



**Ferguson**  
Township  
*Pennsylvania*

# 2016-2020 Capital Improvement Plan



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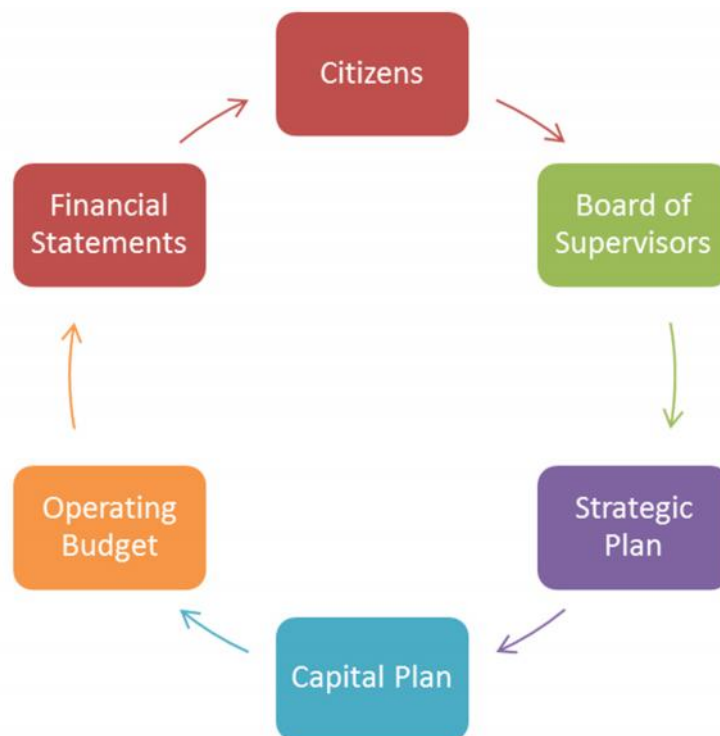
# Chapter 1: Introduction

## 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,

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.

The Township has a Strategic Plan that is updated on average every three to five years. Given the five year future look that the CIP offers, the term of the Strategic Plan fits well with the goals of the Township. Given the rapid changes in technology 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.

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



The Ferguson Township Strategic Plan is an essential part of the CIP if Township resources are to be used as effectively as possible. The strategic plan provides long-term direction defined by the Elected Officials and the CIP interfaces directly with the funding requirements 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 consists of three key elements that tie it to the CIP.

- **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?

Capital Planning is one important means of satisfying objectives of the Strategic Plan. 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).

## What is the Capital Improvement Plan (CIP)?

By definition, the CIP is a five-year plan projecting the financial requirements in order to fulfill capital needs of the township within the five year interval of the plan. The township has defined a capital asset as one that the initial cost exceeds \$2,500 and will have a life span of longer than one year. This plan is updated annually, in order to maintain its relevance and to prevent it from getting stale.

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.

## 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 annually. 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?

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 Township 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 what staff should spend time and resources on.

### *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.

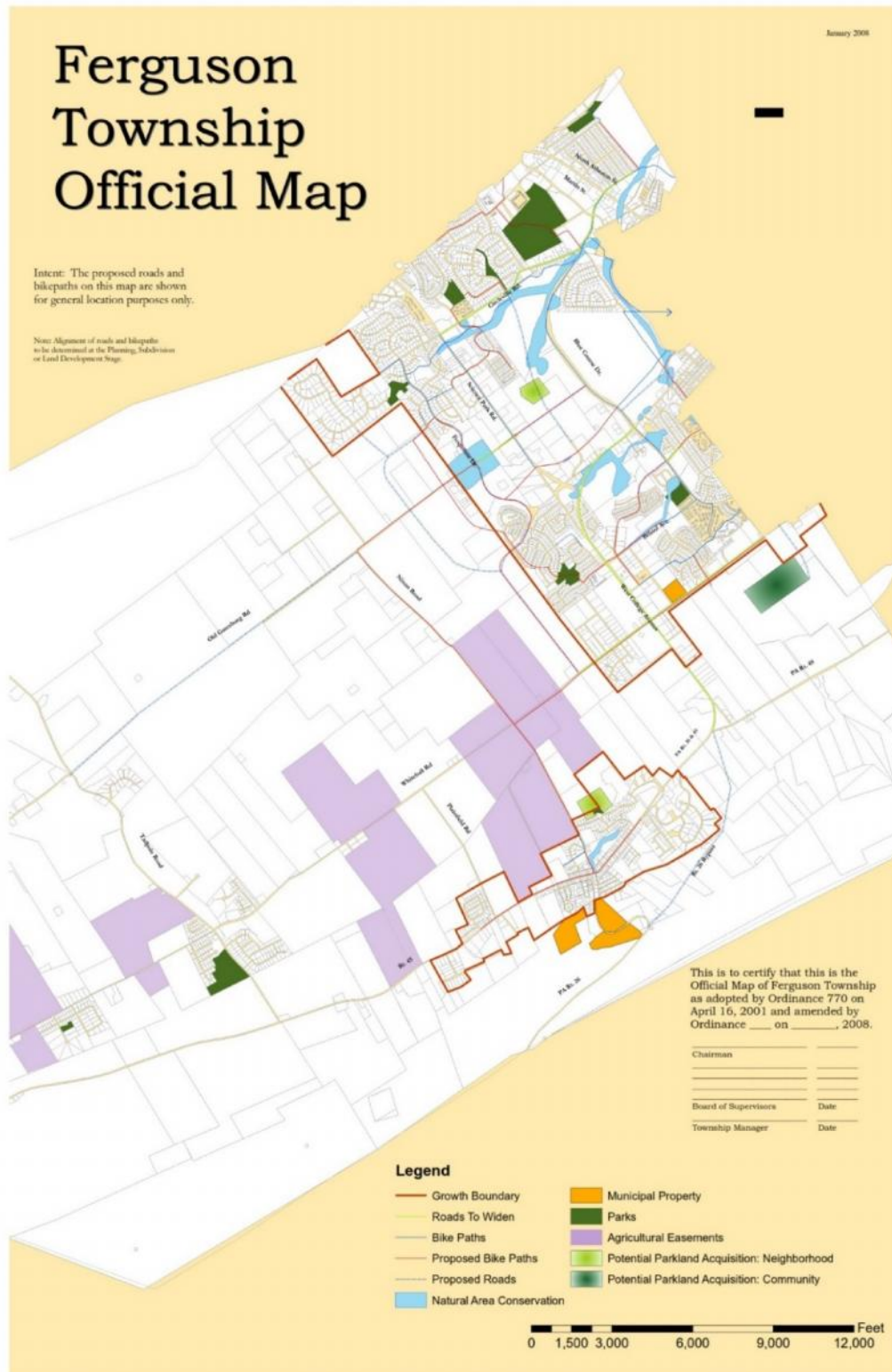
**Managing our resources wisely.** It is recognized that resources, including tax revenue, public utilities such as water and sewer, and services such as police and fire, are finite and must be allocated in the most efficient manner. It is our responsibility to continuously review and refine our practices 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 2020, the Township proposes spending **\$79,724,748** for all governmental funds. This does not include pension trust funds nor the Tom Tudek Memorial Trust Fund.



## Demographics

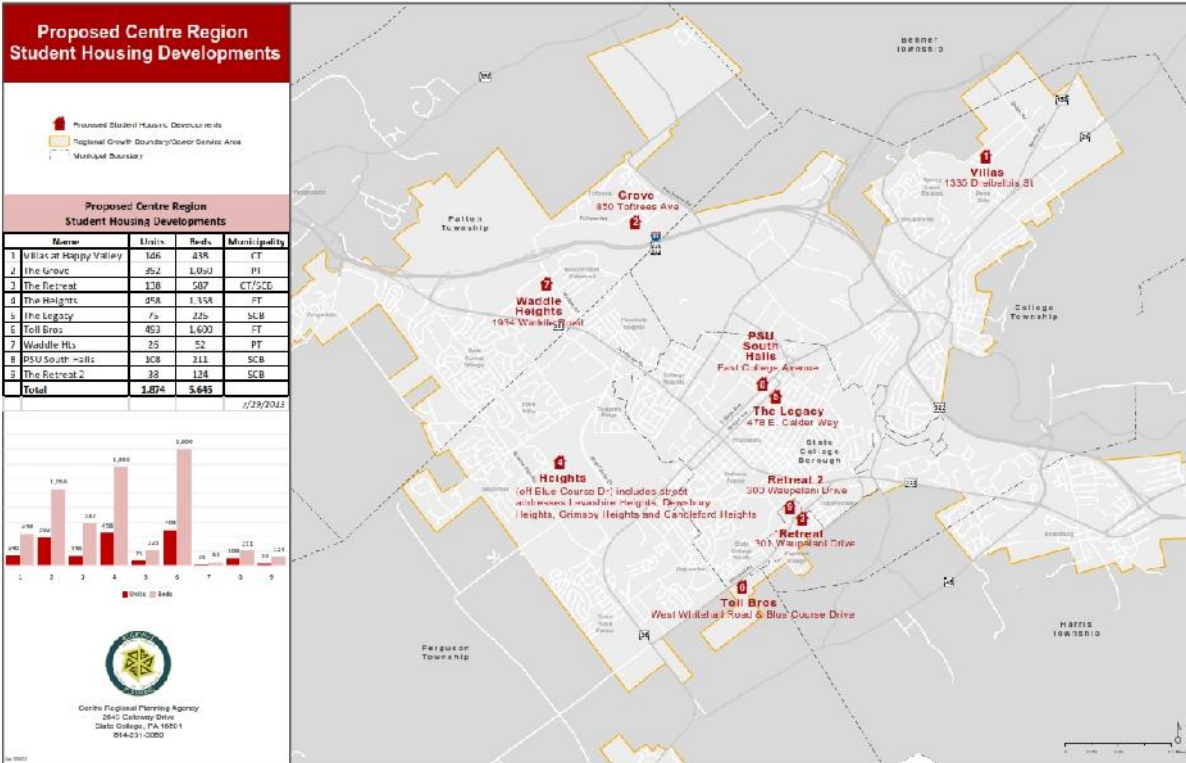


The Township encompasses an area of approximately 50 square miles and is home to 18,000 residents. Several high-tech industries have found a home in Ferguson Township over the years including AccuWeather, Minitab, Sound Technology, Videon, and Avail Technologies . The Township is also home to major research 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. Be aware that student housing can require additional township resources without necessarily returning sufficient revenue to offset the additional cost. This may very well place a strain on township funds.

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	2015	2016	2017	2018	2019	2019
Based on COG planning estimates	18,475	18,660	18,847	19,035	19,225	19,417

The demographic breakdown, according to Penn State Data Center for the range 2008-2012, the population breakdown by age is represented by the following table. According to the data, 68.5% of the township population is of working age.

Demographic	0-4	5-17	18-59	60-64	65+
Male	2.2	5.6	33.0	2.5	6.5
Female	2.7	6.9	30.0	3.0	7.6
<b>Total</b>	<b>4.9</b>	<b>12.5</b>	<b>63.0</b>	<b>5.5</b>	<b>14.1</b>

## Employment Data

### NEWS & ANALYSIS

*Credit implications of current events*

#### Best and Worst US State Labor Force Participation Trends

Average Participation 2014 Versus 2007			Average Participation Jan-Apr 2015 Versus Jan-Apr 2014		
	Percentage Point Change	Average 2014 Participation		Percentage Point Change	Average January-April 2015 Participation
<b>Best</b>			<b>Best</b>		
Texas	-0.5	65.2%	Louisiana	2.0	61.2%
Louisiana	-0.9	60.8%	Arkansas	1.3	57.7%
North Dakota	-1.3	72.8%	Oklahoma	1.1	61.6%
Massachusetts	-1.4	65.3%	Connecticut	1.0	66.0%
Iowa	-1.6	70.4%	Massachusetts	1.0	65.7%
Nebraska	-1.6	71.3%	South Carolina	1.0	58.8%
New York	-2	60.7%	Delaware	0.7	61.4%
Pennsylvania	-2	62.5%	Missouri	0.7	65.0%
New Hampshire	-2.1	68.7%	New Mexico	0.6	57.8%
Missouri	-2.1	64.8%	Arizona	0.6	60.1%
<b>Worst</b>			<b>Worst</b>		
South Carolina	-4.6	58.4%	Colorado	-0.6	67.2%
Washington	-4.9	63.1%	Illinois	-0.8	63.9%
North Carolina	-5.1	60.5%	Texas	-0.8	64.4%
Delaware	-5.2	61.2%	Florida	-0.9	59.3%
Nevada	-5.5	63.1%	Virginia	-0.9	65.4%
Tennessee	-5.5	58.9%	Nebraska	-0.9	70.3%
Mississippi	-5.6	54.4%	Alabama	-1.1	55.9%
New Mexico	-5.6	57.4%	Maine	-1.5	62.3%
Georgia	-6.1	62.0%	West Virginia	-1.5	51.9%
Arkansas	-6.3	56.9%	Kentucky	-1.6	57.4%

Sources: US Bureau of Labor Statistics and Moody's Analytics

## Fund Groups Defined

***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.

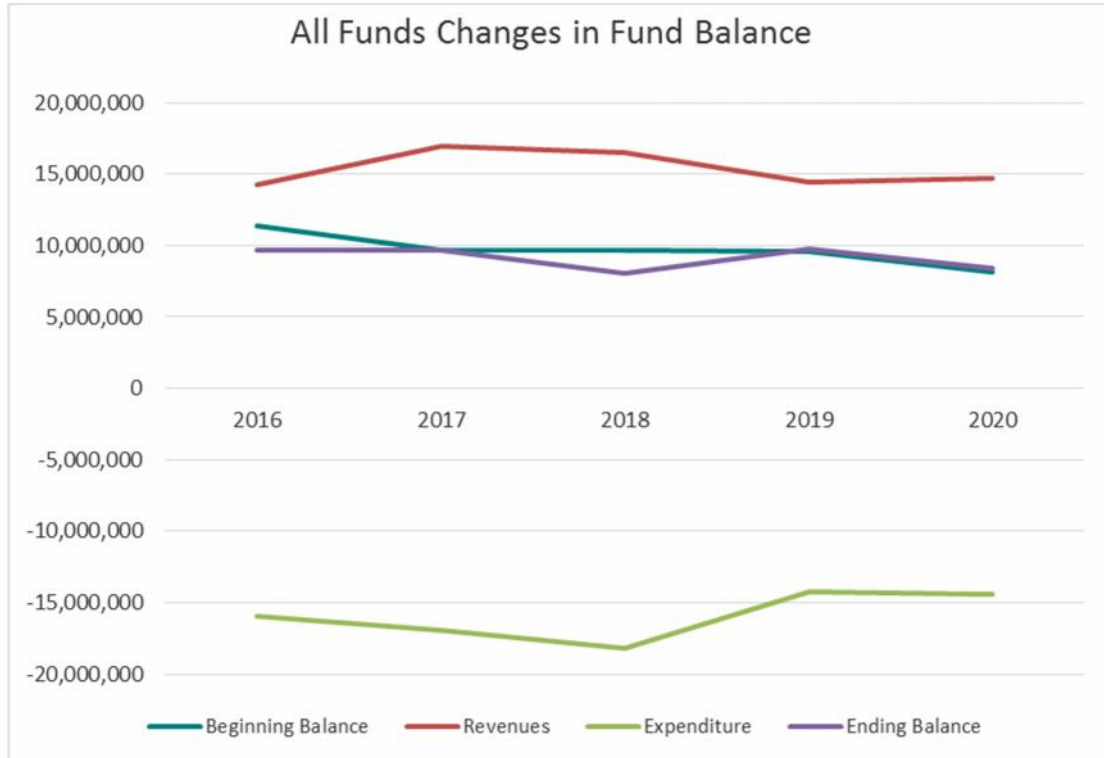
***The General Obligation Fund*** is the payer fund of the debt service for the township. This includes any direct bond or loan payments. Indirect payments, such as the COG park and pools debt are not included in the General Obligation Fund. These payments are made out of the General Fund and the Regional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

