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Introduction

Pennsylvania Business Campus and Horsham Business Center, collectively known as the Horsham Business Parks, are vibrant employment centers located in Horsham Township, Pennsylvania. The business parks occupy 615 acres and provide over 15,000 jobs in industries ranging from healthcare and technology to distribution and manufacturing.

Major employers at the business parks are Penn Mutual, UPS, Amerihealth and Bimbo Bakeries. Employees commute locally and from Bucks County, Chester and Delaware Counties, the Lehigh Valley, and New Jersey.

Construction of the business parks began prior to 1970, with its most active construction period in the 1980’s. Since then, large national businesses, low vacancy rates and easy accessibility have contributed to the Parks success, but new investment is necessary to keep up with market trends.

Study Area Quick Facts

Study Area Size = 615 Acres
Total Parcels = 83
Total Office Space = 3,514,553 sf
Total Industrial / Flex Space = 1,189,342 sf
Percent of Buildings Built Before 1980 = 31%
Horsham / Willow Grove Office Submarket
Average Rent* = $22.74 / sf
Vacancy Rate* = 9.4%

* Rent and Vacancy figures are based on first quarter 2015 figures from the CoStar Group. The Horsham/Willow Grove submarket extends beyond the borders of the study area of this report.
GOALS FOR THE BUSINESS PARKS
What is the future of the Horsham Business Parks?

**The Horsham Business Parks Today**

The Horsham Business Parks are strong employment centers that need to keep up with current market trends to remain competitive into the future. A SWOT analysis (strengths, weaknesses, opportunities, and threats) provides an impression of the parks today and a framework for setting goals.

Strengths and Weaknesses explain how the park is functioning today. Opportunities and Threats are oriented towards the future, signaling the issues and trends likely to affect the business parks.

**Will new transportation improvements improve traffic congestion?**

**What kind of new development will be built in the business parks?**

**What amenities will be needed to attract young workers and the companies that employ them?**

**What is the future of the Horsham Business Parks?**
STRENGTHS

- Strong location with access to the Pennsylvania Turnpike, Eastern Montgomery County, Bucks County, and Philadelphia.
- Large employment base providing a critical mass of employees and business opportunities.
- Majority of buildings are owner-occupied with reliable property management in other buildings.
- Good infrastructure conditions for roads, utilities, and storm water management.
- Nearby recreational amenities including the Powerline Trail and Lukens Park.
- Access to public transportation.
- Large residential community for drawing professional employees.
- Nearby commercial development provides needed services to businesses and employees.
- Comparatively low vacancy.
- Affordable rents and taxes.

WEAKNESSES

- Inconsistent walkability with missing sidewalk connections.
- Un-signalized intersections are difficult to use at peak hours.
- Lack of biking infrastructure.
- Pedestrian and vehicular connections are interrupted by certain land uses and natural features.
- Limited commercial amenities within the park for businesses or employees (i.e. restaurant, postal services, general goods and services).
- Many aging buildings without market interest to support significant reinvestment.
- Several hotels beginning to age.
- Sewage capacity is close to maximum.
- Lack of name recognition and identity for the Horsham Business Park area.
- Many operational facilities employ wage-based workers who may not be able to support ancillary businesses due to shorter lunches and longer commutes.
- The nearby residential market may not be affordable to many employees.

OPPORTUNITIES

- Proposed Pennsylvania Turnpike Interchange improvements at Route 611 and a new interchange at Welsh Road.
- Trend in mixing uses may prompt further consideration of future residential or commercial development.
- The desire of business and property owners to come together to focus on common issues and needs.
- Underperforming sites may facilitate new redevelopment ideas.
- Current business park layout provides space for additional public amenities.

THREATS

- Future redevelopment of Willow Grove Naval Air Station may generate congestion and competition.
- Employee preference for a more urban and walkable work environment.
- Lack of prestige in the Horsham or Willow Grove name as compared to other suburban markets.
- Continued traffic congestion in surrounding road network.
- Lack of significant future public transportation improvements or plans.
- A trend toward smaller square footage needs due to increased telecommuting and consolidated floor plans.
- Regional industry shifts, especially regarding the pharmaceutical industry and its decrease in local jobs and operations.
Goals

The following goals were developed from the results of the SWOT analysis, stakeholder interviews, and steering committee input. They provide a framework for developing the Master Plan. The specific goals fall into three major categories and reflect the vision and values for the Horsham Business Parks.

Land Use
- Support new types of land uses, such as residential and commercial.
- Encourage a walkable density of land uses.
- Promote the re-skinning or redevelopment of aging structures.

Design & Transportation
- Invigorate the business parks with new amenities, gathering places, and trails to attract both tenants and workers.
- Improve existing features such as woodlands, public art, and ponds.
- Practice sustainable stormwater practices, energy efficiency, and natural resource management.
- Improve pedestrian and vehicular access and circulation within the business parks.

Real Estate, Marketing, & Management
- Maintain low vacancy rates and stable, competitive rents.
- Create a stronger identity for the business parks that can be folded into marketing efforts.
- Establish an organization of property owners and businesses to address common issues and seek improvements.
- Position the business parks to take advantage of funding opportunities.
BACKGROUND ANALYSIS
**Location**

The Horsham Business Parks are located 20 miles north of Center City Philadelphia in the heart of Horsham Township’s commercial corridor. The parks are easily accessible from Interstate Route 276, Exit 343, and State Route 611. Intense land developments within a 5 mile radius include the Willow Grove Air Base to the north, Willow Grove Mall to the south, and Fort Washington Office Park to the southwest.

Regional trail networks are planned for the Horsham area. The Power Line Trail, currently in active use, runs through the office parks and is a valued amenity to walkers, cyclists and horseback riders. The proposed Cross County Trail route lies just outside the office parks parallel to Route 276.

**Adjacent Land Use**

The Horsham Business parks are surrounded by a variety of different land uses. Residential communities and the commercial/industrial corridor along Route 276 and 611 are the primary adjacencies. Retail establishments and restaurants are clustered on the northeast and southeast ends of Blair Mill Road, and form the most visible edges of the Office Parks. Horsham Township’s Lukens Park is adjacent to the Business Park across Dresher Road.
The Horsham Business Parks study area is primarily an office park with limited light industrial and flex space. Office properties comprise approximately 68% of the total nonresidential square footage in the study area, but many of the flex and industrial buildings also include some office space. Warehousing and distribution operations are the dominant types of industrial uses and includes the UPS distribution center, which is the largest property in the study area. Flex spaces have a combination of office and warehousing uses, but typically have a greater amount of square footage attributed to warehousing.

Other uses, including hotels and retail, are found in the study area. The Horsham Gate shopping center is home to a Toys R Us/Babies R Us. Three residential properties that predate the business park remain as private residences. The St. Catherine of Siena Church campus includes a dormitory and church offices. Two structured parking decks have been built within the last 10 years, but most parking is accommodated in surface lots.

### Existing Land Use

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Gross Square Feet</th>
<th># Parcels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>158,701</td>
<td>7</td>
</tr>
<tr>
<td>Day Care</td>
<td>20,500</td>
<td>1</td>
</tr>
<tr>
<td>Flex</td>
<td>520,581</td>
<td>5</td>
</tr>
<tr>
<td>Hotel</td>
<td>243,380</td>
<td>4</td>
</tr>
<tr>
<td>Industrial</td>
<td>668,761</td>
<td>6</td>
</tr>
<tr>
<td>Institutional</td>
<td>68,818</td>
<td>1</td>
</tr>
<tr>
<td>Office</td>
<td>3,514,553</td>
<td>52</td>
</tr>
<tr>
<td>Residential</td>
<td>NA</td>
<td>3</td>
</tr>
<tr>
<td>Undeveloped</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Utility</td>
<td>468</td>
<td>1</td>
</tr>
<tr>
<td>Grand Total</td>
<td>5,195,762</td>
<td>83</td>
</tr>
</tbody>
</table>
Age of Structures

With advances in building materials, technology, and work habits, building structures and layouts become outdated and outmoded. Most of the buildings in the Horsham Business Parks were constructed before 1990, and reinvestment and modernization will continue to be issues for property owners. Although many have been updated or reconfigured through the process of tenant fit-out, only six properties have undergone significant renovation since 2000.

<table>
<thead>
<tr>
<th>YEAR BUILT</th>
<th>BUILDINGS</th>
<th>SQUARE FOOTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1970</td>
<td>11</td>
<td>241,564</td>
</tr>
<tr>
<td>1970s</td>
<td>22</td>
<td>1,075,981</td>
</tr>
<tr>
<td>1980s</td>
<td>51</td>
<td>2,765,478</td>
</tr>
<tr>
<td>1990s</td>
<td>13</td>
<td>589,502</td>
</tr>
<tr>
<td>2000s</td>
<td>8</td>
<td>522,093</td>
</tr>
</tbody>
</table>

Building by Decade Built
Environmental Features

The Horsham Business Parks area is divided by a riparian corridor that runs along a tributary of the Pennypack Creek. The only 100 year floodplain area in the Business Parks runs along this corridor. Several ponds and detention basins have been incorporated along the waterway to help control stormwater flows and provide aesthetic qualities for the area. Some of the woodland along this corridor has also been preserved to help promote the greenway. The adjacent map depicts the floodplain, woodland, and water bodies within the area. Additionally, there are several smaller branches of the creek, some of which run underground or through culverts, and an area of woodland has been preserved south of the church along Manor Drive.
Utility Infrastructure

A high voltage PECO transmission line traverses six properties within the business parks. PECO restricts development within a 45’ horizontal easement to either side of the transmission towers. These constraints have deterred development at the intersection of Prudential Road and Witmer Road. Currently, surface parking, roads, and sidewalk are the primary uses within the 90’ wide PECO easement. The regional Power Line Trail, part of which is within the business park, has been built within this easement.

The Business Parks are served by a network of separate sewage and water lines. Sewage for the Business Parks falls under Area ‘C’ of the Upper Moreland-Hatboro Joint Sewer Authority and is currently at capacity, handling 2.15 million gallons/day. The Act 537 plan calls for up to 200,000 gallons to be made available for future use beginning in two years. This limitation represents a challenge to redevelopment and intensification in the Horsham Business Parks.
Transportation and Pedestrians

PennDOT
PennDOT owns Welsh Road and Blair Mill Road, the arterial roads that mark the eastern and southern edges of the Horsham Business park area. The other roads within the area are either municipal or private roadways. Most of the internal roads in the Horsham Business Center section of the study area, including Manor Drive and Business Center Drive, are private roadways. These roads serve the overall circulation within the area just like the municipal roads.

Sidewalks
Sidewalks are absent from some roads in the Business Parks area, and this deficiency is especially apparent along the busier roadways like Dresher Road and Blair Mill Road. Connections between existing sidewalks could be improved, and an overall pedestrian circulation plan would be beneficial. Walkways are usually present at office building entrances, but these paths are not always connected to a larger walking network.

Trails
The Power Line Trail is a valuable amenity and future plans will continue the trail to Upper Moreland Township and will ultimately connect with the proposed Cross-County Regional Trail.

Parking
Two structured parking decks satisfy some of the newer buildings, but most parking is accommodated in surface lots. A systematic stormwater approach is needed to manage the runoff from the surface parking lots.

Transit
The Horsham Business Parks are served by SEPTA bus service with stops indicated on the adjacent map. Not all service stops provide shelters or have adequate sidewalk connections.
Current Planning

Horsham Township Comprehensive Plan Update 2011

Horsham has a current comprehensive plan that was completed in 2011. From a land use perspective, this plan expects most of the township to stay the same as it currently is; however, three areas are targeted for more extensive changes—the Willow Grove Naval Air Station, the Route 611 commercial corridor, and the Maple Glen area.

- The Horsham Business Center, Walnut Grove Business Park, and Pennsylvania Business Campus, as well as the United Parcel Service property, are anticipated to remain office and industrial employment areas.

- Retail commercial uses are proposed to be limited to the 611 corridor and locations near existing shopping centers. No significant additional retail development is anticipated by the plan.

- A range of residential land uses are recommended, although the plan notes that the township already meets this need.

Route 611 Transportation Study

As part of its Decade of Investment initiative, PennDOT is conducting a study of the Route 611 corridor in Montgomery and Bucks Counties, including critical nearby intersections. The study has a number of recommendations for intersections and road segments within the study area, as illustrated in the adjacent map:

A Route 611 and Blair Mill Road/New Road Intersection - significant proposed intersection improvements include adding a new westbound lane on Blair Mill Road and closing New Road’s access to Route 611.

B Blair Mill Road from Welsh to Horsham Roads - widen from 3 lane cross-section to 5 lane cross-section.

C Blair Mill Road and Commerce Ave/ Witmer Road Intersection - widen all legs of intersection to provide more through movements and/or turning lanes.

D Welsh Road and Blair Mill Road Intersection - Widen Welsh Road around intersection.

E Welsh Road and Dreshertown Road Intersection - Widen Welsh Road from Jarrettown Road to Dreshertown Road.
**Route 611 Transportation Study Recommendations**

**Upper Moreland Twp.**

**A**
- Close New Road at Route 611
- Add an additional westbound lane on Blair Mill Road

**B**
- Widen Blair Mill Road from 3 lanes to 5 lanes

**C**
- Additional through and turning lanes

**D**
- Widen Welsh Road at intersection

**E**
- Widen Welsh Road from Jarrettown Road to Dresher Road
**Willow Grove Naval Air Station Redevelopment Plan, 2012**

The federal government has closed the 1,100 acre Willow Grove Naval Air Station and transferred 862 acres of the property for redevelopment.

