# **APPENDIX A**

## PROFILES

## FOR THE

# WHEATFIELD TOWNSHIP, PERRY COUNTY, PA COMPREHENSIVE PLAN

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# SUPPORTED BY MAPS SHOWN IN APPENDIX B

Population Density by Census Blocks Existing Land Use Community Facilities and Service Areas Intentionally Blank

This profile of demographic and social characteristics of Wheatfield Township, Perry County, PA provides an indication of current resident needs for land, infrastructure, and services. Population projections enable an estimate of future needs for the same. Statistics used to characterize the Wheatfield Township population were derived from the U.S. Census Bureau decennial censuses and its interim American Community Survey estimates. Population projections for 2020 and 2030 were prepared by the Pennsylvania State Data Centre and Tri-County Regional Planning Commission.

## **Findings of the Data**

- Wheatfield Township's 2010 population was 3,334. This figure represented an increase of only 5 residents since 2000 and a total of 237 residents since 1990. The township's decennial growth rate was 0.1 percent for the 2000-2010 decade and 7.7 percent for the 20-year 1990-2010 period. These growth rates were slower than both Perry County and Pennsylvania for the same periods. (Table 1)
- At 160 residents per square mile in 2010, Wheatfield Township remains a rural community. In 2010, the township was nearly twice as dense as Perry County (83 residents per square mile) and nearly half as dense as the state (284 residents per square mile). The small population increase from 2000 to 2010 resulted in no change to the township's population density. (Table 2)
- **Residents are homogenous in racial and ethnic origins.** At 98.1 percent white (of one race) and 0.8 percent Hispanic/Latino as estimated in 2009, the township was less racially and ethnically diverse than the county and the state. Racial and ethnic diversity increased since 2000 at a very slow pace. This nominal change may reflect the changing nature of the census survey question as much as a changing in the population's ethnicity. (**Table 3**)
- The average age of a township resident in 2009 was 39.6 years. With an estimated median age of 39.6 years in 2009, township residents on average were slightly younger than Perry County residents (40.1 years) and the same age as Pennsylvania residents (39.6 years). The township population on average was 3.5 years older in 2009 than in 2000, similar to the aging of Perry County over the same period. (Table 4)
- There were fewer children and youth living in Wheatfield Township in 2009 than 20 years ago. As estimated in 2009, the township had a higher percentage of adults ages 25 to 64 and smaller percentages of children and youth (under 18), young adults (18-24), and seniors (65 years and over) than the county and the state. The township's percentage of children and youth declined since 1990 by more than 7 percent; a similar but slower trend occurred across the county and the state. (Table 5)
- Those who lived in Wheatfield Township in 2009 were more highly educated than township residents 20 years ago. With 86.6 percent of adults having graduated high school and 17.1 percent having received a bachelor's degree or higher, Wheatfield Township residents are slightly more educated than Perry County residents and slightly less educated than Pennsylvania residents as a whole. Attainment of high school graduate status or equivalent increased significantly across all surveyed geographies from 1990 to 2009. The township's increased percentage of residents with a bachelor's degree or higher was similar to most other municipal geographies, higher than Perry County, and lower than the state. (Table 6)
- Wheatfield Township grew by nearly as many households as residents from 1990 to 2009. According to estimates, the township's 2009 population of 3,490 residents lived in 1,308 households. This estimate represented an increase of 102 households since 2000 and a growth rate of 7.8 percent, higher than that

of Perry County or Pennsylvania. The total increase in households was 219 compared to 237 more residents over the 20 year period. (Table 7)

- Wheatfield Township households have decreased in size but were still larger than county or state households in 2009. At an estimated 2.67 persons per household, the average household in Wheatfield Township was larger than that of Perry County or Pennsylvania in 2009. Household size declined from 1990 to 2000, and again from 2000 to 2009. Wheatfield Township estimated household size in 2009 was 2.67, a decrease of 0.17 since 1990. Perry County's decline in average household size was greater, 0.20, since 1990, and Pennsylvania's was slower, 0.12. (Table 8)
- Household compositions reflect fewer children and more seniors. At 35.8 percent, the percentage of Wheatfield Township households with children under the age of 18 was higher than that of the county or the state. This figure decreased from 2000 to 2009 by 4.4 points. This trend occurred in all surveyed geographies except Bloomfield Borough. At 18.0 percent, the percentage of Wheatfield Township households with seniors 65 years or over was lower than that of the county and the state. This figure increased from 2000 to 2009 by 1.6 points. Perry County's increase was much smaller and Pennsylvania's percentage of households with seniors declined over this period. (Table 9)
- Prior to the 2008-2009 recession and based on projections prepared by the Pennsylvania State Data Center in the early to mid 2000s, Perry County projected a population increase of 840 residents in Wheatfield Township by 2010 and another 274 township residents by 2020. The State Data Center revised its county population projections in late 2010, projecting a county increase of 757 residents by 2010, a reduction of more than 8,000. Municipal allocations of the revised Perry County projection have not been prepared. The township's population grew by only 5 residents from 2000 to 2010 and, given the very slow pace of economic recovery, may experience similarly slow growth to 2020. (Table 10)

| Table 1: Population Counts, 1990- 2010 |            |                |            |         |       |         |       |         |       |  |
|--|------------|----------------|------------|---------|-------|---------|-------|---------|-------|--|
| Geography                              | 1990       | 2000           | 2010       | 1990-2  | 2000  | 2000-2  | 2010  | 1990-2  | 2010  |  |
|  |            |                |            | #       | %     | #       | %     | #       | %     |  |
| Bloomfield Boro                        | 1,092      | 1,077          | 1,247      | -15     | -1.4% | 170     | 13.6% | 155     | 14.2% |  |
| Carroll Twp                            | 4,597      | 5 <i>,</i> 095 | 5,269      | 498     | 10.8% | 174     | 3.3%  | 672     | 14.6% |  |
| Centre Twp                             | 1,974      | 2,209          | 2,491      | 235     | 11.9% | 282     | 11.3% | 517     | 26.2% |  |
| Duncannon Boro                         | 1,450      | 1,508          | 1,522      | 58      | 4.0%  | 14      | 0.9%  | 72      | 5.0%  |  |
| Miller Twp                             | 894        | 953            | 1,098      | 59      | 6.6%  | 145     | 13.2% | 204     | 22.8% |  |
| Penn Twp                               | 3,283      | 3,013          | 3,225      | -270    | -8.2% | 212     | 6.6%  | -58     | -1.8% |  |
| Rye Twp                                | 2,136      | 2,327          | 2,364      | 191     | 8.9%  | 37      | 1.6%  | 228     | 10.7% |  |
| Wheatfield Twp                         | 3,097      | 3,329          | 3,334      | 232     | 7.5%  | 5       | 0.1%  | 237     | 7.7%  |  |
| Perry County                           | 41,172     | 43,602         | 45,969     | 2,430   | 5.9%  | 2,367   | 5.1%  | 4,797   | 11.7% |  |
| Pennsylvania                           | 11,881,643 | 12,281,054     | 12,702,379 | 399,411 | 3.4%  | 421,325 | 3.3%  | 820,736 | 6.9%  |  |
|  | _          |                |            |         |       |         |       |         |       |  |

## Data

#### Table 1: Population Counts, 1990-2010

Source: US Census Bureau

#### Table 2: Population Density, 1990-2010

| Geography       | Area (Sq. Mi.) | 1990 | 2000 | 2010  |
|-----------------|----------------|------|------|-------|
| Bloomfield Boro | 1.1            | 993  | 979  | 1,134 |
| Carroll Twp     | 34.4           | 134  | 148  | 153   |
| Centre Twp      | 29.1           | 68   | 76   | 86    |

## **Demographic & Social Profile**

| Duncannon Boro | 0.4   | 3,625 | 3,770 | 3,805 |
|----------------|-------|-------|-------|-------|
| Miller Twp     | 12.5  | 72    | 76    | 88    |
| Penn Twp       | 21.4  | 153   | 141   | 151   |
| Rye Twp        | 25.6  | 83    | 91    | 92    |
| Wheatfield Twp | 20.8  | 149   | 160   | 160   |
| Perry County   | 553.6 | 74    | 79    | 83    |
| Pennsylvania   | 44743 | 266   | 274   | 284   |

Source: US Census Bureau

## Table 3: Race and Ethnicity, 2010 and Change, 1990-2010

|                     |                 |                 |                   | Percent   | Change     | , 1990-2010 |
|---------------------|-----------------|-----------------|-------------------|-----------|------------|-------------|
| C l                 | Percent         | Percent         | Percent           | Hispanic, | XA71- *r - | Hispanic    |
| Geography           | One race, White | One race, Other | Two or more races | Latino    | White      | , Latino    |
| Bloomfield Boro     | 95.0            | 4.3             | 0.7               | 1.3       | -4.8       | 0.1         |
| Carroll Twp         | 97.7            | 1.1             | 1.2               | 1.4       | -1.9       | 0.5         |
| Centre Twp          | 98.1            | 1.5             | 0.4               | 1.3       | -0.9       | 0.2         |
| Duncannon Boro      | 97.2            | 1.4             | 1.4               | 2.4       | -2.2       | 1.1         |
| Miller Twp          | 99.1            | 0.4             | 0.5               | 1.0       | 0          | 0.2         |
| Penn Twp            | 97.2            | 1.6             | 1.2               | 1.6       | -2.3       | 0.6         |
| Rye Twp             | 98.1            | 0.7             | 1.2               | 0.9       | -1.4       | 1.2         |
| Wheatfield Twp      | 98.1            | 1.2             | 0.7               | 0.8       | -1.4       | 0.1         |
| Perry County        | 97.4            | 1.6             | 1.0               | 1.3       | -2         | 0.5         |
| Pennsylvania        | 81.9            | 16.2            | 1.9               | 5.7       | -6.6       | -0.1        |
| Comment IIC Comment | <b>D</b>        |                 |                   |           |            |             |

Source: U.S. Census Bureau

## Table 4: Median Age, 2009 estimate

| Geography       | 2000 | 2009 | Change,<br>2000-2009 |
|-----------------|------|------|----------------------|
| Bloomfield Boro | 42.3 | 35.1 | -7.2                 |
| Carroll Twp     | 35.2 | 38.0 | 2.8                  |
| Centre Twp      | 38.1 | 42.3 | 4.2                  |
| Duncannon Boro  | 37.5 | 40.8 | 3.3                  |
| Miller Twp      | 35.1 | 31.5 | -3.6                 |
| Penn Twp        | 39.9 | 43.8 | 3.9                  |
| Rye Twp         | 39.9 | 42.0 | 2.1                  |
| Wheatfield Twp  | 35.9 | 39.6 | 3.5                  |
| Perry County    | 37.5 | 40.1 | 3.6                  |
| Pennsylvania    | 38.0 | 39.6 | 1.6                  |

Source: U.S. Census Bureau

| Geography       | Total          | Percent<br>0-17 yrs | Percent<br>18-24 yrs | Percent<br>25-44 yrs | Percent<br>45-64 yrs | Percent<br>65 yrs and over | Chai<br>1990-<br>< 18 | U ·  |
|-----------------|----------------|---------------------|----------------------|----------------------|----------------------|----------------------------|-----------------------|------|
| Bloomfield Boro | 1,289          | 24.2                | 11.6                 | 26.7                 | 19.6                 | 17.8                       | 1.4                   | 1.3  |
| Carroll Twp     | 5 <i>,</i> 330 | 26.4                | 6.4                  | 30.4                 | 28.2                 | 8.6                        | -3.0                  | 1.5  |
| Centre Twp      | 1,970          | 19.8                | 15.1                 | 19.6                 | 19.6                 | 8.5                        | -10.9                 | 1.4  |
| Duncannon Boro  | 1,378          | 19.3                | 7.7                  | 28.0                 | 27.6                 | 17.3                       | -4.8                  | 0.7  |
| Miller Twp      | 920            | 32.0                | 8.0                  | 27.3                 | 25.5                 | 7.2                        | 2.5                   | 1.4  |
| Penn Twp        | 3,180          | 21.2                | 7.4                  | 23.2                 | 28.4                 | 19.8                       | -3.3                  | 8.3  |
| Rye Twp         | 2,496          | 24.3                | 5.2                  | 26.9                 | 33.5                 | 10.1                       | -2.6                  | 2.2  |
| Wheatfield Twp  | 3,490          | 21.8                | 6.1                  | 30.9                 | 32.6                 | 8.6                        | -7.6                  | 1.0  |
| Perry County    | 45,048         | 23.7                | 7.8                  | 26.3                 | 29.4                 | 12.8                       | -3.3                  | 1.7  |
| Pennsylvania    | 12,516,596     | 22.5                | 9.5                  | 25.8                 | 26.9                 | 15.3                       | -1.0                  | -0.1 |

## Table 5: Age Distribution, 2009 estimate

Source: U.S. Census Bureau

## Table 6: Educational Attainment, 2009 estimate

|                 |                                    | Change, 1                                    | .990-2009                         |  |  |
|-----------------|------------------------------------|--|-----------------------------------|--|--|
| Geography       | Population<br>25 years and<br>over | Percent high<br>school graduate<br>or higher | bachelor's<br>degree or<br>higher | Percent high<br>school graduate or<br>higher | Percent<br>achelor's degree<br>or higher |
| Bloomfield Boro | 827                                | 84.7   | 18.8                              | 13.1   | -1.1                                     |
| Carroll Twp     | 3,580                              | 88.0   | 13.4                              | 16.4   | 7.7                                      |
| Centre Twp      | 1,283                              | 91.8   | 11.8                              | 16.1   | 3.0                                      |
| Duncannon Boro  | 1,006                              | 84.9   | 8.3                               | 15.0   | 4.0                                      |
| Miller Twp      | 552                                | 76.6   | 13.4                              | 11.6   | 8.5                                      |
| Penn Twp        | 2,270                              | 84.7   | 11.6                              | 11.4   | 4.8                                      |
| Rye Twp         | 1,761                              | 92.6   | 18.9                              | 11.8   | 5.3                                      |
| Wheatfield Twp  | 2,516                              | 86.6   | 17.1                              | 15.8   | 5.8                                      |
| Perry County    | 30,865                             | 85.4   | 13.1                              | 13.1   | 4.2                                      |
| Pennsylvania    | 8,510,688                          | 86.9   | 26.0                              | 12.2   | 8.1                                      |

Source: U.S. Census Bureau

#### Table 7: Households, 1990-2009 estimate

|                 | 1990      | 2000      | 2009      | 1990-2000 |       | 2000-2  | -2009 |  |
|-----------------|-----------|-----------|-----------|-----------|-------|---------|-------|--|
| Geography       |           |           |           | #         | %     | #       | %     |  |
| Bloomfield Boro | 408       | 396       | 434       | -12       | -2.9% | 38      | 8.8   |  |
| Carroll Twp     | 1,583     | 1,897     | 2024      | 314       | 19.8% | 127     | 6.3   |  |
| Centre Twp      | 669       | 843       | 798       | 174       | 26.0% | -45     | -5.6  |  |
| Duncannon Boro  | 605       | 667       | 634       | 62        | 10.2% | -33     | -5.2  |  |
| Miller Twp      | 322       | 340       | 306       | 18        | 5.6%  | -34     | -11.1 |  |
| Penn Twp        | 1,201     | 1,159     | 1255      | -42       | -3.5% | 96      | 7.6   |  |
| Rye Twp         | 728       | 850       | 883       | 122       | 16.8% | 33      | 3.7   |  |
| Wheatfield Twp  | 1,089     | 1,206     | 1308      | 117       | 10.7% | 102     | 7.8   |  |
| Perry County    | 14,949    | 16,695    | 17,467    | 1,746     | 11.7% | 1,208   | 6.9   |  |
| Pennsylvania    | 4,495,966 | 4,777,003 | 4,893,127 | 281,037   | 6.3%  | 241,901 | 4.8   |  |

Source: U.S. Census Bureau

### Table 8: Average Household Size, 1990-2009 estimate

| Geography       | 1990 | 2000 | 2009 | 1990-2000 | 2000-2009 |
|-----------------|------|------|------|-----------|-----------|
| Bloomfield Boro | 2.34 | 2.25 | 2.58 | -0.09     | 0.33      |
| Carroll Twp     | 2.90 | 2.69 | 2.63 | -0.21     | -0.06     |
| Centre Twp      | 2.95 | 2.62 | 2.47 | -0.33     | -0.15     |
| Duncannon Boro  | 2.40 | 2.26 | 2.17 | -0.14     | -0.09     |
| Miller Twp      | 2.78 | 2.80 | 3.01 | 0.02      | 0.21      |
| Penn Twp        | 2.66 | 2.48 | 2.33 | -0.18     | -0.15     |
| Rye Twp         | 2.93 | 2.74 | 2.83 | -0.19     | 0.09      |
| Wheatfield Twp  | 2.84 | 2.75 | 2.67 | -0.09     | -0.08     |
| Perry County    | 2.73 | 2.58 | 2.54 | -0.15     | -0.05     |
| Pennsylvania    | 2.57 | 2.48 | 2.46 | -0.09     | -0.03     |

Source: U.S. Census Bureau

#### Table 9: Household Composition, 2000-2009 estimate

|                 | Percent wi | als under 18 years | Percent with individuals 65 years and over |      |      |                     |
|-----------------|------------|--------------------|--|------|------|---------------------|
| Geography       | 2000       | 2009               | Change<br>2000-2009                        | 2000 | 2009 | Change<br>2000-2009 |
| Bloomfield Boro | 30.6       | 35.9               | 5.4  | 31.1 | 35.3 | 4.2                 |
| Carroll Twp     | 40.6       | 36.0               | -4.6                                       | 15.3 | 16.7 | 1.4                 |
| Centre Twp      | 36.9       | 32.7               | -4.2                                       | 17.7 | 15.2 | -2.5                |
| Duncannon Boro  | 27.9       | 23.8               | -4.1                                       | 31.3 | 28.4 | -2.9                |
| Miller Twp      | 40.9       | 39.5               | -1.3                                       | 14.7 | 17.3 | 2.6                 |
| Penn Twp        | 34.6       | 32.8               | -1.8                                       | 22.9 | 23.4 | 0.6                 |
| Rye Twp         | 39.4       | 38.7               | -0.7                                       | 20.2 | 18.9 | -1.3                |
| Wheatfield Twp  | 40.2       | 35.8               | -4.4                                       | 16.4 | 18.0 | 1.6                 |
| Perry County    | 35.8       | 34.2               | -1.6                                       | 22.7 | 22.8 | 0.1                 |
| Pennsylvania    | 32.6       | 31.0               | -1.7                                       | 27.8 | 27.0 | -0.8                |

Source: U.S. Census Bureau

#### **Table 10: Population Projections**

|                 | Census Co | Population I   | Projections | Projected Change |        |       |           |      |
|-----------------|-----------|----------------|-------------|------------------|--------|-------|-----------|------|
| Geography       | 1990      | 1990 2000 2010 |             | 2020             | 2000-2 | 010   | 2010-2020 |      |
|                 |           |                |             |                  | #      | %     | #         | %    |
| Bloomfield Boro | 1,092     | 1,077          | 1,214       | 1,258            | 137    | 12.7% | 44        | 3.6% |
| Carroll Twp     | 4,597     | 5,095          | 6,512       | 6,975            | 1,417  | 27.8% | 463       | 7.1% |
| Centre Twp      | 1,974     | 2,209          | 2,807       | 3,002            | 598    | 27.1% | 195       | 6.9% |
| Duncannon Boro  | 1,450     | 1,508          | 1,664       | 1,714            | 156    | 10.3% | 50        | 3.0% |
| Miller Twp      | 894       | 953            | 1,292       | 1,403            | 339    | 35.6% | 111       | 8.6% |
| Penn Twp        | 3,283     | 3,013          | 3,579       | 3,763            | 548    | 18.1% | 184       | 5.1% |
| Rye Twp         | 2,136     | 2,327          | 2,843       | 3,012            | 516    | 22.2% | 169       | 5.9% |
| Wheatfield Twp  | 3,097     | 3,329          | 4,169       | 4,443            | 840    | 25.2% | 274       | 6.6% |
| Perry County    | 41,172    | 43,602         | 52,795      | 55,784           | 9,193  | 21.1% | 2,989     | 5.7% |

Source: Pennsylvania State Data Center (County Projections), TCRPC (Municipal Allocations) as reported in the 2007 Perry County Comprehensive Plan

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This profile provides an indication of current housing supply and diversity, and help to identify issues related to availability. Housing statistics used to characterize housing conditions and trends in Wheatfield Township and comparative geographies were derived from the U.S. Census Bureau decennial censuses and its interim American Community Survey estimates.