***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.

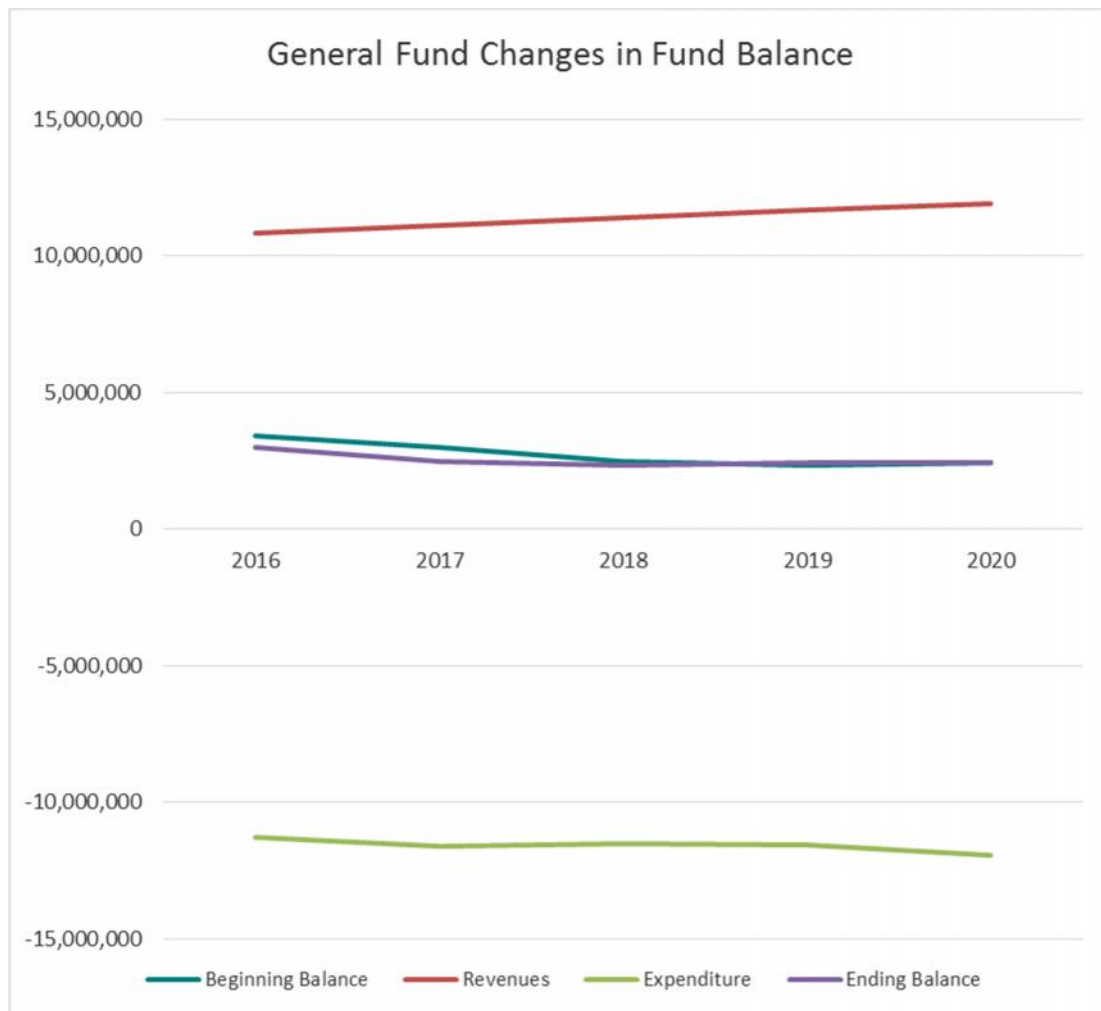
## Fund Balances

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



All Funds	2015	2016	2017	2018	2019	2020
Beginning Balance	12,208,261	11,400,855	9,712,432	9,700,204	9,563,548	8,137,864
Revenues	14,531,430	14,265,572	16,934,476	16,503,821	14,403,654	14,674,087
Expenditure	-15,338,836	-15,953,995	-16,946,704	-18,189,588	-14,238,436	-14,396,024
Ending Balance	11,400,855	9,712,432	9,700,204	8,014,436	9,728,765	8,415,927
Fund Balance % of Expenditures	74%	61%	57%	44%	53%	58%

## General Fund



General Fund	2015	2016	2017	2018	2019	2020
<b>Beginning Balance</b>	3,999,264	3,430,015	2,976,470	2,467,390	2,330,734	2,454,162
Revenues	10,553,734	10,846,067	11,114,594	11,390,652	11,674,456	11,926,626
Expenditure	-11,122,983	-11,299,612	-11,623,674	-11,527,308	-11,551,028	-11,928,724
<b>Ending Balance</b>	3,430,015	2,976,470	2,467,390	2,330,734	2,454,162	2,452,065
<b>Fund Balance % of Expenditures</b>	31%	26%	21%	20%	21%	21%

## Capital Projects Funds

<b>Piney Ridge Fund</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Beginning Balance</b>	<b>88,846</b>	<b>89,446</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Revenues	600	0	0	0	0	0
Expenditure	0	-89,446	0	0	0	0
<b>Ending Balance</b>	<b>89,446</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Ag Preservation Fund</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Beginning Balance</b>	<b>73,208</b>	<b>73,508</b>	<b>59,497</b>	<b>75,986</b>	<b>75,986</b>	<b>62,978</b>
Revenues	25,300	15,989	16,489	16,992	17,499	17,499
Expenditure	-25,000	-30,000	0	-30,000	0	0
<b>Ending Balance</b>	<b>73,508</b>	<b>59,497</b>	<b>75,986</b>	<b>62,978</b>	<b>93,485</b>	<b>80,477</b>
<b>Capital Reserve Fund</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Beginning Balance</b>	<b>2,355,934</b>	<b>2,057,720</b>	<b>1,612,717</b>	<b>2,333,335</b>	<b>2,333,335</b>	<b>1,799,685</b>
Revenues	1,173,000	509,600	2,496,600	2,909,600	509,600	509,600
Expenditure	-1,471,214	-954,603	-1,775,982	-3,443,250	-272,378	-529,336
<b>Ending Balance</b>	<b>2,057,720</b>	<b>1,612,717</b>	<b>2,333,335</b>	<b>1,799,685</b>	<b>2,570,557</b>	<b>1,779,949</b>
<b>Reg Cap Rec Projects Fund</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Beginning Balance</b>	<b>1,241,253</b>	<b>1,111,401</b>	<b>1,367,201</b>	<b>1,218,675</b>	<b>1,218,675</b>	<b>1,065,693</b>
Revenues	7,000	400,000	0	0	0	0
Expenditure	-136,852	-144,200	-148,526	-152,982	-152,982	-157,571
<b>Ending Balance</b>	<b>1,111,401</b>	<b>1,367,201</b>	<b>1,218,675</b>	<b>1,065,693</b>	<b>1,065,693</b>	<b>908,122</b>
<b>Transportation Imp Fund</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Beginning Balance</b>	<b>3,706,734</b>	<b>4,285,801</b>	<b>3,322,941</b>	<b>3,221,067</b>	<b>3,221,067</b>	<b>2,388,936</b>
Revenues	1,691,067	1,115,694	1,878,126	1,140,869	1,153,933	1,167,325
Expenditure	-1,112,000	-2,078,554	-1,980,000	-1,973,000	-1,124,000	-588,000
<b>Ending Balance</b>	<b>4,285,801</b>	<b>3,322,941</b>	<b>3,221,067</b>	<b>2,388,936</b>	<b>3,251,000</b>	<b>2,968,261</b>
<b>PGM Streetlight Fund</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Beginning Balance</b>	<b>21,187</b>	<b>21,787</b>	<b>21,975</b>	<b>22,163</b>	<b>22,163</b>	<b>22,353</b>
Revenues	600	188	189	190	190	191
Expenditure	0	0	0	0	0	0
<b>Ending Balance</b>	<b>21,787</b>	<b>21,975</b>	<b>22,163</b>	<b>22,353</b>	<b>22,353</b>	<b>22,545</b>
<b>Park Improvement Fund</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Beginning Balance</b>	<b>126,135</b>	<b>27,385</b>	<b>27,924</b>	<b>28,463</b>	<b>28,463</b>	<b>29,002</b>
Revenues	250	539	539	539	539	539
Expenditure	-99,000	0	0	0	0	0
<b>Ending Balance</b>	<b>27,385</b>	<b>27,924</b>	<b>28,463</b>	<b>29,002</b>	<b>29,002</b>	<b>29,541</b>

## Special Revenue Funds

Streetlight Fund	2015	2016	2017	2018	2019	2020
<b>Beginning Balance</b>	<b>5,016</b>	<b>2,840</b>	<b>2,594</b>	<b>2,057</b>	<b>2,057</b>	<b>1,217</b>
Revenues	12,440	14,174	14,316	14,458	14,603	14,748
Expenditure	-14,616	-14,420	-14,853	-15,298	-15,298	-15,757
<b>Ending Balance</b>	<b>2,840</b>	<b>2,594</b>	<b>2,057</b>	<b>1,217</b>	<b>1,361</b>	<b>208</b>
Hydrant Fund	2015	2016	2017	2018	2019	2020
<b>Beginning Balance</b>	<b>8,218</b>	<b>3,264</b>	<b>6,342</b>	<b>8,894</b>	<b>8,894</b>	<b>10,898</b>
Revenues	22,856	30,888	31,196	31,507	31,822	32,139
Expenditure	-27,810	-27,810	-28,644	-29,504	-29,504	-30,389
<b>Ending Balance</b>	<b>3,264</b>	<b>6,342</b>	<b>8,894</b>	<b>10,898</b>	<b>11,212</b>	<b>12,649</b>
Liquid Fuels Fund	2015	2016	2017	2018	2019	2020
<b>Beginning Balance</b>	<b>546,668</b>	<b>258,401</b>	<b>275,484</b>	<b>282,887</b>	<b>282,887</b>	<b>263,652</b>
Revenues	484,583	477,083	481,403	485,765	485,765	490,172
Expenditure	-772,850	-460,000	-474,000	-505,000	-578,000	-631,000
<b>Ending Balance</b>	<b>258,401</b>	<b>275,484</b>	<b>282,887</b>	<b>263,652</b>	<b>190,652</b>	<b>122,824</b>

## General Obligation Fund

General Obligation Fund	2015	2016	2017	2018	2019	2020
<b>Beginning Balance</b>	<b>35,798</b>	<b>39,287</b>	<b>39,287</b>	<b>39,287</b>	<b>39,287</b>	<b>39,287</b>
Revenues	560,000	855,350	901,025	513,247	515,247	515,247
Expenditure	-556,511	-855,350	-901,025	-513,247	-515,247	-515,247
<b>Ending Balance</b>	<b>39,287</b>	<b>39,287</b>	<b>39,287</b>	<b>39,287</b>	<b>39,287</b>	<b>39,287</b>

# 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.

<b>Fund Group</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
General Fund	10,553,734	10,846,067	11,114,594	11,390,652	11,674,456	11,926,626
Capital Projects Funds	2,897,817	2,042,010	4,391,942	4,068,190	1,681,761	1,695,155
Special Revenue Funds	519,879	522,145	526,915	531,731	532,190	537,059
General Obligation Fund	560,000	855,350	901,025	513,247	515,247	515,247
<b>Total</b>	<b>14,531,430</b>	<b>14,265,572</b>	<b>16,934,476</b>	<b>16,503,821</b>	<b>14,403,654</b>	<b>14,674,087</b>
<b>Group change %</b>		- 1.8%	18.7%	-2.5%	- 12.7%	1.9%
<b>General Fund change %</b>		2.8%	2.5%	2.5%	2.5%	2.2%

<b>Capital Projects Funds</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Piney Ridge	600	0	0	0	0	0
Ag Preservation	25,300	15,989	16,489	16,992	17,499	17,499
Capital Reserve	1,173,000	509,600	2,496,600	2,909,600	509,600	509,600
Regional Capital Rec Projects	7,000	400,000	0	0	0	0
Transportation Improvement	1,691,067	1,115,694	1,878,126	1,140,869	1,153,933	1,167,325
Pine Grove Mills Street Lights	600	188	189	190	190	191
Park Improvement	250	539	539	539	539	539
<b>Total</b>	<b>2,897,817</b>	<b>2,042,010</b>	<b>4,391,942</b>	<b>4,068,190</b>	<b>1,681,761</b>	<b>1,695,155</b>

<b>Special Revenue Funds</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Street Light	12,440	14,174	14,316	14,458	14,603	14,748
Hydrant	22,856	30,888	31,196	31,507	31,822	32,139
Liquid Fuels	484,583	477,083	481,403	485,765	485,765	490,172
<b>Total</b>	<b>519,879</b>	<b>522,145</b>	<b>526,915</b>	<b>531,731</b>	<b>532,190</b>	<b>537,059</b>

## 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 Services taxes at 2.0% and Transfer taxes with no projected increases.

