

2017 - 2021 Capital Improvement Plan



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Chapter 1: Introduction

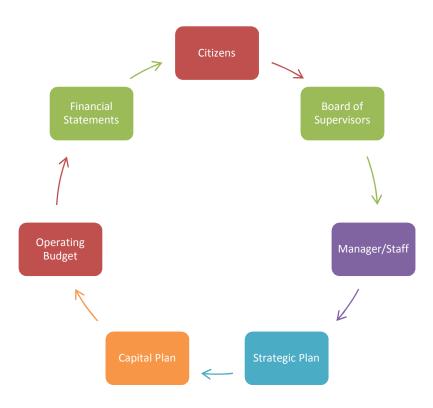
Who should read this document?

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 in the next five years. This is a financial plan, rather than official budget. It is used to provide 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, the Vision Statement, the Mission Statement and Values Statement.

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



Strategic Planning



According to the Balanced Scorecard Institute,

WELCOME TO THE BALANCED SCORECARD INSTITUTE

The Balanced Scorecard Institute (BSI) provides training, certification and consulting services to commercial, government, and non-profit organizations worldwide. BSI helps clients increase focus on strategy and results, improve organizational performance by measuring what matters, align the work people do on a day-to-day basis with strategy, focus on the drivers of future performance, improve communication of the organization's Vision and Strategy, and prioritize in tough economic times.

Strategic planning is an organizational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust 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, with a focus on the future. Effective strategic planning articulates not only where an organization is going and the actions needed to make progress, but also how it will know if it is successful. Without planning, 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 as a whole and service delivery demands, attempting to plan beyond five years is difficult at best and subject to substantial changes and risks. The Strategic Plan is an integral part of the CIP and provides important guidance for funding of 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 interfaces directly with the financial needs originated by the Strategic Plan

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

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

The Strategic Plan heirarchy 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 to reach.
- *Objectives* are measurable, definable achievements that must be attained prior to accomplishing or advancing a goal.

Action Steps are specific, operable processes that are undertaken to achieve an objective. While goals are not necessarily attainable, objectives and action steps inherently are. The purpose of this Strategic Plan is to define these elements in an attempt to marry vision and action with the ultimate goal of improving the quality of life for those who live, work, study and visit Ferguson Township

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 to be one-time long term investments (rather than ongoing expenses) in equipment or fixed assets that are costly. Such assets improve productivity, reduce operating costs, or improve service delivery. Typically, there is an expected return on the investment for it to make financial sense.

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

What is the Capital Improvement Plan (CIP)?

The CIP is a five-year plan forecasting the financial requirements in order to fulfill capital needs of the township. In order to provide an accurate forecast of the township in its entirety, operational costs are included as part of the summary sections. These are not detailed like the capital components are however.

The township CIP also includes projected staffing changes since personnel costs make up over 45% of the General Fund budget and have a long-term impact on the finances of the township.

Defining what is to be included in the CIP is critical to narrowing down the amount of items to be considered during the creation and reviews of the plan. The township has defined a capital asset as one with an initial cost exceeding \$2,500 each and will have a life span of longer than one year.

Why do we need a Capital Improvement Plan?

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

How does the Township Mission, Vision and Values guide the preparation of the CIP?

2016 Ferguson Township Board of Supervisors



Steve Miller

Supervisor-at-Large



Peter Buckland

Ward I







Laura Dininni Janet Whitaker
Ward II Supervisor-at-Large

Rita Graef

The staff of Ferguson Township is guided in its 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 examples of guiding documents that staff utilize on a daily basis to help allocate resources, capital and otherwise,

to provide effective services. However, with all of these supporting documents several questions remain.

How do we know our actions today are leading towards where 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 defines the general philosophy of the township. The Values guide staff in appropriate behavior as township employees. Together, the Mission, Vision and Values determine what is important to the township and how staff should allocate time and resources.

Our Mission

It is Ferguson Township's mission 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 condition, provide exemplary service, keep Township 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 strong 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.

We Value...

Effective, efficient, professionalism in delivering services to our residents. Residents, elected and appointed officials expect the highest quality service delivery from Township staff. It is our duty 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 and employees, professionals, and students. Each give the area a character all its own. It is our responsibility to ensure that policies and service delivery are directed at maintaining that character for generations to come.

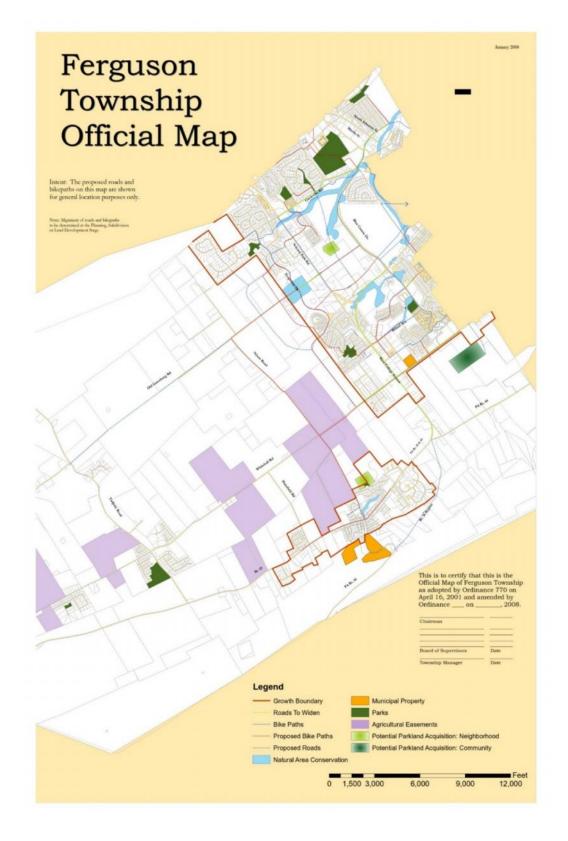
A well-maintained and safe environment. Every resident and guest deserves to live, work, study, and recreate in a high quality environment. Therefore, it is our responsibility to properly maintain and provide for the safety of our community's neighborhoods, streets, parks and common areas.

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 in the most efficient manner. 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 provide 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. It is our responsibility 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 in an ethical and honest manner. It is our responsibility to ensure that all who perform work for the Township operate with the highest standards of ethical and honest behavior.

Official Township Map



Chapter 2: Summary

Plan Summary

This section provides an overview of fund balances, revenues and expenditures for all funds except pension funds. The overview 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. This is important because without sufficient financial resources and fund balances, the plan would not be feasible.

For the five years ending in 2021, the Township proposes spending **\$92.7** *million* for all governmental funds. This does not include pension trust funds nor the Tom Tudek Memorial Trust Fund (even though the township provides funding for park projects).

Please be aware that for budgeting purposes, amounts are estimated and rounded to the nearest \$100 in most cases. It is not possible to obtain exact amounts over 12 months in advance. Vendor pricing is generally only valid for 60 or 90 days. Beyond that, amounts are only estimates of expected pricing.

Demographics

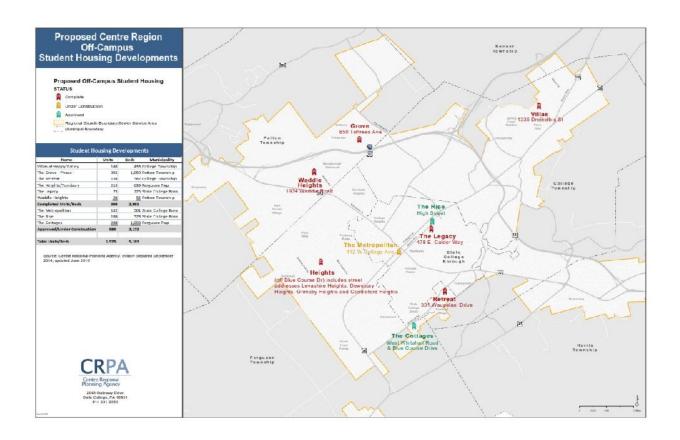


The township encompasses an area of approximately 50 square miles and is home to nearly 19,000 residents. Several high-tech industries have found a home in Ferguson Township over the years including AccuWeather, Minitab, Sound Technology, Videon, and Avail Technologies. The township is also home to major research facilities of The Pennsylvania State University, one of the nation's premier agricultural and engineering institutions. The demographics have a large impact on 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. By smartly managing growth, the township will continue to operate soundly for many years to come. By using population data for various revenue and expenditure calculations, it is possible to remove the changes in population from those calculations, providing more relevant information than would otherwise be available.

With the construction of several housing developments ongoing in the township, including student housing, the population will continue to increase at a manageable pace, for at least the end of the decade. There have been many debates over the cost of growth and how it affects costs of services.

According to the Centre Region Planning Agency, the region is witnessing a student housing boom. Several projects on the radar are in construction currently or are expected to be constructed during the term of the CIP.



Since tax revenues are driven by population and age, identifying the demographics and trends provides important data for revenue projections. The following tables depict the township population estimates and age groups.

Population Estimates	2017	2018	2019	2020	2021
Based on Centre Regional Planning Agency Data	18,847	19,035	19,225	19,417	19,611

The demographic breakdown, according to American Community Survey estimates for 2014, the population breakdown by age is represented by the following table. According to the data, 67.8% of the township population is of working age.

DEMOGRAPHIC TABLE										
Age/Sex %	e/Sex % Less than 5 5-17 18-59 60-64 65+									
Male	2.1%	6.3%	33.7%	2.3%	5.6%					
Female	2.9%	7.7%	29.1%	2.7%	7.6%					
Total	5.0%	14.0%	62.8%	5.0%	13.2%					

Versions of this table are available for the following years:

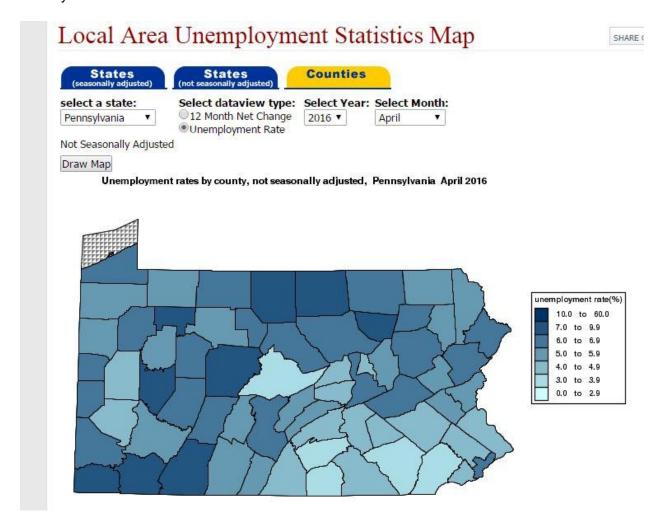
2014
2013
2012
2011
2010
2009

	Ferguson township, Centre County, Pennsylvania							
	Total			Male	Female			
Subject	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Erro		
Total population	17,962	+/-42	9,067	+/-567	8,895	+/-569		
AGE								
Under 5 years	4.9%	+/-1.1	4.1%	+/-1.6	5.7%	+/-1.5		
5 to 9 years	6.3%	+/-1.3	6.4%	+/-1.9	6.2%	+/-2.4		
10 to 14 years	4.7%	+/-1.0	3.8%	+/-1.2	5.5%	+/-1.7		
15 to 19 years	5.8%	+/-1.4	5.8%	+/-2.1	5.9%	+/-1.7		
20 to 24 years	12.6%	+/-2.6	14.9%	+/-4.0	10.2%	+/-3.7		
25 to 29 years	9.3%	+/-1.5	9.2%	+/-2.0	9.5%	+/-2.4		
30 to 34 years	6.4%	+/-1.2	7.4%	+/-1.8	5.4%	+/-1.4		
35 to 39 years	5.5%	+/-1.4	6.3%	+/-2.0	4.6%	+/-1.5		
40 to 44 years	7.4%	+/-1.4	6.5%	+/-1.8	8.2%	+/-1.7		
45 to 49 years	6.1%	+/-1.2	6.5%	+/-1.7	5.7%	+/-1.5		
50 to 54 years	7.2%	+/-1.6	7.8%	+/-2.3	6.6%	+/-1.8		
55 to 59 years	5.8%	+/-1.4	5.7%	+/-1.5	5.9%	+/-1.8		
60 to 64 years	5.0%	+/-1.2	4.6%	+/-1.7	5.4%	+/-1.5		
65 to 69 years	3.9%	+/-1.0	3.3%	+/-1.2	4.6%	+/-1.3		
70 to 74 years	2.9%	+/-0.8	2.2%	+/-1.1	3.7%	+/-1.1		
75 to 79 years	3.1%	+/-0.8	3.4%	+/-1.2	2.8%	+/-1.1		
80 to 84 years	1.8%	+/-0.7	1.5%	+/-0.8	2.2%	+/-0.9		
85 years and over	1.3%	+/-0.6	0.8%	+/-0.4	1.8%	+/-1.2		
SELECTED AGE CATEGORIES								
5 to 14 years	10.9%	+/-1.5	10.2%	+/-2.1	11.7%	+/-2.8		
15 to 17 years	3.0%	+/-0.7	2.3%	+/-1.0	3.6%	+/-1.2		
18 to 24 years	15.4%	+/-2.5	18.3%	+/-4.0	12.5%	+/-4.1		
15 to 44 years	47.0%	+/-2.4	50.0%	+/-3.2	43.9%	+/-3.5		
16 years and over	83.3%	+/-1.4	85.0%	+/-1.8	81.5%	+/-2.9		
18 years and over	81.2%	+/-1.3	83.4%	+/-2.0	79.0%	+/-3.0		
60 years and over	18.1%	+/-1.7	15.7%	+/-2.5	20.5%	+/-2.2		
62 years and over	15.9%	+/-1.6	13.4%	+/-2.2	18.4%	+/-2.0		
65 years and over	13.1%	+/-1.2	11.1%	+/-1.8	15.1%	+/-1.6		
75 years and over	6.2%	+/-0.9	5.7%	+/-1.3	6.8%	+/-1.3		
SUMMARY INDICATORS								
Median age (years)	35.0	+/-1.7	33.6	+/-3.1	36.2	+/-4.0		
Sex ratio (males per 100 females)	101.9	+/-13.0	(X)	(X)	(X)	(X		
Age dependency ratio	46.8	+/-3.9	(X)	(X)	(X)	(X		
Old-age dependency ratio	19.2	+/-2.1	(X)	(X)	(X)	(X		
Child dependency ratio	27.6	+/-2.5	(X)	(X)	(X)	(X		
PERCENT IMPUTED								
Sex	0.2%	(X)	(X)	(X)	(X)	(X		
Age	2.3%	(X)	(X)	(X)	(X)	(X		

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Employment Data

Following is a current map, from the Bureau of Labor Statistics, as of April 2016 related to PA county unemployment. As you can see that Centre County has extremely low unemployment rates. It has been historically accurate that employment in the county has exceeded most of the country unrelated to national economics



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 the profit motive. With this in mind, governments, including the township, create funds to separate assets for specific purposes. This improves accountability and removes risk that funds are not comingled with other general funds. To simplify the reporting, funds are classified into Fund Groups, which summarize the individual funds by type. These are described below:

The General Fund is the main operating fund of the township. The majority of revenues are deposited into this fund and the majority of expenditures are made out of this fund. This includes interfund transfers to other funds, making up a large portion of revenue in those particular funds.