## **Findings of the Data**

- Housing unit growth outpaced population growth from 2000 to 2010. In 2010, there were 1,370 housing units in Wheatfield Township. This figure represented an increase of 87 units or 6.4 percent since 2000, and a total increase of 217 units since 1990. Housing unit growth was slower than Perry County but faster than the state over the past decade. (Table 1)
- While population density was stable, housing unit density increased from 2000 to 2010. Overall housing unit density was 66 units per square mile or 0.1 units per acre in 2010. The township had a higher housing unit density than any of the surrounding townships. (Table 2)
- Housing options in Wheatfield Township were limited in 2009. The township's housing stock was estimated as exclusively single family units of detached dwellings (1,156 units, 84.8 percent) and mobile homes (196 mobile homes, 14.4 percent) in 2009. Only Rye Township had a higher percentage of single family detached homes. The township had no single family attached units or multi-unit structures. All other surveyed geographies offered at least three housing unit options. (Table 3)
- Wheatfield Township's housing boom occurred in the 1970s and 1980s, later than peak periods of Perry County and Pennsylvania. More than 51 percent of the township's housing stock was built over these two decades. The majority of Perry County's housing stock dates to the 1970s or prior to 1940, while Pennsylvania's first measurable boom occurred in the 1950s. (Table 4)
- Vacancy rates in Wheatfield Township in 2010 were higher than 1990 but still lower than Perry County and Pennsylvania rates. At 91.6 percent of housing units occupied (8.4 percent vacant), Wheatfield Township had a higher occupancy rate than the county (87.7 percent occupied; 12.3 percent vacant) and the state (90.1 percent occupied; 9.9 percent vacant) in 2010. Occupancy rates fell and vacancy rates increased for all surveyed geographies except Perry County from 1990 to 2009. (Table 5)
- Home ownership was estimated at 100 percent in 2009. Estimates from the U.S. Census Bureau indicate that all occupied units were owner-occupied units. However, rental housing does exist through private arrangement. There are also two group homes in the Township. (Tables 6 and 7)
- The average home in Wheatfield Township was valued at \$142,000 in 2009. In 2009, the majority of housing units in the township were valued between \$100,000 and \$199,999. Another 20 percent were valued between \$200,000 and \$299,999. The median home price was estimated at \$142,000, \$6,200 higher than Perry County's median and \$10,300 lower than Pennsylvania's median. The township's median home value increased by more than 20 percent since 1990, accounting for inflation. This increase was less than that of the county and the state. (Table 6)

#### Data

## Table 11: Housing Units and Housing Density, 1990-2010

| #     %       Bloomfield Boro     425     425     485     0     0.0%       Carroll Twp     1,660     2,036     2,207     376     22.7%       Centre Twp     730     897     1,018     167     22.9%       Duncannon Boro     643     714     725     71     11.0%       Miller Twp     403     425     526     22     5.5%       Penn Twp     1,260     1,242     1,347     -18     -1.4% | #<br>60<br>171 | %<br>12.4%<br>7.7% |
|---|----------------|--------------------|
| Carroll Twp1,6602,0362,20737622.7%Centre Twp7308971,01816722.9%Duncannon Boro6437147257111.0%Miller Twp403425526225.5%  | 171            |                    |
| Centre Twp7308971,01816722.9%Duncannon Boro6437147257111.0%Miller Twp403425526225.5%  |                | 7.7%               |
| Duncannon Boro6437147257111.0%Miller Twp403425526225.5%   | 101            |                    |
| Miller Twp     403     425     526     22     5.5%  | 121            | 11.9%              |
|   | 11             | 1.5%               |
| Penn Twp 1,260 1,242 1,347 -18 -1.4%  | 101            | 19.2%              |
|   | 105            | 7.8%               |
| Rye Twp     750     872     941     122     16.3%   | 69             | 7.3%               |
| Wheatfield Twp     1,153     1,283     1,370     130     11.3%  | 87             | 6.4%               |
| Perry County 17,063 18,941 20,424 1,878 11.0%   | 1,483          | 7.3%               |
| Pennsylvania 4,938,140 5,249,750 5,567,315 311,610 6.3% 3   | 517,565        | 5.7%               |

Source: U.S. Census Bureau

## Table 12: Housing Unit Density, 1990-2010

| 0                    | <i>,</i> |       |       |       |      |       |     |        |
|----------------------|----------|-------|-------|-------|------|-------|-----|--------|
| Housing Unit density | Area     | 1990  | 2000  | 2010  | 1990 | -2000 | 200 | 0-2010 |
|                      | Sq. Mi.  |       |       |       | #    | %     | #   | %      |
| Bloomfield Boro      | 1.1      | 386   | 386   | 441   | 0    | 0.0%  | 55  | 12.4%  |
| Carroll Twp          | 34.4     | 48    | 59    | 64    | 11   | 22.7% | 5   | 7.7%   |
| Centre Twp           | 29.1     | 25    | 31    | 35    | 6    | 22.9% | 4   | 11.9%  |
| Duncannon Boro       | 0.4      | 1,608 | 1,785 | 1,813 | 178  | 11.0% | 28  | 1.5%   |
| Miller Twp           | 12.5     | 32    | 34    | 42    | 2    | 5.5%  | 8   | 19.2%  |
| Penn Twp             | 21.4     | 59    | 58    | 63    | -1   | -1.4% | 5   | 7.8%   |
| Rye Twp              | 25.6     | 29    | 34    | 37    | 5    | 16.3% | 3   | 7.3%   |
| Wheatfield Twp       | 20.8     | 55    | 62    | 66    | 6    | 11.3% | 4   | 6.4%   |
| Perry County         | 553.6    | 31    | 34    | 37    | 3    | 11.0% | 3   | 7.3%   |
| Pennsylvania         | 44743    | 110   | 117   | 124   | 7    | 6.3%  | 7   | 5.7%   |
|                      |          |       |       |       |      |       |     |        |

Source: U.S. Census Bureau

## Table 13: Housing Units Type, 2009 estimate

| Housing Type    | Total<br>housing<br>units | 1-unit,<br>detached | 1-unit,<br>attached | 2 units | 3 or 4<br>units | 5 to 9<br>units | 10 to 19<br>units | 20 or<br>more<br>units | Mobile<br>home | Boat, RV,<br>van, etc. |
|-----------------|---------------------------|---------------------|---------------------|---------|-----------------|-----------------|-------------------|------------------------|----------------|------------------------|
| Bloomfield Boro | 466                       | 72.1                | 16.1                | 8.4     | 3.4             | 0.0             | 0.0               | 0.0                    | 0.0            | 0.0                    |
| Carroll Twp     | 2,152                     | 66.1                | 1.3                 | 2.6     | 0.0             | 3.4             | 0.0               | 0.0                    | 26.5           | 0.0                    |
| Centre Twp      | 903                       | 75.9                | 0.4                 | 1.8     | 0.0             | 1.1             | 1.1               | 0.0                    | 19.7           | 0.0                    |
| Duncannon Boro  | 693                       | 54.7                | 11.8                | 5.2     | 6.3             | 10.0            | 1.9               | 8.5                    | 1.6            | 0.0                    |
| Miller Twp      | 361                       | 59.6                | 0.8                 | 0.0     | 2.2             | 0.0             | 0.0               | 0.0                    | 37.4           | 0.0                    |
| Penn Twp        | 1,300                     | 63.3                | 8.6                 | 1.7     | 2.6             | 12.1            | 1.4               | 0.0                    | 10.3           | 0.0                    |
| Rye Twp         | 883                       | 95.9                | 0.0                 | 0.0     | 0.6             | 0.0             | 0.0               | 0.0                    | 3.5            | 0.0                    |
| Wheatfield Twp  | 1,364                     | 84.8                | 0.0                 | 0.0     | 0.0             | 0.0             | 0.0               | 0.0                    | 14.4           | 0.0                    |
| Perry County    | 19,815                    | 73.5                | 5.2                 | 2.3     | 1.8             | 3.0             | 0.4               | 1.1                    | 12.7           | 0.0                    |
| Pennsylvania    | 5,481,676                 | 57.1                | 18.1                | 4.9     | 4.3             | 3.3             | 2.5               | 5.3                    | 4.5            | 0.0                    |

### Source: US Census Bureau

| Age, 2005-2009  | Built<br>1939 or<br>earlier | Built<br>1940-1949 | Built<br>1950-1959 | Built<br>1960-1969 | Built<br>1970-1979 | Built<br>1980-1989 | Built<br>1990-1999 | Built<br>2000 or<br>later |
|-----------------|-----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------------|
| Bloomfield Boro | 57.1                        | 6.2                | 13.7               | 4.5                | 4.5                | 2.6                | 3.0                | 8.4                       |
| Carroll Twp     | 8.1                         | 1.7                | 3.1                | 5.3                | 19.6               | 19.5               | 34.2               | 8.5                       |
| Centre Twp      | 14.4                        | 4.2                | 2.1                | 4.2                | 20.3               | 23.0               | 23.0               | 8.7                       |
| Duncannon Boro  | 61.5                        | 8.9                | 8.7                | 3.8                | 4.3                | 2.5                | 6.1                | 4.3                       |
| Miller Twp      | 10.5                        | 1.1                | 8.6                | 7.5                | 21.6               | 20.2               | 24.7               | 5.8                       |
| Penn Twp        | 15.3                        | 2.2                | 12.4               | 12.8               | 19.9               | 19.5               | 8.0                | 9.9                       |
| Rye Twp         | 10.3                        | 1.9                | 7.2                | 8.5                | 21.7               | 25.6               | 16.2               | 8.5                       |
| Wheatfield Twp  | 16.2                        | 2.3                | 8.5                | 2.3                | 25.2               | 26.3               | 12.8               | 6.3                       |
| Perry County    | 27.9                        | 4.0                | 6.9                | 7.2                | 17.3               | 14.7               | 15.9               | 6.2                       |
| Pennsylvania    | 28.8                        | 8.5                | 14.2               | 10.0               | 13.0               | 9.9                | 9.4                | 6.2                       |

## Table 14: Housing Units by Built Date, 2009 estimate

Source: US Census Bureau

## Table 15: Vacancy Rates, 1990-2010

| Vacancy Rates      | 199      | <b>)</b> | 2000     | )      | 201      | )      | Change in Vacancy  |
|--------------------|----------|----------|----------|--------|----------|--------|--------------------|
|                    | Occupied | Vacant   | Occupied | Vacant | Occupied | Vacant | Rate,<br>1990-2010 |
| Bloomfield Boro    | 96.0     | 4.0      | 93.2     | 6.8    | 90.1     | 9.9    | 5.9                |
| Carroll Twp        | 95.4     | 4.6      | 93.2     | 6.8    | 93.7     | 6.3    | 1.7                |
| Centre Twp         | 91.6     | 8.4      | 94.0     | 6.0    | 90.0     | 10.0   | 1.6                |
| Duncannon Boro     | 94.1     | 5.9      | 93.4     | 6.6    | 89.9     | 10.1   | 4.2                |
| Miller Twp         | 79.9     | 20.1     | 80.0     | 20.0   | 77.6     | 22.4   | 2.3                |
| Penn Twp           | 95.3     | 4.7      | 93.3     | 6.7    | 93.5     | 6.5    | 1.8                |
| Rye Twp            | 97.1     | 2.9      | 97.5     | 2.5    | 96.7     | 3.3    | 0.4                |
| Wheatfield Twp     | 94.4     | 5.6      | 94.0     | 6.0    | 91.6     | 8.4    | 2.8                |
| Perry County       | 87.6     | 12.4     | 88.1     | 11.9   | 87.7     | 12.3   | -0.1               |
| Pennsylvania       | 91.0     | 9.0      | 91.0     | 9.0    | 90.1     | 9.9    | 0.9                |
| Courses LIC Concus |          |          |          |        |          |        |                    |

Source: U.S. Census Bureau

## Table 16: Owner-Occupied Housing Unit Values, 2009 estimate

|                        | Owner-<br>occupied<br>units | Less than<br>\$50,000 | \$50,000-<br>\$99,999 | \$100,000-<br>\$149,999 | \$150,000-<br>\$199,999 | \$200,000-<br>\$299,999 | \$300,000-<br>\$499,999 | \$500,000-<br>\$999,999 | ⊅1M or<br>more | Median<br>(dollars<br>) | Percent<br>Change<br>1990-2009<br>Median<br>(dollars) |
|------------------------|-----------------------------|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------|-------------------------|---|
| <b>Bloomfield Boro</b> | 319                         | 3.8                   | 16.6                  | 40.4                    | 19.4                    | 12.5                    | 2.5                     | 3.5                     | 1.3            | 135,400                 | 23.6  |
| Carroll Twp            | 1,740                       | 19.4                  | 9.4                   | 20.3                    | 28.7                    | 17.1                    | 3.9                     | 1.2                     | 0.0            | 151,000                 | 26.8  |
| Centre Twp             | 663                         | 5.7                   | 17.8                  | 38.5                    | 19.8                    | 10.9                    | 4.1                     | 2.3                     | 1.1            | 132,600                 | 15.5  |
| Duncannon Boro         | 354                         | 3.4                   | 44.6                  | 34.2                    | 7.3                     | 10.5                    | 0.0                     | 0.0                     | 0.0            | 102,100                 | 29.2  |
| Miller Twp             | 246                         | 19.9                  | 23.6                  | 22.8                    | 17.9                    | 8.5                     | 1.6                     | 1.2                     | 4.5            | 112,500                 | 19.1  |
| Penn Twp               | 911                         | 11.5                  | 19.5                  | 30.5                    | 17.7                    | 12.4                    | 8.3                     | 0.0                     | 0.0            | 129,200                 | 18.8  |
| Rye Twp                | 844                         | 3.3                   | 13.0                  | 17.9                    | 34.4                    | 19.5                    | 9.4                     | 2.1                     | 0.4            | 166,200                 | 19.2  |
| Wheatfield Twp         | 1,291                       | 13.4                  | 9.4                   | 31.2                    | 22.2                    | 20.0                    | 2.0                     | 0.9                     | 0.9            | 142,000                 | 21.1  |

| Perry County | 14,130    | 9.0 | 19.6 | 29.2 | 21.0 | 14.1 | 4.3  | 1.6 | 1.1 | 135,800 | 28.6 |
|--------------|-----------|-----|------|------|------|------|------|-----|-----|---------|------|
| Pennsylvania | 3,496,696 | 9.7 | 21.2 | 18.3 | 15.6 | 17.4 | 12.7 | 4.3 | 0.8 | 152,300 | 34.4 |

Source: US Census Bureau

Percent change, 1990-2009 was compared the 1990 median value multiplied by an inflation factor of 1.64.

### Table 17: Renter-Occupied Housing Unit Value, 2009 estimate

|                 | Occupied<br>units<br>paying<br>rent | Less than<br>\$200 | \$200-\$299 | \$300-\$499 | \$500-\$749 | \$750-999 | \$1,000-<br>\$,1499 | \$1,500 or<br>more | Median<br>(dollars) | Percent<br>Change<br>1990-2009<br>Median<br>(dollars) |
|-----------------|-------------------------------------|--------------------|-------------|-------------|-------------|-----------|---------------------|--------------------|---------------------|---|
| Bloomfield Boro | 96                                  | 0.0                | 0.0         | 19.8        | 39.6        | 29.2      | 11.5                | 0.0                | 633                 | 11.8  |
| Carroll Twp     | 260                                 | 0                  | 0.0         | 17.7        | 58.5        | 15.8      | 8.1                 | 0.0                | 627                 | 10.2  |
| Centre Twp      | 122                                 | 0.0                | 0.0         | 6.6         | 62.3        | 31.1      | 0.0                 | 0.0                | 594                 | -1.3  |
| Duncannon Boro  | 263                                 | 0.0                | 6.8         | 26.2        | 56.3        | 8.4       | 2.3                 | 0.0                | 557                 | 5.8   |
| Miller Twp      | 60                                  | 0.0                | 0.0         | 5.0         | 63.3        | 25.0      | 6.7                 | 0.0                | 724                 | 21.6  |
| Penn Twp        | 291                                 | 0.0                | 0.0         | 12.7        | 87.3        | 0.0       | 0.0                 | 0.0                | 613                 | 12.9  |
| Rye Twp         | 25                                  | 0.0                | 0.0         | 0.0         | 0.0         | 44.0      | 0.0                 | 56.0               | 1554                | 97.8  |
| Wheatfield Twp  | 0                                   | 0.0                | 0.0         | 0.0         | 0.0         | 0.0       | 0.0                 | 0.0                | N/A                 | N/A   |
| Perry County    | 2,938                               | 1.5                | 2.0         | 23.1        | 52.8        | 16.2      | 3.8                 | 0.5                | 589                 | 5.0   |
| Pennsylvania    | 1,306,211                           | 3.5                | 4.3         | 14.7        | 31.7        | 24.6      | 16.1                | 5.0                | 716                 | 8.1   |

Source: US Census Bureau

Percent change, 1990-2009 was compared the 1990 median value multiplied by an inflation factor of 1.64.

This economic profile of Wheatfield Township provides information about resident occupations, household income, and conditions and trends in regional employment opportunities. Economic statistics used to characterize the Wheatfield Township labor force and county and regional employment and economy were derived from the U.S. Census Bureau and U.S. Bureau of Economic Analysis.

## **Findings of the Data**

- More than 3 in 5 township residents were employed in 2009. Of the estimated 2,836 residents of working age (16 yrs and older) in 2009, 64.5 percent were employed and 4.0 percent were unemployed. The remaining 31.5 percent were not active in the labor force at this time. The township's unemployment rate was slightly higher than that of Perry County and slightly lower than that of Pennsylvania. Since 1990, the township's employment rate fell and the unemployment rate increased by approximately 1.8 percent. This shift was somewhat greater than that of Perry County and was in contrast to gains in both rates for Pennsylvania as a whole. (Table 1)
- Township residents tended to work in white collar positions. As estimated, most Wheatfield Township residents were employed in management/professional occupations or sales/office occupations in 2009. More than 30 percent of residents were employed in each of these occupation categories. Another 21.1 percent of residents were employed in production and logistics (transportation and material moving) occupations. These three occupation categories represented the majority of resident employment in the county and the state, as well. Trend analysis is not feasible, given the changing categories of occupations in different census surveys. (Table 3)
- Township residents also tended to work in public service and logistics industries. Also as estimated, the primary employment industry in the township was educational services and health care and social assistance (21.4 percent of employed residents), followed by transportation and warehousing (logistics) and utilities (14.2 percent). Retail trade ranked third (11.1 percent). Employment patterns were similar for Perry County, though retail trade (12.8 percent) outranked transportation and warehousing and utilities (11.0 percent). Again, trend analysis is not feasible, given the changing categories of industries in different census surveys. (Table 3)
- The capital region economy grew 67,510 new jobs over the past 20 years. Employment opportunities in Perry County and the Harrisburg-Carlisle Metropolitan Statistical Area (MSA) increased from 1989 to 2009. Perry County gained 3,128 jobs over this period, an increase of 31.0 percent in comparison to the MSA's 21.0 percent increase. New employment was created for wage and salary workers as well as business owners and partners in both geographies. Increases in wage and salary employment were higher in Perry County, while increases among owners and partners were higher across the MSA. Notably, farm proprietors employment increased 27.5 percent in Perry County and only 2.0 percent across the MSA. Private employment represented 2,270 new jobs, more than the public sector, but government jobs (mostly local government jobs) grew at a faster rate (36.7 percent) in the county. (Table 4)
- Wheatfield Township's median household income was estimated at \$62,333 in 2009. This represented a 42.3 percent increase over the \$26,708 median household income of 1990 after accounting for a 1.64 inflation factor. The township's 2009 median household income was higher than that of the county and the state. Its increase in value over 20 years (42.3 percent) was significantly higher than county and state figures 6.3 and 4.3 percent, respectively. (Table 5)

• While the average household income has increased, a small portion of township residents live in poverty. The U.S. Census Bureau estimated that 4.0 percent of families and 5.5 percent of all residents lived below the poverty line. The highest figures were for single mothers and seniors 65 years and over. Percentages for families and individuals increased from 1990 to 2009.

## Data

## Table 18: Labor Force, 2009 estimate

|                     |            | Percent  |         |          |            |        |        |
|---------------------|------------|----------|---------|----------|------------|--------|--------|
|                     | Populatio  |          | Civilia |          |            |        | Not in |
|                     | n 16 years | In labor | n labor |          |            | Armed  | labor  |
|                     | and over   | force    | force   | Employed | Unemployed | Forces | force  |
| Wheatfield Township | 2,836      | 68.5     | 68.5    | 64.5     | 4.0        | 0.0    | 31.5   |
| Change, 1990-2009   | 542        | -0.2     | 0.1     | -1.8     | 1.9        | -0.3   | 0.2    |
| Perry County        | 35,704     | 67.3     | 67.2    | 63.4     | 3.8        | 0.1    | 32.7   |
| Change, 1990-2009   | 4351       | 0.5      | 0.5     | -0.6     | 1.2        | -0.1   | -0.5   |
| Pennsylvania        | 10,055,581 | 63.0     | 62.9    | 58.7     | 4.3        | 0.1    | 37.0   |
| Change, 1990-2009   | 662765     | 1.3      | 1.4     | 0.8      | 0.6        | -0.1   | -1.3   |

Source: U.S. Census Bureau

## Table 19: Employment by Occupation, 2009 estimate

|              |  | ,   |                     |                                 |  |  |  |
|--------------|--|---|---------------------|---------------------------------|--|--|--|
|              |  | Percent   |                     |                                 |  |  |  |
|              | Civilian employed<br>population 16 years<br>and over | Management,<br>professional, and<br>related occupations | Service occupations | Sales and office<br>occupations | Farming, fishing,<br>and forestry<br>occupations | Construction,<br>extraction,<br>maintenance, and<br>repair occupations | Production,<br>transportation, and<br>material moving<br>occupations |
| Wheatfield   |  |   |                     |                                 |  |  |  |
| Township     | 1,830  | 30.1  | 10.3                | 30.8                            | 0.5  | 7.3  | 21.1   |
| Perry County | 22,642   | 26.6  | 12.7                | 26.8                            | 0.7  | 13.4   | 19.9   |
| Pennsylvania | 5,901,533  | 34.8  | 16.3                | 25.8                            | 0.4  | 8.7  | 14.0   |
|              |  |   |                     |                                 |  |  |  |

Source: U.S. Census Bureau

## Table 20: Employment by Industry, 2009 estimate

|   | Wheatfield |              |              |
|---|------------|--------------|--------------|
|   | Township   | Perry County | Pennsylvania |
| Civilian employed population 16 years and over              | 1,830      | 22,642       | 5,901,533    |
| Agriculture, forestry, fishing and hunting, and mining      | 1.1        | 2.4          | 1.2          |
| Construction  | 6.2        | 8.8          | 6.4          |
| Manufacturing   | 6.4        | 9.3          | 13.2         |
| Wholesale trade   | 5.8        | 4.0          | 3.2          |
| Retail trade  | 11.1       | 12.8         | 11.7         |
| Transportation and warehousing, and utilities               | 14.2       | 11.0         | 5.3          |
| Information   | 1.9        | 1.9          | 2.1          |
| Finance and insurance, and real estate and rental and       |            |              |              |
| leasing   | 9.0        | 7.5          | 6.7          |
| Professional, scientific, and management, and               |            |              |              |
| administrative and waste management services                | 8.7        | 7.7          | 9.4          |
| Educational services, and health care and social assistance | 21.4       | 16.6         | 24.3         |
| Arts, entertainment, and recreation, and accommodation      |            |              |              |
| and food services   | 5.7        | 4.5          | 7.6          |
| Other services, except public administration                | 2.0        | 5.0          | 4.7          |
| Public administration                                       | 6.4        | 8.5          | 4.1          |
| Source: U.S. Canque Burgan                                  |            |              |              |

Source: U.S. Census Bureau

## Table 21: Commuting to Work, 2009 estimate

|                     | Number    | Percent     |             |                |           |       |
|---------------------|-----------|-------------|-------------|----------------|-----------|-------|
|                     |           |             |             | Public         |           |       |
|                     | Workers   | Car, truck, | Car, truck, | transportation | Walked or |       |
|                     | 16 years  | or van      | or van      | (excluding     | Worked at | Other |
|                     | and over  | drove alone | carpooled   | taxicab)       | home      | means |
| Wheatfield Township | 1,735     | 85.2        | 10.0        | 0.0            | 4.0       | 0.8   |
| Change, 1990-2009   | 224       | 8.8         | -11.4       | -0.4           | 3.7       | -0.6  |
| Perry County        | 22,028    | 77.9        | 13.5        | 0.3            | 7.6       | 0.7   |
| Change, 1990-2009   | 2211      | 9.7         | -10.2       | -0.2           | 6.8       | -6.1  |
| Pennsylvania        | 5,755,001 | 76.4        | 9.5         | 5.4            | 7.5       | 1.2   |
| Change, 1990-2009   | 406869    | 5.0         | -3.4        | -1.0           | 6.6       | -7.2  |

Source: U.S. Census Bureau

## Table 22: Median Household Income, 2009 estimate

|                     | Median household income | Median household income |                           |
|---------------------|-------------------------|-------------------------|---------------------------|
|                     | 1989                    | 2009                    | Percent Change, 1989-2009 |
| Wheatfield Township | \$ 44,010               | \$62,333                | 42.3                      |
| Perry County        |                         | \$51,497                | 6.3                       |
| Pennsylvania        |                         | \$49,737                | 4.3                       |
|                     |                         |                         |                           |

Source: U.S. Census Bureau

| Table 20. Tereenage 0 | 'i i uninite. | j unu i co |          | 5 DCION | I Overty, | , <b>2</b> 00 | Junate   |           |          |
|-----------------------|---------------|------------|----------|---------|-----------|---------------|----------|-----------|----------|
|                       |               | Married    | Single   |         | Under     | 18 to         | 65 years |           |          |
|                       | All           | couple     | mother   | All     | 18        | 64            | and      | Change, 1 | 990-2009 |
|                       | families      | families   | families | people  | years     | years         | over     |           |          |
|                       |               |            |          |         |           |               |          | Families  | People   |
| Wheatfield Township   | 4.0           | 1.8        | 26.6     | 5.5     | 2.3       | 5.6           | 13.4     | 1.1       | 1.1      |
| Perry County          | 6.5           | 3.6        | 26.2     | 9.0     | 14.4      | 7.5           | 7.0      | 0.2       | 1.5      |
| Pennsylvania          | 8.3           | 3.5        | 27.1     | 12.1    | 16.8      | 11.1          | 9.0      | 0.1       | 1.0      |

## Table 23: Percentage of Families and People Living Below Poverty, 2009 estimate

Source: U.S. Census Bureau

## Table 24: Total full-time and part-time employment, 1989-2009

| 10,099<br>6,522<br>3,577 | 12,400<br>8,456  | 13,227<br>8,660  | #<br>3,128<br>2,138  | %<br>31.0  |
|--------------------------|--|--|--|--|
| 6,522                    | 8,456  |  |  |  |
| ,                        | ,  | 8,660  | 2.138  |  |
| 3.577                    |  |  |  | 32.8   |
|                          | 3,944  | 4,567  | 990  | 27.7   |
| 700                      | 818  | 877  | 177  | 25.3   |
| 2,877                    | 3,126  | 3,690  | 813  | 28.3   |
| 851                      | 967  | 1,085  | 234  | 27.5   |
| 9,248                    | 11,433   | 12,142   | 2,894  | 31.3   |
| 7,549                    | 9,421  | 9,819  | 2,270  | 30.1   |
| 1,699                    | 2,012  | 2,323  | 624  | 36.7   |
| 100                      | 95   | 94   | -6   | -6.0   |
| 178                      | 143  | 120  | -58  | -32.6  |
| 1,421                    | 1,774  | 2,109  | 688  | 48.4   |
| 332                      | 391  | 440  | 108  | 32.5   |
| 1,089                    | 1,383  | 1,669  | 580  | 53.3   |
| 1989                     | 1999   | 2009   | Change,  | 1989-2009  |
|                          |  |  | #  | %  |
| 320,922                  | 374,297  | 388,432  | 67,510   | 21.0%  |
| 281,078                  | 325,806  | 331,349  | 50,271   | 17.9%  |
| 39,844                   | 48,491   | 57,083   | 17,239   | 43.3%  |
| 2,633                    | 2,940  | 2,982  | 349  | 13.3%  |
| 37,211                   | 45,551   | 54,101   | 16,890   | 45.4%  |
| 3,524                    | 3,565  | 3,596  | 72   | 2.0%   |
| 317,398                  | 370,732  | 384,836  | 67,438   | 21.2%  |
| 253,666                  | 306,709  | 317,451  | 63,785   | 25.1%  |
| 63,732                   | 64,023   | 67,385   | 3,653  | 5.7%   |
| 10.000                   | 9,659  | 7,781  | -3,199   | -29.1%   |
| 10,980                   | ,007   | . ,  |  |  |
| 3,316                    | 2,515  | 2,098  | -1,218   | -36.7%   |
|                          |  |  | -1,218<br>8,070  | -36.7%<br>16.3%  |
| 3,316                    | 2,515  | 2,098  |  |  |
|                          | 2,877<br>851<br>9,248<br>7,549<br>1,699<br>100<br>1778<br>1,421<br>332<br>1,089<br>1989<br>320,922<br>281,078<br>39,844<br>2,633<br>37,211<br>3,524<br>317,398 | 2,8773,1268519679,24811,4337,5499,4211,6992,012100951781431,4211,7743323911,0891,38319891999320,922374,297281,078325,80639,84448,4912,6332,94037,21145,5513,5243,565317,398370,732253,666306,709 | 2,8773,1263,6908519671,0859,24811,43312,1427,5499,4219,8191,6992,0122,32310095941781431201,4211,7742,1093323914401,0891,3831,669198919992009320,922374,297388,432281,078325,806331,34939,84448,49157,0832,6332,9402,98237,21145,55154,1013,5243,5653,596317,398370,732384,836253,666306,709317,451 | 2,877     3,126     3,690     813       851     967     1,085     234       9,248     11,433     12,142     2,894       7,549     9,421     9,819     2,270       1,699     2,012     2,323     624       100     95     94     -6       178     143     120     -58       1,421     1,774     2,109     688       332     391     440     108       1,089     1,383     1,669     580       1,089     1,383     1,669     580       1,089     1,383     1,669     580       1,089     1,383     1,669     580       1,089     1,383     1,669     580       1,089     1,383     1,669     580       1,089     325,806     331,349     50,271       39,844     48,491     57,083     17,239       2,633     2,940     2,982     349       37,211     45,551     54,101 |

Source: Bureau of Economic Analysis, U.S. Department of Commerce

The natural resources of a community identify its unique location and present both opportunities and constraints to community and economic development. Understanding the location, connectivity, quality and function of all natural resources, but especially sensitive resources, is essential to sound, sustainable land use policy. Data from various state and federal agencies were compiled, in conjunction with analysis from previous resource planning studies, to characterize the sensitive natural resources in Wheatfield Township.

## **Findings of the Data**

- Weather characteristics and patterns, including temperature, humidity, wind, and cloud cover, influence land use and development potential. They affect surface and subsurface water supply, and land use opportunities, such as agriculture and wind and solar power generation, and recreational opportunities, as well as energy consumption in the use of climate-control equipment in buildings and vehicles. (Except 1)
- Wheatfield Township lies in the Chesapeake Bay watershed, a critical water planning area for the **Pennsylvania Department of Environmental Protection.** The township lies in the Lower Susquehanna River Basin, Hydrological Unit Code (HUC) 2050305. Two creeks drain the majority of Wheatfield Township. Sherman's Creek and its tributary, Dark Run, drain the western portion of the township. (Excerpt 2)
- Significant waterways and water frontage are found along the township's eastern and southern borders. Approximately two-miles of the Juniata River flows along Wheatfield Township's eastern border, and more than four miles of Shermans Creek flows into the township from Carroll Township before entering Penn Township and Duncannon. (Excerpt 2)
- Waterways in the township support both warm water and cold water fisheries. Shermans Creek supports warm water fisheries; the run, cold water fisheries. Little Juniata Creek drains the central portion. It supports cold water fisheries and is trout-stocked. Craigs Run/Losch Run and other unnamed tributaries drain the eastern portion along the Juniata River and are warm water fisheries. (Excerpt 2)
- One-hundred year floodplains have been delineated or approximated for Sherman's Creek, Little Juniata Creek, and Craigs Run/Losch Run. (Map Excerpt 1) There is no detailed stormwater management plan for Sherman's Creek or the Juniata River. A stormwater management plan for the Little Juniata Creek is under preparation. (Table 25)
- Wetlands are not a frequent constraint to development in the township. Approximately 15 wetland sites have been identified by the National Wetland Inventory. The largest lies along the Little Juniata Creek. (Map Excerpt 2) Other wetlands may exist in the township. (Excerpt 3)
- Surface geology does not present specific inherent limitations to land use. The bedrock underlying Wheatfield Township includes sandstone, siltstone, and shale, which hold little groundwater but can support domestic water supplies. The surface bedrocks generally provide strong and stable foundations for building and infrastructure. (Map Excerpt 3)
- There are no commercially viable stone or mineral resources in Wheatfield Township. Mineral resources in Perry County are few, but iron ore was once forged at Fio Forge at Loop Hill. (Excerpt 5)

- There may be natural gas beneath a portion of the township. The Marcellus Formation of the Hamilton Group underlies the northwestern portion of the township. This shale-based formation is under exploration throughout Pennsylvania for the extraction of natural gas. (Excerpt 7)
- The topography of the township is characterized by rolling hills. More than half of the township has slopes of 15 percent or greater. The steepest slopes, 25 percent or greater, are found draining the land into the local waterways. Shallower slopes are found on the hillcrests and the few wider valley areas in the township. (Map Excerpt 5)
- Soils in the township include naturally productive farmland soils, though prime farmland soils are not abundant. The Weikert-Calvin-Berks soil association, well-drained upland soils formed from shale, siltstone, and sandstone, covers the vast majority of Wheatfield Township. (Map Excerpt 6) These soils include the majority of the prime farmland soils, located only in the flattest valley areas, and soils of statewide importance, following the surface drainage patterns, of the township. (Map Excerpt 7)
- Three natural areas of state significance are located in or adjacent to Wheatfield Township: Aqueduct Bluffs/Juniata River Scour, Sherman's Creek at Pine Ridge, and Losh Run Valley. Pine Ridge Swamp, on the border with Penn Township, is a locally significant site. (Map Excerpt 9)
- The large forested blocks in the township are relatively isolated from the forested ridgelines surrounding the rest of the county. Protection of these forest blocks and restoration of connectivity to other natural areas will enhance the value of this area as a wildlife corridor and to protecting the water quality of the watersheds. Two Stream ReLeaf projects have been completed along streams in Wheatfield Township. (Excerpt 12, Table 26)

## Data

Excerpt 1: Climate (Regional)<sup>1</sup>

Weather elements or activities of the atmosphere, such as precipitation, temperature, wind direction and speed, relative humidity, and sunshine have measurable qualities; which affect the study area.

The study area normally receives about 46 inches of precipitation annually. Normal monthly precipitation totals average from a minimum of 2.6 inches in February to a maximum of 4.3 inches in August. Snowfall is light to moderate averaging about 30 inches annually, while the mean annual number of days with snow cover one inch or more is about 50 days.

Air temperatures are important to the management of water resources and water quality. The average annual temperature for the study area is about 50 degrees F. The mean freeze-free period is about 175 days. Because of the rugged terrain, the freeze-free season varies between 170 days in the mountains to 180 days in the lowlands. In the study area, the summer mean temperature is about 76 degrees F, and the winter mean is about 32 degrees F.

Winds are important hydrological factors because of their evaporate effects and their association with major storm systems. The prevailing wind directions in the area are from the northwest in winter and from

<sup>&</sup>lt;sup>1</sup> Chapter III Natural Resources, Perry County Comprehensive Plan, 2007

the west in spring. The average wind speed is 10 mph, with an extreme wind speed of 68 mph from the west-northwest reported in the Lower Susquehanna area during severe storm activity in March of 1955.

Relative humidity also affects evaporation processes. The mean monthly relative humidity for the months of January, April, July, and October are about 68 percent, 62 percent, 70 percent and 75 percent, respectively.

Sunshine, which varies with latitude and time of the year, is a factor to be considered in the various aspects of water resources. The mean annual sunshine in hours per year for the study area is about 2,500 hours.

The evaporation process is controlled by temperature, wind, sunshine, and humidity. The rate of evaporation during the warmer months has an important impact on water storage in reservoirs and on irrigation. The mean May to October evaporation accounts for about 72 percent of the total annual evaporation.

Development in the County should take some of the climatic conditions into consideration. Tree lines and high ground should be on the northwest side of buildings to take advantage of microclimates of a tract of land. By breaking the velocity of the northwest winds, energy conservation can be realized by reducing the temperature slightly. To take advantage of the sun for passive or active solar systems, building should have south facing walls. Although the climate will not have a major effect on land uses, it should be considered in the layout of buildings.

## Excerpt 2: Hydrology<sup>2</sup>

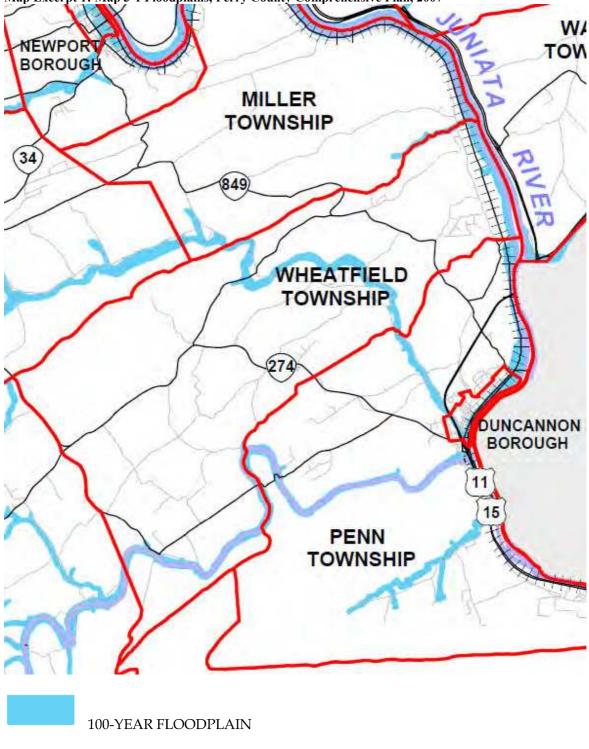
Almost all of Perry County lies in the Susquehanna River watershed. The Juniata River is a major tributary that enters the Susquehanna River at the eastern county line. The Juniata River portion of the Susquehanna River watershed drains 37 percent of the County while nearly 63 percent drains into the Susquehanna River from sources other than the Juniata River. The largest drainage area into the Susquehanna River from those other sources is Sherman Creek; which drains 42 percent of Perry County. Only a very small area of 520 acres along the western boundary drains into the Conococheaque Creek, a contributing tributary to the Potomac River Basin.

Flood plains are defined as low lying, flat areas adjacent to streams, which are subject to frequent, periodic flooding. ...Flood plains are intrinsic and beneficial aspects of the natural landscape. They allow for an increase in drainage during rainy periods and buffer the stream from any detrimental effects of surrounding land uses. Map 3-1 [of the Perry County Comprehensive Plan] shows the 100-year flood plains in [Wheatfield Township,] Perry County.

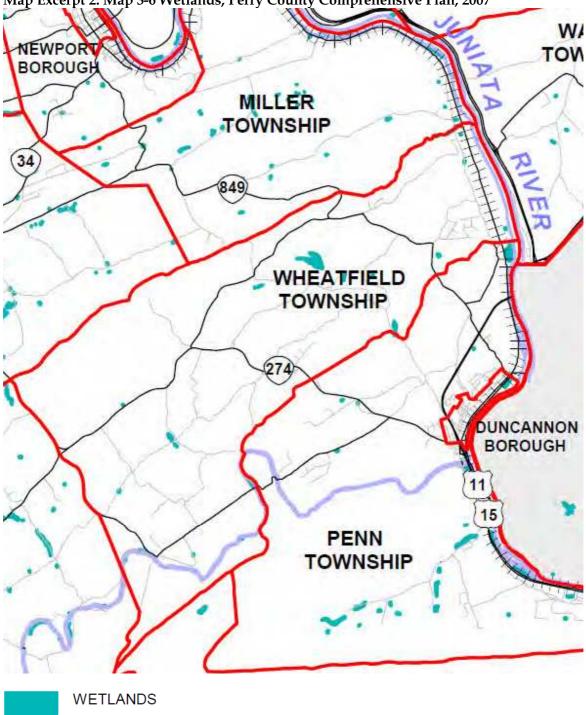
#### Table 25: Watersheds of Wheatfield Township and Act 167 Stormwater Management Plan Status

| Watershed Name  | Watershed<br>Square Miles | Watershed<br>Acres | Act 167 Plan Status |  |
|---|---------------------------|--------------------|---------------------|--|
| Juniata River   | 505.15                    | 323,399.09         | No Plan             |  |
| Little Juniata Creek  | 30.36                     | 19,437.62          | Under Preparation   |  |
| Sherman Creek   | 244.45                    | 156,499.04         | No Plan             |  |
| Source: http://www.emappa.dep.state.pa.us/emappa/viewer.htm_accessed lune 27_2011 |                           |                    |                     |  |

<sup>2</sup> Ibid.



Map Excerpt 1: Map 3-1 Floodplains, Perry County Comprehensive Plan, 2007



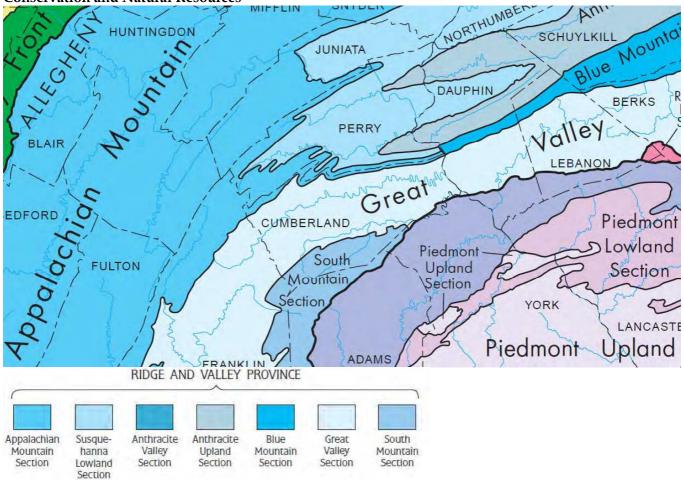
Map Excerpt 2: Map 3-6 Wetlands, Perry County Comprehensive Plan, 2007

## **Excerpt 3: Wetlands**

Wetlands are low lying, swampy areas usually associated with larger bodies of water such as lakes and streams. Wetlands have unique environmental characteristics, which include various plants and animal species peculiar to these areas. Significant wetlands areas in Perry County are associated with the confluence of the Susquehanna and Juniata Rivers with their tributary streams.

The National Wetlands Inventory, the only official statewide mapping of wetlands, can be found in the offices of the Perry County Conservation District, Tri-County Regional Planning Commission and the Pennsylvania Department of Environmental Protection, Division of Rivers and Wetlands. These maps highlight documented wetlands throughout the County and region. Their publication date, however, inhibits documentation of recently proven wet areas. Therefore these maps should be used only as a guideline and initial reference when examining for wetland potential. ... Map 3-6 of the Perry County Comprehensive Plan] graphically identifies the location of NWI Identified wetlands in [Wheatfield Township,] Perry County.

## Map Excerpt 3: Physiographic Provinces of Pennsylvania, Map 13, Pennsylvania Department of Conservation and Natural Resources<sup>3</sup>



<sup>3</sup> W. D. Sevon, 2000, *Physiographic Provinces of Pennsylvania*, 4th ed., Pennsylvania Geological Survey, 4th ser., Map 13.

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| Susquehanna Lowland Se | ection  |
|------------------------|---|
| Dominant Topographic   | Low to moderately high, linear ridges; linear valleys; Susquehanna River valley           |
| Form                   |   |
| Local Relief           | low to moderate   |
| Underlying Rock Types  | sandstone, siltstone, shale, conglomerate, limestone, and dolomite                        |
| Geologic Structure     | Open and closed plunging folds having narrow hinges and planar limbs                      |
| Approximate Elevation  | 260 to 1,715 feet above sea level   |
| Drainage pattern       | Trellis [parallel with near 90 degree convergences] and Angulate [dendritic or trellis    |
|                        | pattern modified by faults, fractures, or jointing systems]                               |
| Boundaries             | Base of slope change to higher ridges of all surrounding areas; arbitrary in valley areas |

## Excerpt 4: Physiographic Provinces of Pennsylvania, Map 13, Pennsylvania Department of Conservation and Natural Resources<sup>4</sup>

## Excerpt 5: Groundwater<sup>5</sup>

The County is located within the physiographic province called the Ridge and Valley Province. ...A major portion of the Valley Province is composed of shales. The shale provides about half of the wells of the Valleys with an adequate amount of groundwater for domestic needs. The pore spaces in these shales are very small. Fortunately, however, joints break the shale and it is these joints, as well as spaces between bedding planes, that allow for some water movement. In hard, brittle shale, joints are more open and tend to have somewhat greater yields.

The remaining portion of the County is composed of limestone and dolomites. Almost anywhere in these areas where limestone or dolomite occur at the surface or in the subsurface, serious problems may be expected from solution opening cave-ins. Such depressions are known as sinkholes. Surface drainage passes directly into the groundwater system, which means a high potential for groundwater pollution.

The mineral resources of Perry County are not extensive. During the past century, iron was produced locally to supply several small furnaces. The ore was obtained from the Onondaga formation, which is a part of the Marcellus and Mahantango.

## Excerpt 6: Geology<sup>6</sup>

The geology of an area is an ever-present factor in land use planning. The ultimate or best use of land has historically been determined by the characteristics and quality of an areas geologic composition. ...On-lot sewage disposal, drainage, well water and construction cost are some of the factors affected by bedrock geology. For the most part, the rock types found in Perry County generally do not present specific inherent limitations. However, there are a few notable formations with limestone which could contribute to the rapid spread of groundwater contaminants. In some cases, on-site evaluation of geologic factors may be necessary to determine the feasibility and impacts of a proposed project.

The engineering aspects of the bedrock geology are also important. These characteristics give an indication of such things as ease of excavation, cut-slope stability, and foundation stability. Generally, the rock

<sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Chapter III, Natural Resources, Perry County Comprehensive Plan, 2007.

<sup>&</sup>lt;sup>6</sup> Ibid.

formations in the County provide strength and support for heavy structures such as dams, highways, bridges, and large buildings. Those areas, which are underlain by limestone and dolomites, however, may pose some problems to foundation engineering. Cavernous areas and areas known to be susceptible to sinkholes should be investigated thoroughly before construction of heavy structures. It is important to recognize that most of these problems would be site specific and require an on-site evaluation to determine the appropriateness of a project. The geology of [Wheatfield Township,] Perry County is shown on Map 3-3 [of the Perry County Comprehensive Plan].

| Formation           | Description   |  |
|---------------------|---|--|
| Catskill Formation  | Grayish sandstone, siltstone and shale  |  |
| Irish Valley Member | Non-marine, gray and grayish-red sandstone, and grayish-red claystone interbedded       |  |
|                     | with minor, thin light-olive-gray marine siltstone                                      |  |
| Sherman Creek       | Alternating grayish-red siltstone and claystoneand minor intervals of gray sandstone    |  |
| Member              |   |  |
| Clarks Ferry Member | Gray to yellowish-gray sandstone and conglomerate                                       |  |
| Hamilton Group      |   |  |
| Mahantango          | Gray, brown and live shale and siltstone; Tully Member includes limestone or calcareous |  |
| Formation           | shale   |  |
| Marcellus Formation | Black, carbonaceous shale   |  |
| Trimmers Rock       | Olive-gray siltstone and shale  |  |
| Formation           |   |  |
|                     |   |  |

## Excerpt 7: Geologic Map of Pennsylvania

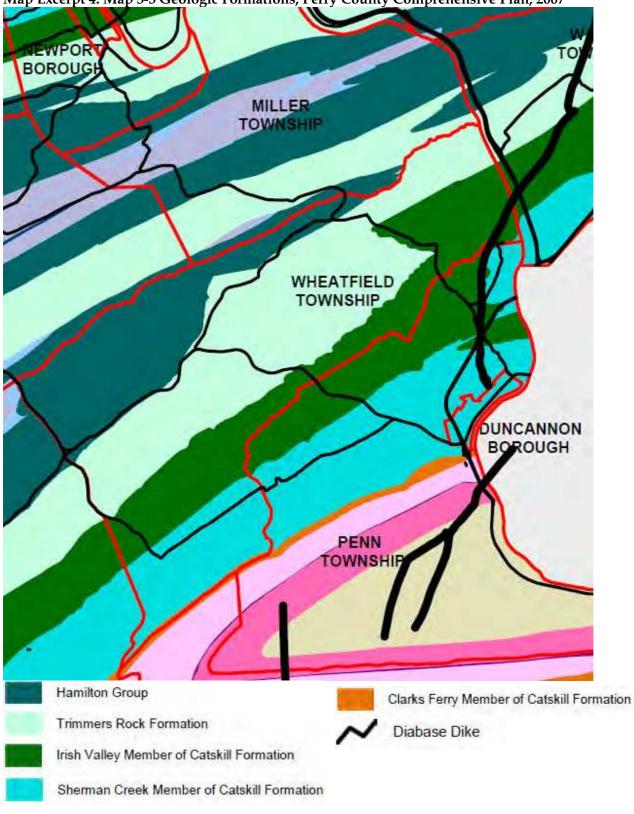
Source: Berg, T. M., Edmunds, W. E., Geyer, A. R., and others, compilers, 1980, Geologic map of Pennsylvania (2nd ed.): Pennsylvania Geological Survey, 4th ser., Map 1, scale 1:250,000, 3 sheets [web release].

## Excerpt 8: Slopes-Topography<sup>7</sup>

The development of steep slopes of 15 percent and greater results in erosion, deforestation, landslides, flooding, decreased groundwater filtration and loss of natural beauty. Slopes in excess of 25 percent are generally unstable and serious erosion and sedimentation problems may occur if these areas are disturbed. Slope stability depends upon a combination and balance of soil, degree of slope, vegetation and geology. Development of these areas can create an unbalance when the stable condition is altered, the results can be hazardous and costly.

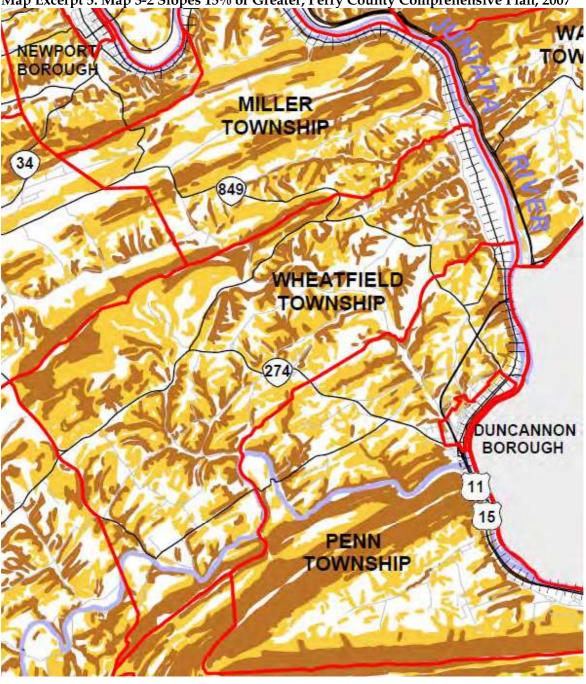
In the development and planning of any area, the slope of the land is a major factor. Map 3-2 [of the Perry County Comprehensive Plan] shows those areas of 15 percent and over. Development in these areas should be considered with caution.

<sup>7</sup> Chapter III, Natural Resources, Perry County Comprehensive Plan, 2007.



Map Excerpt 4: Map 3-3 Geologic Formations, Perry County Comprehensive Plan, 2007

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Map Excerpt 5: Map 3-2 Slopes 15% or Greater, Perry County Comprehensive Plan, 2007



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## Excerpt 9: Soils<sup>8</sup>

The Soil Survey of Cumberland and Perry Counties, Pennsylvania, published in April 1986, is the primary source for information regarding soils in the County. [The soil survey] classifies the soils according to depth, texture (coarseness or fineness), natural drainage, thickness, and arrangement of the various layers, kind of parent material, slope, erosion, flooding and other characteristics. Because each soil has its own characteristic place depending on the slope or its composition, and soils ordinarily occur together in the landscape, a small scale map can be produced to present this information. The Soil Associations Map of Perry County is shown on Map 3-4.

| Name  | Description  | Use   |
|---|--|---|
| Hazleton-Laidig-Buchanan<br>Association       | Deep, nearly level to very steep, well drained to<br>somewhat poorly drained soils that formed in<br>material weathered from gray and brown quartzite,<br>sandstone, siltstone, and shale; on uplands. | Almost all woodland   |
| Monongahela-Atkins-<br>Middlebury Association | Deep, nearly level and gently sloping, moderately well drained to poorly drained soils that formed in alluvium; on terraces and flood plains.  |   |
| Weikert-Calvin-Berks<br>Association           | Shallow and moderately deep, gently sloping to very<br>steep, well drained soils that formed in material<br>weathered from red, gray, and brown shale, siltstone<br>and sandstone; on uplands.         | Used for a mixture of<br>cropland, pasture, and<br>woodland |
| Elliber-Kreamer Association                   | Deep, gently sloping to very steep, well drained and<br>moderately well drained soils that formed in material<br>weathered from cherty limestone; on uplands.  | Suited to use as cropland                                   |

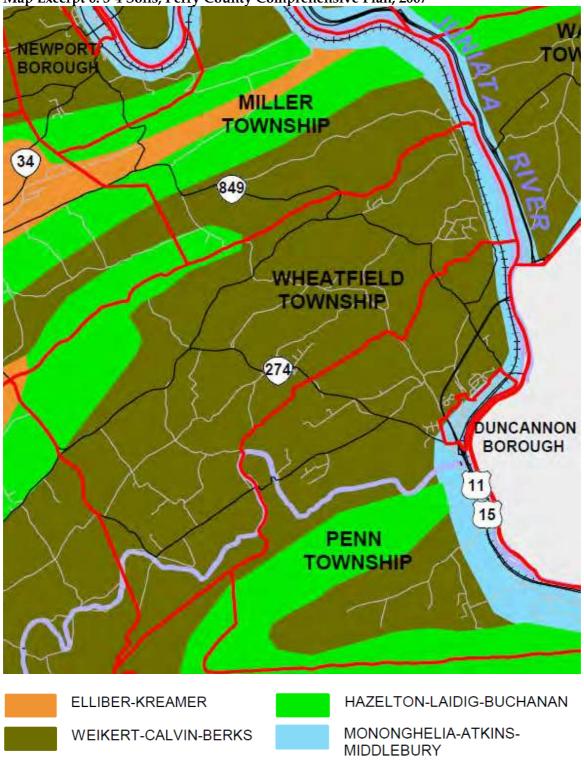
Excerpt 10: Soil Associations found in Wheatfield Township

Source: Soil Survey of Cumberland and Perry Counties, Pennsylvania, April 1986; Use data – Perry County Natural Areas Inventory, The Pennsylvania Science Office of the Nature Conservancy, 2005.

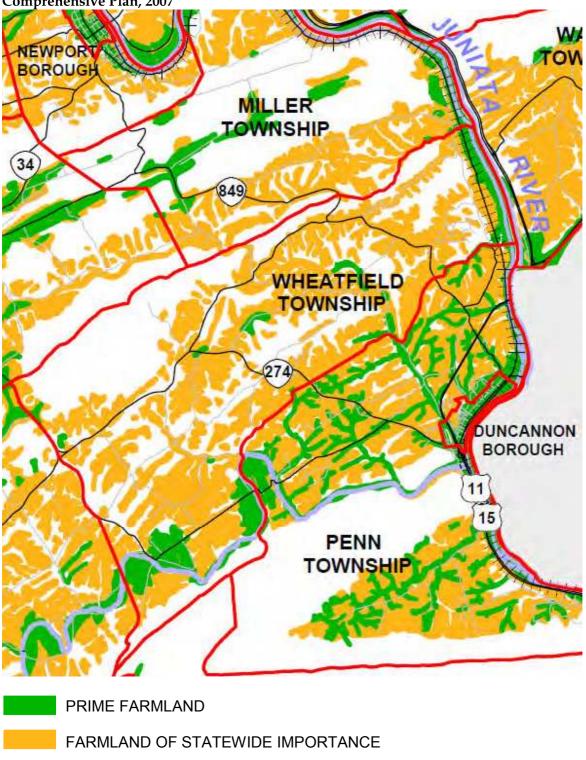
The overall capabilities of soils are referred to by grouping the soils into classes; all soils in a single class have similar limitations and management problems. Approximately 42,000 acres, or 12 percent of the County is defined by the Soil Conservation Service as prime farmland. These include Soil Classes I, II, III, and IV and are the most productive soils for crop production because they are well drained, not highly erodible, and resist flooding during the growing season. Map 3-5 [of the Perry County Comprehensive Plan shows the locations of prime and statewide important agricultural soils in Wheatfield Township, Perry County].

A few of the soil types are known to pose severe limitations on development and major construction projects. These limitations result from such factors as slow percolation rates for on-lot sewage disposal, shallow depth to bedrock, and erodibility. Individual soil tests are recommended prior to construction on sites where the soil type indicates that such limitations may exist. [These locations were not mapped for the Perry County Comprehensive Plan.]

<sup>&</sup>lt;sup>8</sup> Chapter III, Natural Resources, Perry County Comprehensive Plan, 2007.



Map Excerpt 6: 3-4 Soils, Perry County Comprehensive Plan, 2007



Map Excerpt 7: Map 3-5 Prime and Statewide Important Agricultural Soils, Perry County Comprehensive Plan, 2007

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## Excerpt 11: Woodlands9

Prior to clearing by European settlers, most of Perry County was covered by forests. Today, most of the forested areas are concentrated on the slopes and ridges of the County. The main forest cover type is mixed oak-hickory stands consisting mainly of white oak, red oak, hickory, black oak, and chestnut oak. Other species to be found include yellow poplar, shagbark hickory, white ash, red maple, beech, elm, birch, sycamore, hemlock, white pine, and Virginia pine.

## Excerpt 12: Perry County Natural Areas Inventory, 2005

The vegetation of Cumberland, Dauphin, and Perry Counties reflects the environmental conditions (geology, topography, soils, climate) and disturbance history, both natural and anthropogenic that occur within the counties. The three counties are located in the original Oak-Chestnut Forest Region (Braun 1950). The American chestnut (*Castanea dentata*) was once a dominant feature of the Oak-Chestnut Forest, but was virtually eliminated with the introduction to North America of the chestnut blight fungus (*Endothia parasitica*) in 1904. Today the forest of this region is more aptly classified as Appalachian Oak Forest (Bailey 1980) or Mixed Oak Forest (Monk et al. 1990), dominated by white, red, scarlet, and black oaks (*Quercus alba, Q. rubra, Q. coccinea,* and *Q. velutina*), often mixed with tulip poplar (*Liriodendron tulipifera*), red maple *Acer rubrum*), and/or beech (*Fagus grandifolia*).

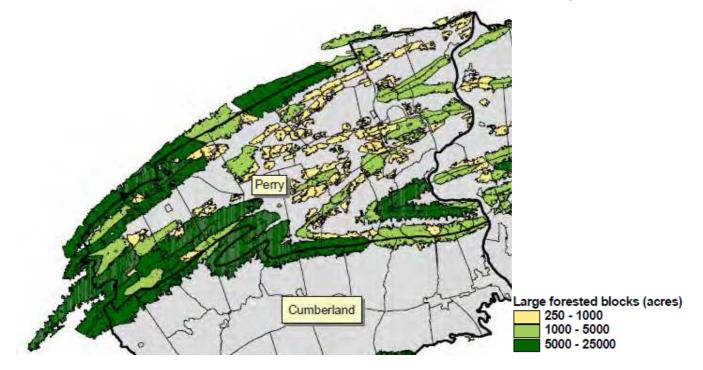
Several notable variations in the typical "Mixed Oak Forest" composition (Monk et al.1990) occur with relationship to soil, soil moisture, and topography [chestnut oak-black gum, pitch pine-scrub oak, Mesic Central Forest, and hemlock-yellow birch].

[Today] Large, relatively unfragmented forested areas cross the Tri-county area, providing valuable habitat for many species of plants and animals. The connected forest blocks also act as important migration corridors for dispersal throughout the region. Fragmenting features, such as roads, powerlines and buildings, greatly diminish the long-term viability of these areas. A concerted effort should be made to guide such projects away from these remaining large forested areas.

The large forested blocks in [Wheatfield Township] are relatively isolated from the forested ridgelines surrounding the rest of the county. Protection of these forest blocks and restoration of connectivity to other natural areas will enhance the value of this area as a wildlife corridor and to protecting the water quality of the watersheds. Forested buffers help filter surface water runoff, preventing many non-point sources of pollution from entering waterways, protecting water quality in the township and the Susquehanna River basin.

<sup>&</sup>lt;sup>9</sup> Chapter III, Natural Resources, Perry County Comprehensive Plan, 2007.

Map Excerpt 8: Large Unfragmented Forest Blocks of Cumberland, Dauphin and Perry Counties<sup>10</sup>



## Table 26: Stream ReLeaf

| Project id                   | 5411                                     | 3877                        |  |
|------------------------------|--|-----------------------------|--|
| Start date                   | Wed, 1 Oct 2003                          | Wed, 1 Oct 2003             |  |
| End date                     | Thu, 30 Sep 2004                         | Thu, 30 Sep 2004            |  |
| Project name                 | Roger Graham                             | NRCS Project 20             |  |
| County                       | Perry                                    | Perry                       |  |
| Municipality                 | Wheatfield                               | Wheatfield                  |  |
| Buffer permanently protected | 0 [No]                                   | 0 [No]                      |  |
| Stream name                  | Unnamed                                  | Unnamed                     |  |
| Landowner type               | Private                                  | Private                     |  |
| Waterbody description        | Stream Stream                            |                             |  |
| Watershed name               | Sherman Creek Tuscarora - Buffalo Creeks |                             |  |
| Buffer type description      | Trees/Shrubs                             | Trees/Shrubs                |  |
|                              | Appended from NRCS database              | Appended from NRCS database |  |
| Comments                     | 1999-2005                                | 1999-2005                   |  |
| Approved                     | 1 [Yes] 1[Y                              |                             |  |
| Object id                    | 4199 374                                 |                             |  |

Source: http://www.emappa.dep.state.pa.us/emappa/viewer.htm, accessed June 27, 2011

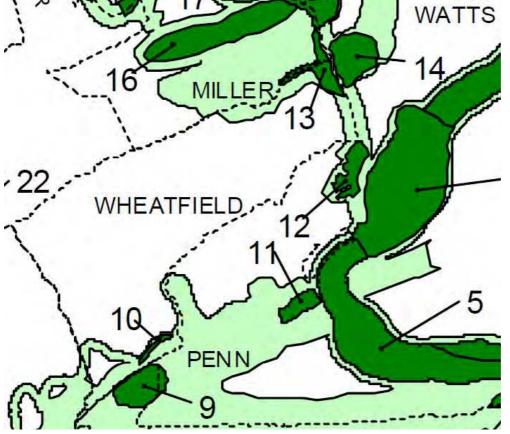
<sup>&</sup>lt;sup>10</sup> Perry County Natural Areas Inventory, The Pennsylvania Science Office of the Nature Conservancy, 2005.

## Excerpt 13: Wildlife<sup>11</sup>

Perry County has an abundance of wildlife. There are a variety of non-game species of birds, amphibians, reptiles, and small mammals. Game species include white-tailed deer, gray squirrel, cottontail rabbit, turkey, grouse, ring-neck pheasant, woodcock, morning dove, and various waterfowl. There are also red and gray fox, mink, muskrat, raccoon, weasel, opossum, and beaver.

Perry County contains intact examples of natural communities and sites for species rare in the state or even globally rare. Protecting the integrity of these natural systems provides benefits to humans and provides for the survival of wildlife and habitat. Map 3-7 [of the Perry County Comprehensive Plan] graphically depicts the location of these sites.

Map Excerpt 9: Site Index [Map] by Municipality, Perry County Natural Area Inventory, 2005



Excerpt 14: Natural Areas with Significance for the Protection of Biological Diversity<sup>12</sup>

All of the natural areas in the county are important to maintaining biodiversity in the region and the state. Table 1. The sites of statewide significance for the protection of biological diversity in Perry County in approximate order of priority from the most important (rank = 1) to the least (rank = 5). The presence of species of special concern and/or exemplary natural communities has been documented at these sites.

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<sup>&</sup>lt;sup>11</sup> Chapter III, Natural Resources, Perry County Comprehensive Plan, 2007.

<sup>&</sup>lt;sup>12</sup> Perry County Natural Area Inventory, The Pennsylvania Science Office of the Nature Conservancy, 2005.

- Aqueduct Bluffs/Juniata River Scour (Site # 12, County Rank: 3 of 5) Penn and Watts Townships [adjacent to Wheatfield Township] This site along the Juniata River has two listed species occupying distinct habitats. The S2, PA-threatened jeweled shooting star (Dodecatheon radicatum) occupies moist limestone cliffs on the west side of the Juniata, associated with maidenhair spleenwort, columbine, and poison ivy. The G4, S1 PA-endangered flat-stemmed spike rush (Eleocharis compressa) occurs along a scoured area of riverbank, growing on sparsely populated bedrock ridges at the water's edge. Also occurring with the spike rush is the G5, S4 lance fog fruit (Phyla lanceolata), which has been delisted since the 2000 report. The habitat occupied by the shooting star is fairly inaccessible and there are no current threats to the population. The exotic species purple loosestrife is a potential threat to the river scour species, although annual scouring by ice and floods prevents succession from progressing at this site. County Rank: 3 of 5.
- Sherman's Creek at Pine Ridge (Site #10, County Rank: 5 of 5)
- A small population of an aquatic animal species of concern was found at this site in 1998. The substrate of the Creek here is a mixture of shale bedrock ridges and loose gravel. Associated animal species include Eastern Elliptio and the Asiatic Clam and a large population of crayfish. This portion of the Creek is surrounded by forest and is habitat to a variety of bird species, including kingfishers, green herons and great egrets. Preserving water quality will protect the species of concern as well as the other wildlife which use the Creek.
- Losh Run Valley (Site #13, County Rank: 5 of 5) This site is an early succession rich woodland adjacent to Losh Run. A fair population of G5, S2 PAthreatened common hop-tree (Ptelea trifoliata) occurs here, associated with red oak, bitternut hickory, Japanese honeysuckle, poison ivy, and black locust. The site is disturbed by exotic species, particularly privet, and is bounded by roads and a railroad. The population, though small, has no immediate threats, and no management concerns are apparent.

Table 2. Areas of local significance in Perry County based on size, diversity of wildlife and plant life, water quality protection, and recreation potential.

• Pine Ridge Swamp (Site #9, County Rank: High) Penn and Rye Townships [adjacent to Wheatfield Township]

This area is a forested swamp that forms the headwaters of Trout Run, a small tributary of Shermans Creek. It is located in a narrow valley between Pine Ridge and Cove Mountain. The swamp is fed by many small seeps and springs from the base of the ridges along the perimeter. The swamp has a well-developed "pit and mound" topography, with hemlock, sweet birch, red maple and black ash growing on the mounds. The shrub layer has winterberry, and highbush blueberry. Sphagnum and other moss species and golden saxifrage are common in the wetter portions of the swamp. Cinnamon and royal ferns, various sedges, and skunk cabbage are also present in the groundcover. Upslope, southwest of the swamp are a series of small vernal pools; this area has been heavily logged, but the pools may be used by amphibian species and have potential for rare plant species if allowed to recover. Adjacent to the swamp is The Chimneys, the remains of an old foundry. The swamp itself is in fairly good condition and is potential habitat for rare plant species. Part of the site is owned by Duncannon Borough.

Intentionally Blank

Knowledge of historic and cultural resources increases our understanding and appreciation of the community's settlement and development, identifies site of significance, and helps develop a local sense of place. Historic resources comprise the prehistoric and historic districts, sites, structures, artifacts, and other physical evidence of the past, while cultural resources include the organizations and events that celebrate the history, traditions, and values considered important by a community. Data from the Pennsylvania Historical and Museum Commission was compiled and text from the Perry County Comprehensive Plan (2007) reviewed, to characterize the historic and cultural resources in Wheatfield Township.

## **Findings of the Data**

- Wheatfield Township will be 200 years old in 2026. The township was established in 1826. (Excerpt 15)
- There are at least 19 sites of local, county, and state significance in Wheatfield Township. These sites represent the eras of frontier settlement, colonial settlement, the Pennsylvania Canal and Pennsylvania Railroad. In a few locations, a historic structure or other evidence remains. Local landmarks and documented historic resources may be worthy candidates for local preservation by public organizations or private citizens. In many cases, there is little to no physical evidence on site. (Table 29)
- Documented historic sites, buildings, and bridges on file with State Historic Preservation Office total thirteen. The Delville Covered Bridge is the only structure listed on the National Register of Historic Places, which protects the bridge from demolition by development projects that use public funds. The Pennsylvania Railroad and the McKinzie Farm are eligible for listing on the National Register. Nine other sites, districts, and bridges have been evaluated by the State Historic Preservation Office and deemed ineligible for listing. (Tables 30 and 31)
- There are no Pennsylvania Historical Markers recognizing people, places or events of state significance in Wheatfield Township. Perry County's agricultural history has not been incorporated into Pennsylvania's Agricultural History Project, prepared by the Pennsylvania Historical and Museum Commission. (Excerpts 16 and 17)
- **Resident values for historic preservation have not been measured.** A 2010 statewide survey captured only 22 responses from across Perry County. (Excerpt 18)
- **Two county-wide organizations foster preservation and appreciation of Perry County heritage.** The Perry County Historical Society preserves sites and structures significant to the county's history and heritage. The Perry Historians maintain records and artifacts of the same significance. (Excerpts 19 and 20)
- **Rural arts and German ancestry play a strong role in Perry County culture.** These are promoted by the Perry County Council of the Arts. There have been no events in the township. (Excerpt 21)

### Data

## Excerpt 15: Historic Development<sup>13</sup>

Wheatfield formed from Rye Township in 1826.

### Table 27: Local Landmarks, Place Names, and Historic Sites, and Their Significance

| Historic Name                                 | Address  | Significance  |
|---|--|---|
| Aqueduct                                      |  | An elevated aqueduct across the Juniata River at the<br>juncture of the northern and eastern branches of the<br>Pennsylvania Canal; operated 1820-1840  |
| Dellville Bridge, formerly<br>Billow's Bridge |  | The longest covered bridge in Perry County  |
| Dellville Mill                                |  | One of few mills to survive the 1846 flood; operated until the 1920s  |
| Dellville Post Office and<br>General Store    |  | One of the first settled areas of Perry County, due to its close proximity to Cumberland County   |
| Dugan's Mill                                  | Downstream along Dugan's<br>Mill Road  | one of first mills in Perry County; relocated from<br>Marysville by Sidle in 1820s to one of the original land<br>warrants; also operated into 1900s  |
| Fio Forge                                     | Where Dellville Road<br>crosses Sherman's Creek at<br>Loop Hill  | four iron forges, sawmill, dam to power, stone house<br>(private residence) was the forge office at Dellville Rd.<br>and Glutz Hole Rd (now Lynton Hill Road)   |
| The Great Clarks Ferry-<br>Carlisle Road      | Lynton Hill Road to Dellville<br>Road, over the mountain at<br>Pine Hill                               | A major travel route for early settlers   |
| Kings Mill                                    |  | A fulling mill (combing to process wool prior to<br>spinning to yarn) and a station along the Shermans<br>Valley Railroad   |
| Mecks Corner                                  |  | The junction of the westbound road toward<br>Dromgold's Corner (now Route 274) and the original<br>route to Pittsburg and beyond, and northbond road<br>toward N Bloomfield (now Route 34); location of a<br>tavern   |
| Montebello Station and<br>Park                |  | Park had pavilions for picnics and community events   |
| Shermans Valley Railroad                      | Along Little Juniata Creek<br>from Duncannon to New<br>Bloomfield, crossing the<br>creek several times | Included in the charter of the Southern Pennsylvania<br>Railroad, the subject of the Erie War, 1866-1868, a legal<br>battle between Cornelius Vanderbilt owner of the New<br>York Central Railroad, and Jason "Jay" Gould, owner of<br>the Erie Railroad, which kept these investors from<br>expanding the Shermans Valley Railroad from<br>Duncannon to New Bloomfield to Loysville to Path<br>Valley in Juniata County; instead, Vanderbilt built a<br>railroad through the Cumberland Valley, known as<br>Vanderbilt's Folly, which later the became the<br>alignment of the PA Turnpike |
|   |  | <u> </u>  |

<sup>13</sup> Chapter II Historic Resources, Perry County Comprehensive Plan, 2007.

# Historic and Cultural Resources Profile

| Historic Name                  | Address                                | Significance   |
|--------------------------------|--|--|
|                                |  | Methodist Church   |
| Route 274                      |  | Follows the original route from Duncannon to New<br>Bloomfield, a major route for early Perry County<br>settlers in the 1750s; probably a Native American trail;<br>also follows portions of the original route from<br>Harrisburg to Pittsburgh |
| Sherman's Creek                |  | According to legend, named for Sherman, a trader with<br>Native Americans, who tried to cross the creek at<br>Gibson's Rock in Carroll Township and was swept<br>away with his horse   |
| Sherman's Creek                |  | 2 <sup>nd</sup> or 3 <sup>rd</sup> church in Perry County; moved into Carroll  |
| Presbyterian Church            |  | Twp; rumored that first white man to die in Perry<br>County is buried ; oldest gravestones – 1777  |
| The "smokestacks"              | Between Pine Hill and Cove<br>Mountain | the first steam-powered sawmill in Perry County;<br>served by a road from Duncannon along Sherman's<br>Creek to The Great Clarks Ferry-Carlisle Road   |
| Snyder's (United               |  | Established by one of the original land warrantees   |
| Methodist) Church and cemetery |  |  |
| Stone House                    |  | Built by Finley in early 1800s; includes very large stones in the construction   |
| Calabara Crasin e e            |  |  |
| Sulphur Springs                | ondence with Dennis Hocker. Jui        | a station along the Shermans Valley Railroad   |

Source: Telephone correspondence with Dennis Hocker, June 24, 2011.

#### **Table 28: Documented Historic Resources**

| Key #  | Inventory<br>ID | Historic<br>Name  | Address                | National<br>Register<br>Status | Resource<br>Category | Material | Date<br>Built |
|--------|-----------------|---|------------------------|--------------------------------|----------------------|----------|---------------|
| 112369 | 109531          | Pennsylvania Railroad:<br>Main Line (Harrisburg<br>to Pittsburgh); also<br>known as Conemaugh<br>Line, Monongahela<br>Line, Pittsburgh Line,<br>Port Perry Line |                        | Eligible                       | District             |          | N             |
| 112369 | 126530          | SR 4019 Bridge over<br>Conrail (Pennsylvania<br>Railroad)   | SR 4019                | Contributes<br>to Resource     | Structure            | Steel    | 1902          |
| 125326 | 113974          | McKinzie, Augustine,<br>Farm*   | 501 Dellville Rd.      | Eligible                       | Building             | Brick    | 1852          |
| 125330 | 113975          | Yocum, Moses, House   | 680 Glutzhole Rd.      | Ineligible                     | Building             | Stone    | 1800          |
| 127399 | 115415          | Ensminger Farm  | 851 Dugans Mill<br>Rd. | Ineligible                     | Building             | Aluminum | 1850          |
| 127401 | 115417          | Billow Property   | 1155 Pine Hill Rd.     | Ineligible                     | Building             | Aluminum | 1820          |
| 127405 | 115421          | Dellville Area: Rural<br>Historic District  |                        | Ineligible                     | District             |          |               |

# Historic and Cultural Resources Profile

| Key #  | Inventory<br>ID | Historic<br>Name | Address           | National<br>Register<br>Status | Resource<br>Category | Material | Date<br>Built |
|--------|-----------------|------------------|-------------------|--------------------------------|----------------------|----------|---------------|
| 127402 | 115418          | Crosson Property | 852 Dellville Rd. | Ineligible                     | Building             | Asbestos | 1863          |
| 127403 | 115419          | Barrick Property | 903 Delville Rd.  | Ineligible                     | Building             | Aluminum | 1900          |

\* Known today as the Woods Farm

Source: Pennsylvania Historical and Museum Commission, Cultural Resources Geographic Information System (CRGIS), accessed June 24, 2011.

## **Table 29: Historic Bridges**

| Key #  | Inventory<br>ID | Historic Name                            | Address | National<br>Register<br>Status | Resource<br>Category | Material | Date<br>Built |
|--------|-----------------|--|---------|--------------------------------|----------------------|----------|---------------|
| 50837  | 50743           | Dellville Covered<br>Bridge              |         | Listed                         | Structure            | Wood     | 1889          |
| 94735  | 94639           | L.R. 50014 Bridge 50 20<br>0014 0 021267 |         | Ineligible                     | Structure            | Steel    | 1927          |
| 137430 | 124167          |  | SR 7221 | Ineligible                     | Structure            | Steel    | 1904          |
| 137431 | 124168          |  | SR 7221 | Ineligible                     | Structure            | Brick    | 1890          |

Source: Pennsylvania Historical and Museum Commission, Cultural Resources Geographic Information System (CRGIS), accessed June 24, 2011.

#### Excerpt 16: Pennsylvania Historical Marker Program<sup>14</sup>

Since 1946, the Pennsylvania Historical and Museum Commission has administered a program of historical markers to capture the memory of people, places, and events that have affected the lives of Pennsylvanians over the centuries since William Penn founded his Commonwealth. More than 2,000 cast aluminum markers tell the stories of Native Americans and settlers, government and politics, athletes, entertainers, artists, struggles for freedom and equality, factories and businesses, and a multitude of other topics. Source:

Fifteen Pennsylvania Historical Markers have been installed in Perry County. They celebrate various people who lived in Perry County and played a significant role in state history and the County's establishment in 1820, as well as Fort Robinson, Centre Church, Carson Long Military Institute, and transportation features such as the Rockville Bridge, Pennsylvania Canal, and Millersburg ferry service. None of the markers are located in Wheatfield Township.

#### Excerpt 17: Pennsylvania's Agricultural History Project<sup>15</sup>

Farming has guided Pennsylvania's economic growth and cultural development and has profoundly shaped the lands and people of the Commonwealth. Road improvement activities, new housing

<sup>&</sup>lt;sup>14</sup> Pennsylvania Historical and Museum Commission, Bureau of Historic Preservation, Pennsylvania Historical Marker Program,

http://www.portal.state.pa.us/portal/server.pt?open=512&objID=2539&&SortOrder=200&level=2&parentCommID =1586&menuLevel=Level\_2&mode=2, accessed June 24, 2011.

<sup>&</sup>lt;sup>15</sup> Pennsylvania Historical and Museum Commission, Pennsylvania's Agricultural History Project, <u>http://www.portal.state.pa.us/portal/server.pt/community/agricultural\_history\_project/2579</u>, accessed June 24, 2011.

construction, and economic development projects together exert enormous pressure on agricultural lands. Every year the Federal Highways Administration, PennDOT and the Pennsylvania Historical and Museum Commission's Bureau for Historic Preservation (BHP) evaluate thousands of historic agricultural resources as part of the planning process for transportation projects across the state. Deciding which resources merit historic preservation requires high quality accessible information. In the face of sprawl, multiple initiatives across the state seek to protect historic open space, farmland, and natural historic resources. Heritage Tourism and education projects seek reliable information about rural historic resources for planning and interpretation. No such source of information was available until the Historic Agricultural Resources of Pennsylvania c 1700-1960: a National Register Multiple Property Documentation Form was completed by the Pennsylvania Historical and Museum Commission.

This document establishes clear and specific guidance on questions of National Register eligibility, defining standards for significance and integrity according to the National Register Criteria and guidelines. The primary beneficiaries of the project will be federal, state and local, and private agencies whose work affects the rural landscape. A comprehensive planning document that addresses the scope and character of Pennsylvania's historic agricultural resources will be a valuable tool that can be used to protect natural and historic resources that comprise Pennsylvania's "farm country."

Perry County is located in the Central Limestone Valleys region, though there is no specific data or analysis for Perry County at this time.<sup>16</sup> This region encompasses portions of Centre, Union, Mifflin, Snyder, Juniata, Clinton and Montour counties, extending south and west into Huntingdon, Perry, Cumberland, and Franklin counties. The region focuses on Nittany, Penn's, and Brush Valley and Ferguson Township in Centre County, Union County's Buffalo Valley, Mifflin County's Big (Kish) Valley, central Snyder County, the Cocolamus region of Juniata County; Sugar and Nittany Valleys in Clinton County – Nippenose, and Limestone Township in Montour County.<sup>17</sup>

A high level of mechanization, a high rate of farm tenancy, high livestock numbers, a large ratio of cropland to grassland, a Pennsylvania-German cultural influence, and narrow valleys characterized farming systems [in this region]. Landscape features may include barns and outbuildings that reflect machinery use and storage, tenant farms or houses, housing for livestock, Pennsylvania-German construction, siting and building types, and a landscape pattern of linearity with farms sprouting off of one road.

## Excerpt 18: Community Preservation Values Survey<sup>18</sup>

Beginning in Summer 2010, the Pennsylvania Historical and Museum Commission's Bureau for Historic Preservation ran a Community Preservation Values Survey, the results of which will help form the basis of a new Statewide Historic Preservation Plan. Over 2,200 citizens of Pennsylvania completed the survey and identified what they value in their communities. Eleven surveys were submitted from Perry County

<sup>&</sup>lt;sup>16</sup> Correspondence with Carol Lee, Bureau of Historic Preservation,

<sup>&</sup>lt;sup>17</sup> Historic Agricultural Resources of Pennsylvania c 1700-1960: a National Register Multiple Property Documentation Form, <u>http://www.portal.state.pa.us/portal/server.pt/community/pennsylvania%27s\_agricultural\_history/2584</u>, accessed July 8, 2011.

<sup>&</sup>lt;sup>18</sup> Honoring the Past, Planning for the Future: Pennsylvania's Historic Preservation Plan, 2012-2017, Pennsylvania Historical and Museum Commission

http://www.portal.state.pa.us/portal/server.pt/community/preservation\_plan/20240, accessed June 24, 2011.

residents. Detailed analysis is pending, as of June 24, 2011, however a few select statewide findings include:

- What places best reflect what you value about your community?
  - 1 Trails, waterways, or natural areas
  - 2 Local parks or public spaces
  - 3 Surrounding countryside and farmland
- What resources enhance the character of your community? 1 Appearance, views and overall beauty of the area 2 Availability of parks and open spaces 3 Small town/rural atmosphere
- What is negatively affecting the character of your community? 1 properties not being maintained (844 responses)
  2 sprawling development (632 responses)
  3 lack of state support financially (670 responses)
- The average person where I live recognizes that there are benefits to protecting and preseing the architectural, historic, and cultural character of the community, 48.15% Yes, 51.9% No
- Should public tax dollars be spent to preserve state and local heritage resources? 90.2% Yes, 9.8% No
- Is preserving historic places important to your community's future? 93.0% Yes, 7.0% No

#### Excerpt 19: Perry County Culture<sup>19</sup>

The arts and entertainment community also have a strong foundation which will further efforts to strengthen the County's heritage. The Perry County Council of the Arts is the organizing body [for this community, and provides promotion for many community-based cultural events.] A strong community exists with German ancestry in Perry County, also contributing to its culture.

#### Excerpt 20: Historical Society of Perry County<sup>20</sup>

The Historical Society of Perry County was originally established in the middle nineteenth century. After a period of dormancy, the Society was re-established around 1924 and incorporated as a non-profit organization in 1953. The Society is comprised of approximately 270 members and is administered by an elected Board of Directors with an additional three members chosen by the President of the Board. The full Society meets four times a year, while the Board meets monthly. Funding sources include membership fees and private donations.

<sup>&</sup>lt;sup>19</sup> Chapter II Historic Resources, Perry County Comprehensive Plan, 2007.<sup>20</sup> Ibid.

Program and scope of services include site and/or structure acquisition, rehabilitation and maintenance. The Society has acquired the Blue Ball Tavern in Centre Township, a one room church in Toboyne Township, a one room school house in Tyrone Township, a mansion in Landisburg Borough, a church in Spring Township, and the first free school of Perry County in Bloomfield Borough. In addition to site acquisition, the Society has sponsored the reprinting of two texts pertaining to the history of Perry County. They are, "The History of Perry County" by H.H. Hain (1922) and "Churches between the Mountains" by Rev. D.H. Focht (1862).

## Excerpt 21: The Perry Historians<sup>21</sup>

The Perry Historians is a volunteer organization concerned with the heritage of Perry County as revealed through the lives of individuals and families that was established in 1976. The Historians is comprised of approximately 800 members and administered by a nine (9) member Board of Directors. The Historians are actively preserving and organizing the source materials and representative artifacts relative to the genealogical history of Perry County and adjacent areas. The collection of the Historians is housed in the Harry W. Lenig Library. The Harry W. Lenig Library houses a list of records, which include the following; church records, newspapers, tombstone inscriptions, mortuary records, court records, land survey drafts, printed works, family an subject files, photographs, Taufschein collection, connected warranty maps, census schedules, rare books, and artifacts.

<sup>21</sup> Ibid.

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Every region has a land use pattern – a unique arrangement of residential, agricultural, commercial, industrial, and public/institutional uses. This arrangement reflects historic and contemporary settlement patterns, transportation routes, economic drivers, and development policies. This profile characterizes the land use pattern based on land use classifications prepared by the Tri-County Regional Planning Commission and illustrated on the Land Use map (**Map 2**).

## **Findings of the Data**

- Wheatfield Township's landscape reflects a predominantly 19th and 20th century agricultural land use pattern, fronted with late 20th century residential development. (Map 2)
- There is no historic center of community activity, though several crossroads locations are named: Mecks Corner, Route 274 at Route 34; Dellville, along Dellville Road (SR 2002) and Sherman's Creek; Roseglen, just west of Route 274; Sulphur Springs and Kings Mill along the Little Juniata Creek; and Aqueduct, just west of the Norfolk Southern rail corridor along the Juniata River. Many of these locations were landmarks to early settlers and travelers, however they did not develop into centers of community activity beyond the 19th century.
- Portions of the native woodland cover and historic agricultural land uses have been displaced and fragmented by residential development of single lots and subdivisions, generally along state and local highways where slopes are shallow and access is readily available. There are 6 large residential subdivisions of 10 lots or more. Most subdivision activity has been minor in nature, yielding three lots or less at any one time. This change in parcel pattern and use has occurred as a result of the needs and desires of landowners. (Map 2, Table 32)
- Over the past decade, Wheatfield Estates and Dellville Manor (Grandview Drive) have been the largest developments of any type in the township. Based on building permits issued during the 1997-2010 period, residential development peaked in 1997 at 31 new dwellings constructed and again in 2004 with 21 new dwelling units constructed. These peaks coincide with the construction of Wheatfield Estates and Dellville Manor, respectively. Overall, residential development has been declining since 1997. Based on building permits for commercial units, there was only one new commercial structure, Noaker's Auto Body shop, built in Wheatfield during these thirteen years. (Table 31)
- Land use data from Perry County for the township updated through 2009 show the following: (Table 30)
  - There are 1,950 parcels in Wheatfield Township.
  - Agricultural uses occupy 3,305 acres of the Wheatfield Township's 13,489 acres, or 24.5 percent. These uses are located where slopes are shallow on hilltops and along the river and creek floodplains.
  - **Commercial uses are few, small and scattered.** Only five parcels totaling 25 acres are identified as primarily commercial in use. Commercial activity that is secondary to residential use is not quantified within these figures.
  - **Public and semi-public uses,** including the State Game Lands, Wagner Park, the Township office/garage site, and numerous churches, **occupy 1,143 acre on 18 parcels, or 8.5 percent of the township.**

- Residential uses occupy 1,405 acres or 10.4 percent of the township but represent 55.3 percent of all parcels.
- Vacant use parcels, as classified by Perry County, total 686 acres or 5.1 percent of the township area and 18.3 percent of its parcels.
- **Woodlands occupy 6,606 acres or 49.0 percent of the township**, generally along the steepest ridges, valleys, and waterways. They also occupy 27 of the 30 parcels in the township that are 100 acre or more in size.
- **Approximately 1,200 acres of the township is protected open space.** The State Game Lands and Wagner Park are lands protected from future development by the nature of their public ownership. There is one preserved farm, the Hall farm, which spans Centre and Wheatfield Townships; approximately 10 acres is located in Wheatfield Township. (Table 30)
- Land uses of regional impact include the State Game Lands, the Norfolk Southern rail corridor, and the Perry County Farmer's Market on Route 894. The State Game Lands provide public hunting lands for all who possess a state hunting license. The rail corridor represents opportunity for industry that employs rail for freight shipping. The Perry County Farmer's Market attracts consumers from Perry County and surrounding areas to this hub of local merchants.
- There are no significant land use conflicts within the township. Resident complaints about neighboring properties are generally related to property maintenance not use. Land use patterns along the township's borders are very similar to its interior; the only exception is a limited concentration of commercial uses along Route 274 in Carroll Township, just west of Mecks Corner. (Map 2)
- The township supports continued farming through the establishment and continuance of its Agricultural Security Area (ASA). As of 2009, total of 2,316 acres of farmland in Wheatfield Township was enrolled in the ASA program.
- Most parcels are less than two acres in size. The 1,427 smallest parcels total 952 acres of the township. In fact, 413 parcels are less than one-quarter acre and total only 33 acres. These lands could not be developed without unification into a minimum two-acre parcel. (Table 33)
- The 15 percent of parcels are four acres or more represent 77 percent of the township's total area. Based solely on size, these 294 parcels could be subdivided and developed. Various environmental conditions and access requirements constrain or limit this development potential. (**Table 33**)
- Wheatfield Township has employed authorized municipal planning tools to manage development and its impact on the community since 1970. The township has managed local land development practices since 1988 and land use since 1993. Its planning commission has been active since 1970. The township does not use an official map to plan future public land acquisitions for township facilities, road network expansions, or other public purposes. (Table 34)

#### Data

## Table 30: 2009 Land Use/Land Cover

|                        | Acres  | Percent of<br>Total Acres | Parcels | Percent of<br>Total Parcels | Largest<br>Parcel Size<br>(Acres) | Average<br>Parcel Size<br>(Acres) |
|------------------------|--------|---------------------------|---------|-----------------------------|-----------------------------------|-----------------------------------|
| Agricultural Use       | 3,305  | 25.1%                     | 396     | 20.3%                       | 114                               | 8.3                               |
| Commercial Use         | 25     | 0.2%                      | 5       | 0.3%                        | 11                                | 5.0                               |
| Public/Semi-Public Use | 1,143  | 8.7%                      | 18      | 0.9%                        | 882                               | 63.5                              |
| Residential Use        | 1,405  | 10.7%                     | 1,079   | 55.3%                       | 31                                | 1.3                               |
| Vacant Use             | 686    | 5.2%                      | 356     | 18.3%                       | 41                                | 1.9                               |
| Woodland Cover         | 6,606  | 50.2%                     | 96      | 4.9%                        | 429                               | 3.9                               |
| Other                  | 319    | 2.4%                      | n/a     | n/a                         | n/a                               | n/a                               |
| Total                  | 13,489 | 100.0%                    | 1,950   | 100.0%                      | n/a                               | n/a                               |

Source: Tri-County Regional Planning Commission

# Table 31: Total New Dwelling Units and New Commercial Establishments (based on issued building permits), 2000-2009

|      | New Dwellin         | g Units      | Commercial Estab          | olishments |
|------|---------------------|--------------|---------------------------|------------|
| Year | Wheatfield Township | Perry County | Wheatfield Township   Per | rry County |
| 1997 | 31                  | 269          | 0                         | 3          |
| 1998 | 18                  | 282          | 0                         | 12         |
| 1999 | 21                  | 260          | 0                         | 13         |
| 2000 | 21                  | 249          | 0                         | 14         |
| 2001 | 10                  | 204          | 0                         | 4          |
| 2002 | 12                  | 257          | 0                         | 8          |
| 2003 | 13                  | 245          | 0                         | 3          |
| 2004 | 16                  | 291          | 1                         | 19         |
| 2005 | 9                   | 242          | 0                         | 6          |
| 2006 | 10                  | 126          | 0                         | 4          |
| 2007 | 11                  | 73           | 0                         | 5          |
| 2008 | 9                   | 87           | 0                         | 6          |
| 2009 | 2                   | 118          | 0                         | 4          |
| 2010 | 6                   | 93           | 0                         | 1          |

Source: Tri-County Regional Planning Commission

## Table 32: Large Subdivisions of 10 lots or more

|                                   | Number of Lots |
|-----------------------------------|----------------|
| Craig Run Hills                   | +/- 30         |
| Dellville Manor (Grandview Drive) | +/-24          |
| (Hemlock Drive)                   | +/-18          |
| Roseglen Heights                  | +/- 20         |
| Thomas Drive                      | +/- 10         |
| Wheatfield Estates                | +/- 45         |
| Total                             | +/ -147        |
|                                   |                |

Source: Wheatfield Township

## Table 33: Development Potential Based on Parcel Size

|                    | Number of<br>Parcels <2 acres   | Parcels<br>4 ac or more              | Number of<br>Parcels 8 acres or<br>more                         | Number of<br>Parcels 100 acres or<br>more                       |
|--------------------|---|--------------------------------------|---|---|
| 2009 Use/Cover     | Not able to be<br>developed without<br>unification into a<br>parcel 2 acres or more | Able to<br>subdivided into<br>2 lots | Able to developed as<br>a major subdivision<br>(4 lots or more) | Able to developed as<br>a major subdivision<br>(4 lots or more) |
| Agricultural       | 216   | 144                                  | 98  | 2   |
| Commercial         | 0   | 2                                    | 1   | 0   |
| Public/Semi-Public | n/a   | n/a                                  | n/a   | 1   |
| Residential        | 877   | 46                                   | 4   | 0   |
| Vacant             | 312   | 40                                   | 23  | 0   |
| Woodland           | 22  | 62                                   | 50  | 27  |
| Total              | 1,427   | 294                                  | 176   | 30  |

Source: Tri-County Regional Planning Commission

#### Table 34: Use and Currency of Municipal Planning Tools

| Municipality           | Planning Tool                              | Adopted/Established | Last Amended |
|------------------------|--|---------------------|--------------|
|                        | Zoning Ordinance                           | 12/1993             | 4/2008       |
| 1471                   | Zoning Map                                 | 12/1993             | 5/2008       |
| Wheatfield<br>Township | Subdivision and Land Development Ordinance | 2/1988              | 3/2007       |
| rownsnip               | Official Map                               | None                |              |
|                        | Planning Commission                        | 5/1970              | 7/1994       |
|                        | Comprehensive Plan                         | 2/2007              |              |
| Perry County           | Subdivision and Land Development Ordinance | 9/1990              | 4/2011       |
|                        | Planning Commission                        | 1966                |              |

Source: Tri-County Regional Planning Commission website, <u>www.tcrpc-pa.org</u>

#### Excerpt 22: Agricultural Security Area<sup>22</sup>

The Agricultural Area Security Law (Act of June 30. 1981, P.L. 128, No. 43)(3 P.S. §§901-915), as amended allows any owner or owners of land used for agricultural production totaling at least 500 acres to submit a petition to their approving municipal authority for the creation of an Agricultural Security Area. If the petition is approved by the participating landowners agree to keep their lands for agricultural use in return for certain benefits that the municipality will give.

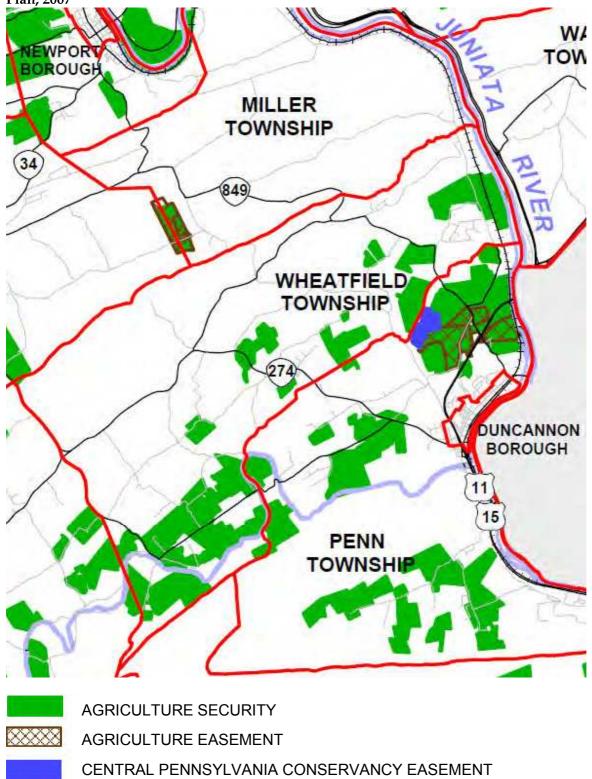
Benefits of an Agricultural Security Area are:

- 1. Local governments are not to pass ordinances that unreasonably restrict farm structures or properties.
- 2. Prevents local governments from defining or prohibiting as a "public nuisance" agricultural activities and operations within the security area.
- 3. Protects farm operations by discouraging condemnation of agricultural land through eminent domain.
- 4. Acreage in the security area can participate in the Agricultural Easement Program.

Participation in the Agricultural Security area is purely voluntary. There are no penalty provisions for an individual who changes land use while in a security area. The term of an Agricultural Security Area is seven years followed by a re-certification process. As of March 2006, approximately 779 properties, with 80,398 acres of farmland, in eighteen municipalities, were recorded with the County as an Agricultural Security Area. Map 3-8 [of the Perry County Comprehensive Plan] shows the location of the easements and Agricultural Security Areas as identified by the Perry County Agricultural Land Preservation Board.

<sup>&</sup>lt;sup>22</sup> Chapter III, Natural Resources, Perry County Comprehensive Plan, 2007.

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Map Excerpt 10: Map 3-8 Agriculture Security and Easement Areas Map, Perry County Comprehensive Plan, 2007

The transportation system is critical to local circulation as well as commerce, commuting, and tourism. This profile presents an understanding of the location of transportation facilities for the available modes of travel, their function and role in commerce, commuting, and tourism, their connectivity and needs for improvement as system, and planned improvements. Data were compiled from PennDOT Management Systems and stakeholder interviews.

## **Findings of the Data**

- The roadway network serves as the backbone of the township's transportation system. The network consists of both state and locally-owned roadway. Just over two-thirds of the township's roadways are owned and maintained by the municipality (34.75 miles), while the rest (15.9 miles) are state-owned facilities. Several principal state traffic routes traverse the township, including: PA 34, PA 274, PA 849, and 4-digit SRs 2002 (Dellville Road), and 2005 (Paradise Road). A third, SR 1021 (Aqueduct Road) connects the Village of Aqueduct to PA 849 in neighboring Penn Township. (Figure 1)
- State roads are designed to serve intra-county and inter-county travel. State roads in the township are functionally classified as rural or local traffic roadways, designed to serve rural through-, intracounty, and local traffic. There are no rural principal arterial roadways within the township. PA 34 and PA 274 are classified as rural minor arterials. PA 849 is classified as a rural major collector. Dellville Road (SR 2002) is classified as a rural minor collector. Paradise Road (SR 2005) is functionally classified as a local road, referring to the type of traffic it carries, not the road-ownership.(Figure 2, Summary 1)
- Paradise Road (SR 2005) is eligible for PennDOT's Highway Transfer or "Turnback" program. Through this program, PennDOT would provide an annual maintenance payment of \$4,000 per turnback mile in exchange for township ownership and maintenance. Narrows Road was a previously "turned-back" to the Township.
- Traffic volumes vary widely given the differing roles of the township's roadway network. PA 274 carries the most traffic, averaging over 6,100 vehicles daily. PA 34 along the border with Carroll and Centre Townships, also carries in excess of 6,000 vehicles daily. Lower-order state routes carry more moderate traffic volumes, including PA 849 (1,400), and Dellville Road (350), Paradise Road (400), and Aqueduct Road (400). (Figure 3)
- There are five state-owned bridges greater than eight feet in length in the township. All are located on four-digit, low volume state roads and two are structurally deficient. The longest state-owned bridge on Paradise Road over Little Juniata Creek is now 50 years old and has the lowest sufficiency ratings (37.4) among state-owned bridges. (Summary 3, Table 36)
- The Township owns and maintains three bridges greater than 20 feet in length. The Sulphur Springs Road bridge over Little Juniata Creek is classified as functionally obsolete and structurally deficient yet still safe for travel up to the posted weight limit. There are additional, smaller structures and box culverts in the township that are not included in this state-maintained inventory. (Summary 3, Table 37)
- **Perry County owns and maintains two bridges in the Township.** While the covered bridge over Shermans Creek is functionally obsolete and structurally deficient, it carries only a few park visitors

on very occasional basis. Nonetheless it has a posted weight limit. The modern replacement bridge was completed in 2008. (Summary 3, Table 37)

- Travel demand in the county has declined in recent years, most likely as a result of the soft economy. Data from PennDOT's Bureau of Planning and Research indicate that travel demand within the township on state-owned roadways declined for the ten-year period ending 2009, from roughly 62,000 daily vehicle miles of travel (DVMT) to a total of nearly 57,000 DVMT. Rates of decline in the township have mirrored that of Pennsylvania, yet this trend is not expected to continue long-term. (The amount of travel on *local* roads is not recorded by PennDOT, so numbers for those networks are not available.) It should be noted that travel demand nationally was down in 2008-09 due to the weak economy. (Table 35 and Figure 4)
- No major repairs or projects, only routine maintenance, on state-owned roadways and bridges in the township are scheduled by PennDOT's County Maintenance Department. (Interview 1)
- The township's top transportation priority is the replacement of the 55-foot steel bridge on Sulphur Springs Road. The overall project cost has been estimated at \$1.6 million; approximately \$300,000 of this has been programmed as part of the HATS' 2011-14 Transportation Improvement Program for preliminary engineering work. (Summary 5, Table 38)
- **Transportation-related costs are projected to consume 32.9 percent of the township's 2011 budget**. The township's fiscal year 2011 budget includes \$265,000 for transportation-related costs, including winter maintenance, operation and maintenance of traffic control devices, and machinery and equipment. Over the past six years, spending on roads and bridges has increased, although its share of total expenditures has declined, overall. Since 2004, transportation-related expenditures have increased by over 50 percent, compared to a 173 percent increase in total expenditures over the same period (Figure 5). The township's 2011 liquid fuels distribution of \$117,208 is projected to support 44 percent of the township's 2011 transportation budget. (Summary 6)
- The majority of workers are very reliant on the private automobile and the roadway network as a means of journey to work, as a result of the remoteness of Wheatfield Township in relation to area employment opportunities and lack of fixed-route public transportation. Eighty-five percent drives alone to work and an additional 10 percent carpools to work. (Table 39)
- Travel time to work for Wheatfield Township workers is higher than state and national averages, yet has been declining in recent years. The mean travel time to work for Wheatfield Township's resident workers is approximately 32 minutes, which enables workers to reach the Harrisburg central business district, Cumberland County's West Shore Office complex, as well as downtown Carlisle. Average trip time for workers residing in Wheatfield Township and in Perry County overall has declined slightly since the 2000 Census, yet is still significantly longer than state average (by up to 25 percent). This may be a direct result of the completion of major capital improvements in the greater region, the most notable one being the opening of the US 22/322 Dauphin bypass in November 2000. There has been a corresponding drop in carpool participation rates as well in recent years. (Table 39, Figure 6)
- The Perry County Transit Authority (PCTA) is the only provider of transit service within Perry County, and thus Wheatfield Township. It operates a non-profit shared ride bus service that provides transportation through Senior Shared Ride, Persons with Disabilities, Medical Assistance Transportation, and Mental Health/Mental Retardation programs, and the Human Services Development Fund. All are state-supported transportation programs. Capital Area Transit once

provided **fixed route bus service** to Marysville in extreme southeastern Perry County, but CAT discontinued that service years ago, and the county no longer supports CAT financially. (**Interview 2**)

- Commuter Services of PA helps commuters find travel alternatives to driving alone and helps employers support the use of travel alternatives.
- The nearest park-and-ride lots are located at:
  - Route 34 at US Route 22/322 (Newport/New Bloomfield) for commuters headed northwest,
  - Bucks Valley Road at US 11/15 between New Buffalo and Liverpool for commuters headed north,
  - at Route 147 at US Route 22/322 for commuters headed northeast,
  - at PA 225 at US Route 22/322 in Dauphin for commuters headed east, and
  - at the Summerdale Plaza along US Route 11/15 for commuters headed into the Capital Region. (Source: Commuter Services of PA's Park & Ride Interactive Map)

#### **Other Anecdotes and Observations**

- The few sidewalks in Wheatfield Township do not function as a system because they lack interconnection. There are sidewalks and crosswalks in some of the township's residential developments but the networks don't always extend into adjacent properties nor are not connected to any community-wide network. The lack of sidewalks may discourage walking as a means of transportation and promotes driving, even to destinations that are within walking distance. Fewer than one percent of the township's resident workers walk to work.
- There are no formal bicycle lanes on the roads in the Township, though PA 274 has wide shoulders in which some residents are comfortable walking and biking. Without a marked bicycle network, inexperienced riders may feel intimidated riding on roadways.
- There are no cab companies providing alternative transportation services in Wheatfield Township or in Perry County.
- **Intercity bus service** is available to Wheatfield Township residents through Fullington Trailways, which makes stops in nearby Newport in serving the State College-Harrisburg axis. From the Harrisburg Mall, MegaBus also provides direct intercity bus connections to Philadelphia, Pittsburgh, and State College, as well as to Baltimore, Buffalo, Toronto, and Washington, D.C.
- There are no commercial or general aviation public-use airports in Perry County. The Harrisburg International Airport (30 miles from Roseglen) is the closest commercial airport with scheduled service.
- The sole operating rail line in the township is a Norfolk Southern freight line that runs tangent to the Juniata River. Linton Hill Road (T-347) crosses the rail line at-grade at the Village of Aqueduct.
- The nearest passenger rail service is available from the Harrisburg Transportation Center (20 miles from Roseglen). Passenger trains on the Keystone East Corridor currently operate at speeds up to 110 mph between Harrisburg and Philadelphia, and this part of the corridor has seen ridership grow from 891,764 passengers in 2006 to 1.29 million in 2009 (45% increase).
- PennDOT is currently studying the feasibility of expanded passenger rail service on what is termed as the "Keystone West" line between Harrisburg and Pittsburgh. Currently Amtrak's

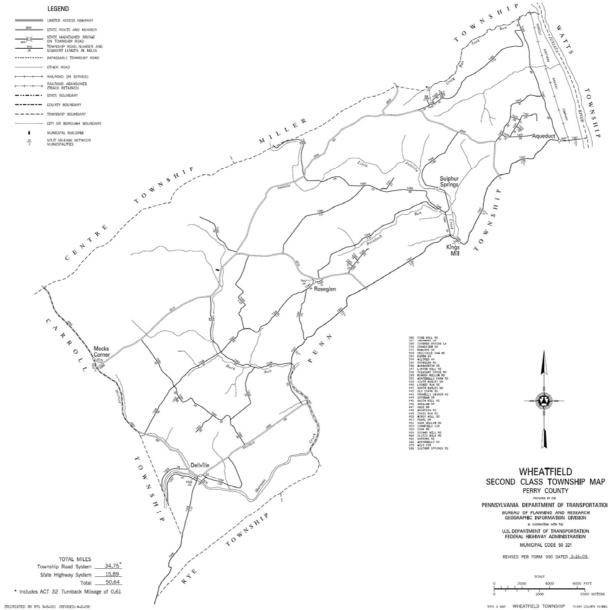
*Pennsylvanian* service runs one roundtrip per day between the two cities with seven stops in between. With only one roundtrip that takes 5½ hours in each direction, passenger rail service between Harrisburg and Pittsburgh is not attractive for business persons and other frequent travelers; thus, ridership remains relatively low.

• Wheatfield Township, Perry County, lying within the service area of the Harrisburg Metropolitan Planning Organization (MPO), is currently in "attainment" with national ambient air quality standards.<sup>23</sup> This determination was made by the EPA in July 2007. In maintaining this designation, the MPO and its member municipalities continue to consider the air quality impacts of any proposed transportation plans, programs or projects. The MPO is required to show that programmed projects will not yield pollutants greater than the established 2009 and 2018 emission budgets.

<sup>&</sup>lt;sup>23</sup> 8-hour ozone National Ambient Air Quality Standards (NAAQS)

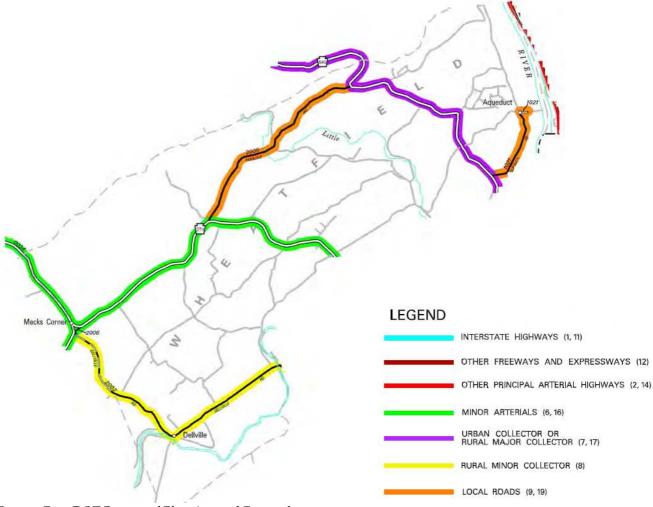
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#### Data



#### Figure 1: PennDOT Type 5 Map, Wheatfield Township Roadway Network

Source: PennDOT Bureau of Planning and Research



## Figure 2: Functional Classification of State Roadways

Source: PennDOT Bureau of Planning and Research

## **Summary 1: Functional Classifications**

- **Rural Principal Arterial** roadways link cities and larger towns and form an integrated network providing interstate and inter-county service.
- **Rural Minor Arterial** roadways generally designed to accommodate relatively high overall travel speeds with a focus on through movement for trip lengths and travel densities greater than those predominantly served by lower-order roads.
- **Rural Major Collector** roadways generally serve travel needs that are intra-county in nature with shorter trip lengths and slower speeds.
- **Rural Minor Collector** These roads collect traffic from local roads and link locally important traffic generators with rural areas.
- **Local** roadways are the lowest order of roadway with the slowest speeds and shortest travel distances, providing direct access to trip origins and destinations.

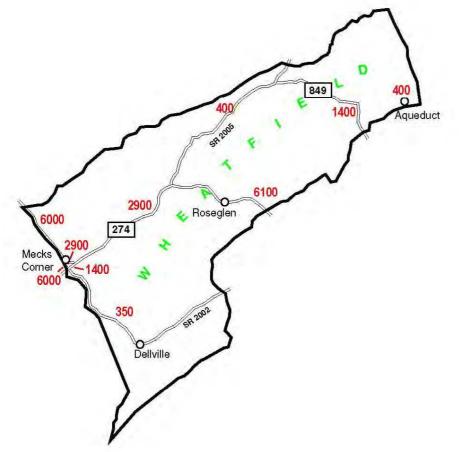
Source: Gannett Fleming, Inc.

## Summary 2: PennDOT Highway Transfer Program

The 12,000 miles of functionally classified local roads are eligible for PennDOT's Highway Transfer or "Turnback" program. Roughly half of all municipalities in the state have participated in PennDOT's Highway Transfer Program. Through this program, PennDOT provides an annual maintenance payment of \$4,000 per Turnback mile, in exchange for municipal ownership and maintenance.

Source: Gannett Fleming, Inc.

## Figure 3: Annual Average Daily Traffic (AADT), 2009



Source: PennDOT Bureau of Planning and Research

| Table 35: Daily  | Vehicle Miles     | of Travel (000s | ), 1999, 2004, 2009 |
|------------------|-------------------|-----------------|---------------------|
| i ubic boi buily | v cificie ivilieo |                 |                     |

| Municipality                                    | 1999      | 2004      | 2009      |  |  |
|---|-----------|-----------|-----------|--|--|
| Wheatfield Township                             | 61,937    | 65,205    | 56,960    |  |  |
| Perry County                                    | 1,273,436 | 1,238,611 | 1,271,755 |  |  |
| Pennsylvania 210,278,000 222,026,000 213,428,   |           |           |           |  |  |
| Source: PennDOT Bureau of Planning and Research |           |           |           |  |  |

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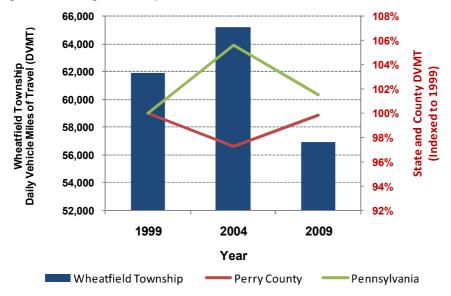


Figure 4: Change in Daily Vehicle Miles of Travel, 1999, 2004, 2009

Source: PennDOT Bureau of Planning and Research

## **Summary 3: Bridge Condition Classifications**

Functionally obsolete bridges refer to bridge design that is outdated, e.g. lower load carrying capacity, narrower shoulders or less clearance underneath than bridges built to the current standard. Bridges that are structurally deficient describe structures where the deck, superstructure, substructure, or culvert is rated in "poor" condition by inspection ratings, its load carrying capacity is significantly below current design standards, or a waterway below frequently overtops the bridge during floods. Source: Gannett Fleming, Inc

#### Summary 4: PennDOT's Bridge Management System

PennDOT's Bridge Management System (BMS) is a tool for asset management as well as monitoring progress of Pennsylvania's bridge program. Based on federal requirements, all bridges greater than 20 feet in length are required to be inspected every two years, regardless of ownership, and inspection data is included in BMS. Therefore, there is considerable information about all bridges over 20 feet in length available from BMS.

Additionally, PennDOT inspects and includes data on all state-owned bridges between eight and 20 feet in length. (There are no inspection requirements for local bridges less than 20 feet.) None of the state-owned bridges in the township are functionally obsolete, yet two of them, the Dellville bridge and the Montebello bridge, are considered to be structurally deficient. None of the state-owned bridges is posted or closed. Of the five township-owned bridges greater than 20 feet in length, two (40 percent) are rated as being functionally obsolete and classified as structurally deficient. (This compares to the state average of 34 percent of all locally-owned bridges that meet this criterion.) These same two bridges have also been posted. Details on the location and condition of township-owned bridges are highlighted in Table 37. It

should be noted that there are additional, smaller structures and box culverts that are not included in this inventory. Information on these particular assets is either incomplete or unavailable at the state level.

Table 36 provides more detail on the condition of these assets.

Of the five township-owned bridges greater than 20 feet in length, two (40 percent) are rated as being functionally obsolete and classified as structurally deficient. (This compares to the state average of 34 percent of all locally-owned bridges that meet this criterion.) These same two bridges have also been posted. Details on the location and condition of township-owned bridges are highlighted in Table 37. It should be noted that there are additional, smaller structures and box culverts that are not included in this inventory. Information on these particular assets is either incomplete or unavailable at the state level.

| 1 able 50. 5ta | Table 50. State-owned bridges > 6 Feet in Length |                              |        |              |               |                       |      |  |
|----------------|--|------------------------------|--------|--------------|---------------|-----------------------|------|--|
| State Route    | Location   | Feature Intersected          | Length | Deck<br>Area | Year<br>Built | Sufficiency<br>Rating | AADT |  |
| SR 2002        | 0.5 mi south of<br>Mecks Corner                  | Trib Shermans Creek          | 19′    | 518.7        | 1946          | 69.7                  | 360  |  |
| SR 2002        | 1 mi north of<br>Dellville                       | Trib Shermans Creek          | 13′    | 438.1        | 1959          | 96.7                  | 360  |  |
| SR 2002        | Dellville  | Trib Shermans Creek          | 13′    | 435.5        | 1920          | 53.7                  | 360  |  |
| SR 2005        | 4 mi northwest of<br>Duncannon                   | Trib Little Juniata<br>Creek | 10′    | 600.0        | 2001          | 94.2                  | 406  |  |
| SR 2005        | Paradise Road                                    | Little Juniata Creek         | 70′    | 2,366.0      | 1961          | 37.4                  | 406  |  |

#### Table 36: State-owned Bridges >8 Feet in Length

Source: PennDOT Bridge Management System (BMS) Report A for Internet, PA Highway Bridges, Bridges on State Route System, Length 8' or Greater, 3/30/11

#### Table 37: Locally-owned Bridges > 20 Feet in Length

| Route              | Feature<br>Intersected  | Length       | Deck<br>Area | Year<br>Built | Sufficiency<br>Rating | AADT | Notes  |
|--------------------|-------------------------|--------------|--------------|---------------|-----------------------|------|--|
| Dark Hollow Rd     | Dark Run                | 27′          | 882.9        | 1998          | 99.0                  | 50   |  |
| Pine Hill Rd       | Shermans Creek          | 174′         | 2,784.0      | 1810          | 26.9                  | 25   | Covered<br>Bridge;<br>County-owned;<br>SD; Posted,<br>4 tons |
| Pine Hill Rd       | Shermans Creek          | 19 <b>2'</b> | 6,336.0      | 2008          | 99.8                  | 475  | County-owned   |
| Montebello Rd      | Little Juniata<br>Creek | 32′          | 588.8        | 1930          | 81.0                  | 75   | Stone-arch   |
| Sulphur Springs Rd | Little Juniata<br>Creek | 55′          | 665.5        | 1904          | 19.5                  | 100  | SD; Posted,<br>10 tons                                       |

Source: PennDOT Bridge Management System (BMS), Report B for Internet, PA Highway Bridges, Bridges on Local Route System, Length 20' or Greater, 3/30/11

#### **Interview 1: PennDOT District 8-9**

Maintenance work on state-owned roadways in Wheatfield Township is managed by PennDOT's Maintenance District 8-9, located in Bloomfield Borough. No major roadway or bridge repairs or projects are currently scheduled within the township. The only work scheduled is routine maintenance, such as brushing, inlet cleaning, shoulder cutting, crack sealing, and some base repair.

#### Summary 5: Harrisburg Area Transportation Study 2011-14 Transportation Improvement Program

The Harrisburg Area Transportation Study (HATS) serves as PennDOT's "Planning Partner" for federal and state-funded transportation projects. Projects can be funded from a variety of sources, including Appalachian Regional Commission (ARC) funds, Surface Transportation Program (STP) funds, and a variety of smaller funding elements, such as those for traffic signals and park and rides Congestion Management and Air Quality (CMAQ) and Transportation Enhancements (TE) program funds. Multi-year projects are programmed and placed onto a regional Transportation Improvement Program, or TIP, which competitively ranks projects based on projected funding. HATS' 2011-14 Highway TIP includes \$235.4 million in projects. Future projects recommended as part of the comprehensive planning process may become candidates for a future TIP.

HATS' 2011-14 TIP includes Wheatfield Township's top transportation priority: the replacement of the 55foot Sulphur Springs Road (T-506) steel bridge over Little Juniata Creek. The bridge is classified as structurally deficient and has been considered to be in poor condition since a 1999 bridge inspection report. As part of the project, the bridge will be widened from one to two lanes. An estimated completion date has been set for December 2018. HATS' 2011-14 TIP includes only \$302,850 for preliminary engineering work; subsequent engineering phases would be funded in future years<sup>24</sup>. Eighty percent of the project's costs will be federally funded. Table 38 shows the project's funding summary.

| FFY  | Total                        | Federal  | State  | Local  |
|------|------------------------------|--|--|--|
| 2012 | \$302,848                    | \$242,278  | \$45,427   | \$15,143   |
| 2015 | \$200,000                    | \$160,000  | \$30,000   | \$10,000   |
| 2017 | \$50,000                     | \$40,000   | \$7,500  | \$2 <i>,</i> 500   |
| 2017 | \$50,000                     | \$40,000   | \$7,500  | \$2 <i>,</i> 500   |
| 2018 | \$1,000,000                  | \$800,000  | \$150,000  | \$50 <i>,</i> 000  |
|      | \$1,602,848                  | \$1,282,278  | \$240,427  | \$80,143   |
|      | 2012<br>2015<br>2017<br>2017 | 2012   \$302,848     2015   \$200,000     2017   \$50,000     2017   \$50,000     2018   \$1,000,000     \$1,602,848   \$1,602,848 | 2012   \$302,848   \$242,278     2015   \$200,000   \$160,000     2017   \$50,000   \$40,000     2017   \$50,000   \$40,000     2018   \$1,000,000   \$800,000 | 2012     \$302,848     \$242,278     \$45,427       2015     \$200,000     \$160,000     \$30,000       2017     \$50,000     \$40,000     \$7,500       2017     \$50,000     \$40,000     \$7,500       2018     \$1,000,000     \$800,000     \$150,000       \$1,602,848     \$1,282,278     \$240,427 |

#### Table 38: Sulfur Springs Road - Bridge Funding Summary

Source: Harrisburg Area Transportation Study (HATS)

<sup>&</sup>lt;sup>24</sup> Pennsylvania is required to spend between 15 and 35 percent of its federal bridge allocation on structures similar to the Sulphur Springs Road bridge that are "off the system".

## Summary 6: Wheatfield Township Transportation Maintenance Budget, Fiscal Year 2011

The township's fiscal year 2011 budget includes \$265,000 for transportation-related costs, including winter maintenance, operation and maintenance of traffic control devices, and machinery and equipment. This represents a 14 percent increase in spending over 2010 levels, stemming largely from the planned acquisition of a new tractor (confirm).

# Summary 7: PA Department of Community and Economic Development, Municipal Statistics Reports, 1998-2009

Data from the state Department of Community and Economic Development (DCED) indicate that township spending on "public works" (streets and roadways) has historically ranged anywhere from 30 to 60 percent of overall expenditures. For the decade ending 2009, spending on roads and bridges averaged 41 percent of total expenditures. As a share of overall expenditures, spending on streets and roadways has increased after several years of decline in the earlier part of the last decade. Over the past six years, spending on roads and bridges has increased, although its share of total expenditures has declined, overall. Since 2004, transportation-related expenditures have increased by over 50 percent, compared to a 173 percent increase in total expenditures over the same period, as shown in Figure 5.

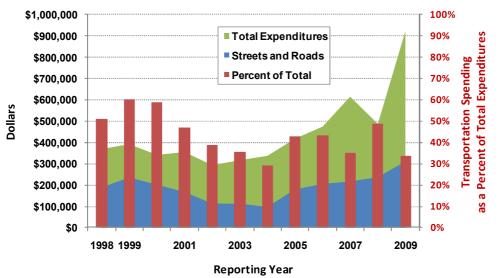


Figure 5: Transportation Spending as a Percent of Total Expenditures for Wheatfield Township

Source: PA Department of Community and Economic Development, Municipal Statistics Reports, 1998-2009

# Summary 8: Municipal Liquid Fuels Program

Maintenance and improvements to the township's locally-owned roadway system are largely accomplished using Liquid Fuels revenues that are disbursed by PennDOT's Bureau of Municipal Services. The township's share of this funding is determined on a formula basis, expressly the township's share of total population, as well as municipal roadway mileage. (Total municipal-owned roadway mileage is 34.75 miles, while the 2010 census put the township population at 3,334.) The formula for this disbursement is

steady and the amount typically increases from year to year based on Daily Vehicle Miles of Travel (DVMT), which in turn generates the gas tax revenues that capitalize the liquid fuels amounts.

Amounts have varied slightly in recent years from fiscal year 2011's distribution of \$117,208, which was up 2.3 percent from the year before, yet down overall from 2009's total of \$119,234. This revenue supported 44 percent of the township's 2011 transportation budget. The combination of a weak economy, coupled with ongoing efficiencies in vehicle fuel consumption, has negatively impacted liquid fuels revenues statewide. This revenue to Wheatfield Township would only increase appreciably would be if there were a legislative change in the funding formula or if there were a state gas tax increase.

#### Summary 9: Journey to Work Mode Choice, US Census Bureau

Perry County is a major exporter of labor to adjoining urban areas of Harrisburg and Carlisle. The county exports over half of its workforce, making transportation a critical government service. Even more significant is the rate at which the township's resident workers carpool to work – a full five percentage points higher than the state rate. The relative remoteness of Wheatfield Township and lack of fixed-route public transportation means that its workers are very reliant on the private automobile and the roadway network as a means of journey to work. Data from the American Community Survey<sup>25</sup> indicate that the township workers' reliance on the private automobile is only increasing, as demonstrated in Table 39.

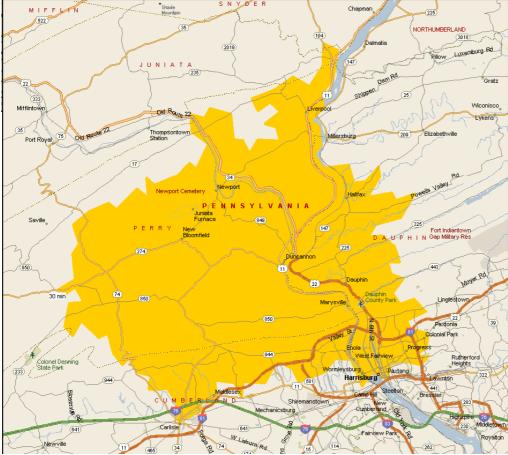
Data from the American Community Survey indicate that the mean travel time to work for Wheatfield Township's resident workers is approximately 32 minutes.

| Geography                              | Wheatfield ' | Township | Perry C | ounty   | Pennsy    | lvania    |
|--|--------------|----------|---------|---------|-----------|-----------|
| Period                                 | 2000         | 2005-09  | 2000    | 2005-09 | 2000      | 2005-09   |
| Total Workers (age 16 and above)       | 1,695        | 1,735    | 21,391  | 22,028  | 5,556,311 | 5,755,001 |
| Single Occupant<br>(car, truck or van) | 78.7%        | 85.2%    | 77.8%   | 77.9%   | 76.5%     | 76.4%     |
| Carpool                                | 15.6%        | 10.0%    | 15.2%   | 13.5%   | 10.4%     | 9.5%      |
| Transit                                | 0.8%         | 0.0%     | 0.5%    | 0.3%    | 5.2%      | 5.4%      |
| Walked                                 | 1.0%         | 0.5%     | 2.2%    | 2.1%    | 4.1%      | 4.1%      |
| Other means                            | 0.4%         | 0.8%     | 0.7%    | 0.7%    | 0.8%      | 1.2%      |
| Worked at Home                         | 3.6%         | 3.5%     | 3.6%    | 5.5%    | 3.0%      | 3.4%      |
| Mean Travel Time to Work (min)         | 34.9         | 32.2     | 34.7    | 30.9    | 25.2      | 25.4      |
|  |              |          |         |         |           |           |

#### Table 39: Journey to Work Mode Choice, 2005-2009; 2000

Source: US Census Bureau

<sup>&</sup>lt;sup>25</sup> The American Community Survey (ACS) is a continuous monthly survey conducted by the U.S. Census Bureau which began in 2005. Most of the questions in the ACS are the same (or similar) to the Census 2000 long form.



## Figure 6: Iso-chronal Map of 30-Minute Drive Time from Village of Roseglen

Source: Microsoft map point; Gannett Fleming

# **Interview 2: Perry County Transportation Authority**

Demand-responsive transportation service is available to Wheatfield Township residents under the auspices of the Perry County Transportation Authority (PCTA). Demand-responsive refers to services in which the actual routing and schedule of the vehicles is determined by passenger reservations and requests. Clients must make reservations two working days in advance, although the Authority will try to accommodate clients on shorter notice. PCTA has approximately 40-50 clients in Wheatfield Township.

PCTA provides transportation services to destinations throughout the county, as well as Cumberland County between Carlisle and the Susquehanna River, and Dauphin County along the US 22/322 corridor from Clarks Ferry into and including Harrisburg. Finally, PCTA also serves the PA 39 corridor from Harrisburg to Hershey and Derry Township. Regularly served destinations include: Carlisle, Camp Hill, and all of Perry County. PCTA maintains a fleet of 26 vehicles, but not all are handicapped accessible. PCTA's hours of operation are between 8:00 am to 4:00 pm on weekdays with 9:30 am and 2:00 pm being the busiest period.

Service is provided on a door-to-door basis and primarily caters to dependent population groups—senior citizens, persons with disabilities, and low income individuals who receive subsidized or free fares through various state and federal specialized transportation funding programs as long as they meet certain eligibility requirements. Overall service is funded through several programs, including the successful Persons with Disabilities Program, or PwD. Others include the Medical Assistance Transportation Program (MATP), and Mental Health/Mental Retardation (MH/MR), of which PCTA contracts with the Pennsylvania Department of Public Welfare (DPW) for their clients. DPW, in turn, refers their clients to PCTA for their transportation needs.

Perry County Transportation Authority is interested in the possibility of one day providing deviated fixed route service, where routes and times are fixed though off-route pick-ups and drop-offs maybe scheduled, as another option in its service portfolio.

## Excerpt 23: Commuter Services of PA<sup>26</sup>

Commuter Services is a program of the non-profit Susquehanna Regional Transportation Partnership and is funded by federal Congestion Mitigation & Air Quality funds. Through free services, Commuter Services works to reduce traffic congestion by helping commuters find alternatives, other than driving alone, and by reaching out to employers so they can help their workforce find those options. Using alternatives helps improve air quality, and fewer cars in rush hour can mean safer highways, too. Our free services are extended to more than one million commuters who live or work in Adams, Berks, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, Perry and York counties and to the employers in these participating counties. The program is the vision of the chambers, transit agencies and planning organizations, including the Harrisburg Metropolitan Planning Organization (Harrisburg Area Transportation Study, HATS), who developed and who support Commuter Services of Pennsylvania.

<sup>&</sup>lt;sup>26</sup> Commuter Services of PA, <u>http://pacommuterservices.com/index.html</u>, accessed August 23, 2011.

There are a variety of services that municipal government and community organizations provide to protect the health, safety and welfare of local citizens. The quality and cost of these services, in addition to affordable housing and job opportunities, influence the overall quality of life and desirability of a given community. This profile characterizes the educational, medical, safety, and recreational services available in or near Wheatfield Township.

## **Findings of the Data**

- The Susquenita School District is the second largest in Perry County. It serves eight municipalities, including Wheatfield Township—a resident population of 14,612 across 91.6 square miles. All three school facilities are located in Duncannon. Student enrollment at all three Susquenita School District schools has declined over the past five years, however the district's enrollment is still the second largest in Perry County. (Excerpt 23, Table 40)
- Two private schools near Wheatfield Township, as well as others in Perry County and the Capital Region, offer alternative education programs for grades K-12. (Table 40)
- There are at least 20 institutions of higher education located in Perry County and the Capital Region. They offer a variety of curricula, ranging from including trade and technical programs to business degrees, liberal arts, community college and university degrees. (Table 41)
- The Bloomfield and Newport Public Libraries are the two closest libraries to Wheatfield Township. Both are members of the Perry County Library System. The Library System has been campaigning for additional local financial support to leverage state grants. (Excerpts 25 and 26, Table 42)
- There are no large health care facilities within Perry County. The nearest medical care facility is the Duncannon Family Health Center in Penn Township. Wheatfield Township residents rely on hospitals in the Capital Region for health care. There are three small to medium-sized nursing homes in the surrounding region. (Excerpt 26, Tables 43 and 44)
- Wheatfield Township is served by nearby fire companies and EMS units to provide fire protection and emergency medical services. The Duncannon Fire Company serves the central and eastern portion of the township and the New Bloomfield Volunteer Fire Company serves the western portion of the township. Both are volunteer organizations. (Excerpt 27, Table 45)
- Wheatfield Township residents rely on state police based in Newport to respond to emergency calls. (Excerpt 27)
- Wheatfield Township generally follows a prepared but not adopted Act 537 Sewerage Plan for guidance on sewage disposal methods and standards. Some residents objected to the proposed on-lot disposal management provisions that required pumping of the septic tank every three years; the supervisors yielded to the concern and tabled the plan adoption. The plan is generally followed in all other regards. The 1994 Perry County Sewerage Plan identified five areas suspected of on-lot sewage disposal problems and one private facility problem area. The plan made no recommendations to address these areas. (Excerpt 30)
- Trash collection is contracted by residents with private haulers. Solid waste collected from residents is disposed at one of eleven landfills for the Harrisburg incinerator. (Excerpt 31)
- There is public access to athletic, social and nature-based recreation activities at the township park. Wagner Park is the largest municipal park in Perry County. Approximately one-third of the 281 acres

has been developed for active (physical) and social recreation. The remaining portion is wooded and has a one-mile marked trail for hiking; others are planned. A master site plan dated 2003 outlines existing facilities (one building and one large and one small multi-purpose field, each with one diamond and one flat field) and proposed facilities: one large multi-purpose field, one tennis court/in-line hockey rink, basketball court, four horseshoe pits, playground, two pavilions, and two small and two large parking areas.

- Additional recreational activities are supported on state and private lands, and at nearby municipal and county parks. State game lands and the Duncannon Sportsmen Association property in Wheatfield Township provide conservation and hunting lands for a variety of game. The Juniata River and Shermans Creek offer opportunities for boating and fishing where access is available. Additional sports fields and courts, picnic areas, nature areas, and two swimming pools are available in nearby municipal and county parks. (Excerpts 32 and 33, Table 46)
- The Perry County Greenways and Open Space Plan prioritizes land conservation followed by greenway and trail connections, then expanded recreational opportunities. The two recommendations most relevant to Wheatfield Township are to develop a water trail along Shermans Creek and to develop a rail-trail on the abandoned rail corridor along the former Sherman's Valley Railroad right-of-way. (Excerpt 36)

## Data

## Excerpt 24: Public Schools<sup>27</sup>

Susquenita School District is located in the southeastern region of Perry County and includes Penn, Rye, Watts and Wheatfield Townships and Duncannon, Marysville and New Buffalo Boroughs, as well as Reed Township in Dauphin County. Susquenita School District ranks second in enrollment [1,873 in 2010] to West Perry School District [2,689 in 2010], with approximately [one-sixth (16 percent] of the area of the County. Susquenita School District educates [29] percent of the County's total student population. It has the highest calculated student density of [20.4] students per square mile. The district administers three (3) school building facilities. They are the Susquenita Elementary, Middle and High Schools.

Susquenita School District is the closest district in the County to the Harrisburg Metropolitan Area. For the past five years, the student population has been trending downward – approximately 2 percent each year. The district projects that the rate of decline will slow over the next five year before leveling off and potentially increasing in the mid to late 2010s. Capacity is not a concern at this time; however, heating and air conditioning upgrades and replacements will be a major expense in the next five years. The Middle School will be the first facility addressed (Spring 2012).

<sup>&</sup>lt;sup>27</sup> Chapter VIII, Community Facilities and Utilities, Perry County Comprehensive Plan, 2007.

| Table 40. Tublic and Thvate Educational Facilities, K-12 |   |                  |                          |                          |                             |
|--|---|------------------|--------------------------|--------------------------|-----------------------------|
| Name   | Location  | Grades<br>Taught | Enrollment,<br>Fall 2005 | Enrollment,<br>Fall 2010 | Enrollment<br>Change, 05-10 |
| Public Schools   |   |                  |                          |                          |                             |
| Susquenita<br>Elementary School                          | 101 Susquenita Drive<br>Duncannon, PA 17020-9582  | K-4              | 697                      | 655                      | -42<br>-6.0%                |
| Susquenita<br>Middle School                              | 200 Susquenita Drive<br>Duncannon, PA 17020-9582  | 5-8              | 744                      | 573                      | -171<br>-23.0%              |
| Susquenita<br>High School                                | 309 Schoolhouse Road<br>Duncannon, PA 17020-9582  | 9-12             | 760                      | 645                      | -115<br>-15.1%              |
| Private Schools  |   |                  |                          |                          |                             |
| Carson Long<br>Military Institute                        | 200 N Carlisle Street<br>New Bloomfield, PA 17068 | 6-12             | 193                      | 127                      | -66<br>-34.2%               |
| Community<br>Christian<br>Academy                        | 55 West Shortcut Road<br>Newport, PA 17074        | K-12             | 40                       | 8                        | -32<br>-80.0%               |

#### Table 40: Public and Private Educational Facilities, K-12

Source: Perry County Comprehensive Plan, 2007; PA Department of Education, <u>www.education.state.pa.us</u> accessed July 5, 2011

| Name                                 | Facility                                   | Location                        |
|--------------------------------------|--|---------------------------------|
| Central Pennsylvania Diesel          |  | 1718 Old Trail Road             |
| Institute                            | Trade Programs; Private Licensed School    | Liverpool, PA 17045             |
| AAA School of Trucking, Ltd.         |  | 6003 Jonestown Road             |
|                                      | Private Licensed School                    | Harrisburg, PA 17112            |
| AASP-PA Automotive School            |  | 2151 Greenwood Street           |
|                                      | Trade Programs; Private Licensed School    | Harrisburg, PA 17104            |
| Capitol Bartending School            |  | 2612 N Third St                 |
|                                      | Private Licensed School                    | Harrisburg, PA 17110            |
| Central Pennsylvania College         |  | 107 College Hill Rd, PO Box 309 |
|                                      | Private College and University             | Summerdale, PA 17093-0309       |
| Diskingen Cellege                    | Private, Liberal Arts                      | 584 W. Louther St.              |
| Dickinson College                    | Private, Liberal Arts                      | Carlisle, PA 17013              |
| Harrisburg Area Community<br>College | Community College                          | 1 HACC Dr, Harrisburg, PA 17110 |
| ITT Technical Institute              | Specialized Associate Degree-Granting;     | 449 Eisenhower Blvd, Ste 100    |
|                                      | Trade Programs; Private Licensed School    | Harrisburg, PA 17111            |
| Kaplan Career Institute              | Specialized Associate Degree-Granting;     |                                 |
|                                      | Trade Programs; Business Programs; Private | 5650 Derry Street               |
|                                      | Licensed School                            | Harrisburg, PA 17111            |
| Keystone Technical Institute         | Specialized Associate Degree-Granting;     |                                 |
|                                      | Trade Programs; Business Programs;         | 2301 Academy Drive              |
|                                      | Private Licensed School                    | Harrisburg, PA 17112            |
| McCann School of Business &          | Specialized Associate Degree-Granting;     | 346 York Road                   |
| Technology                           | Business Programs; Private Licensed School | Carlisle, PA 17013              |
| Messiah College                      |  | One College Ave, PO Box 3000    |
|                                      | Private College and University             | Grantham, PA 17027-0000         |
| New Horizons Learning                |  | 5095 Ritter Rd Ste 114          |
| Institute of Pennsylvania            | Private Licensed School                    | Mechanicsburg, PA 17055         |

## **Table 41: Institutions of Higher Education**

# **Community Facilities and Services Profile**

| Name   | Facility                                   | Location                         |  |  |
|--|--|----------------------------------|--|--|
|  | Facility                                   |                                  |  |  |
| Penn State/ Dickinson School   |  | 150 South College Street         |  |  |
| of Law   | State-Related Commonwealth University      | Carlisle, PA 17013-2899          |  |  |
| Penn State/Capital College-  |  | 777 W. Harrisburg Pike           |  |  |
| Harrisburg   | State-Related Commonwealth University      | Middletown, PA 17057-4898        |  |  |
| Penn State/College of  |  | 500 University Drive, PO Box 850 |  |  |
| Medicine   | State-Related Commonwealth University      | Hershey, PA 17033-0000           |  |  |
| Schneider Training Academy   |  | 1 Schneider Drive                |  |  |
|  | Private Licensed School                    | Carlisle, PA 17013               |  |  |
| Shippensburg University of   |  | 1871 Old Main Drive              |  |  |
| PA   | State University                           | Shippensburg, PA 17257-2299      |  |  |
| Widener University/  |  | 3800 Vartan Way                  |  |  |
| Harrisburg Campus  |  | PO Box 69382                     |  |  |
|  | Private College and University             | Harrisburg, PA 17106-9382        |  |  |
| YTI Career Institute - Capital   | Specialized Associate Degree-Granting;     | 401 Winding Hill Rd              |  |  |
| Region   | Business Programs; Private Licensed School | Mechanicsburg, PA 17055          |  |  |
| Source: Perry County Comprehensive Plan, 2007; PA Department of Education, <u>www.education.state.pa.us</u> accessed |  |                                  |  |  |

Source: Perry County Comprehensive Plan, 2007; PA Department of Education, <u>www.education.state.pa.us</u> accessed July 5, 2011

## Excerpt 25: Libraries<sup>28</sup>

A great source of cultural, technical and general information from the past, present and for the future can be found in libraries. The Perry County Library System was established in 1980 to evaluate the current system and to assist and direct the County libraries to ultimately meet the basic Pennsylvania standards for library systems. Managed by seven (7) volunteer board members, the Perry County Library System works to unify the libraries of the County for better coordination, resource management and access of library programs and materials for all of the County's residents. Currently there are four (4) member libraries within the system. In addition to the member libraries there are three (3) other libraries in the County.

#### Table 42: Libraries

| Name   | Location  |
|--|---|
| Bloomfield Public Library                    | Borough Bldg, 23 E McClure St, New Bloomfield, PA 17068 |
| Community Library of Western Perry<br>County | PO Box 56, Blain, PA 17006                              |
| Marysville-Rye Public Library                | 198 Overcrest Rd., Marysville, PA 17053                 |
| Newport Public Library                       | 316 N 4th St, Newport, PA 17074-1203                    |
| Perry County Library System                  | 198 Overcrest Rd, Marysville, PA 17053-1157             |

Source: Perry County Comprehensive Plan, 2007; PA Department of Education, <u>www.education.state.pa.us</u> accessed July 5, 2011

#### Excerpt 26: Perry County Library System<sup>29</sup>

The Perry County Library System has been under financial duress for some time. Perry County is missing out on Pennsylvania public library matching grants simply because it hasn't raised enough per person (or \$5 per capita) funding to meet state standards. As a result, it is one of the last Pennsylvania counties that does not meet state requirements to receive state funding.

<sup>&</sup>lt;sup>28</sup> Chapter VIII, Community Facilities and Utilities, Perry County Comprehensive Plan, 2007.

<sup>&</sup>lt;sup>29</sup> <u>http://www.perrycountypl.org</u>, accessed July 6, 2011

That means that fifty-four percent of residents in Perry County do not have the free access to books, videos, audiotapes, computers or magazines available to other Pennsylvania citizens. As a result, over half our population remains "legally unserved." A 1998 comparison of 14 other rural PA counties with similar populations shows that per capita revenues averaged \$7.50, or 150% higher than Perry County.

## Excerpt 27: Healthcare Facilities<sup>30</sup>

There are no large healthcare facilities within the County so Perry County residents rely on hospitals in and around Harrisburg for advanced health care. A couple of [these hospitals] 3 have opened satellite operations such as the Duncannon Family Health Center in Penn Township, and Harrisburg Medical Management in Marysville Borough.

#### Table 43: Hospitals

| Name   | Location          |
|--|-------------------|
| Community General Osteopathic Hospital-Pinnacle Health               | Harrisburg, PA    |
| Harrisburg Hospital-Pinnacle Health                                  | Harrisburg, PA    |
| The Polyclinic Hospital-Pinnacle Health                              | Harrisburg, PA    |
| Penn State Hershey Medical Center and Penn State College of Medicine | Hershey, PA       |
| Holy Spirit Hospital and Health System                               | Camp Hill, PA     |
| Carlisle Regional Medical Center                                     | Carlisle, PA      |
| Health South Rehabilitation of Mechanicsburg                         | Mechanicsburg, PA |
|  | Mechanicsburg, PA |

Source: Perry County Comprehensive Plan, 2007

#### **Table 44: Nursing Homes**

| Name                               | Location       | Ownership  | Medicare/Medicaid | Beds |
|------------------------------------|----------------|------------|-------------------|------|
| Kinkora-Pythian Home               | Duncannon      | Non-Profit | Yes/Yes           | 60   |
| Perry Village, Inc.                | New Bloomfield | Profit     | Yes/Yes           | 123  |
| Stone Bridge Rehabilitation Center | Penn Township  | Profit     | Yes/Yes           | 60   |

Source: Perry County Comprehensive Plan, 2007; PA Department of Health, <u>www.portal.health.state.pa.us</u>, accessed July 6, 2011

#### Excerpt 28: Police and Fire Protection<sup>31</sup>

In Perry County there are twelve (12) fire companies established to serve in fire protection and ambulance services, as well as the newly established Advance Life Support Station in Duncannon. ... The fire companies have mutual aid agreements with companies of neighboring communities.

There are six (6) police departments..., as well as one State Police Barracks in Newport. The municipalities served by a local police force are: Duncannon Borough, Marysville Borough, Newport Borough, Oliver Township, Penn Township, and Rye Township. The remaining twenty-four (24) municipalities [including Wheatfield Township] are served by the Pennsylvania State Police.

<sup>&</sup>lt;sup>30</sup> Chapter VIII, Community Facilities and Utilities, Perry County Comprehensive Plan, 2007.

<sup>&</sup>lt;sup>31</sup> Chapter VIII, Community Facilities and Utilities, Perry County Comprehensive Plan, 2007.

| Table 45: Emergency Services |                                 |  |  |  |
|------------------------------|---------------------------------|--|--|--|
| Fire Company                 | Address/Location                | Primary Service Area                         |  |  |
|                              |                                 | Duncannon Borough, Reed Township (Dauphin    |  |  |
| Duncannon Fire Company       |                                 | County), Penn Township, Wheatfield Township, |  |  |
| No. 1                        | PO Box 6, Duncannon, PA 17020   | Watts Township, and Miller Township          |  |  |
| New Bloomfield Volunteer     | 23 West High Street, PO Box 22, |  |  |  |
| Fire Company                 | New Bloomfield, PA 17068        | Bloomfield Borough and Centre Township       |  |  |
|                              | 1                               |  |  |  |

**Table 45: Emergency Services** 

Source: Perry County Comprehensive Plan, 2007

## **Interview 3: Duncannon Fire Company**

- Service Area: Serves the eastern portion of Wheatfield Township from the Penn Township line to Dark Hollow Road, Pine Hill Road, and Dellville Dam Road; other portions of Wheatfield Township are served by New Bloomfield Volunteer Fire Company; mutual-aid agreements are in place to ensure fire protection response when the primary company is unable to respond.
- **Stations**: one in Duncannon and a 2<sup>nd</sup> station at 428 New Bloomfield Road, about 1.5 miles from the Penn/Wheatfield Township line
- **Response time**: averages 5 minutes to Wheatfield Township
- Call Volume in 2010: 310 calls to WT, 20-25% of total calls
- **Call Types**: fires, car, brush, auto accident, rescue farm, yard, other; assistance to EMS with lifting; automated external defibrillator (AED) calls for cardiac needs
- Top 3 Call Types: auto accidents, medical assists, and brush fires in 2010
- **5-year Trend Call Volume**: calls are up, especially in 2011; volume depends on many factors including service areas, which change periodically; Duncannon's service area increased in Penn Township in 2010
- **Volunteer Participation:** a steady core group, including some Wheatfield Township residents; company is occasionally short-handed; fortunately company has not had a large daytime incident (for which volunteers are few) with any consequences
- Major Fundraising Activities: fund drive letter, chicken BBQs, cash lottery raffles, and meat raffles
- **Municipal Contributions:** \$30,0000 in 2010 from Wheatfield Township (one-fifth of total budget, and 38 percent of total municipal contribution); any Wheatfield Township contribution above \$20,000 goes to a capital reserve fund for toward capital purchases, e.g. apparatus
- Anticipated Capital Expenditures: Replace rescue/pumper in mid to late 2012

## Interview 4/Excerpt 29: Duncannon Emergency Medical Services, Inc./2010 EMS Report

- Service Area: majority of Wheatfield Township to and including Windy Hill Road; New Bloomfield serves Mecks Corner; automatic mutual-aid is dispatched by County 911 if the primary responder is unavailable
- Stations:
- Response time: average 2min:40sec, up to 6 min with volunteer responders coming from home

- **Call Volume in 2010**: 1,090; 862 emergency patient transports; 20 non-emergency transports; 228 cancellations, refusals, or stand-bys; 257 calls to Wheatfield Township (24 percent of total); about 100 more in Penn Township due to the presence of two nursing homes
- Call Types:
- Top 3 Call Types: medical (breathing, abdominal, falls); standby for fires; vehicles incidents
- **5-year Trend Call Volume:** busiest in 2006 (1,109 calls); low was 1,060 in 2008; anticipates +50-75 calls in 2011 as a result of service area expansion
- **Staff:** two full-time staff one clerical, one operation; 13 part-time EMTs; social volunteers help with fundraising, staff catering events, bingo, and public relations
- Volunteer Participation: about six from Wheatfield Township
- Major Fundraising Activities: billings, service subscriptions, events; yields \$50,000-\$60,000 annually
- **Municipal Contributions:** \$14,000 from Wheatfield Township in 2010 (3.47% of budget); anticipated \$15,000 in 2011 as a result of expanded service area; Wheatfield Township is one of three contributing municipalities (Duncannon, Penn Township); three non-contributing municipalities are New Buffalo, Watts, and Reed Townships; total municipal contribution is less than 8% of total budget
- Anticipated Capital Expenditures:
- Total Manhours: 46,625 hours in 2010; 18,725 volunteer hrs (40 percent; top two were EMS on-call and bingo); 27,900 employee hours (60 percent; top two were EMS on-call and EMS call response/transport)

# Excerpt 30: Perry County Sewerage Plan<sup>32</sup>

In 1994, the Perry County Board of Commissioners adopted a County-Wide Sewerage Plan. The Plan, along with its findings, was adopted as an amendment to the Perry County Comprehensive Plan. The Plan included an evaluation of the existing systems with respect to both their treatment capabilities and service areas. Existing and proposed treatment facilities were examined using as a basis the upgraded water quality criteria established by the Department of Environmental Protection. Studies were made on the unsewered areas to determine where sewers are needed at present and where needs are likely to occur. The findings of the report were based upon the results of the studies.

# Excerpt 31: Perry County Sewerage Plan, 1994

# Chapter 1: Introduction (page 1)

There are 30 municipalities in the county, each of which seeks to cope with its sewerage responsibilities individually, wherever possible. Because the limits of development and the patterns of natural drainage do not always coincide with political boundaries and all sewage discharges in the county eventually flow in to the Susquehanna River, the opportunities for joint planning of sewage facilities are very real.

Chapter 6: Existing Sewage Treatment Facilities & Sewage Facilities Planning

Public Sewerage Treatment Systems and On-Lot Disposal System Information Wheatfield Township (page 49)

- 1. There are no public sewerage treatment facilities in the Township.
- 2. On-lot Disposal Problem Areas

<sup>32</sup> Chapter VIII, Community Facilities and Utilities, Perry County Comprehensive Plan, 2007.

- a. Rose Glen Rose Glen located along Route 274 northwest of Duncannon was identified as having problems.
- b. Pfautz's Mobile Home Park and Adjacent Area along Route 274 this area was identified as a problem area due to the presence of older homes and its proximity to Dark Run.
- c. Wheatfield Estates Located in the northeastern section of the Township, Wheatfield Estates has a high number of sand mounds some of which have failed. Also, this development's on-lot permits were issued by an SEO [Sewage Enforcement Officer] who has since been decertified.
- d. Craig Run Hills This development is located in the northeast section of the Township. Well contamination problems have been identified.
- e. Myerstown Located west of Craig Run Hills, the Myerstown Area has been identified as having gray water surface discharges.

## **Private Facilities**

## Wheatfield Township (page 50)

1. Pfautz's Mobile Home Park – Served by an existing package wastewater treatment plan. Concerns have been expressed with water quality downstream of plant discharge.

## Chapter 7: Design Criteria

## On-Lot Disposal System Design Criteria (page 54)

Before the design for an on-lot disposal system can be finalized there must be a site investigation. Soil tests are needed to determine the passage of water. These tests shall be conducted prior to permit issuance. Percolation test shall also be conducted at this time. An absorption area must be designated and must meet PA DER requirements.

For single family dwelling units the following minimum septic tank design criteria must be utilized. Specific design criteria for absorption areas and sand mounds is available in Chapter 73 of DER's Rules and Regulations.

- a. The minimum liquid capacity of a septic tank for any installation shall be 900 gallons.
- b. For single family dwelling units not served by a community system, a minimum daily flow of 400 gpd shall be used to determine the required septic tank capacity. This figure shall be increased by 100 gallons for each bedroom over three. The daily flow indicated provides for use of garbage grinders, automatic dishwashing machines or dishwashers, and water softeners. Septic tanks may be connected in series to attain requires capacity.

Regulations for design standards for on-lot disposal systems should be enforced through the county. Design information for septic tanks can be obtained from the PA Department of Environmental Resources.

## Chapter 8: Costs of Financing

[No projects were identified for Wheatfield Township.]

#### Chapter 9: Management (page 65)

Municipalities with Adopted Act 537 Sewage Facilities Plans most likely have also adopted a Management and Maintenance Ordinance for on-lot disposal systems. This ordinance generally monitors how often individual systems are pumped out, water testing for those utilizing private wells and proper installation of septic systems. The primary objective of this ordinance is to endure groundwater protection for the residents it serves. A model On-Lot Management Ordinance is included in Appendices III. It should be noted that this is s model (sample) and it <u>SHOULD</u> be reformatted/modified to meet the needs of each municipality. The DER recently modified the requirement for the need of such an ordinance only where sewage malfunctions are widespread in an area and endanger public health by discharging into public areas or private property or threaten to contaminate drinking water.

In conclusion, although providing sewer service is primarily a municipal responsibility, certain economies can be realized by operating on a larger scale. Location alone distances that not all municipalities can or should individually provide all phases of sewerage from collection through treatment. This fact when combined with necessity of an immediate construction program in all the sewer service area shows the advantages of coordinating sewer system management and operation.

## Chapter 10: Act 537 Planning (page 67)

Act 537 was passed in 1966 to entrust municipalities with the primary responsibility of protecting the public health, safety and welfare from the negative impacts of improper sewage treatment. The act was designed to ensure that on-lot sewage systems are located and installed in an environmentally sound manner and that adequate sewage services is provided to handle anticipated growth. Act 537 mandates that every municipality must development, and update, as necessary, a plan to address the sewage needs of the municipality. Table 5 addresses the communities in Perry County and their individual Act 537 Plan status. [Table 5 shows no Act 537 Plan for Wheatfield Township.] All areas not having an individual Act 537 Plan are believed to use the county Act 537 Plan.

## Excerpt 32: Solid Waste Disposal<sup>33</sup>

In 2005, the County with its consultant Evergreen Environmental Services, Inc. completed a nonsubstantial revision to the Perry County Solid Waste Management Plan (SWMP). The revised Plan was reviewed by the PADEP for compliance with the Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101 of 1988, P.L. 556, as amended). When the County opened up the process of finding host landfills to handle the County's solid waste, twelve (12) sites offered proposals. Permitted landfills in Perry County SWMP include but are not limited to the following: Modern Landfill, York County, Cumberland County Landfill, Cumberland County, and the Harrisburg Incinerator, City of Harrisburg.

## Excerpt 33: State Game Lands<sup>34</sup>

Perry County has nine reserved areas designated as state game lands totaling approximately 17,129 acres. [Game land 256 in Centre and Wheatfield Townships occupies 1,254.5 acres and is home to turkey, squirrel, grouse, rabbit, and deer.]

# Excerpt 34: Local Parks and Recreation Areas<sup>35</sup>

Aside from the abundant forest and game land areas within Perry County, there are also a variety of municipally owned and managed parks, picnic areas, swimming pools and play areas. The public schools within the county also open their outdoor recreation facilities to the public.

# Table 46: Parks and Recreational Facilities

<sup>33</sup> Chapter VIII, Community Facilities and Utilities, Perry County Comprehensive Plan, 2007
<sup>34</sup> Ibid.

<sup>35</sup> Ibid.

# **Community Facilities and Services Profile**

| Park                        | Facilities   | Acres           |
|-----------------------------|--|-----------------|
|                             | Baseball/Softball Field, Basketball, Soccer Field, Multi-Purpose |                 |
| Bloomfield/Centre/Carroll   | Field, Tennis Court, Playground/Tot Lot, Swimming Pool,          |                 |
| Swimming Pool Association   | Picnic Tables, Pavilion, Benches, Parking, Food/Vending          |                 |
| (Bloomfield Borough)        | Machines, Restrooms, and Wheelchair/Stroller Accessible          | 2.3             |
|                             | Baseball/Softball Field, Basketball, Soccer Field, Multi-Purpose |                 |
|                             | Field, Tennis Court, Volleyball Court, Playground/Tot Lot,       |                 |
| Carroll Township            | Picnic Tables, Pavilion, Benches, Parking, Food/Vending          |                 |
| Community Park              | Machines, Restrooms, and Wheelchair/Stroller Accessible          | 15.38           |
|                             | Baseball/Softball Field, Basketball, Soccer Field, Multi-Purpose |                 |
|                             | Field, Tennis Court, Volleyball Court, Playground/Tot Lot,       |                 |
|                             | Nature Preserve, Community Center, Hiking Trails, Fishing,       |                 |
|                             | Hunting, Boating/Stream Access, Camping, Picnic Tables,          |                 |
|                             | Pavilions, Historic Site, Bird Watching, Gardens, Restrooms,     |                 |
|                             | Benches, Parking, Public Telephone, Food/Vending Machines,       |                 |
| Duncannon Borough Park      | and Wheelchair/Stroller Accessible                               | 1               |
|                             | Basketball, Baseball/Softball Field, Soccer Field, Multi-purpose |                 |
|                             | Field, Volleyball Court, Playground/Tot Lot, Hiking Trails,      |                 |
|                             | Fishing, Hunting, Picnic Tables, Pavilions, Bird Watching,       |                 |
|                             | Restrooms, Benches, Parking, Food/Vending Machines, and          |                 |
| Penn Township Park          | Wheelchair/Stroller Accessible                                   | 10              |
| Perry County                |  |                 |
| Recreational Park           | Multi-purpose Field, Playground/Tot Lot, Swimming Pool,          |                 |
| (Penn Township)             | Camping, and Wheelchair/Stroller Accessible                      | 30              |
|                             | Baseball/Softball Field, Multi-purpose Field, Playground/Tot     |                 |
| New Valley Road             | Lot, Nature Preserve, Hiking Trails, Fishing, Picnic Tables,     |                 |
| Community Park              | Pavilions, Restrooms, Portable Toilet, Benches, Parking, and     |                 |
| (Rye Township)              | Wheelchair/Stroller Accessible                                   | 12              |
| Weaver Nature Park          |  |                 |
| (Rye Township)              | Nature Preserve, Hiking Trails, Bird Watching and Benches        | 5               |
|                             | Baseball/Softball Field, Multi-purpose Field, Playground/Tot     | 65.6 (expanded  |
|                             | Lot, Hiking Trails, Fishing, Picnic Tables/Pavilions, Bird       | to 281.2 with   |
| Wagner Park                 | Watching, Restrooms, Benches, Parking, and                       | acquisitions in |
| (Wheatfield Township)       | Wheelchair/Stroller Accessible                                   | 2007 and 2009)  |
| Source: Perry County Compre | hensive Plan, 2007: Wheatfield Township Parks and Recreation Bo  | ard             |

Source: Perry County Comprehensive Plan, 2007; Wheatfield Township Parks and Recreation Board

#### Excerpt 35: Wheatfield Township Parks and Recreation Plan, 2008.

#### Mission Statement:

The Wheatfield Township Park and Recreation Board (WTPRB) is committed to providing our citizens with Park and Recreation opportunities and preserving Open Spaces.

Goals:

- 1. Continue to implement the Master Site Plan fat Wagner Park.
- 2. Establish a green Corridor to connect Miller, Centre, and Penn Township via Little Juniata Creek.
- 3. Address present and future needs for Park and Recreation in the township.
- 4. Establish contact with the surrounding townships (Carroll, Center, Miller, Penn) Recreation Boards.
- 5. Pursue acquisitions for Open Space of land parcels adjoining Wagner Park.

Wagner Park:

Wagner Park is the only Park in Wheatfield Township. The Park was dedicated to Wheatfield Township August 13, 1991 by Mildred B. Wagner for the purpose of outdoor recreation, land conservation/preservation of aesthetic value, protection of natural habitats (Fish, wildlife, plants, and similar ecosystems) and the conducting of education programs facilitating those purposes. (Perry County Deed Book 0637 page 263)

The WTPRB is managing grant opportunities to continue the implementation of the Wagner Park Master Site Park. The service work of volunteers, organization and township employees has morphed the vision for Wagner Park to a successful, growing asset in the community.

Wagner Park is used by community groups, families, and individuals. The Trout stream that flows through the park, Little Juniata Creek, is used by fisherman from all over central PA. The stream is stocked by the PA Fish and Boat Commission and the Duncannon Sportsmen Association.

Wagner Park is maintained by WTPRB and funded by Wheatfield Township. Funding is crucial to the continued maintenance of the park for the community.

# Other Areas of Recreation:

The Juniata River, Shermans Creek, PA State Game Lands, and the Duncannon Sportsmen Association provide many recreational opportunities to include: hunting, fishing, boating, canoeing, hiking, shooting, and archery ranges.

## WTPRB Future:

- 1. Manage resources and funding from the Township Supervisors.
- 2. Pursue alternate form of funding, grants, and building and development fees.
- 3. Evaluate township demographics for recreational needs of our community.
- 4. Exchange information with surrounding Townships about how and where they are establishing Parks and Open Spaces.
- 5. The Dellville Covered Bridge 'proposed park' area will most likely be turned over to Wheatfield Township for maintenance. The proposed park is an anticipated expenditure for the WTPRB budget.

# Interview 5: Wheatfield Township Parks and Recreation Board

- Acquisition History: Mildred B. Wagner donated the first parcel of land August 13, 1991; 64.484 acres. Second parcel was purchased December 2007; 67.52 acres. Third parcel was purchased June 2009; 149.201 acres. Park is now total 281.2 acres.
- **Facility Development**: foot bridge over the Little Juniata Creek, 1994; garage/storage/snack bar, 1995; (lower, #1) 60' softball field, 1996; restrooms, 1996; (upper, #2) 60' softball field, 1997; playground, 2002; 32'x50' pavilion, 2004; and multipurpose field for football, soccer, 2008.
- Most Used Facilities: Softball Fields, Pavilion and Playground
- User Groups: Duncannon Area Girls Softball Association, Churchmen's Softball League, Women's Slow Pitch Softball, and Susquenita Midget Football Association all use the park for their playing seasons. Duncannon Sportsmen's Association holds its Annual Kids Trout Derby at the park. Wheatfield Township uses the parking lot for a three-day township cleanup (collection) in the spring.

- Park Policies: distributed to persons who reserve the pavilion
- **Park Maintenance/ Playground Inspections:** Recreation Board Members (volunteers) provide weekly maintenance such as mowing, restrooms check, trash collection, check of playground mulch; bolts on all of the playground equipment are checked for tightness.

## Excerpt 36: Perry County Greenways and Open Space Plan, August 2011.

The *Perry County Greenways, Parks, Recreation, and Open Space Plan* has been developed as a supplement to the Perry County Comprehensive Plan. It is meant to work in concert with the other elements of the County Comprehensive Plan and the Tri-County Regional Growth Management Plan to provide additional direction for the County over the next 10 to 15 years.

This planning effort is due in part to direction from the state. *Pennsylvania Greenways: An Action Plan for Creating Connections* was developed in 2001 and is designed to provide a coordinated and strategic approach to creating connections through the establishment of greenways in the Commonwealth. The plan identifies twelve strategies for implementation; one of those strategies is to promote the development of greenway plans by county and local governments as an integral part of their planning effort.

The Commonwealth recognized the value of Perry County in connections, conservation and heritage preservation by establishing three mega greenways that traverse Perry County and connect to the larger region beyond. These greenways are the Susquehanna Greenway, the Mainline Canal Greenway, and the Kittatinny Ridge (Blue Mountain) Greenway.

*Pittsburgh to Harrisburg Mainline Canal Greenway* - The Pittsburgh to Harrisburg Mainline Canal Greenway is a 320-mile long, 2-mile wide corridor that follows the path of the historic Pennsylvania Mainline Canal from Pittsburgh to Harrisburg. It traverses Perry County via the Juniata River in the northeastern part of the county. The Pittsburgh to Harrisburg Mainline Canal Greenway runs concurrent with the Juniata River Water Trail; in Perry County the two run for 18 miles to the Juniata River's confluence with the Susquehanna River. From that point, it shares its designation with the Susquehanna Greenway for an additional 10 miles to the Perry-Cumberland County Boundary line. In total, this greenway travels approximately 28 miles through Perry County in parts of Buffalo, Greenwood, Howe, Rye, Miller, Oliver, Penn, Tuscarora, and Wheatfield Townships, and Duncannon, Marysville, Millerstown, and Newport Boroughs.

Priority Strategies (and select recommendations relevant to Wheatfield Township)

- PS1 Conserve Land and Water Resources, and Promote Activities that Contribute to the
- Ecological Health of the County.
- PS2 Protect the County's Scenic Character and Rural Lifestyle.
- PS3 Provide Assistance and Outreach to Municipalities and Private Sector Partners.
- PS4 Establish Partnerships to Promote and Implement Greenways, Parks, Recreation, and Open Space.
- PS5 Expand Existing Recreation Programs.

- Recommendation #6 Increase access points to the Shermans Creek for floating, fishing, and other water related recreation opportunities.
- PS6 Link the County through the Development of Greenways and Trails.
  - Recommendation #1 Develop Greenways to Protect Linear Features and Promote Recreation.
    - b) Support Locally Identified Greenways
      - **Recreational Greenways**

6. The Little Juniata Creek Greenway follows the Little Juniata Creek for approximately 13.5 miles. The greenway is located in Centre, Miller, Penn, and Wheatfield Townships, and Bloomfield and Duncannon Boroughs.

• Recommendation #2 – Commission a Committee to determine the Feasibility of developing the Shermans Creek Greenway starting at the headwaters of Shermans Creek and terminating at its confluence with the Susquehanna River.

#### Action:

- The vision of this greenway is more than resource protection. Shermans Creek runs the full length of Perry County from west to east and is enjoyed by numerous interests – including trout and bass fishermen, swimmers cooling off during a hot summer day, canoeing and rafting during high water levels during the spring thaw to name a few. Landscapes along the way include forested lands, farms, narrow valleys, parks, and campgrounds.
- Recommendation #3 Support Shorter Greenways that Connect the Mega-Greenways to the Shermans Creek Greenway to Public and Private Park and Recreation Areas to Trails.

#### Opportunities

- 2. Shermans Creek as a Water Trail Shermans Creek was identified as a significant waterway and one of the most underutilized water features in the county. Throughout this plan Shermans Creek has been identified for a greenway and water related recreation, and now a water trail. However, full fledge boating/canoeing opportunities only present themselves during spring and early summer when water levels of the creek run high. During summer months tubing and related floating adventures can occur; however, it will require significant portage,
- 8. Rail Trail Utilize remnants of the former Sherman's Valley Railroad rights-of-way to develop a trail layout out plan that would connect Duncannon Borough to New Bloomfield Borough and to other destinations in the County. Portions of the rights-of-way have been claimed by adjoining property owners therefore the initial recommendation is to prepare a feasibility study to determine a general path and cost of the project.

#### Action:

a. Interconnecting proposed greenways to other greenways and trails is essential in developing a coordinated approach to preserve linear features and the recreational use of the greenways and trails. These smaller but equally important greenways include: Big Buffalo Creek, Bixler Run, Berry Mountain, Bowers Mountain, Buffalo Mountain, Conococheague Mountain, Cove Mountain, Hickory Ridge, Laurel Run, Little Buffalo Creek, Little Juniata Creek, Little Second Mountain, Mahanoy Ridge, Montour Creek, Perry Furnace Run, and Tuscarora Mountain.

• Recommendation #5 - Link the County through Greenways and Trail

## Actions:

- b. Plan for the development of the Shermans Creek Water Trail.
- h. Plan for a rail trail from Duncannon/Newport boroughs to New Bloomfield to the Tuscarora State Forest. This trail could also be used by the Amish as a transportation corridor in the western part of the County.
- PS7 Provide New and Enhance Existing Recreation Facilities.
  - Recommendation #6 Expand access to rivers and streams.
- PS8 Promote Tourism and Compatible Economic Development.