressing cyber security and informing strategic technological planning.
- Improved cyber security measures with the adoption of a Multi-Factor Authentication policy
- Began rewrite to the Terraced Streetscape District plan

2023-2027 Capital Improvement Plan

- Facilitated the on-boarding of two new staff in Administration, two staff members in Public Works, and one in Planning and Zoning
- Initiated an Organizational Assessment in the Administrative Department
- Continued Recreation, Parks, and Open Space Plan with new master plans for two Township Parks
- Continued recovery efforts from the COVID-19 pandemic and reconstitution of Township services and operations
- “Flipped the switch” to generate solar power at the Public Works LEED Certified facility
- Hosted the first Authorities, Boards, and Commissions picnic since 2019

Strategic Plan Alignment

The Capital Improvement Plan seeks to advance the goals, objectives, and action steps outlined in the Ferguson Township Strategic Plan. While every goal presented in the 2017 Strategic Plan will be promoted through the investments established in this document, the following Goals are directly connected to developing a five-year Capital Improvement Program Plan.

Goal 1 – Financial Stability

b. Regularly compare the cost of providing services in-house with prices from private contractors, other municipalities, other government agencies, and regional services.

Goal 5 – Best Management Practices for Operations

- a. Ensure adequate staffing and resources necessary to carry out Township services and programs.
- c. Ensure that operational practices are fiscally responsible.

FERGUSON TOWNSHIP						
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS						
ADMINISTRATION						
30.400.401.750						
Description	2023	2024	2025	2026	2027	Total
						0
Strategic Communications Plan - Consultant Services	40,000					40,000
Administration Vehicle	30,000			30,000		60,000
Disaster Recovery Test	10,000					10,000
Update to Personnel Policy Manual	25,000					25,000
Fireproof Cabinet	5,500					5,500
						0
	110,500	0	0	30,000	0	140,500

2023 & 2026	
Administration Vehicle	\$30,000
Historically, the Administration vehicle had been on a three-year replacement schedule, and the outgoing vehicle had been transferred to the fleet. Given the relatively good condition and low mileage of the	

2023-2027 Capital Improvement Plan

current fleet vehicles, it is recommended that this replacement is based on a five-year cycle. An all-electric vehicle will be purchased for the Administration vehicle.	
Disaster Recovery Test	\$10,000
The Township maintains a Continuity of Operations Plan to be better able to respond to unforeseen emergencies ranging from simple power outages to the total loss of the municipal building. In previous years, staff has conducted a series of tabletop exercises and training simulations to test the plan's implementation and train on its use; however, these exercises have taken place entirely in-house with the resources available to the Township. A cyber-security test is also recommended to evaluate the Township's data backup and recovery effectiveness.	
Strategic Communications Plan	\$40,000
The adopted 2017 Strategic Plan recognized increased participatory government by utilizing two-way communication and promoting municipal identity with a developed marketing strategy and sense of place. Over the years, staff has creatively evolved communications and community engagement; however, communication as a fundamental obligation of local government is transforming, and digital communications are becoming an essential service with expectations and diverse audiences on the rise. A written strategic communications plan is proposed to establish consistency and continuity for communication practices, set expectations for interacting with internal and external audiences and provide a process for assessing communication priorities, developing goals, and allocating limited resources with templates.	
Update to the Personnel Policy Manual and Redesign of Onboarding Hiring Process	\$25,000
Staff recommends updating the personnel policy handbook to ensure compliance with ever-evolving federal and state laws. The employee handbook introduces new employees to the policies, practices, and workplace expectations and procedures. Formalizing the Township's onboarding practices with a formal orientation and up-to-date policies will aim to reduce the turnover rate, initiate the first step in succession planning, and establish performance measures.	
Fireproof Cabinet	\$5,500
The Human Resources Administrator requires a fireproof cabinet to store sensitive personnel information in a secure and protected manner. A fireproof cabinet is necessary to accommodate this need.	

2023-2027 Capital Improvement Plan

FINANCE DEPARTMENT

The Finance Department includes the Township and school real estate tax collection. The Finance Department requests a total of **\$149.7 Thousand, or 1.7% of the Capital Reserve Fund Requests** for this capital plan.

The finance department provides the billing and cash receipts for the Township and collection of school real estate taxes, payment of vendors and employee payroll, cash management, and investments as part of the daily activities. Furthermore, the finance department works with staff to prepare the five-year capital improvement plan and the annual budget.

The goals of the Finance Department include:

- To maintain the long-term financial sustainability of the Township.
- To collect real estate taxes, revenues, and grant funds
- To make payments to vendors, suppliers, and employee payroll
- To provide the Board of Supervisors, management, and the public with independent reports of the Township finances for planning purposes.
- To follow generally accepted accounting guidelines and best practices
- To promote internal controls to reduce the risk of financial loss or errors in reporting.
- To assist with information technology needs as appropriate
- To continue Government Finance Officers Association awards submissions for reporting.
- To manage the taxpayer monies with care and invest wisely.
- To maintain Township debt within acceptable levels according to best practices.

Strategic Plan Alignment

The Finance Department's objectives relate directly to the following strategic plan goals:

Goal 1.0 Financial Stability

Ferguson Township strives to be financially stable and capable of funding the Township's resource demands for immediate and long-term sustainability.

Goal 2.0 Adequate Staffing

Ferguson Township will maintain adequate staffing and expertise to meet the needs of a growing population.

Goal 4.0 Service Delivery

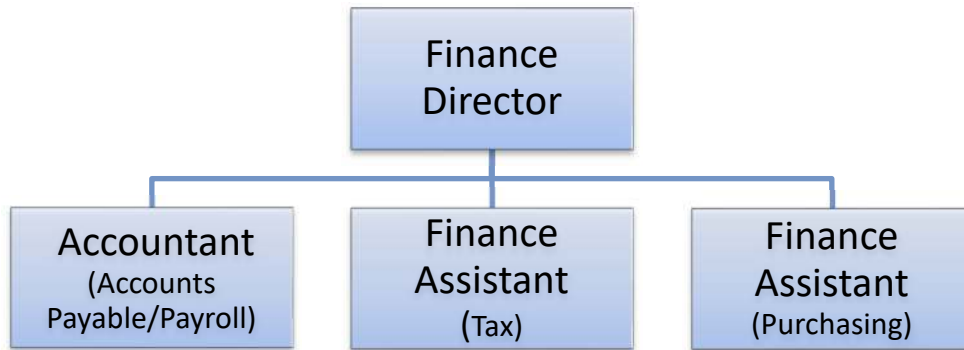
Ensure service delivery in Ferguson Township is sufficient to accommodate growth, address new community concerns, and is provided at the lowest responsible cost to residents.

Goal 8.0 Regional Programs

Ferguson Township will continue to actively participate in regional programs that have a demonstrable positive impact on cost and quality of service delivery.

2023-2027 Capital Improvement Plan

Organizational Chart



The Finance Department includes the tax collection, finance, and debt components of the Township. Finance also assists with computer services as needed. Finance activities include treasury management, billing & collection of revenues, payroll, accounts payable, debt management, risk management, grant management, fixed assets, and inventories.

The tax office collects the real estate taxes for the Township and the school district for Ferguson residents. The Township tax office collects over \$26 million in real estate taxes annually.

The Finance Department works with the Township staff and other related agencies, the GFOA (Government Finance Officers Association), GASB (Governmental Accounting Standards Board), the Commonwealth of PA, the Centre Region Council of Government (CRCOG), and regional municipalities to obtain valuable information on the financial health of the Township.

Thankfully, the Township tax mix provides for increasing revenues due to the increasing income tax collections. The combination of taxes has allowed the Township to grow without raising general taxes for more than ten years. Occasionally, it is necessary to raise property taxes to make up the difference between revenue growth and the cost of providing services.

One of the best ways to improve revenues is to obtain grant funding. The administration works closely with local agencies, developers, and PA state agencies to locate and secure grant funding where possible. Grants supplement the tax revenues and reduce the burden on the Township taxpayers.

TAX COLLECTION

The Township uses the RBA cloud-based system for real estate tax collection for the Township and school. This system is economical and effective. With the use of a bar-code reader for data input, the tax bills can be processed more quickly and accurately than in the past. Tax payments (other than cash) are uploaded into the bank using a remote deposit scanner. The remote scanner saves significant time by nearly eliminating the need to drive to the bank to make deposits. The bank provides a courier weekly at no cost to the Township for cash deposits and miscellaneous items.

TECHNOLOGY

The finance department continues to look at methods and means to improve the performance of daily activities using technologies. Improvements include using technology to save staff time using the Laserfiche document management system and the ClearGov Budgeting system. The Government Finance Officers Association recommends Cleargov. The Borough of State College is also implementing this software.

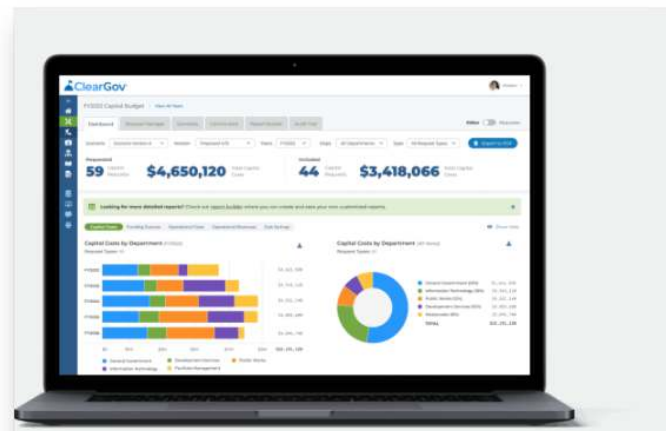
2023-2027 Capital Improvement Plan

FERGUSON TOWNSHIP						
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS						
FINANCE						
30.400.402.750						
Description	2023	2024	2025	2026	2027	TOTAL
ClearGov GFOA Budget Book Cloud Software	7,000	7,000	7,000	7,000	7,000	35,000
ClearGov Capital Budgeting	6,690	5,250	5,250	5,250	5,250	27,690
Move Springbrook Accounting system to the Cloud	27,000	15,000	15,000	15,000	15,000	87,000
						0
	40,690	27,250	27,250	27,250	27,250	149,690

Electronic Capital Budget Suite

The Finance Department has more than a year of experience with the ClearGov budgeting system and thus far is very pleased with the design and capabilities of the system for the future. This system will improve transparency with the public by allowing the budget to be presented in an easy-to-read and navigate platform. For 2023, the finance department is requesting to add the capital budgeting suite to the current system. This will improve the township budgeting by reducing or eliminating the existing CIP spreadsheets that need to be updated annually. This would also include the personnel component and obtain significant discounts over individual modules. It also allows staff to submit capital requests on customizable forms rather than the current system of paper and email. It is promoted by the Government Finance Officers Association as well. It has a dashboard that provides summary data at a glance as well. A snippet is included below

Capital Budgeting Features



Capital Budgeting Dashboard

The Capital Budgeting dashboard centralizes everything you need to build your budget and provide deeper insight into capital requests. Use filters to visualize the data from multiple angles while you review capital costs, funding sources, operational costs, cost savings, and project revenue – by department per year and across all years. Easily click on a request to drill down into the details to see pictures, attachments and a cost breakdown.

Move Springbrook Accounting System to the Cloud

The Finance Department implemented the Springbrook accounting system in 2013. It has been through a couple of ownership changes and still exists, proving the quality and acceptance in the industry. Currently, the software is maintained on the township servers. Given the changes in the software industry, most companies are investing in cloud versions commonly known as “software as a service” SAS. The same is true for Springbrook. Another township similar to Ferguson, Pine Township, moved to the cloud version in 2015 and responded to my inquiry with, “Springbrook Cloud is wonderful. We’ve been on the cloud since 2015 and love it”.

2023-2027 Capital Improvement Plan

There are substantial benefits to moving to the cloud. Such benefits are:

- It brings us to the current version and does not require Hinton to update the software. Typically this is done monthly. The cloud will be dated automatically.
- It offers features that are not currently available. Springbrook is investing in cloud software and moving away from investing in traditional on-premises systems.
- It allows access from anywhere. No VPN access is required to login into the township servers
- Since the software is located elsewhere, it reduces the risk of unauthorized access to the township servers.
- It reduces the cost of 3rd party IT support. Hinton is no longer required to maintain the software or issues related to the servers.

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DEBT SERVICE



Proposed and current debt service costs a total of **\$3.63 Million or 3.3% of Total Expenditures** (including interfund transfers) in this capital plan. Part of the long-term planning for capital items must include debt service considerations. Given the Township strategic plans' scope, many proposals require significant funding to be completed in a reasonable time. Due to currently available Township resources, financing such projects with cash may not be possible. Best practices recommend restricting debt to capital needs and not being used for ongoing operations.

FERGUSON TOWNSHIP											
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS											
DEBT SERVICE PROJECTIONS											
TOWNSHIP DEBT	Payments Begin	Loan Amount	Rate	Term (Years)	Expires	2022	2023	2024	2025	2026	2027
COG Pools Debt	2021	827,828	1.23%	7	2028	120,000	120,000	120,000	120,000	120,000	120,000
COG Parks Debt	2021	1,674,172	1.33%	13	2034	125,000	125,000	125,000	125,000	125,000	125,000
Ferguson Township Maintenance Facility	2019	6,845,000	2.60%	25	2044	376,000	376,000	376,000	376,000	376,000	376,000
Township Fire Station	2026	2,850,000	4.00%	15	2041					260,000	260,000
Total		12,197,000				621,000	621,000	621,000	621,000	881,000	881,000

The proposed debt service for the new five years is listed in the following chart. The debt service includes a new fire station, the public works facility, CRCOG pools, and parks.

It is important to understand that debt is spending beyond the current ability to pay. It should be reserved for capital needs and used as an investment to reduce future operating costs. Debt reduces the Township's ability to pay for other activities. Some experts believe debt service payments should be kept below 10% of annual operating expenditures. Debt can be thought of as a drag on operations. It limits the township's ability to use funds for unexpected opportunities when they occur. Staff believes this is a reasonable limit for long-term sustainability.

The Township's portion of the regional debt is also included. COG refinanced the debt in 2021, reducing the cost of debt service and increasing the amount of funding available for the parks projects. The debt payment for COG assumes no change in the COG formula for the pool's loan, for which the municipal contributions are recomputed after ten years. The regional pools and parks currently have long-term debt service requirements, as listed in the table above.

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INFORMATION TECHNOLOGY DEPARTMENT

The Information Technology department requests **\$528.8 Thousand or 6.0% of the Capital Reserve Fund Requests** for this capital plan.

A third party, Hinton & Associates, currently manages the information technology department. The Manager, Assistant Manager, and the Finance Director work closely with Township staff and Hinton to manage the computer systems and software, perform updates, plan future needs of the

Township and assist with helpdesk tickets.

Desktop computers, laptops, and software maintenance fall under the operating budget based on not meeting the \$2,500 threshold for capital expenditures.