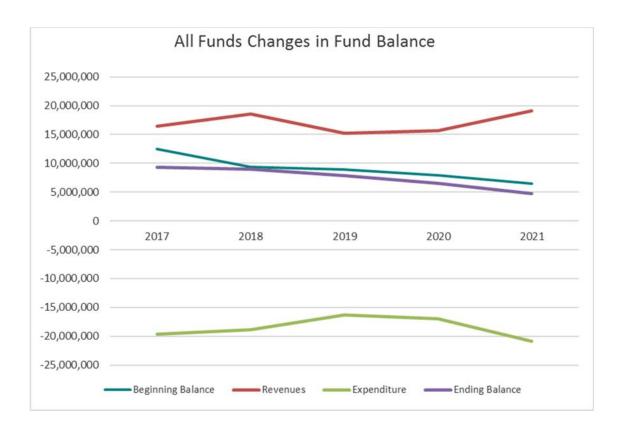
The General Obligation Fund is the payer fund of the debt service for the township. This includes any direct bond or loan payments. Indirect payments, such as the COG park and pools debt are not included in the General Obligation Fund. These payments are made out of the General Fund and the Regional Capital Recreation Projects Fund.

The 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 and the Piney Ridge 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

The Special Revenue Funds are those funds that have a special assessment to obtain revenue rather than taxes. The township adds a separate real estate assessment for street lighting and fire hydrants, while the state administers a fuel tax to help local governments maintain their roads. This requires a separate Liquid Fuels Fund.

Fund Balances

Over the years, the township has maintained sound fund balances for operations and present and future capital expenditures. Oftentimes the township uses cash reserves to purchase equipment and long-term investments rather than using debt. This conservative style has reduced financial risk considerably and has helped the township through economic downturns that has severly hurt other governmental organizations.



All Funds	2017	2018	2019	2020	2021
Beginning Balance	12,525,208	9,329,240	8,936,737	7,899,260	6,522,044
Revenues	16,422,730	18,532,073	15,244,177	15,638,795	19,077,671
Expenditure	-19,618,698	-18,924,576	-16,281,654	-17,016,010	-20,899,862
Ending Balance	9,329,240	8,936,737	7,899,260	6,522,044	4,699,854
Fund Balance % of Expenditures	48%	47%	49%	40%	22%

Sinking Funds

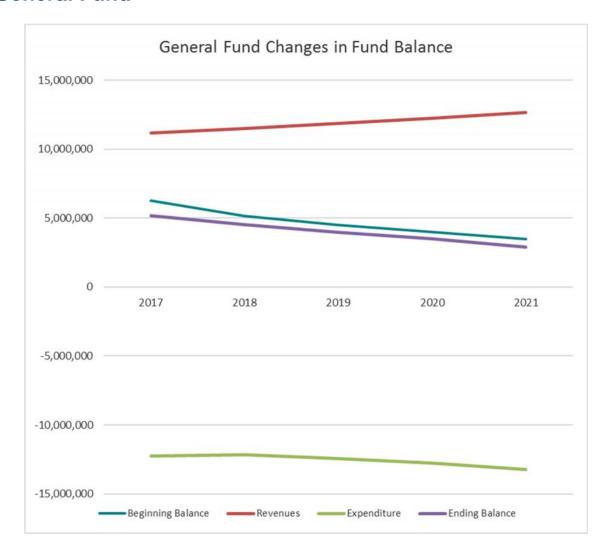
The township uses "sinking funds" to accumulate money for various specific needs.

According to the Financial Dictionary, a sinking fund is defined as a fund or account into which a person or company deposits money on a regular basis in order 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 in order 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.

The township puts money in the sinking funds to replace equipment. Such items include the Building Equipment Replacement Fund, the Public Works Equipment Replacement Fund, the Police Vehicle Equipment Fund, the Executive Recruitment Sinking Fund

General Fund



General Fund	2017	2018	2019	2020	2021
Beginning Balance	6,274,691	5,162,505	4,509,109	3,971,470	3,485,148
Revenues	11,161,778	11,518,471	11,884,082	12,258,833	12,642,953
Expenditure	-12,273,964	-12,171,867	-12,421,721	-12,745,155	-13,241,973
Ending Balance	5,162,505	4,509,109	3,971,470	3,485,148	2,886,127
Fund Balance % of Expenditures	42%	37%	32%	28%	22%

Capital Projects Funds

Piney Ridge Fund	2017	2018	2019	2020	2021
Beginning Balance	741	741	741	741	741
Revenues	0	0	0	0	0
Expenditure	0	0	0	0	0
Ending Balance	741	741	741	741	741
Ag Preservation Fund	2017	2018	2019	2020	2021
Beginning Balance	55,791	41,780	58,269	45,261	62,760
Revenues	15,989	16,489	16,992	17,499	17,499
Expenditure	-30,000	0	-30,000	0	0
Ending Balance	41,780	58,269	45,261	62,760	80,258
Capital Reserve Fund	2017	2018	2019	2020	2021
Beginning Balance	1,208,006	612,283	542,694	558,703	183,756
Revenues	1,619,308	3,885,685	809,600	809,600	3,844,600
Expenditure	-2,215,031	-3,955,274	-793,591	-1,184,547	-3,999,839
Ending Balance	612,283	542,694	558,703	183,756	28,517
Reg Cap Rec Projects Fund	2017	2018	2019	2020	2021
Beginning Balance	1,046,858	905,658	760,132	610,150	455,579
Revenues	3,000	3,000	3,000	3,000	3,000
Expenditure	-144,200	-148,526	-152,982	-157,571	-162,298
Ending Balance	905,658	760,132	610,150	455,579	296,281
Transportation Imp Fund	2017	2018	2019	2020	2021
Beginning Balance	3,507,842	2,105,492	2,523,906	2,156,321	1,785,688
Revenues	2.044.730	1.858.313	1,272,415	1,285,744	1,299,407
Expenditure	-3,447,079	-1,439,900	-1,640,000	-1,656,377	-2,201,000
Ending Balance	2,105,492	2,523,906	2,156,321	1,785,688	884,094
PGM Streetlight Fund	2017	2018	2019	2020	2021
Beginning Balance	21,516	21,704	21,892	22,082	22,273
Revenues	188	189	190	190	191
Expenditure	0	0	0	0	0
Ending Balance	21,704	21,892	22,082	22,273	22,464
Park Improvement Fund	2017	2018	2019	2020	2021
Beginning Balance	92,267	92,806	93,345	93,884	94,423
Revenues	539	539	539	539	539
Expenditure	0	0	0	0	0
Ending Balance	92,806	93,345	93,884	94,423	94,962

Special Revenue Funds

Streetlight Fund	2017	2018	2019	2020	2021
Beginning Balance	32	978	1,471	1,500	1,529
Revenues	16,000	16,000	16,000	16,000	16,000
Expenditure	-15,054	-15,506	-15,971	-15,971	-16,450
Ending Balance	978	1,471	1,500	1,529	1,078
Hydrant Fund	2017	2018	2019	2020	2021
Beginning Balance	-1,088	1,156	2,849	3,967	5,400
Revenues	30,888	31,196	31,507	31,822	32,139
Expenditure	-28,644	-29,504	-30,389	-30,389	-31,300
Ending Balance	1,156	2,849	3,967	5,400	6,239
Liquid Fuels Fund	2017	2018	2019	2020	2021
Beginning Balance	317,249	382,835	421,026	433,877	423,446
Revenues	605,586	611,191	616,851	622,569	628,343
Expenditure	-540,000	-573,000	-604,000	-633,000	-654,000
Ending Balance	382,835	421,026	433,877	423,446	397,789

General Obligation Fund

General Obligation Fund	2017	2018	2019	2020	2021
Beginning Balance	1,303	1,303	1,303	1,303	1,303
Revenues	924,725	591,000	593,000	593,000	827,000
Expenditure	-924,725	-591,000	-593,000	-593,000	-827,000
Ending Balance	1,303	1,303	1,303	1,303	1,303

Chapter 3: Revenue Details

Revenue Projections

Township revenues are made up of tax collections, 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 these items and are represented in the table below

The Liquid Fuels fund includes a 1% annual increase in revenue growth. The Hydrant and Street Light Funds revenues are adjusted in accordance with expenditures to maintain a positive fund balance, taking into consideration the expenditures out of those funds.

Fund Group	2017	2018	2019	2020	2021
General Fund	11,161,778	11,518,471	11,884,082	12,258,833	12,642,953
Capital Projects Funds	3,683,753	5,764,215	2,102,736	2,116,571	5,165,236
Special Revenue Funds	652,474	658,387	664,359	670,390	676,482
General Obligation Fund	924,725	591,000	593,000	593,000	827,000
Total	16,422,730	18,532,073	15,244,177	15,638,795	19,311,671
Group change %	12.6%	12.8%	-17.7%	2.6%	23.5%
General Fund change %	3.2%	3.2%	3.2%	3.2%	3.1%
_					
Capital Projects Funds	2017	2018	2019	2020	2021
Piney Ridge	0	0	0	0	0
Ag Preservation	15,989	16,489	16,992	17,499	17,499
Capital Reserve	1,619,308	3,885,685	809,600	809,600	3,844,600
Regional Capital Rec Projects	3,000	3,000	3,000	3,000	3,000
Transportation Improvement	2,044,730	1,858,313	1,272,415	1,285,744	1,299,407
Pine Grove Mills Street Lights	188	189	190	190	191
Park Improvement	539	539	539	539	539
Total	3,683,753	5,764,215	2,102,736	2,116,571	5,165,236
Special Revenue Funds	2017	2018	2019	2020	2021
Street Light	16,000	16,000	16,000	16,000	16,000
Hydrant	30,888	31,196	31,507	31,822	32,139
Liquid Fuels	605,586	611,191	616,851	622,569	628,343
Total	652,474	658,387	664,359	670,390	676,482

Tax Revenue Projections

The tax revenues make up some 65% of the total township revenue on average, depending on loan proceeds.

The General Fund revenue projections include annual increases based on type of revenue source. Each source has a different projected increase. Earned income taxes are projected to

increase at 3.0%, Real Estate taxes and Local Servics taxes at 2.0% and Transfer taxes with no projected increases.

Tax Revenue	2017	2018	2019	2020	2021
Real Estate Taxes	1,425,133	1,453,635	1,482,708	1,512,362	1,542,610
Earned Income Taxes	6,686,703	6,887,304	7,093,924	7,306,741	7,525,944
Transfer Taxes	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Local Services Taxes	316,200	322,524	328,974	335,554	342,265
Total	9,628,036	9,863,464	10,105,606	10,354,658	10,610,818
Average EIT per Resident	354.79	361.82	368.99	376.31	383.76
Percentage of Total Revenue	58.6%	53.2%	66.3%	66.2%	54.9%

General Fund Transfers

Funding for many of the capital funds is derrived from a transfer from the General Fund. These transfers, whether mandated or not, have a direct impact on the General Fund balances and the associated capital funds. The following table details the projected transfers during the term of the CIP.

General Fund Transfers Out	2017	2018	2019	2020	2021
<u>TIF</u>	1,246,730	1,259,413	1,272,415	1,285,744	1,299,407
Capital Reserve	800,000	800,000	800,000	800,000	800,000
Ag Preservation	15,000	15,000	15,000	15,000	15,000
General Obligation Fund	924,725	591,000	593,000	593,000	827,000
Total	2,986,455	2,665,413	2,680,415	2,693,744	2,941,407

Tax Considerations

The Township has used a fiscally conservative approach to budgeting. Increases in tax rates have not occurred on any frequent basis relying on annual revenue increases from a growing tax base. At this time, there is no projected tax increase included in the CIP. The local economic conditions are very positive and have led to increased Earned Income Tax revenues and increased Transfer Tax revenues. In addition, the township has aggresively pursued grant funding. Grant revenue has been very beneficial to the township finances. Combined with fiscal restraint, the township maintains healthy 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 in accordance with 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 as a way 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 each year.

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

West College Avenue Streetscape Grant Application Initiative

In 2017, \$2 million is included in the budget as the Township's share of the cost to install streetscape improvements along West College Avenue from Corl Street to Buckout Street at the Township/Borough line. Staff submitted a grant application totaling approximately \$1,387,000 including design, construction, utility impacts, easement acquisition, construction, and inspection of 8 foot wide concrete sidewalks on both sides of West College Avenue, street light conduit, repairs and replacement of affected concrete curb, and related construction.

The 2017–2021 Capital Improvement Plan anticipates one grant for Planning & Zoning initiatives. Pennsylvania Act 89 (transportation bill) providing financial support to transportation projects that focused on job creation, multimodal transportation, environmental sustainability, and more established the PennDOT Multimodal Transportation Fund in 2014. If successful, funding from this program will be used to complete streetscape improvements along the West College Avenue corridor in the Terraced Streetscape District.

This will supplement the 2014 PennDOT Transportation Alternatives Program grant that was awarded and used to install sidewalks and supporting infrastructure in the district. An application for the grant was submitted in the fall of 2015 and award announcements are expected in the summer of 2016.

Other Grant Funding Efforts

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

County Liquid Fuels Grant: Every other year public works staff apply for a County Liquid Fuels Grant, typically around \$30,000 to assist with a capital paving project. In 2015, the Township received \$30,000 in county liquid fuels funds to assist with the cost of paving Circleville Road.