<b>Tax Revenue</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Real Estate Taxes	1,361,916	1,389,154	1,416,937	1,445,276	1,474,182	1,503,665
Earned Income Taxes	6,396,386	6,588,278	6,785,926	6,989,504	7,199,189	7,415,164
Transfer Taxes	1,200,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Local Services Taxes	310,000	316,200	322,524	328,974	335,554	342,265
<b>Total</b>	<b>9,268,302</b>	<b>9,293,632</b>	<b>9,525,387</b>	<b>9,763,754</b>	<b>10,008,924</b>	<b>10,261,095</b>
<b>Average EIT per Resident</b>	<b>346.22</b>	<b>353.07</b>	<b>360.05</b>	<b>367.19</b>	<b>378.21</b>	<b>385.70</b>
<b>Percentage of Total Revenue</b>	<b>63.8%</b>	<b>65.1%</b>	<b>56.2%</b>	<b>59.2%</b>	<b>69.5%</b>	<b>69.9%</b>

## General Fund Transfers

Funding for many of the capital funds is derived 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.

<b>General Fund Transfers Out</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
TIF	1,373,567	1,115,694	1,128,126	1,140,869	1,153,933	1,167,325
Capital Reserve	500,000	500,000	500,000	500,000	500,000	500,000
Ag Preservation	25,000	15,000	15,000	15,000	15,000	15,000
GOA	560,000	855,350	901,025	513,247	515,247	515,247
<b>Total</b>	<b>2,458,567</b>	<b>2,486,044</b>	<b>2,544,151</b>	<b>2,169,116</b>	<b>2,184,180</b>	<b>2,197,572</b>

## Tax Increase Consideration

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. Even with sound fiscal management the growth in the Township has required increased services and these services come at a cost. While maintaining services may be feasible with normal growth, expanding services to meet this growth may require some modest tax increase.

## Grant Revenue Projections

Grant revenues assist the township in many ways. It is one way to provide additional revenue for projects without raising taxes. Many federal grants are administered by the state and doled out to local governments in accordance with the federal mandates. One such grant is the DUI grant that police receive to offset the costs of the checkpoints.

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.

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 2016–2020 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. Application for the grant will be submitted in the fall of 2015 and award announcements are expected in the spring 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:** Staff applies for these grants as appropriate for qualified projects. No projects are anticipated at this time.

**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 2015 the public works staff applied for \$179,678 (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.

**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 grapppler. PaDEP announced the award of this grant in 2014. The grapppler 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/Contributions Detail	Fund	Type	2016	2017	2018	2019	2020
DUI Enforcement	GF	G	42,500	42,500	42,500	42,500	42,500
Drive Safe Program	GF	G	3,000	3,000	3,000	3,000	3,000
Buckle Up Program	GF	G	4,500	4,500	4,500	4,500	4,500
Ballistic Vest Reimbursement	GF	G	2,250	2,250	2,250	2,250	2,250
Liquid Fuels	LF	G	431,963	436,283	440,645	440,645	445,052
Liquid Fuels Turnback	LF	G	45,120	45,120	45,120	45,120	45,120
County Liquid Fuels	GF	G					
CR Codes Rent of Fire Trailer	CR	C	9,600	9,600	9,600	9,600	9,600
Lezzer Haubert Agreement	RCRP	C					
Northern ITS Cable Right of Way	GF	C	22,144	22,144	22,144	22,144	22,144
Sunecsis Right of Way	GF	C	4,570	4,570	4,570	4,570	4,570
Crown Castle Right of Way	GF	C	2,596	2,596	2,596	2,596	2,596
S&A Field Lighting	CR	C					
Green Light Go Green grant	CR	C		179,678			
DCNR grant for grapppler truck	CR	G					
Tudek Trust Funding	CR	C					
State Multimodal Transportation Funding	CR	G		1,387,000			
State Multimodal Transportation Funding	CR	L		600,000			
DCNR Westfield/Hillsides Park	CR	G			100,000		
DCNR CNG Conversions	CR	G					
Toll Brothers fee in-lieu	RCRP	C	400,000				
PennDOT Grant for Valley Vista Roundabout	TIF	G		750,000			
Loan Proceeds for new fueling station	CR	L			300,000		
Loan Proceeds for new PW building	CR	L			2,000,000		
College Court fee in-lieu	PI	C					
<b>Total</b>			<b>968,243</b>	<b>3,489,241</b>	<b>2,976,925</b>	<b>576,925</b>	<b>581,332</b>
Grant Summary	Fund		2016	2017	2018	2019	2020
General Fund	GF		81,560	81,560	81,560	81,560	81,560
Capital Reserve Fund	CR		9,600	2,176,278	2,409,600	9,600	9,600
Regional Capital Rec Projects	RCRP		400,000	0	0	0	0
Transportation Improvement Fund	TIF		0	750,000	0	0	0
Liquid Fuels Fund	LF		477,083	481,403	485,765	485,765	490,172
Park Improvement Fund	PI		0	0	0	0	0
<b>Total</b>			<b>968,243</b>	<b>3,489,241</b>	<b>2,976,925</b>	<b>576,925</b>	<b>581,332</b>
Grant Summary by Type	Type		2016	2017	2018	2019	2020
Grants	G		529,333	2,670,653	638,015	538,015	542,422
Contributions	C		438,910	218,588	38,910	38,910	38,910
Loans	L		0	600,000	2,300,000	0	0
<b>Total</b>			<b>968,243</b>	<b>3,489,241</b>	<b>2,976,925</b>	<b>576,925</b>	<b>581,332</b>

# 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	2015	2016	2017	2018	2019	2020
General Fund	11,122,983	11,299,612	11,623,674	11,527,308	11,551,028	11,928,724
Capital Projects Funds	2,844,066	3,296,803	3,904,508	5,599,232	1,549,360	1,274,907
Special Revenue Funds	815,276	502,230	517,497	549,802	622,802	677,146
Debt Service	556,511	855,350	901,025	513,247	515,247	515,247
<b>Total</b>	<b>15,338,836</b>	<b>15,953,995</b>	<b>16,946,704</b>	<b>18,189,588</b>	<b>14,238,436</b>	<b>14,396,024</b>

## 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.

General Fund Detail	2015	2016	2017	2018	2019	2020
Salaries	3,457,629	3,460,800	3,564,624	3,671,563	3,671,563	3,781,710
New Staffing & Benefits	194,586	101,848	97,252	97,252	105,908	183,183
COG Programs	1,545,990	1,648,000	1,697,440	1,748,363	1,748,363	1,800,814
Vendors	3,466,211	3,602,920	3,720,208	3,841,014	3,841,014	3,965,445
Transfers Out	2,458,567	2,486,044	2,544,151	2,169,116	2,184,180	2,197,572
<b>Total</b>	<b>11,122,983</b>	<b>11,299,612</b>	<b>11,623,674</b>	<b>11,527,308</b>	<b>11,551,028</b>	<b>11,928,724</b>

Some items do not meet the dollar threshold for capital items and have been moved to the general fund operations. The table below identifies these items

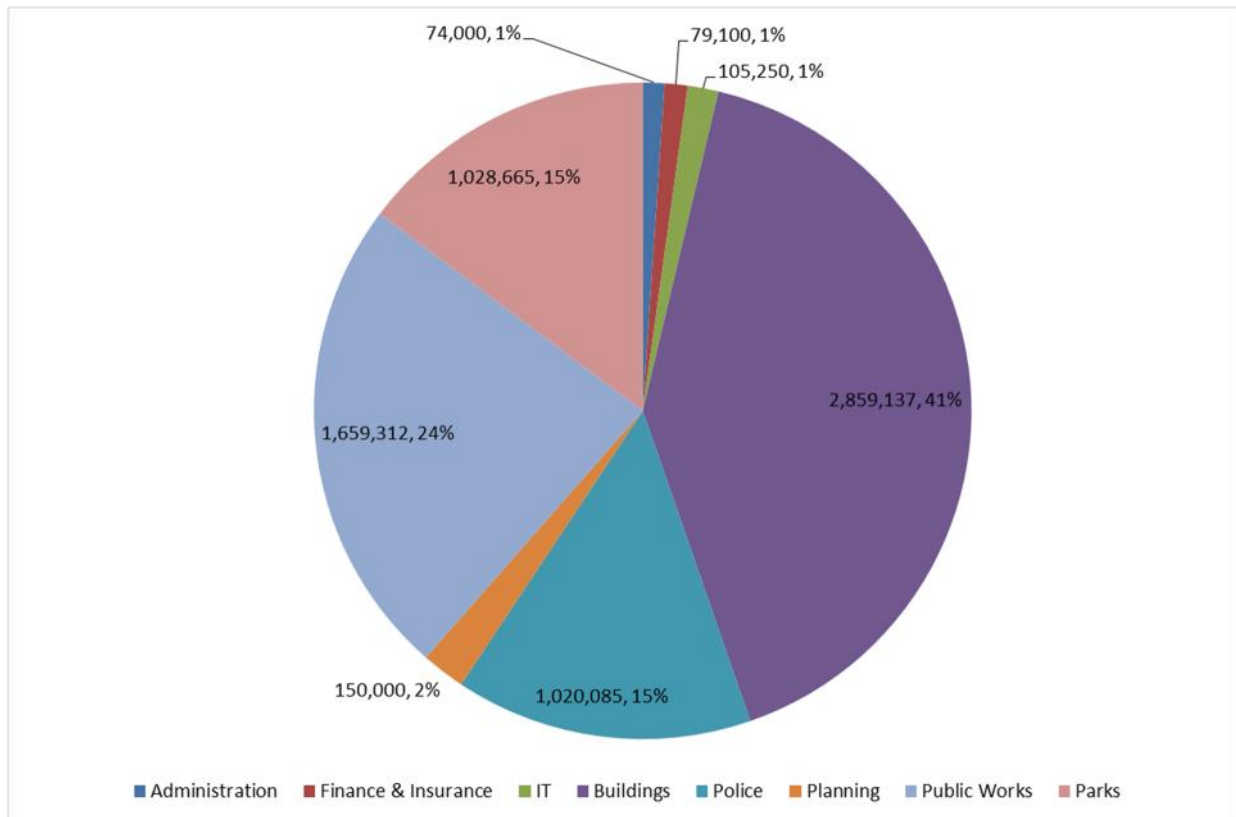
**FERGUSON TOWNSHIP**  
**2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS**  
**NON-CAPITAL ITEMS**

General Fund			
Description	Year	Dept	Amount
Admininstration Office Chairs	2016	Admin	5,000
LED Handgun Lights	2016	Police	3,254
.22 Caliber Rifles for Patrol Vehicles	2016	Police	3,100
Office furniture for Police	2016	Police	6,000
Cell Phone Forensic System Update	2016	Police	3,424
Surveillance Cameras	2016	Police	2,745
Park Trees (various locations) 20 @ \$460 each	2016	Parks	9,200
Park Trees (various locations) 20 @ \$460 each	2017	Parks	9,200
Park Trees (various locations) 20 @ \$460 each	2018	Parks	9,200
Park Trees (various locations) 20 @ \$460 each	2019	Parks	9,200
Park Trees (various locations) 20 @ \$460 each	2020	Parks	9,200
<b>Total</b>			<b>69,523</b>
Subtotals by Year		2016	32,723
		2017	9,200
		2018	9,200
		2019	9,200
		2020	9,200
		<b>Total</b>	<b>69,523</b>

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 Projects	2015	2016	2017	2018	2019	2020
Piney Ridge	0	89,446	0	0	0	0
Ag Preservation	25,000	30,000		30,000		
Capital Reserve	1,471,214	954,603	1,775,982	3,443,250	272,378	529,336
Regional Capital Rec Projects	136,852	144,200	148,526	152,982	152,982	157,571
Transportation Improvement	1,112,000	2,078,554	1,980,000	1,973,000	1,124,000	588,000
Pine Grove Mills Street Lights	0					
Park Improvement	99,000	0	0	0	0	0
<b>Total</b>	<b>2,844,066</b>	<b>3,296,803</b>	<b>3,904,508</b>	<b>5,599,232</b>	<b>1,549,360</b>	<b>1,274,907</b>

**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.



<b>Capital Reserve Fund</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Administration	19,500	5,500	41,000	0	0	27,500
Finance & Insurance	6,000	7,000	72,100	0	0	0
IT	15,900	35,250	50,000	20,000	0	0
Buildings	132,400	73,728	308,581	2,448,750	0	28,078
Police	276,189	263,000	286,900	192,768	159,759	117,658
Planning	106,000	100,000	0	0	0	50,000
Public Works	543,525	283,750	538,751	496,832	75,119	264,860
Parks	371,700	186,375	478,650	284,900	37,500	41,240
<b>Total</b>	<b>1,471,214</b>	<b>954,603</b>	<b>1,775,982</b>	<b>3,443,250</b>	<b>272,378</b>	<b>529,336</b>

**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.

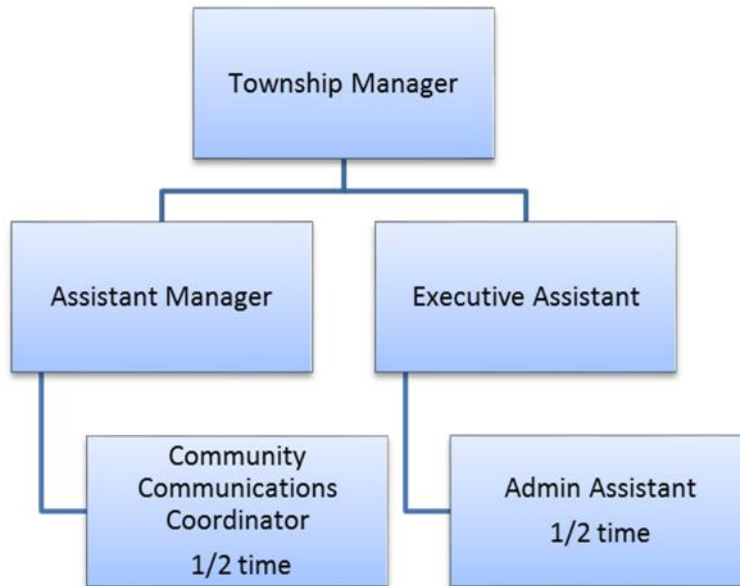
<b>Special Revenue</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Street Light	14,616	14,420	14,853	15,298	15,298	15,757
Hydrant	27,810	27,810	28,644	29,504	29,504	30,389
Liquid Fuels	772,850	460,000	474,000	505,000	578,000	631,000
<b>Total</b>	<b>815,276</b>	<b>502,230</b>	<b>517,497</b>	<b>549,802</b>	<b>622,802</b>	<b>677,146</b>

# Departmental Expenditures

## ADMINISTRATION DEPARTMENT

The Administration department proposes to spend **\$74,000 or 1.1%** 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.

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 7 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.