In response to this closing, Horsham has created a Horsham Land Redevelopment Authority which has prepared a master plan for the site. Even though this property is not within the business park study area, its size and scope will have a profound impact on the market and development within the area.

Overall, commercial development is anticipated to include 1,884,622 square feet of building area. About 305,000 square feet of this development, mostly retail, is expected to be part of a town center area within the development.

Overall, institutional and recreation development is anticipated to include 452,727 square feet of building area. This will include a plaza and other open space in the town center area.
Montgomery County Planning Commission

Horsham Business Parks Master Plan

The Turnpike Corridor Reinvestment Project

To address concerns about the viability of the county’s office parks, the county has conducted a study of land use and transportation improvements for the Turnpike Corridor. The study recommends two significant Turnpike interchange improvements that directly affect the Horsham business parks:

- **New Welsh Road Interchange** - a new interchange is proposed at Welsh Road on the Prudential Insurance property in Upper Dublin Township. This interchange would provide full access to both east and west-bound traffic on the Turnpike, as well as a direct connection to Blair Mill Road.

- **Willow Grove Interchange Modernization** - proposed improvements to turning movements on Route 611.

In addition, the Turnpike Commission is considering widening the Turnpike in this area and instituting cashless tolling facilities.


The county’s comprehensive plan, Montco 2040: A Shared Vision identifies the study area as a Business Area, which are concentrations of employment-oriented land uses. Offices, research facilities, industrial parks are primary uses, while secondary uses include smaller retail uses, service businesses, day care centers, and higher density residential. In the future, Business Areas should have more supporting land uses and make it easy for employees and residents to walk to transit and commercial services.

The existing development to the east of Blair Mill Road is identified as Community Mixed Use and Services. The character of this designation is suburban in nature, and should provide a transition from major roads. Local community focal points, significant retail, institutional elements and nearby residential are common uses. These areas should share driveways and become more walkable in character.

**New Welsh Road Interchange**

The Turnpike Corridor Reinvestment Project recommends interchange improvements near the Horsham Business parks.
Existing Zoning

Districts

Six zoning districts, as shown on the adjacent map and following tables, apply to the business parks and study area.
### Permitted Uses

All of the employment-oriented districts, the I-1, I-2, O-1, and BC, allow offices. Apartments are not allowed in any of the districts; hotels are only permitted in the two Industrial districts as special exceptions, and retail is only allowed in the shopping center district.

<table>
<thead>
<tr>
<th>Permitted Use</th>
<th>I-1 Industrial</th>
<th>I-2 Industrial</th>
<th>O-1 Office/Nonmanufacturing</th>
<th>BC Business Campus</th>
<th>C-1 Shopping Center</th>
<th>R-3 Low-Density Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family Detached</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>Permitted</td>
</tr>
<tr>
<td>Townhouses</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Apartments</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Age-Restricted Housing</td>
<td>——</td>
<td>——</td>
<td>As part of retirement/care campus</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Permitted</td>
<td>Permitted</td>
<td>——</td>
<td>Computer only</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Warehousing</td>
<td>Permitted</td>
<td>Permitted</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Laboratory/Research</td>
<td>Permitted</td>
<td>Permitted</td>
<td>Permitted</td>
<td>Permitted</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Offices</td>
<td>Permitted</td>
<td>Permitted</td>
<td>Permitted</td>
<td>Permitted</td>
<td>Permitted</td>
<td>——</td>
</tr>
<tr>
<td>Hotel</td>
<td>Special Exception</td>
<td>Special Exception</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Retail</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>Permitted</td>
</tr>
<tr>
<td>Restaurants</td>
<td>Special Exception</td>
<td>Special Exception</td>
<td>——</td>
<td>As ancillary use to campus</td>
<td>Permitted</td>
<td>——</td>
</tr>
<tr>
<td>Banks</td>
<td>Special Exception</td>
<td>Special Exception</td>
<td>——</td>
<td>As ancillary use to campus</td>
<td>Permitted</td>
<td>——</td>
</tr>
<tr>
<td>Day Care Centers</td>
<td>Special Exception</td>
<td>Special Exception</td>
<td>Special Exception or as part of retirement/care campus</td>
<td>Special Exception</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Personal Service</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>Permitted</td>
</tr>
<tr>
<td>Indoor Recreation</td>
<td>Permitted</td>
<td>Permitted</td>
<td>——</td>
<td>As ancillary use to campus</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Schools</td>
<td>——</td>
<td>——</td>
<td>As part of retirement/care campus</td>
<td>Permitted</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Billboards</td>
<td>——</td>
<td>Special Exception</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
</tbody>
</table>
**Dimensional Standards**
The existing zoning districts have been structured to create a relatively low intensity suburban character, with heights limited to 40 feet, impervious coverage ratios in the employment districts not exceeding 65%, and large setbacks.

<table>
<thead>
<tr>
<th>Dimensional Standard</th>
<th>I-1 Industrial</th>
<th>I-2 Industrial</th>
<th>O-1 Office/Nonmanufacturing</th>
<th>BC Business Campus</th>
<th>C-1 Shopping Center</th>
<th>R-1 Low-Density Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Tract Size</td>
<td>50 acres for integrated parks</td>
<td>50 acres for integrated parks</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Minimum Lot Size</td>
<td>25 acres for individual lots; 2 acres for integrated parks with 6 acre average</td>
<td>4 acres for individual lots; 2 acres for integrated parks with 6 acre average</td>
<td>10 acres</td>
<td>30 acres</td>
<td>6 acres</td>
<td>32,000 sf</td>
</tr>
<tr>
<td>Density</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>Calculated through environmental resource protection</td>
</tr>
<tr>
<td>Minimum Lot Width</td>
<td>750 feet for individual lots; 200 feet for integrated park lots</td>
<td>250 feet for individual lots; 200 feet for integrated park lots</td>
<td>500 feet</td>
<td>250 feet</td>
<td>300 feet</td>
<td>115 feet</td>
</tr>
<tr>
<td>Maximum Height</td>
<td>40 feet</td>
<td>40 feet</td>
<td>40 feet</td>
<td>35 feet</td>
<td>40 feet</td>
<td>35 feet</td>
</tr>
<tr>
<td>Maximum Building Coverage</td>
<td>40%</td>
<td>40%</td>
<td>40% for all uses except retirement care campus, which is 15%</td>
<td>40%</td>
<td>25%</td>
<td>——</td>
</tr>
<tr>
<td>Maximum Impervious Coverage</td>
<td>65%</td>
<td>65%</td>
<td>65% for all uses except retirement care campus, which is 30%</td>
<td>65%</td>
<td>75%</td>
<td>20%</td>
</tr>
<tr>
<td>Front Yard Setback</td>
<td>200 feet on individual lots; 100 feet for integrated park lots</td>
<td>150 feet on individual lots that can be reduced to 50 feet; 100 feet for integrated park lots</td>
<td>150 feet, can be reduced to 50 feet</td>
<td>100 feet</td>
<td>35 feet</td>
<td>50 feet</td>
</tr>
<tr>
<td>Side Yard Setback</td>
<td>150 feet on individual lots; 50 feet for integrated park lots</td>
<td>75 feet on individual lots; 50 feet for integrated park lots</td>
<td>100 feet</td>
<td>75 feet</td>
<td>50 feet</td>
<td>15 foot minimum, 35 foot aggregate</td>
</tr>
<tr>
<td>Rear Yard Setback</td>
<td>150 feet on individual lots; 50 feet for integrated park lots</td>
<td>75 feet on individual lots; 50 feet for integrated park lots</td>
<td>100 feet</td>
<td>75 feet</td>
<td>50 feet</td>
<td>50 feet</td>
</tr>
<tr>
<td>Setback from Residential Zone</td>
<td>150 feet for integrated park lots</td>
<td>150 feet for integrated park lots</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Parking Setback</td>
<td>100 feet from streets and 10 feet from property lines on individual lots; 100 feet from property lines for integrated park lots</td>
<td>50 feet from streets and 10 feet from property lines on individual lots; 100 feet from residential property lines for integrated park lots</td>
<td>75 feet</td>
<td>50 feet</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Other</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>Open space preservation option on tracts of 50 acres or more</td>
</tr>
</tbody>
</table>
Market Conditions

Office Market

Locally. Although there have been a number of recent office renovation, office construction in the county has tapered off significantly over the past decade, with less than 700,000 square feet being added per year. The most recent office construction in Horsham Township was built in 2007.

Nationally. The national trend in suburban offices is similar. During the peak years of suburban office construction (1989-1990 and 1999-2001) over 80 million square feet of office space was built nationally in the suburbs. In 2011 and 2012, less than 8 million square feet were added per year.

Some indicators point towards a resurgence of office construction. The Delaware Valley Regional Planning Commission projects that the county will add over 63,000 jobs by 2040, and, if past trends continue, most of these jobs would be in offices. Horsham Township is projected to grow from 30,872 jobs in 2010 to 37,323 jobs in 2040. This increase of 6,451 jobs is the largest numerical increase forecasted for the county, with many of the jobs expected at the former Willow Grove Naval Air Station.

The PA Center for Workforce Information and Analysis publishes employment forecasts by industry and occupation. The Center forecasts that Montgomery County will add 40,050 jobs between 2012 and 2022, an 8% increase. Looking at the industries of these jobs, 21,700 might be expected to be in office buildings. If there are 3.32 employees per 1,000 square feet of office, this correlates to 6.5 million square feet of new office space county wide. This might not be as robust as past decades, but it would still be a healthy amount, assuming the forecasts are accurate. If the ratio of employees per square foot changes because of technological changes in offices, say to 4 employees per 1,000 square feet, or if more workers end up working from home, then significantly less new office space would be needed countywide.

Growth Industries. The following office-based industries will have the strongest numeric growth in the next 10 years:

- Professional and technical services, including scientific research and development and computer systems design
- Ambulatory health care services, including medical offices and home health care
- Management of companies and services
- Financial investment services
Trends:

Consolidation. Many companies want to consolidate operations into one geographic area, which leads them to suburban sites where there is land and room to grow. Locally, DOW Chemical consolidated research in Oaks while ALMAC pharmaceuticals built consolidated US headquarters near Harleysville.

Employee Preference. Many younger employees favor mixed use, transit-accessible areas, which has fueled some resurgence in central cities and more urbanized areas, such as the Navy Yard in Philadelphia. The image of suburban office parks has suffered in the popular imagination, such as seen in the movie Office Space, which associates corporate parks with monotonous office jobs.

Flexible Space. Flexible office space, popularized by companies like Apple and Google, is becoming the new standard and could lead to a lower rate of office construction. Work formats like benching and hoteling, where employees share offices, cubicles and space, require a specific floor layout that older office buildings may not be able to accommodate. By reducing individual office sizes and increasing common sitting and meeting areas where employees can collaborate, the Philadelphia law firm Drinker, Biddle and Reath decreased the size of their offices from 209,000 square feet to 155,000.

Given its assets and existing employment base, Horsham is likely to experience additional office development. Much of this development will be realized as expansions of existing building stock, renovations, and complete tear downs of existing space.

Office Square Footage, Rents and Vacancy Rates

<table>
<thead>
<tr>
<th>AREA</th>
<th>TOTAL SQUARE FOOTAGE</th>
<th>% CLASS A OFFICE</th>
<th>RENT PER SQUARE FOOT*</th>
<th>VACANCY RATE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horsham/Willow Grove*</td>
<td>11,634,605 sf</td>
<td>33%</td>
<td>$22.74</td>
<td>9.4%</td>
</tr>
<tr>
<td>Conshohocken</td>
<td>4,594,341 sf</td>
<td>73%</td>
<td>$30.31</td>
<td>8.2%</td>
</tr>
<tr>
<td>Fort Washington/Spring House</td>
<td>4,831,187 sf</td>
<td>39%</td>
<td>$21.86</td>
<td>19.4%</td>
</tr>
<tr>
<td>King of Prussia/Wayne</td>
<td>14,318,839 sf</td>
<td>62%</td>
<td>$24.93</td>
<td>14.7%</td>
</tr>
<tr>
<td>Suburban Philadelphia</td>
<td>126,114,241 sf</td>
<td>37%</td>
<td>$23.00</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

* The Horsham business park study area, consisting of 3,514,553 square feet of office space, comprises 31% of this CoStar office submarket.

Many office buildings offer amenities, such as this outdoor sitting area.
**Industrial Market**

The industrial market includes manufacturing, distribution, warehousing, and flex space. Construction has been low countywide over the past decade, and there has not been any new industrial construction in Horsham over the past ten years. Two major reasons for low industrial construction is the shift of manufacturing overseas, and increasing automation of activities.

**Manufacturing.** Montgomery County’s manufacturing industry has declined in the past 50 years. Most heavy industrial facilities, including steel plants, textiles, tire factories, and chemical plants, have closed. A few large manufacturing complexes, such as Lockheed Martin in King of Prussia and Honeywell in Fort Washington have converted into office and research facilities. Pharmaceutical manufacturing and its packaging remains the most significant type of manufacturing in the county. The county has also retained a number of large industrial plants, such as Hatfield Meats and SPS Technologies in Jenkintown.

**Distribution and Warehousing.** Wholesaling, warehousing, distribution, and storage account for approximately 24,000 jobs in the county in 2010. This number is expected to remain relatively stable for the next 5 years. In Horsham, the large UPS distribution facility is the biggest industrial employer in the township.