Automated Red Light Enforcement Grant: For the current CIP, subject to installation of new hardware and software through an ARLE grant, traffic signal performance will be optimized on a more frequent basis than in the past, annually or more frequently.

TreeVitalize Grant: In 2014, public works staff applied for and was awarded a grant for \$20,000 to replace street trees infected with the emerald ash borer. Staff will continue to apply for such grants as new grant rounds are announced.

Green Light Go Grant: In 2016, the public works staff received approval for a \$176,085 (50%) grant to assist in funding the cost to complete traffic signal improvements and ADA compliant accessibility for the intersection of West College Avenue and Corl Street. Payment is expected in 2017.

Recycling Grant Act 101 Section 902 Recycling Program Grant: This program administered by PADEP provides funding to municipalities for recycling equipment. In 2013,

public works staff requested funding in the amount of \$206,000 (90% of the total cost) for 4 leaf boxes and 1 brush collection truck with grappler. PADEP announced the award of this grant in 2014. The grappler truck was purchased and put into service in 2015. Since we received a grant in this last round, staff cannot apply for funding in the next grant round, but will apply for funding when allowed.

GRANT TABLE								
Grant/Contributions Detail	Fund	Type	2017	2018	2019	2020	2021	TOTAL
CR Codes Rent of Fire Trailer	CR	С	9,600	9,600	9,600	9,600	9,600	48,000
Green Light Go Green grant	CR	С		176,085				176,085
DEP 902 Recycling Grant	CR	G	169,708					169,708
ARLE Grant	TIF	G		598,900				598,900
State Multimodal Transportation Funding	TIF	G	798,000					798,000
DCNR Cecil Irvin Park	CR	G		100,000				100,000
DCNR CNG Conversions	CR	G						0
DCNR Grant for Louis Silvi Field	CR	G	50,000					50,000
Loan Proceeds for new fueling station	CR	L		300,000				300,000
Loan Proceeds for new PW building	CR	L		2,300,000				2,300,000
Loan Proceeds for new fire station	CR	L					2,800,000	2,800,000
Loan Proceeds for Tudek Park	CR	L	350,000					350,000
Blue Course Drive Property	CR	L	240,000					240,000
Suburban Park Improvements	CR	L		200,000				200,000
Haymarket Park Improvements	CR	L					235,000	235,000
Northern ITS Cable Right of Way	GF	С	22,144	22,144	22,144	22,144	22,144	110,720
Suneysis Right of Way	GF	С	4,570	4,570	4,570	4,570	4,570	22,850
Crown Castle Right of Way	GF	С						C
DUI Enforcement	GF	G	43,435	43,435	43,435	43,435	43,435	217,175
Drive Safe Program	GF	G	3,000	3,000	3,000	3,000	3,000	15,000
Buckle Up Program	GF	G	4,500	4,500	4,500	4,500	4,500	22,500
Ballistic Vest Reimbursement	GF	G						C
County Liquid Fuels	GF	G						C
Liquid Fuels	LF	G	560,466	566,071	571,731	577,449	583,223	2,858,940
Liquid Fuels Turnback	LF	G	45,120	45,120	45,120	45,120	45,120	225,600
College Court fee in-lieu	PI	С	,	-,	-,	-,	-,	0
Toll Brothers fee in-lieu	RCRP	С						0
		-						
Total			2,300,543	4,373,425	704,100	709,818	3,750,592	11,838,478
Grant Summary by Fund	Fund		2017	2018	2019	2020	2021	TOTAL
Capital Reserve Fund	CR		819,308	3,085,685	9,600	9,600	3,044,600	6,968,793
General Fund	GF		77,649	77,649	77,649	77,649	77,649	388,245
Liquid Fuels Fund	LF		605,586	611,191	616,851	622,569	628,343	3,084,540
Park Improvement Fund	PI		0	0	0	0	0	C
Regional Capital Rec Projects	RCRP		0	0	0	0	0	C
Transportation Improvement Fund	TIF		798,000	598,900	0	0	0	1,396,900
Total			2,300,543	4,373,425	704,100	709,818	3,750,592	11,838,478
							,	
Grant Summary by Type	Type		2017	2018	2019	2020	2021	TOTAL
Grants	G		1,674,229		667,786	673,504	679,278	5,055,823
Contributions	С		36,314	212,399	36,314	36,314	36,314	357,655
Loans	L		590,000	2,800,000	0	0	3,035,000	6,425,000
Total			2,300,543	4,373,425	704,100	709,818	3,750,592	11,838,478

Net Project Cost Table									
Description	Fund	Cost	Grants	Loans	Net cash				
Public works Maintenance Facility	CR	2,341,700		2,300,000	41,700				
Fuel Pumps with Canopy	CR	300,000		300,000	0				
Fire Station	CR	2,880,000		2,800,000	80,000				
Traffic Signal Performance Metrics (ARLE)	TIF	640,000	598,900		41,100				
West College Ave Streetscape	TIF	798,000	798,000		0				
Corl Street/West College Signal	TIF	359,000	176,085		182,915				
Cecil Irvin Park	CR	200,000	100,000		100,000				
Louis Silvi Field	CR	100,000	50,000		50,000				
PW Equipment	CR	188,564	169,708		18,856				
Blue Course Drive Property	CR	240,000		240,000	0				
Suburban Park Improvements	CR	200,000		200,000	0				
Tudek Park Improvements	CR	386,000		350,000	36,000				
Haymarket Park Improvements	CR	235,000		235,000	0				
Total		8,868,264	1,892,693	6,425,000	550,571				
Percentage of Costs			21.3%	72.4%	6.2%				
- V									
		SUB'	TOTAL by I	FUND					
	CR	7,071,264	319,708	6,425,000	326,556				
	TIF	1,797,000	1,572,985	0	224,015				
	Total	8,868,264	1,892,693	6,425,000	550,571				

Chapter 4: Expenditure Details

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 information that is more current is obtained, the technology changes, or the direction of the plan changes. These requests are best estimates of the future costs given available information at the time of the printing.

Expenditure Projections Summary

Fund Group	2017	2018	2019	2020	2021
General Fund	12,273,964	12,171,867	12,421,721	12,745,155	13,241,973
Capital Projects Funds	5,836,310	5,543,700	2,616,573	2,998,495	6,363,137
Special Revenue Funds	583,699	618,010	650,360	679,360	701,751
Debt Service	924,725	591,000	593,000	593,000	827,000
Total	19,618,698	18,924,576	16,281,654	17,016,010	21,133,862

General Fund Detail	2017	2018	2019	2020	2021
Salaries & Benefits	5,629,710	5,798,601	5,972,559	6,151,736	6,336,288
New Staffing & Benefits	18,230	11,367	11,367	79,575	79,575
COG Programs	1,648,000	1,697,440	1,748,363	1,800,814	1,854,839
Vendors	1,989,364	1,999,045	2,009,016	2,019,287	2,029,865
Non Capital Items	2,205	0	0	0	0
Transfers Out	2,986,455	2,665,413	2,680,415	2,693,744	2,941,407
Total	12,273,964	12,171,867	12,421,721	12,745,155	13,241,973

Staffing

Changes in the number of personnel are included in the budget due to the significance of the cost of additional staffing. Not only does salary have 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. This includes part time staffing as well, 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 be aware that overtime is an indication of additional staffing needs, usually not sufficient to merit an additional position.

Fulltime Equivalents

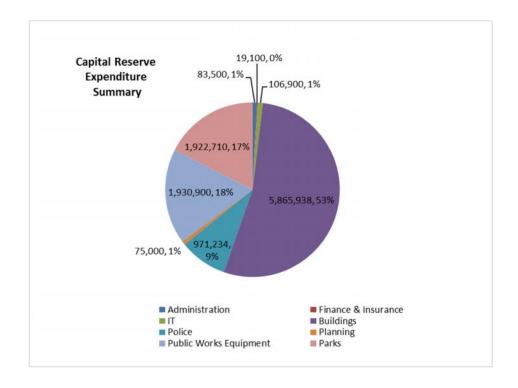
The number of township "Full-time Equivalents", a measure of employment based on the number of hours paid for all staff helps determine the rate of change in the staffing levels of the township. One FTE is equivalent to 2080 hours worked. The proposed table is included for your reference. The resident per FTE provides information as to the relative size of the township staff for the amount 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	2017	2018	2019	2020	2021			
Population	18,660	18,847	19,035	19,225	19,611			
Elected Officials	7,464	7,539	7,614	7,690	7,844			
Administration	4,147	4,188	4,230	3,845	3,922			
Finance	5,331	4,712	4,759	4,806	4,903			
Buildings & Grounds	12,440	12,565	12,690	12,817	13,074			
Engineering	3,393	3,427	3,461	3,495	3,566			
Police	748	756	763	771	786			
Planning & Zoning	4,147	4,188	4,230	4,272	4,358			
Public Works	1,166	1,178	1,190	1,202	1,226			
FTES								
Elected Officials	2.5	2.5	2.5	2.5	2.5			
Administration	4.5	4.5	4.5	5.0	5.0			
Finance	3.5	4.0	4.0	4.0	4.0			
Buildings & Grounds	1.5	1.5	1.5	1.5	1.5			
Engineering	5.5	5.5	5.5	5.5	5.5			
Police	23.5	23.5	23.5	23.5	23.5			
Police OT (from YE)	1.4	1.4	1.4	1.4	1.4			
Planning & Zoning	4.5	4.5	4.5	4.5	4.5			
Public Works	15.5	15.5	15.5	15.5	15.5			
Public Works OT (from YE)	0.5	0.5	0.5	0.5	0.5			
Total	62.9	63.4	63.4	63.9	63.9			

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 and the Piney Ridge 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

Capital Reserve Fund	2017	2018	2019	2020	2021
Administration	52,000	4,000	0	27,500	0
Finance & Insurance	0	7,000	12,100	0	0
Π	55,000	36,900	15,000	0	0
Buildings	493,618	2,513,164	31,078	28,078	2,800,000
Police	181,813	204,610	251,413	179,759	153,639
Planning	25,000	0	0	50,000	0
Public Works Equipment	283,200	451,700	146,500	464,300	585,200
Parks	986,400	495,900	71,500	68,910	300,000
Total	2,077,031	3,713,274	527,591	818,547	3,838,839
Roads	2017	2018	2019	2020	2021
Liquid Fuels	143,000	170,000	186,000	205,000	226,000
Capital Reserve	138,000	242,000	266,000	366,000	161,000
Transportation Improvement	3,447,079	1,439,900	1,640,000	1,656,377	2,201,000
Piney Ridge	0	0	0	0	0
Total	3,728,079	1,851,900	2,092,000	2,227,377	2,588,000

The Capital Reserve fund comprises the equipment capital requests along with occasional projects. This is one of the Capital Projects Funds. Each department puts in requests for equipment in this fund.



The Special Revenue Funds are those funds that have a special assessment to obtain revenue rather than taxes. The township adds a separate assessment for street lighting and fire hydrants, while the state administers a fuel tax to help local governments maintain their roads.

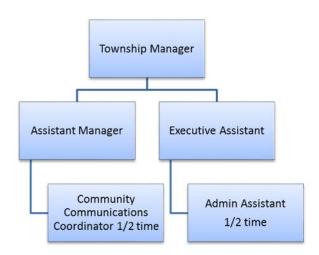
Special Revenue	2017	2018	2019	2020	2021	TOTAL
Street Light	15,054	15,506	15,971	15,971	16,450	78,954
Hydrant	28,644	29,504	30,389	30,389	31,300	150,226
Liquid Fuels	540,000	573,000	604,000	633,000	654,000	3,004,000
Total	583,699	618,010	650,360	679,360	701,751	3,233,179

Departmental Expenditures

ADMINISTRATION DEPARTMENT

The Administration Department proposes to spend \$83,500 or 0.8% of the total Capital Reserve fund expenditures during the term of this capital plan.

Organizational Chart



Administration Staffing

The Administration Department has recognized the need to complete some historical scanning of documents to reduce the hard copy storage and improve retrieving time of certain documents. Existing staff does not have sufficient time available to provide a dedicated effort to accomplish this task. The suggested approach is to use an intern or business school graduating student. With the document imaging software changes in 2016 this part-time position was not filled and is being rebudgeted.

The Community Communications Coordinator position began as a part-time position in 2012 and has functioned well. The township's community engagement has expanded during the past 5 years and maintaining the various informational outlets has grown. Moving this position to full-time will allow the township to both maintain its current information outlets but also expand to other outlets and media.

FERGUSON TOWNSHIP						
			P STAFF			
			ON STAF			
	PART TII	ME SCAN	INING ST	AFFER		
Direct Coots						
Direct Costs						
Estimate	2017	2018	2019	2020	2021	Total
Salary	6,000					6,000
Health/Eye/Dental	0					0
Life/Disability Insurance	0					0
Pension	0					0
Employer Taxes	567					567
Workers Comp	296					296
Total	6,863	0	0	0	0	6,863
		/ 001111		NIO 000		
PT to FT CC	DMMUNIT	Y COMMU	JNICATIC	NS COO	RDINAIC)R
Direct Costs						
Estimate	2017	2018	2019	2020	2021	Total
Salary				35,963	35,963	71,926
Health/Eye/Dental				24,000	24,000	48,000
Life/Disability Insurance				0	0	0
Pension				3,596	3,596	7,193
Employer Taxes				2,871	2,871	5,742
Workers Comp				1,777	1,777	3,554
Total	0	0	0	68,208	68,208	136,415
GRAND TOTAL	6,863	0	0	68,208	68,208	143,278

Department Activities

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

The goal of the Administration Department is to strive 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. Our goal is 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 basic service needs of the residents and businesses. Federal and state mandates many times affect the township, requiring the township absorb additional costs while maintaining current staffing levels. At the end of the day, the delivery of services that many residents, businesses and visitors have come to expect must be performed.

2016 Accomplishments

The Administration Department has completed a number of goals through mid-year 2016. With new members of the Board of Supervisors starting their term in 2016, and an early vacancy on the Board, staff coordinated the process to first fill the vacancy and secondly to conduct a Board orientation training session. Department staff completed fundraising and secured in-kind contributions while coordinating the Louis E. Silvi Baseball Complex field lighting project. The Community Communications Coordinator has posted six eNewsletters, published a Spring Newsletter and maintained and kept current the Township's Web Page, Twitter account, and media releases. Staff also published a new resident Welcome Guide. Grant applications for park improvements have been written and submitted to DCNR. A testing exercise has been conducted on the Continuity of Operations Plan with senior staff. Finally, the Township Code of Ordinances have been migrated from the former publisher to General Code.