<b>FERGUSON TOWNSHIP 2016 – 2020 CIP STAFFING ADMINISTRATION STAFFING</b>						
<b>PART TIME SCANNING STAFFER</b>						
<b>Direct Costs Estimate</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
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
<b>Total</b>	6,863	0	0	0	0	6,863
<b>PT to FT COMMUNITY COMMUNICATIONS COORDINATOR</b>						
<b>Direct Costs Estimate</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Salary					35,963	35,963
Health/Eye/Dental					24,000	24,000
Life/Disability Insurance					0	0
Pension					3,596	3,596
Employer Taxes					2,871	2,871
Workers Comp					1,777	1,777
<b>Total</b>	0	0	0	0	68,208	68,208

## 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.

## 2015 Accomplishments

The Administration Department has completed a number of goals through mid- year 2015. An update of the Code of Ordinances, hiring process for a Community Planner, Arborist and Director of Planning and Zoning along with all part-time personnel for summer work, coordination of Township Open House, completed an update to the Personnel Policies affecting Uniformed and Non-Uniformed Personnel, held two Coffee and Conversation events and one Business Leaders Luncheon event, launched a social media through Twitter, received Gold Standard Certification through the Pennsylvania Sustainable Communities program and obtained certification from PennPRIME for achieving loss control standards.

## 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 6.2: Develop a communications strategy to improve transparency and strengthen media exposure.**

### **Objective 6.4: Evaluate and implement eGovernment strategies designed to provide convenience and accessibility to Township residents.**

- **Action Step 6.4.2:** Identify which Township functions could be enhanced by providing eGovernment services.

### **Objective 9.2: Complete, test, and modify the Township's Continuity of Operations Plan (COOP).**

- **Action Step 9.2.3:** Coordinate and implement testing of disaster recovery plan with Agility Recovery.

2016	
<b>Strategic Plan Update</b>	<b>\$5,500</b>
This project would be a revision to the Strategic Plan implementing the mission, vision, core values, goals and objects. Using an experienced consultant to facilitate this project is	

suggested. Combining this strategic planning process with community survey results would begin with new and current members of the Board of Supervisors and would be a more encompassing approach than by a standalone facilitator.	
<b>2017</b>	
<b>Community Survey</b>	<b>\$15,000</b>
In 2012, the Township received the results of its first Community Survey in 20+ years. In order to evaluate the impact of changes implemented since the 2012 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.	
<b>Administration Vehicle</b>	<b>\$26,000</b>
It will be time to replace the administration vehicle and transfer the existing vehicle to the fleet.	
<b>2018</b>	
No requests have been made for the current year.	
<b>2019</b>	
No requests have been made for the current year.	
<b>2020</b>	
<b>Administration Vehicle</b>	<b>\$27,500</b>
It will be time to replace the administration vehicle and transfer the existing vehicle to the fleet.	

## Executive Recruitment

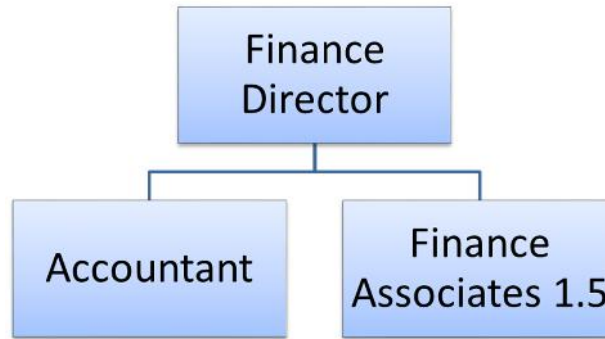
The township is preparing for the retirement of certain senior staff within the term of the CIP. With this in mind, the Board recommended creating a sinking fund to underwrite the cost of an executive search and related hiring costs.

<b>FERGUSON TOWNSHIP</b> <b>2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS</b> <b>EXECUTIVE SEARCH SINKING FUND</b>				
01.400.401.XXX				
Description	Year	Additions	Deductions	Balance
Annual Sinking Fund Contribution	2015	10,000		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
<b>Total</b>		<b>50,000</b>	<b>0</b>	
Subtotals by Year		2016	0	
		2017	0	
		2018	0	
		2019	0	
		2020	0	
		total	0	

## FINANCE DEPARTMENT

The Finance Department includes the township and school real estate tax collection. The Finance Department requests total **\$79,100** or **1.1%** of the total Capital Reserve fund proposals for this capital plan.

### 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.

The mission 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.

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 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 will be the system of choice for the near future. This system is used for the township and school real estate tax collections.

## FINANCE ITEMS

With almost two years of the new Springbrook accounting software under our belt, 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 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.

Engineering is investigating several work order systems. One is software named FacilityDude. This software would be standalone similar to the current Access database system in place. In conjunction with this, engineering is interested in replacing the Cartegraph system. The FacilityDude software would be the replacement for the Access database and the Cartegraph system. An alternative to this would be to incorporate the Springbrook Work Order system, which integrates with the accounting data already in the system. This would take advantage of existing data and not require rekeying certain data. Staff is investigating this option with engineering.

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.

30.400.402.750		
Description	Year	Amount
AP/PO workflow Springbrook	2016	7,000
Inventory Module Springbrook	2017	12,100
Work Order/Fleet Management Module Springbrook (5 year cost)	2017	60,000
<b>Total</b>		<b>79,100</b>
Subtotals by Year	2016	7,000
	2017	72,100
	2018	0
	2019	0
	2020	0
	total	79,100

## DEBT SERVICE

Proposed and current debt service costs total **\$3,300,116** or **4.1%** 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. For the current Capital plan, consideration must be given to the COG debt in addition to any township debt. The regional pools have a long-term debt service requirement as well as the regional parks. The Oak Hall Park and the Whitehall Road Park projects can entail such amounts of money that additional financing would be required. The Centre Region COG is also planning to undertake additional debt for a parks maintenance facility requiring additional contributions by the municipalities. In addition to this, the township may have needs for additional financing proposed in the strategic plans. Such items include an additional Public Works facility 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 loan proceeds of a similar amount are included in the revenue. As one can see, the current township debt will be retired at the end of 2017, saving a significant amount of General Fund resources.

16,400,XXX.XXX							
Description	Year	Amount					
Township 2014 Refinancing	2016	559,350	Subtotals by Year		2016	855,350	
Township 2014 Refinancing	2017	558,725			2017	901,025	
COG Pools Debt	2016	120,000			2018	513,247	
COG Pools Debt	2017	120,000			2019	515,247	
COG Pools Debt	2018	120,000			2020	515,247	
COG Pools Debt	2019	120,000					
COG Pools Debt	2020	120,000			Total	3,300,116	
COG Parks Debt	2016	130,500					
COG Parks Debt	2017	110,000					
COG Parks Debt	2018	112,000					
COG Parks Debt	2019	114,000					
COG Parks Debt	2020	114,000					
Terraced Streetscape PA Infrastructure Loan	2017	66,800					
Terraced Streetscape PA Infrastructure Loan	2018	66,800					
Terraced Streetscape PA Infrastructure Loan	2019	66,800					
Terraced Streetscape PA Infrastructure Loan	2020	66,800					
Ferguson Township Maintenance Facility (proposed)	2018	134,000					
Ferguson Township Maintenance Facility (proposed)	2019	134,000					
Ferguson Township Maintenance Facility (proposed)	2020	134,000					
Ferguson Township Fueling Facility (proposed)	2018	34,947					
Ferguson Township Fueling Facility (proposed)	2019	34,947					
Ferguson Township Fueling Facility (proposed)	2020	34,947					
COG Maintenance Facility (proposed)	2016	45,500					
COG Maintenance Facility (proposed)	2017	45,500					
COG Maintenance Facility (proposed)	2018	45,500					
COG Maintenance Facility (proposed)	2019	45,500					
COG Maintenance Facility (proposed)	2020	45,500					
Total		3,300,116					

## DEBT SERVICE SCHEDULE

The proposed annual Debt Service costs for the next 15 years are detailed below. This assumes no change in the COG formula for the pools loan, for which the municipal contributions are recomputed after 10 years. The proposed township maintenance facility cost is based upon a \$2 million 20-year loan at 3% fixed interest rate. The COG maintenance facility cost is based on a \$2.5 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).

### FERGUSON TOWNSHIP

#### 2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS

#### DEBT SERVICE PROJECTIONS

	Expires	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>TOWNSHIP DEBT</b>																
Township 2014 Refinancing	2017	559,350	558,725													
COG Pools Debt	2028	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	0	0
COG Parks Debt	2031	130,500	110,000	112,000	114,000	114,000	114,000	114,000	114,000	114,000	114,000	114,000	114,000	114,000	114,000	114,000
Fueling Facility financing (10 yrs 3.0%)	2027			34,947	34,947	34,947	34,947	34,947	34,947	34,947	34,947	34,947	34,947			
Terraced Streetscape PA Infrastructure Loan (10 yr 2%)	2026		66,800	66,800	66,800	66,800	66,800	66,800	66,800	66,800	66,800	66,800	0	0	0	0
Ferguson Township Maintenance Facility (20 yr, 3%)	2037			134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000	134,000
COG Maintenance Facility (proposed)	2035	45,500	45,500	45,500	45,500	45,500	45,500	45,500	45,500	45,500	45,500	45,500	45,500	45,500	45,500	45,500
Total		855,350	901,025	513,247	515,247	515,247	515,247	515,247	515,247	515,247	515,247	515,247	448,447	413,500	293,500	293,500

## INFORMATION TECHNOLOGY DEPARTMENT

The Information Technology Department capital requests total **\$105,250** or **1.5%** 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

Due to the \$2,500 threshold per item for capital, many of the Information Technology items are now considered operating costs rather than capital costs. Such items include new desktops, laptops and software maintenance.

### CLOUD SOFTWARE

Technology is changing and cloud software is finding some footing in industry. The Centre Region COG Codes software and the Centre Region COG Finance accounting software are evidence of this. At some point, certain software that the township uses may be cost effective to be move to the cloud. This could be office software, GIS, document management or police records software. One such item is the Microsoft Office suite. The Township is moving to the cloud version of Microsoft Office. A small version of the software is downloaded to the client computer and it is updated automatically, similar to the Windows operating system updates. Users are able to use the most current software available, with many new features not available in the older versions of the software.

Another cloud version is the email service. Microsoft, as part of the Office suite, has a cloud version of Outlook which integrates with their cloud version of Microsoft Exchange. In fact, our current email provider, the State College Borough, is migrating its email data to such service at this time.

**FERGUSON TOWNSHIP  
2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS  
INFORMATION TECHNOLOGY**

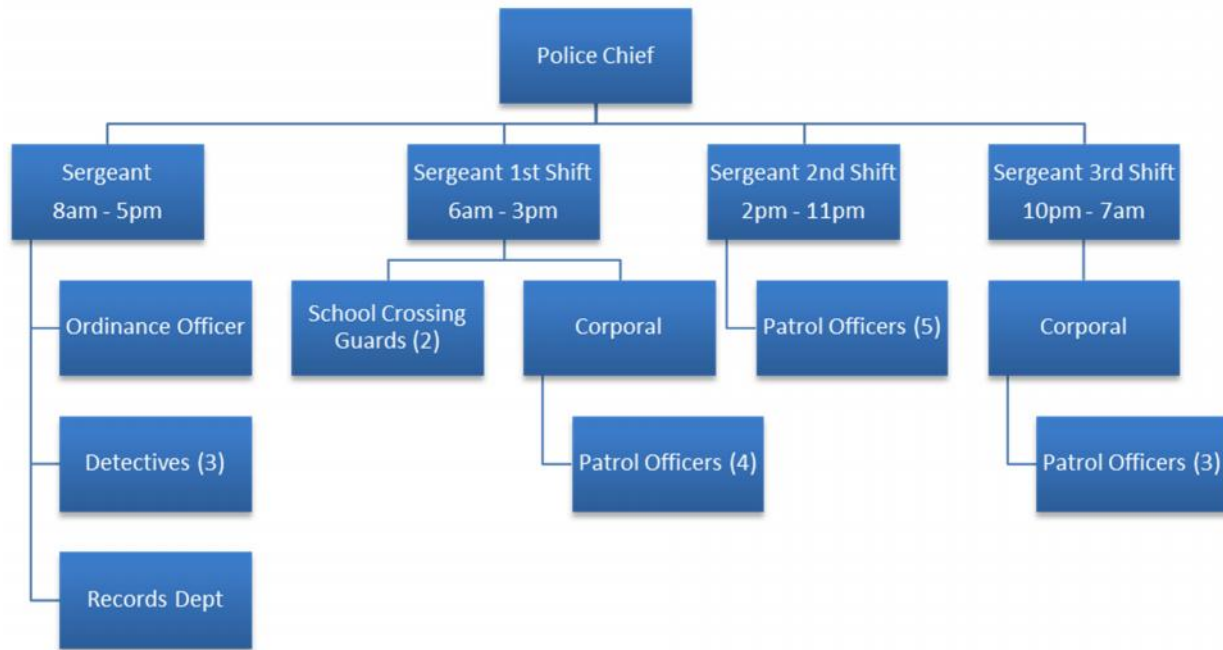
30.400.407.750		
Description	Year	Amount
Document Management System	2016	25,000
Firewall and installation	2016	10,250
Document Management replacement server including database software	2017	25,000
Backup system replacement server including software	2017	25,000
Replace Server (end of life)	2018	15,000
Network GB switch for new PW building	2018	5,000
Replace ARGON fire suppression system in computer room	2020	included in bldgs
<b>Total</b>		<b>105,250</b>
Subtotals by Year	2016	35,250
	2017	50,000
	2018	20,000
	2019	0
	2020	0
	total	105,250

## POLICE DEPARTMENT

The police department is proposing to spend **\$1,020,085** or **14.6%** of the total Capital Reserve fund expenditures during the term of this capital plan

### Organizational Chart

The current organizational chart for the department is displayed below. The department employees 21 officers including the Chief, and two records assistants, a part time ordinance enforcement officer and two part time crossing guards.



### Police Staffing

The department is requesting an additional sergeant position to remedy the disproportional workload of the daylight sergeant currently. This new position is represented in the chart above as the 8am to 5pm Sergeant. This new position would supervise the detective unit, records office and ordinance officer as well as serve as the Accreditation Manager. The position would be promoted from within, thereby creating a new entry-level officer position.

The direct cost of an officer is estimated in the following chart. It includes the cost of the officers' uniforms and personal protection equipment, such as weapons and body armor. It also includes the cost to promote a current officer to Sergeant. This does not include the cost of vehicles and related insurance, which are accounted for separately.

**FERGUSON TOWNSHIP  
2016 – 2020 CIP STAFFING  
POLICE OFFICER AND PROMOTIONAL COSTS**

<b>Direct Costs Estimate</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2018</b>	<b>2020</b>	<b>Total</b>
Salary	59,678	65,167	65,167	70,848	76,728	337,588
Health/Eye/Dental	15,338	16,872	16,872	18,559	20,415	88,056
Life/Disability Insurance	380	384	384	388	392	1,928
Pension	5,968	6,517	6,517	7,085	7,673	33,759
Employer Taxes	4,673	5,093	5,093	5,528	5,978	26,365
Workers Comp	2,948	3,219	3,219	3,500	3,790	16,676
Personal Protection Equipment	6,000					6,000
<b>Total</b>	<b>94,985</b>	<b>97,252</b>	<b>97,252</b>	<b>105,908</b>	<b>114,976</b>	<b>510,372</b>

## 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 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 / Make/ Model	2013 Chev Tahoe	2014 Chev Tahoe	2013 Chev Tahoe	2012 Chev Caprice	2011 Chev Caprice	2012 Chev Caprice	2009 Ford Crown Victoria	2015 Chev Tahoe	2010 Ford Fusion	2013 Chev Tahoe	2014 Chev Caprice	2014 Chev Impala	2011 Chev Tahoe	2008 Chev Impala	2008 Ford Crown Victoria	2000 MCV	CRV 1995 Ford
Twp ID	100046	100259	100045	100043	100255	100048	100195	100262	100253	100044	100261	100260	100254	100123	100193		100252
VIN	1GNL2E2E00DR283016	1GNSK2E02E4172886	1GNL2E2E06DR284297	6G1MK5U23CL646331	6G1MK5T20BL544811	6G1MK5U2XCL644432	2FAHP71V39X140033	1GN5K2E0C1F12638450	3FAHP0H1A0AR213114	1GNL2E2E06DR284350	6G3NS5U22EL959725	1G11X5S12EU145604	1GNSK2E04BR326560	2G1WS53181338892	2FAFP71V28X106851	5134LP37J8Y3319896	1FDJE30F8SHB77651
In Service	May-13	May-14	May-13	Oct-12	Aug-12	Oct-12	Jun-09	Jun-15	Apr-12	May-13	Apr-15	Mar-14	Aug-12	Mar-10	Oct-12	Jul-05	Jun-08
Assignmt	Patrol	Patrol	Patrol	Patrol	Patrol	Patrol	Training	Patrol	Detective	Patrol	Traffic	Chief	Patrol	Detective	EVOC	Spec	Spec
CNG	Y (Jan 2014)	N	Y (Jan 2014)					Y (7)		Y (May 2013)	N		N				
Radio	XTL2500	XTL2500	XTL2500	XTL2500	XTL2500	XTL2500	XTL5000	APX6500	XTL2500	XTL5000	APX4500	XTL2500	XTL2500	XTL2500		Multiple	
In Service	2013		2013	2013	2013	2013	2009	2015		2009	2015	2015					
MCT								GETAC Tablet			GETAC Tablet						
Model / In service	M-6 (2010)	M-6 (2009)	M-6 (2010)	M-6 (2010)	M-6 (2010)	M-6 (2010)	M-6 (2009)		None	M-6 (2010)			M-6 (2010)	None	None		None
VASCAR / VSPEC	VASCAR	VASCAR	VASCAR	VASCAR	VASCAR	VASCAR	VSPEC	VASCAR Plus IIIIL	N/A	VASCAR	VASCAR Plus IIIIL	N/A	N/A	N/A	N/A		N/A
In service							2009	2015			2015						
Est. Rplcmt	2018	2019	2018	2017	2016	2017	2019	2020	2017	2018	2020	2019	2016	2016		N/A	N/A
Color	Bl/Silver	Bl/Silver	Bl/Silver	Silver	Silver	Silver	Dk Blue	Bl/Silver	Gold	Bl/Silver	Black	Black	Silver	Black	White	White	
Registrn	MG4783G	MG7709G	MG4785G	MG3039G	MG7642F	MG3038G	EDD0010	MG6229H	GFW2466	MG4784G	MG3851H	JKK3229	MG6670F	HJS9086	MG7443D	95356MG	MG4227B
Mileage May 2015	51,661	30,687	57,522	55,098	101,055	52,237	68,714		36,549	41,500	579	6,923	74,048	38,472	122,882	5,235	187,422

The total proposed Public Safety department capital items for the 2016 to 2020 CIP is described in the following department 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-year cycle of 2 to 3 vehicles per year, depending on condition of the vehicle. Most new patrol vehicles have been specified as Chevrolet Tahoes, instead of passenger cars, so that the CNG tank and fueling system may be accommodated and the benefits of fuel savings of CNG bi-fueled vehicles will be maximized.

<b>FERGUSON TOWNSHIP</b>		
<b>2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS</b>		
<b>POLICE VEHICLES</b>		
30.400.410.750		
<b>Description</b>	<b>Year</b>	<b>Amount</b>
Police Vehicles & Accessories (3) (FT5/FT14/FT17)	2016	129,000
CNG Conversion (2) (new tanks) (FT5/FT14)	2016	24,000
Police Vehicles & Accessories (3) (FT4/FT6/FT10)	2017	141,900
CNG Conversion (2) (new tanks)	2017	25,000
Police Vehicles & Accessories (3) (FT1/FT3/FT11)	2018	170,268
CNG Conversion (3) (existing tanks)	2018	22,500
Police Vehicles & Accessories (3) (FT2/FT13/FT7)	2019	152,259
CNG Conversion (1) (existing tanks)	2019	7,500
Police Vehicles & Accessories (2) (FT8/FT12)	2020	110,158
CNG Conversion (1) (existing tanks)	2020	7,500
<b>Total</b>		<b>790,085</b>
Subtotals by Year	2016	153,000
	2017	166,900
	2018	192,768
	2019	159,759
	2020	117,658
	total	790,085

Grant money is not expected 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 save the township \$16,000 per vehicle over the life of the tank.

## 2016

### Police Vehicles & Equipment

**\$153,000**

Three vehicles will be due for replacement.

Replace 2011 Chevrolet Caprice (FT-5)	38,750
Equipment and installation	10,000
Subtotal	48,750
Replace 2011 Chevrolet Tahoe (FT-14)	38,750
Equipment and installation	10,000
Subtotal	48,750
Replace 2008 Chevrolet Impala (FT-17)(CI)	26,500
Equipment and installation	5,000
Subtotal	31,500
<b>Total</b>	<b>129,000</b>

Replacement costs include paint and graphics. 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

**\$24,000**

This cost is for the new Tahoes (FT-5 & 14) to be upfitted 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. 2 @ \$12,000 each.

## 2017

### Police Vehicles & Equipment

**\$166,900**

Three 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 2012 Chevrolet Caprice (FT-4)	42,625
Equipment and installation	11,000
Subtotal	53,625
Replace 2012 Chevrolet Caprice (FT-6)	42,625
Equipment and installation	11,000

Subtotal	53,625
Replace 2010 Ford Fusion (FT-10)(CI)	29,150
Equipment and installation	5,500
Subtotal	34,650
<b>Total</b>	<b>141,900</b>

### **CNG Conversions** **\$25,000**

One or both units may be converted to CNG to continue program and recognize fuel savings (2 @ 12,500)

## **2018**

### **Police Vehicles & Equipment** **\$192,768**

Three vehicles will be due for replacement.

Replace 2013 Chevy Tahoe (FT-1)	44,756
Equipment and installation	11,500
Subtotal	56,256
Replace 2013 Chevy Tahoe (FT-3)	44,756
Equipment and installation	11,500
Subtotal	56,256
Replace 2013 Chevy Tahoe (FT-11)	44,756
Equipment and installation	11,500
Subtotal	56,756
Total	170,268

### **CNG Conversions** **\$22,500**

All units will need converted to CNG should we choose to continue the program and recognize the 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 \$5,000. (3 @ \$7,500)

## **2019**

### **Police Vehicles & Equipment** **\$159,759**

Three patrol vehicles are due for replacement.

Replace 2014 Chevrolet Tahoe (FT-2)	46,994
Equipment and installation	12,650
Subtotal	59,644
-	-
Replace 2014 Chevy Impala (FT-13)	32,065
Equipment and installation	6,050
Subtotal	38,115
Replace 2009 Crown Victoria (FT-7)	43,000
Equipment and installation	11,500

Subtotal	54,500
Total	152,259

### CNG Conversions

**\$7,500**

One unit will need converted to CNG should we choose to continue the program and recognize the fuel savings. It is anticipated we will be able to move the CNG tank, which should result in conversion savings. (1 @ \$7,500).

## 2020

### Police Vehicles & Equipment

**\$117,658**

Two vehicles will be due for replacement.

Replace 2015 Chevrolet Tahoe (FT-8)	51,693
Equipment and installation	13,915
Subtotal	65,608
-	
Replace 2004 Chevy Impala (FT-12)	38,500
Equipment and installation	6,050
Subtotal	44,550
Total	110,158

### CNG Conversions

**\$7,500**

The Tahoe will need converted to CNG should we choose to continue the program. (1 @ \$7,500)



<b>2019</b>	
No Items are requested at this time for this year.	
<b>2020</b>	
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.

<b>FERGUSON TOWNSHIP</b> <b>2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS</b> <b>POLICE CAR VIDEO SINKING FUND</b>				
30.400.410.760				
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
Annual Sinking Fund Contribution	2015	20,000		50,000
Mobile Computer Systems	2015		60,000	(10,000)
Annual Sinking Fund Contribution	2016	20,000		10,000
Mobile Cameras for Cars	2017		60,000	(50,000)
Annual Sinking Fund Contribution	2017	20,000		(30,000)
Annual Sinking Fund Contribution	2018	20,000		(10,000)
Annual Sinking Fund Contribution	2019	20,000		10,000
Annual Sinking Fund Contribution	2020	20,000		30,000
<b>Total</b>		<b>140,000</b>	<b>120,000</b>	
Subtotals by Year		2016	0	
		2017	60,000	
		2018	0	
		2019	0	
		2020	0	

## PLANNING AND ZONING DEPARTMENT

The total proposed capital costs for the Planning and Zoning Department totals **\$150,000** or **2.2%** 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 activity. 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.

### 2015 Accomplishments

Several department goals were accomplished or significantly advanced in 2015. Most notably, the addition of a Community Planner has allowed the department to remain current on plan reviews and keep up with the rapidly growing development activity in the Township. Additionally, workforce housing guidelines were established to address a need for more affordable living options (Strategic Plan Action Step 3.1.4), and progress was made toward improving the Terraced Streetscape District to make it more attractive to development (Strategic Plan Action Step 3.3.3).

Turnover of senior staff in recent years has made long term planning difficult. The addition of the Community Planner will allow the Director of Planning & Zoning to focus on several initiatives outlined in the Strategic Plan, Comprehensive Plan, and other guiding documents that will help to advance the long range land use planning goals of the Township.

## 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 (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 PSU Concept of the Terraced Streetscape District

### THE TERRACED STREETSCAPE DISTRICT



#### TSD I

- Focus on retail, office, and residential real estate
- Maximum 7 floor mixed use on W. College Ave
- Shorter building height on Butz and Beaver to provide a more seamless transition to State College west end neighborhood

#### Plaza

- Railroad corridor space focused on mixed use buildings
- Access to PSU via bike trail
- Concentration of retail, restaurants, offices, hotel, and residential
- Lawns and courtyards to areas for outdoor social gathering
- Ample parking spaces included

#### TSD II

- Continued combination of retail, office, and residential mixed use
- Larger building footprint than TSD I
- Transition toward other businesses currently on W. College Ave



Use	Area (gsf)	Floor Occupancy
Green Roof	265,000 gsf	roof
Residential	1,615,000 gsf	3-7
Office	390,000 gsf	2
Commercial/Retail/Restaurant	263,000 gsf	1
Parking		1-6 garage + surface lot

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

30.400.414.750		
Description	Year	Amount
Rewrite Land Use Ordinances	2016	100,000
Land Use Master Plan	2020	50,000
Total		150,000
Subtotals by Year	2016	100,000
	2017	0
	2018	0
	2019	0
	2020	50,000
	total	150,000

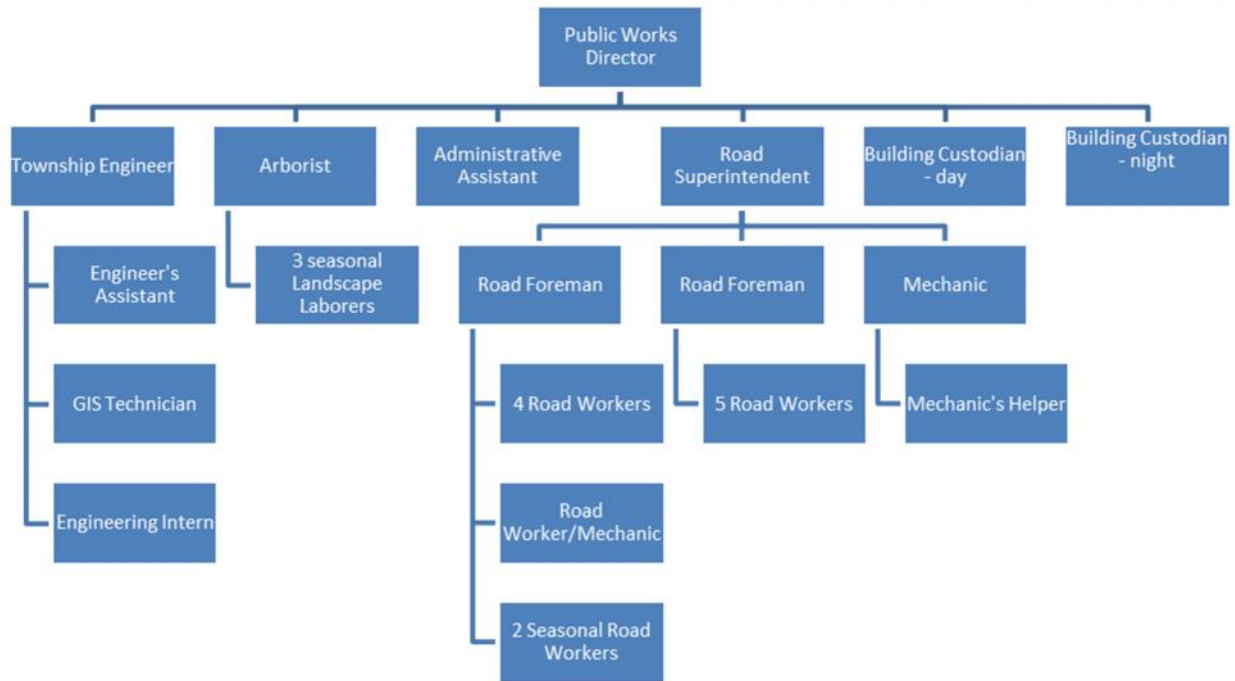
**Planning & Zoning Department Requests**

<b>2016</b>	
Consultant - Rewrite of Land Use Ordinances	<b>\$100,000</b>
<p>This item will cover the cost to engage a consultant to assist Township staff in rewriting the zoning ordinance and the subdivision and land development ordinance. This project was unable to be completed in 2015 due to planning activity and staff turnover. It is expected that this rewrite could take more than one year to bring to fruition, and will require a significant investment of staff and consulting time due to the overall complexity of a project of this magnitude.</p>	
<b>2020</b>	
<b>Land Use Master Plan</b>	<b>\$50,000</b>
<p>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.</p>	

## PUBLIC WORKS DEPARTMENTS

### PUBLIC WORKS STAFFING

The Public Works Organizational Chart is depicted below. No new personnel are requested in this 5 year CIP. The organizational chart reflects staffing effective May 2015 including a vacant arborist position.



### BUILDINGS AND GROUNDS DEPARTMENT

The total proposed capital costs for the Buildings & Grounds Department totals **\$2,859,137** or **41.0%** of the total Capital Reserve expenditures for the five years. This is by far, the most costly of the departments for this CIP. The majority of this consists of the Public Works maintenance facility.

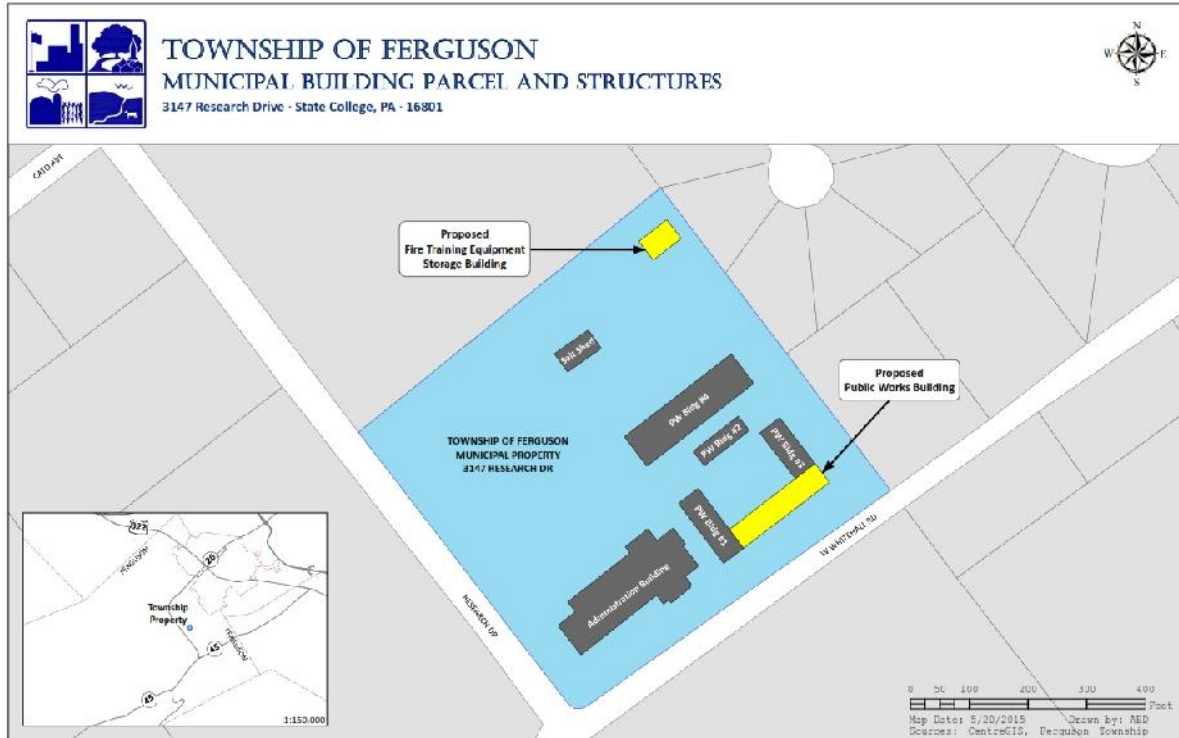
In this CIP, the basis for the “sinking fund” or “Public Works Capital Building Fund Appropriation” for building systems was recalculated. This fund was set up after the township building was renovated in 2007 to save for the future replacement of building systems such as HVAC, roofs, doors, and fixtures. The amount established in 2007 was \$27,000 per year. The amount has been recalculated at \$41,000 per year for 2016 to more accurately reflect current building systems and costs and now includes saving for systems such as windows, flooring, light fixtures, security door system, cameras, fire system and panels, and audio video systems. The CIP shows expenses anticipated to come out of this fund as well as expenses not attributable to the fund.

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 grapppler 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 buildings and grounds department is requesting the following items for this planning period. Please note that the new facility will be paid out of loan proceeds.

<b>FERGUSON TOWNSHIP</b> <b>2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS</b> <b>BUILDINGS &amp; GROUNDS</b>		
30.400.409.750		
Description	Year	Amount
Renovate Finance/Engineering to improve flow and HVAC	2016	33,000
Renovate PD to accommodate 4th detective	2017	15,000
Architectural design and engineering site plan new PW maintenance bldg	2017	285,863
Site work, utilities, parking for new PW maintenance facility	2018	100,000
New PW maintenance facility	2018	1,905,750
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
<b>Total</b>		<b>2,749,613</b>
Subtotals by Year	2016	33,000
	2017	300,863
	2018	2,415,750
	2019	0
	2020	0
	total	2,749,613

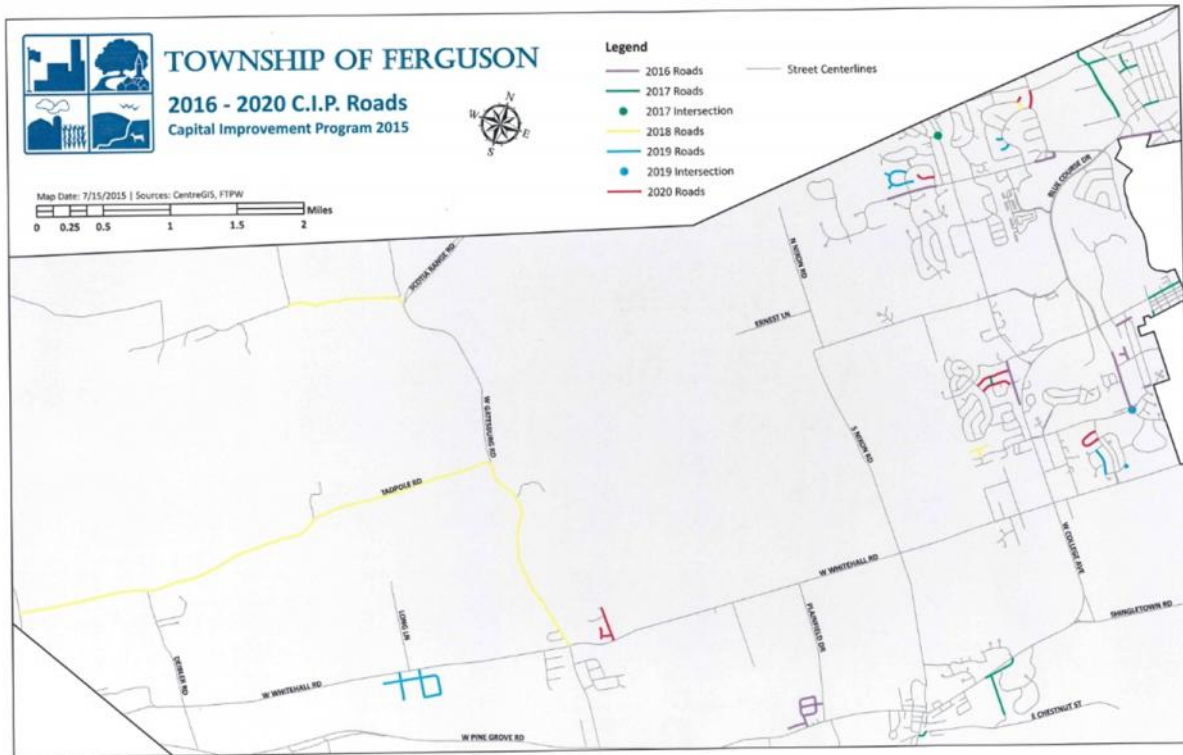
The Buildings & Grounds Department has a sinking fund for replacement of major equipment. The proposed sinking fund activity is included in the following chart. Currently, there are no plans to replace any equipment during the term of this capital plan.

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. The amount established was \$27,000 per year. The amount has not changed and remained the same each year without escalation. By 2019, the HVAC system will be 12 years old. Staff will review the equipment depreciation schedule and cost and useful life for the building systems and suggest any funding changes and include systems for replacement from this fund in future CIPs as necessary.

<b>FERGUSON TOWNSHIP</b> <b>2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS</b> <b>BUILDING EQUIPMENT SINKING FUND</b>				
30.400.409.760				
Description	Year	Additions	Deductions	Balance
Annual Sinking Fund Contribution	2012	27,000		27,000
Annual Sinking Fund Contribution	2013	27,000		54,000
Annual Sinking Fund Contribution	2014	27,000		81,000
Annual Sinking Fund Contribution	2015	27,000		108,000
Annual Sinking Fund Contribution	2016	41,000		149,000
Replace 8 overhead doors PW Bldg1	2016		28,350	120,650
Replace 3 steel personnel doors	2016		6,300	114,350
Camera system upgrades (hardware only)	2016		6,078	108,272
Annual Sinking Fund Contribution	2017	41,000		149,272
Upgrade exterior lighting PW buildings	2017		7,718	141,554
Annual Sinking Fund Contribution	2018	41,000		182,554
Paint exterior stucco Administration Building	2018		15,000	167,554
Replace rubber roof Administration Building	2018		18,000	149,554
Annual Sinking Fund Contribution	2019	41,000		190,554
Annual Sinking Fund Contribution	2020	41,000		231,554
Replace carpet Admininstration Building	2020		19,144	212,410
Replace Computer room halon fire suppression	2020		8,934	203,476
<b>Total</b>		<b>313,000</b>	<b>109,524</b>	
Subtotals by Year		2016	40,728	
		2017	7,718	
		2018	33,000	
		2019	0	
		2020	28,078	
		total	109,524	

## ROAD PROJECTS

Road Projects make up the bulk of the capital expenditures for the township. For the term of this CIP, road projects total **\$9,769,554 or 64.7%** of the total capital expenditures for all capital projects funds. The map below depicts the various roadwork that that township is planning to undertake during the term of this capital plan.



2016	
<u>Terraced Streetscape District Improvements</u>	<b>\$150,000</b>
<p>In 2015, the Township completed the installation of sidewalk and supporting improvements along the West College Avenue from Buckhout Street to Corl Street in the Terraced Streetscape District. This project was made possible by a nearly \$800,000 PennDOT Transportation Alternatives Program grant. Additional funding, however, of approximately \$500,000 is needed to complete the streetscape improvements along the corridor. These include the installation of street lighting, trees and street furniture. This item anticipates an application to the PennDOT Multimodal Transportation Fund grant program in 2015, and would cover the 30% match required by the grant.</p>	

<b>FERGUSON TOWNSHIP</b> <b>2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS</b> <b>PUBLIC WORKS ROADS</b>					
30,400,430.750					
Description	Year	TIF	Liquid Fuels	Piney Ridge	Capital Reserve
Summary of Road Projects	2016	1,928,554	460,000	89,446	0
Terraced Streetscape Project	2016	150,000			
Summary of Road Projects	2017	1,980,000	474,000	0	0
Summary of Road Projects	2018	1,973,000	505,000	0	0
Summary of Road Projects	2019	1,124,000	578,000	0	0
Summary of Road Projects	2020	588,000	631,000	0	0
<b>Total</b>		<b>7,743,554</b>	<b>2,648,000</b>	<b>89,446</b>	<b>0</b>
Subtotals by Year	2016	2,078,554	460,000	89,446	0
	2017	1,980,000	474,000	0	0
	2018	1,973,000	505,000	0	0
	2019	1,124,000	578,000	0	0
	2020	588,000	631,000	0	0
<b>Total</b>		<b>7,743,554</b>	<b>2,648,000</b>	<b>89,446</b>	<b>0</b>

### Road Improvements by Contract:

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.

Microsurfacing is a cold-mix paving system; it is not a hot 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. In 2016 FTPW proposes to pave Knob Hill Road. 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 2016 is estimated to cost \$37/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 \$40/linear foot. No recycling was done in 2015. The 2014 paving projects with all work done by contract including cold in place recycling cost \$118/linear foot. Additional costs are incurred if residential driveway aprons are paved as part of the 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 for the first time is trying 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. \$4,000 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. 8 ramps are proposed to be reconstructed with capital road projects in 2016.

For the first time, in 2015, roads to be microsurfaced will have associated handicap ramps upgraded. The concrete work is to be completed by FTPW. The work is very labor intensive. Approximately 30 ramps are planned for replacement by FTPW in 2015. The CIP includes a line item for materials only for this work by FTPW. Based on workload, if FTPW is unable to perform the work, additional funding will need to be budgeted in future years to contract the work.

### **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 at the Borough/Township line. This will be the first phase of construction of streetscape improvements along West College Avenue in an area zoned Terrace Streetscape District.

In 2016, \$43,300 is included in the budget as the Township's share of the cost for engineering, right of way acquisition, and utility relocation for this project (some design fees are being accrued in 2015).

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

### Traffic Signals:

Funding is requested each year to optimize traffic signals. This requires an engineering study, traffic counts, revised traffic signal timing plan, approval by PennDOT and minor equipment upgrades. Staff anticipates studying and optimizing 4 intersections each year. With 20 signalized intersections, each signal would be studied every 5 years.

Funding is requested for a UPS backup system for the traffic signal at the College Avenue/Corl Street intersection. If the signals on Atherton Street are upgraded by PennDOT with the paving project, this will be the last signal that needs upfitted with a UPS backup.