FERGUSON TOWNSHIP								
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS								
INFORMATION TECHNOLOGY								
30.400.407.750								
Description	Department	Age at Replacement	2023	2024	2025	2026	2027	Total
Microsoft Office Licenses (operating cost)	IT							0
Replacement Server	IT			30,000				30,000
RMS maintenance fees (existing system)	Police	see police	35,770	20,370	21,389	22,458	22,458	122,445
RMS replacement (consultant and new system)	Police	see police	16,000	50,000	50,000			166,000
Replace Copiers	IT			10,000		10,000		20,000
Ethernet Switch	IT					9,000		9,000
Server OS replacements (end of life)	IT		20,000					20,000
Replacement UPS	IT			2,500		2,500		5,000
Replace Firewalls (2)	IT							0
Replace Plotter/scanner	Engineering		12,000					12,000
Phone system replacement	IT		25,000					25,000
Move Springbrook Accounting to the Cloud	Finance	see finance						0
Move Laserfiche to the Cloud	IT		24,800	17,400	17,400	17,400	17,400	94,400
Keystone Payroll Time & Labor	Admin		25,000					25,000
Total			158,570	130,270	88,789	111,358	39,858	528,845

Security and Training

Internet security is a dynamic and ever-changing challenge. It requires constant improvements in security measures. Such measure includes state-of-the-art internet firewalls, email protection from spoofing, ransomware attacks, phishing and spearphishing protection, and ongoing staff training to prevent becoming victims.

One primary way for unauthorized accessing the system is using human behavior weakness. Hackers use social engineering to convince potential victims to click on malicious email links. There is even one known as whaling, where the attack is aimed at senior executives. Ongoing training of staff is a vital deterrent from these attacks. Such training includes the PII system provided by our 3rd party IT service. This keeps staff up to date on various threats and offers quizzes to test the employee's understanding.

Another recent prevention method for ransomware attacks is software that continuously examines the operation of the servers looking for potential attacks. The township is looking to implement such as system to stay even or ahead of potential attackers.

Microsoft Windows Updates and Architecture

The township relies on the Microsoft platform for its operating system. Servers are currently using older operating system versions that must be updated every five to seven years.

For hardware, the Township uses virtual servers (sharing hardware to operate multiple operating systems on one piece of hardware) to save the cost of server hardware. Given the power of current equipment and improvements to operating systems, it is standard practice these days to have multiple applications on one

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physical server. Virtual servers require redundancy since if a server fails, it will affect several systems. For the 2023-2027 CIP, the township will need to replace one server.

This typically requires a backup server. Yet the total cost of hardware is significantly less than traditional architecture. The Township is using server virtualization is cost-effective and beneficial relative to conventional systems.

In addition, the township standardizes on the Microsoft Office platform for word processing, spreadsheets, and presentations, among other applications

New Internet Provider

The township entered into a regional agreement with CentreWisp in 2022 for high-speed internet service. This agreement provides a five-fold increase in speeds from 200MB to 1GB up and down. The contract is 60 months and requires no upfront payments. Increasing the speed of the internet opens doors as well. High-speed Internet allows for increased use of cloud computing, faster backups, and better quality video and telephone communications.

Cloud Computing, Subscription-based services, and Backups

Many software companies are moving to a subscription-based model for software licensing. Such models are consistently more expensive than the past's traditional "on-premises" systems. The township is anticipating the increase in costs related to this change

Online cloud backups are a secondary but necessary choice, with the first remaining to be an onsite backup for fast recovery. By having a secondary backup on the cloud, it is protected from onsite disasters and is portable if Township operations need to be relocated temporarily.

Move Laserfiche to the Cloud

Laserfiche is the document management and workflow system for the township. It was implemented in 2016, and its use has expanded. The staff is requesting to move the software to the cloud. There are several reasons for this, including:

- Currently, the forms system must be on two independent servers for security purposes. Having two servers at different sites communicating with each other has caused issues with the system being down for weeks (at least twice). Moving to the cloud eliminates the need to have two servers, preventing such situations from occurring in the future.
- Reduces staff time by not requiring duplicating forms and eliminating the need for intermediate workflows to move data from one server to another.
- Provides for the most current version as Laserfiche is investing in the cloud versions and moving away from on-premises systems.
- It allows access from anywhere as VPN access is not required.
- Reduces the risk of unauthorized access to the township servers since the software will be hosted elsewhere.
- It eliminates the cost of hosting the second server since two servers will no longer be needed.
- It reduces the cost of the 3rd party IT since Hinton will not have to update or maintain the software on the township servers.

Phone System Replacement

The current phone system was purchased in December 2013. Given the technological changes over the past decade, the phone system is nearing the end of its life. The township is reviewing options for a new

2023-2027 Capital Improvement Plan

platform for 2023. Many new designs are internet-based and offer many features not available to older systems.

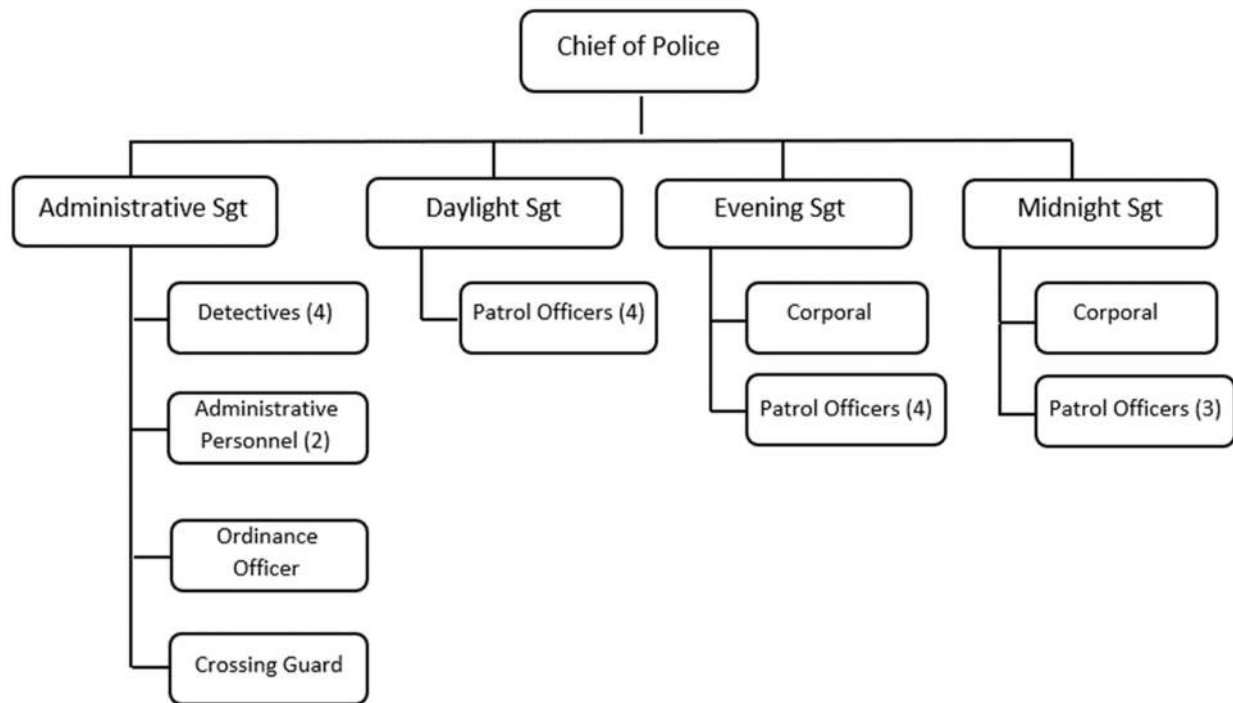
2023-2027 Capital Improvement Plan

POLICE DEPARTMENT

The Police Department is proposing to spend **\$1.31 Million or 14.8% of the Capital Reserve Fund Requests** during the term of this capital plan

Organizational Chart

The proposed organizational chart for the department is displayed below. The department employs 22 officers, the Chief, two records assistants, a part-time ordinance enforcement officer, and one part-time crossing guard.



Ferguson Township Police Department

The Police Department delivers a full range of services to the community 24 hours a day, 365 days a year. The services include response to all calls for service, criminal investigations, crime detection and prevention activities, vehicle crash investigations, and traffic control and enforcement. The Police Department's authorized complement is 23 full-time sworn personnel, two full-time civilian office assistants, a part-time Ordinance Enforcement Officer shared with Planning and Zoning, and a part-time school crossing guard. The Department will continue participation in the regional Drug Task Force, Crisis Intervention, Tactical Response Team, and Crisis Negotiation.

Summary of Requests

The Capital Improvement Plan provides a framework to project costs associated with higher-cost items such as equipment and staffing changes. Here is a summary of the department's requests:

- Fleet – Maintain existing fleet of vehicles. We continue to explore the use of Hybrid vehicles as well as fully electric-powered vehicles.
- Regional Records Management System – Ferguson Township, Patton Township, State College Borough, and Penn State Police Departments share a records management system. Our current system was implemented in January 2019. The agencies have been working with the vendor to

2023-2027 Capital Improvement Plan

refine system deficiencies; however, the corrective process has been slow. The consortium is withholding final payment until the vendor's system meets expectations.

If the vendor cannot fulfill their obligation, funding may be necessary to purchase a replacement system. Conversely, we will have an annual maintenance fee if the vendor can correct the deficiencies.

- Technology Driven Investigations – Electronic devices often contain information related to criminal investigations. The Department seeks to improve forensic analysis capabilities. As the Capital Improvement Plan is being developed, Ferguson Township and Patton Township Police Departments collaborate to establish a framework for sharing software and hardware investigative tools. An electronic device can only be analyzed through owner consent or a search warrant.
- Body / Car Camera System – The Department began using the Axon body/car camera system. The videos generated by the devices have proven valuable for court prosecution, training, and quality assurance. Our current contract expires in 2023.
- Miscellaneous – This category includes speed trailer, Taser, AEDs, and other first-aid supplies

Police Department Vehicle Requests

The total proposed police department capital items for the 2023-2027 Capital Improvement Plan are described in the following requests. The proposed five-year CIP expenditures are based on available information and coordinated with the Township's strategic plan. It includes fleet rotation based on a five-year or more cycle of two or three vehicles per year, depending on the vehicle's condition. Most new patrol vehicles have been specified as Ford Interceptor SUVs.

The department intends to replace administrative and detective vehicles with fuel-efficient Hybrid vehicles. The department purchased two Ford hybrid SUV patrol vehicles in 2020. The technology reduces idling time by managing the electrical needs of the vehicle. At idle, the engine only runs when the batteries are low.

Our current patrol fleet is a blend of cars and four-wheel-drive SUVs. The department intends to maintain a similar fleet composition. The cars have better fuel economy, but equipment storage is limited, and officer comfort is often a concern. Four-wheel drive SUVs offer more equipment storage, operator comfort, and operability in inclement conditions. The smaller Ford SUVs provide a better fuel economy than our current fleet of Tahoes. As mentioned earlier, the new hybrid vehicles will offer greater fuel savings.

2023-2027 Capital Improvement Plan

Police Vehicle Fleet Map

The current police vehicle fleet map is included for your reference. It includes ten Patrol vehicles and administrative, detective, and training vehicles. The Mobile Command Vehicle, jointly owned but maintained by FT, is listed on the map. The replacement dates are included in the chart.

Vehicle #	FT-1	FT-2	FT-3	FT-4	FT-5	FT-6	FT-8	FT-9	FT-10	FT-11	FT-12	FT-13	FT-14	FT-16	FT-17	FT-18	FT-20	FT-21	EVOC
Year / Make	2019 Ford F-50	2020 Ford Intercept SUV	2017 Ford Intercept SUV	2019 Ford Taurus	2022 Ford SUV	2019 Ford Taurus	2021 Ford Intercept SUV	2018 Ford Fusion	2016 Chev Equinox	2020 Ford Intercept SUV	2014 Chev Caprice		2017 Ford Intercept SUV	2019 Ford Fusion	2008 Chev Impala	2012 Chev 1500 MCV	2000 MCV	CRV 1995	2011 Chev Caprice
Type ID	20004	20008	20000	20001		20005			101001	20007	100251	100260	100254		100123	100315	100252		100255
In Service	May-19	Sep-20	May-18	Mar-19		Mar-19	May-21	May-18	May-16	Sep-20	Apr-15		Aug-17	Jan-19	Mar-10	May-12	Jul-05	Jun-08	11/16
Assign	Patrol	Patrol	Patrol	Patrol	Patrol	Patrol	Patrol	Chief	Det	Patrol	All	Det	Patrol	Det	Training	Spec	Spec	Spec	Patrol
Radio	XTL2500	XTL2500	XTL2500	XTL2500	XTL2500	XTL2500	APX6500		XTL2500	XTL2500	APX4500	XTL2500	XTL2500	XTL2500	XTL2500	N/A	Multiple		
In Service	2013	2013	2013	2013	2013	2013	2015	2018	2013	2009	2015	2015	2013	2020	2013				2013
MCT Model /	GETAC	GETAC	GETAC	GETAC	GETAC	GETAC	GETAC			Zebra	GETAC		GETAC						
in service	(2017)	(2017)	(2017)	(2017)	(2022)	(2017)	(2021)		None	2020	(2015)	None	(2017)	None	None	None	None	None	None
VASCAR /	Plus IIC	VASCAR	VASCAR	VASCAR	VASCAR	VASCAR	Plus IIC			VASCAR	VASCAR								
VSPEC	(2015)	(2015)	(2015)	(2015)	(2015)	(2015)	(2015)	N/A	N/A	(2015)	Plus IIC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Replacement Date	2025	2025	2023	2024	2027	2024	2027	2026	2026	2026	2024	2030	2023	2029		2025	N/A	N/A	Feb or 14 in 2023
Mileage	32,106	30,754	89,936	40,583	Not in service yet	70,711	4,253	32,461	29,387	24,102	53,312	44,141	76,357	3,670	69,798	85,788	7,272	188,991	131,981
Special	4WD	AWD	AWD	Sedan	AWD	Sedan	Hybrid	Hybrid	AWD	Hybrid	Sedan	Sedan	SUV	Hybrid	Sedan	4WD			

2023-2027 Capital Improvement Plan

FERGUSON TOWNSHIP								
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS								
POLICE VEHICLES								
30,400,410,750								
Description	Current Mileage	Age @ Replacement	2023	2024	2025	2026	2027	Total
Replace 2016 Ford SUV (FT3)(Including equipment)	89,936	7	65,000					65,000
Replace 2017 SUV (FT14) (Including equipment)	76,367	6	65,000					65,000
Zero DSRP ZF14.4 Electric Motorcycle with equipment	N/A		31,000					31,000
Replace 2017 Sedan (FT4) (Including equipment)	40,583	6		65,000				65,000
Replace 2017 Sedan (FT6) (Including equipment)	70,711	6		65,000				65,000
Replace 2014 Caprice (FT12) (Including equipment)	53,312	10		65,000				65,000
Replace 2020 Ford SUV (FT2) (Including equipment)	30,754	5			65,000			65,000
Replace 2019 Pick-up (FT1) (Including equipment)	32,106	6			65,000			65,000
Replace 2012 Pick-up (OEO)(Including equipment)	85,788	13			50,000			50,000
Replace 2016 Equinox (FT10) (Including equipment)	29,387	10				35,000		35,000
Replace 2018 Fusion (FT9) (Including equipment)	32,461	8				35,000		35,000
Replace 2020 Ford SUV (FT11) (Including equipment)	24,102	6				65,000		65,000
Replace 2021 Ford SUV (FT8)(Including equipment)	4,253	6					65,000	65,000
Replace 2022 Ford SUV (FT5) (Including equipment)	N/A	5					65,000	65,000
Total			161,000	195,000	180,000	135,000	130,000	801,000

2023

Police Vehicles and Equipment			\$161,000
Replace 2016 Ford SUV (FT-3) with Ford SUV	89,936 miles (5/22)	\$40,000	
Equipment and Installation (New tablet and VASCAR)		\$25,000	
Subtotal		\$65,000	
Zero Motorcycle, DSRPZF14.4 Electric Motorcycle		\$25,000	
Equipment and gear		\$6,000	
Eligible for PA Alternative Fuel Incentives			
Subtotal		\$31,000	
Replace 2017 Ford SUV (FT14) with Ford SUV	76,367 miles (5/22)	\$40,000	
Equipment and Installation (New tablet and VASCAR)		\$25,000	
Subtotal		\$65,000	
Total		\$161,000	

2024

Police Vehicles and Equipment			\$195,000
Replace 2017 sedan (FT-4) with Ford Hybrid SUV	40,583 miles (5/22)	\$40,000	
Equipment and Installation (New tablet and VASCAR)		\$25,000	
Subtotal		\$65,000	

2023-2027 Capital Improvement Plan

Replace 2017 sedan (FT-6) with Ford Hybrid SUV	70,711 miles (5/22)	\$40,000	
Equipment and Installation (New tablet and VASCAR)		\$25,000	
Subtotal		\$65,000	
Replace 2014 Caprice (FT-12) with Ford Hybrid SUV	53,312 miles (5/22)	\$40,000	
Equipment and Installation		\$25,000	
Subtotal		\$65,000	
Total		\$195,000	
2025			
Police Vehicles and Equipment			\$180,000
Replace 2020 Ford Hybrid SUV (FT-2) with Hybrid SUV	30,754 miles (5/22)	\$40,000	
Equipment and Installation (New tablet and VASCAR)		\$25,000	
Subtotal		\$65,000	
Replace 2012 OEO Pick-up (FT-18) with electric Ford 150 Pick-up	85,788 miles (5/22)	\$43,000	
Equipment and Installation		\$7,000	
Subtotal		\$50,000	
Replace 2019 F-150 (FT-1) with similar vehicle Hybrid or electric	32,106 miles (5/22)	\$40,000	
Equipment and Installation (New tablet and VASCAR)		\$25,000	
Subtotal		\$65,000	
Total		\$180,000	

2023-2027 Capital Improvement Plan

2026			
Police Vehicles & Equipment			\$135,000
Replace 2020 Ford Hybrid SUV (FT-11) with Ford Hybrid SUV	24,102 miles (5/22)	\$40,000	
Equipment and Installation (New tablet and VASCAR)		\$25,000	
Subtotal		\$65,000	
Replace 2018 Ford Hybrid sedan (FT-9) with Hybrid sedan	32,461 miles (5/22)	\$27,000	
Equipment and Installation		\$8,000	
Subtotal		\$35,000	
Replace 2016 Equinox (FT-10) with Hybrid SUV	29,387 miles (5/22)	\$27,000	
Equipment and Installation		\$8,000	
Subtotal		\$35,000	
Total		\$135,000	
2027			
Police Vehicles and Equipment			\$130,000
Replace 2022 Ford SUV (FT-5) with Ford SUV	0 miles (5/22)	\$40,000	
Equipment and Installation (New tablet, VASCAR)		\$25,000	
Subtotal		\$65,000	
Replace 2021 Ford Hybrid SUV (FT-8) with Ford Hybrid SUV	4,253 miles (5/22)	\$40,000	
Equipment and Installation (New Tablet and VASCAR)		\$25,000	
Subtotal		\$65,000	
Total		\$130,000	

2023-2027 Capital Improvement Plan

Police Equipment

FERGUSON TOWNSHIP						
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS						
POLICE SOFTWARE & EQUIPMENT						
30.400.410.750						
Description	2023	2024	2025	2026	2027	Total
Records Management System	see IT					0
Replacement rifles / shotgun optics	12,500					12,500
Power DMS Document Management Program	6,200	6,200	6,200	6,200	6,200	31,000
Cellebrite	6,100	6,100	6,100	6,100	6,100	30,500
Graykey	9,995	9,995	9,995	9,995	9,995	49,975
Body Camera / MVR / Interview Room / Tasers	70,000	70,000	70,000	70,000	70,000	350,000
Medical Equipment / Supplies			5,600	5,600		11,200
Automated External Defibrillator (AED) (10)				20,000		20,000
Total	104,795	92,295	97,895	117,895	92,295	505,175

2023

Police Software and Equipment		\$156,565
Body Camera / Car Camera / Interview Room Camera System Renewal – Our contract with Axon expires in 2023. This expenditure will include a new vendor or upgrading existing equipment with the current vendor. Package to include Taser replacement.	\$70,000	
Records Management – The new regional records management system went live in 2019. The project has experienced technical difficulties with the vendor. The participating agencies have not paid the remaining balance because unresolved issues remain. There is a chance that the vendor may not be able to meet contractual obligations, and a need vendor may be sought. (Remaining unpaid balance \$16,363 / Maintenance fee \$19,400). If necessary, the regional consortium wants to hire a consultant/project manager to help select a replacement system. (\$16,000)	\$51,770	
Power DMS – Document Management System utilized for accreditation. The system consolidates records, tracks policies and changes, and tracks training tasks and testing.	\$6,200	
GrayKey - Forensic access tool extracts encrypted or inaccessible data from mobile devices.	\$9,995	
Cellebrite – Annual membership renewal electronic forensics	\$6,100	
Replacement Rifles, Shotgun Optics, and Miscellaneous Parts – The funding will be used to replace two 1960's rifles and purchase optics for department shotguns	\$12,500	

2024

Police Software and Equipment		\$162,665
Records Management – The current regional records management system went live in 2019. The project has experienced technical difficulties with the vendor. The participating agencies have not paid the remaining balance because unresolved issues remain. There is a chance that the vendor may not be able to meet contractual obligations, and a need vendor may be sought.	\$50,000	

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Records Management Maintenance Fee – The fee is used to maintain the existing regional records management system. This line item may be unnecessary if the vendor cannot resolve system deficiencies.	\$20,370	
Power DMS – Document Management System utilized for accreditation. The system consolidates records, tracks policies and changes, and tracks training tasks and testing.	\$6,200	
Body / Car / Interview Room Camera System – Agreement to be a determined vendor. Package to include Taser replacement.	\$70,000	
Graykey - Forensic access tool extracts encrypted or inaccessible data from mobile devices.	\$9,995	
Cellebrite – Annual membership renewal	\$6,100	
2025		
Police Software and Equipment		\$169,284
Records Management – The new regional records management system went live in 2019. The project has experienced technical difficulties with the vendor. The participating agencies have not paid the remaining balance because unresolved issues remain. There is a chance that the vendor may not be able to meet contractual obligations, and a need vendor may be sought.	\$50,000	
Records Management Maintenance Fee – The fee is used to maintain the existing regional records management system. This line item may be unnecessary if the vendor cannot resolve system deficiencies.	\$21,389	
Body / Car / Interview Room Camera System – Agreement to be a determined vendor. Package to include Taser replacement.	\$70,000	
Power DMS - Document Management System utilized for accreditation. The system consolidates records, tracks policies and changes, and tracks training tasks and testing.	\$6,200	
Cellebrite – Annual membership renewal	\$6,100	
GrayKey - Forensic access tool extracts encrypted or inaccessible data from mobile devices.	\$9,995	
Medical Equipment / Supplies – Some of our medical supplies have a five-year shelf life. The first items replaced will be Quikclot hemostatic trauma dressings and chest seals.	\$5,600	
2026		
Police Software and Equipment		\$190,353
Records Management – The new regional records management system went live in 2019. The project has experienced technical difficulties with the vendor. The participating agencies have not paid the remaining balance because unresolved issues remain. There is a chance that the vendor may not be able to meet contractual obligations, and a need vendor may be sought.	\$50,000	
Records Management Maintenance Fee – The fee is used to maintain the regional records management system.	\$22,458	
Body / Car / Interview Room Camera System – Agreement to be a determined vendor. Package to include Taser replacement.	\$70,000	

2023-2027 Capital Improvement Plan

Power DMS - Document Management System utilized for accreditation. The system consolidates records, tracks policies and changes, and tracks training tasks and testing.	\$6,200	
Cellebrite – Annual membership renewal.	\$6,100	
GrayKey - Forensic access tool extracts encrypted or inaccessible data from mobile devices.	\$9,995	
Medical Equipment / Supplies – Some of our medical supplies have a five-year shelf life. The first items replaced will be Quikclot hemostatic trauma dressings and chest seals.	\$5,600	
Automated External Defibrillator (AED) – Replace 10 AED units. Existing units will be eight years old and at their end-of-life rating.	\$20,000	
2027		
Police Software and Equipment		\$115,868
Records Management Maintenance Fee – The fee is used to maintain the regional records management system.	\$23,573	
Body / Car / Interview Room Camera System – Agreement to be a determined vendor. Package to include Taser replacement.	\$70,000	
Power DMS – Document Management System utilized for accreditation. The system consolidates records, tracks policies and changes, and tracks training tasks and testing.	\$6,200	
Cellebrite – Annual membership renewal.	\$6,100	
GrayKey - Forensic access tool extracts encrypted or inaccessible data from mobile devices.	\$9,995	

2023-2027 Capital Improvement Plan

PLANNING AND ZONING DEPARTMENT

The proposed capital costs for the Planning and Zoning Department total **\$175 Thousand or 2.0% of the Capital Reserve Fund Requests** for the five years.

Organizational Chart



Department Activities

The Department of Planning & Zoning regulates land use activity in the Township, including all subdivisions and land development activities. Staff reviews plan submissions for new construction or alterations to ensure compliance with Township ordinances. Additionally, the department conducts inspections on all building activity in the Township.

The Zoning Administrator and Ordinance Enforcement Officer are responsible for enforcing Township ordinances relating to items such as snow removal, abandoned vehicles, lawn maintenance, and more.

The Planning Department has recently worked on several large projects, including the Toll Brothers Cottages, Pine Hall development, the Harner Farm subdivision, West College Student Housing Land Development Plan, 1004 & 1006 West College Avenue Land Development Plan, adoption of the Official Map Ordinance, Telecommunications Tower amendments, as well as tracking potential COVID-19 amendments and comprehensive amendments that resulted in errors after the 2019 comprehensive Zoning and SALDO update. Planning & Zoning Staff are also the primary support for the Planning Commission, Pine Grove Mills Small Area Plan Advisory Committee, and Zoning Hearing Board, as well as representing the Township on the Centre County Housing & Land Trust (CCHLT) Board.

Strategic Plan Alignment

The Capital Improvement Plan seeks to advance the goals, objectives, and action steps outlined in the Ferguson Township Strategic Plan. Over the next five years, several Strategic Plan items will be accomplished through the proposed expenditures in the Capital Improvement Plan.

Mobility Study Implementation (2023-2027)

1) Financial

Make realistic estimates of program costs (Staff)

Permitting Software (2022) Regional Program

1) Best Management Practices

Ensure adequate staffing and resources necessary to carry out Township services and programs (Staff, Board)

Market Study Land Use and Housing Needs

3) Growth Management

2023-2027 Capital Improvement Plan

- a. Identify and complete (develop) plans for specific small areas. (Board, Staff, Planning Commission)
- b. Develop a Long-Range Growth Management Plan. (Staff, Planning Commission, Board)
- c. Develop a Regional Housing Plan to identify and provide for low, moderately, and attainably priced housing in the Township. (Staff, Consultant, Regional input)

A Regional Housing Study and Needs Assessment is the first step in the strategic planning process for Ferguson Township's Affordable Housing Initiatives. This analysis will inform the second step of the process, which is to recommend housing strategies for each municipality and region that will address key issues impacting housing affordability. A single solution targeted at a specific issue or population is no longer a good strategy to advance an affordable housing agenda, and many approaches must be considered. This Study will draw on internal resources, consultants, housing industry representatives, and observations from the community.

- d. Coordinate with CCHLT and administer the Township's Workforce Housing Program. (Board, Staff)

Regional Housing Study and Needs Assessment will identify objectives and strategies to pursue by each municipality:

- Develop a plan for listening to residents in need of better housing;
- Create a holistic regional approach;
- Strengthen the relationship between localities;
- Connect housing efforts to transportation and workforce development;
- Create a formal means for sharing information; and
- Advocate for the integration of housing into decision-making.

The Study will provide the Township with:

- Household demographics;
- Housing supply and market conditions;
- Housing affordability and the gap not being addressed by the private market; and
- Key issues are impacting affordable housing outline the key issues as the basis for future strategy formulation (housing supply, land development policies, transportation, funding, incomes, discrimination).

4) Environmental Stewardship

Make sure that land development regulations and development plans are consistent with environmental values (Staff, Planning Commission, Board)

9) Partnerships and Regional Thinking

Work towards regional cooperation on issues affecting the Centre Region, i.e., attainable housing, affordable housing, and sustainable growth.

8) Promotion of Municipal Identity

Develop our Sense of Place by developing a vibrant Town Center, preserving our agricultural heritage, and promoting the features that make the Township unique. (Staff)

2023-2027 Capital Improvement Plan

FERGUSON TOWNSHIP						
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS						
PLANNING						
30,400,414,750						
Description	2023	2024	2025	2026	2027	TOTAL
Northland Mobility Study Implementation	see transportation improvement fund					-
Terraced Streetscape District						-
Regional Housing Study			75,000			75,000
Long Range Management Plan				100,000		100,000
Total	0	0	75,000	100,000	0	175,000

2023 - 2026	
Northland Area Mobility Study Implementation	\$250,000/yr.
<p>Public Works Department concluded the Northland Area Mobility Study in 2019. The Board of Supervisors accepted the final report on May 19, 2019. The report identified specific safety and mobility improvements. This fund was established to allow for engineering, utility acquisition, right-of-way acquisition, and construction of future projects, specified in the report.</p> <p>***See Transportation Improvement Fund for costs.</p>	
2025	
Municipal or Regional Housing Study	\$75,000
<p>Housing is a regional issue, like transportation and environmental quality. A lack of a regional approach to affordable housing exacerbates income and racial inequality throughout the region. We are fortunate to live in a prosperous location with a wealth of opportunities that can support individual and family economic well-being and success. Consequently, we are better positioned than many other places to create regional tools to expand housing options, mainly if we take an incremental and results-driven approach.</p> <p>This study should be completed as a regional approach. However, if there is a lack of regional interest in this study, the Township will be prepared to conduct this study alone. This housing study provides decision-makers, stakeholders, and community members with a comprehensive understanding of key housing issues in the region. The study will assess unmet housing demand in the next five, ten, and fifteen years. This study will also offer community leaders and stakeholders a basis for formulating housing priorities, policies, and intervention strategies that can be achieved within two, five, ten, and fifteen years.</p> <p>The Township needs to build a comprehensive analysis of housing needs and implement a housing plan and a set of corresponding policies to improve housing choice and opportunities for attainable and affordable housing within the Township.</p>	
2026	
Long-Range Growth Management Plan (LRGMP)	\$100,000
<p>Great communities don't just happen. They require a guiding vision for the future and a sustained set of strategies for bringing that vision to reality. This plan aims to determine what the grown-up, built-out Ferguson Township should look like. The LRGMP should be a strategic roadmap for the Township to</p>	

2023-2027 Capital Improvement Plan

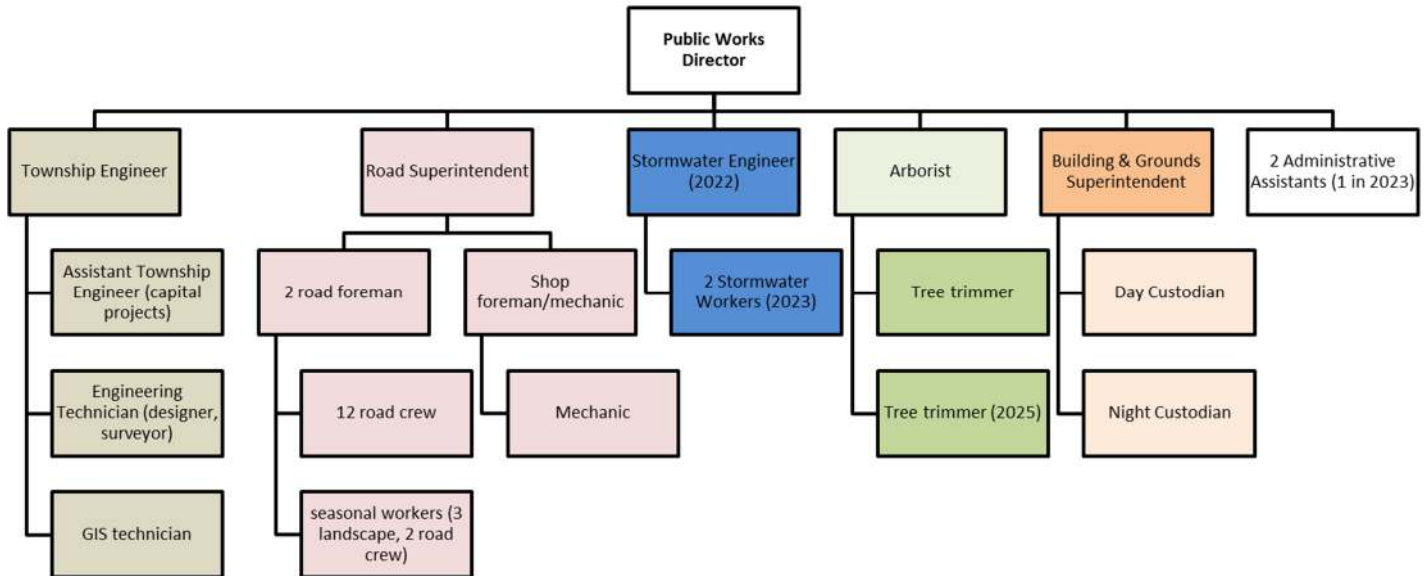
follow as it grows and matures over the next 25 years. Proper planning results in tangible benefits for the community and efficient use of tax dollars. This plan will be a detailed and wide-ranging effort that reaches beyond the typical 10-year planning horizon and looks ahead 25 years to ensure a sustainable future for the next generation. This plan will establish strategies to guide the future growth and development of the community, assess existing conditions and trends, and provide recommendations for the use and development of land. The plan also establishes strategies for extending and improving transportation services and infrastructure, constructing community facilities, and expanding the Township's economic base. It will identify protections for natural resources and open space.

2023-2027 Capital Improvement Plan

PUBLIC WORKS DEPARTMENT

PUBLIC WORKS STAFFING

The Public Works Department organizational chart is depicted below. The organizational chart reflects current and proposed staffing.



The Public Works Department consists of 5 sections, as shown in the organizational chart. These include Engineering, Stormwater, Road/Fleet Maintenance, Arbor Care, Buildings, and Asset Management.

2023-2027 Capital Improvement Plan

BUILDINGS AND ASSET MANAGEMENT SECTION

The proposed capital cost for the Buildings Section totals **\$3.92 Million or 44.4% of the Capital Reserve Fund Requests** for the five years.

The Public Works Capital Building Fund Appropriation for building systems saves the future replacement of building systems such as HVAC, roofs, doors, windows, flooring, light fixtures, fire system and panels, and fixtures.

TRAI SR is used as the Township's asset management and work order system to assist with managing buildings and assets. The asset management system is being built in 2022. It is expected to be used to collect condition assessment data on building components, traffic signals, signs, stormwater infrastructure, equipment, trees, and other infrastructure assets.

Buildings include:

Administration Building (Admin, Finance, Planning, PW Engineering, Police, all conditioned spaces)

FTPW/FTPD Building 1 (mostly FTPD equipment storage, used for training, heated)

FTPW Building 2 (old salt shed, used for equipment storage, not heated)

FTPW Building 3 (equipment storage, sign shop, welding shop, heated)

FTPW Building 4 (equipment storage, wood shop, partially heated)

FTPW Building 5 (high arch gambrell salt shed, not heated)

FTPW Building 6 (LEED Gold pending maintenance garage heated, offices conditioned, wash bay, fueling station)

FTPW Building 7 (Fire training equipment storage, not heated)

A Building Automation System is used to help manage the heating, ventilation, and cooling systems for the admin building and FTPW building 6.

An interactive touch screen in FTPW building six will display information on green initiatives, LEED education, and electric and gas consumption compared to solar generation. The roof of the building contains a 108KWh solar array.

Green stormwater infrastructure on-site includes traditional BMPs (best management practices) such as stormwater infiltration basins and innovative bio-swales, reforestation, lawn areas converted to pollinator habitat, pervious pavement, rain gardens, hydrodynamic stormwater separator, capture tank for any fuel leaks.

These initiatives are consistent with goal numbers 4) Environmental Stewardship, 5) Best Management Practices, and 7) Promotion of Clean Renewable Energy of the Strategic Plan.

2023-2027 Capital Improvement Plan

The Public Works Department requests the following building items for this planning period.

FERGUSON TOWNSHIP							
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS							
BUILDINGS & GROUNDS							
30.400.409.750							
Description	Department	2023	2024	2025	2026	2027	TOTAL
Fitness Equipment	ALL	2,000	2,000	2,000	2,000	2,000	10,000
Ventilation Control for Police Accreditation	PW	15,225					15,225
Pave PW laydown area	PW	110,250					110,250
Door Fobs	PW	4,200	2,205	2,315	2,431	2,553	13,704
Exterior Lighting per Manager request	PW	45,000					45,000
Additional DVR for police security cameras	PW	2,100					2,100
Additional Building cameras	PW	4,200	4,410	4,631	4,862	4,862	22,965
Structural Pallet Racks PW Bldg 4	PW	2,952					2,952
Precast concrete walls to store stone & materials	PW			58,315			58,315
New Fire Station Land Acquisition	Admin		100,000				100,000
New Fire Station Design & Engineering	Admin			427,500			427,500
New Fire Station Construction	Admin				2,850,000		2,850,000
	Total	185,927	108,615	494,761	2,859,293	9,415	3,658,011

2023-2027 Capital Improvement Plan

The Township established a Buildings sinking fund for the replacement of major equipment. The proposed sinking fund activity is included in the following chart. The sinking fund was set up after the Township building was renovated in 2007 to save for the future replacement of building systems such as HVAC, roof, doors, and fixtures.

FERGUSON TOWNSHIP						
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS						
BUILDING EQUIPMENT SINKING FUND						
30.400.409.760						
* YOP=Year of Purchase, YOR=Year of Replacement						
Description	YOP	AGE	YOR	Additions	Deductions	Balance
Beginning Balance 12/31/2021						288,770
Annual Sinking Fund Contribution			2022	30,000		318,770
Annual Sinking Fund Contribution			2023	30,000		348,770
Repaint Exterior Admin Bldg	1997	26	2023		36,000	312,770
Replace 2 steel entry doors	1997	26	2023		2,100	310,670
Replace Admin Building Carpet tiles	2007	16	2023		39,900	270,770
Replace Partial Rubber Roof on Admin Bldg	2005	18	2023		13,466	257,304
Replace Security Camera			2023		1,838	255,466
Salt Shed Roof Repairs			2023		10,500	244,966
Annual Sinking Fund Contribution			2024	30,000		274,966
Replace 2 steel entry doors	1997	27	2024		2,205	272,761
Replace door security system			2024		16,538	256,223
Replace Security Camera			2024		1,929	254,294
Replace Simplex Fire System	2007	17	2024		11,025	243,269
Annual Sinking Fund Contribution			2025	30,000		273,269
Replace 2 steel entry doors	1997	28	2025		2,315	270,954
Replace HVAC system in computer room			2025		11,576	259,378
Replace Security camera			2025		2,026	257,352
Replace Small Water Heater			2025		2,315	255,037
Annual Sinking Fund Contribution			2026	30,000		285,037
Replace 2 steel entry doors	1997	29	2026		2,431	282,606
Replace Security camera			2026		2,127	280,479
Annual Sinking Fund Contribution			2027	30,000		310,479
Replace 2 steel entry doors	1997	30	2027		2,553	307,926
Replace HVAC through wall units (20)			2027		63,814	244,112
Replace light fixtures all buildings			2027		38,288	205,824
Replace Security Camera			2027		2,127	203,697
						203,697
						203,697
Total				180,000	265,073	
				EXPENDITURES		
				2023	103,804	
				2024	31,697	
				2025	18,232	
				2026	4,558	
				2027	106,782	
				Total	265,073	

2023-2027 Capital Improvement Plan

ROAD PROJECTS

Road improvement projects make up the bulk of the capital expenditures for the Township. For the term of this CIP, road projects total **\$17.4 Million, or 68.5% of the Capital Expenditures for All Funds.**

Roadway Improvements

Each year a roadway assessment is conducted of approximately half of the Township's 95 miles of roadway. PAVER software generates a pavement condition index based on data collection from visual field observations (boots on the ground inspection). Before 2021, candidate road projects were selected on a "worst first" basis, meaning roads with the lowest PCI were considered first for paving. The pavement condition index was also evaluated in conjunction with geographic considerations and traffic volumes, with input from staff and elected officials to develop the plan of road improvements. At the request of the Board of Supervisors, and after deferring paving projects in 2021, staff investigated the use of PAVER to more scientifically develop the five-year plan of road improvements based on input criteria rather than use the "worst first" approach, which has served us in the past. The road improvements plan represents a budget-constrained approach of approximately 1.0MM/year for hot mix paving and 700K/year for microsurfacing. Using this road improvement approach, the area-weighted average condition of our roads decreases slightly steady, starting at 82.57 after 2023 paving and microsurfacing is complete and ending at 80.62 after 2027 paving and microsurfacing is complete. To make the best use of available funds, PAVER selects road projects for paving and microsurfacing based on the specific condition and distresses for each road segment. PAVER tries to keep roads above or near the critical PCI for the road family. It is most cost-effective to pave roads before they go below critical, and if not enough funds are available, PAVER will ignore roads with the lowest PCIs and allocate funding to roads with the "biggest bang for the buck." However, it becomes apparent that more road sections are in fair, poor, very poor, and even failed condition. A backlog elimination scenario was run that eliminated the backlog of paving work within five years while maintaining the condition of the roadways. This scenario showed an increase in PCI after five years from 84.07 to 87.28, and all but six road sections were in good and satisfactory condition. The cost of this program averaged approximately 3.5MM/year. Both scenarios emphasized microsurfacing, bolstering the importance of our microsurfacing program. Given the cost of microsurfacing per SY rising more than the cost of hot mix paving per SY, staff will begin investigating the merits of thin lift asphalt overlays vs. microsurfacing.

Candidates for paving are listed as line items in the CIP road improvement table. Due to the specialized equipment used in paving operations, large paving projects are competitively bid. Base repair is performed in-house more cost-effectively than by contract. The road crew will continue to focus on maintenance such as crack sealing, potholes, road patches, and base repair.

The CIP lists roads proposed for capital improvements. Depending on the severity of pavement distress or underlying base course failure, projects may include cold in-place recycling, select base repair, milling, or a combination of these techniques. In most all cases, the existing asphalt surface will then be overlaid. As the average area-weighted PCI is maintained above critical, cost-effective treatments such as thin lift asphalt overlay become feasible.

A cost-effective method to preserve pavement life is microsurfacing, a cold-mix paving system. It is not a hot-mix pavement. The material consists of small aggregate, asphalt emulsion, water, and mineral fillers and is generally applied in two lifts that total 3/8" in thickness. A durable asphalt seal is applied to roads with signs of aging and minor distress. By retarding the surface's natural breakdown, this process extends the pavement's lifespan to approximately seven years. Microsurfacing adds no structural value to the pavement, and therefore, roadways that have deteriorated beyond a certain point are generally not good candidates for this process. Typically microsurfacing is placed in 2 lifts, back to back. Based on historical pricing and translated to an average price per linear foot of 26-foot wide roadway, microsurfacing can be placed for approximately \$16/linear foot of the road.

Based on historical Township pricing data and a condition rating of approximately 80, an existing rural road can be repaved for approximately \$45/linear foot of roadway. An urban road can be repaved for

2023-2027 Capital Improvement Plan

approximately \$65/linear foot of roadway (excluding any concrete curb, handicap ramps, storm inlets, or pipes estimated separately). The Public Works Department Engineering Section maintains a historical paving pricing cost database. This cost data was converted to SF unit pricing for PAVER. Should a new concrete curb be required, depending on the type of curb and quantity, it adds approx. \$30/linear foot per side (\$60/linear foot for both sides) to the project cost. Needed stormwater system repairs could double the cost of a road project. Again, depending on the pipe's quantity and size, it costs an average of \$150/linear foot to line an 18" diameter storm pipe. When preparing the budget, a certain amount of funding is set aside to replace or reline existing corrugated metal pipe (CMP) under a road to be paved. Before repaving, pipe systems will be cleaned and video assessed to determine the extent of pipe system replacement and repair. Inlet tops are considered for repair or replacement when roads are paved and can be repaired in-house or new tops installed for \$2,000/each.

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Comprehensive Township-Wide Traffic Study

This study is requested to help the Township understand the effects of development over the past years on the road network. It will forecast growth over the next 20 years and, using modeling software, predict impacts on the roadway network. The study results will provide information to help staff and elected officials plan and program funding for future capital improvements to the roadway system.

Background: In 1998, the Township completed a comprehensive transportation study that forecasted a 20-year horizon (2018) traffic condition based upon assumptions in development within the Township over those 20 years. Development was rapidly occurring, and an understanding of the cumulative effects of the development was not known, nor how to fund improvements to maintain an efficient street network. Based on that study, specific improvements were identified, and a funding source known as the Transportation Improvement Fund (TIF) was created to fund the projects. This study, which was started in the early 90s, had not only assumptions about development patterns over the 20 years, but it also modeled changes in traffic patterns with the then-future completion of significant missing links in the network, such as Blue Course Drive from North Atherton Street to West College Avenue, Old Gatesburg Road from Science Park Road to Blue Course Drive, and Bristol Avenue from West College Avenue to Blue Course Drive.

Ten years later, development within the growth area occurred, zoning changes occurred, and Blue Course Drive was completed. In 2009 an update to the study was initiated to consider these changes to land use and the street network. That study again evaluated a 20-year horizon with a future condition of 2030. Based upon that study, a list of updated projects was created for consideration for funding to maintain network efficiency.

Staff recommends the Township update the study sometime in this 5-year CIP. Changes in zoning and land use will be considered as well as the actual effects of the completion of links such as Old Gatesburg Road and Bristol Avenue. When the Township becomes more linear or even static in development trends, an update to the study may not be warranted.

2023-2027 Capital Improvement Plan

FERGUSON TOWNSHIP								
2023 – 2027 CIP CAPITAL PROJECTS DETAIL-CASH BASIS								
PUBLIC WORKS ROAD PROJECTS								
FUND	CAT	DESCRIPTION	2023	2024	2025	2026	2027	TOTAL
R=road, D=stormwater, M=mobility, O=operating								
CR	R	18 LED street lights Pine Grove Mills	250,000					250,000
CR	R	Sealcoat Township Parking Lots	11,000	11,000	12,000	13,000	14,000	61,000
LF	O	Pavement Marking Eradication	43,000	46,000	49,000	52,000	56,000	246,000
LF	O	Pavement Markings	150,000	160,000	172,000	184,000	196,000	862,000
LF	O	Road Materials & Supplies	54,000	57,000	61,000	66,000	70,000	308,000
LF	O	Road Salt	119,000	139,000	148,000	159,000	170,000	735,000
LF	R	ADA Curb Ramp Replacements	96,000	103,000	110,000	118,000	126,000	553,000
LF	R	Mill & Fill in advance of microsurfacing						0
LF	R	Design & Construction Traffic Signal Science Park & Sandy Drive	0	54,000				54,000
TIF	D	Reline/Line CMP pipes for current years projects	46,000	298,000	105,000	85,000	367,000	901,000
TIF	D	Repair Stormwater inlets & replace tops for current years projects			74,000	79,000	84,000	237,000
TIF	M	Audible Pedestrial signals at West College & Bristol						0
TIF	M	Engineering & Construction for Pine Grove Mills TASA (Grant)	820,000					820,000
TIF	M	Level of Service projections for intersections (with planning dept)						0
TIF	M	Northland Mobility Study Implementation (Grant)	0		451,000	2,813,000		3,264,000
TIF	M	Pedestrian Improvements at Blue Course Drive & Martin Street (Grant)		137,000				137,000
TIF	M	Pine Grove Mills Mobility for SR26/SR45/Nixon Road			368,000			368,000
TIF	M	Sealcoat & Pavement Repairs for Bike Paths	32,000	34,000	37,000	39,000	42,000	184,000
TIF	M	Shingletown Road & College Ave Pedestrian Accommodations						0
TIF	R	Comprehensive township-wide traffic study			245,000			245,000
TIF	R	ADA Handicap Ramps for current years projects	15,000	16,000	30,000	14,000	133,000	208,000
TIF	R	Aaron Drive		189,000				189,000
TIF	R	Ashburton Court					26,000	26,000
TIF	R	Autumnwood Drive		0				0
TIF	R	Bachman Lane				26,000		26,000
TIF	R	Birch Court		65,000				65,000
TIF	R	Blue Course Drive	283,000	34,000		433,000		750,000
TIF	R	Bristol Ave		127,000	192,000			319,000
TIF	R	Cato Ave					100,000	100,000
TIF	R	Cherry Hill Road				142,000		142,000
TIF	R	Clinton Ave				143,000		143,000
TIF	R	Cromer Drive					58,000	58,000
TIF	R	Design & Construction school zone flashing lights Cherry Lane	19,000	158,000				177,000
TIF	R	Design & Construction Traffic Signal Science Park & Sandy Drive		508,000				508,000
TIF	R	Denton Drive					72,000	72,000
TIF	R	East Park Hills Avenue				159,000		159,000
TIF	R	Glenwood Circle				60,000		60,000
TIF	R	Koebner Circle			26,000			26,000
TIF	R	Lighting design for 18 LED lights Pine Grove Mills	16,000					16,000
TIF	R	Marjorie May Street					31,000	31,000
TIF	R	Martin Street			48,000			48,000
LF	R	Microsurfacing Liquid Fuels	428,000	229,000	0	0	0	657,000
TIF	R	Microsurfacing TIF	0	229,000	490,000	524,000	561,000	1,804,000
TIF	R	Middle Street	21,000					21,000
TIF	R	Pine Grove Mills parking consultant	15,000					15,000
TIF	R	Park Center Boulevard	78,000					78,000
TIF	R	Plainfield Road			279,000			279,000
TIF	R	Potential Green Light Go intersection improvements (Grant)	144,000	155,000	165,000	177,000	135,000	776,000
TIF	R	Princeton Drive		136,000				136,000
TIF	R	Replace concrete curb for this years road projects				66,000	70,000	136,000
TIF	R	Revendale Road					99,000	99,000
TIF	R	Rosemont Drive		69,000				69,000
TIF	R	Saratoga Drive		24,000				24,000
TIF	R	Stonebridge Drive			0		291,000	291,000
TIF	R	Summersweet Lane					33,000	33,000
TIF	R	Vairo Boulevard			281,000			281,000
TIF	R	Val Verda Drive			199,000			199,000
TIF	R	West Gatesburg Road		57,000		33,000		90,000
TIF	R	Woodberry Circle					58,000	58,000
Total			2,640,000	3,035,000	3,542,000	5,385,000	2,792,000	17,394,000

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PUBLIC WORKS EXPENDITURES BY TYPE								
	D	Drainage Projects	46,000	298,000	179,000	164,000	451,000	1,138,000
	R	Road Projects	1,376,000	2,164,000	2,077,000	1,908,000	1,807,000	9,332,000
	M	MultiModal Projects	852,000	171,000	856,000	2,852,000	42,000	4,773,000
	O	Operating Expenses	366,000	402,000	430,000	461,000	492,000	2,151,000
Total			2,640,000	3,035,000	3,542,000	5,385,000	2,792,000	17,394,000
PUBLIC WORKS EXPENDITURES BY FUND AND TYPE								
CR	D	Drainage Projects-Capital Reserve	0	0	0	0	0	0
CR	R	Road Projects-Capital Reserve	261,000	11,000	12,000	13,000	14,000	311,000
TIF	M	MultiModal Projects-Transportation Improvement	852,000	171,000	856,000	2,852,000	42,000	4,773,000
TIF	D	Drainage Projects-Transportation Improvement	46,000	298,000	179,000	164,000	451,000	1,138,000
TIF	R	Road Projects-Transportation Improvements	591,000	1,767,000	1,955,000	1,777,000	1,667,000	7,757,000
LF	R	Road Projects-Liquid Fuels	524,000	386,000	110,000	118,000	126,000	1,264,000
LF	O	Operating Expenses	366,000	402,000	430,000	461,000	492,000	2,151,000
Total			2,640,000	3,035,000	3,542,000	5,385,000	2,792,000	17,394,000

Americans with Disability Act (ADA) Handicap Accessibility Sidewalk Intersection Ramp Improvements

Per federal and state regulations, sidewalk intersection ramps are upgraded to current ADA standards. If upgrades are required, they are made whenever a road is paved or microsurfaced.

For roads to be paved or microsurfaced, the concrete work is included in the CIP as a line item. The cost varies for each ramp depending on the existing grades and the number of sidewalk blocks that need to be removed to reconstruct the ramp to the proper grades. \$3,500 is budgeted for each ramp that needs to be replaced. Truncated domes are required at these crossings.

Traffic Signals and Transportation Studies:

Automated Red Light Enforcement (ARLE) Grant – Traffic Signal Optimization Project

Through ARLE, the Township is expected to receive grant funding in 2022 to improve performance and communication at all 20 of our traffic signals. The new system will monitor real-time traffic in the Township, and staff will be better equipped to fine-tune the signals to changing traffic demands. This project, contract number 2016-C11, went into construction in 2022. Future grant funding is possible through either ARLE or GLG, or both.

ARLE grant applications could also be submitted to request funding assistance for rectangular rapid flashing beacons (RRFB) on Blue Cours Drive and Martin Street.

Green Light Go (GLG) Grant – Traffic signal vehicle detection upgrade

The Township has consistently awarded funding through the GLG program to upgrade several traffic signals yearly to digital radar vehicle detection. This technology replaces ground loops or video detection making the signal operations more reliable. Staff will continue to apply for these grants.

SR26/SR45/Nixon Road (aka flashing light in Pine Grove Mills) - The Pine Grove Mills Mobility Study identified this intersection for improvements via either a round-a-bout or stop control with geometric enhancements to improve pedestrian mobility and safety. The public works department acknowledges advancing engineering design for this project in this CIP via fund 30.414.750 ARPA (\$80,000). Right of way and utility relocation could occur in 2024, with construction in 2025. The advancement of the project may depend on the complexity of the project.

Science Park Road/Sandy Drive intersection (North)

This intersection warrants a traffic signal. Staff expected to complete the design for this project in-house in 2022. However, given staffing shortages and an aggressive capital improvement plan, this project was

2023-2027 Capital Improvement Plan

not designed for 2022. Staff should complete the design of this project in 2022/2023 with an anticipated 2023 construction start.

Pine Grove Mills Mobility Study – pedestrian and bicycle improvements

Grant funding totaling \$700,000 has been secured for the construction and inspection of improvements to include bike lane shoulder widening on SR45 west of Pine Grove Mills to near Harold Drive, sharrows in town to Nixon Road, an RRFB on Nixon Road at the bike path crossing near Sunday Drive, and sidewalk replacement on the west side of Water Street from the flashing light to Chestnut Street. Engineering for this project (funded locally) is expected to be completed in 2023, with construction beginning as soon as late 2023.

Consider funding the design of other projects suggested by the Pine Grove Mills Mobility Study in future years.

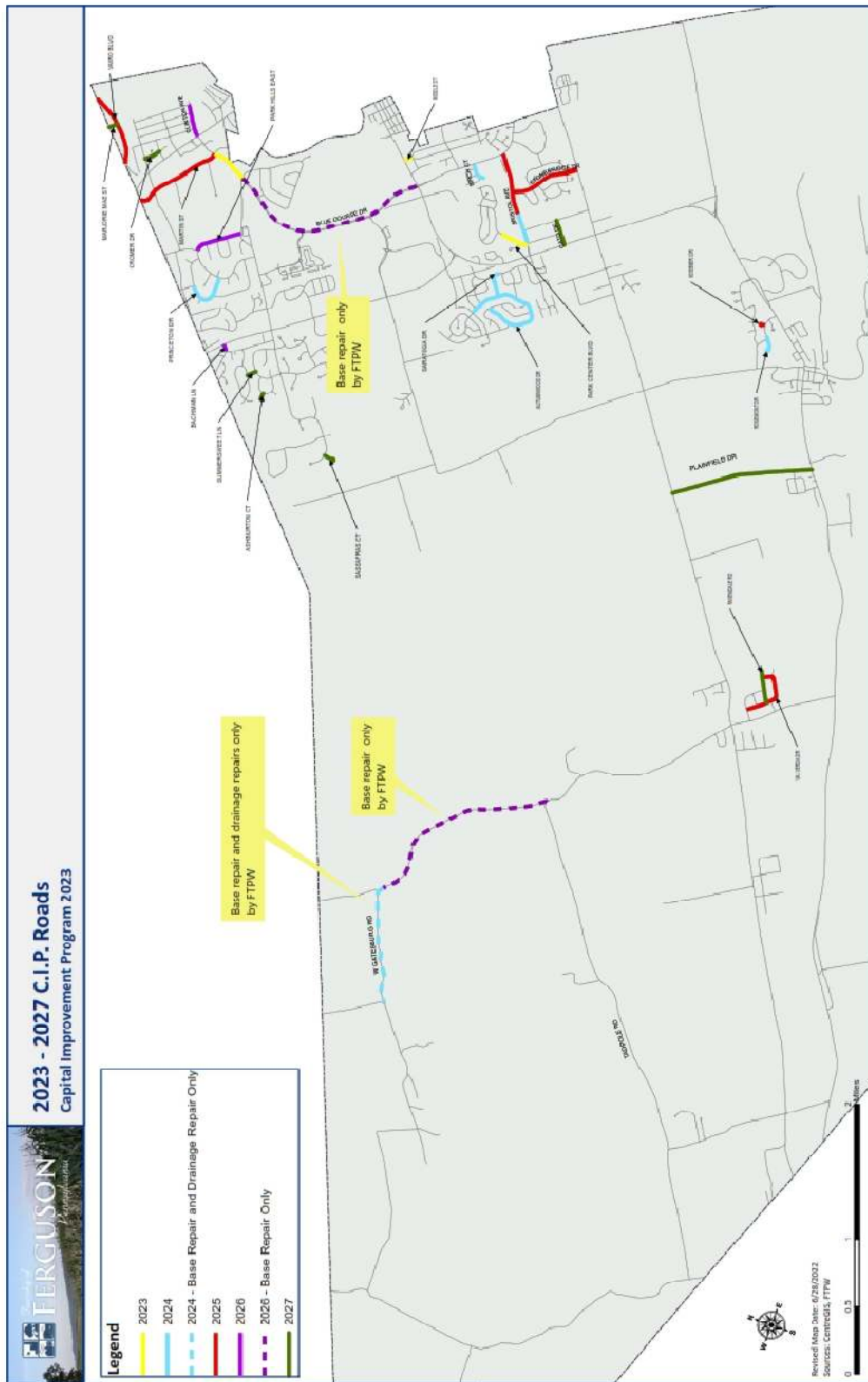
Northland Area Mobility Study Implementation

Refer to the Planning and Zoning section for any set-aside funding for potential projects identified in the Northland Area Mobility Study completed in 2019. Many worthwhile projects were identified, including pedestrian crossing upgrades, lighting and safety improvements, bike path improvements, and transit improvements. Tier 1 projects range in estimated cost from \$25,000 to \$500,000. The public works department suggests moving forward with engineering for pedestrian improvements such as an RRFB (rectangular rapid flashing beacon) and overhead lighting to be installed on Blue Course Drive near Martin Street and two RRFBs and overhead lighting on Martin Street. ARP funds are committed to this project. Consider advancing engineering design for the bike path connectivity project from Teaberry Lane to the McKee Street bike path in 2023. Utility work can be considered for 2024, with construction anticipated in 2025.

Storm Pipe Improvements associated with Road Projects

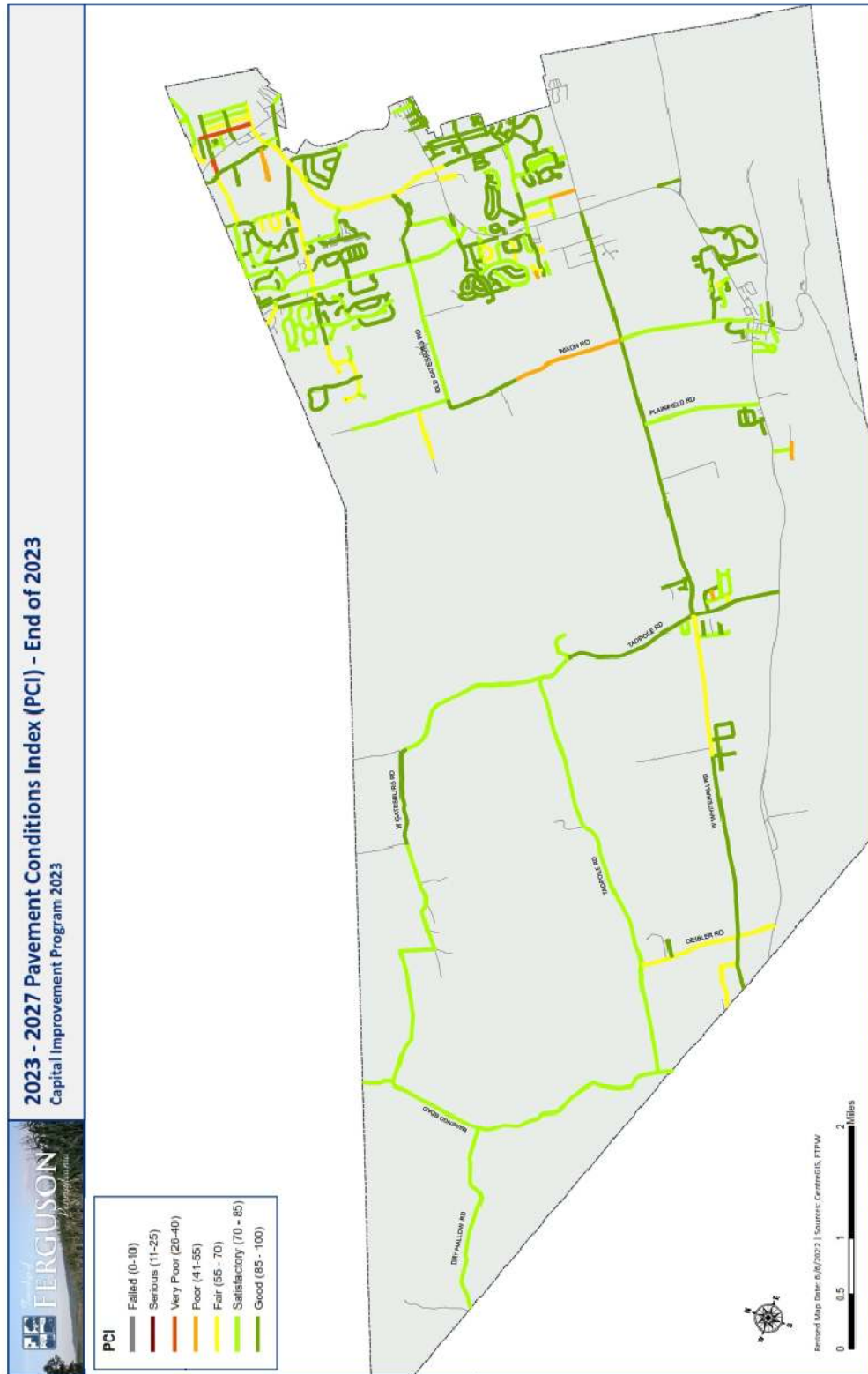
Before paving a road, the conditions of any inlets are assessed visually, and a remote-controlled camera is used to assess the conditions of any storm pipes. Repairs to pipes under roads are conducted before paving. In addition, utility companies are notified of the road paving and asked to inspect their facilities and perform any needed repairs. Since a newly paved road can last 20 to 30 years before repaving, it is important to ensure the underground infrastructure is in good order to lessen the number of paving cuts in a newly paved road. Pave cuts seriously degrade the road condition. This CIP reflects anticipated inlet and storm pipe replacement costs associated with road paving projects. Entire new inlets set in place can cost \$3,000 to \$4,000 each. It is sometimes possible for FTPW to repair inlets and tops, which do not need to be entirely replaced. The cost of storm pipe replacement varies based on the length of pipe to be replaced, the diameter of the pipe, the type of pipe material, and other work associated with the storm pipe replacement, such as other utility relocation costs and if the above curb or sidewalk needs replaced. A typical 18-inch diameter high-density polyethylene (HDPE) pipe with installation will add about \$125/ linear foot to the project cost plus roadway and curb restoration (say \$30/LF). The structural lining of an old corrugated 18-inch diameter pipe could cost \$150/linear foot for long runs and more for small quantities.

ROADS 2023-2027



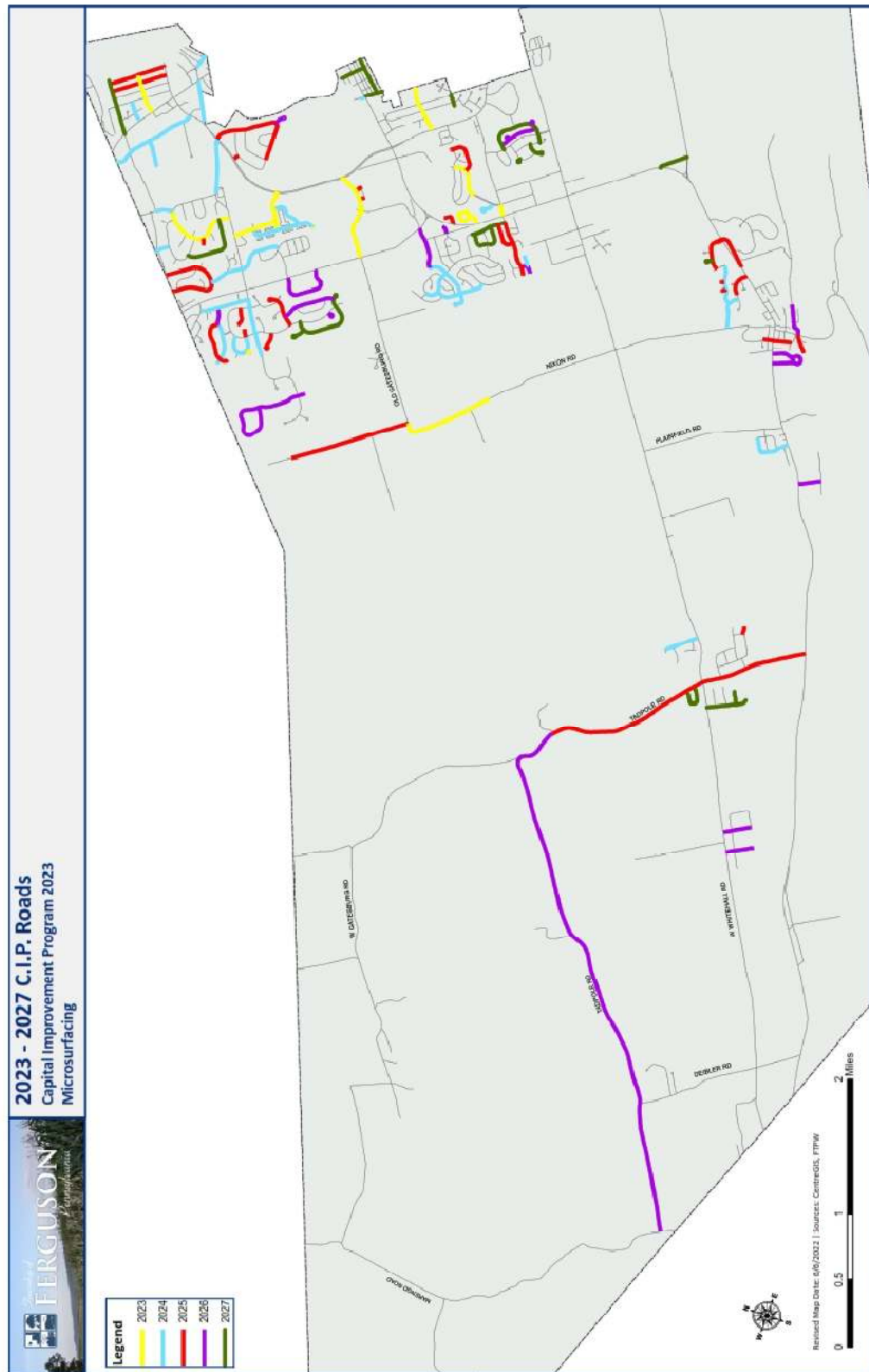
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PAVER PCI INDEX 2023-2027

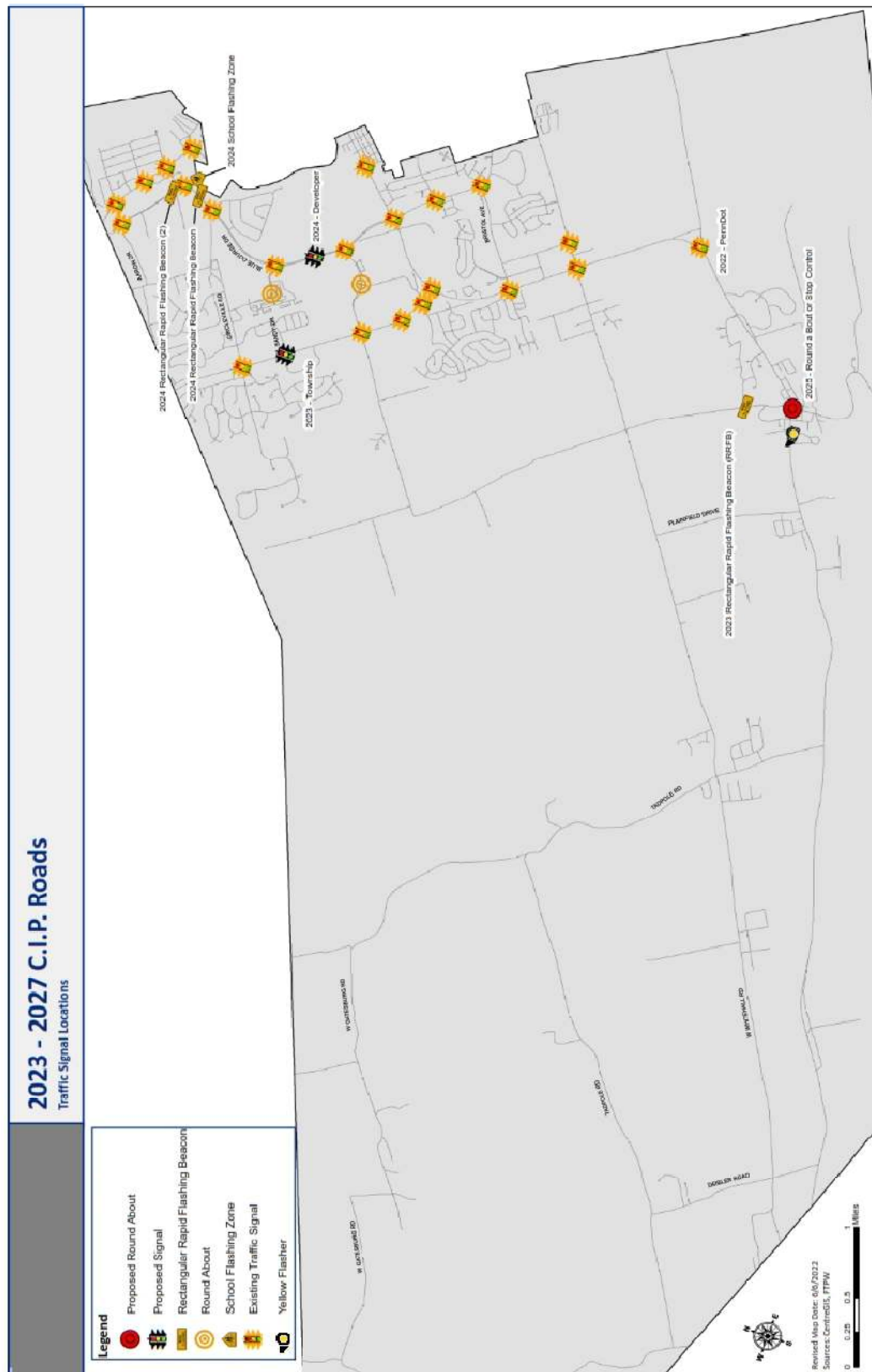


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MICROSURFACING 2023-2027



TRAFFIC SIGNALS 2023-2027



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STORMWATER PROJECTS FUND 20

The Stormwater Projects Fund represents the program's cost during the term of the capital plan. The stormwater fee is expected to provide funding for this program. The total proposed expenditures are **\$6.67 Million**, including salaries. Beginning in 2022, the stormwater fund has been reclassified as a Special Revenue Fund since it has a separate revenue source.

FERGUSON TOWNSHIP						
2023 – 2027 CIP CAPITAL PROJECTS DETAIL-CASH BASIS						
STORMWATER FUND PROJECTS						
DESCRIPTION	2023	2024	2025	2026	2027	TOTAL
MS4 Chesapeake Bay Pollutant Reduction Program	250,000	250,000	250,000		75,000	825,000
Park Hills drainage improvement	1,500,000					1,500,000
Line CMP pipes	401,250	429,338	459,391	491,549	525,957	2,307,485
Video assess and clean CMP pipes	132,951	142,257	152,216	162,871	174,272	764,567
New storm inlets	16,050	17,174	18,376	19,662	21,038	92,300
Community Partnership Program	53,500	57,245	61,252	65,540	70,128	307,665
Johnson Road Drainage Redesign & Metzger's Easement	14,570					14,570
Deerfield Drive roadside swale program		57,245				57,245
						0
	2,368,321	953,259	941,235	739,622	866,395	5,868,832

Stormwater Fee

In 2021 the Board of Supervisors adopted a stormwater fee ordinance after years of study and deliberation. Starting in 2022, a dedicated funding source is utilized for stormwater repairs and projects not directly attributed to a road paving project. Stormwater improvement costs associated with a road paving project are included under TIF or LF expenses. The Stormwater fee will also be used for costs related to compliance with Municipal Separate Storm Sewer System (MS4) requirements, replacing failing stormwater infrastructure not directly attributed to a road paving project, addressing flooding, labor and equipment expenses for stormwater maintenance, public/private partnerships to address maintenance issues such as stormwater basin repairs due to mostly public stormwater. In addition, the fee is to pay for storm pipe video assessment and cleaning. This is necessary to understand the condition of our underground infrastructure and determine which pipes need to be repaired, replaced, or lined.

Implementation of projects related to the Chesapeake Bay Pollutant Protection Plan (CBPRP) and implementation of the stormwater fee are consistent with goals 1) Financial Stability, 4) Environmental Stewardship, 5) Best Management Practices for Operations, 6) Increase Participatory Government, and 9) Partnerships and Regional Thinking of the Strategic Plan.

Storm Pipe Video Assessment Program

Funding is set aside each year to video assess the condition of our stormpipes. The Township owns and maintains 174,200 linear feet (or 33 miles) of stormwater pipe. Sixteen miles of this pipe are constructed of corrugated metal, some as old as 40 years. Additionally, there are 22 miles of privately owned stormwater pipes. Video assessment, preceded by pipe cleaning, is the first step in the asset management plan for stormwater pipes. Pipe sections are then rated on a NASSCO scale.

Storm Pipe and Inlet Improvements

After stormpipes are assessed by video, they are prioritized for replacement and repair. Sometimes, spot repairs are necessary due to compromised integrity by rusting, collapse, or penetration. In some cases, the pipe failure is more significant, and sections of the pipe require repair. The NASSCO (National Association Of Sewer Service Companies) pipe rating system assigns priorities to pipe repair and helps

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guide the type of repair. The two most common repairs for long pipe sections are pipe replacement and lining. Pipe replacement includes opening cutting the ground surface, replacing the pipe, and restoring the surface. Pipe lining involves inserting a pipe liner material into the pipe and curing it with ultraviolet light.

The Township owns 2,352 storm inlets (aka catch basins). Private property owners own another 408 inlets. The stormwater cost of service model includes the services of part-time interns to help collect data, the first step in the asset management process. Inlets in need of repair, not associated with a specific road paving project, are funded through the stormwater fee.

Pollution Reduction Plan (CBPRP)

A condition of the Township's National Pollutant Discharge and Elimination System (NPDES) Municipal Separate Storm System (MS4) permit is the completion and implementation of a Chesapeake Bay Pollutant Reduction Plan, often now referred to as PRP. A specific plan was developed, showing how particular projects will reduce pollutant loads to the Chesapeake Bay. The program offers pollutant reduction to impaired waterways (Slab Cabin Run and Spruce Creek). The Pollutant Reduction Plan was prepared in 2017/2018 on a regional basis, with projects developed for each municipality. The CIP includes funding each year to design, acquire the right of way, and construct stream channel restoration projects as required.

Park Hills Drainageway

Design work continues on this drainageway improvement project in Park Hills, located between Devonshire Drive at the north end and Circleville Road at the south. This incised waterway (dry most of the year but handling a lot of stormwater during heavy rain events) is designed to provide a natural restoration using step pools. The project also includes utility coordination and relocation. The Township Arborist is involved in preparing a tree protection plan. Some trees will be impacted to construct the project. Steps were taken during design to mitigate the impact on trees. Some private property stormwater easements will be required. Design requires submissions and approvals by PaDEP and FEMA since work is planned in a floodplain. Funding for construction is included in this 5-year CIP.

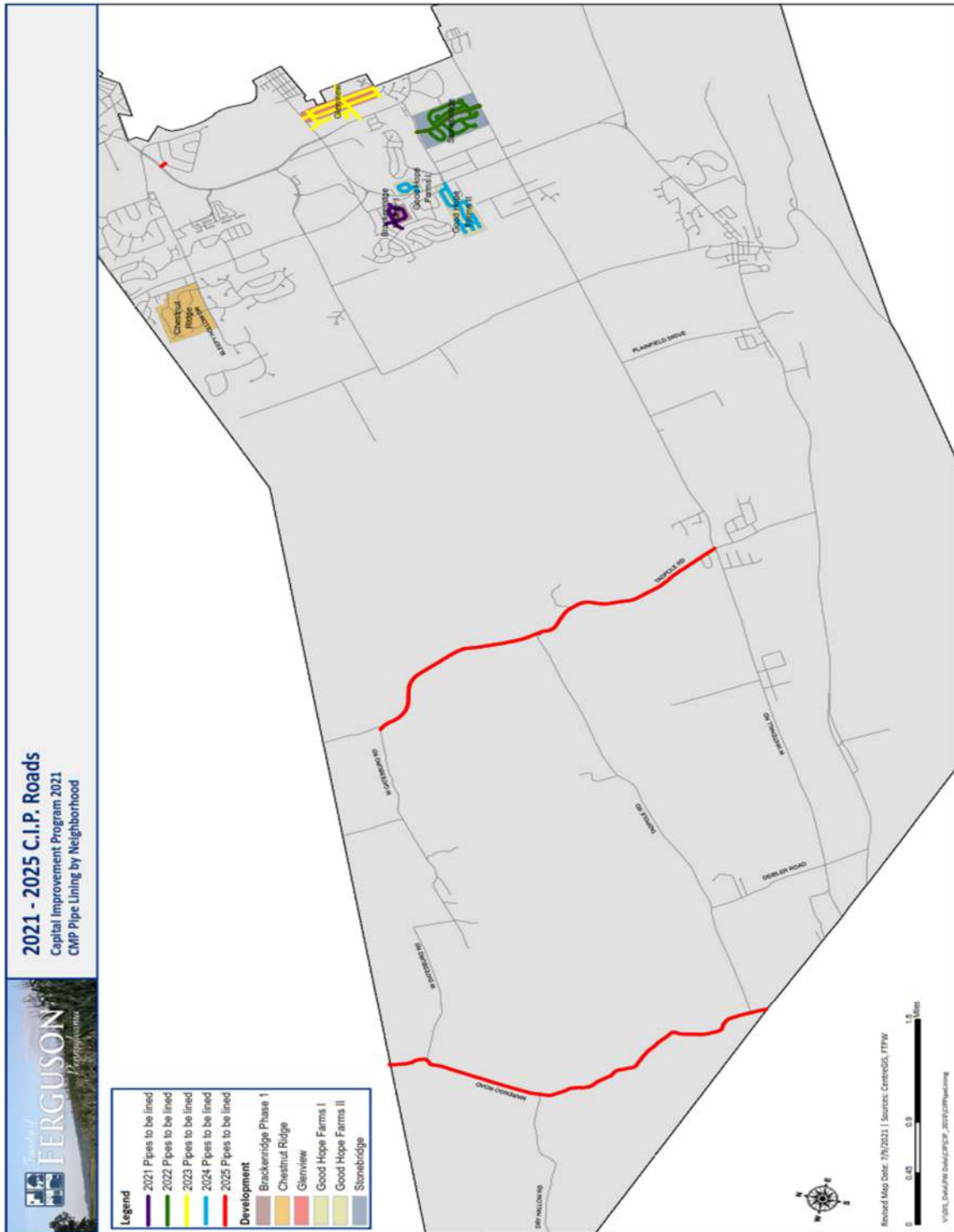
Community Partnership Program

Property owners needing assistance repairing stormwater infrastructure can request funding from the Township through this program. Candidate projects must show a need for improvement and demonstrate that public stormwater is commingling with private stormwater. Since 2022 is the program's first year, ranking criteria will be developed to prioritize projects requesting funding. Cost-sharing will be based on the ratio of public to private stormwater determined by either the size of the contributing drainage area or the quantity of estimated runoff.

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PIPELINING 2023-2027

No change to the 2021-2025 map



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ROAD/FLEET SECTION - PUBLIC WORKS EQUIPMENT

The following charts depict the capital equipment requested by the Public Works Department during the term of the capital plan. Public Works equipment requests **\$2.62 Million or 29.7% of the Capital Reserve Fund Requests**.

Each year a condition report is generated by the mechanic and road superintendent to assist with preparing the equipment CIP. The CIP is prepared based on the condition report and useful historical life of similar equipment. The equipment fleet of vehicles over \$25,000 has an estimated 2022 replacement value of \$2.6 million.

New Equipment/Vehicles or Replacement Equipment/Vehicles under \$25,000

FERGUSON TOWNSHIP								
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS								
NEW EQUIPMENT PUBLIC WORKS								
30,400,430.750								
Description	Department	FUND	2023	2024	2025	2026	2027	Total
Traffic Signal UPS Battery Replacement (routine maintenance)	OPER	GF	3,100	3,200	3,300	3,400	3,500	16,500
Replace traffic signal LED bulbs (routine maintenance)	OPER	GF	5,788	6,381	6,078	6,078	6,078	30,403
Convert overhead Luminaire to LEDs	EQUIP	CR	9,450	9,923				19,373
Puller set for mechanic	EQUIP	CR	3,675					3,675
Electric truck for Arborist	EQUIP	CR	48,300					48,300
Parts Cleaner for PW Building 6	EQUIP	CR	3,360					3,360
Rock Hound attachment for JBL skid steer	EQUIP	CR				8,370		8,370
Replace IM-107 Tow behind compressor	EQUIP	CR				23,702		23,702
Replace PW-65 2015 Carmate trailer	EQUIP	CR					22,973	22,973
Heavy Duty Truck (Ford F550) dump	EQUIP	CR			90,956			90,956
Hydroseeder for mulch and earthwork projects	EQUIP	CR	8,080					8,080
Floor Scrubber	EQUIP	CR	3,045					3,045
ACS 60" construction forks for Deere Loader	EQUIP	CR			11,426			11,426
		CR						0
Total			84,798	19,504	111,760	41,550	32,551	290,163
	Department	FUND	2023	2024	2025	2026	2027	Total
	OPER	GF	8,888	9,581	9,378	9,478	9,578	46,903
	EQUIP	CR	75,910	9,923	102,382	32,072	22,973	243,260
	ROADS	CR	0	0	0	0	0	0
	Total	Total	84,798	19,504	111,760	41,550	32,551	290,163

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Replacement Equipment

Public Works has a separate bank account for equipment greater than the \$25,000 original cost. The account activity and balance are included in the following table. The funding is based on estimated current costs and inflated annually by 7%. The costs do not reflect any trade-in or sale value of the existing equipment, which could be substantial. The sale amounts are recorded as revenue in the capital reserve fund.

The details of the expenditures out of the sinking fund are itemized below.

FERGUSON TOWNSHIP							
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS							
PUBLIC WORKS EQUIPMENT SINKING FUND							
30,400,430.760							
Description	Grant Amount	DOP	Age	Year	Additions	Deductions	Balance
Beginning Balance 12/31/2022 (estimated)							372,846
Annual Sinking Fund Contribution				2023	391,792		764,638
Replace IM-517 Wright standing mower with electric		2014	9	2023		28,770	735,868
Replace PW-45 Single Axle plow truck		2008	15	2023		260,085	475,783
Annual Sinking Fund Contribution				2024	403,546		879,329
Replace 2004 ODB one person leaf collector (90% grant)	258,978	2017	7	2024		287,753	591,576
Replace IM-522 Wright standing mower with electric		2016	8	2024		30,209	561,367
Replace PW-19 single axle plow truck		2010	14	2024		273,089	288,278
Annual Sinking Fund Contribution				2025	415,652		703,930
Replace IM-523 Wright standing mower with electric		2019	6	2025		31,719	672,211
Replace PW-10 Heavy Duty Pickup Truck with electric		2010	15	2025		81,034	591,177
Replace PW-71 Toolcat		2017	8	2025		63,669	527,508
Replace Survey Equipment (from new equipment)		2015	10	2025		28,941	498,567
Annual Sinking Fund Contribution				2026	428,122		926,689
Replace PW-44 Catapillar backhoe		2001	25	2026		158,016	768,673
Replace PW-56 Interstate trailer		2002	24	2026		25,526	743,147
Replace PW-57a single axle plow truck		2014	12	2026		301,081	442,066
Replace PW-63 Petersen Rear Steer Brush Collector (Grant)	184,879	2015	11	2026		205,421	236,645
Replace PW-62 Ford F550 plow truck		2017	10	2027		183,785	52,860
Replace PW-7 Ford F550 plow truck		2017	10	2027		183,785	(130,925)
Annual Sinking Fund Contribution				2027	440,965		310,040
Total	443,857				2,080,077	2,142,883	
					Subtotals by Year	EXPENDITURES	
					2023	288,855	
					2024	591,051	
					2025	205,363	
					2026	690,044	
					2027	367,570	
					Total	2,142,883	

The preparation of the Equipment Replacement section of the CIP is consistent with goal 1a Financial Stability - Make realistic estimates of program costs of the Strategic Plan

2023-2027 Capital Improvement Plan

ARBORIST SECTION – PUBLIC TREE MAINTENANCE

Most arborist requests and Tree Commission initiatives are funded through the operating budget, including contracted tree trimming, removal, and injections. This CIP includes purchasing battery-powered electric mowers for roadside mowing. An electric truck for use by the arborist and fleet use is proposed. A modular heavy-duty truck for urban forestry operations is also requested, with a preference for electric if available or hybrid.

Since 2020 tree planting is considered a capital expense, funding is requested for this activity each year of the 5-year CIP.

A full-time municipal tree specialist was requested, and the position was approved in 2020. Due to the pandemic, postponement of the purchase of a new bucket truck, and hiring conditions, the position has remained unfilled. It is anticipated this position will be filled in 2023.

FERGUSON TOWNSHIP							
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS							
NEW ITEMS ARBORIST							
30.400.455.375							
Description	FUND	2023	2024	2025	2026	2027	Total
Street Tree Planting	CR	31,833	34,061	36,445	38,996	41,726	183,060
							0
							0
Total		31,833	34,061	36,445	38,996	41,726	183,060

Street tree planting 70 Balled and Burlaped and 30 bare root trees each year with a 7% price escalation annually

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PARKS AND RECREATION

The proposed five-year Capital Improvement Program Budget for Parks and Recreation (not including CRCOG) totals **\$1.92 Million or 7.0% of the Capital Projects Requests**. The following projects are recommended in the upcoming five years.

These projects represent the park improvements to meet the growing needs of the Township's residents and are consistent with the Township's Recreation, Parks, and Open Space Plan and each of the parks' master plans. The projects are proposed to be paid for through grant funds, parkland fee-in-lieu funds, and general funds. It should be noted that the Township is a partner in the Centre Region Parks and Recreation, Centre Region Parks and Recreation Authority, and in the various regional programs offered by the CRCOG. Long-term debt has been issued to renovate and expand the two regional pools and parks. The Township's portion of the repayment is now incorporated into the Township's annual operating costs.

The 2023-2027 CIP includes Suburban Park phase A improvements, Cecil Irvin Park improvements, Tudek Park Phase IIIA, and restroom facilities at Haymarket Park.

The CIP also includes two park master plan updates, Fairbrook and Greenbriar/Saybrook Parks, which may be included in the Recreation, Parks, and Open Space Plan update scope of work.

FERGUSON TOWNSHIP							
2023 – 2027 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS							
PARK IMPROVEMENT FUND 34							
34,400,452.750							
Description	Loan/Grant Amount	2023	2024	2025	2026	2027	TOTAL
Playground Safety & Updates		10,000	10,000	10,000	10,000	10,000	50,000
Community Orchard Program			10,000				10,000
Park Surveying Program		10,000	10,000	10,000	10,000		40,000
Recreation, Parks, Open Space Plan		10,000					10,000
Suburban Park Phase 1A Construction	250,000	750,000					750,000
Greenbriar/Saybrook playground equipment replacement		100,000					100,000
GaGa Pit		5,000					5,000
Cecil Irvin Park Phase II	160,000		320,000				320,000
Fairbrook Park Natural Landscape Areas		6,000					6,000
Restroom outside sewer service area in Township Park					50,000		50,000
Haymarket Restroom Facilities		-	165,000				165,000
Veterans Memorial @ Louis E Silvi Baseball Field	50,000	50,000					50,000
Compost Facility at Meadows Park				5,000			5,000
Tudek Park Phase IIIA				355,000			355,000
Tudek Park Butterfly Garden Observation Deck		5,000	50,000				55,000
Total	460,000	946,000	565,000	380,000	70,000	10,000	1,971,000

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Strategic Plan Alignment

The Capital Improvement Plan seeks to advance the goals, objectives, and action steps outlined in the Ferguson Township Strategic Plan. Over the next five years, several Strategic Plan items will be accomplished through the proposed expenditures in the Capital Improvement Plan.

☐ **Objective 10.1: Promote environmental and social stewardship in parkland development.**

2023	
Playground Safety and Contingency Program	\$10,000
This item provides funding for equipment upgrades and replacements to meet playground safety standards.	
Recreation, Parks, and Open Space Plan (carry over)	\$10,000
The Recreation, Parks, and Open Space (RPOS Plan) provides a long-term outlook and vision for Ferguson Township parks, recreation facilities, and open space. The update will drive near-term and long-range planning, ensure Township parks provide recreational opportunities for all community members and direct decision-making and resources toward a defined vision for the future.	
Suburban Park Construction of Phase 1A (carried over)	\$750,000
The BOS approved the Suburban Park Master Plan Update in May 2019. Staff recommends the Township initiate park improvements by budgeting for Phase A1 to allow for the drainage improvements, which will create a free-flowing drainage channel through the park. Also, this phase will include stormwater Best Management Practices (BMPs) associated with the channel and the bridge/boardwalk crossings. The Township was awarded a DCNR C2P2 \$250,000 grant award. The Township's obligation will be 50 percent of the budgeted amount if awarded the grant.	
Saybrook/Greenbriar Park Playground Equipment Replacement	\$100,000
Park play equipment is near the end of its useful life and is considered outdated. This project will replace the main piece of play equipment with a new structure that is safe and designed for age-appropriate play. The estimate assumes the required site work will be completed by staff.	
Fairbrook Park Natural Landscape Areas	\$6,000
The Board of Supervisors approved a Grow Zone and two designated native landscape areas at Fairbrook Park. This appropriation will support the removal of the existing brush, purchasing seed mix, and signage.	
Park Surveying Program	\$10,000
This is a continuation of the park surveying program mentioned in 2021. Parks that will be surveyed in 2023 have yet to be identified and will depend on priorities and the ability of staff to complete any work in-house.	
Tudek Butterfly Gardens Observation Deck Design	\$5,000
This is at the request of the board of supervisors to design and install an observation deck at the Tudek Park butterfly gardens. Design is scheduled for 2023 and construction in 2024.	
Veterans Memorial at Louis E. Silvi Baseball Field	\$50,000

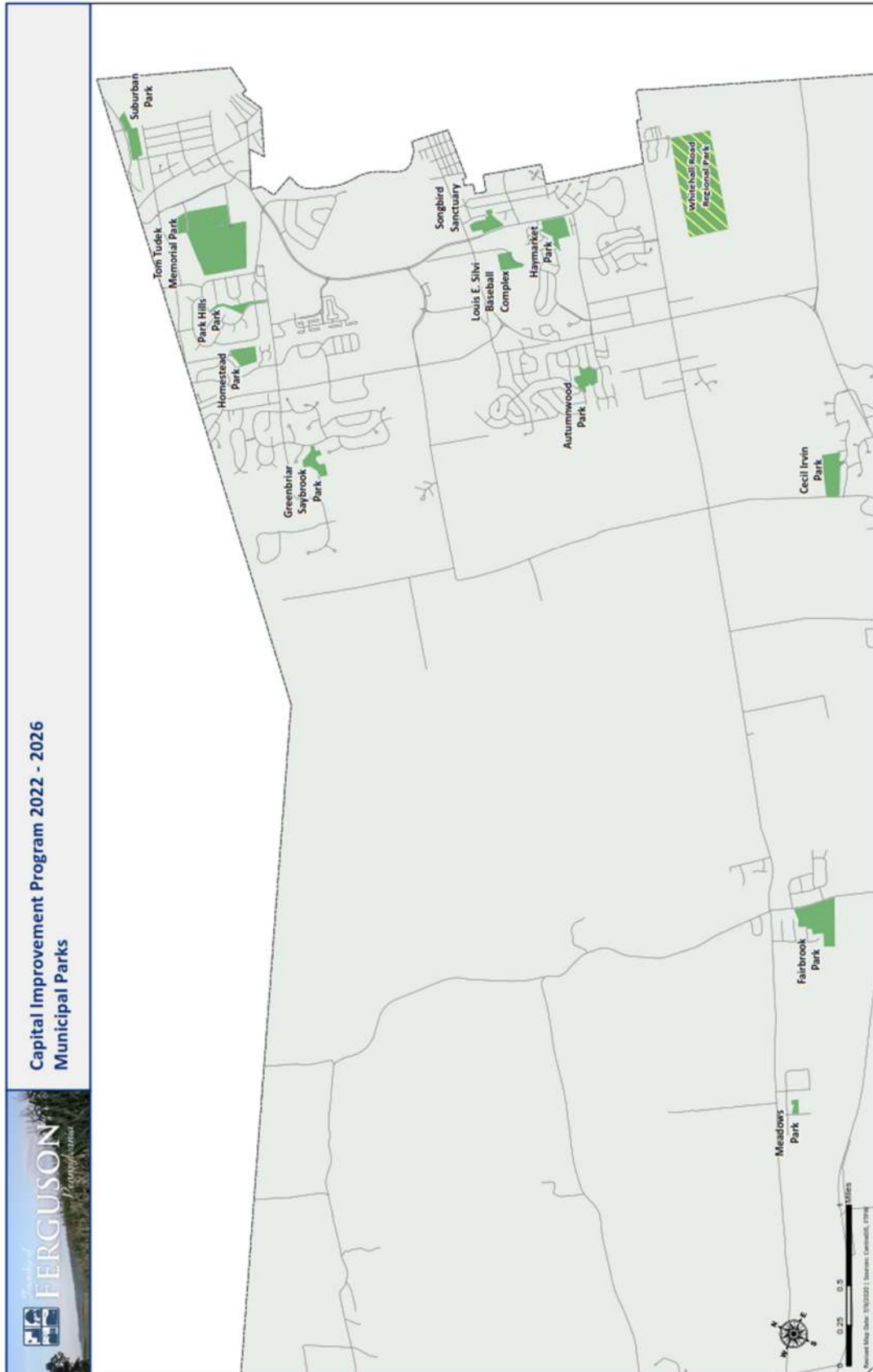
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This appropriation is to install a memorial to honor military veterans at the Louis E. Silvi Baseball Complex. The request was submitted by the Louis E. Silvi Foundation to honor Mr. Silvi's service and commitment to remembering veterans' sacrifices from all branches. The funding for this installation is planned to come from the Louis E. Silvi Foundation.	
GaGa Ball Pit	\$5,000
Residents requested a GaGa Ball pit in Ferguson Township. GaGa Ball is a dodgeball-type game accessible to all ages and physical abilities and growing in popularity. The permanent installation of a Gaga Ball pit is unique to the Centre Region.	
2024	
Tudek Butterfly Gardens Observation Deck Design	\$50,000
This is at the request of the board of supervisors to design and install an observation deck at the Tudek Park butterfly gardens. Design is scheduled for 2023 and construction in 2024.	
Haymarket Park Restroom Facilities	\$165,000
The master plan for Haymarket Park includes the construction of restroom facilities. This park is a highly-used, centralized park. Currently, the only Township park where permanent restroom facilities are constructed is Tom Tudek Memorial Park. This estimate represents the cost of a two-stall turnkey restroom.	
Cecil Irvin Park Phase II	\$320,000
The Township plans to submit a grant application to the Department of Conservation and Natural Resources Community Conservation Partnerships Program in 2022 to continue the development of Cecil Irvin Park. Planned Improvements include an amphitheater, a porous pavement parking area off of Nixon Road, a pavilion, and a connecting shared use path to the existing developed area of the park. The amount budgeted reflects the project's total cost, and a 50 percent grant match will be requested.	
Community Orchard Program	\$10,000
Residents have requested in prior years that the Township install a community orchard at a local park. Several concerns accompany this request, and the staff requires additional time to research and plan for this installation appropriately. This is budgeted as a placeholder for 2024.	
Park Surveying Program	\$10,000
This is a continuation of the park surveying program mentioned in 2021. Parks that will be surveyed in 2024 have yet to be identified and will depend on priorities and the ability of staff to complete any work in-house.	
Playground Safety & Update Program	\$10,000
This item provides funding for equipment upgrades and replacements to meet playground safety standards.	
2025	
Compost Facility at Meadows Park	\$5,000
In collaboration with residents, staff recommends the Township designate a compost facility at Meadows Park.	
Park Surveying Program	\$10,000

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This is a continuation of the park surveying program mentioned in 2021. Parks that will be surveyed in 2025 have yet to be identified and will depend on priorities and the ability of staff to complete any work in-house.	
Playground Safety and Contingency Program	\$10,000
This is a continuation of the park surveying program mentioned in 2021. Parks that will be surveyed in 2025 have yet to be identified and will depend on priorities and the ability of staff to complete any work in-house.	
Tom Tudek Memorial Park Phase IIIA	\$355,000
Completion of Tudek Park Phase 3a includes the construction of two pickleball courts, completion of remaining sidewalk connections, paving the remainder of the parking lot, and associated landscaping and stormwater improvements. Phase IIIA is located on land owned by the Tom Tudek Memorial Trust and is adjacent to the park entrance on Herman Drive.	
2026	
Park Restroom – Outside Sewer Service Area	\$50,000
This item is to install restroom facility services by a conventional or unconventional treatment system for a park to be designated outside the Centre Region Sewer Service Area.	
Park Surveying Program	\$10,000
This is a continuation of the park surveying program mentioned in 2021. Parks that will be surveyed in 2026 have yet to be identified and will depend on priorities and the ability of staff to complete any work in-house.	
Playground Safety & Update Program	\$10,000
This item provides funding for equipment upgrades and replacements to meet playground safety standards.	
2027	
Playground Safety & Update Program	\$10,000
This item provides funding for equipment upgrades and replacements to meet playground safety standards.	

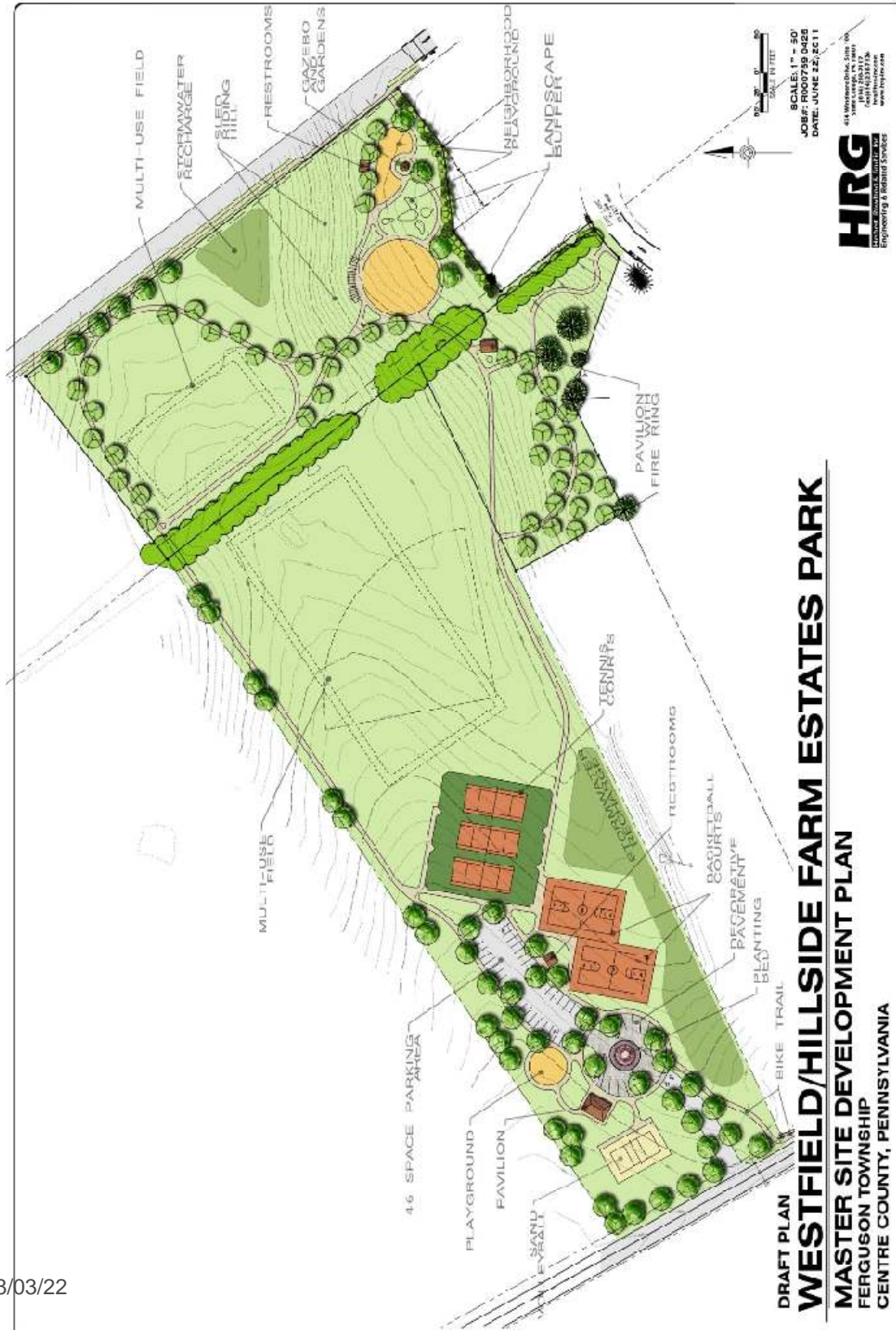
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