Strategic Plan Alignment

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

Objective 2.1: Identify and plan for the demands on public services as development expands to new areas of the Township.

 Action Step 2.1.1: Manage staff size and equipment inventories as needed to continue to provide street maintenance, brush and leaf collection, and other service demands that increase with more development.

Objective 6.1: Update and maintain hardware and software used by Township staff.

 Action Step 6.1.3: Maintain inventory of all computing hardware to allow sufficient time for replacement.

Objective 6.3: Encourage participation from new candidates on the Township's Authorities, Boards, and Commissions.

 Action Step 6.3.4: Distribute resident survey and use results to identify gaps in resident engagement.

Objective 9.1: Improve and maintain storm water management practices.

FERGUSON TOWNSHIP 2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS ADMINISTRATION

30.400.401.750		
Description	Year	Amount
Document scanning assistance	2017	see salaries
Community Survey Update	2017	15,000
Meeting Room Protective Equipment	2017	11,000
Replace Administration Vehicle	2017	26,000
Replace Meeting Room Projector	2018	4.000
Replace Administration Vehicle	2020	27,500
Fulltime Community Communications Coordinator	2020	see salaries
New Fire Station Land Purchase	2017	see buildings
New Fire Station	2021	see buildings
Total		83,500
Subtotals by Year	EXPE	NDITURES
	2017	52,000
	2018	4,000
	2019	0
	2020	27,500
	2021	0
	Total	83,500

2017	
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Community Survey \$15,000

In 2011, the Township received the results of its first Community Survey in 20+ years. In order to evaluate the impact of changes implemented since the 2011 survey a follow up survey or some other method, such as community focus groups, combined with the survey should be conducted. The township has investigated utilizing Penn State University resources or the ICMA National Citizens Survey, which allows a municipality to benchmark against peer municipal operations of similar size, services provided, and population. This survey would assist with developing an update to the township's Strategic Plan.

Meeting Room Protective Equipment

\$11,000

Rapid Deployment Shields are being proposed to provide emergency shielding of township representatives conducting public meetings in the main meeting room. As part of the township's training on active shooters safe exiting of the building is the first step. Given the exit points in the main meeting room some protective devices are recommended. Five units are proposed in 2017.

New Fire Station - Land Purchase

\$80.000

Please note: The cost of the Fire Station is included in the Buildings department. The narrative is provided for your information as an Administration project.

In anticipation of the need for a new fire station to be located in the Township consideration should be given to acquiring land as soon as practical. Early indications are that the ideal location would be somewhere west of West College Avenue but not beyond Plainfield Drive. Anticipated lot size is 2 acres and a subdivision plan would need to be completed.

Administration Vehicle \$26,000

It will be time to replace the administration vehicle and transfer the existing vehicle to the fleet.

2018

Replacement of Meeting Room Projector

\$4,000

The meeting room projector is over ten years old and has reached its useful life.

Acquisition/Lease of Brush and Leaf Composting Property

\$80,000

Brush and leaf collection has become a major public works activity on a monthly basis. State regulations requiring the collection of brush and leaf yard waste has created a cost center for the township in its annual operating budget. Transportation and recycling of this waste needs to be a major consideration. Leaf and grass waste is being composted by State College Borough under contract with the township. Brush on the other hand is being disposed of in two ways: Loose brush is being transported to the Hawbaker Recycling facility in Patton Township, while chipped brush is being stored for transport by the University Area Joint Authority for its composting with sewage sludge. Acquiring land closer to the brush collection point will reduce transport cost, save manpower time and wear and tear on equipment. UAJA has indicated an interest in partnering on this project. A site off of Old Gatesburg Road has been identified and the property owner has indicated a willingness to sell or lease acreage long-term.

2019

No requests have been made for the current year.

2020

Administration Vehicle

\$27,500

It will be time to replace the administration vehicle and transfer the existing vehicle to the fleet.

2021

New Fire Station

\$2,800,000

Please note: The cost of the Fire Station is included in the Buildings department. The narrative is provided for your information as an Administration project.

In the early years of this Capital Improvement Program budget the Centre Region COG Public Safety Committee will likely endorse a study to determine the need for a new fire station in Ferguson Township. The study will determine the ideal site, size and configuration of the station. Based on a two bay station with kitchen, social area, and sleeping quarters it is estimated this facility with cost approximately \$2.8 million.

Executive Recruitment

The township is preparing for the retirement of certain senior staff within the term of the CIP. With this in mind, the Board has created a sinking fund to underwrite the cost of an executive search and related hiring costs.

FERGUSON TOWNSHIP									
2017 – 2021 CIP CAPITAL	2017 – 2021 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS								
EXECUTIVE S	SEARCH SI	NKING FUN	ID						
	1.400.401.XXX		Darley-Cons	Delever					
Description	Year	Additions	Deductions	Balance					
Beginning Balance				10,000					
Annual Sinking Fund Contribution	2016	10,000		20,000					
Annual Sinking Fund Contribution	2017	10,000		30,000					
Annual Sinking Fund Contribution	2018	10,000		40,000					
Annual Sinking Fund Contribution	2019	10,000		50,000					
Annual Sinking Fund Contribution	2020	0		50,000					
Annual Sinking Fund Contribution	2021	0		50,000					
Total		40,000	0						
Subtotals by Year		EXPEND	ITURES						
Subtotale by Toda		2017	0						
		2018	0						
		2019	0						
		2020	0						
		2021	0						
		Total	0						

FINANCE DEPARTMENT

The Finance Department includes the township and school real estate tax collection. The Finance Department requests total \$19,100 or 0.2% of the total Capital Reserve fund proposals for this capital plan.

The goals of the Finance Department includes on-going reviews of the township operations with staff to promote waste reduction, efficiency and cost effective operations. This comprises using technology, staff training, trend analysis, cost management techniques, vendor relations, best practices techniques, performance benchmarking and peer group discussions.

Strategic Plan Alignment

The Finance Department 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.

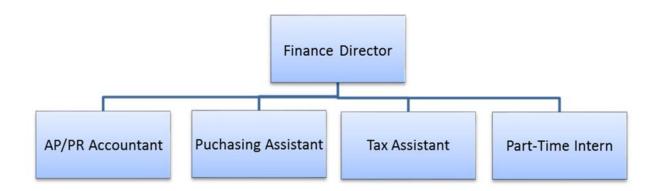
Goal 4.0 Service Delivery

Ensure service delivery in Ferguson Township is sufficient to accommodate growth, addresses new concerns of the community, 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.

Organizational Chart



The Finance Department includes the tax collection and debt components of the Township. Activities consist of treasury management, billing and collection of revenues, payroll, accounts payable, debt management, risk management, grant management, fixed assets and inventories.

With the current workload and staffing, the department is requesting a part time employee beginning in 2018. Even with streamlining procedures and expert staff, It is expected that additional help will be needed to maintain current service levels.

FERGUSON TOWNSHIP									
	2017	– 2021 C	IP STAFF	ING					
FINANCE STAFFING									
PART TIME ASSISTANT									
Direct Costs									
Estimate	2017	2018	2019	2020	2021	Total			
Salary	10,000	10,000	10,000	10,000	10,000	50,000			
Health/Eye/Dental		0	0	0	0	0			
Life/Disability Insurance		0	0	0	0	0			
Pension		0	0	0	0	0			
Employer Taxes	873	873	873	873	873	4,365			
Workers Comp	494	494	494	494	494	2,470			
Total	11,367	11,367	11,367	11,367	11,367	56,835			

Historically, since changes in revenue and expenditures occur over years, rather than months, it is critical to monitor trends in order to adjust for such changes. The Finance Department works with the township staff and other related agencies, the GFOA (Government Finance Officers Association), the Centre Region COG and municipalities to obtain critical information on the

health of the township at large. This way, the township can proactively manage the township operations to adjust to these changes.

One way 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. This supplements the tax revenues and reduces the burden on the township taxpayers.

TAX COLLECTION

The RBA cloud-based system is used for real estate tax collection and has been very effective for the township and school collections. This system is used for the township and school real estate tax collections.

FINANCE ITEMS

With nearly three years of experience with Springbrook accounting software, the Finance Department is considering additional capabilities of the software that was purposely delayed to allow staff sufficient training time on the new package.

One such capability is electronic requisition/purchasing/accounts payable workflow. The concept of the electronic workflow is to eliminate paper documents related to requesting and authorizing purchases. Currently, the system is a paper system, where the individual requesting authorization to purchase an item completes a requisition form that is approved via a signature of the department head. Once approved, staff can order the item. The paper requisition is copied and one copy is retained in finance for matching with the invoice. If a formal purchase order is required, the Finance Department prepares one using the accounting system. The township manager approves the purchase via his signature. Once approved, staff can order the item. The purchase order is matched to the invoice. While this paper system has functioned adequately for many years, technology is changing rapidly. Paper and related costs are being eliminated where possible to save money and time.

Springbrook has the capability to allow users to complete a requisition on the system directly and allow department heads and/or the Township Manager to approve the request on the system, as well. The main benefits of electronic requisitions are to reduce the chance of lost paperwork, reduce the amount of paper flow, speed up the process in many cases, and to save storage costs for records. Another benefit is to require staff to enter all the necessary data before the request can be submitted. Currently, it is common that certain data is missing, requiring additional staff time to obtain the missing data.

As the township becomes more advanced in technology, other options become available for consideration. One such item is inventory control. Finance is investigating the cost and benefit of implementing an inventory system for the Springbrook system. This system would track small items that do not meet the fixed assets threshold in cost. Small tools, automotive parts and supplies, salt, etc. Finance would partner with public works to implement such a project.

ser 2017 – 2021 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS FINANCE/TAX

30.400.402.750		
Description	Year	Amount
AP/PO workflow Springbrook	2018	7,000
Inventory Module Springbrook	2019	12,100
Total		19,100
Subtotals by Year	EXPENDITURES	
	2017	0
	2018	7,000
	2019	12,100
	2020	0
	2021	0
	Total	19,100

DEBT SERVICE



Proposed and current debt service costs total \$3.29 million or 3.6% of the total costs for all funds in this capital plan. Part of the long term planning for capital items must include debt service considerations. Given the scope of the township strategic plans, many of the proposals require significant funding to be completed in a reasonable time. Financing such projects may require longer-term payments than may be possible given available township resources. Other future debt needs include a fire station located in Ferguson Township and a second floor addition to the township main building.

The proposed debt service for the new five years is listed in the following chart. This includes a proposed Public Works facility and related loan payment.

The current township debt will be retired at the end of 2017, providing resources needed to complete the proposed projects.

The proposed township maintenance facility cost is based upon a \$2 million 20-year loan at 3% fixed interest rate. The fueling facility would be financed over 10 years piggybacked with the township maintenance facility financing.

The Terraced Streetscape improvements will be funded through a grant and a local share amount of approximately \$600,000 which would be through a 10 year PA Infrastructure Bank Loan (PIB).

Due to the amount of park projects and related costs, debt funding has been included with these expenditures as well.

The township's portion of the regional debt is also included. This assumes no change in the COG formula for the pools loan, for which the municipal contributions are recomputed after 10 years. For the current Capital plan, consideration must be given to the COG debt in addition to any township debt. The regional pools and the regional parks have a long-term debt service requirements

FERGUSON TOWNSHIP						
2017 – 2021 CIP CAPITAL EQUIPMENT DETAIL-C	ASH BASIS					
DEBT SERVICE PROJECTIONS						
TOWNSHIP DEBT	Evniros	2017	2018	2019	2020	2021
Township 2014 Refinancing	Expires 2017	558,725	2010	2019	2020	2021
COG Pools Debt	2028	120,000	120,000	120,000	120,000	120,000
COG Parks Debt	2031	110,000	112,000	114,000	114,000	114,000
Fueling Facility financing (\$300K, 15 yrs 3%)	2032		45,000	45,000	45,000	45,000
Terraced Streetscape PA Infrastructure Loan (\$600K,10 yr 2%)	2026	67,000	67,000	67,000	67,000	67,000
Ferguson Township Maintenance Facility (\$2.3M, 20 yr, 3%)	2038		155,000	155,000	155,000	155,000
Township Fire Station (\$2.8M, 20 yr, 4%)	2040					206,000
Park Improvement Loan (Tudek, 350K, 10 yr 3%)	2027	41,000	41,000	41,000	41,000	41,000
Park Improvement Loan (Suburban 200K, 10 yr 3%)	2028		23,000	23,000	23,000	23,000
Park Improvement Loan (Haymarket 235K, 10 yr 3%)	2031					28,000
Land Purchase (240K, 10 yr 3%)	2027	28,000	28,000	28,000	28,000	28,000
Total		924,725	591,000	593,000	593,000	827,000

INFORMATION TECHNOLOGY DEPARTMENT

The Information Technology department requests \$106,000 or 1.0% of the total Capital Reserve Fund proposals for this capital plan.

Currently, a third party, Hinton and Associates, manages the information technology department. The 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.

OUTLOOK AND STRATEGIC PLANNING

It seems like technology is in a constant state of flux. What was common 5 years ago may be completely different today. Mobile apps are expanding exponentially and cloud versions of software are commonplace. What will the next 5 years bring to the industry and how will the township adapt or deal with the changes? Historically, the township has done a good job of assessing the marketplace and making needed changes within the launch window. Will this practice be as effective in the next five years?



Software is expensive. And many products are licensed monthly now, rather than licensed over the life of the product as was commonplace in the past. Part of the reason for the cost is the complexity of the hardware and software and the multitude of platforms.

THE TOWNSHIP IS GROWING

The township is large enough now to handle most IT activities independenty rather than requiring a group endeavor. Part of the reason for this is the cost of hardware for the amount of computing power has decreased considerably. There are some real benefits to this. Decisions can be made that are tailored to the township needs and implementation can be performed faster. It is important to be aware that this also increases risk. It will require diligence on the township to plan for the technology needs using experts and relying on the IT contractor in assisting with choices. The IT strategic plan and the CIP fills this need.