Replacement Schedule for Traffic Signal Uninterruptable Power Supplies (UPS): In an effort to improve the function and reliability of traffic signal operations especially in the event of power outages, public works staff requests funding for UPSs in accordance with the below schedule:

Traffic Signal Battery Backup Inventory

System	Location	UPS Type	Battery Type	Battery Installed / Last Replaced	Generator Plug / Type	Indicator Lights
Atherton	Aaron Dr and N Atherton St	Econolite: DBLMX	3 - Genesis: NP100-12 (12V 100Ah)	2007/2013	Leviton 30A, 125V	Yes
	North Hills Place and N Atherton St	PennDOT	None		No	No
	Blue Course Dr/Cilinton Ave and N Atherton St	Econolite: DBLMX	3 - Genesis: MP100-12 (12V 100Ah)	2004/2014	Hubbell 30A, 125V	Yes
	Cherry Ln and N Atherton St	PennDOT	None		No	No
Blue Course	Martin St and Blue Course Dr	Econolite: DBL 777MX	3 - Genesis: MP100-12 (12V 100Ah)	2014	Leviton 30A, 125V	Yes
	Circleville Rd and Blue Course Dr	Econolite: DBL700-M	3 - Genesis: NP100-12 (12V 91.6Ah)	2006/2014	Hubbell 30A, 125V	Yes
	Havershire Blvd and Blue Course Dr	Econolite: DBLMX	3 - Genesis: MP100-12 (12V 100Ah)	2013	Leviton 30A, 125V	Yes
	Old Gatesburg Rd and Blue Course Dr	Econolite DBL-700	3 -Genesis: MP100-12 (12V 100Ah)	2012	Leviton 30A, 125V	Yes
	W College Ave and Blue Course Dr	Econolite: DBLMX	3 - Genesis: MP100-12 (12V 100Ah)	2004/2014	Hubbell 30A, 125V	Yes
	Westerly Pkwy and Blue Course Dr	Econolite DBL-777-MX	3 - Genesis: NP100-12 (12V 100Ah)	2009/2014	Hubbell 30A, 125V	Yes
Science Park	Circleville / Valley Vista and Science Park	Econolite: DBLMX	3 - Genesis: MP100-12 (12V 100Ah)	2015	Leviton 30A, 125V	Yes
	Old Gatesburg Rd and Science Park Rd	Econolite: DBL700-M	3 - Genesis: NP100-12 (12V 100Ah)	2006/2014	Leviton 30A, 125V	No
	Raytheon/ARL and Science Park Rd	Econolite DBL-777-MX	Magic Power Solution SN 12-100 (HT)	2010	Leviton 30A, 125V	Yes
	Pine Hall Rd and Science Park Rd	Econolite: DBL 777MX	3 - Genesis: MP100-12 (12V 100Ah)	2014	Leviton 30A, 125V	Yes
	Science Park Rd and W College Ave	Econolite: DBL700-M	3 - Genesis: NP100-12 (12V 100Ah)	2012	Leviton 30A, 125V	Yes
None	Corl St and W College Ave	2016-C11	None		No	No
	Whitehall Rd and W College Ave	Econolite: DBLMX	3 - Genesis: NP100-12 (12V 100Ah)	2013	Leviton 30A, 125V	Yes
	Martin St and Aaron Dr	Econolite: DBL 777MX	3 - Genesis: MP100-12 (12V 100Ah)	2014	Leviton 30A, 125V	Yes
	Bristol Ave and W College Ave	Econolite: DBL700-M	3 - Genesis: NP100-12 (12V 100Ah)	2012	Leviton 30A, 125V	Yes
	Research Dr and Whitehall Rd	Econolite: DBL 777MX	3 - Genesis: MP100-12 (12V 100Ah)	2014	Leviton 30A, 125V	Yes

7/7/2015

The road projects are depicted by year and are shown below.

ROADS and Road Supplies- Description	Year	feet	unit price	Construction	Year Cost	
2016						
Microsurfacing and pavement preservation Townshipwide	2016	1	\$220,000	\$242,000	\$242,000	
microsurfacing	2016	1	\$5,000	\$5,500	\$6,000	
Road Materials and Supplies routine maintenance	2016	1	\$25,000	\$27,500	\$28,000	
Road Materials for below Capital TIF projects	2016	1	\$25,000	\$27,500	\$28,000	
Knob Hill Road materials and equipment rental - Pave by FTPW	2016	1	\$31,000	\$34,100	\$34,000	
Pavement Markings	2016	1	\$65,000	\$71,500	\$72,000	
Road Salt	2016	1 x		\$50,000	\$50,000	
Subtotal Liquid Fuels						\$460,000
Subtotal Capital Reserve Fund from General Fund						\$0
W College Ave Streetscape Engineering	2016	1	\$65,000	\$71,500	\$72,000	
West College Ave Streetscape ROW	2016	1	\$330,000	\$363,000	\$363,000	
West College Ave Streetscape Utility	2016	1	\$8,000	\$8,800	\$9,000	
repair by FTPW)	2016	1700	\$45	\$50	\$84,000	
repair by FTPW)	2016	850	\$45	\$50	\$42,000	
repair by FTPW)	2016	1170	\$45	\$50	\$58,000	
swales(base repair by FTPW)	2016	850	\$50	\$55	\$47,000	
Kansa drainage (pipe from 652 Kansa to stream)	2016	550	\$75	\$83	\$45,000	
Kansa drainage inlets	2016	6	\$3,000	\$3,300	\$20,000	
Kansa utility relocation	2016	1	\$15,000	\$16,500	\$17,000	
Kansa ROW (drainage easement)	2016	1	\$5,000	\$5,500	\$6,000	
Piney Ridge driveway adjustments in ROW	2016	65	\$1,500	\$1,650	\$107,000	
Bikepaths and parking lots pavement repair, sealcoating, line striping	2016	1	\$30,000	\$33,000	\$33,000	
improvement	2016	1	\$20,000	\$22,000	\$22,000	
(base repair by FTPW)	2016	1430	\$37	\$41	\$58,000	
drainage	2016	1900	\$37	\$41	\$77,000	
mill and overlay, no drainage, no curb (base repair by FTPW)	2016	3430	\$37	\$41	\$140,000	
drainage	2016	400	\$37	\$41	\$16,000	
Conover Lane (Haymarket) - mill and overlay, no curb, no drainage	2016	600	\$37	\$41	\$24,000	
roundabout) on Valley Vista Drive at Bachman Lane	2016	1	\$35,000	\$38,500	\$39,000	
ADA handicap ramps for this year's capital road improvements	2016	8	\$4,000	\$4,400	\$35,000	
Left turn Valley Vista Drive and Bachman Lane - Utility	2016	1	\$25,000	\$27,500	\$28,000	
Left turn Valley Vista Drive and Bachman Lane - ROW	2016	1	\$25,000	\$27,500	\$28,000	
roundabout) on Science Park Road at Sandy Drive	2016	1	\$35,000	\$38,500	\$39,000	
Science Park Road and Sandy Drive - Utility	2016	1	\$25,000	\$27,500	\$28,000	
Science Park Road and Sandy Drive - ROW	2016	1	\$25,000	\$27,500	\$28,000	
Street to N Atherton Street	2016	1	\$35,000	\$38,500	\$39,000	
W Aaron Drive from Martin Street to N Atherton Street - Utility	2016	1	\$25,000	\$27,500	\$28,000	
W Aaron Drive from Martin Street to N Atherton Street - ROW	2016	1	\$25,000	\$27,500	\$28,000	
Local share of 50/50 Green Light Go Grant W College/Corl Street	2016	0.5	\$359,356	\$395,292	\$198,000	
Westerly Parkway (base repair by FTPW) mill, overlay, no curb	2016	2450	\$55	\$61	\$148,000	
Westerly Parkway - ADA ramps	2016	6	\$4,000	\$4,400	\$26,000	
Westerly Parkway - inlet tops, no pipe	2016	15	\$2,500	\$2,750	\$41,000	
overlay, no drainage except abandon open grate, no curb	2016	640	\$45	\$50	\$32,000	
Myrtle Ave from Madison to McBath - mill and overlay	2016	270	\$45	\$50	\$13,000	
PINEY RIDGE SUBTOTAL						\$89,446
TIF SUBTOTAL						\$1,928,554
TOTAL					\$2,478,000	

ROADS - Description	Year	feet	unit price	Construction	Year Cost	
<b>2017</b>						
Microsurfacing and pavement preservation Townshipwide	2017	1	\$220,000	\$266,200	\$266,000	
microsurfacing	2017	1	\$5,000	\$6,050	\$6,000	
Road Materials and Supplies	2017	1	\$26,000	\$31,460	\$31,000	
Road Materials for below Capital TIF projects	2017	1	\$25,000	\$30,250	\$30,000	
Iroquois Road materials and equipment rental - Pave by FTPW	2017	1	\$10,000	\$12,100	\$12,000	
Pavement Markings	2017	1	\$65,000	\$78,650	\$79,000	
Road Salt	2017	1 x		\$50,000	\$50,000	
Subtotal Liquid Fuels						\$474,000
W College Ave Streetscape Construction				\$694,000		
W College Ave Streetscape Construction Grant Reimbursement				(\$798,000)		
W College Ave Inspection Cost				\$104,000		
Subtotal Capital Reserve Fund from General Fund						\$0
Bikepaths and parking lots pavement repair, sealcoating, line striping	2017	1	\$30,000	\$36,300	\$36,000	
improvement	2017	1	\$20,000	\$24,200	\$24,000	
curb replacement, some drainage	2017	740	\$300	\$363	\$269,000	
Denton Avenue - (base repair by FTPW) overlay, no curb, no drainage	2017	900	\$37	\$45	\$40,000	
Denton Ave ADA ramps	2017	2	\$4,000	\$4,840	\$10,000	
drainage	2017	640	\$37	\$45	\$29,000	
Sycamore Drive - (base repair by FTPW) overlay	2017	1590	\$37	\$45	\$71,000	
Sycamore Drive drainage ditches and driveway culverts	2017	3180	\$50	\$61	\$192,000	
Meckley Drive	2017	1530	\$37	\$45	\$68,000	
FTPW) overlay	2017	640	\$37	\$45	\$29,000	
repair by FTPW) overlay	2017	220	\$37	\$45	\$10,000	
ADA handicap ramps for this year's capital road improvements	2017	15	\$4,000	\$4,840	\$73,000	
Bachman - Construction	2017	1	\$750,000	\$907,500	\$908,000	
overlay, no curb, no drainage, 3 lanes	2017	3070	\$55	\$67	\$204,000	
E Chestnut Street from Water Street to a point 390 feet to the east	2017	390	\$37	\$45	\$17,000	
TIF SUBTOTAL						\$1,980,000
TOTAL					\$2,454,000	
<b>ROADS - Description</b>	<b>Year</b>	<b>feet</b>	<b>unit price</b>	<b>Construction</b>	<b>Year Cost</b>	
<b>2018</b>						
Microsurfacing and pavement preservation Townshipwide	2018	1	\$220,000	\$292,820	\$293,000	
microsurfacing	2018	1	\$5,000	\$6,655	\$7,000	
Road Materials and Supplies	2018	1	\$26,000	\$34,606	\$35,000	
Road Materials for below Capital TIF projects	2018	1	\$25,000	\$33,275	\$33,000	
Pavement Markings	2018	1	\$65,000	\$86,515	\$87,000	
Road Salt	2018	1 x		\$50,000	\$50,000	
Subtotal Liquid Fuels						\$505,000
Subtotal Capital Reserve Fund						\$0
Bikepaths and parking lots pavement repair, sealcoating, line striping	2018	1	\$30,000	\$39,930	\$40,000	
improvement	2018	1	\$20,000	\$26,620	\$27,000	
repair by FTPW) scratch and overlay	2018	6125	\$37	\$49	\$302,000	
Fairfield Circle (Good Hope Farms) - (base repair by FTPW) overlay	2018	750	\$37	\$49	\$37,000	
concrete mountable BCBC mounted curb	2018	1580	\$18	\$24	\$38,000	
Fairfield Circle (Good Hope Farms) - ADA ramps	2018	2	\$4,000	\$5,324	\$11,000	
Stafford Circle (Good Hope Farms)	2018	430	\$37	\$49	\$21,000	
concrete mountable BCBC mounted curb	2018	930	\$18	\$24	\$22,000	
(base repair by FTPW) overlay, no curb, no drainage	2018	320	\$37	\$49	\$16,000	
ADA handicap ramps for this year's capital road improvements	2018	15	\$4,000	\$5,324	\$80,000	
overlay (base repair by FTPW)	2018	8200	\$37	\$49	\$404,000	
Tadpole Road 1 from Marengo Road to W Gatesburg Road	2018	19800	\$37	\$49	\$975,000	
TIF SUBTOTAL						\$1,973,000
TOTAL					\$2,478,000	

Ferguson Township Capital Plan 2016-2020

ROADS - Description	Year	feet	unit price	Construction	Year Cost	
<b>2019</b>						
Microsurfacing and pavement preservation Townshipwide	2019	1	\$220,000	\$322,102	\$322,000	
microsurfacing	2019	1	\$5,000	\$7,321	\$7,000	
Road Materials and Supplies	2019	1	\$26,000	\$38,067	\$38,000	
Road Materials for below Capital TIF projects	2019	1	\$25,000	\$36,603	\$37,000	
Unnamed Road materials and equipment rental - Pave by FTPW	2019	1	\$20,000	\$29,282	\$29,000	
Pavement Markings	2019	1	\$65,000	\$95,167	\$95,000	
Road Salt	2019	1 x		\$50,000	\$50,000	
Subtotal Liquid Fuels						\$578,000
Subtotal Capital Reserve Fund						\$0
Bikepaths and parking lots pavement repair, sealcoating, line striping improvement	2019	1	\$30,000	\$43,923	\$44,000	
New Traffic Signal - Blue Course and Bristol	2019	1	\$250,000	\$366,025	\$366,000	
ramps	2019	350	\$37	\$54	\$19,000	
Appletree Circle, new concrete mountable curb	2019	700	\$18	\$26	\$18,000	
Avebury Circle (Park Hills)	2019	450	\$37	\$54	\$24,000	
Shagbark Court (Chestnut Ridge)	2019	380	\$37	\$54	\$21,000	
Sassafras Court (Chestnut Ridge)	2019	300	\$37	\$54	\$16,000	
Hickory Hill Drive (Chestnut Ridge)	2019	1590	\$37	\$54	\$86,000	
Ashburton Court (Chestnut Ridge)	2019	350	\$37	\$54	\$19,000	
Sheffield Court (Stonebridge)	2019	300	\$37	\$54	\$16,000	
Williamsburg Drive (Stonebridge)	2019	1100	\$37	\$54	\$60,000	
ADA handicap ramps for this year's capital road improvements	2019	15	\$4,000	\$5,856	\$88,000	
Blade Drive	2019	3500	\$37	\$54	\$190,000	
Gardner Lane	2019	1160	\$37	\$54	\$63,000	
Timothy Lane - (base repair by FTPW) overlay, no drainage, no curb	2019	1200	\$37	\$54	\$65,000	
TIF SUBTOTAL						\$1,124,000
TOTAL					\$1,702,000	
<b>ROADS - Description</b>	<b>Year</b>	<b>feet</b>	<b>unit price</b>	<b>Construction</b>	<b>Year Cost</b>	
<b>2020</b>						
Microsurfacing and pavement preservation Townshipwide	2020	1	\$220,000	\$354,312	\$354,000	
microsurfacing	2020	1	\$5,000	\$8,053	\$8,000	
Road Materials and Supplies	2020	1	\$26,000	\$41,873	\$42,000	
Road Materials for below Capital TIF projects	2020	1	\$25,000	\$40,263	\$40,000	
Unnamed Road materials and equipment rental - Pave by FTPW	2020	1	\$20,000	\$32,210	\$32,000	
Pavement Markings	2020	1	\$65,000	\$104,683	\$105,000	
Road Salt	2020	1 x		\$50,000	\$50,000	
Subtotal Liquid Fuels						\$631,000
Subtotal Capital Reserve Fund	2020	1	\$1	\$2	\$0	\$0
Goddard Circle (Ramblewood II)	2020	600	\$37	\$60	\$36,000	
Dogwood Circle	2020	260	\$37	\$60	\$15,000	
Park Lane from Park Hills Avenue to West Aaron Drive	2020	700	\$37	\$60	\$42,000	
Muncy Road	2020	1220	\$37	\$60	\$73,000	
James Ave	2020	1430	\$37	\$60	\$85,000	
Brooklawn Road (Ramblewood II)	2020	370	\$37	\$60	\$22,000	
Ramblewood Road (Ramblewood II)	2020	1380	\$37	\$60	\$82,000	
Corinna Court	2020	850	\$37	\$60	\$51,000	
Pinecliff Road	2020	1430	\$37	\$60	\$85,000	
ADA handicap ramps for this year's capital road improvements	2020	15	\$4,000	\$6,442	\$97,000	
TIF SUBTOTAL						\$588,000
TOTAL					\$1,219,000	

## 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 **\$1,659,312** or **23.4%** 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.

A new pickup truck is requested to assist with tasks assigned to the arborist, superintendent, and building custodian, and for light duty use by the Public Works Department.

A new hydraulic truck conveyor is requested for use on the back of a single axle truck to place topsoil or stone for road shoulder backup and repairs

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

<b>2016</b>	
<b>anticipated purchases less than 25,000 each</b>	
UPS backup and signal cabinet modifications College/ Corl	\$20,000
Traffic signal LED replacements	\$5,000
Pedestrian push button upgrades - 1 intersection	\$5,000
new F250 3/4 ton gas engine truck	\$31,000
single axle truck	\$7,500
<b>SUBTOTAL EQUIP NOT IN FUND</b>	<b>\$68,500</b>
<b>2017</b>	
<b>anticipated purchases less than 25,000 each</b>	
Traffic signal LED replacements	\$5,250
Replace a 2003 variable message sign	\$19,000
Pedestrian push button upgrades	\$5,250
Replace IM-501 a 2007 Kubota RTV utility vehicle	\$24,150
Replace 2007 IM-513 Kubota ZG-20 mower	\$14,333
<b>SUBTOTAL EQUIP NOT IN FUND</b>	<b>\$67,983</b>
<b>2018</b>	
<b>anticipated purchases less than 25,000 each</b>	
Traffic signal LED replacements	\$5,513
Replace a 2003 variable message sign	\$20,000
Pedestrian push button upgrades	\$5,513
Purchase new wing plow for loader to plow back drifts	\$37,485
<b>SUBTOTAL EQUIP NOT IN FUND</b>	<b>\$68,510</b>
<b>2019</b>	
<b>anticipated purchases less than 25,000 each</b>	
Traffic signal LED replacements	\$5,788
Pedestrian push button upgrades	\$5,788
Replace a 2003 variable message sign	\$21,000
<b>SUBTOTAL EQUIP NOT IN FUND</b>	<b>\$32,576</b>
<b>2020</b>	
<b>anticipated purchases less than 25,000 each</b>	
Traffic signal LED replacements	\$6,078
Pedestrian push button upgrades	\$6,078
<b>SUBTOTAL EQUIP NOT IN FUND</b>	<b>\$12,155</b>

## Replacement Equipment

Public Works has a major equipment sinking fund for equipment greater than \$25,000 original cost. The sinking fund activity and balance is included in the following table. The funding is based on estimated current costs and inflated annually by 5%.

<b>FERGUSON TOWNSHIP</b> <b>2016 – 2020 CIP CAPITAL EQUIPMENT DETAIL-CASH BASIS</b> <b>PUBLIC WORKS EQUIPMENT SINKING FUND</b>				
30.400.430.760				
Description	Year	Additions	Deductions	Balance
Beginning Balance 12/31/2015				270,535
Annual Sinking Fund Contribution/Expenditures	2016	290,850	215,250	346,135
Annual Sinking Fund Contribution/Expenditures	2017	305,393	470,768	180,760
Annual Sinking Fund Contribution/Expenditures	2018	320,662	428,321	73,101
Annual Sinking Fund Contribution/Expenditures	2019	336,695	42,543	367,253
Annual Sinking Fund Contribution/Expenditures	2020	353,530	252,704	468,079
<b>Total</b>		<b>1,607,130</b>	<b>1,409,586</b>	
Subtotals by Year		2016	215,250	
		2017	470,768	
		2018	428,321	
		2019	42,543	
		2020	252,704	
		total	1,409,586	

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

<b>2016</b>	
<u>anticipated appropriation fund expenses (&gt;25,000 each)</u>	
Replace PW-20 a 2001 Ford F550 plow and dump truck	\$101,850
Replace IM-102 a 2000 crafcoc crack sealer	\$49,350
Replace IM-401 a 2000 Brush-Bandit brush chipper	\$64,050
<b>SUBTOTAL 2016 EQ FUND EXP</b>	<b>\$215,250</b>
<b>2017</b>	
<u>anticipated appropriation fund expenses (&gt;25,000 each)</u>	
Replace PW-34 a 1997 Vac-All Sweeper	\$198,450
dump truck with 4wd	\$214,988
with new F350 truck and crane to pick grates	\$57,330
<b>SUBTOTAL 2017 EQ FUND EXP</b>	<b>\$470,768</b>
<b>2018</b>	
<u>anticipated appropriation fund expenses (&gt;25,000 each)</u>	
Replace 2001 backhoe	\$150,491
including hydraulic post pounder	\$75,246
Replace PW-16 a 2004 Freightliner one-man leaf collector	\$202,584
<b>SUBTOTAL 2018 EQ FUND EXP</b>	<b>\$428,321</b>
<b>2019</b>	
<u>anticipated appropriation fund expenses (&gt;25,000 each)</u>	
Replace IM-100 a 1997 5 ton roller	\$42,543
<b>SUBTOTAL 2019 EQ FUND EXP</b>	<b>\$42,543</b>
<b>2020</b>	
<u>anticipated appropriation fund expenses (&gt;25,000 each)</u>	
Replace IM-402 a 2004 Vermeer brush chipper	\$77,853
Replace IM-117 a 2007 Caterpillar skid steer loader	\$140,391
Replace IM-101 a 1996 4 ton asphalt trailer	\$34,460
<b>SUBTOTAL 2020 EQ FUND EXP</b>	<b>\$252,704</b>

## PARKS AND RECREATION

The proposed five-year Capital Improvement Program Budget for Parks and Recreation (not including CRCOG) totals **\$1,028,665 or 14.7 %** of the total Capital Reserve fund proposals.

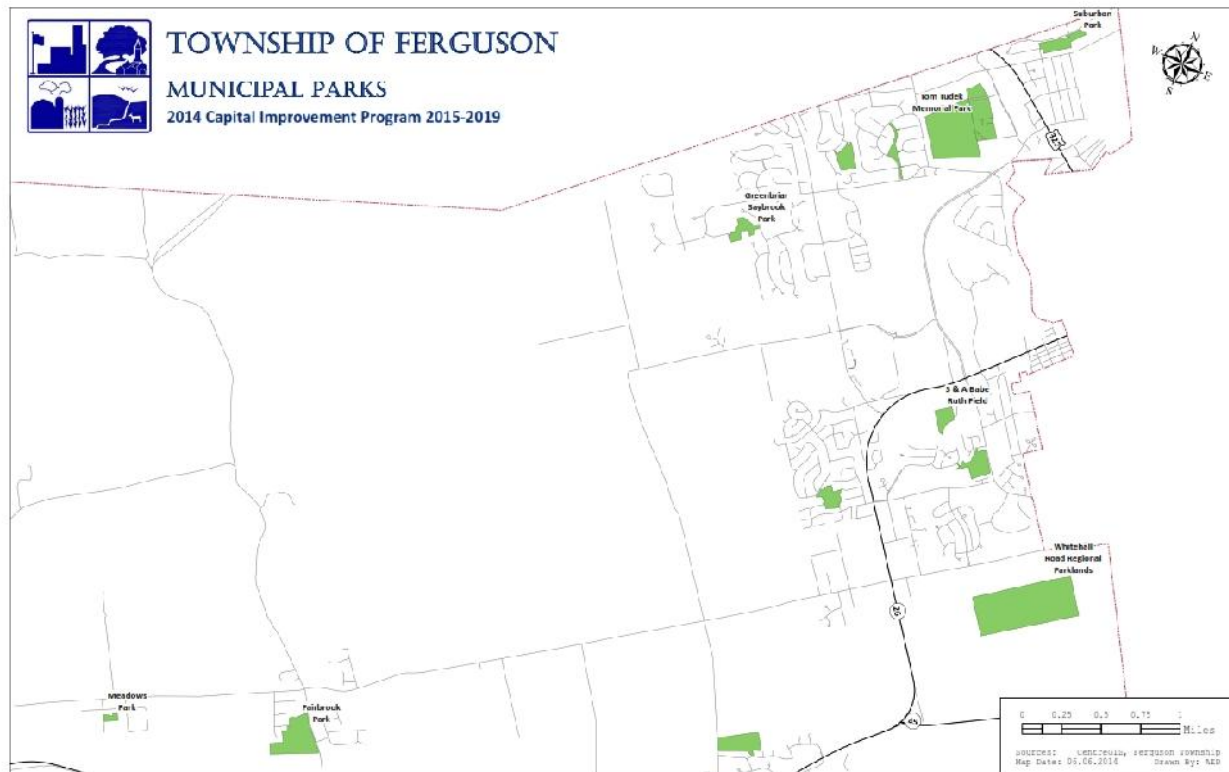
The following projects are recommended to be included in the upcoming five years of the CIP.

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 Plans and each of the park's 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 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.

Two 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 other 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.



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

2016	
<b>Replace Picnic Pavilion at Meadows Park</b>	<b>\$38,200</b>
(24' x 36' Glue Laminated shelter with shingles, concrete floor, installed)	
<b>Suburban Park</b>	<b>\$6,300</b>
Replace baseball backstop, upgrade play equipment (Jayco 4 panel 2 Center Over Panels installed)	
<b><u>Drinking Fountain Replacements</u></b>	
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	<b>\$10,000</b>

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. Fairbrook Park Greenbriar/Saybrook Park	
<b>Fairbrook Park Parking Lot Paving</b>	
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. It is not anticipated that any further storm water management controls will be needed.	<b>\$82,000</b>
<b>Park Amenities (benches, trash containers, grills, doggie stations)</b>	<b>\$14,700</b>
<b>Playground Safety &amp; Update Program</b>	<b>\$35,175</b>
To provide for equipment upgrades and replacements in order to meet playground safety standards.	
<b>Fairbrook Park Tennis Court</b>	<b>\$75,000</b>
During 2013, the Township received a request from a resident to consider construction of a tennis court at Fairbrook Park. The Centre Region Parks and Recreation Department has not conducted a needs assessment for such a facility at this park. The project is included in the CIP as a placeholder until a needs analysis is completed.	
<b>2017</b>	
<b>Tudek Park Phase 3a</b>	<b>\$250,250</b>
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.	
<b>Fairbrook Park</b>	<b>\$6,500</b>
Replace baseball backstop (Jayco 4 panel 2 Center Over Panels installed)	
<b>State College Teener League Field Upgrades</b>	<b>\$100,000</b>
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.	
<b>Drinking Fountain Replacements</b>	
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.	<b>\$10,000</b>

Haymarket Park Meadows Park	
<b>Playground Safety &amp; Update Program</b>	<b>\$36,900</b>
To provide for equipment upgrades and replacements in order to meet playground safety standards.	
<b>2018</b>	
<b>Tudek Barn Roof Replacement/Replace Barn Doors</b>	<b>\$38,000</b>
<b>Westfield/Hillside Farm Estates Park</b>	<b>\$200,000</b>
Continued park improvements in accordance with the park master plan. The township is seeking \$100,000 funding assistance from DCNR.	
<b>Drinking Fountain Replacements</b>	
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. Homestead Park Park Hills Park	<b>\$10,000</b>
<b>Playground Safety &amp; Update Program</b>	<b>\$36,900</b>
To provide for equipment upgrades and replacements in order to meet playground safety standards	
<b>Park Trees (various locations: 20 trees installed @ \$500/tree)</b>	<b>\$11,000</b>
Concentration on newer parks to begin installation of landscaping	
<b>2019</b>	
<b>Tom Tudek Memorial Park Waterline Upgrade and Fountain Replacement on Restroom Building</b>	<b>\$45,210</b>
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 up sizing 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.	
<b>Playground Safety &amp; Update Program</b>	<b>\$37,500</b>
To provide for equipment upgrades and replacements in order to meet playground safety standards	
<b>Park Trees (various locations: 20 trees installed @ \$500/tree)</b>	<b>\$11,500</b>
Concentration on newer parks to begin installation of landscaping	

<b>2020</b>	
<b>Tudek Farmhouse Roof Replacement</b>	<b>\$7,000</b>
The farmhouse is need of a roof. This will be funded through the Tudek Trust Fund.	
<b>Suburban Park Baseball Field Fence Replacement</b>	<b>\$20,240</b>
The park little league/tee ball field is one of the sports fields used by the State College Little League Program and Pony League Softball. The field fencing is the original fencing installed in the 1970's. The fence is recommended for replacement.	
<b>Park Trees (various locations: 20 trees installed @ 460/tree)</b>	<b>\$9,700</b>
<b>Park Amenities (benches, trash containers, grills, doggie stations)</b>	<b>\$14,000</b>