**Flex Space.** Flex Space typically consists of one-story small scale space designed to be adapted according to the tenant's needs. Flex spaces can include office, fabrication, or storage or light industrial for small businesses. The Pennsylvania Business Campus has a number of older flex space properties. Flex space and light industrial space will likely continue to be needed by small companies, including new companies and those leaving older obsolete industrial space.

**Trends:**

**Converting industrial to new uses.** Older industrial buildings are often converted to secondary uses, like indoor recreation, contractor’s facilities, warehousing, and retail sales. Rents for industrial properties are relatively low, typically around $5 per square foot, and therefore industrial land often comes under pressure to convert to other uses. In addition, industrial manufacturing and warehouse operations often need new facilities with high ceilings and modern utilities to operate most efficiently.

**Natural gas production.** Declines in natural gas prices, driven by new supply such as Pennsylvania’s Marcellus Shale, may encourage new manufacturing, particularly energy-dependent manufacturing. Between 2001 and 2011, the number of manufacturing jobs in the county declined 40%, from 72,509 in 2001 to 43,385 in 2011. By 2022, the county is projected to lose another 1,200 manufacturing jobs. Support industries for gas production might locate in Montgomery County.

**Reshoring.** Companies are reshoring due to rising labor costs in China, transportation costs, supply chain issues, lead times, quality, and intellectual property protection. Businesses like Ford, General Electric, Whirlpool, and Apple have announced reshoring initiatives. Locally, K’NEX industries in Hatfield has announced it is bringing some jobs back to the United States. One concern with reshoring is that many new industrial facilities are...
highly automated, which means fewer jobs are being created than there might have been prior to technological advancements.

Montgomery County and the Horsham Business Parks are unlikely to see any large scale new industrial plants due to high land values.

Recently, most large scale wholesaling and distribution centers, with some of these focusing on online retail distribution, have located in the Lehigh Valley or central Pennsylvania and it is unlikely these will locate in Montgomery County or Horsham Township; however, smaller scale facilities that need to be near the Philadelphia market may.
Retail Market
Retail construction in the region has been very strong over the past decade, and the county now has 36 square feet of shopping center space per resident, while the national average is 23 square feet. Montgomery County had about 38,800,000 square feet in 2012, while the estimated demand of residents is only 19,600,000 square feet.

There are two major factors contributing to the disparity of excess retail space to demand. First, Montgomery County is a regional shopping draw, drawing consumers from neighboring counties to retail centers like the Willow Grove Mall. Second, many shopping centers are converting retail space to other uses, even though the overall land use is considered to be a shopping center. For example, the Plymouth Meeting Mall recently converted 23,000 square feet to a healthcare center. Other shopping centers have converted old department or grocery stores to offices and ambulatory care centers.

National vacancy rates were at 6.1% at the end of 2014, while the Philadelphia suburbs were lower at 5.7%, according to Costar data. The Horsham/Willow Grove submarket had a relatively low vacancy rate of 4.4% as of the first quarter of 2015. Rents in the Horsham area were running at $16.77 a square foot, just over the PA suburb’s rental rate of $16.56.

Overall, the retail market in Montgomery County and the Horsham/Willow Grove area is saturated and growth will not come from unmet demand of residents. The Horsham/Willow Grove area had about 2.9 million square feet of retail space, while its population only needed 1.68 million square feet and is projected to need 1.91 million square feet by 2040. Customers are coming from outside of the region to shop.

However, this does not mean there will not be new retail development. Sometimes, new companies want to enter the market, and this means they will want new sites. There will also be new Formats that require new buildings, such as drug stores adding drive-throughs or convenience stores adding gas sales. Whole new retail formats will emerge, like main street lifestyle centers. Many retailers want to be in more established suburban communities rather than greenfield sites on the edge of the region. All of these trends mean that there will be some demand for new space and old space may convert to other uses.
**Apartment Market**

Apartment construction in the county has been relatively strong over the past decade, and the trend is expected to continue.

Montgomery County is following the national trend that has made, according to IRR, the apartment sector the hottest property sector in 2012, with almost all markets not only demonstrating strong property fundamentals but also experiencing all-time low capitalization rates. These factors have combined to drive new development in many markets, making multifamily the sole major property sector experiencing significant expansion across the country.

The Horsham/Willow Grove area is expected to have 2,980 additional homes by 2040, and over 1,100 of these are expected to be apartments. So far, many of the apartments built in the local area have either been age-restricted, like the Victorian Village at Loller Academy in Hatboro or Dublin Terrace in Upper Dublin Township, or conversions of old industrial space, like the Hatboro Loft Apartments in Hatboro. Nevertheless, developers are interested in building new, high-quality apartments, and Horsham Township and nearby communities are expected to have a high share of their new homes be apartments, mostly because the amount of available land is limited.

In 2012, the Philadelphia market area had a 3.7% vacancy rate, well below the national average of 5.16% making the region very attractive to national investors. The low vacancy rate has helped drive proposals for new apartment construction.

**Demographic Shifts.** Both nationally and regionally, there is a concern that too many apartments will get developed at the same time. In the long term, there are fundamental demographic and development shifts that should keep demand for apartments high.

These shifts include an aging population, more non-family households, deferred marriage and childbearing, a preference of many younger adults for more urban-style living, more immigrants living in the county, less land available for single-family detached homes, and a slower economy.
Office Park and Campus Trends

A Distinct Style
The corporate office park is a landscape and building type that has thrived since the 1950’s. Campuses like the John Deere World Headquarters in Moline, IL set the aesthetic standard of a group of modern buildings nestled within a gently rolling landscape. While aesthetically pleasing, this mode of development is evolving to address the needs and values of the modern business and its employees.

The Green Standard
The national corporate culture is shifting toward a more environmentally sustainable “green” design. Two technology industry leaders are expanding their campuses in California:

Apple Computers
- Headquarters building will enclose a park
- Goal to rely on 100% renewable energy
- Underground parking
- Employee bicycles

Google
- Path network to connect campus buildings
- Green roofs
- Efficient office layout

The John Deere World Headquarters was constructed in suburban Illinois in 1964.

A conceptual rendering of potential mixed-use redevelopment and streetscape improvements at a redeveloped office park.

Lunchtime concert series in the King of Prussia office park

A conceptual rendering of potential mixed-use redevelopment and streetscape improvements at a redeveloped office park.
Another strong trend is the transformation of the office park into a dynamic place. A sense of place may be achieved through various measures:

- Revitalization of old buildings: Retrofitting existing industrial and commercial space has enhanced the character of Philadelphia’s Navy Yard.
- Green infrastructure: A linear park at King of Prussia’s First Avenue will feature a pedestrian-oriented landscape that will manage stormwater on site.
- Central open space: Courtyards and small parks encourage social interaction.
- Walkable destinations: Local retail, like that found along Conshohocken’s Fayette Street, provides opportunities for social exchange outside of the office and allows employees to accomplish multiple tasks in one place.
- Community events: Lunchtime concerts, summer putting greens, and walking and softball clubs.

Marketing the Place
Some of Suburban Philadelphia’s office parks advertise their businesses, office design, and events through an organized and cooperative central forum. Marketing techniques include:

- Business Improvement District
- Social media presence (LinkedIn, Twitter, Facebook)
- Webpage link through Municipality website

Urban Amenities in the Suburbs
Suburban Philadelphia’s office parks have been repositioning to compete with the Center City market. By introducing typically urban amenities like bus routes, retail shopping, cafes and bike lanes, the suburban office park can appeal to the needs and desires of today’s diverse workforce. Below is a cross-section of the common attributes and amenities found in our local office parks.

<table>
<thead>
<tr>
<th>Amenities at a Glance</th>
<th>Suburban Philadelphia Office Parks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Highway</td>
<td>Horsham Business Park</td>
</tr>
<tr>
<td></td>
<td>Fort Washington Business Park</td>
</tr>
<tr>
<td></td>
<td>King of Prussia</td>
</tr>
<tr>
<td></td>
<td>Conshohocken</td>
</tr>
<tr>
<td></td>
<td>City Avenue</td>
</tr>
<tr>
<td></td>
<td>Great Valley</td>
</tr>
<tr>
<td>Rt. 276</td>
<td>Rt. 276</td>
</tr>
<tr>
<td>Regional Rail &amp; Buses</td>
<td>ConnectKOP &amp; Buses 91, 92, 124, 125, 139</td>
</tr>
<tr>
<td></td>
<td>Regional Rail &amp; Buses 95, 97</td>
</tr>
<tr>
<td></td>
<td>Regional Rail &amp; Buses 44, 65</td>
</tr>
<tr>
<td></td>
<td>Buses 205, 206</td>
</tr>
<tr>
<td>Access to Transit</td>
<td>Buses 130, 80</td>
</tr>
<tr>
<td></td>
<td>Regional Rail &amp; Buses 94, 95, 201</td>
</tr>
<tr>
<td>Walkable Mixed-Use</td>
<td>Horsham Business Park Master Plan</td>
</tr>
<tr>
<td>Use Character</td>
<td>First Avenue Improvements</td>
</tr>
<tr>
<td></td>
<td>Fayette Street</td>
</tr>
<tr>
<td></td>
<td>City Avenue</td>
</tr>
<tr>
<td>Cafes &amp; Restaurants</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Hotel &amp; Conference</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Fitness Center</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓</td>
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<td></td>
<td>✓</td>
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<tr>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

| Horsham Fitness Center | Camphill Athletic | Cross Fit | Tone Zone |
| LA Fitness            |                  |          |          |
|                       |                  |          |          |
|                       |                  |          |          |

| BID/Website | Horsham Business Allience | KOP Business Improv. District | City Ave. Special Services District |
|            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
Chapter 4

LAND USE SCENARIOS AND MASTER PLAN
Development Scenarios

The Horsham Business Parks are fully developed places now experiencing redevelopment. The main question is: what type of new development should the township encourage?

Three distinct redevelopment patterns and their impacts are analyzed in this chapter, based on the assumption that some, but not most, properties will be available for redevelopment over time. A fifteen year window was used as a theoretical time frame to estimate the following redevelopment scenarios. These three alternatives were then used to guide the final master plan, which takes elements from each alternative.
Scenario 1

Scenario 1 would involve the least amount of change. In this scenario, no additional land uses are permitted; instead, the existing zoning would stay more or less the same, except for a higher impervious coverage ratio of 80% and height of up to 4 stories.

Because the market is more limited in this case, this scenario generates less redevelopment than the other two scenarios over the next 15 years.

<table>
<thead>
<tr>
<th>USE</th>
<th>NEW DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>10,000 sf</td>
</tr>
<tr>
<td>Apartments</td>
<td>—</td>
</tr>
<tr>
<td>Offices</td>
<td>597,000 sf</td>
</tr>
<tr>
<td>Hotel</td>
<td>—</td>
</tr>
</tbody>
</table>

Redeveloping Properties in Scenario 1

Scenario 1

Same zoning with minor amendments

Office
Retail
Park
**Scenario 2**

Scenario 2 would involve the most amount of change in land uses. In this scenario, apartments and retail are allowed anywhere. In addition, the existing zoning would allow a higher impervious coverage ratio of 80% and height of up to 4 stories. Because the market can choose any land use in this case, this scenario generates a significant amount of new development, mostly apartments and retail.

<table>
<thead>
<tr>
<th>USE</th>
<th>NEW DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>356,000 sf</td>
</tr>
<tr>
<td>Apartments</td>
<td>1,040 dwellings</td>
</tr>
<tr>
<td>Offices</td>
<td>268,000 sf</td>
</tr>
<tr>
<td>Hotel</td>
<td>210 rooms</td>
</tr>
</tbody>
</table>

**Redeveloping Properties in Scenario 2**

Scenario 2  
Apartments & retail allowed throughout business parks
Scenario 3

Scenario 3 would focus intense new development in a walkable core area along Witmer Road. This area would allow apartments mixed with retail and designed to be walkable. In addition, the existing zoning would allow a higher impervious coverage ratio of 80% and height of up to 4 stories.

Although apartments and retail uses are limited to a core area, the walkability and diversity of this core area attract new companies and new office development.

<table>
<thead>
<tr>
<th>USE</th>
<th>NEW DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>53,000 sf</td>
</tr>
<tr>
<td>Apartments</td>
<td>800 apartments</td>
</tr>
<tr>
<td>Offices</td>
<td>666,000 sf</td>
</tr>
<tr>
<td>Hotel</td>
<td>210 rooms</td>
</tr>
</tbody>
</table>

Redeveloping Properties in Scenario 3

Scenario 3

Mixed use core allowed along Witmer Road
**Master Plan Concept**

The overall land use in the business parks is expected to evolve over time, becoming more diverse and less one-dimensional. Scenario 3 comes the closest towards meeting this concept. However, the overall nature of the parks should still retain an emphasis on office uses. The master plan accommodates an intensification of office uses with limited new residential uses as a base for the mixed use core. Some retail will support the mixed use core, but additional retail and commercial activity is also appropriate at several locations on the perimeter of the study area.

**New mixed-use core area should**
- Be a vibrant, higher-intensity activity center for the business parks
- Surround a public square with a variety of recreation and entertainment options
- Contain 500 to 600 apartment units to create diversity and more liveliness in evenings
- Have significant amounts of ground floor retail and restaurants

**Frontages along major roads to medium should:**
- Be a mix of offices and retail
- Contain retail, restaurant, and entertainment uses that support the business parks and appeal to workers and their employers

**The Business Parks as a whole should:**
- Remain employment centers, primarily office with existing industrial allowed to continue
- Contain supporting retail and restaurants in appropriate mixed use and major road frontage areas
- Support other uses, such as day cares, fitness centers, banks, etc.
- Permit hotels, convention centers, and meeting space
Master Plan Land Use

The master plan is still focused on a fifteen year timeframe, but assumes that redevelopment will be hastened by new zoning and market opportunities. The master plan emphasizes the mixed use core concept similar to Scenario 3, but it invokes a cap of 500 - 600 apartment units before other uses must be substituted. This limit seeks to provide the benefits of bringing professional-type residential living into the core while still providing a strong office and retail base.

Zoning in the core area should be intensified to allow more impervious coverage, up to 5 or 6 stories in height, and added design elements to bring greater walkability and varied façade elements. These increases should be offered as a bonus situation for developers that will help to achieve overall design goals and public spaces. See Chapter 5 for more details on the core area design and zoning changes.

The master plan also encourages more commercial redevelopment along major roads at two perimeter areas of the study area. The first is near the intersection of Blair Mill Road and Rt. 611. Current opportunities exist for a drug store, gas station, and restaurant uses that could serve workers in the business park as well as capitalize off of the heavy traffic along the Rt. 611 corridor. The second area would continue retail development on Welsh Road adjacent to the Horsham Gate Shopping Center. Larger retail uses would be appropriate here in addition to other potential commercial activity, such as a movie theater or other entertainment venue.

<table>
<thead>
<tr>
<th>USE</th>
<th>NEW DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>189,000 sf</td>
</tr>
<tr>
<td>Apartments</td>
<td>500 apartments</td>
</tr>
<tr>
<td>Offices</td>
<td>847,000 sf</td>
</tr>
<tr>
<td>Hotel</td>
<td>110 rooms</td>
</tr>
</tbody>
</table>
Impact Analysis

The master plan, as well as each of the scenarios, generates impacts for vehicle trips, jobs, real estate values, sewage flows, school children, impervious coverage, and image. The following calculations are based on known data and observed qualities in similar developments within the county. They are not guaranteed, but rather a best-guess estimate used to gauge the potential impact and compare scenarios. In each case, the new impact is measured by subtracting the impact of existing development that will be demolished from the impact of the new development.

The final impact is not a quantitative estimate, but rather an acknowledgement of the potential change in image and modernization for the business parks. Scenario 1 results in little image change or modernization as it results in mostly updated office buildings. Scenario 2 introduces residential development, which will add a new component to its image, although the apartments will likely be scattered with less consistency in image. Scenario 3 offers the core area concept with mixed uses and a focused sense of place. The master plan is intended to offer the greatest image change with its focused sense of place in a central walkable corridor, heightened office buildings, and defined retail edges.

Vehicle Trip Impact

There’s a lot of traffic currently generated from the business parks:
- 60,600 existing vehicle trips per day
- 7,700 existing PM peak hour trips per day

Scenario 2 generates the most traffic, a 28% gain, due to the higher rate of traffic generated by retail uses. Some of this traffic might have existed anyway, as people drive by a store and decide to stop.

The master plan would create fewer trips than Scenario Two, but more than Scenario Three based on its more intense zoning provisions within the Core Area. However, the mixed use concept should also provide an increase in efficiency of trips as some people are able to shop, live, and/or work all within the park.

<table>
<thead>
<tr>
<th>Increase in Daily Trips</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
<th>Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,300 trips</td>
<td>16,800 trips</td>
<td>8,300 trips</td>
<td>11,900 trips</td>
</tr>
<tr>
<td>Increase in PM Peak Hour Trips</td>
<td>160 trips</td>
<td>1,600 trips</td>
<td>800 trips</td>
<td>1,300 trips</td>
</tr>
</tbody>
</table>

Traffic estimates were generated from the ITE Trip Generation Manual, 9th edition:
- Office = 1.03 trips per day/1,000 square feet and 1.49 trips per peak hour/1,000 square feet
- Retail = 44.32 trips per day/1,000 square feet and 5.02 trips per peak hour/1,000 square feet
- Hotel = 8.92 trips per day/room and .74 trips per peak hour/room
- Apartments = 6.65 trips per day/apartment and .67 trips per peak hour/apartment

Jobs Impact

The business parks currently have about 15,500 jobs.

Scenario 1 generates the most jobs, a 4% increase, because it does not replace existing offices and industry with apartments; however, this analysis assumes that there are no vacant commercial buildings and that these buildings will remain fully occupied over time. This most likely is not the case.

The master plan would add the most jobs due to its intensification of office uses that should come as a result of offering zoning bonuses.

<table>
<thead>
<tr>
<th>Change in Jobs</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
<th>Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>580 Jobs</td>
<td>-1,650 Jobs</td>
<td>160 Jobs</td>
<td>740 Jobs</td>
</tr>
</tbody>
</table>

The following factors were used to estimate employment:
- Office = 1 employee per 225 square feet
- Retail = 1 employee per 665 square feet
- Hotel = 25 employees per hotel
- Apartments = 5 employees per apartment complex
Real Estate Value Impact

Redevelopment, tearing down an older building and replacing it with a modern, up-to-date building, increases real estate value significantly, which drives up local tax revenue. The total Assessed Value in the business parks is currently $339,874,000. In 2015, the township received $1 for every $1,000 of assessed value, and the Hatboro Horsham School District received $26.85 for every $1,000.

Scenario 2, with a 31% increase, would generate the most additional real estate value, partially because retail space has a high value per square foot. The school district would receive most of the newly added revenue, approximately $2,865,000. Scenario 3 was not far behind in generating substantial new real estate value.

The master plan delivers less than those scenarios based on its reduction in new apartments. However, there would be more office development and the municipality would also gain revenue from income taxes that apply to the additional employees.

Sewage Flow Impact

Sewage capacity is a constraint in this part of Horsham Township. The current system is at capacity in eastern Horsham Township, although there is a proposal to transfer some of the flows to a different sewer plant, which would open up 200,000 gallons per day.

The business parks fall within drainage area “C”, which generates about 320,000 gallons per day. Scenario 3, with an increase of 28%, would generate the most additional sewage flow.

The master plan reduces the increase in sewage flow to only 67,800 gallons per day based on the reduction in apartments and increase in office development, which is typically causes the least sewage on a square footage basis.
School District Impact

Residential development will add new school-age children, although not many because new apartments are mostly occupied by singles, young adults, and empty-nesters.

The Hatboro-Horsham School District currently has 4,739 students. Scenario 2, with 49 students and an increase of the school district's enrollment by 1%, adds the most students because it has the most apartments.

The master plan adds fewer students than either of the other scenarios that include residential uses.

Current school district boundaries would place these students within the Hallowell Elementary School catchment area, although some of the projected students would be attending middle and high school levels.

### New Public School Students

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
<th>Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Students</td>
<td>49 Students</td>
<td>38 Students</td>
<td>24 Students</td>
</tr>
</tbody>
</table>

- New multi-family construction, county-wide, adds 0.06 school-age children per unit
- 79% of school-age children in the Hatboro-Horsham District attend public school

Impervious Coverage Impact

Total existing impervious coverage is 55%, totaling 13,900,000 square feet of the business park properties as a whole.

Scenario 2, with a 3.08% overall increase in impervious coverage, generates more impervious coverage because it has the most properties receiving intense new development.

The master plan anticipates a higher increase for impervious coverage, based on the more intense zoning around the core area. However, these figures are surely estimates. Some development could come in with structured parking that reduces the need for surface parking and may allow for more green areas.

### New Impervious Coverage

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
<th>Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>279,600 sf</td>
<td>429,900 sf</td>
<td>228,800 sf</td>
<td>648,758 sf</td>
</tr>
</tbody>
</table>

- Redeveloped parcels assumed maximum of 80% impervious coverage
- Apartment parcels calculated at 60% impervious coverage
- Excluding protected woodlands and environmental constraints
Introduction

The Horsham Business Parks Master Plan is a comprehensive vision of how the current business parks need to evolve and remain a vibrant part of the township and region. The Plan introduces an exciting new mixed use core center concept that will bring residents into the park for the first time, provide new retail and restaurant uses, enhance walkability, and produce a sense of place where all these things can thrive in an employee-centered environment.

The Master Plan embraces its past and current success as a regional employment center, while providing for updates to the built environment to serve future employment bases. Expanded commercial opportunities will be created along high volume traffic areas at the perimeter of the parks along Easton Road and along Welsh Road. Traffic improvements are recommended throughout the park as a number of varying solutions that can increase walkability, make roads safer, and maintain proper circulation. A Landscaping Plan brings together the green elements of the business parks to provide better walking connections, greater use of the Powerline Trail, and the beginnings of a greenway loop within the park that employees, residents, and visitors can enjoy.
Mixed Use Core Center

The Mixed Use Core Center is focused along the corridor surrounding Witmer Road between Dresher and Blair Mill Roads. It includes new and existing greenway areas that emphasize the connections between the Powerline Trail and a new Public Square at Witmer and Prudential Roads. A limited number of apartments are encouraged both as a gateway element at the Western end of the corridor as well as a transitional element alongside the Public Square and new retail opportunities.

Unlike the land use plans presented in Part 3, the following images of the Mixed Use Core Area constitute a longer-term vision of how this area could ultimately evolve through redevelopment and actions taken by the township. This vision may take longer than the 15 year time frame used in the land use plans. The drawings and specifics indicated in the following pages are not to be viewed as an absolute guide, but rather as a series of concepts that will deliver the intended goal of creating a dynamic new place within the business parks. A place that brings new uses, new amenities, and an anchor for long-term sustainability as a key business center for Horsham Township.

Bala and Pottstown offer a mix of uses and public spaces that can guide redevelopment of the Horsham office parks.
Core Concept Plan
Core Concept - Witmer Road Perspective
Public Square

The Public Square element is a traditional concept often used as an anchor point for public space amongst a denser developed backdrop. Gathering space, a plaza, and areas to relax are the typical elements. The concept employed for the Master Plan is to embrace the public gathering aspect, but to bring it into a modern context with amenities that provide just enough relaxation and fun to create cross-generational appeal and after-hours possibilities. The Public Square should be an attractive space that not only works as a gathering area, but also as a magnet that enhances the entire pedestrian network by providing a destination along connecting paths.

The main part of the Public Square should be a plaza with furnishings, but it should also be a place that can transform into event space for outdoor performances, potential vendor operations, or other coordinated activities. Parts of the Square should offer varied places to stroll or sit, allowing visitors to relax and enjoy what is happening around them, or to retreat into a book or report that needs review.

The “fun” concept should also be represented in the Public Square. Newer public spaces in Philadelphia and other cities have improved their spaces with activities that can hold people’s attention or add another reason to visit the space. Possible recreational activity includes ping pong tables, life-size chess boards, or group yoga facilities.

Another activity that can bolster the popularity of a public space is eating. New pocket parks and plazas have experimented with onsite cafes. If mixed use development can bring adjacent retail and restaurant uses, then an onsite space is not needed. Another alternative may be to design the Square with access and areas conducive to food trucks, which are becoming more popular in the city and suburbs alike.

Potential Public Square Elements:
- Garden Walk
- Staging Area for Events
- Stadium Style Seating (Elevated Areas)
- Public Art
- Permeable Pavers
- Programmed Activities (Yoga, Market, etc.)
- Recreation Facilities (Ping Pong, Chess, etc.)
- Café or Food Trucks
- Comfortable Seating

Food Trucks

Recreational Events

Public Art

Amphitheater Seating
Core Design Elements

The following design elements and concepts will further enhance the Mixed Use Core Center as a functional and active centerpiece for the Horsham business parks.

Access Management

Building and parking access should be focused on function, but it should also be designed in conjunction with the pedestrian network and streetscape. Site designs should include a circulation system that efficiently moves vehicles in a well-defined manner while avoiding and reducing potential conflicts between pedestrians and vehicles. Shared ingress and egress points and interconnected parking lots where applicable can help allow public right-of-ways and gathering spaces to remain safer and more pleasant.

Pedestrian Connections

Individual sites in the Core Center should not only connect the building to parking and internal amenities, but they should also connect with the broader pedestrian network throughout the Core and the business park as a whole. Each building should connect to sidewalks in the public right-of-way, the Powerline Trail, and a future greenway loop as it evolves through the park.

Diversity of Building Scale

A maximum building height within the Core is proposed to be six stories. However, this should not imply large monolithic structures lined up after each other. Building setbacks will help prevent this result, but the design and placement of the buildings can also provide for greater densities without seeming monotonous or overbearing from the street level.

Create Indoor-Outdoor Connections

Building entrances should also be designed with an eye to the Core. While main entrances should front along a street, there may be other parts of the building that are used for connecting to the outside, such as a courtyard or lunch area. These should be designed in a way that does not make them secluded, but rather opens up to the other amenities, networks, or natural features within the Core.

Foster a Sense of Place

Integrating site amenities, such as courtyards, site furniture, and landscaping, adds to the creation of a sense of place and an aesthetically pleasing environment. Small water fountains, special accent paving, trelliswork, sculpture, and/or other design features shall be incorporated into plaza, courtyard, and streetscape design.

“Activate” the Core

Providing attractive or serene environments around a business park only accomplishes part of the campus potential. Providing active uses alongside the primary business, residential, or shopping roles opens up new opportunities for creating a place as well as giving people additional opportunities to improve their health or mental well-being.

Strengthen External Connections

A reality of business parks is the extent of surface parking needed. Often times, the parking lots create vast gaps between buildings and disrupt the external connections that a building might make to other uses around it. While structured parking will be encouraged for the most dense developments in the Core, surface lots can still be designed so as not to isolate buildings and disrupt pedestrian connections. Surface lots should be:

- Screened with plantings or fences
- Limited to the rear and side of buildings
- Interconnected
- Broken up into smaller lots
- Integrated with pathways that join to amenities
Landscape Plan

The Landscape Plan provides a development framework that prioritizes the creation of public open space. Public open space will bring structure and identity to the Business Parks, add value to redeveloped parcels, and provide locations for relaxation and exercise.

One of the Business Parks’ primary assets is its available green space. Building upon existing preserved acreage, natural areas, and adjacency to Lukens Park, a continuous greenway corridor and trail will provide passive and active recreational space for employees, residents, and visitors. The loop will provide an additional connection to the Power Line Trail, which will itself be enhanced with amplified naturalized zones.

Parking lots will be graded to drain runoff into a series of localized greenways, swales and pervious areas that will facilitate natural water infiltration.

Multiple formalized gateways will provide a transition into the Business Parks at highly visible locations.
Traffic and Pedestrian Improvements

The Horsham Business Parks would likely benefit from targeted transportation improvements even if there was not a master plan or future redevelopment. Some of these improvements are focused on safety and improving the pedestrian experience. The Master Plan addresses these needs and identifies other improvements including new road connections, streetscapes, and more efficient road usage through both road diets and widenings.

Transportation improvements will emphasize a network that varies in character to respond to the needs of vehicles, bicyclists, and pedestrians. They will enhance access into the site and encourage and make safer alternate modes of transportation such as walking and public transit. New street connections will improve traffic circulation. Improvements such as pedestrian refuge islands, landscaped medians, and a connected sidewalk network will provide pleasant, walkable streets. Direct connections to the commercial edges and the Public Square and recreation will also be provided.

Streetscape

Streetscaping can aesthetically enhance a roadway corridor as well as provide safety and walkability improvements. The corridors along Dresher Road, Gibraltar Road, Witmer Road, Prudential Road, and Blair Mill Road, comprise the major vehicular connections within the Business Parks and they should also be maximized for pedestrian and bicycle safety wherever possible.
Signalization

New traffic signals are recommended at three locations where safety is a concern between vehicles making turns onto busy roads or pedestrians are forced to make difficult road crossings. Dresher Road hosts two of these locations, as it is a very challenging road to cross with four lanes of traffic and cars that tend to speed with few interruptions. It is also suggested to remove the existing signal at Dresher and New Road since New Road will be further diminished as a throughway when it closes prior to Easton Road. A new roadway connection is proposed East of the Toll Brothers office building between New Road and Gibraltar Road.

The new signals on Dresher Road are proposed at Gibraltar Road and further down at the intersection with Business Center Drive where a future greenway trail could also intersect. A new signal is also proposed on Blair Mill Road and Gibraltar Road to compensate for the increased usage of Gibraltar when New Road closes.

New Road Construction

In addition to the proposed road that would connect New Road and Gibraltar Road, another internal roadway connection is proposed between Witter Road and the endpoint of Rock Road in what will be the Mixed Use Core Center of the Business Parks. This road will enhance circulation as this area becomes a focal point with increased vehicle and pedestrian traffic.

Pedestrian Refuge Islands

Refuge islands greatly increase pedestrian safety and comfort level as they provide a moment of rest when crossing a busy street and break the experience into two smaller and separate actions. Additionally, they can also be a traffic calming device as a wide open road with four or five lanes encourages cars to go faster while a median narrows the perceived cartway for vehicles and can make travel at a slower speed. Dresher Road is also the area where these improvements are most needed to assist with pedestrian crossings and slow down vehicles.

Road Widening

Blair Mill Road is five lanes wide in some areas along the Business Parks, but it also narrows to as little as two lanes at some points. This can lead to greater congestion as the road becomes more heavily used to connect to Easton Road (Rt. 611). Over the long term, if the proposed new interchange for the PA Turnpike gets built at Welsh Road, Blair Mill Road will become even more heavily used for traffic going North and avoiding the Rt. 611 interchange. The Rt. 611 Transportation Study also calls for the widening of Blair Mill Road to keep it consistent all the way down to Welsh Road. Of course, streetscape and sidewalk connections should also be addressed in any widening project.

Sidewalk Connections

The pedestrian network within the Business Parks suffers whenever a roadway is missing a sidewalk within the right-of-way unless a separate trail or path has been provided. The transportation improvements plan notes where missing sidewalk pieces hinder the ability to form a continuous path between potential destinations in the Parks. These pieces should be filled in with new redevelopment by the applicants, but some areas may require additional investment in order to fully establish a pedestrian network.
Chapter 6

DESIGN GUIDELINES AND ZONING RECOMMENDATIONS
Site Design
A key element in the design of business parks is the arrangement of structures, parking, circulation routes and open space, and how they relate in scale and character to each other and the surrounding environment. The following are guidelines for the harmonious layout of these site design elements. These guidelines encompass a range of situations, and are intended to apply to the business parks as a whole. Certain areas, such as the Core Area, may require more specific provisions as discussed in Chapter 5 and the zoning recommendations at the end of this chapter.

General Layout and Street Pattern
The new land uses introduced in this plan are designed around streets, which can be either public or private. Buildings are located close to streets to encourage pedestrian activity.

- Various land uses should be laid out and spaced to make walking from one land use to another as easy as possible.
- Retail uses should be located as physically close to as many of the following on and off-site features as possible: existing retail areas, transit stops, existing collector or higher classification streets, and proposed plaza areas.
- New streets should be laid out to create blocks where feasible.

Building Setback and Placement
Buildings should relate to the streetscape, with main entrances oriented toward the road, and sidewalk connections provided from the entrance to the road. Buildings should have entrances for every street it abuts.

- Building placement should create opportunities for plazas, courtyards, patios, or outdoor dining.
- A variety of 40’ - 80’ building setbacks should be provided in order to avoid monotonous building facades and to create diversity in design.
- Five- and six-story buildings can be made less obtrusive and more attractive with architectural treatments along facades, vertical plane differentiation, and additional upper floor setbacks.
- Building forms should preserve natural landforms and minimize cut and fill to the greatest extent possible.

Building Entries
- Building entries should be easily identifiable and provide convenient public access.
- Each site should provide a well-defined entry sequence from the street or parking lot to the building.
- Entrances and courtyards should relate to adjacent buildings.
- All primary building entrances should be accentuated. Permitted entrance accents may include: recessed, protruding, canopy, portico, or overhang.

To provide a campus-like atmosphere, building placement should create opportunities for interesting outdoor passageways.

Above, a landscaped island at a Great Valley office building enhances the entry sequence by providing a safe pedestrian route and pleasant transition between parking and building entrance.
**Pedestrian Circulation**
- The circulation system should efficiently move vehicles while avoiding potential conflicts between pedestrians and vehicles.
- Site design should accommodate pedestrian circulation from parking areas to destinations such as buildings, plazas, open spaces, and adjoining buildings.
- Existing and proposed pedestrian or multiuse circulation systems and easements should be integrated into site design.
- Parking lots and structured parking should provide clearly identifiable visitor parking.
- Pedestrian access should be provided between bus stops and building entrances.

**Parking**
- Reduce the number of vehicle access points per parcel to reinforce continuity of the streetscape.
- Parking lots which accommodate a significant number of vehicles should be divided into a series of connected smaller lots.
- Parking lots should be placed at the side or rear of the building when feasible, to ensure direct visual connections between the street and the building entrance.
- Parking lots should be screened with landscape plantings when they are not placed behind buildings.
- Primary access points for vehicles and visitors should be enhanced with elements such as ornamental landscaping, signage, or decorative paving.
- Convenient public access, short-term visitor, and handicap parking should be closest to the building to provide the shortest route of travel.
- Structured parking facilities should relate in scale and design to the surrounding buildings.
- Structured parking facilities should avoid long, monotonous uninterrupted wall or roof planes.

**Sustainable Office Park Features**
- Adaptively reuse flex and industrial buildings for new, modern office use.
- Encourage new buildings to be Energy Star or LEED-certified.
- Install green roofs wherever feasible.
- Use green technologies for renovations and maintenance, e.g. Energy Star roofs, energy efficient windows and lighting.
- Equip parking lots with electric vehicle charging stations.
- Investigate bike share and car share programs.
- Encourage alternative modes of transit. Investigate providing shuttle service to Hatboro SEPTA station, bike share program, or car share programs.

*Green parking lot design can also accommodate safe and pleasant pedestrian passage to building entrances.*

*Solar panels can be installed in parking lots.*

*Green roofs, like the one pictured here at the Shaffer Office Building in Conshohocken, provide energy savings, ecological value, and health benefits.*
Streetscape Design

The term “Streetscape” refers to the appearance of a street. The scale and combination of elements such as street trees, building facades, and benches contributes to the positive aesthetics of a street. Streetscape elements should be selected for their aesthetic value as well as their utility. The style and material of streetscape elements should support a comfortable pedestrian scaled environment while maintaining the goal of supporting and enhancing the new mixed-use character of the office parks.

Material Palette & Design Style

Furnishings should be thematically unified in their design. The streetscape theme should conform to an elegant, modern aesthetic while incorporating a select amount of high-end natural and traditional materials. A neutral and inviting color and material palette should be selected. Bright, complimentary materials and paint colors may be introduced selectively at key locations in order to enhance wayfinding and invigorate public spaces.

High-quality materials should be used, and no plastics, including benches, flower pots, or newspaper vending machines, should be used or displayed on public corridors at any time. Whenever possible, materials and furnishings should be locally sourced and contain recycled content.

Horsham Business Park’s existing color and material palette is dominated by earth tones, brick, stone, and wood. The contemporary style of the Business Park’s newer developments and site renovations, exemplified by the use of glass, steel, and concrete, should be employed as properties redevelop. Natural materials like stone and wood should be used primarily as an accent.

Existing Material Palette

Certain stylistic features should be phased out.

Proposed Material Palette

A subtle shift in visual energy can be achieved by executing a contemporary style.
**Sidewalks**
Encouraging mobility choices such as walking, biking, and transit is essential for compact, mixed use development. Sidewalks along street frontages should be wide enough to make a person’s use of them pleasant and uncrowded. Additional sidewalks should be required to connect all front building entrances, parking areas, plazas, bus stops, and any other destination with the existing street network.

- Sidewalks parallel and adjacent to major through roads should be a minimum of eight to ten (8-10) feet in width, with a minimum verge of 8 feet.
- All sidewalks on minor roads should be a minimum of six (6) feet wide.
- Sidewalks that are integral components to surface parking lots should be a minimum of five (5) feet side.
- Permissible sidewalk materials include the following finishes: exposed aggregate concrete, colored concrete, or textured concrete.
- Unit pavers may be used as sidewalk material when adjacent to a building entrance or plaza.
- Pavement scoring and joint detailing should be complimentary to pavement materials and finishes, and to adjacent buildings.

**Street Furnishings**
Street furnishings should support a comfortable pedestrian scaled environment while also maintaining the goal of supporting and enhancing the character of the Business Parks. Street furniture should be required along these key pedestrian corridors, and at other locations as appropriate to achieve the goal of creating a walkable business park: Witmer Road, Prudential Road, Gibraltar Road, Dresher Road, and Business Center Drive.

**Pedestrian Lighting**
Lighting should provide atmosphere, safety, and security to the pedestrian. Light intensity should be of satisfactory quality to ensure visibility, safety, and security.

- In general, lighting for pedestrian walkways, parking areas, and vehicle access ways should not exceed a height of fourteen (14) feet.
- Lights should be located in mid-block areas and at intersections to reduce dark areas or gaps at night.
- All public areas should be lit at night to not only promote use, but also to create a sense of safety and allure into these spaces.

**Benches**
Benches should be selected for overall comfort (bench form an material) and adaptability in the streetscape (e.g. multiple sizes).

- As a general rule, benches are to be placed at 100 feet on center.
- Benches should be located out of the direct path of pedestrian circulation.
- Benches should provide for a variety of options such as sunlight, shade, quiet, activity, formality, and informality.

Pedestrian Lighting options: Forms + Surfaces Cordia LED fixture (left) and Landscape Forms Alcott LED fixture (right).
Montgomery County Planning Commission

Streetscape Cross-section

Existing Cross-Section

Witmer Road is a heavily-travelled major collector roadway in Horsham Township, and one of the busiest roads in the Business Parks. This roadway currently meets commuters’ needs, but does not meet the needs of pedestrians or area residents. The Mixed Use Core Center will be situated around Witmer Road. This important corridor will be a focal point for new development, and should evolve with the new uses that will border it. Witmer Road should become a welcoming, tree-lined boulevard that is actively used by employees and local residents alike.

Proposed Cross-Section

- An ample landscape median will slightly narrow each travel lane, slowing traffic.
- A wide, 8’-10’ verge will allow for the healthy growth of new street trees.
- An 8’-10’ sidewalk will accommodate two or three pedestrians walking side by side.
- New street furniture will welcome visitors, employees, and residents to this active core.
- The remainder of the setback will accommodate small gathering places, gardens, or lawn.

Bicycle Racks

- Bicycle racks must support the bicycle frame in at least 2 places, allowing the frame and wheel to be locked using a U-lock or cable lock.
- Be durable, rust-proof, and securely anchored.
- Bike racks must not impede pedestrian traffic.

Litter and Recycling Receptacles

- The design and style of planters should compliment the selected pavement style and bench style.
- Planters may be placed individually or grouped, depending on size and location. Planters should be incorporated along the streetscape and in public gathering areas.

- Receptacles should be low maintenance, rust-proof, and include a weatherproof lid.
- Litter and recycling receptacles should be placed together at busy locations, including consolidated parking and public gathering areas.
- Receptacles should be placed every 200’ - 300’ on center within the streetscape.

- Litter and Recycling Receptacles option: Landscape Forms Poe 34-gallon. Powdercoated or metallic finish aluminum.

- Bicycle Racks option: See diagram.

- Litter and Recycling Receptacles style should blend in well and not detract from other streetscape furnishings.

- New zoning and design guidelines should encourage the activation of the streetscape, achieved through decreased building setbacks, wide sidewalks, and ample space for street trees and other plantings.
Streetscape Cross-Section

30' (min)  8'-10'  8'-10'  11' + 3'  12'  11' + 3'  8'-10'  8'-10'  30' (min)
Public/Private Courtyard and Garden Area  Sidewalk  Planted Verge  Travel Lane & Shoulder  Landscape Median & Turn Lane  Travel Lane & Shoulder  Planted Verge  Sidewalk  Public/Private Courtyard and Garden Area

40' Cartway  60' Right-of-Way

Witmer Road - Proposed Cross-Section
1" = 20'
Two Lanes with Landscape Median
Streetscape Plantings

The Business Park plant palette should remain consistent yet diverse throughout the office parks. The palette may change to announce a special area within the Business Park, such as the Public Square. A plant palette that is specific to a special location creates a sense of place. Plants native to North America should always be prioritized, especially those plants which are native to the Northeast. In certain cases non-natives may be selectively chosen if they are proven to be non-invasive and provide superior performance and aesthetics to a native variety. Plants listed as invasive by the Pennsylvania Department of Conservation and Natural Resources should never be planted.

Business Park plantings as a whole should enhance outdoor recreational space for the enjoyment of business park employees and residents; provide habitat for native plant and animal species; and mitigate stormwater runoff from paved surfaces.

Street Trees

Street trees are the most important trees in the Business Parks. Street trees directly line the traffic right of way and are within 15’ of the edge of the roadway. They cast shade on the sidewalk and on the street, moderating temperature in developed areas. They add texture to the streetscape and provide a visual break between the road and buildings.

- Large street trees should be planted every 35’-40’ on center on both sides of major roads. Spacing should allow for eventual continuous tree canopy without crowding.
- Plant a diverse tree palette to maintain tree health and prevent disease. The USDA recommends these guidelines: plant no more than 10% of any 1 species (e.g. Willow Oak), and no more than 20% of any 1 genus (e.g. Oak, Maple).
- Avoid planting species that are vulnerable to common diseases and pests, such as Dutch Elm Disease.
- Maintain street trees under supervision of a certified arborist.

Planting and Maintenance

Tree growth is influenced by the size of the root growth area, soil type, water availability, and drainage.

- Tree planting and stormwater management should occur simultaneously.
- Pro-actively design streets, roofs, parking lots, sidewalks and other impervious parts of the landscape to drain to tree openings.
- Plant small caliper trees (<4”) to avoid transplant shock, promote rapid growth, and reduce installation costs.
- Shredded bark mulch should be applied thinly (<2”) over a 3’ - 4’ area for root establishment and protection from mowers.
- Sweep and collect tree leaves for on-site composting to avoid nutrient run-off.

Specimen & Understory Trees

Specimen trees and understory trees and are located between buildings, along walkways and parking areas, and in naturalized areas such as woodland edges. Trees that tolerate a combination of shade and sun are best for planting between buildings and on woodland edges. Trees which produce colorful flowers or fruit, or possess interesting bark should be planted near walkways and plazas.

Recommended Tree Species

Street Trees

* Acer rubrum ‘October Glory’ (October Glory Red Maple)
* Ginkgo biloba (Ginkgo)
* Platanus xacerifolia ‘Bloodgood’ (Bloodgood London Planetree)
* Quercus phellos (Willow Oak)
* Quercus rubra (Red Oak)
* Tilia americana (American Linden)
* Tilia cordata (Littleleaf Linden)
* Cornus florida (Flowering Dogwood)
* Gymnocladus dioicus (Kentucky Coffee Tree)
* Liquidambar styraciflua (Sweetgum)
* Nyssa sylvatica (Black Gum)
* Quercus alba (White Oak)
* Styrax japonica (Japanese Snowbell)

Specimen & Understory Trees

* Amelanchier canadensis (Serviceberry)
* Carpinus betulus ‘Fastigiata’ (Fastigate European Hornbeam)
* Carpinus caroliniana (American Hornbeam)
* Cercidiphyllum japonicum (Katsura)
* Cercis canadensis (Redbud)
* Cornus florida (Flowering Dogwood)
* Gymnocladus dioicus (Kentucky Coffee Tree)
* Liquidambar styraciflua (Sweetgum)
* Nyssa sylvatica (Black Gum)
* Quercus alba (White Oak)
* Styrax japonica (Japanese Snowbell)

*Native species
Understory Plantings
Shrubs, perennials, and native grasses occupy the streetscape understory. These plantings engage the senses by providing a wide range of color, texture, and scents. Most of these plants become dormant in winter, and so they should be paired with trees and evergreen shrubs to maintain structure in the landscape. Plantings should be coordinated to provide color from early spring to fall.

Perennials
Perennial plantings are suitable for most areas of the Business Parks. Mass plantings of tall, colorful perennials attract pollinators and employees seeking a moment of relaxation. Low-growing, spreading perennials act as groundcovers, and hardy, native varieties should take the place of commonly used non-natives such as Pachysandra terminalis.

Grasses
Grasses are low-maintenance and can adapt to a wide range of landscape conditions. When left to complete their growing cycle, they provide interest year-round, including the winter months. Many grasses will naturalize and form larger colonies, and many combine well with wildflowers. Grasses are suitable to plant in parking lots, meadows, plazas, and landscape medians.

Recommended Shrubs
*Aronia arbutifolia (Red chokeberry)
*Cornus sericea (Red Twig Dogwood)
*Fothergilla gardenia (Fothergilla)
*Hamamelis xintermedia (Hybrid Witchhazel)
*Hamamelis virginiana (American Witchhazel)
*Hydrangea paniculata (Panicle Hydrangea)
*Hydrangea quercifolia (Oak Leaf Hydrangea)
*Itea ‘Henry’s Garnet’ (Virginia Sweetspire)
*Rosa ‘Radrazz’ Knockout (Knockout Rose)

*Native species

Recommended Perennials
*Asarum canadense (Wild Ginger)
*Aster novo-belgii (New York Aster)
*Carex ‘Ice Dance’ (Sedge)
*Coreopsis verticillata ‘Moonbeam’ (Tickseed)
*Echinacea purpurea (Purple Coneflower)
*Lobelia cardinalis (Cardinal Flower)
*Pachysandra procumbens (Allegheny spurge)

*Native species

Recommended Grasses
*Andropogon gerardii (Big Bluestem)
*Andropogon virginicum (Little Bluestem)
*Eragrostis spectabilis (Purple Lovegrass)
*Muhlenbergia capillaris (Purple muhly grass)
*Panicum virgatum ‘Shenandoah’ (Switchgrass)
*Sporobolus heterolepis (Prairie dropseed)

*Native species
High Performance Landscape

The office park landscape is a crucial component of the suburban infrastructure that will help Horsham and Montgomery County address future land use challenges. Additional building, parking and street coverage will be added to the Business Parks with future redevelopment. A high-performance landscape must be designed to meet the increasing demands that will arise with redevelopment. These landscape guidelines provide direction for how a high-performance landscape should be designed, built, and maintained.

• Capture, slow, or reduce overall stormwater volume
• Provide habitat and increase biodiversity
• Create aesthetic interest
• Decrease capital expenditures and long-term maintenance costs
• Expand opportunities for relaxation and recreation

Stormwater Management

The stormwater basin is the most common on-site stormwater management technique. It is designed to retain or detain stormwater runoff to allow a more gradual release of surplus surface water.

The typical stormwater basin in the Business Parks is planted with traditional lawn grass which requires regular mowing on steep slopes. The result is often an aesthetic and safety problem with high maintenance requirements. Some basins are filled with rip rap in an attempt to ease maintenance, but this approach magnifies erosion.

A stormwater basin can be enhanced with the incorporation of wet-tolerant trees, shrubs and wetland vegetation. These mixed plantings can filter sediment, remove pollutants, reduce maintenance, enhance flood control, create wildlife habitat, and provide visual interest. Carex pensylvanica may be planted on the basin border to provide a mowable edge.

Recommended Storm Basin Plants

Street Trees
*Carex lurida (Shallow Sedge)
*Carex pensylvanica (Pennsylvania sedge)
*Chasmanthium latifolium (River Oats)
*Cornus amomum (Silky Dogwood)
*Crataegus viridis (Winter King)
*Rhus aromatica (Fragrant Sumac)
*Sorghastrum nutans (Indian Grass)
*Taxodium distichum (Bald Cypress)
*Viburnum lentago (Nannyberry)

*Native species

Naturalized detention basins are a benefit to wildlife.

A high-performance stormwater landscape attracts migrating birds. Educational signage may be included.

A higher-performance stormwater landscape at the Business Parks today utilizes native grasses.

A low-performance retention basin at the Business Parks today exacerbates erosion and requires high levels of maintenance.
Naturalized Areas
Over 500 acres of land in the Horsham Business Parks will remain unbuilt. Some of this land is protected woodlands or riparian corridor, but much of it is turf grass. The lawn areas that are not adjacent to buildings or plazas or not utilized for active recreation, should be converted to naturalized landscape. Naturalizing large areas of lawn and turf will decrease stormwater runoff, decrease maintenance costs, and increase biodiversity and wildlife value.

Green Parking Lots
Green parking can dramatically enhance the appearance and performance of parking lots in office and mixed use centers. Green parking lots are designed to use innovative stormwater management practices that incorporate plantings and sustainable paving to mitigate adverse environmental impacts of large expanses of impervious paving.

Creating green and sustainable parking lots involves several design elements. When these elements are combined, a parking lot can be transformed into an environmental asset.

• Shading and Greening
• Permeable Paving
• Light and Energy Generation
• Naturalized Drainage
• Pedestrian Connections
• Community Character

Soil fertility in tree planting areas in parking lots is often poor due to compaction and loss of top soil. All debris and compacted soils should be removed and replaced with good quality loam at a depth of 30 inches.

For further guidelines on green parking, refer to the Montgomery County Planning Commission’s publication “Sustainable Green Parking Lots.”

Existing Bioswale
This parking lot swale at the Horsham Business Parks is planted with site-appropriate River Birch trees, but it could be enhanced with additional plantings.

Proposed Bioswale
The addition of native plantings of shrubs and grasses slows and filters stormwater more effectively than traditional turf.
**Plazas**

In addition to the Public Square in the Core Area, public seating areas that are adjacent to and between office and mixed use buildings should be provided throughout the Business Parks. These plazas should provide flexible space for social interaction or quiet reflection. Seating, shade, ornamental plantings, and lighting should be incorporated into these plazas.

- Plazas should be at least 75% paved with unit pavers, paving stone, or concrete. One shade tree per 1,000 square feet of plaza area is recommended.
- Plazas should be surrounded by streets or front or side facades of buildings. Off-street parking spaces should not abut plazas.
- Plazas could include amenities such as fountains, public art, pergolas, shade trees, benches, lounge seating, pedestrian lighting, and table games.

Paving patterns should be varied.

Seating is incorporated into low planting walls at Arborcrest.

A small plaza at Horsham Business Park provides seating and shade between two office buildings.

A patio at SEI in Oaks is enlivened with brightly colored furnishings that mimic the colors used in the building façade. Dense plantings of trees, shrubs, and grasses add visual interest.

Informal lounge seating should be provided in plazas.
**Public Art**

Public Art is an existing, successful element of the Business Parks. Additional art should be placed within prominent visual axes and highly trafficked areas. Interested parties may refer to Art on Our Trails, a guide for placing art on Montgomery County trails.

Generally, art works should be free-standing and sized appropriately for the outdoor space in which they are located.

Artists’ work should be developed in collaboration with the site/building architect and landscape architect so that the setting and art work relate to each other in terms of scale and materials.

Art work should be weatherproof, low maintenance, and vandal-resistant.

The works can be abstract or have a utilitarian function, but should be designed primarily for aesthetic purposes.

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**Bus Stops**

- A minimum four foot (1.2m) wide clear pedestrian path should be provided for access to the bus stop waiting area and loading area.
- The sidewalk should provide a clear pedestrian path to and from the bus stop area, the bus stop loading pad, and the bus shelter or bench, when present.

**Bus Shelters**

- Bus shelters should be no less than five (5) feet distant from the curb line or a road’s edge.
- Placement should be at a conspicuous location with a clear sight distance in the direction of all traffic flow of no less than three hundred (300) feet.
- Bus shelter placement should not block the sidewalk.
- Bus shelters should have a minimum of 5 linear feet of seating.
- Lighting should be provided under the roof of the shelter.
- Bus shelter walls provide the office park with a branding opportunity or a location to display artwork which enhances the image of the Office Parks.
**Trail Design**

**Power Line Trail**

The **Power Line Trail runs for over half a mile through the Business Parks.** It generally is aligned under the PECO high-voltage power line. The PECO easement prohibits all development over 10’ high within 45’ from the centerline.

Enhancements to the Power Line Trail through the Business Parks should be 10-12 feet wide and should be constructed of macadam or a similar quality material. Where possible, the trail corridor should be a minimum of 30’ in width.

**New Greenway Loop Trail**

A new Greenway Loop Trail should be provided for employees and area residents. The Loop will enhance the connection between the Pennsylvania Business Campus and the Horsham Business Park, and provide a recreation option to the trails at Lukens Park.

- To the maximum extent feasible, trails should be installed in areas where significant natural and scenic resources exist on a site.
- Trails should be located in prominent areas with visual interest.
- Trails should directly connect with an existing trail or sidewalk.
- Trails or greenways should also directly connect with the Office Park’s retail area via a sidewalk connection or pathway.
- The entire trail corridor should be a minimum of thirty (30) feet in width.

**Existing Power Line Trail**

The Power Line Trail is 5’-6’ wide and abuts nearly 1,000 linear feet of parking at the Horsham Business Parks.

**Proposed Power Line Trail**

A dedicated 30’ trail corridor should be installed. The portion of the Schuylkill River Trail pictured below is buffered with attractive plantings, and is a visual amenity for adjacent office buildings.

**Existing Trail Crossing**

The crossing of the Power Line Trail at Dresher Road is a major pedestrian gateway to the Business Parks. It should be made safer with the installation of curb bulb-outs or a median pedestrian refuge.
Business Park Identity / Gateways

Wayfinding and signage serve as visual cues to visitors and are imperative to successfully navigating the Business Park campus. Signs should be simple, accurate, and reflect the Business Park's identity.

- A Wayfinding Plan and signage design should be crafted and carried out for the comprehensive design and installation of all wayfinding signage.
- All signage should be located within the curb zone if possible, or with a minimum passable distance within the pedestrian zone of at least six (6) feet.
- Gateway signage locations are located on the Landscape Plan, page X
- All signage locations should be lit to promote visibility at night. All lighting should be directed at the signage to concentrate lighting where it's needed.
- Creating a sign ordinance for private storefront signs in the Business Parks is recommended.
- Landscaping at or around signage should not detract from or obstruct the sign.

Existing Gateway Sign

Existing Signs/Directories

Private business sign should be relocated within the curb/pedestrian zone. Colors should be highly visible from a distance.

Proposed Gateway Signs

New gateway signs should establish an easily-recognizable “brand” for the Business Parks. Vertical gateway signs have been installed elsewhere in the County, and establish an eye-catching presence along major corridors. Below, the King of Prussia gateway sign on Route 202, and SKF’s sign in Hatfield Township.
Potential Zoning Changes

The Land Use Master Plan has three overall recommendations that apply to three different aspects of the office parks:

- Business Park as a Whole
- Mixed Use Core Area
- Commercial Frontages on Major Roads

The land use policies for each of these three areas are listed below along with detailed descriptions of potential zoning changes for implementing the policy. Not all of these zoning approaches are recommended at this time, but they illustrate the potential strategies to be used in drafting new zoning for the Business Parks Area. Some of the strategies listed represent choices or alternatives that will need to be deliberated by a future consultant, the township solicitor, and elected officials. The simplest approach will be to create a single district for the Business Parks, but also to establish overlays for the Mixed Use Core and Commercial Frontages along Major Roads in order to shape the vision of the Master Plan for those areas.

Business Parks as a Whole

<table>
<thead>
<tr>
<th>Land Use Policies</th>
<th>Potential Zoning or Other Ordinance Approach</th>
</tr>
</thead>
</table>
| Business parks as a whole should remain employment centers, primarily office with industrial allowed to continue | • Create a new zoning district that encompasses the I-1 Industrial, I-2 Industrial, BC Business Campus, and O-1 Office/Non-manufacturing  
• Allow offices by-right  
• Limit industrial uses to high-tech and life sciences uses or, alternatively, only allow industrial uses to continue as non-conforming uses, with special non-conforming standards in the district that allows existing industrially used properties to continue to be used for industrial purposes |
| Business parks as a whole should support other uses, such as day cares, fitness centers, etc. | • Allow day care centers and fitness centers by-right  
• Require day cares and fitness centers to have direct pedestrian connections to the sidewalk network |
| Business parks as a whole should permit hotels, convention centers, and meeting space | • Allow hotels, convention centers, and meeting space by-right  
• Require front doors with sidewalk connections to streets  
• Consider wrapping convention centers and meeting spaces with other uses, such as restaurants or hotels, that will screen the space from streets. Alternatively, add screening and design standards to reduce the bulk of these buildings. |
| Business parks as a whole should allow more intensive development through selective zoning changes. | • Increase impervious coverage to 75%, possibly as a bonus  
• Increase height to 4-stories or 60 feet, whichever is less, possibly as a bonus  
• Limit height of buildings within 200 feet of residential zoning boundaries to 3 stories.  
• For increased impervious coverage or height, potential bonus provisions might include mixing uses, building public trails, providing publicly-accessible open space, meeting additional LEED and green standards, using structured parking, contributing to improvements to a central green, or contributing to office park streetscaping, landscaping, gateway, and traffic calming improvements. |
### Mixed Use Core Area

<table>
<thead>
<tr>
<th>Land Use Policies</th>
<th>Potential Zoning or Other Ordinance Approach</th>
</tr>
</thead>
</table>
| The mixed use core area should be a vibrant, higher-intensity activity center for the business parks | • Create a Witmer Road core area that applies to properties along Witmer Road between Dresher and Blair Mill roads.  
• Identify this core area by using one of a few different approaches: a mapped overlay; a reference and identification standards within the overall business park zoning; or a new zoning district  
• Require extensive building design standards to encourage walkability, including parking to the side and rear of buildings, front doors and windows, buildings relatively close to streets, and varied facades |
| The mixed use core area should surround a public square with a variety of recreation and entertainment options | • Require new developments to either provide central greens on their properties or to pay a fee in lieu of building a central green  
• Allow a higher height, more impervious coverage, and additional uses, such as apartments, when funds are provided for improvements to a central green for the mixed use core area  
• Show the central green on the township’s Official Map |
| The mixed use core area should contain 500 to 600 apartment units to create diversity and more liveliness in evenings | • Consider a variety of approaches to limit apartments to 500 to 600 total units: allow apartments as a conditional use with one of the conditions of approval that the total business park zoning area has no more than 500 to 600 apartments; allow apartments by-right, but restrict two residential developments from being within a defined distance of each other; or limit apartments to a very defined area, such as fronting the public square shown in the master plan, while also limiting the density of apartment developments. |
| The mixed use core area should have significant amounts of small scale ground floor retail and restaurants | • Allow small scale retail, restaurants, personal services, and banking by-right when part of a mixed use development  
• Require retail, restaurant, and other supportive uses in office and apartments developments  
• Require retail and restaurant uses to be close to streets, near central greens, near trails, accessible to pedestrians with sidewalk connections and front doors, and easy to see with ground floor windows and appropriate signage  
• Limit these supportive uses to no more than 10% of the building square footage on the property |
| The mixed use core area should allow more intensive development through selective zoning changes | • Increase impervious coverage to 80%, possibly as a bonus.  
• Increase height to 5 to 6 stories, or 70 to 90 feet, possibly as a bonus.  
• Require buildings over 4 stories to have design elements that reduce the perceived height of the building, such as step backs, variations in the façade, or architectural variations.  
• For increased impervious coverage or height and for the apartment use, potential bonus provisions might include mixing uses, building public trails, providing publicly-accessible open space, meeting additional LEED and green standards, using structured parking, contributing to improvements to a central green, or contributing to office park streetscaping, landscaping, gateway, and traffic calming improvements. |
### Commercial Frontages on Major Roads

<table>
<thead>
<tr>
<th>Land Use Policies</th>
<th>Potential Zoning or Other Ordinance Approach</th>
</tr>
</thead>
</table>
| **Be a mix of offices and small to medium scale retail** | • Create retail commercial areas along Route 611 and Route 63.  
• Identify this core area by using one of a few different approaches: a mapped overlay; a reference and identification standards within the overall business park zoning, including a reference to the road classification and overall volume; or a new zoning district.  
• Allow offices, standalone retail, restaurants, personal services, entertainment uses, banks, and day care centers within this area. |
| **Contain retail, restaurant, and entertainment uses that support the business parks and appeal to young, creative workers and their employers** | • Limit the size of buildings to prevent large scale superstores, but provide for more square footage when buildings are connected, such as in a shopping center. Larger scale uses that are appropriate, such as a movie theater or other entertainment venue, may require a conditional use.  
• Require developments to be walkable, with internal sidewalks leading to every building, connecting with abutting streets, and connecting to nearby office and business developments, even if they are to the side or rear of the development.  
• Require sidewalks to be relatively wide and grade-separated from parking areas, with direct landscaped connections from building to building and clear crosswalks over driveways.  
• Prohibit drive-throughs for these supportive uses, except banks. |
Chapter 7

IMPLEMENTATION
STEPS AND FUNDING
Implementation

Any plan requires the steady and committed participation of stakeholders in order to become reality. The Horsham Business Parks Master Plan is no exception, and the township will have to be the primary driver to set the stage for other stakeholders and the private market to participate in achieving the Plan’s vision.

The tables on the following pages outline the steps and actions that will need to be taken in order for the full vision of the Master Plan to be achieved. The items have been grouped into categories that relate to the elements outlined in this plan. Items are further delineated by the timeframe in which they are expected to occur. Many of the steps are intended to take place in the first one to two years after the Plan’s adoption. It is these actions which will set the stage for developer contributions, funding opportunities, and municipal investment. Furthermore, some of these actions are expected to commence immediately and have been distinguished with an asterisk in the tables.

The next time period covers year three through seven and represents a critical point when substantial redevelopment proposals should be brought forward and implemented. An established zoning district for the business parks along with specific criteria for public improvements will allow for new development that starts to bring the business parks into the vision of the Master Plan.

The third time period, which loosely covers years eight through fifteen but really should continue beyond then, is when the business parks truly begin to reflect the vision with a vibrant Central Core Area and a Public Square in place. Other projects outside the Core will also develop as the identity of the Parks takes root and attracts more redevelopment opportunity.

Of course, the timing of the implementation steps and the speed with which the market reacts cannot be guaranteed. Market trends, property ownership, funding realities, and unforeseen shifts in the economy could provide opportunities or challenges at any time. However, this Plan still puts the township in the best position to act and be ready for when the right conditions align. Better still, this Plan seeks to provide the market incentives that will create the needed conditions for change before less desirable changes might be brought about through inaction.
**Organizational Structure**

In addition to the efforts that will be needed from township staff and officials, a major necessity comes from getting the property owners in the parks to “buy in” to the Plan. This should not be a problem as companies begin to see the benefits that their properties stand to gain from the increased value from rezoning and long term office park viability. However, it may take time to build a level of partnership.

A proven method of making improvements in a unified commercial area is to establish a Business Improvement District (BID) where property owners formally organize in the interest of making improvements to their overall area. King of Prussia and City Avenue are prominent Montgomery County examples of this working in major employment centers, but other smaller examples exist in more main street style mixed use settings. A BID offers the opportunity to raise funds for public improvements that serve to benefit the entire business park such as streetscape, public square, and trail improvements.

The township would benefit from having a person on staff serve as an economic development coordinator. This person could help facilitate the creation of a BID and possibly assist in its organization. The coordinator could manage implementation of this Master Plan as well as provide guidance in other employment centers in the township, such as the redevelopment of the Naval Air Station and the business parks along Horsham Road.

**Development Preparation**

One of the township’s first actions should be to start work on drafting a new zoning district for the Business Parks as recommended in this Plan. The new zoning will signify the township’s commitment to updating the Parks and get property owners excited to consider their prospects and opportunities under the new zoning.

The increase in Sewage from redevelopment will have to be addressed with the two authorities serving Horsham, although an update to the Act 537 plan may not be needed until redevelopment prospects begin to solidify.

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**ORGANIZATIONAL STRUCTURE**

<table>
<thead>
<tr>
<th>#</th>
<th>Action</th>
<th>Phase</th>
<th>Responsible Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>O1</td>
<td>Develop a branding and marketing strategy for the business parks.</td>
<td>Year 1-2</td>
<td>Township, Consultant</td>
</tr>
<tr>
<td>O2</td>
<td>Create an organization of property owners in the Business Parks with some funding attached. A Business Improvement District would be the traditional concept to pursue, but it does require commitment from owners.</td>
<td>Year 3-7</td>
<td>Property Owners</td>
</tr>
<tr>
<td>O3</td>
<td>Township consider creating a new staff position for economic development that would coordinate revitalization efforts in the Business Parks as well as other commercial areas of the Township. This person could also serve as an organizer for the property owners group and help facilitate their actions.</td>
<td>Year 8-15</td>
<td>Township</td>
</tr>
</tbody>
</table>

**DEVELOPMENT PREPARATION**

| D1  | Draft and adopt new zoning for the office parks as detailed in the Master Plan. | *                      | Township, Consultant |
| D2  | Update the Act 537 Sewage Facilities plan to address potential sewage flow needs in the ‘C’ area. | Year 8-15 | Township, UMHJSA, Horsham Water & Sewer Authority |

* Signifies a high priority that should be pursued soon after Master Plan adoption
Transportation Plan Improvements

The action items in this section are going to be somewhat fluid due to the costs and evolving needs as redevelopment occurs. First, the township engineer and staff needs to consider the recommendations in this Plan and formulate their own priorities as to what is most feasible and necessary.

The cost of some of these improvements is an issue for the township. Horsham already has a transportation impact fee ordinance codified with an advisory committee to oversee its use. Some of the recommended improvements could be partially funded with fees collected from redevelopment in the Parks, but it may require some initial work, including updates to the capital improvements plan and land use assumptions report.

The improvements at the North end of the Parks, detailed in T5—T7, could involve some patient juggling to address those needs at the best time. There may be an opportunity to connect New Rd. and Gibraltar Rd. with the current proposed development on the Williamson parcel. Otherwise, it may be some time before an opportunity becomes feasible closer to the Prudential Rd. intersection. The traffic signalization changes may not be possible until those roads have a new connection.

TRANSPORTATION PLAN IMPROVEMENTS

<table>
<thead>
<tr>
<th>#</th>
<th>Action</th>
<th>Phase</th>
<th>Responsible Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Prioritize recommended transportation improvements throughout the Business Parks based on current need, availability of funding, and redevelopment activity</td>
<td>Year 1-2: *</td>
<td>Township</td>
</tr>
<tr>
<td>T2</td>
<td>Update the Transportation Capital Improvement Plan, and possibly the Land Use Assumptions Report, if Transportation Impact Fees are to be collected from redevelopment projects.</td>
<td>Year 3-7</td>
<td>Township</td>
</tr>
<tr>
<td>T3</td>
<td>Engineer road widening across portions of Blair Mill Road between Welsh Road and Route 611</td>
<td>Year 8-15</td>
<td>Township</td>
</tr>
<tr>
<td>T4</td>
<td>Evaluate any needed improvements at the intersection of Welsh Rd. and Blair Mill Rd. in advance of the future construction of a new turnpike interchange at Welsh Road.</td>
<td>Year 8-15</td>
<td>Township, PADOT, PA Turnpike Commission</td>
</tr>
<tr>
<td>T5</td>
<td>Traffic signalization at Gibraltar Rd. and Blair Mill Rd. alongside the proposed closing of New Rd. at Easton Rd.</td>
<td>Year 8-15</td>
<td>Township, PADOT</td>
</tr>
<tr>
<td>T6</td>
<td>Seek opportunity to build road connection between New Rd. and Gibraltar Rd.</td>
<td>Year 8-15</td>
<td>Township, Property Owners</td>
</tr>
<tr>
<td>T7</td>
<td>Remove signalization from New Rd. and Dresher Rd., relocating it to Gibraltar Rd. and Dresher Rd. This will be dependent on first establishing additional road connection in T6.</td>
<td>Year 8-15</td>
<td>Township</td>
</tr>
<tr>
<td>T8</td>
<td>Engineer pedestrian refuge islands on Dresher Rd. at the Powerline Trail crossing and at the Witmer Rd. intersection. This may involve reconfiguring a portion of Witmer Rd. and the travel/turning lanes at the intersection.</td>
<td>Year 8-15</td>
<td>Township</td>
</tr>
<tr>
<td>T9</td>
<td>Install traffic signal and pedestrian refuge on Dresher Rd. at the intersection with Business Center Drive and potential greenway loop trail.</td>
<td>Year 8-15</td>
<td>Township</td>
</tr>
<tr>
<td>T10</td>
<td>Install landscaped medians and streetscape elements along major municipal roads - Witmer Rd., Gibraltar Rd., and Prudential Rd.</td>
<td>Year 8-15</td>
<td>Township</td>
</tr>
</tbody>
</table>

* Signifies a high priority that should be pursued soon after Master Plan adoption
Landscape Plan Improvements
The first actions in this section will be to establish the particulars of streetscape, landscape, and gateway installations so that developers will be able to provide some of these installations when they redevelop their properties. Streetscape installations will be gradual as funding becomes available or redevelopment affords opportunity.

The Greenway Corridor Loop Trail as shown in the Landscape Trail should be planned now in order to understand what is necessary in terms of siting the trail and making connections back to the Powerline Trail and other amenities in the Parks.

Public Square
The Public Square is a key part of the Master Plan and its creation will be a challenge in terms of funding and lining up the development around the Square. The first step is to work with PECO on gaining site control. Then the township will need to garner support by engaging property owners and the public with the possibilities that this Square could provide. New residential uses will help support the Square in addition to retail opportunities and expanded offices with more employees. The township may want to explore the idea of a special assessment within the Parks to help fund the construction of a dynamic amenity.

LANDSCAPE PLAN IMPROVEMENTS

<table>
<thead>
<tr>
<th>#</th>
<th>Action</th>
<th>Year 1-2</th>
<th>Year 3-7</th>
<th>Year 8-15</th>
<th>Responsible Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>Prepare gateway designs so that they are able to be implemented with redevelopment at key sites as designated on Landscape Plan.</td>
<td>*</td>
<td></td>
<td></td>
<td>Township, Marketing Consultant</td>
</tr>
<tr>
<td>L2</td>
<td>Prepare streetscape plan to guide installations with redevelopment and municipal investment.</td>
<td>*</td>
<td></td>
<td></td>
<td>Township, Consultant</td>
</tr>
<tr>
<td>L3</td>
<td>Install streetscape trees and landscaping within right-of-way along major roadways.</td>
<td></td>
<td></td>
<td></td>
<td>Township</td>
</tr>
<tr>
<td>L4</td>
<td>Prepare a trail feasibility study for the greenway corridor loop trail.</td>
<td></td>
<td></td>
<td></td>
<td>Township, Consultant</td>
</tr>
<tr>
<td>L5</td>
<td>Install trail along the existing riparian corridor as part of the greenway loop trail, while other pieces are installed as part of redevelopment projects or right-of-way sidewalk installations.</td>
<td></td>
<td></td>
<td></td>
<td>Township, Property Owners</td>
</tr>
<tr>
<td>L6</td>
<td>Extend County Powerline Trail through the Public Square and along Witmer Rd.</td>
<td></td>
<td></td>
<td></td>
<td>Township, County, PECO</td>
</tr>
</tbody>
</table>

PUBLIC SQUARE

| PS1 | The Public Square concept should be highlighted as a centerpiece to the Master Plan. Potential developers of adjacent properties should be made to expect how their properties can feed into and augment the Public Square. The zoning is the official step for this process, but a constant drumbeat is required. | Township |
| PS2 | Initiate discussion with PECO to establish a cooperative agreement to locate the Public Square along their property at the corner of Prudential and Witmer Rd. | Township, PECO |
| PS3 | Develop a formal design and plan for the Public Square expanding off of the concepts in the Master Plan. Potentially host a design competition or solicit a public campaign for ideas and interest. | Township, Community, Consultant |
| PS4 | Development of the Public Square should begin in conjunction with redevelopment projects to the North or East of the Square. Funding opportunities should also be sought in the forms of public or open space grants. | Township |

* Signifies a high priority that should be pursued soon after Master Plan adoption
Funding

Creating a vision is only the start. Finding the money and situations to make it happen is the long-term battle. Much of the change recommended in this Master Plan will come about through the regulatory structure and the market forces that bring redevelopment projects. These changes will be gradual and take fifteen or more years, but during that time, buildings will be renovated, expanded, torn down, and replaced. New buildings and expansions will fit into the vision of the Master Plan, creating a more urbanized environment with greater walkability. Buildings will front closer to the street and their public areas will form external connections between amenities. New uses, such as residential apartments, retail, and restaurants, will create a more active environment for employees, visitors, and the community at large. Much of this will happen through private investment facilitated by a productive regulatory environment. However, there are still many public improvements that will both enhance private investment and capitalize off of it.

The following boxes illustrate the potential funding sources that may be available for the township and a future business organization to pursue. Many of them are grant programs and competition is always stiff, but new opportunities will arise over time. If the township creates an economic development coordinator, that person may also devote time toward making grant applications and improving the ability to secure funds.

**Transportation Alternatives Program (TAP)**

*Sponsoring Agency: PennDOT*

*Description:* The Transportation Alternatives Program provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, environmental mitigation, recreational trail program projects, and safe routes to school projects.

*Potential Projects:* Trails, Sidewalks, Bike Facilities, Bus Access

*Program Term:* The 2016 round of applications closes on January 8. The program runs every two years.

**Automated Red Light Enforcement (ARLE)**

*Sponsoring Agency: PennDOT*

*Description:* Transportation enhancement program that utilizes funds collected from the Automated Red Light Enforcement Program.

*Potential Projects:* Signalization to increase mobility, walkability, pedestrian safety

*Program Term:* Annual with applications collected in June.

**Multi-Modal Transportation Fund (MTF)**

*Sponsoring Agency: PennDOT*

*Description:* The Multi-Modal Transportation Fund provides grants to ensure that a safe and reliable system of transportation is available to the residents of this commonwealth. The program is intended to provide financial assistance to municipalities, councils of governments, businesses, economic development organizations, public transportation agencies, rail/freight, and ports in order to improve transportation assets in order to enhance communities, pedestrian safety, and transit revitalization.

*Potential Projects:* Streetscapes, Lighting, Sidewalk Enhancement, Pedestrian Safety

*Program Term:* The latest round of applications closed on December 18, but the program has been conducted annually since 2013.

**Green Light—GO**

*Sponsoring Agency: PennDOT*

*Description:* Provides state funds for the operation and maintenance of traffic signals along critical and designated state highways.

*Potential Projects:* Signalization on state roads

*Program Term:* TBD
<table>
<thead>
<tr>
<th>Program Name</th>
<th>Sponsoring Agency</th>
<th>Description</th>
<th>Potential Projects</th>
<th>Program Term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community Conservation Partnership (C2P2)</strong></td>
<td>Department of Conservation and Natural Resources (DCNR)</td>
<td>Grant program to help plan, acquire, and develop parks, recreation facilities, trails, and critical conservation areas and watersheds; support education and training on conservation and recreation topics; and build conservation, heritage, and recreation partnerships.</td>
<td>Trail work, property acquisition</td>
<td>Annual</td>
</tr>
<tr>
<td><strong>Act 13 Greenways, Trails, and Recreation Program (GTRP)</strong></td>
<td>PA DCED</td>
<td>Act 13 of 2012 establishes the Marcellus Legacy Fund and allocates funds to the Commonwealth Financing Authority for planning, acquisition, development, rehabilitation and repair of greenways, recreational trails, open space, parks and beautification projects.</td>
<td>Projects which involve development, rehabilitation and improvements to public parks, recreation areas, greenways, trails and river conservation.</td>
<td>Last round was in June, 2015.</td>
</tr>
<tr>
<td><strong>PECO Green Region</strong></td>
<td>PECO (administered by NLT)</td>
<td>Green Region grants are available to municipalities in amounts up to $10,000. The grants can be used with other funding sources to cover a wide variety of planning and direct expenses associated with developing and implementing open space programs, including consulting fees, surveys, environmental assessments, habitat improvement, and capital improvements for passive recreation.</td>
<td>Trail feasibility or construction through Greenway Corridor.</td>
<td>Annual. Not currently accepting applications. Last round was in Summer, 2015.</td>
</tr>
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<td><strong>Transportation &amp; Community Development Initiative (TCDI)</strong></td>
<td>Delaware Valley Regional Planning Commission (DVRPCP)</td>
<td>Grant program that provides funding for planning or study efforts that increase livability in the Delaware Valley. Central to this effort is to ensure greater quality of life choices by providing and maintaining essential infrastructure, supporting local and regional economic development, and linking land use and transportation planning.</td>
<td>Trail connectivity study, Public Square as an amenity to increase employment and residential</td>
<td>Every 2 years, with a potential round in 2016.</td>
</tr>
<tr>
<td><strong>Local Share Account Gaming Funds</strong></td>
<td>Commonwealth Financing Authority (CFA)</td>
<td>Grants are available for the redevelopment, reuse, or revitalization of previously developed land, development of undeveloped land, and projects which construct, expand, or improve water and wastewater infrastructure related to business development. Planning grants are available to fund predevelopment activities and feasibility studies for those projects.</td>
<td>Site Development, Public Square, Infrastructure, Wastewater Improvements.</td>
<td>Program not currently accepting applications. Last round was in Summer, 2015.</td>
</tr>
<tr>
<td><strong>Act 13 Greenways, Trails, and Recreation Program (GTRP)</strong></td>
<td>PA DCED</td>
<td>Act 13 of 2012 establishes the Marcellus Legacy Fund and allocates funds to the Commonwealth Financing Authority for planning, acquisition, development, rehabilitation and repair of greenways, recreational trails, open space, parks and beautification projects.</td>
<td>Projects which involve development, rehabilitation and improvements to public parks, recreation areas, greenways, trails and river conservation.</td>
<td>Last round was in June, 2015.</td>
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</tbody>
</table>
Building the Circuit—DVRPC Regional Trails Program
Sponsoring Agency: DVRPC and William Penn Foundation

Description: A program promoting investment in the Circuit, Greater Philadelphia’s Regional Trail Network. These funds will be used for targeted investment in the planning, design, and construction of multi-use trails in Greater Philadelphia.

Potential Projects: Improvements associated with the Powerline Trail

Program Term: Four phases of funding have occurred thus far.

Governors Transportation Infrastructure and Investment Fund—TII
Sponsoring Agency: PennDOT

Description: The fund complements Act 89 and is used for transportation infrastructure related economic development projects.

Potential Projects: Intersection improvements, Signal upgrades, Roadway expansion / realignment, etc.

Program Term: Last awarded in 2014. Fund is discretionary but expected to be open again in 2016.

Montgomery County 2040 Implementation Fund
Sponsoring Agency: Montgomery County

Description: This program has not been formally announced, but the County is preparing to offer a grant program that is open to a variety of municipal projects that implement the goals of the County Comprehensive Plan.

Potential Projects: TBA

Program Term: Annual, beginning in 2016