SECURITY

One of the current issues facing business, government, residents and anyone using the internet is security. One threat that made the news recently is ransomware, or malicious software that is designed to block access to a computer system until a sum of money is paid. These types of threats are constantly changing and require the township to adapt to them. The township can protect itself using several methods, including staff training, enhanced firewalls, limiting access points, antivirus/anti-malware protection, proactive scanning of the network, and intrusion detection. Data backup, both onsite and offsite, protects the server data in case of fire or other disaster.

ARCHITECTURE

The township is virtualizing servers (sharing hardware to operate multiple operating systems on one piece of hardware). This requires redundancy since if a server fails, it will affect several systems. The total cost of hardware can be significantly less than the traditional architecture. The township is pursuing server virtualization where cost-effective and beneficial.

Virtualization Defined

For those more visually inclined...



INTERNET ACCESS

There is a new player on the block that may benefit the township with internet speed and cost. The Keystone Initiative for Network Based Education and Research (KINBER) network is a non-profit internet company providing services to the educational and government markets using fiber optic cable. The township could contract with KINBER to provide internet access directly to the township at speeds far superior to the current configuration. At the same time, it is simpler and with our own firewall, could provide a more stable environment for internet and mobile communications



TRAINING

One component of the changing technology is the constant need for training. Microsoft Office (a staple of the township office activities) 2016 is considerably different than even the 2010 version and the versions before that (2003, 2007). Users cannot inherintely understand how software works and how best to use it and the variety of applications is expanding along with the complexity of said software. It is essential to train staff how to be proficient using the tools at hand.

CLOUD SOFTWARE

Technology is changing and cloud software is finding footing in industry. The Centre Region COG Codes software and the Centre Region COG Finance accounting software are evidence of this. Vendors are finding savings in cloud software and some are requring customers to convert to the cloud product. Ascentis, the township's human resource software is not renewing the server version of the license and requiring customers to subscribe to the cloud version. software. The township payroll is on the cloud, as well. The township is subscribing to Microsoft Office 365 (cloud version of Office) for department heads and certain other users. One advantage of cloud software is that users have access to the most current software available and it may be automatically updated behind the scene.

Some software is not a good fit for the cloud. Geographic Information Systems (GIS) software is a good example. Due to the amount of data involved, communicating with the cloud becomes bottlenecked. It is likely that at some point in the future, this issue will be resolved.



DOCUMENT MANAGEMENT

The township has been using document storage technology for the past five years or more. This has been a learning experience with setting up the databases, deciding on indexing methods, importing the documents

and accessing the data. The township decided to replace the current software with another package (Laserfiche) that offers a content management solution, a user-friendly interface, has many government clients and is compliant with Department of Defense standards. Implementation is underway. The software offers many features beyond document storage, such as forms that could be used on the webpage for residents to complete electronically, workflow that could automate some paper processes and email archiving.

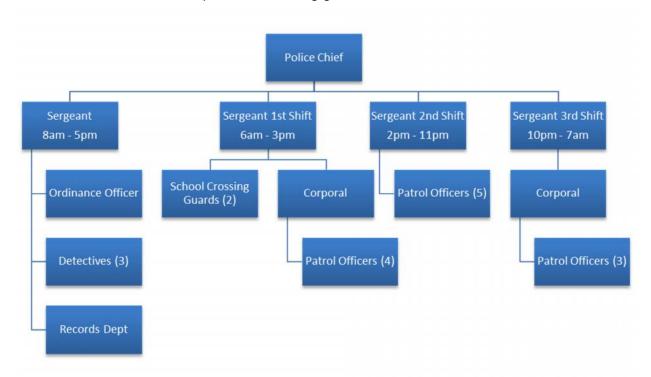
FERGUSON TOWNSHIP		
2017 – 2021 CIP CAPITAL EQUIPMENT DETAIL	-CASH BAS	SIS
INFORMATION TECHNOLOGY		
30.400.407.750		
Description	Year	Amount
New Fiber connection, firewall and installation	2017	25,000
Replacement server including database software and virtualization	2017	15,000
Backup system replacement server including software	2017	15,000
Network GB switch replacement of 10/100MB switch	2018	5,000
FacilityDude Work Order System (2018-2021 cost)	2018	26,900
Network GB switch for new PW building	2018	5,000
Replacement server including database software and virtualization	2019	15,000
Tota		106,900
	EXPE	NDITURES
Subtotals by Year	2017	55,000
	2018	36,900
	2019	15,000
	2020	0
	2021	0
	Total	106,900

POLICE DEPARTMENT

The Police Department is proposing to spend \$971,200 or 8.8% of the total Capital Reserve Fund expenditures during the term of this capital plan

Organizational Chart

The proposed organizational chart for the department is displayed below. The department employs 21 officers as well as the Chief, and two records assistants, a part time ordinance enforcement officer and two part time crossing guards.



Police Vehicle Fleet Map

The current police vehicle fleet map is included for your reference. It includes ten Patrol vehicles, some powered by Compressed Natural Gas, as well as administrative, detective and training vehicles. The Mobile Command Vehicle 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-7	FT-8	FT-10	FT-11	FT-12	FT-13	FT-14	FT-17	EVOC -2 FT-20		FT-21
Year/	2013 Chev	2013 Chev 2014 Chev 2013 Chev 2012 Chev 2016 Chev 2012 Chev	2013 Chev	2012 Chev	2016 Chev		70	2015 Chev		2013 Chev 2014 Chev	2014 Chev	2014 Chev	2011 Chev	2008 Chev	2008 Ford Crown	2000	CRV 1995
Make	Tahoe	Tahoe	Tahoe	Caprice	Tahoe	Caprice	Victoria	Tahoe	Equinox	Tahoe	Caprice	Impala	Tahoe	Impala	Victoria	MCV	Ford
Twp ID	100046	100259	100045	100043		100048	100195	100262		100044	100261	100260	100254	100123	100193		100252
NIV	1GNLC2E0 02F 0DR283016 86	NSK2E 341728	1GNLC2E 06DR2842 97	6G1MK5U 23CL6463 31	<u> </u>	6G1MK5U 2XCL6444 32	2FAHP71 IGN5K2E V39X140 C1F126384 033 50		2GNFLEE KXG6299 (C) 597	2GNFLEE 1GNLC2E KXG6299 06DR2843 297 50 2	6G3N55U 1G11XSS 1GNSK2 22E19597 L2EU145 E04BR32 25 604 6560	1G11X5S 1 L2EU145 1 604		2G1WS 5531813 38892	2G1WS 2FAFP71V 5134LP3 5531813 28X10685 7J8Y331 38892 1 9896	5134LP3 1FDJE30 7J8Y331 F8SHB77 9896 651	1FDJE30 F8SHB77 651
In Service	May-13	May-14	May-13	Oct-12	Aug-16	Oct-12	90-mf	Jul-15	May-16	May-13	Apr-15	Mar-14	Aug-12	Mar-10	Oct-12	Jul-05	Jun-08
Assign mt	Patrol		Patrol	Patrol		Patrol	Patrol	Patrol]	Detective I	Patrol	ΑII	Chief		Detective EVOC		Spec	Spec
CNG	Y (Jan 2014) Grant	N	Y (Jan 2014) Grant		Y			Z	z	Y (May 2013)	Z		Z				
	XTL2500	XTL2500	XTL2500	XTL2500	XTL2500	ХП2500	XTL5000	APX6500	ХП2500	XTL5000	APX4500	XTL2500	XTL2500	XTL2500		Multiple	
Service	2013		2013	2013	2013	2013	2009	2015		2009	2015	2015					
MCT Model / In	M-6 (2009)		M-6 (2010) (2010)		M-6 (2010)	M-6 (2010)	<u> </u>	GETAC Tablet (2015)	None 1	GETA0 Tablet M-6 (2010) (2015)	r)	None (M-6 (2010)	None 1	None		None
VASCA R/ VSPEC	VASCA R/ VSPEC VASCAR	VASCAR	VASCAR VASCAR VASCAR VASCAR	VASCAR	VASCAR		VSPEC	VASCAR Plus IIIL	A/N	VASCAR	VASCAR Plus IIIL	N/A	N/A	N/A	N/A		X A/A
In service							2009	2015			2015						
Replace	2019	2020	2018	2019	2022	2019	2020	2021	2022	2020	2022	2021	2017	2018		N/A	N/A
Color	Bl/Silver	Bl/Silver		Silver	Silver	Silver	Dk Blue	Bl/Silver	Blk	Bl/Silver]	Black	Black	Silver	Black	White	White	
Registr n	MG4783G	MG7709G M	MG4785G	MG3039G	G4785G MG3039G MG7642F MG3038G		EDD0010 MG6229H		MG2392J]	MG2392J MG4784G	JLE9032	JKK3229	MG6670F	HJS9895	MG6670F HJS9895 MG7443D 95356MG MG4227B	95356MG	MG4227B
Mileage June 2016	74,374	55,073	81,000	70,362		70,233	70,841	8,624	525	61,474	8,200	13,320	90,106	45,972	124,107	5,235	187,422

Police Department Capital Requests

The total proposed Police Department capital items for the 2017 to 2021 CIP is described in the following requests. The proposed five-year Capital Improvement Plan expenditures are based on currently known information and are coordinated with the Township's strategic plan. It includes fleet rotation based on a 5 years or more cycle of 1 to 3 vehicles per year, depending on condition of the vehicle. Most new patrol vehicles have been specified as Chevrolet Tahoes. Additionally, the CNG tank and fueling systems were previously offset by grant funding are best accommodated in a larger vehicle such as the Tahoe. These bi-fuel vehicles have environmental benefits as well as fuel cost benefits.

Police Vehicles & Accessories

	FERGUSON	TOWNSHIP)			
2017 – 2021 CIP C	APITAL EQU	IPMENT DI	ETAIL-CAS	H BASIS		
	POLICE V	EHICLES				
	00.400.4	10.750				
	30.400.4					
Description	2017	2018	2019	2020	2021	Total
Police Vehicles & Accessories (1) (FT-14)	51,513					51,513
CNG Conversion (1) (new tank) (FT-14)	10,000					10,000
Police Vehicles & Accessories (2) (FT-3/FT-17)		78,110				78,110
CNG Conversion (1) (existing tank)		6,500				6,500
Police Vehicles & Accessories (3) (FT-1/FT-4/FT-6)			155,913			155,913
CNG Conversion (1) (existing) & (2) (new tanks)			27,500			27,500
Police Vehicles & Accessories (3) (FT2/FT11/FT7)				152,259		152,259
CNG Conversion (1) (existing tanks) & 2 (new tanks)				27,500		27,500
Police Vehicles & Accessories (3) (FT8/FT12/FT13)					135,639	135,639
CNG Conversion (1) (existing tank) & (1) (new tank)					18,000	18,000
						0
						0
Total	61,513	84,610	183,413	179,759	153,639	662,934

Grant money is not guaranteed for the CNG conversions requested in the CIP. Any grant funding that becomes available would decrease the cost to the township for the CNG conversions.

The CNG vehicles will have reusable fuel tanks, with an estimated life of 20 years. Given the expense of the tanks, estimated at \$4,000 each, reusing them could potentially save the township at least \$8,000 per vehicle in conversion costs over the life of the tank.

2017

Police Vehicles & Equipment

\$51,513

One vehicle will be due for replacement.

Replace 2011 Chevrolet Tahoe (FT-14) 4 WD	41,513
Equipment and installation	10,000
Subtotal	51,513
Total	51,513

Replacement costs include paint and graphics (\$1,500). Equipment includes security partition, solid rear seat, fleet key, shotgun lock, console and trunk organizer and any necessary replacement of emergency lighting, radio, siren speakers, switches, wiring, etc.

CNG Conversions \$10,000

This cost is for the new Tahoe (FT-14) to be up-fitted to operate on Compressed Natural Gas. Grant funding may not be available, however, the overall fuel savings and needed person and equipment space this vehicle provides validates the request. (1 @ \$10, 000 each.)

2018

Police Vehicles & Equipment

\$78,110

Two vehicles will be due for replacement. Tahoes are specified for patrol vehicles; Impalas for administrative and detective unit vehicles although all makes/models will be reviewed for best value to need at the time of purchase.

Replace 2013 Chevrolet Tahoe (FT-3)	39,092
Equipment and installation	10,500
Subtotal	49,592
Replace 2008 Chevrolet Impala (FT-17)	22,518
Equipment and installation	6,000
Subtotal	28,518
Total	78,110

CNG Conversions \$6,500

One unit may be converted to CNG to continue the program and recognize fuel savings. This is the first year the CNG tanks we originally purchased will be able to be reused, so upfitting costs should be decreased by the value of the tank, which is estimated at \$4,000. (1@\$6,500)

2019

Police Vehicles & Equipment

\$155,913

Three vehicles will be due for replacement.

Replace 2013 Chevy Tahoe (FT-1)	40,971
Equipment and installation	11,000
Subtotal	51,971
Replace 2012 Chevy Caprice (FT-4)	40,971
Equipment and installation	11,000
Subtotal	51,971
Replace 2012 Chevy Caprice (FT-6)	40,971
Equipment and installation	11,000
Subtotal	51,971

Total	155,913
-------	---------

CNG Conversions \$27,500

All units will need converted to CNG should we choose to continue the program and recognize the fuel savings. (2 @ \$10,500 & 1 @ \$6,500))

2020

Police Vehicles & Equipment

\$152,259

Three patrol vehicles are due for replacement.

Replace 2014 Chevrolet Tahoe (FT-2)	42,945
Equipment and installation	11,500
Subtotal	54,446
_	
Replace 2009 Crown Victoria (FT-7)	42,945
Equipment and installation	11,500
Subtotal	54,446
Replace 2013 Chev Tahoe (FT-11)	42,945
Equipment and installation	11,500
Subtotal	54,446
Total	163,337

CNG Conversions \$27,500

All units will need converted to CNG should we choose to continue the program and recognize the fuel savings. (2 @ \$10,500 & 1 @ \$6,500))

2021

Police Vehicles & Equipment

\$135,659

Two vehicles will be due for replacement.

Replace 2015 Chevrolet Tahoe (FT-8)	43,516
Equipment and installation	11,500
Subtotal	55,016
-	
Replace 2014 Chevy Caprice (FT-12) (Unmarked Traffic)	42,016
Equipment and installation	6,000
Subtotal	48,016
Replace 2014 Chevy Impala (FT-13)	26,127
Equipment and Installation	6,500
Subtotal	32,627

Total	135,659

CNG Conversions \$18,000

The patrol vehicles may need converted to CNG should we choose to continue the program. (1 @ \$7,000 & 1 @ \$11,000)

Police Equipment

FERGUSON TOWNSHIP 2017 – 2021 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS POLICE EQUIPMENT

	30.	.400.410.750				
Description	2017	2018	2019	2020	2021	Total
Records Management/Mobile Data System	110,000					110,000
In-car Camera Systems		60,000				60,000
Body Worn Cameras			34,000			34,000
Drone (shared with Patton Township)	2,600					2,600
Speed Alert RADAR message sign	4,795					4,795
Alternative Light Source (ALS)	2,905					2,905
Total	120,300	60,000	34,000	0	0	214,300

2017

Records Management/Mobile Data System

\$110,000

The remaining initial costs of our newly replaced, regionally shared mobile data/records management system will be due this year. It is anticipated that up to \$101,000 of the estimated total of \$176,000 may be due. \$110,000 has been budgeted in previous years for this project. At the time of this writing, it is anticipated that \$75,000 to \$91,000 will be expended in 2016. All expenditures are dependent upon the date the contract is signed with the vendor and the agreed upon payment milestones are determined.

Drone Shared with Patton Township

\$2,600

The township is working with Patton Township to acquire a drone to be used in search and rescue and other police activities. This is the township's 50% share of the cost

Speed Alert RADAR Message Sign

\$4,795

The police department is requesting a newer model Speed Alert radar message sign with red & blue strobes to better draw driver attention to their speed. These signs are much appreciated by residents as they are an effective speeding deterrent in many places

Alternative Light Source (ALS)

\$2,905

The police department is requesting an ALS to assist in locating forensic evidence such as body fluids, fingerprints, fibers, shoeprints, hair, bone, , and gunshot residue left at crime scenes, as well as for better illumination of bruising injuries on victims.

2018				
In-car Cameras	\$60,000			
This purchase would add in-car audio/video cameras to the patrol fleet. (9 @ \$6 plus one 10 TB server @ \$4000 plus installation and training \$2000.)	,000 each			
2019				
Body Worn Cameras	\$34,000			
This purchase would add body worn cameras to officers' equipment. This amount would be reduced by any available grant funding. Currently there are PA law modifications and technology advancements that need to happen before these would be a prudent investment; it is anticipated that these will be in existance by this time. (18 @ \$100 each plus \$16,000 licensing costs and data storage.)				
2020				
No Items are requested at this time for this year.				
2021				
No Items are requested at this time for this year.				

Police Vehicle Equipment Sinking Fund

This sinking fund is to replace the mobile equipment, such as computers, monitors, keyboards, printers, air cards, in the police cars when they reach the end of life. It is also expected to be used for camera systems, license plate readers and other mobile technologies.

FERGUSON TOWNSHIP						
2017 – 2021 CIP CA			IL-CASH BAS	SIS		
		MENT SINKING				
	30.400.4					
Description	Year	Additions	Deductions	Balance		
Annual Sinking Fund Contribution	2012			10,000		
Annual Sinking Fund Contribution	2013	10,000		20,000		
Annual Sinking Fund Contribution	2014	10,000		30,000		
Mobile Data System	2014		4,820	25,180		
Annual Sinking Fund Contribution	2015	20,000		45,180		
Mobile Data System	2015		4,820	40.360		
Annual Sinking Fund Contribution	2016	30,000		70,360		
Mobile Data Systems	2016		60,000	10,360		
Annual Sinking Fund Contribution	2017	30,000		40,360		
Annual Sinking Fund Contribution	2018	30,000		70,360		
In-car Camera Systems	2018		60,000	10,360		
Annual Sinking Fund Contribution	2019	30,000		40,360		
Body worn Camera System	2019		34,000	6,360		
Annual Sinking Fund Contribution	2020	0		6.360		
Annual Sinking Fund Contribution	2021			6,360		
Total		160,000	163,640			
Subtotals by Year		EXPEND	ITURES			
		2017	0			
		2018	60,000			
		2019	34,000			
		2020	0			
		2021	0			
		Total	94.000			
		Total	94,000			

PLANNING AND ZONING DEPARTMENT

The total proposed capital costs for the Planning and Zoning Department totals \$75,000 or 0.7% of the total Capital Reserve expenditures for the five years.

Organizational Chart



Department Activities

The Department of Planning & Zoning is responsible for the regulation of land use activity in the township including all subdivision and land development acitivity. Staff reviews plan submissions for any 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 the enforcement of township ordinances as they relate to items such as snow removal, abandoned vehicles, lawn maintenance, and more.

2016 Accomplishments

With the addtion of a Community Planner in 2015, and a new Planning Director in late 2015, the Department is ready to accomplish additional projects in the near future, most notably the Zoning and Subdivision and Land Development Ordinance revisions. In early 2016, Planning & Zoning staff issued a Request for Proposals through the PA Planning Association to attract professional planning consultants to assist with this endeavor. In June, the Planning & Zoning Director recommended Environmental Planning & Design of Pittsburgh, PA to complete the revisions to both planning documents with the assistance of both staff and steering committee. The project will encompass a 12 month coordination and development schedule with EPD, LLC.

Also, after a joint meeting between Ferguson Township and State College Borough in September of 2015, a recommendation was made as a result of the Executive Summary of the meeting, to continue discussions related to improvements within Terraced Streetscape District and neighboring Urban Village District. Two elected officials from each municipality were appointed to the joint committee along with professional staff. Meetings shall begin summer 2016, to determine what course of action should be taken to improve development potential with planned streetscape improvements in mind.

Strategic Plan Alignment

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

Consultant – Rewrite of Land Use Ordinances (rebudgeted from 2016)

- Action Step 1.2.1: Review land use ordinances and amend as necessary to encourage a working demographic that improves the income tax base for the township.
- Action Step 3.2.1: Collaborate with the Penn State University Agricultural Science College to amend permitted zoning district uses to allow new types of farming.
- Action Step 3.2.2: Examine township zoning regulations to identify areas that can be modified to promote the sustainability of agriculture as a business.
- Action Step 3.3.3: Review and modify zoning ordinances to encourage mixed-use districts, streamline the plan review process, and encourage other uses that are conducive to the success of small businesses.
- Action Step 5.1.1: Complete selection of consultant to submit recommendations to the Board of Supervisors to update existing Subdivision and Land Development Ordinances.
- Action Step 5.1.2: Review and update Subdivision and Land Development Ordinances and present to Board for adoption.
- Action Step 5.1.5: Revise zoning restrictions on alternative energies such as windmills and solar paneling to encourage renewable energy consumption.
- Action Step 5.2.2: Use the Centre Region Comprehensive Plan update to assist in planning for future growth and for assessing revisions to zoning regulations.

Terraced Streetscape District Improvements (2016)

- **Objective 3.1:** Create and maintain great neighborhoods that are diverse and offer a range of housing and other amenities.
 - Action Step 3.1.1: Apply for and secure grant funding to develop the West College Avenue Terraced Streetscape District (TSD).
 - Action Step 3.1.2: Partner with the Borough of State College and PADOT to develop the West College Avenue TSD.
- Action Step 3.3.3: Review and modify zoning ordinances to encourage mixed-use districts, streamline the plan review process, and encourage other uses that are conducive to the success of small businesses.

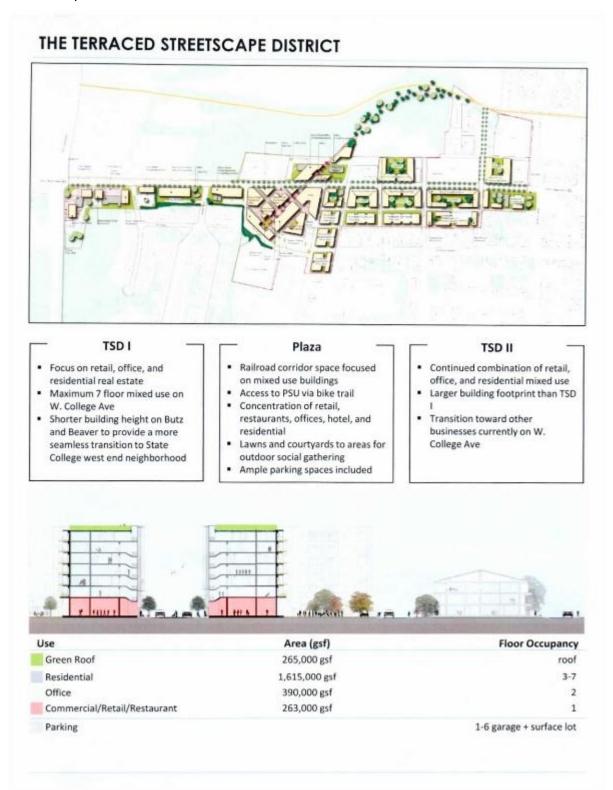
Land Use Master Plan (2020)

- Action Step 1.2.1: Review land use ordinances and amend as necessary to encourage a working demographic that improves the income tax base for the township.
- Action Step 1.2.2: Identify how different types of development impacts the township's tax base.
- Action Step 2.1.3: Develop a strategy for evaluating the impact of development on all services including, but not limited to fire, EMS, sewer, and water.

- **Objective 5.2:** Develop and implement policies that concentrate growth in areas within the Regional Growth Boundary to discourage sprawl.
 - Action Step 5.2.1: Rezone property within the Regional Growth Boundary based on forecasted growth and infrastructure in the township.
 - Action Step 5.2.2: Use the Centre Region Comprehensive Plan update to assist in planning for future growth and for assessing revisions to zoning regulations.
 - Action Step 5.2.3: Determine the impact of Chesapeake Bay Tributary Strategy to infrastructure planning and growth forecasts.

Sample Concept of the Terraced Streetscape District

This is one proposed concept by PSU graduate students presented to the Board of Supervisors at a regular meeting. It is for informational purposes only. It does not necessarily depict the final concept.



FERGUSON TOWNSHIP		
2017 – 2021 CIP CAPITAL EQUIPMENT DETAIL	-CASH BAS	SIS
PLANNING		
30.400.414.750		
Description	Year	Amount
Consultant to Rewrite Terraced Streetcape District	2017	25,000
Land Use Master Plan	2020	50,000
Tota		75,000
Subtotals by Year	EXPE	NDITURES
	2017	25,000
	2018	0
	2019	0
	2020	50,000
	2021	0
	Total	75,000

Planning & Zoning Department Requests

2017	
Consultant to Rewrite Terraced Streetscape District	\$25,000

Since created in 2011, the Terraced Streetscape District along the West College Avenue corridor has not developed as envisioned. Several obstacles to the successful development of the district including, but not limited to pedestrian connectivity, market demand, challenges with property owners, and more have caused the corridor to stagnate in a state of functional blight. Elected officials at Ferguson Township and the Borough of State College have expressed an interest in working together to overcome some of these challenges and create a walkable, mixed-use neighborhood that adds value to the community. Because of the challenges and relative novelty of this style of zoning, it is recommended that consulting services with expertise in this arena be retained to assist in this endeavor. It is possible that this cost could be shared with other partners.

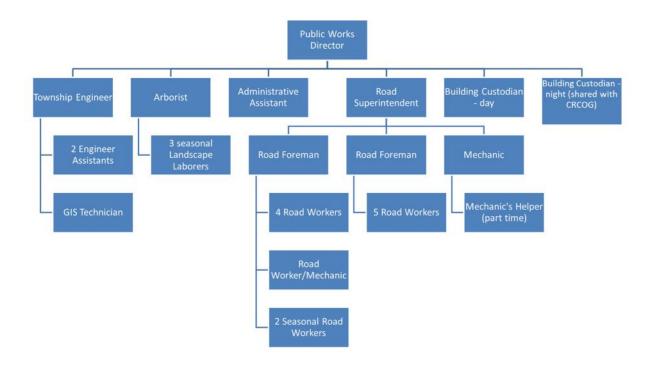
2020	J	
Land Use Master Plan		\$50,000

Several documents guide the township's planning decisions including the Official Map, Strategic Plan, and Centre Region Comprehensive Plan. A Land Use Master Plan would greatly supplement the value of those documents by providing an expanded, consolidated vision for community planning. The plan will focus on issues affecting the township such as a needs assessment on mixed-use development, areas where growth could be concentrated outside of the Regional Growth Boundary, accommodation of additional land uses, and promotion of economic development. This item will cover the cost of a consultant to assist in the preparation of this document.

PUBLIC WORKS DEPARTMENTS

PUBLIC WORKS STAFFING

The Public Works Department organizational chart is depicted below. New personnel may be requested in this 5-year CIP to meet ever increasing demands of the Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permit requirements and the demand for road maintenance and capital road repairs. The organizational chart reflects current staffing.



BUILDINGS AND GROUNDS SECTION

The total proposed capital costs for the Buildings & Grounds Section totals **\$5.87 million** or **53.4%** of the total Capital Reserve expenditures for the five years.

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

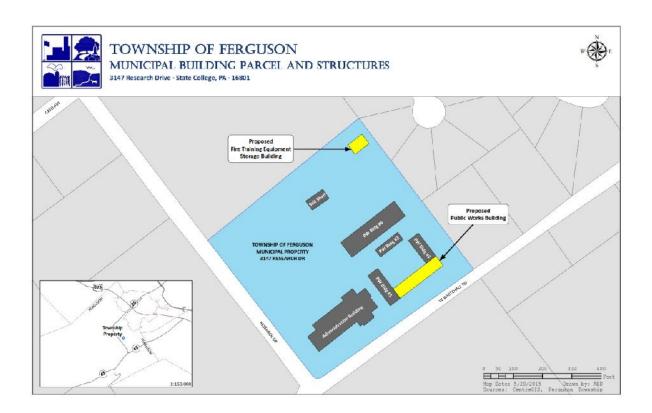
In 2017, funding is requested for the architectural fees for the building design and code required plans and for engineering fees associated with preparing a site plan for township approval. The site plan will also depict a new larger fueling station to replace the existing old pumps. The new station to be constructed in 2018 will include a canopy at a new location to serve more vehicles at one time and larger underground fuel tanks to allow larger fuel shipments which should increase competitive bid prices for fuel. The plan will show any additional parking and any upgrades to the stormwater management plan.

In 2018, the CIP reflects a new 9,000 square foot Public Works Maintenance Garage including truck lifts, truck mechanic bays, storage, offices, break room and showers, bathrooms, and a

truck wash facility. Square foot costs for such a building can vary from \$75/SF to \$350/SF depending on amenities, code requirements, location and construction type. The budget includes \$175/SF for a new 60' x 150' building constructed of steel frames on concrete footers, metal trusses, concrete slab on grade, painted steel roof and siding and fitted up as a public works garage described above. This new building should serve the needs of the Public Works Department well into the future and allow the Police Department to make better use of the existing PW Building 1 for vehicle maintenance and equipment storage which can be renovated at this same time. In recent years, the township has hired additional road workers and an arborist to better serve the needs of the growing Township. In addition, the acquisition of one man leaf collectors, brush grappler truck, and other equipment requires maintenance and storage. Currently, gross truck washing occurs outside on a stone pit and detailed washing occurs inside buildings with floor drains. The new building will be better suited for vehicle washing. The new building can also provide separate facilities such as locker rooms, bathrooms, and showers for men and women.

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The map of the township facilities includes the proposed fire trailer structure and the new public works facility. The project is currently being reviewed and options discussed.



The buildings and grounds department is requesting the following items for this planning period.

Due to the cost of certain projects, they are proposed to be financing using 10 to 20 year loans. They breakdown follows this table

FERGUSON TOWNSHIP		
2017 – 2021 CIP CAPITAL EQUIPMENT DETA	AIL-CASH BAS	SIS
BUILDINGS & GROUNDS		
30.400.409.750		
Description	Year	Amount
Renovate Tax Office to increase work area and HVAC	2017	100,000
Add interior door to Engineering	2017	5,000
Renovate PD to accommodate 4th detective	2017	15,000
Architectural design and engineering site plan new PW maintenance bldg	2017	285,900
New Fire Station Land Purchase	2017	80,000
Land Lease/Purchase for Brush/Leaf Composting	2018	80,000
Site work, utilities, parking for new PW maintenance facility	2018	100,000
New PW maintenance facility	2018	1,905,800
Renovate PW building 1 for CNG detection & removal	2018	50,000
New fuel pumps, island, canopy, tanks	2018	300,000
100K generator upgrade	2018	60,000
Paint interior of interior administration building	2019	10,000
Upgrade all township exterior lighting (LED or Metal Halide)	2019	15,000
New Fire Station	2021	2,800,000
Total		5,806,700
Total		3,800,700
	EXPE	NDITURES
Subtotals by Year	2017	485,900
	2018	2,495,800
	2019	25,000
	2020	0
	2021	2,800,000
	Total	5,806,700

Detailed Table for Buildings							
Description	Cost	Grants	Loans	Net cash			
Public works Maintenance Facility	2,341,700		2,300,000	41,700			
Fuel Pumps with Canopy	300,000		300,000	0			
Fire Station	2,880,000		2,800,000	80,000			
Land Lease for Composting	80,000			80,000			
Totals	5,601,700	0	5,400,000	201,700			

The Buildings & Grounds Department has a sinking fund for 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, fixtures.

FERGUSON TOWNSHIP						
2017 – 2021 CIP CAPITAL E			SASH BASIS	3		
BUILDING EQUII						
30.4	400.409.760					
Description	Year	Additions	Deductions	Balance		
Beginning Balance	2017			184,345		
Annual Sinking Fund Contribution	2017	41,000		225,345		
Upgrade exterior lighting PW buildings	2017		7,718	176,627		
Annual Sinking Fund Contribution	2018	41,000		266,345		
Paint exterior stucco Administration Building	2018		17,364	159,263		
Camera system upgrades	2019		6,078	260,267		
Annual Sinking Fund Contribution	2019	41,000		200,263		
Annual Sinking Fund Contribution	2020	41,000		301,267		
Replace carpet Admininstration Building	2020		19,144	181,119		
Replace Computer room halon fire suppression	2020		8,934	292,333		
Annual Sinking Fund Contribution	2021	41,000		222,119		
				292,333		
Total		205,000	59,238			
Subtotals by Year		EXPEND	ITURES			
		2017	7,718			
		2018	17,364			
		2019	6,078			
		2020	28,078			
		2021	0			
		Total	59,238			

ROAD PROJECTS

Road Projects make up the bulk of the capital expenditures for the township. For the term of this CIP, road projects total \$12.5 million or 53.5% of the total capital expenditures for all capital projects funds. The map below depicts the various roadwork that township is planning to undertake during the term of this capital plan.



The following table portrays the various road projects during the term of the CIP. Detailed information is including in the appendix for your review. Following the road table is a detail of certain projects that are being funded with grant money.

		FERG	GUSON TO	WNSHIP				
		2017 – 2021 CIP CAPIT	AL PROJE	CTS DETAI	L-CASH BA	ASIS		
			ORKS ROA					
FUND	CAT	DESCRIPTION	2017	2018	2019	2020	2021	TOTAL
R=road,								
TIF	R	Microsurfacing	242,000	266,000	293,000	322,000	354,000	1,477,000
CR	D	Cheasapeake Bay Pollutant Reduction Project	83,000	121,000	133,000	220,000	161,000	718,000
CR LF	D R	Park Hills Drainage Road Materials	55,000	121,000	133,000	146,000	07,000	455,000
LF	R	ADA Curb Ramp Replacements	55,000 88,000	73,000 97.000	80,000 106,000	88,000 117,000	97,000 129,000	393,000 537,000
TIF	R	West College Ave Streetscape	798,000	97,000	100,000	117,000	129,000	798,000
TIF	R	Traffic Signal Performance Metrics (ARLE)	41,100	598,900				640,000
TIF	R	Shared Use Path with Patton Township (1/3 share)	50,000	000,000				50,000
TIF	R	Corl Street/West College Signal	359,000					359,000
TIF	R	Kansa Ave	240,000					240,000
TIF	R	Sycamore Drive	484,000					484,000
TIF	R	Meckley Drive	76,000					76,000
TIF	R	ADA Handicap Ramps	62,000	68,000	75,000	82,000	90,000	377,000
TIF	R	Left Turn Lane Valley Vista/Bachman	396,000	33,330	, 5,550	32,000	33,330	396,000
TIF	R	Right Turn Lane Science Park/Circleville/Valley Vista	169,000					169,000
TIF	R	Martin Street	289,000					289,000
TIF	R	Whitehall Road				258,214		258,214
TIF	R	Deibler Road				97,163		97,163
TIF	R	East Chestnut Street	19,000			,		19,000
TIF	R	West Gatesburg Road	221,979	96,000	141,000		325,000	783,979
TIF	R	Fairfield Circle	,	93,000	,		5_5,555	93,000
TIF	R	Stafford Circle		54,000				54,000
TIF	R	West Blade Road Turnaround		24,000	27,000			51,000
TIF	R	Tadpole Road		240,000	,			240,000
TIF	R	Traffic Signal Improvements		-,	27,000	29,000	32,000	88,000
TIF	R	New Traffic Light Blue Course & Bristol			466,000	,	,	466,000
TIF	R	Appletree Circle			46,000			46,000
TIF	R	Avebury Circle			30,000			30,000
TIF	R	Shagbark Court			25,000			25,000
TIF	R	Sassafras Court			20,000			20,000
TIF	R	Hickory Hill Drive			106,000			106,000
TIF	R	Ashburton Court			23,000			23,000
TIF	R	Sheffield Court			20,000			20,000
TIF	R	Williamsburg Drive			73,000			73,000
TIF	R	Gardner Lane			77,000			77,000
TIF	R	Dry Hollow Road			111,000			111,000
TIF	R	Timothy Lane			80,000			80,000
TIF	R	Goddard Circle				44,000		44,000
TIF	R	Princeton Drive				23,000		23,000
TIF	R	Marengo Road				242,000		242,000
TIF	R	Dogwood Circle				19,000		19,000
TIF	R	Park Lane				51,000		51,000
TIF	R	Muncy Road				89,000		89,000
TIF	R	James Ave				105,000		105,000
TIF	R	Brooklawn Road				27,000		27,000
TIF	R	Ramblewood Road				101,000		101,000
TIF	R	Corrina Court				62,000		62,000
TIF	R	Pinecliff Road				105,000		105,000
TIF	R	West Aaron Drive					358,000	358,000
TIF	R	Teaberry Lane					322,000	322,000
TIF	R	Harris Street					177,000	177,000
TIF	R	Blade Drive					282,000	282,000
TIF	R	North Allen Street					209,000	209,000
TIF	R	Grace Street					52,000	52,000
		T					0.86	0
		Total	3,728,079	1,851,900	2,092,000	2,227,377	2,588,000	12,487,356

EXPENDITURES BY FUND									
CR	138,000	242,000	266,000	366,000	161,000	1,173,000			
TIF	3,447,079	1,439,900	1,640,000	1,656,377	2,201,000	10,384,356			
LF	143,000	170,000	186,000	205,000	226,000	930,000			
Total	3,728,079	1,851,900	2,092,000	2,227,377	2,588,000	12,487,356			

Description	Cost	Grants	Loans	Net cash
West College Ave Streetscape	798,000	798,000		0
Corl Street/West College Signal	359,000	176,084		182,916
Traffic Signal Performance Metrics	640,000	598,000		42,000
Totals	1,797,000	1,572,084	0	224,916

Cheasapeake Bay Pollution Reduction Plan (CBPRP)

In 2018 a new NPDES MS4 permit will be issued to us by DEP. As part of that permit, new pollution reduction requirements will be included that require a specific plan to be developed to show how pollutant loads to the Chesapeake Bay as well as impaired waterways (Slab Cabin Run and Spruce Creek) will be reduced. The permit requirements are still unknown but should be finalized this year. The required plan will need to be developed in 2017 for approval by DEP prior to the Notice of Intent to renew our permit. It is anticipated that there will be a large effort to inventory constructed BMPs to assess those that already exist that can be credited and then develop a model to determine existing pollutant loads as well as required BMPs that need to be constructed and maintained by the Township to meet the target pollutant load reductions.

Road Improvements by Contract:

Typically, each year all roadways in the township are inspected and the condition assessed and documented in the form of a pavement inspection report. This report is utilized by the Public Works Director to prioritize capital road improvements including paving and determine appropriate roadways for road surface preservation techniques such as microsurfacing. In 2016, the Public Works Department changed the software program utilited to assess road conditions and at the time this document was prepared, the software was not yet functional. Assessments from 2015, and a visual inspection in 2016 were used to prepare the CIP for roads.

Microsurfacing is a cold-mix paving system; it is not a hot-mix paving as is applied asphalt pavement. The material consists of small aggregate, asphalt emulsion, water and mineral fillers, and is generally applied in a 3/8" thick layer. A durable asphalt seal is applied to roads that have begun to show signs of aging and minor distress. By retarding the surface's natural breakdown, this process extends the pavement's lifespan 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.

Candidates for paving are listed as line items in the CIP. Due to the specialized equipment used in paving operations, large paving projects are competitively bid. Some small paving projects on low volume roads are self-performed by FTPW with rented equipment. Often these small paving projects can be done cost effectively in house due to the mobilization costs and low economy of

scale for a contractor for such small projects. It is also beneficial for the road crew to keep and enhance paving skills.

The CIP lists roads proposed for capital improvements, namely base repair by FTPW and a new asphalt wearing surface by contract. In some cases the existing asphalt surface will be milled off, and in some cases the existing surface will be overlaid. Budget pricing is based on historical costs for the township and estimated by the linear foot (prior to bidding, a detailed engineering estimate is prepared for each project). For example, an asphalt overlay of a 26 foot wide residential street in 2017 is estimated to cost \$50/linear foot assuming FTPW performs base repair and other activities such as sign installation, mail box replacement or resetting, topsoil or shoulder backup, seed and soil supplements. Additional costs are incurred if the storm pipe, curb, or sidewalk ramps are in need of repair. These additional costs are reflected either in the linear foot price for the roadway in the CIP or as separate line items. A road requiring cold in place recycling or reclamation can cost an additional \$45/linear foot. No recycling was done in 2016. Additional costs are incurred if residential driveway aprons are paved as part of a capital project.

Storm Pipe Improvements

Prior to a roadway being overlaid with new asphalt, the condition of the inlets and storm pipe is assessed either visually or by remote controlled camera. The CIP reflects any anticipated costs due to inlet and storm pipe replacement. New inlets set in place can cost \$3,000 each, less if just the top is being replaced. The cost of storm pipe replacement varies based on the length of pipe to be replaced, 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 installed will add about \$75/linear foot to the project cost. In 2015, FTPW started using a 2-part epoxy concrete patch material to repair concrete spalling and breaking in lieu of the cost and time to replace entire inlet tops.

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

In accordance with federal and state regulations, sidewalk intersection ramps are upgraded to current ADA standards. These upgrades are required whenever a road is paved or microsurfaced.

For roads to be paved, the concrete work is included in the CIP as a line item. The cost varies for each ramp depending on the existing grades and 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. The Township Engineer may determine that it is technically infeasible to upgrade some ramps. 16 ramps are proposed to be reconstructed with capital road projects in 2017.

For the first time, in 2015, roads that were microsurfaced had associated handicap ramps upgraded. Additional funding of \$80,000 is requested in 2017 to upgrade handicap ramps in accordance with the ADA federal mandates.

West College Avenue Streetscape Project

The township received grant funding to install an 8 foot wide sidewalk on both sides of West College Avenue from Corl Street to Buckout Street. This will be the first phase of construction of streetscape improvements along West College Avenue in an area zoned Terrace Streetscape District.

In 2016, necessary right of way was acquired.

In 2017, \$648,000 is anticipated to be spent for construction costs and \$150,000 for inspection fees. \$798,000 is anticipated in grant funding.

Traffic Signals:

Subject to installation of new hardware and software through an ARLE grant, traffic signal performance will be optimized on a more frequent basis than in the past, annually or more frequently.

PUBLIC WORKS EQUIPMENT

The following charts depict the capital equipment requested by Public Works Department during the term of the capital plan. Public Works equipment requests total \$1,930,900 or 17.6% of the Capital Reserve Fund expenditures.

Each year a condition report is generated by the mechanic and road superintendent to assist with preparation of the equipment CIP. Based on the condition report and historical useful life of similar equipment, the CIP is prepared. The equipment fleet comprised of vehicles over \$25,000 has an estimated 2015 value of \$1,835,000. The annual straight line cost using the useful life of each piece of equipment is estimated at \$276,511 and is the basis of the Public Works Capital Fund Appropriation request. In addition to equipment replacement requests from the above fund, certain other equipment is requested in 2016.

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

FERGUSON TOWNSHIP									
2017 – 2021 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS									
NEW EQUIPMENT PUBLIC WORKS									
	30.400.430.750								
Description	2017	2018	2019	2020	2021	Total			
Hydraulic adjustable forks for skid steer	4,500					4,500			
Air spade	2,600					2,600			
Replace 2003 Kubota 60" deck diesel zero turn mower with	,					,			
Wright or equivalent	8,700					8,700			
Topcon or equivalent rotary laser with stand and rod	2,900					2,900			
Snap-on or equivalent scan tool for trucks	6,200					6,200			
Diamond cut saw for asphalt	8,100					8,100			
Traffic signal LED replacements	5,300	5,500	5,800	6,100	5,000	27,700			
Replace 2003 variable message sign	19,700	21,000	21,000			61,700			
Pedestrian push button upgrades	5,300	5,500	5,800	6,100	5,000	27,700			
Replace 2007 Kubota RTV utility vehicle with a Tool Cat 5600G or equivalent	51,800					51,800			
Replace 2007 Kubota ZG20 zero turn mower	13,700					13,700			
New wing plow for loader for drifts		37,500				37,500			
Resistograph			12,000			12,000			
Trimble R1 GNSS receiver with RTX			3,500			3,500			
UPS backup and signal cabinet modifications									
(College/Corl)					20,000	20,000			
						0			
Total	128,800	69,500	48,100	12,200	30,000	288,600			

^{*}Please Note: The detailed documents are included in the appendix for your review.

Replacement Equipment

Public Works has a separate bank account for equipment greater than \$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 5%. The costs do not reflect any trade in value 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											
2017 – 2021 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS PUBLIC WORKS EQUIPMENT SINKING FUND 30.400.430.760											
							Description	Year	Additions	Deductions	Balance
Beginning Balance 12/31/2016				461.000							
Annual Sinking Fund Contribution	2017	305.400		766.400							
Replace Terrastar with Ford F550 plow truck	2017		87.200	679.200							
Replace 2002 F350 with new F350 with crane	2017		67.200	612.000							
Annual Sinking Fund Contribution	2018	320,700		932,700							
Replace 1997 5 ton roller	2018		49.600	883.100							
Recondition 2004 Freightliner one-man leaf collector	2018		90.000	793.100							
Replace 2003 International single axle with tandem axle	2018		242,600	550.500							
Annual Sinking Fund Contribution	2019	336.700		887.200							
Replace 2003 dual wheel Ford F550 sign truck including post pounder	2019		98,400	788,800							
Annual Sinking Fund Contribution	2020	353.500		1.142.300							
Replace 2004 Vermeer brush chipper	2020	333.300	79.000	1.063.300							
Replace 1996 4-ton asphalt trailer	2020		32.800	1.030.500							
Replace 1997 Vac-All street sweeper	2020		340,300	690.200							
Annual Sinking Fund Contribution	2021	371.200	010,000	1.061.400							
Replace 2006 International single axle plow truck	2021	071.200	248.900	812.500							
Replace 2001 Backhoe	2021		165.900	646.600							
Replace 2007 Caterpillar skid steer loader	2021		140.400	506.200							
Total 1,687,500		1,642,300									
Subtotals by Year		EXPENDITURES									
		2017	154.400								
		2018	382.200								
		2019	98.400								
		2020	452.100								
		2021	555.200								
		Total	1,642,300								

^{*}Please Note: The detailed documents are included in the appendix for your review.

PARKS AND RECREATION

The proposed five-year Capital Improvement Program Budget for Parks and Recreation (not including CRCOG) totals **\$1.93** *million or* **17.5%** of the total Capital Reserve Fund proposals. The following projects are recommended to be included in the upcoming five years of the CIP.

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, therefore, that cost is now incorporated into the township's annual operating costs.

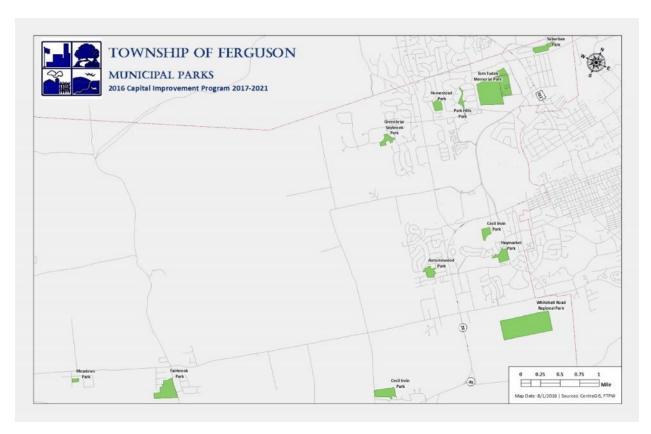
Three regional parks are also part of the regional parks program. Development of those parks has not been finalized. This CIP incorporates the annual capital costs to the township until financing has been finalized among the partnering municipalities. Total projected costs are of total capital expenditures plus the additional financing costs for the pools and parks.

Expenditures for Parks and Recreation have increased significantly over the past 10 years. Much of this increase in costs is associated with the development of three regional parks and the redevelopment of two regional aquatic facilities. At the municipal level, park development in accordance with approved master plans is extremely costly and many times relies upon additional grant funding.

Some of the related costs for these planned improvements may be offset by developer contributions to the parkland fee in lieu fund thus avoiding more impact on the General Fund. Nevertheless, funding for the second phases of development of the three regional parks has not yet been agreed to and could be a cost not factored into the projects found in this budget.

The 2017-2021 CIP includes two park master plans updates. Suburban Park master plan is recommended for updating due to the relocation of sanitary sewer lines and the opportunity to study and define the flood plain through the park. Fairbrook Park master plan is also recommneded to be updated with the purpose of repurposing some of the turf mantained areas to low maintenance no mow areas and pollenator areas.

No additional parkland is planned to be acquired during this planning horizon.



Strategic Plan Alignment

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

 \otimes | Objective 10.1: Promote environmental and social stewardship in parkland development.

FERGUSON TOWNSHIP 2017 – 2021 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS					
PARKS & RECREATION 30.400.452.750					
Suburban Park Master Plan Update	2017	35,000			
Tudek Park Phase 3A	2017	265,250			
Fairbrook Park Baseball Backstop	2017	6,500			
Fairbrook Parking Lot Paving	2017	82,000			
State College Teener League Field Upgrades	2017	100,000			
Haymarket Park Playground Update	2017	90,000			
Tudek Dog Park Parking Improvements	2017	120,750			
Drinking Fountain Replacements	2017	10,000			
Playground Safety & Updates	2017	36,900			
Acquisition of Property	2017	240,000			
Suburban Park Improvements	2018	200,000			
Tudek Park Barn Roof/Barn Doors Replacement	2018	38,000			
Cecil Irvin Park	2018	200,000			
Drinking Fountain Replacements	2018	10,000			
Playground Safety & Updates	2018	36,900			
Park Trees	2018	11,000			
Tudek Park Waterline Upgrade & Fountain Replacement	2020	45,210			
Playground Safety & Updates	2019	37,500			
Park Trees	2019	11,500			
Fairbrook Park Master Plan Update	2019	22,500			
Tudek Farmhouse Roof Replacements	2020	0			
Park Trees	2020	9,700			
Park Amenities	2020	14,000			
Homestead Park Play Equipment	2021	65,000			
Haymarket Park Restroom Facilities	2021	235,000			
Total		1,922,710			
Total		1,922,710			
Subtotals by Year	EXPENDITURES				
	2017	986,400			
	2018	495,900			
	2019	71,500			
	2020	68,910			
	2021	300,000			
	Total	1,922,710			

Detailed Table for Parks						
Description	Cost	Grants	Loans	Net cash		
Tudek Park Phase 3a	265,250		250,000	15,250		
Louis Silvi Baseball Field	100,000	50,000		50,000		
Tudek Dog Parking Improvements	120,750		100,000	20,750		
Blue Course Drive Property	240,000		240,000	0		
Suburban Park Improvements	200,000		200,000	0		
Cecil Irvin Park Improvements	200,000	100,000		100,000		
Haymarket Restrooms	235,000		235,000	0		
Total	1,361,000	150,000	1,025,000	186,000		

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Suburban Park Master Plan Update

\$35,000

In 2016 UAJA plans to replace and relocate the sewer lines that were within the center of the park. Additionally, UAJA has indicated an interest in assisting in park improvements that would also create nutrient/sediment credits. The current park master plan did not take into consideration the flood plain location as it relates to park improvements. The flood plain should be evaluated for its actual location and an updated park master plan prepared before making any further improvements to the park.

Tudek Park Phase 3a \$265,250

Completion of park master plan in the area just south of Herman Drive by constructing two basketball courts, complete sidewalk connections, paving of remainder of parking lot and install landscaping.

Fairbrook Park Baseball Backstop

\$6,500

Replace baseball backstop (Jayco 4 panel 2 Center Over Panels installed)

Fairbrook Park Parking Lot Paving

\$82,000

This project was programmed in 2016, but due to engineering costs to design the storm water management system the project is being reprogrammed for 2017. The Fairbrook Park parking lot is currently a stabilized stone parking area. Due to the increasing use of the park for Centre Region Parks and Recreation sports programs and other sports associations, the parking lot is in continual need of maintenance due to potholing. Paving of the parking lot is recommended.

Louis E. Silvi Baseball Complex Improvements

\$100,000

A master plan was completed in 2014, which included improvements to add, handicapped accessible walkways and improved parking areas. New benches and landscaping is included in this phase of the field improvements. The township is seeking \$50,000 funding assistance from DCNR.

Haymarket Park Playground Update

\$90,000

The Parks and Recreation Department has recommended replacing the existing wood framed play equipment. Purchase and installation of a new piece of play equipment by a certified installer is recommended.

Tudek Dog Park Parking Improvements

\$120,750

Landscape Architect Dan Jones has developed a plan to improve parking, enhance the Park Crest Lane park entrance, signage and stormwater management for the dog park. Current parking is inadequate and frequently dog park users are parking in grass areas resulting in mud. Additionally, a pedestrian walkway would be constructed from the parking area for the community garden to the dog park should overflow parking be required.

Drinking Fountain Replacements

\$10,000

Placement of drinking fountains at township parks began nearly 20 years ago as new parks were developed and older parks refurbished. A replacement program is suggested since some of the fountains are older and parts not available. The replacement program would affect 6 parks and cost spread out over 3 years. Included in the cost is the fountain, concrete and some underground plumbing. This item would replace drinking fountains at Haymarket Park and Meadows Park.

Playground Safety & Update Program

\$36,900

To provide for equipment upgrades and replacements in order to meet playground safety standards.

Acquisition of Property - Blue Course Drive

\$240,000

The township is interested in purchasing a plot of land for development of a connection trail between Glenview and Blue Course Drive along with preservation of a natural area for stormwater control. This is currently private property. The township is currently in negotiations with the property owner.

2018

Suburban Park Improvements

200,000

Based on the updated master plan, it is anticipated that the baseball field may be relocated and new playground equipment installed. The current field fencing was installed in the 1970's. The baseball field is used by State College Little League and the State College Pony League.

Tudek Barn Roof Replacement/Replace Barn Doors

\$38,000

The barn roof at the park should be evaluated. This is a metal roof that has been sealed once in the past 15 years. The actual age of the roof is unknown. The evaluation will provide the Township will information on the need and timing of replacing the roof. While this is occuring, the barn doors should also be replaced.

Cecil Irvin Park \$200,000

Continued park improvements in accordance with the park master plan. The township is seeking \$100,000 funding assistance from DCNR.

Drinking Fountain Replacements

\$10,000

Placement of drinking fountains at township parks began nearly 20 years ago as new parks were developed and older parks refurbished. A replacement program is suggested since some of the fountains are older and parts not available. The replacement program would affect 6 parks

and cost spread out over 3 years. Included in the cost is the fountain, concrete and some underground plumbing. This item would replace drinking fountains at Park Hills Park and Homestead Park.

Playground Safety & Update Program

\$36,900

To provide for equipment upgrades and replacements in order to meet playground safety standards.

Plant Trees (various locations: 20 trees installed @ \$500/tree)

\$11,000

Concentration on newer parks to begin installation of landscaping.

2019

Tom Tudek Memorial Park Waterline Upgrade and Fountain Replacement on Restroom Building

\$45,210

The restroom building at the Tom Tudek Memorial Park is heavily used during the spring, summer and fall. Since construction, the restrooms have experienced a problem with the water pressure and volume available to operate the toilet facilities. An upsizing of the water line is the only solution. This project would be combined with the replacement of the drinking fountain located on the exterior of the restroom facility.

Playground Safety & Update Program

\$37,500

To provide for equipment upgrades and replacements in order to meet playground safety standards.

Plant Trees (various locations: 20 trees installed @ \$500/tree)

\$11,500

Concentration on newer parks to begin installation of landscaping.

Fairbrook Park Master Plan Update

\$22,500

Fairbrook Park is a 23-acre public facility with playing fields, play areas, picnic facilities, perimeter walking path, hard court and parking facilities. The park offers an opportunity to convert some of the highly maintained turf areas to low maintenance as no mow or pollinator areas. A revised master plan would evaluate the areas of the park for conversion as well as consider improving amenities.

2020

Tudek Farmhouse Roof Replacement

\$0

The farmhouse is need of a roof. This will be funded through the Tudek Trust Fund. \$7,000

Plant Trees (various locations: 20 trees installed @ 460/tree)

\$9.700

Concentration on newer parks to begin installation of landscaping.

Park Amenities

\$14,000

Install or replace benches, trash containers, grills, dog waste stations

2021

Homestead Park Play Equipment

\$65,000

The Parks and Recreation Department is recommending updating and adding age appropriate play equipment and installation by a certified installer.

Haymarket Park Restroom Facilities

\$235,000

The master plan for Haymarket Park includes construction of restroom facilities. This park is a highly-used, centralized park. Currently, the only township park where permanent restroom facilities are constructed is at Tom Tudek Memorial Park.

APPENDIX

The following documents are included for reference and assist the reader in understanding the budget document: