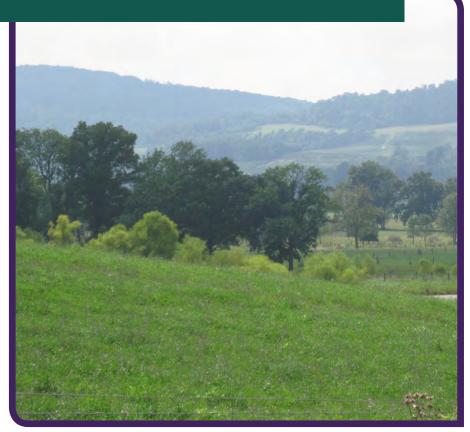
Southwest Adams Joint Comprehensive Plan

Adams County, Pennsylvania



ACKNOWLEDGEMENTS

Southwest Adams County Joint Comprehensive Plan

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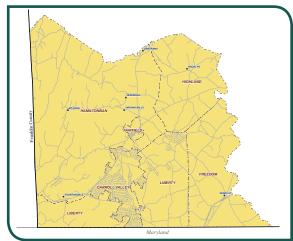
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Introduction

A comprehensive plan represents an expression of the desired future of a community and establishes policies and recommendations that address how the desired future can be attained. The very nature of a comprehensive plan implies the interrelatedness of issues and strives to develop policies and recommendations that complement each other across topical areas. Comprehensive plans, including joint comprehensive plans involving two or more municipalities, are enabled in Pennsylvania by the Pennsylvania Municipalities Planning Code, Act 247 of 1968 (MPC), as reenacted and amended.

In 2009, six municipalities in Southwest Adams County - Carroll Valley and Fairfield Boroughs, and Freedom, Hamiltonban, Highland, and Liberty Townships - began working collaboratively to develop the Southwest Adams County Joint Comprehensive Plan. The six municipalities recognized

the value of jointly addressing development and conservation issues within the Southwest Adams County region. Municipal officials understood that the region was faced with the prospect of significant new development, which would place pressure on the communities and municipal functions within the setting. The Southwest Adams Joint Comprehensive Plan enables the six municipalities to address these issues with common policies and recommendations regarding the land use, transportation, community facilities, parks and recreation, and related components of the community.

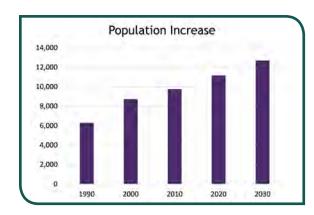


This document reflects the cumulative planning effort of the project steering committee, the public at large, staff of the Adams County Office of Planning and Development, and the selected consultant team. The project was funded with grant support from the Pennsylvania Department of Community and Economic Development (DCED) and the Pennsylvania Department of Conservation and Natural Resources (DCNR). In addition, Adams County invested Community Development Block Grant (CDBG) funding to this project.

Executive Summary

The Southwest Adams County Joint Comprehensive Plan includes three elements. These include an analysis of existing conditions, the development of community goals and objectives, and the development of the policy plan. Each of these elements is summarized as follows.

Existing Conditions



An exhaustive review of existing conditions establishes the baseline from which planning goals, objectives, and policies are developed. The following statements broadly summarize the findings of the existing conditions review.

Demographic Information - The population of the planning area is steadily growing, primarily white, generally well educated, and gradually aging. The region's population is anticipated to increase from 9,766 persons in 2010 to 12,703 persons in 2030.

Housing Information - Housing within the planning area is primarily single-family detached and owner-occupied, and is generally younger and of higher value than Adams County as a whole. The primary household type within the planning area is the family household, and approximately 30% of households in the region experience housing costs in excess of 30% of household income.

Land Use - The majority of the planning area (over 80%) exhibits land uses that are rural in character. These areas include agricultural, forest, and very low density residential settings. Denser forms of development are focused in Fairfield and Carroll Valley Boroughs, several unincorporated villages (for example, Orrtanna), and the Emittsburg Road interchange with US Route 15 in Freedom Township. Other nonresidential uses are scattered throughout the planning area.

Natural Resources - Natural resources include water resources, soils, steep slopes, natural areas, and forested areas and are found throughout the planning area. The largest, uninterrupted areas of natural resources are found in the western portion of the planning area and are associated with Michaux State Forest. Natural resources within the balance of the planning area are most often associated with creeks and privately-owned forested areas.

Historic and Cultural Resources - The planning area includes a range of site-specific and landscape-based historic and cultural resources.

Community Infrastructure - Sewer and water systems and stormwater management facilities constitute the extent of community infrastructure in the region, and are located within Carroll Valley and Fairfield Boroughs and Orrtanna Village. Some of these systems are transitioning from public or investor ownership to private utility company ownership.

Transportation - The transportation network is primarily comprised of the roadway system in area and mode choice is typically the personal vehicle. Only limited facilities exist for pedestrian and bicycle transportation. Mass transit is limited to a demand-responsive service.

Community Facilities - Public education is provided by the Fairfield Area School District and the Gettysburg Area School District within the planning area. Enrollments are projected to

decrease in both districts over the next decade. Police service is provided local departments and the Pennsylvania State Police. Fire protection and emergency medical service are provided by a range of volunteer departments within and closely adjacent to the planning area.

Economic Profile - Employment by occupation and industry for residents of the planning area is consistent with that of Adams County as a whole. However, relatively few of Adams County's highest employers are located within the planning area, and a high proportion of residents leave the planning area (and Adams County as a whole) for employment. Wage levels for employment within Adams County as a whole remain comparatively lower than those for Pennsylvania as a whole.

Parks, Recreation, Open Space, and Greenways - The Southwest Adams Region has a variety of public, semi-public, private, and commercial recreation facilities. However, no formal parks and recreation programming exists within the area. A wide variety of existing open spaces and landscapes exist which form the basis of a greenways network. Only limited trails exist in the planning area, and these are focused in existing parks, Michaux State Forest, and Strawberry Hill Nature Preserve.

Goals and Objectives

The project Steering Committee carefully reviewed the Existing Conditions of the region and the results of various public participation efforts to develop goals and objectives for the Southwest Adams planning area. The goals and objectives reflect the desired future for the region and form the basis for the policies and recommendations provided in the Policy Plan. The public participation exercises included a citizen survey, a SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis, and a Visual Preference Survey. In each of these exercises, respondents expressed a preference to retain the rural character and resources of the setting. Support was also evident for augmenting pedestrian, bicycle, and recreation amenities. Respondents indicated that the most significant issues or problems facing the planning area were those associated with new development and change. Concern regarding the long-term availability of water resources was also a prevalent concern.

From this information, the project steering committee developed goals and objectives for each topical area of the Plan. The goal statement for each topical area read as follows.

Land Use - Retain the rural character of the Southwest Adams region while, at the same time, accommodating the current and anticipated future needs for land uses of all categories.



Natural Resources - Retain the broad array of significant natural resources within the Southwest Adams region.

Water Resources - Ensure that water of sufficient quality and quantity remains available to provide for the current and future needs of residents within the Southwest Adams region.

Housing - Ensure that housing of a variety of types remains available and affordable for current and

anticipated future residents of the Southwest Adams region.

Community Facilities - Ensure that a broad range of necessary community facilities are provided to meet the current and future needs of the residents of the Southwest Adams region.

Transportation - Retain and enhance the existing transportation network in the Southwest Adams region to ensure the safe and efficient movement of persons and goods within and through the region.

Economic Development - Retain and expand the economy of the Southwest Adams region and ensure access to economic opportunities for current and anticipated future residents.

Heritage and Cultural Resources - Conserve the wide variety of historic and cultural resources that help define the Southwest Adams region.

Parks, Recreation, Open Space, and Greenways - Expand and enhance the existing network of parks, open space, and greenways to meet the current and future needs of residents of the Southwest Adams region, and to conserve existing natural and cultural resources.

The objectives associated with each goal statement directly influence the chosen policies and implementation recommendations expressed in the Policy Plan.

Policy Plan

The Policy Plan describes the planning policies and implementation actions the six municipalities should follow to achieve the



desired future for the region. The policies and recommendations are organized by topical area, with the topics reflecting the required elements of a comprehensive plan as established in the MPC. Generalized policy statements that reflect the policies and recommendations established in the Policy Plan are as follows.

Land Use Plan - Three Primary Designated Growth Areas (DGAs) are recommended, one focused on Carroll Valley and Fairfield Boroughs (including a portion of Hamiltonban Township), one focused on the Emittsburg Road interchange of US Route 15 in Freedom Township, and one focused on Orrtanna Village in Hamiltonban Township. A Secondary DGA is recommended to be established in Liberty Township to reflect formal development proposals that have already been submitted in this setting. The balance of the planning area is recommended to be retained in rural use. Higher density residential uses, as well as most commercial and industrial uses, are recommended to be located within the Primary DGAs.

Natural Resources Plan - Natural resources are recommended to be conserved throughout the planning area. Generally, conservation efforts within the western portion of the area are recommended to occur at an overall landscape scale. Within the eastern portion of

the planning area, conservation of natural resources is recommended on a property-by-property basis, particularly when and if development proposals occur.

Water Resources - The protection of water quality and water quantity, especially with regard to groundwater supplies, in the Region is essential, both given current conditions and the projected increase in population by 2030. Development of community water supply should be focused within the Gettysburg Plain hydrogeologic setting. Specific efforts to protect recharge areas and maximize groundwater recharge are recommended.

Housing Plan - Approximately 1,175 new dwelling units will be needed to meet the 2030 projected population within the planning area. The vast majority of these dwelling units, and including a variety of dwelling unit types, should be provided in the Primary and Secondary DGAs. Efforts to maintain existing housing stock should continue.

Community Facilities Plan - Regional cooperation and coordination should be enhanced with regard to the provision of necessary community facilities. Municipalities, municipal authorities, private utility companies, and developers should work jointly to ensure that sewer and water service can be provided within the Primary DGAs to serve the projected 2030 population. Municipalities should work closely with school district officials to ensure that any enrollment increases resulting from sustained population growth can be accommodated. Municipalities should play a central role in the regional provision of police, fire, and ambulance service, particularly given the volunteer nature of fire departments within the planning area.

Transportation Plan - The transportation system needs to be maintained and augmented. Roadways and specific intersections are recommended to be upgraded to address capacity and public safety concerns. Other modes of transportation (pedestrian, bicycle, and transit) need to be enhanced throughout the planning area.

Economic Development Plan - Three broad strategies are recommended to promote economic sustainability in the Southwest Adams region. First, the retention of the agricultural and rural economy should be pursued through the promotion of agricultural and rural business that support local families and are consistent with rural character. Second, the promotion of new business opportunities within Primary DGAs should be pursued to enhance the local economic climate and to afford opportunities for more residents to work locally. Third, economic development opportunities should be explored to further market and promote existing regional recreation, cultural, heritage, and historic resources.

Historic and Cultural Resources Plan - The Southwest Region hosts a variety of historic and cultural resources, many of which are based on districts or landscapes. Efforts should be pursued to further inventory existing resources, and to enhance conservation efforts within those landscapes and districts that define the Region's history and culture.

Parks, Recreation, Open Space and Greenways Plan - Broad recommendations



regarding parks, recreation facilities, open space, and greenways are included in the Plan, and are summarized as follows.

Parkland - The Region currently exhibits a deficit of parkland, particularly with regard to community parks, and this deficit is anticipated to increase given the projected 2030 population. Existing park facilities are evaluated with specific recommendations provided for each park. New community parks should be pursued within the Fairfield / Carroll Valley and the Freedom Township Primary DGAs.

Recreation Facilities - The Region current exhibits deficits with regard to a variety of recreation facilities, and this deficit is anticipated to increase given the projected 2030 population. Development of additional recreation facilities should be pursued, with most of the team sports oriented recreation facilities located in existing or proposed community parks within the Fairfield / Carroll Valley Primary DGA.

Greenways and Open Space - Various types of greenways are recommended to be conserved and developed. These include landscape-oriented greenways such as the Adams County Fruitbelt and the land grants, where landscape conservation is recommended. Natural greenways along Toms Creek, Flat Run, Middle Creek, and Marsh Creek are recommended to provide open space connections and potential sites for walking trails.

Trails - The development of a Region-wide trail network is recommended. Critical elements should include a trail system connecting the Hamiltonban Township Park to Strawberry Hill Nature Preserve and Michaux State Forest, the Carroll Valley Path System connecting Lake Kay in the north to Ranch Trail Park in the south, trails around Fairfield Borough and along the Flat Run and Middle Creek Greenways.

Existing Conditions

Section 1 - Introduction

Analysis of existing conditions within the Region provides an understanding of the current social, economic and physical environment. This chapter presents background information and assessment for the six municipalities within the Region. This chapter summarizes the following information.

- Background Information
- Demographic Information
- Housing Information
- · Existing Land Use
- Natural Resources
- Historic and Cultural Resources
- Existing Community Infrastructure
- Existing Transportation System
- Existing Community Facilities and Services
- · Economic Profile
- Parks, Recreation, Open Space, and Greenways

Section 2 - Background Information

Location

The Southwest Region is located in the southwestern corner of Adams County and borders Frederick County Maryland to the south and Franklin County, Pennsylvania to the West. The Southwest Region borders Franklin Township, Adams County to the north and Cumberland Township, Adams County to the east. The center of the Region (roughly Fairfield Borough) is located near the following urban centers:

•	Gettysburg, PA	8 miles
•	Chambersburg, PA	19 miles
•	Frederick, MD	26 miles
•	Carlisle, PA	30 miles
•	York, PA	36 miles
•	Harrisburg, PA	42 miles
•	Baltimore, MD	53 miles
•	Washington, DC	64 miles

Philadelphia, PA 118 milesPittsburgh, PA 147 miles

Land Area

The Southwest Region includes approximately 87.83 square miles of land area, which constitutes approximately one-sixth (16.7%) of the overall land area of Adams County. The land area associated with each municipality is presented in Table 2-1.

Regional History

Native Americans were the initial settlers of the area now identified as Southwest Adams County. Most of the archeological evidence of Native American settlement has been found within the Gettysburg Plain. However, the most significant Native American archeological site is Snaggy Ridge along the western portion of the boundary

Table 2-1: Land Area

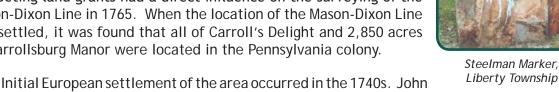
Municipality	Land Area (Sq. Miles)	Percent of Southwest Adams County Land Area	Percent of Adams County Land Area
Carroll Valley Borough	5.47	6.2%	1.0%
Fairfield Borough	0.67	0.8%	0.1%
Freedom Township	14.06	16.0%	2.7%
Hamiltonban Township	39.24	44.7%	7.5%
Highland Township	12.17	13.8%	2.3%
Liberty Township	16.22	18.5%	3.1%
Southwest Adams County Region	87.83	100.00%	16.7%
Adams County	526	N/A	100.00%

between Hamiltonban and Franklin Townships. Quarry pits, work area, and rock shelters have been identified within this area. These features are indicative of the degree to which Native Americans relied on the resources of the South Mountain area.

Initial European settlement in the area is closely associated with the establishment of early land grants or manors. In 1732, two land grants known as Carroll's Delight and Carrollsburg Manor were surveyed in what was believed to be a portion of the northern Maryland colony. Carroll's Delight was located in what is now eastern Hamiltonban Township and Fairfield Borough,

while Carrollsburg Manor was located in what is now eastern Liberty Township. Both of these land grants were granted to Charles, Daniel, and Mary Carroll in 1735, and settlement began shortly thereafter with Charles Carroll managing Carroll's Delight and Daniel Carroll managing Carrollsburg Manor.

The Manor of Maske was laid out by the Penn brothers (sons of William Penn) in 1739-1740 as a reservation for themselves. The grant included portions of Highland Township and nearly all of Freedom Township, as well as all or portions of five other current Adams County municipalities, including Gettysburg Borough. The presence of these competing land grants had a direct influence on the surveying of the Mason-Dixon Line in 1765. When the location of the Mason-Dixon Line was settled, it was found that all of Carroll's Delight and 2,850 acres of Carrollsburg Manor were located in the Pennsylvania colony.



Hanson Steelman is acknowledged to be the first white settler west of the Susquehanna River, and his presence within the Region is commemorated by a historical market at the intersection of Steelman Marker Road and Topper Road in what is now Liberty Township. Settlement at this time necessitated the development of roadways, the most important of which was the Nicholson's Gap Road in 1748. This roadway connected what is now Gettysburg to Blue Ridge Summit in Franklin County and includes portions of PA Routes 116 and 16.

Establishment of formal governmental units began in 1749 with the creation of Hamiltonban Township in what was then York County. The largest settlement in the Township was established on 247 acres of land purchased from Carroll's Delight by John Miller in 1755. Originally known as Millerstown, the village name was officially changed to Fairfield in the early 1800s as the name Millerstown was already in use in a separate postal district. Miller established a manor house in this location in 1757 and licensed what is now the Fairfield Inn in 1786. Fairfield remained as a part of Hamiltonban Township until its incorporation as a Borough in 1896. In addition to Fairfield, a number of smaller villages were established in the area, mainly along



Fairfield Inn, Fairfield Borough

either transportation routes or along waterways at locations advantageous to developing mills. Such villages included Virginia Mills, Iron Springs, Fountain Dale, Fairfield Station, and Fairplay.

Over time, Hamiltonban Township was split into smaller townships as settlement activities proceeded. The establishment of smaller township began shortly after Adams County was split from York County in 1800. Liberty Township was formed in 1801, followed by Freedom Township in 1838 and Highland Township in 1863.

The creation of municipal governments in the Southwest Adams region concluded when Carroll Valley Borough was incorporated in 1974. The Borough boundaries included most of the properties created by a development known as Charnita. The Charnita development included literally thousands of proposed residential lots, as well as a variety of recreation amenities. However, given the size and scope of the development, the existing townships (principally Liberty Township but also Hamiltonban Township) were unable to provide the municipal services necessary to support the growing community. Therefore, in 1974, a group of property owners led by the Carroll Valley Citizens' Association petitioned to incorporate the majority of the Charnita sections as Carroll Valley Borough. This action resulted in the municipal boundaries in the Southwest Adams County area as they exist today.

Southwest Adams County played an important role during the most widely known period of Adams County history - the Battle of Gettysburg. Numerous encampments were located in the area, including those at Fairfield, Fairplay, Iron Springs, and the intersection of what is now PA Route 116 and Jack's Mountain Road. In addition, a relatively small but significant engagement occurred along what is now Carroll's Tract Road in Hamiltonban Township. This engagement secured a roadway that would become a major retreat route for the Confederate Army following its defeat at Gettysburg.

Section 3 – Demographic Information

Understanding the demographic makeup of a region is essential to developing planning policies responsive to the needs of the community. The characteristics of current and future residents of the region influence the range of planning policies that are necessary to address the needs of current and future residents. The demographic section provides information regarding population density, age, educational attainment, race, ethnicity, income. Housing characteristics including number and density of housing units, types of housing units, as well as housing tenure, vacancy, and value are also provided.

Population

A variety of population data is included in the demographic analysis for this Plan. Included is information regarding overall population, population density, population projections, age information (including school-age population information), educational attainment, race and ethnicity, and income and poverty status information.

Overall Population

Population data with regards to population change is presented in Table Total population of the Region in 1990 was 6,298. Total population in 2000 was 8,725, representing a population increase of 38.5% over the decade. By comparison, Adams County's rate of population increase (16.6%) over the same time period was half of the Region. Total population in 2010 was 9,766, representing an increase of 11.9% during this decade. By comparison, Adams County's rate of population increase (11.1%) during this decade was slightly less than that of the Region. The most significant population changes at the individual municipal

Table 2-2: Population Change (1990-2010)

County or Municipality	1990	2000	% Change 1990-2000	2010	%Change 2000-2010
Carroll Valley Borough	1,457	3,291	125.9	3,876	17.8
Fairfield Borough	524	486	-7.3	507	4.3
Freedom Township	692	844	22	831	-1.5
Hamiltonban Township	1,872	2,216	18.4	2,372	7
Highland Township	815	825	1.2	943	14.3
Liberty Township	938	1,063	13.3	1,237	16.4
Southwest Adams Region	6,298	8,725	38.5	9,766	11.9
Adams County	78,274	91,292	16.6	101,407	11.1

Source: United States Census Bureau.

level occurred in Carroll Valley Borough (125.9%) and Freedom Township (22.0%) during the 1990-2000 decade, while Fairfield Borough experienced a population decrease (-7.3) during the 1990-2010 decade and Freedom Township experienced a 1.5% decrease during the 2000-2010 decade. During the 2000 to 2010 decade, Carroll Valley; Highland and Liberty Townships all increased their populations by 14% or more. Most of the population growth from 1990 to 2010 within the Region is associated with the construction of housing on existing Charnita lots, primarily in Carroll Valley Borough.

Proportion of Adams County Population

The overall percentage of Adams County population residing in the Southwest Adams Region has gradually increased over the past twenty years. This information for the years 1990, 2000, and 2010 is presented in Table 2-3. Coupled with the population increases within the region, the Region's percentage of countywide population increased modestly between 1990 and 2000, and has remained generally stable through the 2000 to 2010 period. The regional increase can be attributed to the overall population increase in Carroll

Table 2-3: Population Concentration

Percent of Cou	nty Pop	ulation	1
Municipality	1990	2000	2010
Carroll Valley Borough	1.9	3.6	3.8
Fairfield Borough	0.6	0.5	0.5
Freedom Township	0.8	0.9	0.82
Hamiltonban Township	2.4	2.4	2.3
Highland Township	1	0.9	0.9
Liberty Township	1.2	1.2	1.2
Southwest Adams Region	8	9.6	9.6

Source: United States Census Bureau.

Valley Borough as infill development of the original Charnita Development lots occurred through the period.

Table 2-4: Population Density (1990, 2000, 2010)

Ŋ	Municipality	Carroll Valley Borough	Fairfield Borough	Freedom Township	Hamiltonban Township	Highland Township	Liberty Township	Southwest Adams Region	Adams County Totals
S	quare Miles	5.5	0.7	14.1	39.2	12.2	16.2	87.9	520
	Acres	3499.8	429.4	8996.6	25117.9	7785.9	10382.8	56212.4	332800
	Population	1457	524	692	1872	815	938	6298	78274
1990	Persons per Square Mile	264.9	748.6	49.1	47.7	66.8	57.9	71.6	150.5
	Persons per Acre	0.4	1.2	0.1	0.1	0.1	0.1	0.1	0.2
	Population	3291	486	844	2216	825	1063	8725	91292
2000	Persons per Square Mile	598.4	694.3	59.9	56.5	67.6	65.6	99.3	175.6
	Persons per Acre	0.9	1.1	0.1	0.1	0.1	0.1	0.2	0.3
	Population	3876	507	831	2372	943	1237	9766	101407
2010	Persons per Square Mile	704.7	724.3	59	60.5	77.3	76.4	111.1	195
	Persons per Acre	1.1	1.2	0.1	0.1	0.1	0.1	0.2	0.3

Source: United States Census Bureau.

Population Density

Given population increases in the Region, it is not surprising to find that overall population density has increased currently from 1990 to 2010. Table 2-4 provides population density information for the municipalities and the Region for 1990, 2000, and 2010. The four Townships in the Region have remained in a range of between 50 and 80 persons per square mile for each of the three reporting years. Even with regional population growth, the Townships have not experienced dramatic population density increases. Fairfield Borough retains the highest population density in the Region, although Carroll Valley Borough's population density has nearly equaled Fairfield's as infill development continues on the original Charnita Development lots. Not surprisingly, this infill development accounts for much of the population density increase that the Region has experienced in the last two decades. Still, the Region's population density remains substantially less than that of Adams County as a whole.

Table 2-5: Population Projections (2020, 2030)

Municipality	Adams County	Southwest Adams Region	Carroll Valley Borough	Fairfield Borough	Freedom Township	Hamiltonban Township	Highland Township	Liberty Township
Total Population Census 1990	78,274	6,298	1,457	524	692	1,872	815	938
Total Population Census 2000	91,292	8,725	3,291	486	844	2,216	825	1,063
1990 - 2000 % increase	14.26%	27.82%	55.73%	-7.82%	18.01%	15.52%	1.21%	11.76%
Total Population Census 2010	101,407	9,766	3,876	507	831	2,372	943	1,237
2000-2010 % increase	11.08%	11.93%	17.78%	4.32%	-1.54%	7.04%	14.30%	16.37%
Total Population ACOPD 2020	114,876	11,173	4,498	563	913	2,651	1,143	1,405
2010 - 2020 % increase	13.28%	14.41%	16.05%	11.05%	9.87%	11.76%	21.21%	13.58%
Total Population ACOPD 2030	130,614	12,703	5,114	640	1,038	3,014	1,300	1,597
2020 - 2030 % increase	13.70%	13.69%	13.69%	13.68%	13.69%	13.69%	13.74%	13.67%

Sources: US Census Bureau
ACOPD Projections, 2012

Population Projections

Population projections are essential within the planning process to identify the likely population of a community through the planning period. The projected population defines the number of likely future residents that the municipalities within the planning area will have to accommodate and provide services.

Table 2-5 provides population projection information for the individual municipalities,

the planning area as a whole, and Adams County as a whole. The population projections were developed by the Adams County Office of Planning and Development based on historical building permitting trends. The projections predict that all municipalities within the planning area, as well as Adams County as a whole, will experience modest population growth through the planning period. Overall, the planning area can be expected to accommodate a population increase of around 3,000 persons. The distribution of this population increase within the planning area may be variable, depending on the location and pace of construction of future development proposals. A large development in one municipality may absorb a significant proportion of future housing demand, resulting in proportional decreases in the rate of population growth in the remaining jurisdictions.

Age Information:

Analysis of population age information provides valuable insight into the types residents currently residing in the planning area, as well as types anticipated to reside in planning area in the future. Age trends play an important role in developing policy regarding the provision of education, recreation, health care, and related community services.

Tables 2-6 and 2-7 provide age information for each municipality, the Southwest Adams area as a whole, and Adams County from 2000 and 2010. Overall, the information reveals that the population of the planning area has aged over the past ten years at a rate similar to that of Adams County as a whole. However, it is also evident that median age within the planning area exceeds that of Adams County. All municipalities except Fairfield Borough have experienced significant increases in median age over the past ten years. At the individual municipal level, Carroll Valley Borough exhibits proportionally the youngest population, with higher percentages than the other five municipalities in the youngest age cohorts. Hamiltonban, Highland, and Liberty Township all exhibit similar age distributions, particularly with high proportions of residents in the 35 to 59 years old ranges. Freedom Township and Fairfield Borough both show significant population distribution in the 60 and over age groups. Similar to Adams County, most of the municipalities in the planning area have seen a decrease in the percentage of population in the 19 years and younger age groups. In some instances, decreases in actual number of people in these age groups have occurred.

Table 2-6: Median Age (2000, 2010)

Region	2000	2010
Carroll Valley Borough	35.4	38.6
Fairfield Borough	44.7	42.6
Freedom Township	42.3	47.9
Hamiltonban Township	39.7	41.8
Highland Township	41.3	46.8
Liberty Township	39.7	43.4
Southwest Adams Region	(X)	43.5
Adams County	37.0	40.2

Source: U.S. Census Bureau.

Table 2-7: Population by Age Group (2000, 2010)

	Carroll Valley Borough 2000	Valley 1 2000	Fairfield Borough 2000	field h 2000	Freedom Township 2000	lom ship 00	Hamiltonban Township 2000	onban Iship 00	Highland Township 2000	land Iship 00	Liberty Township 2000	rty ship 00	Southwest Adams Region 2000		Adams County 2000	ounty
Age Group	#	8	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Under 5 years	261	7.93%	26	5.35%	47	5.57%	111	5.01%	41	4.97%	54	5.08%	540	6.19%	5,405	5.92%
5 to 9 years	293	8.90%	26	5.35%	60	7.11%	155	6.99%	44	5.33%	73	6.87%	651	7.46%	6,465	7.08%
10 to 14 years	273	8.30%	32	6.58%	56	6.64%	172	7.76%	61	7.39%	79	7.43%	673	7.71%	6,952	7.62%
15 to 19 years	209	6.35%	25	5.14%	42	4.98%	127	5.73%	63	7.64%	88	8.28%	554	6.35%	6,810	7.46%
20 to 24 years	100	3.04%	10	2.06%	41	4.86%	79	3.56%	34	4.12%	33	3.10%	297	3.40%	5,573	6.10%
25 to 34 years	479	14.55%	59	12.14%	76	9.00%	288	13.00%	83	10.06%	108	10.16%	1,093	12.53%	11,426	12.52%
35 to 44 years	678	678 20.60%	86	13.99%	134	15.88%	364	16.43%	145	145 17.58%	201	18.91%	1,590	1,590 18.22%	15,001 16.43%	16.43%
45 to 54 years	462	462 14.04%	65	13.37%	192	22.75%	342	15.43%	141	141 17.09%	184	17.31%	1,386	15.89%	1,386 15.89% 12,522 13.72%	13.729
55 to 59 years	133	4.04%	29	5.97%	64	7.58%	133	6.00%	59	7.15%	66	6.21%	484	5.55%	4,620	5.06%
60 to 64 years	116	3.52%	30	6.17%	54	6.40%	117	5.28%	42	5.09%	54	5.08%	413	4.73%	3,762	4.12%
65 to 74 years	198	6.02%	55	11.32%	46	5.45%	192	8.66%	73	8.85%	75	7.06%	639	7.32%	6,631	7.26%
75 to 84 years	65	1.98%	44	9.05%	21	2.49%	97	4.38%	35	4.24%	40	3.76%	302	3.46%	4,469	4.90%
85 years and over	24	0.73%	17	3.50%	11	1.30%	39	1.76%	4	0.48%	8	0.75%	103	1.18%	1,556	1.70%
Total	3,291		486		844		2,216		825		1,063		8,725		91,292	
Median age (years)	35.4	8		3	42.3	<u>×</u>	39.7	X)	41.3	3	39.7	8			37	Α,

Table 2-7: Population by Age Group (2000, 2010) - Continued

	Howar	110%											Count	Courthwood		
	Valley Borough	ley ough	Fair Bor	Fairfield Borough 2010	Free Town	Freedom Township 2010	Hamiltonban Township 2010	onban ship 10	High Town 20	Highland Township 2010	Lib Town 20	Liberty Township 2010	Ada Reg 20	Adams Region 2010	Adams County 2010	ms 2010
Age Group	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Under 5 years	165	4.33%	45	7.35%	25	2.88%	88	3.78%	54	6.21%	74	5.46%	452	4.58%	5,717	5.67%
5 to 9 years	316	8.29%	37	6.05%	72	8.30%	159	6.76%	51	5.87%	71	5.24%	706	7.15%	6,177	6.13%
10 to 14 years	334	8.76%	30	4.90%	22	6.57%	127	5.40%	37	4.26%	77	2.68%	662	6.71%	6,642	6.59%
15 to 19 years	320	8.40%	34	5.56%	43	4.96%	159	6.76%	44	2.06%	71	5.24%	671	6.80%	7,719	7.65%
20 to 24 years	191	5.01%	30	4.90%	47	5.42%	105	4.46%	46	5.29%	81	5.97%	200	5.07%	6,613	6.56%
25 to 34 years	373	9.79%	52	8.50%	57	6.57%	264	11.22%	30	3.45%	141	10.40%	917	9.29%	10,570	10.48%
35 to 44 years	747	19.60%	121	19.77%	102	11.76%	413	17.55%	146	16.80%	210	15.49% 1,739	1,739	17.62%	14,075 13.96%	13.96%
45 to 54 years	290	15.48%	48	7.84%	140	16.15%	417	17.72%	178	20.48%	264	19.47% 1,637 16.59%	1,637	16.59%	15,628	15.50%
55 to 59 years	164	4.30%	37	6.05%	84	%69.6	148	6.29%	64	7.36%	115	8.48%	612	6.20%	7,170	7.11%
60 to 64 years	206	5.41%	22	3.59%	86	11.30%	138	2.86%	78	8.98%	92	6.78%	634	6.42%	5,447	5.40%
65 to 74 years	208	5.46%	74	12.09%	86	11.30%	144	6.12%	61	7.02%	89	6.56%	674	6.83%	7,932	7.87%
75 to 84 years	180	4.72%	26	9.64%	44	5.07%	174	7.39%	72	8.29%	09	4.42%	289	5.97%	5,186	5.14%
85 years and over	17	0.45%	23	3.76%	0	0.00%	16	0.68%	8	0.92%	11	0.81%	75	0.76%	1,963	1.95%
Total	3,811		612		867		2353		698		1,356		898′6		100,839	
Median age (years)	38.6	8	(X) 42.6	8	47.9	8	41.8	8	(X) 46.8	8	(X) 43.4	8	43.5	8	40.2	8

Source: United States Census Bureau

School Aged Population

School-aged population figures provide important information regarding the status of households with children in the planning area. The data also serves as a measure to evaluate regional trends regarding the overall number of children living within and expected to live within the planning area, which in turn impacts school facilities planning.

Table 2-8 provides school-aged population information for each municipality, the Southwest Adams area as a whole, and Adams County reported in 2000 and 2010. Overall, the total number of school-aged children within the planning area has increased slightly faster when compared to that of Adams County as a whole. This pattern should be anticipated given the overall and continuous population increase within the planning area over the previous decades. Not surprisingly, Carroll Valley Borough accounts for most of the increase in overall school-aged population as Carroll Valley experienced the fastest overall rate of population increase and exhibits the lowest median age in the planning area. That said, all municipalities demonstrated at least a modest increase in school-aged population during the past decade. Interestingly, however, the planning area as a whole, as well as several individual municipalities, are exhibiting percentage increases in the older age cohorts of school age population (high school and college / graduate school) and percentage decreases in some of the younger cohorts (nursery school, kindergarten, and elementary school). This reflects the overall aging of the community and may impact the pace at which existing school facilities may need to be upgraded to accommodate future population increases.

Educational Attainment

The educational attainment measure is an important indicator that can provide insight into lifestyles, mobility, and employment patterns within the planning area. Typically, but not always, higher levels of educational attainment are associated with higher household income levels and higher degrees of job mobility.

Table 2-9 provides educational attainment information for the individual municipalities, the Southwest Adams planning area as a whole, Adams County as a whole, and Pennsylvania for the years 2000 and 2010. Residents in the planning area have achieved a slightly higher level of educational attainment when compared to Adams County residents, but a slightly lower level when compared to Pennsylvania residents as a whole. This pattern is consistent for both the 2000 and 2010 reporting years. Attainment levels by municipality are generally consistent with the broader Southwest Adams region levels, although some variation within specific levels of attainment exists by municipality. Some correlation between educational attainment and median age also exists, with municipalities with somewhat older populations showing a slightly lower educational attainment level.

Table 2-8: School Aged Population (2000, 2010)

School Aged Population	Carrol Borou	Carroll Valley Borough 2000	Fair Bor 20	Fairfield Borough 2000	Free Tow	Freedom Township 2000	Hamil Tow 20	Hamiltonban Township 2000	Hig Tow	Highland Fownship 2000	Lil Tow	Liberty Township 2000	Sout Adams 20	Southwest Adams Region 2000	Adams County 2000	County 00
(Age 3 to 24)	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Population 3 years and over enrolled in school	876		76		178		465		191		249		2,056		23,246	
Nursery school, preschool	38	4.34%	<u></u>	1.03%	10	5.62%	12	2.58%	16	8.38%	18	7.23%	95	4.62%	1,219	5.24%
Kindergarten	45	5.14%		12 12.37%	13	7.30%	27	5.81%	8	4.19%	8	3.21%	113	5.50%	1,223	5.26%
Elementary school (grades 1-8)	475	475 54.22%		53 54.64%	85	47.75%	281	60.43%	84	43.98%	137	55.02%	1,115	54.23% 10,943	10,943	47.07%
High school (grades 9-12)	203	203 23.17%		19 19.59%	46	25.84%	107	23.01%	99	34.03%	89	27.31%	508	24.71%	5,167	22.23%
College or graduate school	115	115 13.13% 12 12.37%	12	12.37%	24	24 13.48%	38	8.17%	18	9.42%	18	7.23%	225	10.94%	4,694	20.19%

School Aged Population	Carro Borou	Carroll Valley Borough 2010	Fai Bor 20	Fairfield Borough 2010	Fre Tow	Freedom Township 2010	Hamil Tow 20	Hamiltonban Township 2010	Hig Tow	Highland Township 2010	Lib Tow 20	Liberty Township 2010	Sout Adams 20	Southwest Adams Region 2010	Adams County 2010	County 10
(Age 3 to 24)	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Population 3 years and over enrolled in school	1,117		114		183		260		200		279		2,453		25,869	
Nursery school, preschool	23	2.06%		%00:0 0	9	3.28%	0	0.00%	7	3.50%	21	7.53%	57	2.32%	1,386	5.36%
Kindergarten	20		14	1.79% 14 12.28%	14	7.65%	34	6.07%	5	2.50%	8	2.87%	95	3.87%	1,116	4.31%
Elementary school (grades 1-8)	601	601 53.80%		48 42.11%	73	39.89%	245	43.75%	102	51.00%	134	48.03%	1,203		49.04% 10,417	40.27%
High school (grades 9-12)	222	222 19.87%	31	31 27.19%	47	25.68%	170	30.36%	38	19.00%	61	61 21.86%	269	23.20%	5,718	22.10%
College or graduate school	251	251 22.47% 21 18.42%	21	18.42%	43	43 23.50%	111	19.82%	48	24.00%	22	19.71%	529	529 21.57%		7,232 27.96%

Source: United States Census Bureau.

Table 2-9: Educational Attainment, Persons Age 25 Years and Older (2000, 2010)

Municipality	Total Persons (25 years old and older - 2010)	Less than High School Graduate - 2000	High School Graduate or Higher - 2000	Bachelor's Degree or Higher - 2000	Professional or Graduate Degree - 2000
Carroll Valley Borough	2,149	9.4	90.6	27.5	11.2
Fairfield Borough	364	18.2	81.8	15.9	4.1
Freedom Township	589	16	84	18.5	9.2
Hamiltonban Township	1,582	25.2	74.8	12.2	4.6
Highland Township	577	18.9	81.1	23.4	12.3
Liberty Township	744	17.5	82.5	14.9	6.7
Southwest Adams Region	6,005	16.6	83.4	20	8.4
Adams County	60,173	20.3	79.7	16.7	6.5
Pennsylvania	8,266,284	18.1	81.9	22.4	8.4

Municipality	Total Persons (25 years old and older - 2010)	Less than High School Graduate - 2010	High School Graduate or Higher - 2010	Bachelor's Degree or Higher - 2010	Professional or Graduate Degree - 2010
Carroll Valley Borough	2,485	9.3	90.7	21.6	5.8
Fairfield Borough	436	13.5	86.5	23.2	6.4
Freedom Township	623	10.5	89.6	26.5	11.7
Hamiltonban Township	1,714	12.9	87	20.2	7.7
Highland Township	637	14.8	85.2	17.3	8.6
Liberty Township	982	18.6	81.5	17.5	6.8
Southwest Adams Region	6,877	12.4	87.6	20.8	7.2
Adams County	67,971	15.2	84.7	18.5	7.3
Pennsylvania	8,510,688	13.1	86.9	26	9.9

Source: United States Census.

Race / Ethnicity

Table 2-10 provides race and ethnicity information for the individual municipalities, the Southwest Adams planning area as a whole, and Adams County for the years 2000 and 2010. The information indicates that the racial makeup of the Region is primarily white. Racial makeup of the individual municipalities is consistent with that of the Region and Adams County as a whole. The individual municipalities, the planning area as a whole, and Adams County all exhibit similar trends regarding racial and ethnic makeup. In all settings, minority population percentages increased very slowly during the past decade. However, it is noted that the rate of change in the Southwest Adams area was slower than that of Adams County as a whole.

Race data describes people who identify themselves with one or more race. Hispanic or Latino ethnicity information is also provided, although it is important to note that Hispanic or Latino identification is characterized as an ethnic description and not a race description. Since a person can be considered white and Hispanic, or black and Hispanic, the Hispanic or Latino data is not part of the race data's totals.

Table 2-10: Race / Ethnicity (2000, 2010)

	Carroll Boro 20			field ugh - 00	Town	dom ship - 00	Town	tonban ship - 00
Race / Ethnicity	#	%	#	%	#	%	#	%
Total:	3,291		486		844		2,216	
Population of One Race	3,241	98.48%	483	99.38%	836	99.05%	2,196	99.10%
White Alone	3,186	96.81%	478	98.35%	821	97.27%	2,149	96.98%
Black or African American Alone	20	0.61%	0	0.00%	6	0.71%	5	0.23%
American Indian and Alaska Native Alone	14	0.43%	0	0.00%	0	0.00%	6	0.27%
Asian Alone	13	0.40%	3	0.62%	5	0.59%	8	0.36%
Native Hawaiian and Other Pacific Islander Alone	0	0.00%	0	0.00%	0	0.00%	2	0.09%
Some Other Race Alone	8	0.24%	2	0.41%	4	0.47%	26	1.17%
Population of Two or More Races	50	1.52%	3	0.62%	8	0.95%	20	0.90%
Hispanic Latino (of Any Race)	26	0.79%	3	0.62%	15	1.78%	29	1.31%

	High Town: 20	ship -	Libe Town 20	ship -	South Adams - 20		Adams - 2(County 100
Race / Ethnicity	#	%	#	%	#	%	#	%
Total:	825		1,063		8,725		91,292	
Population of One Race	815	98.79%	1,054	99.15%	8,625	98.85%	90,405	99.03%
White Alone	803	97.33%	1,046	98.40%	8,483	97.23%	87,088	95.39%
Black or African American Alone	1	0.12%	2	0.19%	34	0.39%	1,105	1.21%
American Indian and Alaska Native Alone	0	0.00%	3	0.28%	23	0.26%	184	0.20%
Asian Alone	5	0.61%	1	0.09%	35	0.40%	448	0.49%
Native Hawaiian and Other Pacific Islander Alone	1	0.12%	0	0.00%	3	0.03%	21	0.02%
Some Other Race Alone	5	0.61%	2	0.19%	47	0.54%	1,559	1.71%
Population of Two or More Races	10	1.21%	9	0.85%	100	1.15%	887	0.97%
Hispanic Latino (of Any Race)	12	1.45%	2	0.19%	87	1.00%	3,323	3.64%

Table 2-10: Race / Ethnicity (2000, 2010) Continued

	Carroll Boro 20			field ugh - 10	Free Town 20	ship -	Hamilto Towns 201	ship -
Race / Ethnicity	#	%	#	%	#	%	#	%
Total:	3876		507		831		2372	
Population of One Race	3828	98.76%	501	98.82%	824	99.16%	2335	98.44%
White Alone	3772	97.32%	484	95.46%	807	97.11%	2280	96.12%
Black or African American Alone	25	0.64%	12	2.37%	8	0.96%	21	0.89%
American Indian and Alaska Native Alone	9	0.23%	0	0.00%	0	0.00%	7	0.30%
Asian Alone	18	0.46%	1	0.20%	5	0.60%	16	0.67%
Native Hawaiian and Other Pacific Islander Alone	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Some Other Race Alone	4	0.10%	4	0.79%	4	0.48%	11	0.46%
Population of Two or More Races	48	1.24%	6	1.18%	7	0.84%	37	1.56%
Hispanic Latino (of Any Race)	54	1.39%	12	2.37%	10	1.20%	48	2.02%

		land ship - 10	Libe Town 20	ship -	South Adams - 20	Region	Adams (- 20	•
Race / Ethnicity	#	%	#	%	#	%	#	%
Total:	943		1237		9766		101,407	
Population of One Race	927	98.30%	1230	99.43%	9645	98.76%	100,063	98.67%
White Alone	901	95.55%	1196	96.69%	9440	96.66%	94,979	93.66%
Black or African American Alone	7	0.74%	16	1.29%	89	0.91%	1,561	1.54%
American Indian and Alaska Native Alone	4	0.42%	3	0.24%	23	0.24%	213	0.21%
Asian Alone	2	0.21%	7	0.57%	49	0.50%	746	0.74%
Native Hawaiian and Other Pacific Islander Alone	0	0.00%	0	0.00%	0	0.00%	20	0.02%
Some Other Race Alone	13	1.38%	8	0.65%	44	0.45%	2,544	2.51%
Population of Two or More Races	16	1.70%	7	0.57%	121	1.24%	1,344	1.33%
Hispanic Latino (of Any Race)	25	2.65%	20	1.62%	169	1.73%	6,115	6.03%

Source: United States Census Bureau.

Income

Analysis of household income patterns is exceedingly important in understanding the households within the planning area and the challenges households may be facing. Areas with proportionally lower household incomes can indicate areas where focused efforts are needed to ensure access to affordable housing, access to transit options, need for enhanced job training, economic development opportunities, and related services.

Tables 2-10 and 2-11 provide income data for the individual municipalities, the Southwest Planning area as a whole, Adams County, and Pennsylvania. Median household income generally compares favorably within the planning area to Adams County as a whole and to Pennsylvania in both the 2000 and 2010 reporting years. In some instances, individual municipal median household income significantly exceeds that of Adams County as a whole and Pennsylvania. In these settings, the difference can be attributed to demographic patterns involving people commuting from the planning area for higher paying employment outside of Adams County or to higher income households of retirement age moving to the area.

Table 2-11: Household Income Distributed as a Percent

Municipality (2000)	Less than \$10,000	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 and above
Carroll Valley Borough	1.1	1.1	6.8	8.3	22.5	60.2
Fairfield Borough	0.7	2	23.5	17.4	16.8	39.6
Freedom Township	2.4	2.4	9.9	7.9	24.6	52.8
Hamiltonban Township	2.1	3.5	13.8	11.1	20.8	48.6
Highland Township	1.7	2.1	8.9	12.7	16.9	57.8
Liberty Township	1.2	3	4.9	17.9	18.5	54.4
Southwest Adams Region	1.5	2.2	9.7	11.1	20.9	54.5
Adams County	2.9	3.5	10.3	12.9	21.9	48.5
Pennsylvania	9.7	7	13.6	13.3	16.9	39.5

Municipality (2010)	Less than \$10,000	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 and above
Carroll Valley Borough	0	1.1	2	4.3	15.1	77.5
Fairfield Borough	3.9	7.4	8.9	11.2	12.4	56.2
Freedom Township	3.9	3	3.9	7.3	13	68.9
Hamiltonban Township	6.2	3.7	6.9	8.4	17.8	57.1
Highland Township	2.1	2.7	9.2	5.6	13.3	67.2
Liberty Township	1.6	2.6	7.5	15.7	13	59.7
Southwest Adams Region	2.6	2.7	5.4	7.8	15	66.5
Adams County	4.5	4.8	8.9	11.1	14.3	56.5
Pennsylvania	7.2	5.8	10.4	10.5	13.5	57.2

Source: United States Census Bureau.

Poverty Status

Table 2-12 also provide information on poverty status within the planning area. Given that the planning areas fares generally well with regard to median household income measures, it is not surprising that poverty levels within the planning area are generally less than those in Adams County as a whole and Pennsylvania. However, the percentages of persons and families living below poverty level have increased to some degree from the 2000 to 2010 reporting years. This increase can be attributed to the impacts of the recent economic recession, changing demographics (particularly the aging of the population in specific municipalities), and adjustments as to how poverty level statistics are reported. Regardless, the data indicates that poverty is not as extensive an issue in the planning area when compared to Pennsylvania as a whole.

Table 2-12: Household Income and Poverty Level Data

Municipality (2000)	Total Population	Median Family Income (\$)	Median Household Income (\$)	% of Persons below Poverty Level	% of Families Living Below Poverty Level
Carroll Valley Borough	3,291	54,659	55,000	2.2	1.7
Fairfield Borough	486	31,053	39,219	3.5	0.7
Freedom Township	844	47,778	52,188	6.3	3.6
Hamiltonban Township	2,216	42,235	48,750	7.5	4
Highland Township	825	50,066	55,694	4.1	1.7
Liberty Township	1,063	50,833	53,456	3.6	2.1
Southwest Adams Region	8,725	(X)	(X)	(X)	(X)
Adams County	91,292	48,810	42,704	7.1	4.9
Pennsylvania	11,879,950	(X)	40,106	11	9.2

Municipality (2010)	Total Population	Median Family Income (\$)	Median Household Income (\$)	% of Persons below Poverty Level	% of Families Living Below Poverty Level
Carroll Valley Borough	3,876	89,625	76,875	0.7	0
Fairfield Borough	507	51,705	53,393	8.2	10.6
Freedom Township	831	81,477	76,176	5.5	2.9
Hamiltonban Township	2,372	60,200	54,696	7	4.2
Highland Township	943	69,444	65,833	6.4	5.8
Liberty Township	1,237	60,000	53,587	7.4	4.3

Municipality (2010)	Total Population	Median Family Income (\$)	Median Household Income (\$)	% of Persons below Poverty Level	% of Families Living Below Poverty Level	
Southwest Adams Region	9,766	(X)	(X)	(X)	(X)	
Adams County	101,407	66,222	56,529	8	5.2	
Pennsylvania	12,742,886	(X)	50,398	12.4	8.6	

Source: United States Census Bureau.

Section 4 – Housing Information

Understanding the status of the housing sector is critical in terms of developing appropriate policies and programs to ensure that appropriate housing is available for the current and future population within the planning area. Measures of housing status to assess include those focusing on quality, quantity, and cost of housing, as well as those involving trends regarding dwelling unit type and the rate of new dwelling construction.

Housing Units

Table 2-14 indicates the number of housing units within each municipality, the Southwest Adams area as a whole, and Adams County. The number of housing units in the planning area has increased faster than the overall rate of increase in Adams County as a whole, although the rate of increase varies by municipality. This trend is consistent with the overall population trend of the planning area.

Table 2-13: Population Change (1990-2010)

County or Municipality	1990	2000	2010	% Change 1990-2000	% Change 2000-2010	% Change 1990-2010
Carroll Valley Borough	1,457	3,291	3,876	125.88%	17.78%	166.03%
Fairfield Borough	524	486	507	-7.25%	4.32%	-3.24%
Freedom Township	692	844	831	21.97%	-1.54%	20.09%
Hamiltonban Township	1,872	2,216	2,372	18.38%	7.04%	26.71%
Highland Township	815	825	943	1.23%	14.30%	15.71%
Liberty Township	938	1,063	1,237	13.33%	16.37%	31.88%
Southwest Adams Region	6,298	8,725	9,766	38.54%	11.93%	55.07%
Adams County	78,274	91,292	101,407	16.63%	11.08%	29.55%

Source: United States Census Bureau

Housing Occupancy and Tenure

Tables 2-13 and 2-14 address housing occupancy and housing tenure (that is, owner-occupied or renter-occupied housing) for the municipalities, the Southwest Adams area, Adams County, and Pennsylvania. Housing unit vacancy rates have traditionally been low within the planning area, and within Adams County as a whole, but have increased significantly as indicated in the 2010 figures. This is likely due to the impacts of the economic downturn at the end of the previous decade. Vacancy rates of 9% or more were found in several municipalities, as well as the planning area as a whole, and are likely due to foreclosures. In some instances, however (for example, Freedom Township), owner-occupied vacancy rates may be over-stated, which could result from projecting vacancy rates based on very small sample sizes. While some increase in these rates likely occurred during the decade from 2000 to 2010, the actual number may not be as high as that projected in 2010.

Housing tenure information indicates that home-ownership remains the predominant tenure within the planning area. Home-ownership rates within the planning area exceed those of Adams County and Pennsylvania by a significant amount for both reporting years. Home-ownership rates have increased within the planning area faster than in Adams County as a whole, and at a rate comparable to the overall Pennsylvania trend. This trend may indicate the need to evaluate whether sufficient rental housing is provided to ensure that the housing needs of all current and potential future residents are addressed within the planning area.

Table 2-14: Housing Occupancy (2000, 2010)

	Carroll Valley Borough		Fairfield Borough		Freedom Township		Hamiltonban Township		
Occupancy (2000)	#	%	#	%	#	%	#	%	
Total Housing Units	1,261		245		376		898		
Occupied housing units	1,176	93.26%	232	94.69%	328	87.23%	827	92.09%	
Vacant housing units	85	6.74%	13	5.31%	48	12.77%	71	7.91%	
Homeowner vacancy rate (percent)	1.40%		2.00%		0.70%			1.40%	
Rental vacancy rate (percent)		4.70%		4.60%		1.90%		2.90%	

	Highland Township		Liberty Township		Southwest Adams Region		Adams County	
Occupancy (2000)	#	%	#	%	#	%	#	%
Total Housing Units	330		433		3,543		35,831	
Occupied housing units	317	96.06%	407	94.00%	3,287	92.77%	33,652	93.92%
Vacant housing units	13	3.94%	26	6.00%	256	7.23%	2,179	6.08%
Homeowner vacancy rate (percent)		1.50%		1.10%		1.40%		1.40%
Rental vacancy rate (percent)		0.00%	7.80%		3.70%			4.60%

Table 2-14: Housing Occupancy (2000, 2010) Continued

Occupancy (2010)		Valley ugh	Fair Bord		Free Town		Hamilt Town		
	#	%	#	%	#	%	#	%	
Total Housing Units	1,408		265		422		1,037		
Occupied housing units	1,274	90.48%	258	97.36%	330	78.20%	943	90.94%	
Vacant housing units	134	9.52%	7	2.64%	92	21.80%	94	9.06%	
Homeowner vacancy rate (percent)	4.10%		1.90%		0.00%			0.00%	
Rental vacancy rate (percent)	0.00%			0.00%		0.00%		11.30%	

	Highland Township		Liberty Township		Southwest Adams Region		Adams County	
Occupancy (2010)	#	%	#	%	#	%	#	%
Total Housing Units	355		559		4,046		40,352	
Occupied housing units	338	95.21%	508	90.88%	3,651	90.24%	38,331	94.99%
Vacant housing units	17	4.79%	51	9.12%	395	9.76%	2,021	5.01%
Homeowner vacancy rate (percent)	0.00%		0.00%		1.50%			1.20%
Rental vacancy rate (percent)		0.00%	10.80%		7.09%		2.20%	

Source: United States Census Bureau.

Table 2-15: Housing Tenure (2000, 2010)

Housing Tenure (2000)				Fairfield Borough		Freedom Township		Hamiltonban Township		Highland Township	
	#	%	#	%	#	%	#	%	#	%	
Occupied Housing Units	1,176		232		328		827		317		
Owner-Occupied Housing Units	1,075	91.4	149	64.2	275	83.8	695	84	261	82.3	
Renter-Occupied Housing Units	101	8.6	83	35.8	53	16.2	132	16	56	17.7	
Average Household Size of Owner-Occupied Units		2.79	2.2			2.59		2.64		2.58	
Average Household Size of Renter-Occupied Units		2.83		1.9		2.49		2.43		2.71	

Housing Tenure (2000)		Liberty Township		Southwest Adams Region		County	Pennsylvania		
Tellure (2000)	#	%	#	%	#	%	#	%	
Occupied Housing Units	407		3,287		33,652		5.2m		
Owner-Occupied Housing Units	360	88.5	2,815	85.6	25,861	76.8	3.4m	65	
Renter-Occupied Housing Units	47	11.5	472	14.4	7,791	23.2	1.3m	35	
Average Household Size of Owner-Occupied Units		2.63		2.57		2.67		2.62	
Average Household Size of Renter-Occupied Units		2.49		2.47		2.38		2.12	

Table 2-15: Housing Tenure (2000, 2010) Continued

Housing Tenure (2010)				field ough					Highl Town	
	#	%	#	%	#	%	#	%	#	%
Occupied Housing Units	1,274		258		330		943		338	
Owner-Occupied Housing Units	1,248	98	207	80.2	273	82.7	770	81.7	298	88.2
Renter-Occupied Housing Units	26	2	51	19.8	57	17.3	173	18.3	40	11.8
Average Household Size of Owner-Occupied Units		3		2.2		2.62		2.59		2.62
Average Household Size of Renter-Occupied Units		2.65		3.06		2.65		2.08		2.2

Housing Tenure (2010)		Liberty Township		Southwest Adams Region		Adams County		Pennsylvania	
Tenure (2010)	#	%	#	%	#	%	#	%	
Occupied Housing Units	508		3,651		38,331		5,018,904		
Owner-Occupied Housing Units	434	85.4	3,230	88.5	29,813	77.8	3,493,157	69.6	
Renter-Occupied Housing Units	74	14.6	421	11.5	8,518	22.2	1,525,747	31.6	
Average Household Size of Owner-Occupied Units		2.75		2.75		2.6		N/A	
Average Household Size of Renter-Occupied Units		2.2		2.34		2.28		N/A	

Household Composition

Table 2-16 provides information regarding the types of households within the individual municipalities, the planning area as a whole, and Adams County. The measures review information regarding the age of householder and the type of household (family or non-family) for the 2000 and 2010 reporting years.

Housing composition within the planning area, as well as for Adams County as a whole, has remained reasonably constant over the reporting period. The percentages of family and nonfamily households between 2000 and 2010 are very consistent. The data for the region shows some increase in the 35-to-64 age of householder category, which is consistent with the age date for the region indicating a gradual aging of the population. Some variation does exist at the individual municipality level. For example, Fairfield Borough and Freedom Township both show a significant increase in the percentage of family households. However, these increases are balanced by modest decreases in the family household percentage in other municipalities within the planning area. The data indicates a stable population that has not been experiencing dramatic in-migration or out-migration of a specific household type or age group.

For the purposes of this analysis, the term "family household" includes those households with two or more residents that are related by blood, adoption, or marriage. The term "nonfamily household" refers to single-person households or households with two or more unrelated persons.

Housing – Structure Characteristics

Tables 2-16 provides information from the 2010 US Census regarding when residential structures in the planning area were constructed. Not surprisingly, each municipality except Carroll Valley Borough exhibits a consistent pattern with residential structures developed through all reporting periods. Carroll Valley Borough reports proportionally newer housing stock given that most of the Borough's development has occurred since the incorporation of the Borough in 1974. The regional distribution is similar to that of Adams County as a whole, although the housing stock is, overall, somewhat younger than that of the County as a whole given the Carroll Valley Borough influence.

Tables 2-17 and 2-18 indicate the ages of structures and the number of dwelling units per structure for the individual municipalities, the Southwest Adams area as a whole, and Adams County for the 2000 and 2010 reporting years. This information provides information regarding the existing housing stock within the planning area and can serve as a basis for evaluating future housing needs and housing provision strategies.

The overwhelming dwelling unit type within the planning area is single-family dwellings, with all municipalities except Fairfield Borough showing a significantly higher percentage of single-family dwellings when compared to Adams County as a whole. Mobile homes, a form of single-family dwelling, constitutes the second most prevalent dwelling unit type within the planning area for both reporting years. Concurrently, the planning area demonstrates a significantly lower percentage of attached dwelling units when compared to Adams County as a whole. Limited opportunities currently exist within the planning area to accommodate persons or households who require something other than a single-family dwelling.

The age of structure measure is consistent with a community that has experienced

consistent population growth over a sustained period. Accordingly, each municipality, as well as the planning area as a whole, includes housing stock that was constructed during a variety of periods. This pattern is also consistent with the overall Adams County distribution.

Table 2-16: Households by Household Type (2000, 2010)

Households By Type (2000)	Carroll Valley Borough			Fairfield Borough		dom iship	Hamiltonban Township	
Type (2000)	#	%	#	%	#	%	#	%
Total Households	1,176		232		328		827	
Family Households (Families)	953	81	140	60.3	248	75.6	622	75.2
With Own Children Under 18 Years	512	43.5	60	25.9	96	29.3	256	31
Married-Couple Family	846	71.9	117	50.4	224	68.3	508	61.4
With Own Children Under 18 Years	437	37.2	43	18.5	85	25.9	201	24.3
Female Householder, No Husband Present	66	5.6	17	7.3	18	5.5	72	8.7
With Own Children Under 18 Years	47	4	11	4.7	8	2.4	33	4
Nonfamily Households	223	19	92	39.7	80	24.4	205	24.8
Householder Living Alone	165	14	85	36.6	59	18	157	19
Householder 65 Years and Over	47	4	49	21.1	17	5.2	69	8.3
Households with Individuals Under 18 Years	536	45.6	62	26.7	100	30.5	285	34.5
Households with Individuals 65 Years and Over	202	17.2	89	38.4	56	17.1	213	25.8
Average Household Size	2.8	(X)	2.09	(X)	2.57	(X)	2.6	(X)
Average Family Size	3.08	(X)	2.67	(X)	2.97	(X)	2.97	(X)

Table 2-16: Households by Household Type (2000, 2010) Continued

Households By Type (2000)	Highl Town		Libe Town	•	South Adams		Adams County	
1 ype (2000)	#	%	#	%	#	%	#	%
Total Households	317		407		3,287		33,652	
Family households (families)	244	77	326	80.1	2,533	77.1	24,777	73.6
With Own Children Under 18 Years	98	30.9	139	34.2	1,161	35.3	11,352	33.7
Married-Couple family	210	66.2	278	68.3	2,183	66.4	20,551	61.1
With Own Children Under 18 Years	81	25.6	113	27.8	960	29.2	8,817	26.2
Female Householder, No Husband Present	17	5.4	26	6.4	216	6.6	2,876	8.5
With Own Children Under 18 Years	6	1.9	12	2.9	117	3.6	1,708	5.1
Nonfamily Households	73	23	81	19.9	754	22.9	8,875	26.4
Householder Living Alone	59	18.6	66	16.2	591	18	7,158	21.3
Householder 65 Years and Over	25	7.9	28	6.9	235	7.1	3,112	9.2
Households with Individuals Under 18 Years	107	33.8	146	25.9	(X)	(X)	12,190	36.2
Households with Individuals 65 Years and Over	79	24.9	91	22.4	(X)	(X)	8,384	24.9
Average Household Size	2.6	(X)	2.61	(X)	(X)	(X)	2.61	(X)
Average Family Size	2.98	(X)	2.89	(X)	(X)	(X)	3.02	(X)

Table 2-16: Households by Household Type (2000, 2010) Continued

Households By Type (2010)	Carroll Boro	•	Fairfield Borough		Freedom Township		Hamiltonban Township	
Type (2010)	#	%	#	%	#	%	#	%
Total households	1,274		258		330		943	
Family households (families)	1,010	79.3	199	77.1	277	83.9	686	72.7
With Own Children Under 18 Years	459	36	78	30.2	106	32.1	282	29.9
Married-Couple Family	857	67.3	122	47.3	240	72.7	579	61.4
With Own Children Under 18 Years	356	27.9	14	5.4	69	20.9	224	23.8
Female Householder, No Husband Present	101	7.9	66	25.6	33	10	43	4.6
With Own Children Under 18 Years	62	4.9	53	20.5	33	10	17	1.8
Nonfamily Households	264	20.7	59	22.9	53	16.1	257	27.3
Householder Living Alone	(X)	73.9	(X)	94.9	(X)	90.6	(X)	80.5
Householder 65 Years and Over	(X)	11	(X)	86.4	(X)	39.6	(X)	31.1
Households with Individuals Under 18 Years	(X)	0	(X)	0	(X)	0	(X)	0
Households with Individuals 60 Years and Over	(X)	31.4	(X)	91.5	(X)	58.5	(X)	38.1
Average Household Size	2.99	(X)	2.37	(X)	2.63	(X)	(X)	2.5
Average Family Size	3.29	(X)	2.51	(X)	2.84	(X)	(X)	2.8

Table 2-16: Households by Household Type (2000, 2010) Continued

Households By Type (2010)	High Towr	land Iship		erty iship		iwest Region	Adams	County
Type (2010)	#	%	#	%	#	%	#	%
Total Households	338		508		3,651		38,331	
Family Households (Families)	274	81.1	396	78	2,842	77.8	27,605	72
With Own Children Under 18 Years	89	26.3	145	28.5	1,159	31.7	11,598	30.3
Married-Couple Family	234	69.2	344	67.7	2,376	65.1	22,562	58.9
With Own Children Under 18 Years	67	19.8	117	23	847	23.2	8,533	22.3
Female Householder, No Husband Present	29	8.6	26	5.1	298	8.2	3,424	8.9
With Own Children Under 18 Years	15	4.4	8	1.6	188	5.1	2,094	5.5
Nonfamily Households	64	18.9	112	22	809	22.2	10,726	28
Householder Living Alone	(X)	76.6	(X)	87.5	(X)	(X)	(X)	23.3
Householder 65 Years and Over	(X)	25	(X)	19.6	(X)	(X)	(X)	10.2
Households with Individuals Under 18 Years	(X)	0	(X)	0	(X)	(X)	(X)	0
Households with Individuals 60 Years and Over	(X)	40.6	(X)	39.3	(X)	(X)	(X)	36.4
Average Household Size	2.57	(X)	2.67	(X)	(X)	(X)	2.53	(X)
Average Family Size	2.87	(X)	3.09	(X)	(X)	(X)	2.97	(X)

Table 2-17: Year Structure Built

	Carroll Valley Borough		Fair Bord	field ough	Free Town		Hamilt Towr	
	#	%	#	%	#	%	#	%
Total Housing Units	1,408		265		422		1,037	
Year Structure Built								
2005 or later	49	3.5	0	0	15	3.6	76	7.3
2000 to 2004	183	13	26	9.8	10	2.4	73	7
1999 to March 2000	73	5.2	6	2.3	3	0.71	0	0
1995 to 1998	310	22	13	4.9	34	8.1	46	4.4
1990 to 1994	241	17.1	0	0	33	7.8	80	7.7
1980 to 1989	271	19.2	21	7.9	59	14	117	11.3
1970 to 1979	190	13.5	19	7.2	42	10	123	11.9
1960 to 1969	112	8	19	7.2	48	11.4	80	7.7
1940 to 1959	13	0.92	44	16.6	68	16.1	144	13.9
1939 or earlier	53	3.8	124	47	89	21.1	307	29.6

	High Towr		Libe Towr	erty Iship	Soutl Adams	nwest Region	Adams	County
	#	%	#	%	#	%	#	%
Total Housing Units	355		559		4,046		40,352	
Year Structure Built								
2005 or later	15	4.2	33	5.9	188	4.6	1,801	4.5
2000 to 2004	45	12.7	69	12.3	406	10	3,541	8.8
1999 to March 2000	2	0.6	21	3.76	105	2.6	949	2.4
1995 to 1998	15	4.2	17	3	435	10.8	3,141	7.8
1990 to 1994	38	10.7	40	7.2	432	10.7	3,395	8.4
1980 to 1989	47	13.2	88	15.7	603	14.9	5,878	14.6
1970 to 1979	53	14.9	82	14.7	509	12.6	5,356	13.3
1960 to 1969	32	9	54	9.7	345	8.5	3,129	7.8
1940 to 1959	59	16.6	50	8.9	378	9.3	4,846	12
1939 or earlier	84	24	79	14.1	736	18.2	9,137	22.6

Table 2-18: Units in Structure (2000, 2010)

2000	Carroll Boro	Valley ough		field ough			iltonban wnship	
	#	%	#	%	#	%	#	%
Total Housing Units	1,263		246		376		897	
Units in Structure								
1 unit, detached	1,193	94.5	171	69.5	350	93.1	779	86.8
1 unit, attached	24	1.9	16	6.5	2	0.5	8	0.9
2 units	29	2.3	24	9.8	5	1.3	9	1
3 or 4 units	13	1	18	7.3	0	0	0	0
5 to 9 units	0	0	9	3.7	0	0	0	0
10 to 19 units	0	0	0	0	0	0	0	0
20 or more units	0	0	0	0	0	0	0	0
Mobile home	4	0.3	8	3.3	19	5.1	101	11.3
Boat, RV, van, etc.	0	0	0	0	0	0	0	0

2000	High Towr		Libe Towr	•	Southwest Adams Region		Adams	County	
Age of Structure	#	%	#	%	#	%	#	%	
Total Housing Units	330		431		3,543		35,831		
Units in Structure									
1 unit, detached	298	90.3	375	87	3,166	89.4	25,867	72.2	
1 unit, attached	6	1.8	4	0.9	60	1.7	2,407	6.7	
2 units	5	1.5	15	3.5	87	2.5	1,606	4.5	
3 or 4 units	0	0	0	0	31	0.9	1,335	3.7	
5 to 9 units	0	0	0	0	9	0.2	785	2.2	
10 to 19 units	0	0	0	0	0	0	305	0.9	
20 or more units	0	0	0	0	0	0	400	1.1	
Mobile home	19	5.8	35	8.1	186	5.2	3,100	8.7	
Boat, RV, van, etc.	2	0.6	2	0.5	4	0.1	26	0.1	

Table 2-18: Units in Structure (2000, 2010) Continued

2010	Carroll Boro		Fair Boro				Hamiltonban Township	
	#	%	#	%	#	%	#	%
Total Housing Units	1,408		265		422		1,037	
Units in Structure								
1 unit, detached	1,398	99.3	195	73.6	375	88.9	936	90.3
1 unit, attached	0	0	44	16.6	17	4	41	4
2 units	10	0.7	2	0.8	0	0	0	0
3 or 4 units	0	0	10	3.8	0	0	0	0
5 to 9 units	0	0	11	4.2	0	0	0	0
10 to 19 units	0	0	0	0	0	0	0	0
20 or more units	0	0	0	0	2	0.5	0	0
Mobile home	0	0	3	1.1	28	6.6	60	5.8
Boat, RV, van, etc.	0	0	0	0	0	0	0	0

	Highland Township		Libe Towr	•		Southwest Adams Region		Adams County	
2010	#	%	#	%	#	%	#	%	
Total Housing Units	355		559		4,046		40,352		
Units in Structure									
1 unit, detached	341	96.1	472	84.4	3,717	91.9	29,939	74.2	
1 unit, attached	0	0	11	2	113	2.8	3,429	8.5	
2 units	3	0.8	42	7.5	57	1.4	1,310	3.2	
3 or 4 units	0	0	3	0.5	13	0.3	1,099	2.7	
5 to 9 units	0	0	0	0	11	0.3	692	1.7	
10 to 19 units	0	0	0	0	0	0	236	0.6	
20 or more units	0	0	0	0	2	0.05	644	1.6	
Mobile home	11	3.1	31	5.5	133	3.3	3,003	7.4	
Boat, RV, van, etc.	0	0	0	0	0	0	0	0	

Housing Conditions

Table 2-19 summarizes housing conditions within the individual municipalities, the Southwest Adams area as a whole, and Adams County for the 2000 and 2010 reporting years.

Measures such as existence of plumbing facilities, kitchen facilities, and telephone service are often evaluated as proxy measurements to gauge housing quality over time. In most of the municipalities, the number of housing units reporting lack of plumbing and kitchen facilities has decreased or remained essentially at a "zero" level. However, the number of households in Hamiltonban Township reporting lack of kitchen facilities has jumped from 2000 to 2010, as has the number of households in Liberty Township regarding both plumbing and kitchen facilities.

These two municipalities contribute to a pattern within the planning area that is consistent with that of Adams County as a whole. It is anticipated that this change reflects variation in reporting methodology rather than a degradation of housing quality. With regard to phone service, a fairly significant increase in household reporting no telephone service is report from 2000 to 2010. This may reflect a trend of some households discontinuing use of "land line" phone service.

Housing Values

Table 2-20 provides housing values information for the individual municipalities, the Southwest Adams area as a whole, and Adams County. Although some variation of housing value ranges existed at the municipal level in 2000, the overall Southwest Adams area ranges were consistent with those of Adams County as a whole. Housing values in Fairfield Borough and Hamiltonban Township showed proportionally higher percentages of housing units in the lower value ranges. From the 2000 to 2010 period, however, housing values in the planning area rose at a significantly higher rate than that of Adams County as a whole. The median house value in four of the six municipalities in the planning area exceeded the Adams County median value by at least \$35,000. Even Fairfield Borough and Hamiltonban Township, who both had median home values less than the Adams County median in 2000, had median housing values in 2010 that exceeded the County median. These figures may indicate an increasing demand for housing in the planning area, and could also indicate challenges for lower income households in the planning area with regard to housing availability.

Table 2-19: Select Housing Measures

		l Valley ough		field ough		dom Iship	Hamilt Towr	
Select Housing Measures (2000)	#	%	#	%	#	%	#	%
Total Housing Units	1,261		245		376		898	
Lacking complete plumbing facilities	4	0.3	0	0	4	0.5	15	1.7
Lacking complete kitchen facilities	0	0	0	0	4	0.5	0	0
No telephone service	5	0.4	2	0.8	4	0.5	30	3.3

		land iship	Libo Town	erty Iship		iwest Region	Adams	County
Select Housing Measures (2000)	#	%	#	%	#	%	#	%
Total Housing Units	330		433		3,543		35,831	
Lacking complete plumbing facilities	4	1.2	0	0	27	0.7	177	0.5
Lacking complete kitchen facilities	4	1.2	0	0	8	0.2	130	0.4
No telephone service	2	0.6	2	0.5	45	1.3	403	1.1

Select Housing Measures (2010)		l Valley ough	Fairfield Borough		Freedom Township		Hamiltonban Township	
Measures (2010)	#	%	#	%	#	%	#	%
Total Housing Units	1,274		258		330		943	
Lacking complete plumbing facilities	0	0	0	0	0	0	7	0.7
Lacking complete kitchen facilities	0	0	0	0	2	0.6	15	1.6
No telephone service	10	0.8	7	2.7	5	1.5	7	0.7

Select Housing Measures (2010)		land iship		erty iship	1	nwest Region	Adams	County
Measures (2010)	#	%	#	%	#	%	#	%
Total Housing Units	338		508		3,651		38,331	
Lacking complete plumbing facilities	0	0	17	3.3	24	0.7	316	0.8
Lacking complete kitchen facilities	0	0	11	2.2	28	0.8	224	0.6
No telephone service	0	0	3	0.6	32	0.9	917	2.4

Table 2-20: Housing Values (2000, 2010)

2000	1	Valley ough		field ough		dom 1ship		tonban 1ship
	#	%	#	%	#	%	#	%
Less than \$50,000	4	0.4	2	1.6	2	1.3	44	9.4
\$50,000 to \$99,999	211	20.4	61	48.8	60	40	217	46.6
\$100,000 to \$149,999	575	55.6	56	44.8	40	26.7	120	25.8
\$150,000 to \$199,999	201	19.4	4	3.2	19	12.7	66	14.2
\$200,000 to \$299,999	37	3.6	2	1.6	24	16	19	4.1
\$300,000 to \$499,999	7	0.7	0	0	3	2	0	0
\$500,000 to \$999,999	0	0	0	0	2	1.3	0	0
\$1,000,000 or more	0	0	0	0	0	0	0	0
Median (dollars)	124,300	(X)	99,800	(X)	115,500	(X)	97,200	(X)

2000		lland Iship		erty iship		iwest Region	Adams	County
	#	%	#	%	#	%	#	%
Less than \$50,000	3	1.7	6	2.8	61	2.8	422	2.1
\$50,000 to \$99,999	57	33.1	73	34.1	679	31.4	7,622	38.4
\$100,000 to \$149,999	72	41.9	74	34.6	937	43.3	7,717	38.9
\$150,000 to \$199,999	24	14	42	19.6	356	16.5	2,680	13.5
\$200,000 to \$299,999	16	9.3	19	8.9	117	5.4	1,148	5.8
\$300,000 to \$499,999	0	0	0	0	10	0.5	210	1.1
\$500,000 to \$999,999	0	0	0	0	2	0.1	14	0.1
\$1,000,000 or more	0	0	0	0	0	0	21	0.1
Median (dollars)	111,800	(X)	121,200	(X)	(X)	(X)	110,100	(X)

2010	Carroll Boroug	Valley h 2010		field h 2010		dom ip 2010		tonban ip 2010
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than \$50,000	15	1.2	0	0	12	4.4	32	4.2
\$50,000 to \$99,999	0	0	9	4.3	26	9.5	99	12.9
\$100,000 to \$149,999	38	3	36	17.4	20	7.3	65	8.4
\$150,000 to \$199,999	247	19.8	50	24.2	33	12.1	165	21.4
\$200,000 to \$299,999	651	52.2	99	47.8	70	25.6	194	25.2
\$300,000 to \$499,999	285	22.8	6	2.9	62	22.7	131	17
\$500,000 to \$999,999	12	1	7	3.4	38	13.9	78	10.1
\$1,000,000 or more	0	0	0	0	12	4.4	6	0.8
Median (dollars)	241,500	(X)	206,900	(X)	256,300	(X)	212,800	(X)

	High Townsh	land ip 2010		erty ip 2010		iwest Region 10		County 10
2010	#	%	#	%	#	%	#	%
Less than \$50,000	0	0	21	4.8	80	2.5	1,801	6
\$50,000 to \$99,999	12	4	19	4.4	165	5.1	1,973	6.6
\$100,000 to \$149,999	45	15.1	25	5.8	229	7.1	4,593	15.4
\$150,000 to \$199,999	44	14.8	70	16.1	609	18.9	6,463	21.7
\$200,000 to \$299,999	91	30.5	116	26.7	1,221	37.8	8,744	29.3
\$300,000 to \$499,999	53	17.8	125	28.8	662	20.5	4,705	15.8
\$500,000 to \$999,999	41	13.8	58	13.4	234	7.2	1,368	4.6
\$1,000,000 or more	12	4	0	0	30	0.9	166	0.6
Median (dollars)	235,300	(X)	256,400	(X)	(X)	(X)	200,700	(X)

Housing Market

Table 2-21 provide information regarding the housing market in the planning area. Measures include overall number of homes sold, average sales price, median sales price, and days on the market for the 2006, 2008, and 2010 reporting years. The data clearly reflects the changes in the housing market within the planning area and within Adams County as a whole through the reporting period. Number of units sold and the median sales price of housing within the planning area have substantially dropped, while average days on the market of houses for sale has increased. The changes in the housing market appear to have impacted the Southwest Adams County planning area to a more significant degree than other portions of Adams County and Adams County as a whole.

Housing Costs

Table 2-22 provides information regarding the proportion of household income dedicated to housing costs for the 2000 and 2010 reporting years. Of particular concern is the percentage of households with thirty percent or more of household income being used to pay for housing, either home ownership costs or home rental costs. The Southwest Adams County region is generally consistent with Adams County as a whole with regard to these measures. The primary issue of concern with regard to this data is that the percentage of households expending thirty percent or more of gross income on housing has significantly increased over the reporting period. This pattern is not surprising given the increases in housing costs in the middle of the last decade. Further, this pattern indicates that housing affordability will continue to be a challenge for many current and future residents of the planning area.

Building Permit Activity

Table 2-23 depicts building permit activity involving new residential construction from 2000 to 2010. Information is reported by municipality, for the planning area as a whole, and for Adams County as a whole. The data clearly reflects the changes in the housing market from the middle of the last decade to the current period, with precipitous drops in building permit issuance at all levels. Within the Southwest Adams region specifically, the percentage drop in permit issuance has been significantly larger than that of Adams County as a whole. Concurrently, the percentage of permits issued in Southwest Adams County of all permits countywide for new residential construction has dramatically reduced.

Table 2-21: Housing Prices (2006, 2008, 2010)

2006	Number Sold	Dollar Volume	Average Sale Price	Median Sale Price	Average Days on Market
Adams County	1112	\$256,370,791	\$230,549	\$213,500	63
Bermudian Springs School District	136	\$27,150,579	\$199,637	\$187,750	59
Conewago Valley School District	290	\$56,595,396	\$195,157	\$169,400	47
Fairfield Area School District	108	\$28,379,000	\$262,769	\$255,000	84
Gettysburg Area School District	233	\$60,561,873	\$259,922	\$235,000	70
Littlestown Area School District	245	\$60,115,968	\$245,371	\$228,327	61
Upper Adams School District	100	\$23,567,975	\$235,680	\$208,950	72

2008	Number Sold	Dollar Volume	Average Sale Price	Median Sale Price	Average Days on Market
Adams County	692	\$155,047,117	\$224,057	\$198,451	92
Bermudian Springs School District	85	\$19,698,872	\$231,751	\$199,900	71
Conewago Valley School District	188	\$39,874,759	\$212,100	\$184,200	88
Fairfield Area School District	65	\$16,307,550	\$250,885	\$235,000	114
Gettysburg Area School District	152	\$39,947,775	\$262,814	\$214,950	96
Littlestown Area School District	131	\$26,639,710	\$203,357	\$188,000	103
Upper Adams School District	71	\$12,578,451	\$177,161	\$175,500	92

2010	Number Sold	Dollar Volume	Average Sale Price	Median Sale Price	Average Days on Market
Adams County	627	\$121,568,740	\$193,890	\$179,000	100
Bermudian Springs School District	90	\$16,264,713	\$180,719	\$169,950	69
Conewago Valley School District	181	\$32,627,937	\$180,265	\$170,000	83
Fairfield Area School District	46	\$8,762,635	\$190,492	\$179,500	106
Gettysburg Area School District	145	\$31,432,850	\$216,778	\$195,000	125
Littlestown Area School District	115	\$23,436,705	\$203,797	\$190,000	101
Upper Adams School District	50	\$9,043,900	\$180,878	\$172,500	141

Source: Realtors Association of York and Adams Counties Inc. (RAYAC);

Table 2-22: Housing Costs as a Percentage of Income (2000, 2010)

2000	Carroll Boro	•	Fair Boro		Free Towr		Hamilt Town	
Monthly Owner Costs	#	%	#	%	#	%	#	%
Less than 15 percent	210	20.3	54	43.2	44	29.3	212	45.5
15 to 19 percent	219	21.2	13	10.4	25	16.7	84	18
20 to 24 percent	189	18.3	17	13.6	22	14.7	35	7.5
25 to 29 percent	183	17.7	11	8.8	12	8	51	10.9
30 to 34 percent	86	8.3	4	3.2	20	13.3	22	4.7
35 percent or more	148	14.3	26	20.8	27	18	62	13.3
Not computed	0	0	0	0	0	0	0	0
	Carroll	Valley	Fair	field	Free	dom	Hamilt	onban
2000	Carroll Boro		Fairt Boro		Free Towr		Hamilt Town	
2000 Monthly Rental	Boro	ough [°]	Boro	ough %	Towr	ship %	Town #	ship
2000 Monthly Rental Costs	Boro #	wgh %	Boro #	ough % 6.3	Towr #	1 0.8	Town # 37	ship %
2000 Monthly Rental Costs Less than 15 percent	Boro # 24	9 ugh % 25.5 12.8	# 5 15	6.3	Towr # 4 5	10.8 13.5	Town # 37 18	ship % 31.9
2000 Monthly Rental Costs Less than 15 percent 15 to 19 percent	# 24 12	9 ugh % 25.5 12.8	# 5 15	6.3 19	Towr # 4 5	10.8 13.5 13.5	Town # 37 18 9	% 31.9 15.5
2000 Monthly Rental Costs Less than 15 percent 15 to 19 percent 20 to 24 percent	# 24 12	25.5 12.8 11.7 12.8	# 5 15 9	6.3 6.3 19 11.4 22.8	Towr # 4 5 5	10.8 13.5 13.5 16.2	Town # 37 18 9 7	% 31.9 15.5 7.8
2000 Monthly Rental Costs Less than 15 percent 15 to 19 percent 20 to 24 percent 25 to 29 percent	# 24 12 11 12	25.5 12.8 11.7 12.8 5.3	# 5 15 9 18	6.3 19 11.4 22.8 7.6	# 4 5 5 6 6 5 5	10.8 13.5 13.5 16.2 13.5	# 37 18 9 7 4	% 31.9 15.5 7.8 6

2000	High Town			erty nship		iwest Region	Adams Count	
Monthly Owner Costs	#	%	#	%	#	%	#	%
Less than 15 percent	56	32.6	67	31.3	640	29.6	6,524	32.9
15 to 19 percent	19	11	52	24.3	412	19.1	3,331	16.8
20 to 24 percent	33	19.2	14	6.5	310	14.4	3,155	15.9
25 to 29 percent	25	14.5	32	15	314	14.5	2,413	12.2
30 to 34 percent	13	7.6	16	7.5	161	7.5	1,287	6.5
35 percent or more	26	25.1	31	14.5	320	14.8	3,016	15.2
Not computed	0	0	2	0.9	2	0.1	108	0.5
2000	High Town	1		erty iship	Soutl Adams	nwest Region	Adams	County
2000 Monthly Rental Costs		1					Adams #	County %
Monthly Rental	Town	ship	Town	nship %	Adams #	Region %	#	%
Monthly Rental Costs	Town #	ship %	Towr # 16	% 33.3	Adams # 96	Region % 23.2	# 1,521	% 20.7
Monthly Rental Costs Less than 15 percent	Town #	ship % 25.6	Towr # 16 12	% 33.3 25	# 96 68	Region % 23.2 16.4	# 1,521 1,320	% 20.7 17.9
Monthly Rental Costs Less than 15 percent 15 to 19 percent	Town # 10 6	ship % 25.6 15.4	Towr # 16 12	33.3 25 6.3	# 96 68	Region % 23.2 16.4 10.4	# 1,521 1,320 1,111	% 20.7 17.9 15.1
Monthly Rental Costs Less than 15 percent 15 to 19 percent 20 to 24 percent	Town # 10 6	25.6 15.4 15.4	# 16 12 3 0	33.3 25 6.3	# 96 68 43 43	Region % 23.2 16.4 10.4 10.4	# 1,521 1,320 1,111 729	% 20.7 17.9 15.1 9.9
Monthly Rental Costs Less than 15 percent 15 to 19 percent 20 to 24 percent 25 to 29 percent	Town # 10 6 6	25.6 15.4 15.4 0	# 16 12 3 0 2	33.3 25 6.3 0 4.2	# 96 68 43 43 22	Region % 23.2 16.4 10.4 10.4 5.3	# 1,521 1,320 1,111 729 394	% 20.7 17.9 15.1 9.9 5.3

Table 2-22: Housing Costs as a Percentage of Income (2000, 2010) Continued

2010 Monthly Owner	Carroll Boro	· · · · · · · · · · · · · · · · · · ·	Fair: Bord			dom iship	Hamilt Towr	
Costs	#	%	#	%	#	%	#	%
Less than 20 percent	581	46.6	107	51.7	137	50.2	347	45.1
20 to 24.9 percent	228	18.3	13	6.3	38	13.9	83	10.8
25 to 29.9 percent	144	11.5	14	6.8	37	13.6	99	12.9
30 to 34.9 percent	95	7.6	18	8.7	14	5.1	53	6.9
35 percent or more	200	16	55	26.6	47	17.2	188	24.4
Not computed	0	(X)	0	(X)	0	(X)	0	(X)
2010 Monthly Rental	Carroll Boro	· · · · · · · · · · · · · · · · · · ·	Fairfield Borough			dom iship	Hamilt Towr	
Costs	#	%	#	%	#	%	#	%
Less than 15 percent	10	38.5	11	24.4	6	14.3	43	33.1
15 to 19 percent	0	0	0	0	0	0	21	16.2
20 to 24 percent	16	61.5	11	24.4	9	21.4	25	19.2
25 to 29 percent	0	0	7	15.6	2	4.8	8	6.2
30 to 34 percent	0	0	2	4.4	0	0	0	0
35 percent or more	0	0	14	31.1	25	59.5	33	25.4
Not computed	0	(X)	6	(X)	15	(X)	43	(X)

2010 Monthly Owner	Libe Town	· · ·		land iship		iwest Region	Adams	County
Costs	#	%	#	%	#	%	#	%
Less than 20 percent	198	46	153	51.3	1523	47.2	13,226	44.5
20 to 24.9 percent	59	13.7	28	9.4	449	13.9	4,448	15
25 to 29.9 percent	45	10.5	28	9.4	367	11.4	2,998	10.1
30 to 34.9 percent	30	7	33	11.1	243	7.5	2,300	7.7
35 percent or more	98	22.8	56	18.8	644	20	6,716	22.6
Not computed	4	(X)	0	(X)	4	(X)	125	(X)
2010 Monthly Rental	Libe Town	· · ·		land Iship		iwest Region	Adams	County
Costs	#	%	#	%	#	%	#	%
Less than 15 percent	0	0	12	33.3	82	24	1,082	14
15 to 19 percent	16	25.8	3	8.3	40	11.7	1,191	15.4
20 to 24 percent	4	6.5	0	0	65	19.1	1,023	13.2
25 to 29 percent	9	14.5	3	8.3	29	8.5	991	12.8
30 to 34 percent	3	4.8	4	11.1	9	2.6	623	8.1
35 percent or more	30	48.4	14	38.9	116	34	2,826	36.5
Not computed	12	(X)	4	(X)	80	(X)	782	(X)

Table 2-23: Residential Building Permits - New Residential Construction (2000-2010)

Municipality	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carroll Valley Borough	58	23	39	39	30	24	24	12	11	5	6
Fairfield Borough	10	5	0	0	1	1	0	0	3	0	0
Freedom Township	1	4	6	3	5	7	2	2	0	2	1
Hamiltonban Township	20	13	18	16	9	18	13	11	5	3	3
Highland Township	4	7	9	16	13	8	7	6	7	3	2
Liberty Township	6	9	16	11	13	7	16	8	6	5	6
Southwest Adams	99	61	88	85	71	65	62	39	32	18	18
Adams County	649	610	766	609	755	702	576	467	293	191	326
SW% of County Permits	15.25%	10.00%	11.49%	13.96%	9.40%	9.26%	10.76%	8.35%	10.92%	9.42%	5.52%

Source: Adams County Tax Assessment Office



Section 5 - Existing Land Use

Generalized Land Use

Evaluating existing land use within the planning area is essential to develop an understanding of the character of the area, and to assist in the development of future goals and planning policies. The existing land use data was developed by mapping property type information obtained from the Adams County Tax Assessment database, as supplemented by field evaluation. Existing land use categories were established in accordance with standard planning practice and are presented in Table 2-24.

Table 2-24: Existing Land Use Classifications

Land Use Classification	Land Use Description
Wooded	Those properties that are entirely forested and typically do not contain a dwelling.
Specialized Agriculture	Fruit Farms containing orchards that primarily produce apples and other types of fruit locally grown.
Agricultural / Vacant / Rural	Agricultural-Active agricultural use (cropland, pastureland, dairy facilities, barns, and stables), along with agriculturally based businesses.
Residential	Vacant-Open land that is not currently used for agriculture, is not entirely wooded, and does not contain any structures
	Rural Residential-Residential lots of 10 acre or more.
Residential	Residential lots that are less than 10 acres in size. Mapped subcategories include the following: (1) Smaller single-family residential lots of between 0 and 3 acres in size and located primarily within boroughs or unincorporated villages, and (2) Larger single-family detached residential lots between 3 and 10 acres in size located primarily within rural settings.
Multi-Family Residential	Properties developed with either attached forms of housing, or non-agricultural properties that include 2 or more dwelling units of any form.
Commercial	Properties where goods and services are sold, ranging from restaurants, convenience stores, gas stations, and storage units to professional offices and retail stores.
Industrial	Properties being used for intensive manufacturing, processing, or warehousing facilities.
Vacant / Undeveloped	Properties that are less than 10 acres in size and do not contain any structures. These lands are typically open areas or are lots that have been subdivided for residential purposes, but not yet sold. These lots may still retain some agricultural function if they were subdivided from an agricultural lot.
Public / Institutional / Utility	Properties owned by municipal or county governments, schools, churches and cemeteries, utility companies, fire stations, libraries, and cultural facilities.
Outdoor Recreation	Properties held under any type of ownership (excluding State owned), but provide a public or private outdoor recreational function.

Municipal Land Use Character

While the planning area includes a defined and cohesive overall landscape, each municipality within the planning area exhibits some characteristics unique to that municipality. The overall existing land use pattern is depicted on Map 2-1. Maps 2-1a, and 2-1b focus on Fairfield Borough and Carroll Valley Borough respectively. The general land use character of each municipality can be described as follows.



Suburban setting, residential neighborhood, Carroll Valley Borough

Carroll Valley Borough - Carroll Valley Borough is predominately a low density residential community established as part of the former Charnita subdivision. The predominant land use in the Borough is single-family detached residential lots, with proportionally more dwelling units within the northern half of the Borough were public sewer and water service is available. A variety of outdoor recreational and commercial uses are located along PA Route 116. Several parcels, primarily along Jacks Mountain Road, are actively farmed.

Fairfield Borough - Fairfield Borough is a classic example of a compact Pennsylvania village. A mixed-use borough core is surrounded by several

low to moderate density residential neighborhoods. The largest proportion of Fairfield's land area is comprised of agriculturally used lands.

Freedom Township - Freedom Township is predominantly comprised of agricultural and rural residential use. Much of the agricultural and rural residential land uses are located within, and comprise, the Southwest Viewshed of the Gettysburg National Military Park. Limited commercial uses are located along Emmitsburg Road.

Hamiltonban Township - Hamiltonban Township is predominantly comprised of agricultural and natural lands, including a substantial portion of Michaux State Forest, other conserved natural settings. Agricultural lands include the southern extent of the Adams County Fruitbelt and the broad agricultural landscape along Carroll's Tract Road. Commercial uses are concentrated along the PA Route 116 and PA Route 16 corridors. The most significant residential concentrations are adjacent to Fairfield Borough and various unincorporated villages (including Orrtanna), and on lots associated with the former Charnita subdivision.

Highland Township - Highland Township is predominantly comprised of agricultural and rural residential use. Limited commercial use is located along PA Route 116.

Liberty Township - Liberty Township is predominantly comprised of agricultural and natural lands. Limited residential use is located on lots associated with the former Charnita subdivision. Commercial uses are concentrated primarily along the PA Route 16 corridor.

Existing Land Use Analysis

Concurrently, the Existing Land Use maps and Table 2-25 demonstrate the predominant rural character of the setting. Visually, a significant portion of the planning area is comprised of rural land uses, while commercial, employment, and higher density residential uses are, for the most part, centered within or near existing boroughs and unincorporated villages or along primary roadways.

Within the region as a whole, over 80% of the land area is comprised of land uses reflective of rural character. This cumulatively includes the agricultural, specialized agriculture, vacant, and wooded areas, and also includes state and federal lands (primarily Michaux State Forest) as these areas exhibit primarily rural character as well. In addition, many properties not generally included within the land use categories that typify rural character still contribute to the overall open space character of the region. Many of the outdoor recreation uses in the planning area (notably the ski resort, golf courses, and campgrounds) contribute to the open space nature of the setting. Given the high percentage of property that contributes to rural or open space character, there remains proportionally very small percentages of lands that exhibit a developed character. Commercial and industrial uses comprise, collectively, only 1.6% of the land area within the region, and suburban or urban density residential or mixed use properties cumulatively comprise only 4.7% of the land area.

Existing land use mix within individual municipalities varies only modestly within the Not surprisingly, Carroll Valley planning area. Borough and Fairfield Borough exhibit, by far, the highest percentages of land area dedicated to suburban or urban density residential use. By comparison, none of the townships exhibit a percentage of land area dedicated to suburban or urban density residential use of more than 3.2%. All of the municipalities, including the two boroughs, exhibit a fairly high percentage of rural residential uses, which is not surprising given the overall rural character of the region as a whole. Hamiltonban Township includes, by far, a majority of the wooded, specialized agriculture, and state / federal lands within the planning area given that Hamiltonban Township hosts most of Michaux State



Urban setting, East Main Street, Fairfield Borough

Forest, the southern extent of the Adams County Fruitbelt, and related lands. Interestingly, all of the municipalities exhibit a similar low percentage of commercial and industrial lands. Fairfield Borough's percentage of industrial land is proportionally higher, but this is due primarily to the presence of a single large manufacturing facility on the north side of the Borough.

Table 2-25: Existing Land Use

		oll Valley rough	Fairfield Borough		Freedom Township		Hamiltonban Township	
Existing Land Use	Acres	Percent of Total Acres	Acres	Percent of Total Acres	Acres	Percent of Total Acres	Acres	Percent of Total Acres
Wooded	0	0.0	0	0.0	0	0.0	6,172.0	25.0
Specialized Agriculture	12.6	0.4	0	0.0	0	0.0	2,875.4	11.6
Agriculture / Vacant 10 or more acres	447.8	14.4	266.9	65.2	7,626.0	87.8	6,623.9	26.8
Rural Residential	121.2	3.9	16.4	4.0	547.5	6.3	959.9	3.9
Residential	964.5	31.0	65.5	16.0	161.2	1.9	702.6	2.8
Multi-Family Residential	6.7	0.2	9.2	2.3	0	0.0	2.7	0.0
Mixed Use	0.7	0.0	4.1	1.0	4.6	0.1	38.5	0.2
Commercial	13.6	0.4	4.6	1.1	97.9	1.1	17.2	0.1
Industrial	0	0.0	19.4	4.7	0	0.0	531.6	2.2
Outdoor Recreation	462.0	14.9	0	0.0	0	0.0	1,113.7	4.5
Public / Institutional / Utility	102.8	3.3	16.8	4.1	159.4	1.8	1,067.9	4.3
State / Federal	0	0.0	1.4	0.3	0	0.0	4,183.9	16.9
Vacant - less than 10 acres	976.7	31.4	5.1	1.2	93.8	1.1	417.9	1.7
Total	3,108.6	100.0	409.2	100.0	8,690.4	100.0	24,707.4	100.0

Emission I and Has	Highland Township		Libert	y Township	Southwest Adams Region	
Existing Land Use	Acres	Percent of Total Acres	Acres	Percent of Total Acres	Acres	Percent of Total Acres
Wooded	0	0.0	1,086.7	10.7	7,258.7	13.3
Specialized Agriculture	206.1	2.7	46.3	0.5	3,140.4	5.7
Agriculture / Vacant 10 or more acres	6,169.2	81.4	6,303.6	62.1	27,437.3	50.2
Rural Residential	452.2	6.0	655.8	6.6	2,763.0	5.1
Residential	201.8	2.7	300.4	3.0	2,396.0	4.4
Multi-Family Residential	2.2	0.0	11.9	0.1	32.7	0.1
Mixed Use	9.5	0.1	70.6	0.7	127.9	0.2
Commercial	25.4	0.3	52.7	0.5	211.3	0.4
Industrial	86.5	1.1	0.0	0.0	637.4	1.2
Outdoor Recreation	213.3	2.8	147.1	1.4	1,936.0	3.5
Public / Institutional / Utility	65.2	0.9	335.4	3.3	1,747.6	3.2
State / Federal	0	0.0	644.2	6.3	4,829.5	8.8
Vacant - less than 10 acres	144.0	1.9	482.7	4.8	2,120.1	3.9
Total	7,575.2	100.0	10,147.2	100.0	54,638.0	100.0

Source: Adams County Office of Planning and Development

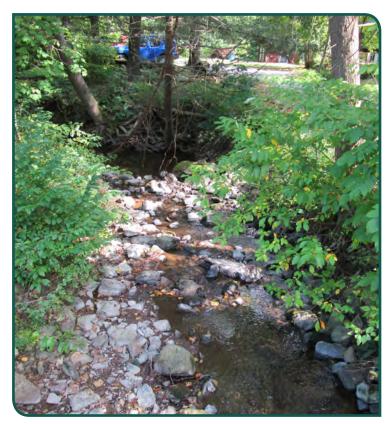
Section 6 - Natural Resources

Understanding the range of natural resources within a setting is critical in terms of addressing the planning needs of an area. Such natural resources are intrinsically related to a region's overall quality of life. Natural resources within the planning area are inventoried as follows.

Hydrology

Alarge proportion of the Region's natural resources are associated with, or at least impacted by, the hydrology of the area. Hydrology, in the broadest sense, includes two components, specifically surface water and groundwater. Surface water includes ponds. lakes, wetlands, creeks, streams and rivers or other water located above ground. Groundwater includes water that resides below the surface and flows from subsurface levels to surface levels or surface water.

Surface Waters - Map 2-2 depicts the extent of surface waters and watersheds within the planning area. Most of the surface water resources within the area are streams, farm ponds or wetlands. Most of the streams that flow within the Region, like within Adams County as a whole, have their headwaters within the area. There are no streams that have their headwaters



Swamp Creek, Strawberry Hill Nature Center, Hamiltonban Township

outside the planning area and then flow into the planning area. The Region, like Adams County as a whole, is very much a headwaters setting for surface waters. Consequently, stream sizes, flow volumes, and subwatershed sizes are consequently and generally small within the planning area.

The entire planning area is located within the Potomac River Watershed. Most of the streams within the planning area eventually drain to the Monocacy River, itself a tributary of the Potomac River. The two streams that do not drain directly to the Monocacy River (specifically the Antietam Creek and the Conococheague Creek via Carbaugh Run, both of which have their headwaters at partially within Hamiltonban Township) drain directly to the Potomac River instead. Table 2-26 lists all the subwatersheds in the planning area and indicates the size of each watershed.

Table 2-26: Subwatersheds

Subwatershed	Area in Acres within Planning Area	Area in Square Miles within Planning Area
Cove Hollow	371.0	0.58
Carbaugh Run	1114.8	1.74
Copper Run	704.5	1.10
East Branch Antietam Creek	3165.6	4.95
Flat Run	4784.7	7.48
Friends Creek	1669.0	2.61
Green Run	683.7	1.07
Hayes Run	187.0	0.29
Little Marsh Creek	5065.0	7.91
Marsh Creek	6870.5	10.74
Middle Creek	7958.4	12.43
Miney Branch	4344.3	6.79
Monocacy River	1401.8	2.19
Muddy Run	3697.0	5.78
Muskrat Run	332.1	0.52
Plum Run	1944.6	3.04
Rattlesnake Run	24.9	0.04
Rattling Run	684.3	1.07
Spring Run	1557.4	2.43
Swamp Creek	1423.9	2.22
Toms Creek	8228.0	12.86

High Quality and Exceptional Value Waters: The Pennsylvania Department of Environmental Protection has developed water quality standards for all surface waters in the Commonwealth. These standards, which are designed to safeguard the streams, rivers and lakes throughout Pennsylvania, include use designations, such as cold water fishery, and water quality criteria necessary to protect these uses. Special protection is provided for streams and their smaller tributaries designated as high quality (HQ) waters or exceptional value (EV) waters. The East Branch of the Antietam Creek, Middle Creek, Swamp Creek and Toms Creek are classified as high quality waters. Carbaugh Run and Saw Mill Run are designated exceptional value waters. Map 2-3 confirms that these streams are all located in the western portion of the Region, specifically in Hamiltonban Township. These streams are all located within the South Mountain area of Hamiltonban Township, and all are located in wooded settings.

Existence of naturally reproducing trout populations is also a good indicator of surface water quality. Map 2-3 also depicts stream segments where such populations exist. These segments extend beyond the extent of the HQ designation for Middle Creek and Toms Creek. Further, an additional reproducing population exists within Marsh Creek to the north and west of Knoxlyn.

Lakes and Reservoirs - There are no naturally occurring lakes within the planning area.

All standing bodies of water are man-made. These water bodies are depicted on Map 2-2 and include the Waynesboro Reservoir on East Branch Antietam Creek in western Hamiltonban Township, the Chambersburg Reservoir on Carbaugh Run along the northern Hamiltonban Township border, the three small reservoirs (Lake Kay, Lake May, and the lake at Carroll Commons) within Carroll Valley, and the various farm ponds within the Region. The two reservoirs were developed for water supply purposes for populations in neighboring Franklin County, while the three lakes in Carroll Valley Borough were developed stormwater primarily for management



Lake May, Carroll Valley Borough

purposes, although they support some modest recreation purposes as well.

Floodplains - Approximately 3,461.9 acres or 5.41 square miles of floodplains exist within the planning area. Designated 100-year floodplains are depicted on Map 2-2 and are typically located along creeks and streams throughout the Region. However, the most significant and widest floodplains are located in the eastern portion of the Region and are associated with Marsh, Middle, and Toms Creeks, Flat Run, and the associated tributaries of these streams. The width of these floodplain areas can be directly attributed to the flat to gently rolling topography of the eastern portion of the Region. Of particular note is the floodplain associated with Middle Creek and its Spring Run tributary, both of which cover significant area within Fairfield and the surrounding developed area. While other floodplain areas obviously affect specific properties, very few population concentrations beyond Fairfield in the Region are directly impacted by floodplains.

Wetlands - According to National Wetlands Inventory (NWI) data, approximately 1.71 square miles (1,091.6 acres) of Palustrine, Lacustrine, and Riverine wetlands are present within the Region. Map 2-2 depicts wetland areas as identified in the NWI. The majority of wetlands within the Region are either associated with creeks and their floodplains or are associated with farm ponds. Most of the wetland areas are located in the eastern half of the Region, specifically to the east of the South Mountain. Relatively few wetland areas are located in the western portion of the Region due to the more rugged topographical characteristics.



Middle Creek Floodplain, Fairfield Borough

Groundwater - Groundwater is an essential resource within the planning area, as every resident and business relies on groundwater supplies. Fully inventorying groundwater resources, from the standpoints of water quality and water quantity, is a highly technical and expansive undertaking, and is beyond the scope of this planning effort. However, some basic information regarding groundwater supplies is presented here in order to "set the stage" for water supply policies and recommendations in following chapters of this Plan.

Hydrogeologic Settings - The quality and quantity of groundwater is partially determined by the hyrdogeologic setting of an area. Two primary hydrogeologic settings exist in the Southwest Adams County planning area - the Gettysburg Lowland Formation and the Blue Ridge Formation. These formations, along with associated sub-formations, are depicted on Map 2-4. The Gettysburg Formation includes large areas of diabase rock, which provides its own unique challenges with regard to water supply and water quality planning. The Gettysburg Formation (along with the diabase areas) constitutes roughly the eastern half of the planning area, while the Blue Ridge Formation constitutes roughly the western half of the area.

United States Geological Survey (USGS) reporting generally indicates that the Gettysburg Formation is the most productive unit in Adams County from a water supply perspective. A significant difference in domestic and nondomestic well productivity has been measured between wells in the Gettysburg Formation versus any other formation in Adams County, including the Blue Ridge Formation. Wells in the Blue Ridge Formation are typically deeper than those in the Gettysburg Formation, particularly where wells are needed on higher elevation properties such as ridgetops. In either formation, domestic and non-domestic well productivity can vary substantially over comparatively small surface distances. Further, USGS reporting conducted specifically within southern Carroll Valley Borough (which includes a portion of the border between these two formations) describes comparable well yields between the two formations as "a house divided." This description underscores the more general observations from broader studies suggesting that the Gettysburg Formation is superior from a water supply perspective than the Blue Ridge Formation. In fact, USGS's Carroll Valley Borough reporting indicates a "groundwater system under stress" in Carroll Valley Borough, particularly in drought seasons.

From a water quality standpoint, the USGS reporting indicates that groundwater quality throughout Adams County is acceptable for most uses. Water within the Blue Ridge Formation is generally more acidic that water from the Gettysburg Formation, while water hardness levels in the Gettysburg Formation are typically much higher due to proximity of limestone deposits. Further, although sample size was limited, USGS reported that water contaminants (dissolved solids, ion, nutrients, etc.) were generally higher in the Gettysburg Formation versus the Blue Ridge Formation.

Water Source - The volume of available groundwater is dependent on the hydrologic cycle. USGS reporting indicates that an average rainfall amount between 44 and 46 inches per year falls within the planning area. Of this amount, between 7 and 9 inches of rainfall per year infiltrates into the ground and contributes to groundwater replenishment. This degree of infiltration, coupled with the knowledge that limited non-groundwater supplies exist within the planning area, again stress groundwater resources in the region in times of drought.

Marsh Creek Watershed - Of particular concern is the portion of the planning area that lies within the Marsh Creek watershed. This area, including portions of Freedom, Hamiltonban, and Highland Townships, has been included in the designated Marsh and Rock Creek Critical Water Planning Area (CWPA) by the Pennsylvania Department of Environmental Protection. As such, a Critical Area Resource Plan (CARP) has been prepared for this area. The draft CARP notes a variety of water quality and water quantity issues within this area. Notable is concern regarding water overall groundwater availability during low flow, or drought,

conditions given anticipated community growth in the coming decades. However, the draft CARP indicates that the average water budget for the watershed is sufficient to meet future water demands if properly managed.

Soils

A basic understanding of soil characteristics is essential to develop appropriate planning policies and to determine where and how property improvements can be accomplished. Five soil associations are present within the planning area. These include the following:

- Penn-Klinesville-Croton
- Lehigh-Neshaminy
- Edgemont-Highfield-Catoctin
- Highfield-Arendtsville-Rohrer
- Athol-Penlaw-Clarksburg

The Edgemont-Highfield-Catoctin and Highfield-Arendtsville-Rohrer associations are located in the western portion of the planning area. These soils are characteristic of the sloping topography of South Mountain (including all of Michaux State Forest), are generally well-drained (if not excessively well-drained), deep, and often stony. These soils, not surprisingly, include various development and agricultural limitations due to slope and the potential for erosion. These soils include the orchard operations within the planning area, and are generally well suited to this use.

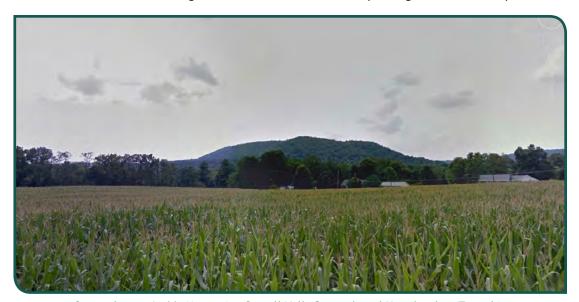
The Penn-Klinesville-Croton, Lehigh-Neshaminy, and Athol-Penlaw-Clarksburg associations are located in the eastern portion of the planning area. These soils are characteristic of the flatter to rolling topography moving east from the foothills of South Mountain. Soils quality within these associations can vary significantly, although the three associations general share the general characteristic (with some exceptions) of being well-drained to excessively drained on hillsides and somewhat poorly to poorly drained in level areas. The area is generally suitable to agricultural use although there is potential for soil erosion in various settings. Limitations for other uses also exist due to slope and, in many areas, wetness.

These general descriptions of soil associations are strongly correlated with soil suitability patterns shown on Maps 2-5, 2-6, and 2-7. Of note is the on-lot septic suitability pattern, which depicts somewhat less limitation in the western half of the planning area than the eastern half. On the whole, limitations on use of basements for dwellings follow this pattern as well, with the exception of areas with no limitations in southern Freedom Township, northeast Liberty Township, and along Carroll's Tract Road in Hamiltonban Township. It must be noted that these maps depict generalized conditions over broad areas, and there are many subareas within these settings where soils limitations are much less constraining.

It is interesting in that that overall pattern depicts soils with less limitations for septic and basement development in those areas where greater limitations on development exist due to slope. These types of dichotomies with regard to soils limitations often make development challenging in just about any portion of the planning area.

Steep Slopes

Map 2-8 depicts steep slopes with grades of 25% or greater. There are approximately 7,150.7 acres (11.17 square miles) of land within steep slopes of 25% or greater within the planning area. The majority of steep slopes are located in the western portion of the Region (that is, to the west of Fairfield, Carroll Valley, and Orrtanna) and are associated with the South Mountain area. Comparatively fewer steep slope areas are located in the eastern portion of the Region, with small concentrations along the Hamiltonban Township – Highland Township border and in



Steep slopes, Jack's Mountain, Carroll Vally Borough and Hamiltonban Township

the extreme southeast corner of Freedom Township. A sizeable proportion of the steep slope areas within the Region are publicly-owned either by the state or federal government. Other steep slope areas are already subject to conservation easements (for example, the Glatfelter Tree Farm #1) or are owned by conservation-oriented entities (for example, Strawberry Hill Nature Preserve). Most of the remaining steep slopes within the Region are dedicated to orchard production. In general, very little of the steepest slope areas within the Region have been developed for residential or other intensive uses. It is noted, however, that much of Carroll Valley Borough includes moderately steep slopes.

Natural Areas

Regionally and locally significant natural areas have been identified in the Adams County Natural Areas Inventory. Natural areas within the planning area are identified in Table 2-27 and are depicted on Map 2-9. The Map ID and Site Name information listed in Table correspond with the sites as depicted on Map 2-9. Four of the ten identified natural areas are located within the South Mountain area of the Region. Another four of the ten areas are located in Freedom Township. The natural areas in the western portion of the Region are predominantly associated with undisturbed natural settings. The natural areas in the eastern portion of the Region are predominantly associated with habitat for endangered or threatened animal or plant species.

Table 2-27: Natural Areas

Map ID	Site Name	USGS Quadrangle	Natural Community Description & Importance
1	Carbaugh Run	Iron Springs / Caledonia Park	Carbaugh Run is an Exceptional Value stream as designated by DCNR.
2	Cold Spring Seeps	Iron Springs	Upland forest dominated by a mix of hemlock, white pine, and tulip poplar.
3	Kepner Knob	Iron Springs	A Pennsylvania candidate for animal species of concern was observed at this site on various occasions.
4	Jacks Mountain	Blue Ridge Summit / Iron Springs	A Pennsylvania candidate for animal species of concern was observed over several years throughout the 1990s.
5	Zora Woods	Blue Ridge Summit / Iron Springs	Locally significant natural community with relatively undisturbed hardwood forest on a steep rock covered slope.
6	Meadow Brook Lane Woods	Fairfield	Small population of endangered tree species was found growing in a floodplain forest along Marsh Run Creek.
7	Redrock Road	Fairfield	Nesting area for an endangered animal of special concern.
8	Plum Run Upland	Fairfield	A single specimen of an S1 endangered animal species was found at this site.
9	North Harpers Hill	Emmitsburg	Locally significant site due to various plant species.

Forested Areas

Map 2-9 depicts the extent of forest cover within the planning area. A significant portion of the planning area is forested. The primary forested area is the landscape that includes the Michaux State Forest and the overall South Mountain area. However, significant additional forested areas are located within the rolling hills of western Freedom Township, eastern Liberty Township, and west-central Highland Township. Further, most of Carroll Valley Borough is forested even with significant portions of the borough developed for residential use. Finally, most of the stream corridors within the planning area include at least some wooded areas within the riparian areas associated with the streams.

Conserved Lands

Map 2-10 depicts preserved lands within the Southwest Adams region. These lands include the Michaux State Forest, including the recent addition of the former Glatfelter Tree Farm, as well as lands that have been preserved through the purchase or donation of conservation easements. Nearly 1,600 acres within the planning area have been preserved through the Adams County Purchase of Agricultural Easements (PACE) program, while over 1,900 acres have been preserved through easements held by the Land Conservancy of Adams County. Easement purchase and donation activity has occurred throughout the planning area, but is focused along Carrolls Tract Road in Hamiltonban Township, northeast Highland Township, and northern Freedom Township.

Section 7 - Historic and Cultural Resources

The Southwest Region of Adams County contains a wide variety of historic resources. These include designated historic properties and historic districts, other properties, and broad landscapes that are important from the historic and cultural heritage perspectives. These historic resources strongly contribute to the community fabric of the region. The region's historic resources are depicted on Map 2-11, and are inventoried as follows.

Historic Properties

The Pennsylvania Historical Museum Commission (PHMC) maintains listings of properties listed or deemed eligible to be listed on the National Register of Historic Places. The PHMC list includes national historic landmarks and listed and eligible historic sites. Table 2-28 identifies those properties within the planning area that are listed on the National Register.

Table 2-28: Properties Listed on the National Register

Municipality	Historic Name Address		Date
Fairfield Borough	Fairfield Inn	15 W. Main Street, Fairfield Borough	1758
Highland Township	Lower Marsh Creek Presbyterian Church	1865 Knoxlyn Road, Orrtanna	1748
Hamiltonban Township	Jack's Mountain Covered Bridge	Jack's Mountain Road, Fairfield, PA Crosses Toms Creek in Hamiltonban Township	1894
Freedom Township	Sach's Covered Bridge	Waterworks Road, Gettysburg Crosses Marsh Creek in Freedom Township	1854

A wide range of individual properties throughout the planning area contain historic resources that reflect the cultural heritage of the setting. While these resources may not be listed in the National Register, they still reflect the settlement and agricultural heritage that characterizes much of the planning area. The resources include a variety of farm houses and farm buildings, as well as structures that were built in the original settlements in the area, notably Fairfield Borough and the other unincorporated villages throughout the area.



Jack's Mountain Covered Bridge, Jack's Mountain Road, Carroll Valley Borough

Historic Districts

The PHMC listings also identify historic districts that are either listed in, or are deemed eligible for listing in, the National Register. Table 2-29 identifies the various historic districts within the planning area.

Table 2-29: Historic Districts

Municipality	Historic District Name	Historic District Type	Area
Freedom Township	Gettysburg Battlefield Historic District	National Register Historic District	Gettysburg, PA near Red Rock Road
Fairfield Borough	Fairfield Historic District	Local Historic District	PA Route 116 and Water Street in Fairfield Borough
Fairfield Borough	Fairfield Historic District	National Register Historic District	PA Route 116, Main Street, Fairfield Borough Starting at the Daniel Musselman Farm, at the northeast comer of the historic district going south to Carroll Tract Road
Hamiltonban Township	Adams County Fruitbelt	National Register Historic District (deemed eligible for listing)	Western Hamiltonban Township between Michaux State Forest and roughly Carroll's Tract Road.
Hamiltonban Township	Fairfield Cavalry Action Historic District	National Register Historic District (deemed eligible for listing)	Hamiltonban Township along Carroll's Tract Road, 2 miles north of Fairfield Borough.

National Register Historic Districts are established in accordance with the federal National Historic Preservation Act of 1966, with the National Register administered and maintained by the National Park Service. National Register listing triggers historic review of projects proposed within the Historic District that are federally funded or that require federal licensing or permitting. Also, National Register listing may enable property owners within the district to be eligible for investment tax credits for the rehabilitation of income producing historic structures. Areas that have been only deemed eligible for listing in the National Register are not eligible for the investment tax credit program.



Fairfield Cavalry Action District, Carroll's Tract Road, Hamiltonban Township

Local Historic Districts are enabled by the Pennsylvania Historic District Act of 1961, and are certified by the Pennsylvania Historical and Museum Commission. Once certified, the local municipality forms a Historic and Architectural Review Board (HARB). The HARB reviews renovations to existing properties and new construction to ensure that any improvements to property are consistent with the historic character of the Local Historic District.

National Register Historic Districts and Local Historic Districts can, and often do, overlap. In the Southwest Adams Region, much of Fairfield Borough is included in both a National Register Historic District and the Local Historic District. While the presence of both types of historic districts demonstrate that significant historical resources are present, the two types of historic districts are separately administered.

Designated Historic / Cultural Heritage Areas

The planning area as a whole is a component of two large, regional heritage regions, described as follows.

Journey Through Hallowed Ground - All of Adams County, and therefore all of the Southwest Adams County planning area, is included in the federally designated Journey Through Hallowed Ground National Heritage Area. This area is focused on interpreting American history within an area roughly centered on the US Route 15 corridor, and extending from Gettysburg in the north to Charlottesville, Virginia in the south. Conservation efforts of the Journey Through Hallowed Ground Partnership focus on the homes and lives of 8 US Presidents, Revolutionary War and Civil War conflicts conducted within the area, and the landscapes that helped define the lives and settlement patterns of the people of the region.

South Mountain Conservation Landscape Initiative - Roughly the western half of Adams County, and therefore all of the Southwest Adams County planning area, is included in the South Mountain Conservation Landscape Initiative, as established by the Pennsylvania Department of Conservation and Natural Resources. Comprising of portions of four Pennsylvania counties, the South Mountain Partnership conducts conservation efforts and regional promotional activities focusing on identified themes within the area. These themes include local agricultural preservation and promotion, natural resources conservation, business and tourism development, and cultural heritage preservation.

Historic Land Grants

Three landscapes that represent colonial era land grants are located within the planning area. These include Carroll's Delight along Carroll's Tract Road in Hamiltonban Township, Carrollsburg Manor along Tract Road in eastern Liberty Township, and the Manor of Maske that extends through much of Freedom and eastern Highland Township. These settings are more fully described in Sections 2 and 12, but are referenced here given the historic and cultural important of these settings to Southwest Adams County.



Carrollsburg Manor setting, Liberty Township

Section 8 - Community Infrastructure

Individual municipalities and various private interests operate various facilities that can be classified as community infrastructure. These systems include community water systems and community sewer systems. In addition, a variety of property owners host stormwater management infrastructure within the setting. Understanding the types and extent of existing community infrastructure is essential in terms of addressing future infrastructure needs of a planning area. The Region's community infrastructure is inventoried as follows.

Water Service

Water service within the planning area includes a range of public and private water systems and regulated systems that serve individual properties. Even with this range of systems, however, the majority of permanent residents within the Region rely upon their own on-lot groundwater well. All inventoried water systems, regardless of system type, rely upon groundwater as the water source. Water systems within the planning area are listed in Table 2-30 and are inventoried as follows.

Community Water Systems - These systems serve the same people for the entire calendar year. Three community water systems operate within the planning area. The two largest systems are the Fairfield Municipal Authority and Section A Water Company systems. The third is a small community water system that provides water for the Hillside Rest Home in Hamiltonban Township.

The Fairfield Municipal Authority provides public water service to Fairfield Borough residents and a small portion of Hamiltonban Township. Hamiltonban Township properties



Fairfield Municipal Authority Standpipe, Iron Springs Road, Hamiltonban Township

account for an estimated 1% of the total service connections. The Authority owns and maintains four underground wells along with a disinfection system and treated-water storage tank. The current distribution system includes roughly 29,200 linear feet of water main lines servicing 246 residential and 25 commercial customers. The system currently serves approximately 780 persons, with a permitted capacity of 352,800 gallons per day.

The Section A Water Company system was developed as an investor owned water system to provide water to property owners within Section A of Carroll Valley. In 2012, the Section A Water Corporation sold the water system to the York Water Company, who assumes responsibility for owning and operating the system. The designated service area for the system was expanded to include all of Carroll Valley Borough. The system includes: 2 wells, well house, one storage tank and water distribution lines. The system currently operates with 105 connections and has a permitted service capacity of 300 persons.

Non-Transient Non-Community Water Systems - These are systems that serve the same population of people, but not for the entire calendar year. Four such systems are located within the planning area. The two most significant systems serve Ski Liberty in Carroll Valley Borough and the Knouse Foods facility in Hamiltonban Township

Transient Non-Community Water Systems - These are systems that do not consistently serve the same population of people. A wide range of establishments, including campgrounds, restaurants, churches, volunteer fire departments, and golf courses, include such systems. At least one transient non-community water system is located in each municipality within the planning area. The systems vary in location from developed areas along major transportation routes to more remote locations away from developed settings.

Table 2-30: Water Systems

Water System Type	Location	EPA ID Number	Water Source	Population Served
Community Water System				
Fairfield Municipal Authority	Fairfield	PA7010005	Groundwater	780
Section A Water Company	Carroll Valley	PA7010033	Groundwater	300
Hillside Rest Home	Hamiltonban	PA7010006	Groundwater	45
Non-Transient Non-Comm	unity Water Syst	ems		
Ski Liberty	Carroll Valley	PA7010348	Groundwater	500
Raven Rock	Liberty	PA7010879	Groundwater	150
Knouse Foods	Hamiltonban	PA7010349	Groundwater	340
ISP Minerals (now Specialty Granules, Inc.)	Hamiltonban	PA7010375	Groundwater	151
Transient Non-Community	Water Systems			
Amvets Post 172	Highland	PA7010384	Groundwater	100
Blue Ridge Sportsmens Club	Hamiltonban	PA7010893	Groundwater	300
Camp Eder	Hamiltonban	PA7010837	Groundwater	100
Camp Happy Valley	Liberty	PA7010378	Groundwater	150
Carroll Valley Resort	Carroll Valley	PA7010367	Groundwater	50
Dave & Jane's	Liberty	PA7010366	Groundwater	325
Donaldson Farm Market (now Our Family Farm Market)	Highland	PA7010832	Groundwater	200
Fellowship Baptist Church	Hamiltonban	PA7010939	Groundwater	140
Four Seasons (now Taverna 5450)	Carroll Valley	PA7010369	Groundwater	50
Frontier BBQ	Carroll Valley	PA7011010	Groundwater	400
Gettysburg Auto Exchange	Freedom	PA7010953	Groundwater	300
Gettysburg Campground	Highland	PA7010365	Groundwater	800
Gettysburg KOA	Highland	PA7010371	Groundwater	300
Granite Hill	Highland	PA7010368	Groundwater	950
Greenmount Fire Company	Freedom	PA7010374	Groundwater	275
Hickory Bridge Farm	Hamiltonban	PA7010827	Groundwater	100
Iron Springs Brethren Church	Hamiltonban	PA7011013	Groundwater	80
Land of Little Horses	Highland	PA7010816	Groundwater	180
Lower Marsh Creek Presbyterian Church	Highland	PA7010925	Groundwater	200
Middle Creek Bible Conference	Liberty	PA7010928	Groundwater	50

Water System Type	Location	EPA ID Number	Water Source	Population Served
Middle Creek Manor	Liberty	PA7010863	Groundwater	30
Mountainview Golf Club	Hamiltonban	PA7010897	Groundwater	180
Orrtanna United Methodist Church	Hamiltonban	PA7010351	Groundwater	60
Sanders Square	Hamiltonban	PA7010978	Groundwater	50
South Pole Snack Bar	Carroll Valley	PA7010933	Groundwater	200
St. Mary's Catholic Church	Hamiltonban	PA7010973	Groundwater	150
Wesley Chapel United Methodist Church	Hamiltonban	PA 7010350	Groundwater	45

Sewer Service

Sewer service within the planning area also includes a combination of public and non-public systems. Three public sewer systems operate within the area, while a number of private sewer systems serve the sewage disposal needs of individual properties. The public sewer systems are inventoried as follows.

Carroll Valley - Carroll Valley Borough owns and operates a sewage treatment facility and system for the northern section of the Borough, specifically Sections J and K. The sewage treatment facility was constructed in 1969 and currently is permitted at a treatment capacity of 0.14 MGD. The sewer system is considered to be "at capacity" with the exception of reserve capacity for the proposed Crest at Carroll Valley development in K Section. The treatment facility is located adjacent to the Carroll Valley golf course's club house on Sanders Road.



Carroll Valley Sewer Plant, Sanders Road, Carroll Valley Borough

Fairfield Borough - Fairfield Borough owns and operates a sewage treatment facility located on Water Street in Hamiltonban Township, just beyond the Borough's southern boundary. This system services the entire Borough as well as two small areas of Hamiltonban Township (the Beechwood Development and a small area located along Carrolls Tract Road). There are a total of 325 billed residential customers with additional EDU's for industry, multiunit structures, commercial, the Fairfield Areas School District campus, and an assisted living home. In the late 2000s, Fairfield Borough was required to upgrade the sewage treatment system to comply with enhanced discharge requirements for systems operating within the Chesapeake Bay watershed.

In 2013, a complete renovation and upgrade of the existing wastewater treatment system was completed, resulting in a permitted capacity of 0.3 MGD. The existing 5-year average daily flow is 0.196 MGD, leaving approximately 100,000 GPD available for development. The design of the new plant utilizes "new and innovative" technology, and allows for a potential

20% expansion of capacity (60,000 GPD) without additional construction through the placement of additional media in the treatment tanks. The design also allows for relatively easy capacity increases with the addition of above-ground retention and treatment tanks.

Hamiltonban Township - Hamiltonban Township owns and operates a sewage treatment facility and system serving the village of Orrtanna. Although the service area and the vast majority of the services connection are in Hamiltonban Township, the treatment plant is located in Highland Township. The treatment plant has operated at 65% capacity since 2010 and therefore has the capacity to add new customers, although new connections have been very limited over the past decade or more.

Even though excess capacity exists within the system, the treatment plant is currently in a Pre-Consent Order Agreement with the Pennsylvania Department of Environmental Protection (DEP) since the plant is no longer able to be operated in accordance with current DEP regulations. Given this situation, the Township has entered into an agreement of sale with Pennsylvania American Water Corporation (PAWC). In accordance with the agreement, Hamiltonban Township will construct a pumping station at the existing treatment plant location and send the sewage to the existing sewer treatment facility in adjoining Franklin Township. PAWC has also purchased the Franklin Township system and has proposed to interconnect the two systems. Upon completion of the sales process and Hamiltonban Township's construction of the new pumping station in 2014, the existing treatment facility and sprayfields will be decommissioned.

Other Systems - A number of privately developed and operated sewage treatment facilities exist within the planning area. These privately developed systems primarily address the sewage disposal needs of individual land uses and are therefore limited in terms of scope and function. Many of the properties listed in Table 2-30 operate a private sewage system in addition to some form of water system. Some, but certainly not all, of these systems have a permitted point discharge to a stream, while many others simply operate large onlot septic systems.

Act 537 Sewage Facilities Planning

All municipalities within the planning area have prepared Act 137 Sewage Facilities Plans. These plans vary significantly in terms of their preparation date, but they collectively provide guidance in terms of the existing status of sewage facilities planning within the Region. The individual municipal Act 537 Plans are briefly summarized as follows.

Carroll Valley Borough - Carroll Valley Borough last updated its Act 537 Plan in 2007. The Plan identified areas within the Borough (notably Section A where many holding tanks exist) where public sewer service should be expanded. In support of any expansion, the Plan discusses the likelihood that a new sewer treatment plant, located south of the current treatment facility, will become necessary. However, citing financial constraints, the Plan indicates that the Borough will not actively pursue sewer system expansion over the short to moderate term. System expansion could be pursued if financial resources became available.

Fairfield Borough - The Fairfield Borough Act 537 Plan is the oldest of the group, and simply requires that all properties within the Borough be connected to the existing public sewer system.

Freedom Township - Freedom Township last updated its Act 537 Plan in 1990. The Plan recommends that on-lot disposal systems be used throughout the Township. The Plan recognizes, however, that long term disposal needs may change if growth rates increase or commercial developments occur.

Hamiltonban Township - The Hamiltonban Township Act 537 Plan was last updated in 1975. This update was prepared to reflect the formation of Carroll Valley Borough. The only location within the Township recommended for public sewer service was the Charnita Section BB lots. Such service never materialized as Carroll Valley Borough's sewer system was never expanded to a sufficient degree to allow such connection. The Township relies on on-lot disposal systems in all areas except those properties immediately adjoining Fairfield Borough or those properties within Orrtanna.

Highland Township - The Highland Township Act 537 Plan was last updated in the 1970s. The Plan did not identify any locations within the Township where the development of a public sewer system was necessary. Use of on-lot disposal systems is recommended throughout Highland Township.

Liberty Township - The Liberty Township Act 537 Plan was last updated in 2007. The Plan did not identify any locations within the Township where the development of a public sewer system by the Township was necessary. However, the Plan acknowledges the potential for significant residential development within the eastern portion of the Township, centered at the intersection of Tract, Crum, and Wenchoff Roads. When and if such development occurs, the Plan recommends that the development community design, build, and operate any required sewer system. The Plan further recommends that individual developers work cooperatively to provide a single sewage treatment system, and suggested that the proposed sewage treatment plan be located in the southeast quadrant of the Tract Road / Wenchoff Road intersection.



Stormwater management basin, Beechwood Development, Hamiltonban Township

Stormwater Management

With the exception of Carroll Valley Borough, stormwater management within the planning area is handled on a property-by-property basis. Individual property owners bear the responsibility of ensuring that required stormwater management systems are operated and maintain appropriately. However, the planning area is subject to the Adams County Stormwater Management Plan, prepared in accordance with Act 167 requirements. As a result, all Adams County municipalities, including the six municipalities within the planning area, are required to implement stormwater management standards consistent with the

standards established in the Plan. As a result, stormwater management within the planning area will be addressed in a consistent basis, although it is acknowledged that publicly managed infrastructure will not result.

Carroll Valley, while still subject to the requirements of the Adams County Stormwater Management Plan, has relied and will continue to rely upon several components of community

infrastructure with regard to stormwater management. The system relies on a system of swales and culverts to move stormwater from individual properties to the Borough-wide collection system. In most locations within the Borough, these swales ultimately drain to three reservoirs located close to the PA Route 116 corridor. Lakes Kay and May, as well as the lake adjacent to Carroll Valley Commons, are publicly maintained and serve to manage stormwater flow in a manner similar to that of a detention or retention pond.



Drainage swales, residential neighborhood, Carroll Valley Borough

Section 9 - Transportation

A region's transportation system represents critical infrastructure components that affect virtually all attributes of a community. Integrating transportation planning with an area's approach to comprehensive planning is therefore essential. To assess a region's transportation system, several measures are used. These include functional classification, existing transportation mode analysis, average annual daily traffic volumes, commuting time to work, and travel demand modeling. These measures are discussed below.

Transportation Network

Functional Roadway Classification System in Southwestern Adams County: Within Pennsylvania, roadways are classified into six categories: Interstate Highways/ Other Freeways and Expressways, Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector, and Local Roadways. These categories are further broken down based on whether an area is defined as Rural or Urban by the U.S. Census Bureau. The Adams County Transportation Planning Organization (ACTPO) is responsible for maintaining and updating the Functional Classification for all roads on the State-owned transportation network within Adams County. The functional classification for state-owned roads in the Southwest Adams County region is depicted on Map 2-12 and is described as follows.

Principal Arterial Highways - There are two types of Principal Arterial Highways. First, "Interstate Highways/Other Freeways and Expressways" connect large population or



U.S. Route 15, Freedom Township

employment centers. These can range from expressways to two-lane roadways. They are inter-county or interstate oriented and usually accommodate long distance trips. Second, "Other Principal Arterials" supplement the Interstate Principal Arterial Highways by providing service for moderate length trips while distributing travel to smaller geographic areas than those served by "Interstate Principal Arterials". Southwest Adams County has one road segment designated as an "Other Principal Arterial" Highway:

U.S. Route 15 through Freedom Township

Minor Arterials - Minor Arterial roadways provide for a lower level of mobility while placing emphasis on access to land rather than to other arterial roadways. These roads typically provide links to a collector roadway system and connect small population centers to the overall arterial system. Southwest Adams County has two road segments designated as Minor Arterials:

- PA Route 16
- PA Route 116
- Business Route 15 (Cumberland Township Line to US Route 15)

Rural Major Collectors - Rural Major Collector roadways provide for both land access and movement within residential, commercial, industrial, or agricultural areas. They serve as a link between land uses and arterial roadways. Major Collector roads provide service to specific areas and to and from other important traffic generators such as schools and parks. Northwest Adams County has one road segment designated as "Rural Major Collector":

Carroll's Tract Road / Orrtanna Road

Rural Minor Collectors - Rural Minor Collector roadways serve remaining, smaller, rural traffic generators. These roads connect residents, businesses, and agriculturalists to major collector or arterial roads. Southwest Adams County has six road segments designated as Rural Minor Collectors:

- Iron Springs Road
- Tract Road
- Pumping Station Road
- Knoxlyn-Orrtanna Road
- Knoxlyn Road
- Carroll's Tract Road (Mt Carmel Road to Orrtanna Road)

Local Roads - Local Roadways or streets provide for direct access to individual properties and land uses. They are not intended to accommodate through traffic, and they are typically low volume roadways. While for funding purposes this designation applies specifically to



PA Route 16, Liberty Township



Carroll's Tract Road, Hamiltonban Township



Iron Springs Road, Hamiltonban Township

the State-owned Road system, all township and borough owned roads and streets also fall under this designation. Southwest Adams County has nine state-owned road segments and multiple bridges formally designated as "Local Roads":

- Harbaugh Valley Road
- Jacks Mountain Road
- Water Street
- Fairfield Station Road
- Emmitsburg Road (US Route 15 to Maryland State Line)
- Bullfrog Road
- Mason Dixon Road
- Cunningham Road
- Camp Gettysburg Road
- Knoxlyn Road (PA 116 to Knoxlyn-Orrtanna Road)
- All township and borough owned roads

Major Transportation Corridors in Southwest Adams County

Southwest Adams County contains portions of one of the major east-west road corridors that traverse Adams County (PA 116) as well as a portion of US Route 15, including one interchange, which is the major north-south road corridor through Adams County. Key road corridors in the region are described as follows.

PA Route 116 - Route 116 is an east-west roadway that connects southwestern Adams County with Gettysburg and other points to the north and east. The road provides one travel lane per direction with varying shoulder widths. Route 116 is characterized by a rolling vertical alignment presenting some sight distance limitations. Penn DOT owns and maintains the roadway.

PA Route 16 - PA Route 16, also known as the Waynesboro Pike, crosses through the southwestern corner of Adams County connecting to Waynesboro on the west and Emmitsburg and MD Route 140 on the east. It is two lanes wide (one per direction) with shoulders of various widths. Excluding the limited access Route 15, it has the highest daily traffic volumes on any roadway in southwestern Adams County with a peak average over 9,000 vehicles a day at the Mason-Dixon Line.

Business Route 15 / Emmitsburg Road (SR 3001) - Running in a north -south direction, this road roughly parallels US Route 15. It intersects with US Route 15 through an interchange in Freedom Township. It has similar characteristics to other state-owned and maintained roads in the region having two travel lanes and small to moderate width shoulders.

Orrtanna Road / Carroll's Tract Road (SR 3011) - This state owned and maintained route extends in a southerly direction from the Village of Cashtown where it transitions from Cashtown Road to Orrtanna Road, near the Village of Orrtanna. From the Village of Orrtanna it becomes Carroll's Tract Road and continues south into Fairfield Borough. It is two lanes

wide (one per direction) with shoulders of various widths. While portions of this road provide direct access to farms, there has been substantial strip residential development along the road. Increasingly Orrtanna Road serves as a commuter link for people traveling through Southwest Adams County to jobs in Maryland.

State Road System in Southwest Adams County

The Southwest Adams County planning area contains 90.31 miles of state-owned roads. This represents 15.8% of the 571.7 miles of state-owned roads in Adams County as a whole. These roads are primarily composed of bituminous paving materials. Small sections of U.S. Route 15 and some bridge decks are constructed of concrete.

Municipal Road System in Southwest Adams County

The Southwest Adams County planning area contains 131.79 miles of municipal-owned and maintained roads. This represents 16.0% of the 824.14 miles of municipal-owned and maintained roads in Adams County. The bulk of this mileage is located in Carroll Valley Borough and Hamiltonban Township. Carroll Valley ranks first amongst Boroughs, and second overall,

in Adams County, in municipal owned road mileage with 52.52 miles. Fairfield Borough ranks 34th out of 34 municipalities in Adams County, narrowly edging out York Springs Borough, in the amount municipal-owned and maintained road mileage.

Of the Southwest Adams County region's 131.79 miles of municipal-owned and maintained roads, 118.09 miles, or 89%, are composed of bituminous paving materials. Another 13.62 miles, or 10.3%, are classified as gravel The remaining mileage roads. consists of unimproved roads in Freedom Township. Table 2-31 provides detailed information regarding municipal owned roads in Southwest Adams County.



Bullfrog Road, Freedom Township

owned road mileage with 52.52 Table 2-31: Municipal Owned Road Mileage (By Type)

Municipality	Unimproved Roads	Gravel Roads	Sealcoat Roads	Bituminous Roads	Total Local Road Mileage
Carroll Valley Borough	0	6.11	0	46.41	52.52
Fairfield Borough	0	0	0	1.10	1.10
Freedom Township	0.08	4.32	0	10.01	14.41
Hamiltonban Township	0	2.70	0	28.81	31.51
Highland Township	0	0	0	15.40	15.41
Liberty Township	0	0.28	0	16.56	16.84
Southwest Adams	0.08	13.62	0	118.09	131.79
Adams County	47.59	40.61	35.41	700.53	824.14
Boroughs	0	6.81	0		
Townships	47.59	33.80	35.41	581.04	697.84

Source: PennDOT, Bureau of Municipal Services

Traffic Signals

Traffic signals are designed to ensure a safe and orderly flow of traffic, protect pedestrians and vehicles at busy intersections, and to reduce the severity and frequency of accidents between vehicles entering intersections. Since Pennsylvania is one of nine (9) states that does not own or maintain traffic signals, they are typically owned and maintained by local municipalities. Occasionally a developer, homeowners association or other private entity will assume responsibility for ownership and maintenance of a traffic signal through legal agreement with the township or borough.

As of 2009, there were 13,660 traffic signals in Pennsylvania. Of those, Adams County had 44, or 0.32% of the statewide total. Southwest Adams County region has one (1) traffic signal on Jacks Mountain Road (SR 3021) in Carroll Valley Borough, although it is noted that this signal is used solely to regulate traffic flow across a one-lane bridge rather than to regulate traffic flow at an intersection.

Regional Bridge Network

The bridge system in Pennsylvania can be categorized into two classes, state-owned and maintained and municipal-owned and maintained facilities. According to data made available by Penn DOT in 2007, there are over 25,000 state-owned (with a span length of greater than 8') and over 6,400 municipal-owned (with a span length of greater than 20') bridges in Pennsylvania. Of these bridges Adams County contains 453, or 1.4% of the total in the state, 382 of which are state-owned and 71 municipal-owned. The majority of these bridges are constructed of concrete (either precast or poured in place), steel (typically using an I-beam design), or a prestressed box or slab design. Some alternative designs/construction materials can be found on the older, potentially historically significant bridges, including wood timbers and stone masonry materials and arch and truss designs. Finally, two bridges in the region are listed on the National Register of Historic Places, the Jacks Mountain Covered Bridge in Hamiltonban Township and the Sach's Covered Bridge on the Cumberland Township / Freedom Township Line.

State-Owned Bridge Network - The Southwest Adams County area has 50, or 13%, of the 383 state-owned bridges in Adams County. Of these, 11, or 22% are classified as structurally deficient. Further, 25.5% of the total bridge deck area is classifies as structurally deficient. These numbers are consistent with Adams County as a whole. The oldest state-owned bridges still standing in this region was built in 1890. At the time this bridge data was provided, there were two (2) state-owned bridges in this region posted with a weight limit. Table 2-32 provides information regarding state-owned bridges in the planning area.

Table 2-32: State-Owned Bridges

State Bridges (Length 8' or Greater)	Total Bridges	Structurally Deficient (%)	Total Deck Area	Structurally Deficient Deck Area
Statewide	25,332	5,656 (22.3%)	112,211,000	20,885,380 (18.61%)
Adams County	383	87 (22.7%)	603,000	162,120 (26.87%)
Southwest Adams	50	11 (22.0%)	90,453	23,056 (25.5%)

Source: PennDOT, March 2010

Municipal-Owned Bridge Network - Southwest Adams County has 12, or 18.5%, of the 65 municipal-owned bridges in Adams County. Of these twelve, only one is classified as structurally deficient while eight (8) have some level of weight restriction posted. The oldest municipal-owned bridge still standing in this region was built in 1905. At the time this bridge data was provided none the municipal-owned bridges were posted as closed. Table 2-33 provides information regarding municipal-owned bridges in the planning area. The municipal bridges collectively have better structurally deficient bridge and deck area ratings that the state-owned bridges, which indicates that municipal bridge infrastructure is in comparatively good shape when compared state bridge infrastructure in the planning area.

Table 2-33: Municipal-Owned Bridges

Local Bridges (Length 20' or Greater)	Total Bridges	Structurally Deficient	Total Deck Area	Structurally Deficient Deck Area
Statewide	6,312	2,149 (34.0%)	14,188,600	4,372,600 (30.82%)
Adams County	65	13 (20.0%)	91,400	21,600 (23.63%)
Southwest Adams	12	1 (8.3%)	12,400	1,637 (13.2%)

Source: PennDOT, March 2010

Bicycle and Pedestrian Network

In Southwest Adams County, non-motorized transportation, primarily bicycle and pedestrian movements, is provided primarily by municipal sidewalk systems. However, only two areas in the region have such sidewalk systems, Fairfield Borough on Main Street, Water Street, and Centennial Street and Carroll Valley on the south side of Lake Kay. Given the limited size of these facilities, most non-motorized transportation in the region occurs on the shoulders of the state and local road system. Recently some residential development proposals have also included internal sidewalk systems.

Public Transportation

Currently, there is no fixed route public transit system that serves Southwest Adams County. Capital Area Transit (Harrisburg) operates a twice daily route to and from Dillsburg, York County and Rabbittansit (York) operates several routes that connect York to the Hanover Area. These routes serve some Adams County commuters on a "park and ride" basis. The Adams County Transit Authority (ACTA) also operates an "on-demand" Paratransit service which provides curb-to-curb trips for seniors and those with disabilities. The bulk of these trips are for seniors although many also serve persons with disabilities that work and the HART (Hanover Adams Rehabilitation/Training) Center in New Oxford, as well as others who need medical transportation, banking, shopping, and personnel services. The Office for Aging provides for 100% of the cost of essential trips for persons aged 60-64. The Pennsylvania Lottery provides 85% funding for persons 65 and older. In these cases the Office for Aging will provide the remaining 15% for essential trips with users responsible to the 15% for non-essential trips. Finally, Adams County is an active participant in the Susquehanna Regional Transit Partnership (SRTP). SRTP, through its Commuter Services of South Central Pennsylvania program, assists commuters and employers in identifying ridesharing/ carpooling options to reduce vehicle trips.

According to data provided by ACTA for Adams County as a whole, a total of 47,298 trips serving 755 persons were provided in 2006. Of these, 3,449 trips serving 29 persons originated from the Southwest Adams County region. Hamiltonban Township had the highest number of persons served, nine (9), and the highest number of trips, 1,348. For comparative purposes, Gettysburg Borough had the highest number of trips (7,705) and persons served (176) in Adams County. With the exception of Hamiltonban Township, the other five municipalities rank in the bottom third in of all Adams County in terms of total trips and persons served. It is noted that, given the very small numbers of persons served in each municipality, the average number of trips per



Rabbitransit paratransit bus

person served figure can easily be skewed by one person using demand responsive service on a daily or very frequent basis. Table 2-34 details ACTA service provided within the planning area.

Table 2-34: Adams County Transit Authority Ridership (Southwest Adams County)

Municipality	People Served	Number of Trips	Average Number of Trips per Person Served
Carroll Valley Borough	5	20	4.0
Fairfield Borough	3	292	97.3
Freedom Township	4	561	140.3
Hamiltonban Township	9	1,348	149.8
Highland Township	5	612	122.4
Liberty Township	3	616	205.3
Southwest Region Totals	29	3,449	118.9
County Boroughs (Avg.)	27.2	1,372	50.5
County Townships (Avg.)	19.1	1,403	73.3
Countywide Totals	755	47,298	62.6

Source: Adams County Transit Authority, 2006

Airport Facilities

While the Southwest Adams County region does not contain an airport, a variety of publicuse airports are located within close proximity. Five (5) Commercial Service Airports are located within a two (2) hour drive from this region, including:

- Harrisburg International Airport (MDT)
- Baltimore-Washington International (BWI)
- Washington-Dulles International Airport (IDA)
- Ronald Regan Washington National Airport (DCA)

Hagerstown Regional Airport (MD)

Additionally, four (4) General Aviation Service Airports are located within a short distance of this region, including:

- Gettysburg Regional Airport
- Franklin County Regional Airport
- Frederick Municipal Airport (MD)
- Carroll County Regional Airport (MD)

The Gettysburg Regional Airport and the Franklin County Regional Airport are both owned and operated by the Susquehanna Area Regional Airport Authority (SARAA) which also operates the Harrisburg International Airport. These facilities provide service for privately owned and operated aircraft and generally do not provide regularly scheduled public flights. They do, however, serve a number of local businesses and institutions via private connections to external locations.

Finally, the Mid-Atlantic Soaring Center, located in Liberty Township, offers private sailplane and gilder activities and storage.

Railway Facilities

Two active railroad lines traverse Adams County, one of which extends through the Southwest Adams County planning area. CSX Transportation provides rail freight service over the "Hanover Subdivision Line" which connects Baltimore, Maryland with Hagerstown, Maryland. The Pennsylvania portion of this line extends 54 miles from the Maryland state line in Franklin County, through Gettysburg and Hanover before crossing back into Maryland. The Adams County portion extends 35.2 miles from the Franklin County line north of Route 16 through Gettysburg and New Oxford before exiting just north of McSherrystown. CSX carries approximately 4 million gross tons of freight, including consumer goods, coal, rock, and municipal and construction waste, over this line annually. As a fairly low volume rail corridor, the 2003 Pennsylvania State Rail Plan identified this corridor as an "at risk" corridor, meaning that due to the low use of the line, it is a potential candidate for sale or lease. However, recent upgrades on the CSX line from the Hanover area through Adams County are being completed to provide improved rail service through the local corridor, indicating that freight movement along this corridor may be

expected to increase in the future, especially to freight transfer facilities in Franklin County.

With the existence of these rail lines, the county has 52 at-grade rail crossings of public roadways. These crossings are identified in Table 2-35. Ten of these at-grade crossings occur in Southwest Adams County. The seven (7) crossings that occur in Hamiltonban Township is the most in a single municipality in Adams County (tied with Straban Township). Although most of these are located on rural roads with low traffic volumes, several crossings occur in core communities and



CSX Railroad Line at Virginia Mills, Hamiltonban Township

can increase both congestion and safety concerns in these communities.

Table 2-35: Adams County At-Grade Rail Crossings (Southwest Adams County)

Municipality	Cross Street	Railroad	Warning Type
Hamiltonban	Carrolls Tract Road	CSX	Flashing lights
Hamiltonban	Hickory Bridge Road	CSX	Stop signs
Hamiltonban	Cold Springs Road	CSX	Stop signs
Hamiltonban	Mount Hope Road	CSX	Flashing lights
Hamiltonban	Fairfield Station	CSX	Cross bucks
Hamiltonban	Fairfield Station	CSX	Flashing lights
Hamiltonban	Iron Springs Road	CSX	Flashing lights
Highland	Railroad Lane	CSX	Cross bucks
Franklin/Highland	Orrtanna Road	CSX	Flashing lights
Franklin/Highland	Silo Road	CSX	Cross bucks

Source: PennDOT

Finally, while no passenger rail services are available in Adams County, Amtrak provides service to seven stations within driving distance of Southwest Adams County, including:

- Harrisburg, PA
- Middletown, PA
- Elizabethtown, PA
- Baltimore-Penn Station, MD
- Baltimore-BWI, MD
- Harpers Ferry, WV
- Martinsburg, WV

Transportation Network Performance Measures

The performance of the roadway network within the region is assessed by reviewing various volume measures. These measures include Average Daily Traffic, commuter patterns, and travel demand modeling.

Average Daily Traffic - Overall, the Average Daily Traffic (ADT) volume figures for Southwest Adams County (see Table 2-36) indicate a mixed trend of increasing traffic volumes on many roadways while stagnating or even decreasing on others. However, one trend is noticeable within these increasing traffic volumes. The roads exhibiting increased volumes all have orientations south towards US Route 15, Emmitsburg, and other destination south of the study area in Maryland. Another noticeable trend is on major roads with either a small increase or even a decrease in traffic volumes. This trend is occurring in many areas of Adams County, and other counties and states nationwide, for a variety of reasons. Many "back roads" have been resurfaced or paved for the first time allowing for safer use of these lower volume roads by motorists. Motorists are increasingly attempting to avoid truck traffic and congestion (both real and perceived) by searching out alternative trip

paths. High speed, broadband internet access and new home versus office work options have allowed more people to telecommute/work from home instead of commuting to and from an office each day. Higher energy costs have forced many households to take fewer trips and combine multiple stops into one trip. Finally, recent economic conditions have resulted in fewer trips to work and shopping locations.

Table 2-36: Traffic Volumes 1998 - 2009

Roadway	1998 AADT	2009 AADT	% Change
Bullfrog Road (North of US 15)	750	1,257	67.6%
Bullfrog Road (South of US 15)	600	432	-28.0%
Camp Gettysburg Road	300	279	-7.0%
Carroll's Tract Road	2,200	2,766	25.7%
Cunningham Road	100	195	95.0%
Emmitsburg Road (North of US 15)	2,600	2,528	-2.8%
Emmitsburg Road (South of US 15)	1,600	858	-46.4%
Fairfield Road (North of Fairfield)	5,300	5,339	0.7%
Fairfield Road (In Fairfield Borough)	8,300	8,088	-2.6%
Fairfield Road (South of Carroll Valley)	3,400	4,652	36.8%
Fairfield Station Road	100	150	50.0%
Harbaugh Valley Road	1,200	791	-34.1%
Iron Springs Road	850	700	-17.6%
Jacks Mountain Road	1,800	2,264	25.8%
Knoxlyn-Orrtanna Road	1,100	977	-11.2%
Knoxlyn Road	400	512	28.0%
Mason-Dixon Road	250	410	64.0%
Orrtanna Road	2,200	2,789	26.8%
Pumping Station Road (S. of Bullfrog Rd)	600	456	-24.0%
Pumping Station Road (N. of Camp Gettysburg Rd)	650	790	21.5%
Tract Road (East of Fairfield Borough)	350	737	110.6%
Tract Road (S. of Pumping Station Rd)	500	612	22.4%
US Route 15 (North & South)	15,000	17,995	20.0%
Water Street	200	189	-5.5%
Waynesboro Pike (East of PA 116)	6,700	9,012	34.5%
Waynesboro Pike (PA 116 to Jacks Mtn. Rd.)	6,600	5,719	-13.3%
Waynesboro Pike (W. of Jacks Mtn. Rd.)	6,600	7,436	12.7%

Source: ACOPD, PennDOT iTMS 2009

Historic Average Daily Traffic - Historic ADT data is somewhat limited, although some data exists for the two main roadways in the planning area (see Table 2-37). The data indicates that overall volume levels have increased over the past four decades. The increase demonstrated for US Route 15 is attributed to the expansion of this roadway to a four-lane, limited access highway in the early 1990s.

Table 2-37: Historic Traffic Volumes 1972-2009

Roadway	1972 AADT	1990 AADT	1998 AADT	2009 AADT	1972-2009 % Change
Fairfield Road (North of Fairfield)	3,000	5,213	5,300	5,339	78.0%
US Route 15 (North & South)	4,360	4,589	15,000	17,995	312.7%

Source: ACOPD, PennDOT iTMS 2009

Adams County Travel Demand Model Results for Southwest Adams County

As part of a planned update to the Transportation Element of the Adams County Comprehensive Plan, a Travel Demand Model (TDM) was created. The purpose of the TDM is to 1) identify broad changes in travel demand, effective capacity, and travel delay, 2) identify areas that may experience increased travel demand and, potentially, associated travel delay, and 3) identify locations or corridors which may encounter transportation issues under the envisioned future scenarios. The TDM accomplishes this by splitting Adams County into 186 internal and 15 external transportation analysis zones (TAZ). These zones represent specific areas of population and employment data that are used by the TDM to calculate projected vehicle trips onto the road network 2020 and 2035.

The results from the TDM are depicted as three data outputs, 1) Average Daily Traffic (ADT), the traffic along a specific roadway representing an average weekday, 2) Vehicle Miles of Travel (VMT), a system-level model output calculated by weighing the total vehicles on a roadway segment by the length of the segment, and 3) Volume-to-Capacity ratio (V/C), which contrasts the volume of vehicles projected on any street segment with the throughput capacity of the same facility. The results of the TDM for Southwest Adams County region are as follows:

Average Daily Traffic (ADT) - Overall the TDM projections indicate that during 2004-2035 period the 2.45% annual percentage rate of traffic volumes for the Southwest Adams County planning region is the second lowest of the six identified planning regions in Adams County. However, specific road segments within the region still exhibit above average growth in traffic volumes over this time frame. These segments include:

- US Route 15
- PA 116
- Carroll's Tract Road / Orrtanna Road
- Knoxlyn-Orrtanna Road
- Pumping Station Road
- Tract Road

The projections also indicate that the rate of annual traffic volume growth will peak by 2020 before declining to approximately 1.1% annually through 2035. While there is some indication that the projected traffic volume growth rates for the Market Scenario is greater

than for the Policy Scenarios, the statistical difference is negligible.

Vehicle Miles of Travel (VMT) - Since the projection of Vehicle Miles of Travel (VMT) uses Average Daily Traffic (ADT) as a starting point the trends exhibited for ADT within the Northwest Adams County region are also exhibited by VMT. However, overall VMT are impacted greatly by economic forces such as higher energy prices. Recently, sustained higher energy and gas prices have resulted in a nationwide trend of negative VMT growth as practices such as telecommuting, carpooling, and combining trips have become more popular.

Volume Capacity Ratio (V/C) - Volume Capacity (V/C) Ratio is a useful tool to monitor areas of congestion on a road network. As a general rule, a V/C ratio can be described as follows:

- V/C Ratio of less than 0.50 Low or No Congestion
- V/C Ratio of 0.50-0.74 Moderate Congestion
- V/C Ratio of 0.75-1.00 Heavy Congestion
- V/C Ratio of greater than 1.00 Severe Congestion

When the results of the TDM within the Northwest Adams County region are analyzed using these ranges one road corridor stands out.

PA 116 (Miller Street to Tract Road)

This road section is projected to approach Moderate congestion levels by 2035. However, the recent downturn in residential housing development may impact this corridor. Should some plans fail to reach construction, the levels of congestion may not reach the projected level.

Travel Mode Choice - Table Table 2-38: Travel Mode Choice 2-38 details travel mode choice bv municipality within the Southwest Adams Over 94 percent of the commuters residing in Southwest Adams County rely on the private automobile, including both single occupant vehicles and carpooling, as a means of getting to work. Carroll Valley, Fairfield and Liberty exhibit fairly high carpool rates, likely tied to the proximity of the area to larger job centers in Frederick MD and the Washington D.C. metropolitan area. Freedom. Highland and Liberty also exhibit higher than average

Municipality	Total Workers*	**VOS	Carpool	Public transit	Motorcycle	Bicycle	Walked	Other means	Worked at home
Carroll Valley	1,719	1,409	274	4	0	0	4	4	24
Fairfield	227	174	39	0	0	0	7	0	7
Freedom	485	398	42	0	0	0	8	4	33
Hamiltonban	1,101	910	123	0	0	4	19	4	41
Highland	454	368	46	7	0	2	6	0	25
Liberty	581	443	90	2	0	0	10	4	32
TOTAL	4,567	3,702	614	13	0	6	54	16	162

^{*} Total workers= all employed persons 16 years of age and

^{**} SOV=Single occupant vehicle (car, truck or van)

work at home rates in comparison to other municipalities in the area and Adams County overall.

Travel Time to Work - Table 2-39 provides travel time to work data for the municipalities within the planning area. Travel times for commuters in the Southwest Adams Planning Area as a whole are similar to other planning areas within Adams County. Most workers travel less than 29 minutes to their place of employment. Yet, Freedom and Carroll Valley have two of the highest percentages in Adams County of workers who travel more than 90 minutes to their place of employment. Travel time statistics also show that many workers in Fairfield Borough work within or close to the borough, with over 41% having a less than 15 minute commute. Conversely, Carroll Valley Borough has the highest percentage of Southwest Area residents with commutes between 60 and 89 minutes, many traveling to jobs in the Frederick, MD and Washington D.C. regions.

Table 2-39: Travel Time to Work

	Carroll Valley	Fairfield	Freedom	Hamiltonban	Highland	Liberty	Total
# of commuters	1,695	220	452	1,076	429	549	4,421
Less than 15 min	345	92	113	299	113	145	1,107
Percent	20%	40%	25%	28%	26%	26%	25%
15-29 min	482	69	167	442	192	143	1,495
Percent	28%	31%	37%	41%	45%	26%	34%
30-44 min	378	31	72	171	57	128	837
Percent	22%	14%	16%	16%	13%	23%	19%
45-59 min	197	17	51	92	23	67	447
Percent	12%	8%	11%	9%	5%	12%	10%
60-89 min	210	6	23	39	33	46	357
Percent	12%	3%	5%	4%	8%	8%	8%
90 or more min	83	5	26	33	11	20	178
Percent	5%	2%	6%	3%	3%	4%	4%

Commutation Pattern - Table 2-40 provides information regarding commuting patterns for residents of the planning area. Related to the regional influence of the Frederick and Washington D.C. metropolitan areas, important destinations for employment outside of the Southwest planning area include Frederick, Carroll and Montgomery counties in Maryland. Top commuter destinations within Adams County are also located outside of the Southwest Adams County area, with Gettysburg, Cumberland and Straban as popular employment destinations.

Table 2-40: Top Commuting Locations (excluding home municipality)

Mi sin alit		Destination								
Municipality	#1	#2	#3	#4	#5					
Carroll Valley	Frederick Co, MD	Gettysburg	Carroll Co, MD	Fairfield	Hamiltonban					
Fairfield	Frederick Co, MD	Gettysburg	Cumberland	Hamiltonban	Carroll Valley					
Freedom	Gettysburg	Frederick Co, MD	Cumberland	Straban	Carroll Co., MD					
Hamiltonban	Frederick Co, MD	Fairfield	Gettysburg	Cumberland	Washington Twp, Franklin Co, PA					
Highland	Gettysburg	Cumberland	· Stranan	Frederick Co, MD	Fairfield					
Liberty	Frederick Co, MD	Gettysburg	· Fairπein	Montgomery Co, MD	Cumberland					

Planned Transportation Improvements

Table 2-41 provides a listing of projects planned and programmed through Adams County Transportation Planning Organization's Transportation Improvement Plan (TIP) 2009-2012.

Table 2-41: ACTPO TIP Projects

Planned Improvement	Narrative	FY	Budgeted Amount (\$Millions)
Bridge Replacement	Cunningham Road Bridge	2009	\$3.2M
Bridge Rehabilitation	Fairfield Road Bridge	2011-2012	\$1.5M
Bridge Replacement	Little Marsh Creek Bridge	2010	\$.5M
Bridge Replacement	Emmitsburg Road Bridge #1	2010-2012	\$1.7M
Bridge Replacement	Emmitsburg Road Bridge #2	2011-2012	\$3.2M
Bridge Rehabilitation	Waynesboro Pike Bridge #1	2010	\$.7M
Bridge Deck Replacement	Waynesboro Pike Bridge #2	2009	\$1.7M
Resurfacing	Waynesboro Pike #1	2010	\$1.7M
Resurfacing	Waynesboro Pike #2	2012	\$3.1M
Resurfacing	Fairfield Road	2009-2010	\$1.8M
Resurfacing	Emmitsburg Road	2009	\$1.3M
New Trail Development/ Enhancement	Carroll Safety Trail		\$57,500
New Trail Development/ Enhancement	N. Carroll Valley Borough Trail		\$172,000
Total in the Region		2009-2012	\$20,629,500

Source: FFY 2009 - 2012 ACTPO-MPO TIP

Related Transportation Planning

1990 Adams County Comprehensive Plan: As part of the 1990 Adams County Comprehensive Plan, an enhance transportation component was completed through a then innovative funding partnership where PennDOT provided grant funds to perform this enhanced component. That element of the County Comprehensive Plan provided a lengthy list of proposed improvements and policy recommendations. The specific project recommendations that impact the Southwest Adams County area are as follows:

Arterial System Improvements - PA Route 116: Due to the substantial increases in traffic volumes projected for Route 116 between Gettysburg and PA Route 16, the County Comprehensive Plan called Route 116 to be improved with widened shoulders the entire length of the route. Traffic signals were recommended at PA Route 16, Bullfrog Road, and Carroll's Tract Road. In 2009 a portion of Route 116 was resurfaced along with minor shoulder widening work. None of the identified intersections have been signalized.

Safety Improvements - PA Route 116 and PA Route 16: The County Comprehensive Plan recommended this intersection be widened to add turning lanes and signalized. At this time, no improvements

2001 Comprehensive Road Improvement Study (CRIS Study): The 1998 Federal transportation reauthorization legislation, known as the Transportation Equity Act for the 21st Century (TEA-21), included a \$3.0 million earmark to conduct the Adams County Comprehensive Road Improvement Study, or CRIS Study. Completed in 2001, the CRIS Study contained a series of recommendations for improvements to existing intersections and roadway corridors, as well as improvements in non-motorized and multi-person vehicle transportation modes such as public transit and bicycle-pedestrian facilities. The specific project recommendations that impact the Northwest Adams County area are as follows:

PA Route 116 Corridor Improvements - The CRIS study analyzed this corridor and recommended that the corridor be improved to consistent twelve (12) foot wide travel lanes and eight (8) foot wide shoulders. In 2009 a portion of Route 116 was resurfaced with minor shoulder widening also completed. Additionally, as bridges along this corridor are repaired, travel lanes and shoulders have been improved to these standards.

Current Transportation Projects

2013 - 2016 Transportation Improvement Program (TIP) Projects: At any given time the Adams County Transportation Improvement program has between twenty (20) and thirty (30) highway and bridge projects in various stages of completion, as well as five (5) to ten (10) funding specific line items. The specific projects that impact the Southwest Adams County area are as follows:

- US Route 15 Resurfacing South This project involves the resurfacing the southbound lanes US Route 15 from the Maryland State Line to PA Route 394. The project is programmed for preliminary engineering and construction in the amount of \$13,525,000.
- Fairfield Road Bridge 3 (SR 116) The Fairfield Road Bridge 2 carries Muddy Run over PA Route 116 in Highland Township. The bridge is programmed as a bridge

- replacement project for preliminary engineering, final design, utilities, right-of-way and construction in the amount of \$1,180,000.
- Mason Dixon Road Bridge (SR 3002) The Mason Dixon Road Bridge carries Mason Dixon Road over Marsh Creek in Freedom Township. The bridge is programmed for utilities, right-of-way, and construction in the amount of \$908,000.
- Cunningham Road Bridge (SR 3008) The Cunningham Road Bridge carries Cunningham Road over Marsh Creek on the Freedom Township/Cumberland Township line. The bridge is programmed for construction in the amount of \$2,500,000.

Recently Completed TIP Projects

The 2011-2014 TIP contained a number of highway and bridge projects in the Southwest Adams County area, including:

Waynesboro Pike Bridge (SR 16) - The Waynesboro Pike Bridge carries PA Route 16 over the Miney Branch of Toms Creek in Hamiltonban Township. The project was added to the TIP in 2011-14 for utilities, right-of-way, and construction. The construction of the bridge was completed and the facility was opened to traffic in November 2011. The total construction cost was \$630,650.

- Waynesboro Pike (SR 16) Waynesboro Pike (PA Route 16) was resurfaced from Old Waynesboro Road to the Maryland State Line in 2011 at a cost of \$1,511,000.
- Fairfield Road Bridge (SR 116) The Fairfield Road Bridge carries PA Route 116 over Marsh Creek on the Cumberland Township/Highland Township line. The project was added to the TIP in 2011-14 for preliminary engineering, final design, utilities, right-of-way, and construction. The construction of the bridge was completed and the facility is now open to traffic. The total construction cost was \$1,500,000.
- Emmittsburg Road Bridge (SR 3001) The Emmittsburg Road Bridge carries Business Route 15 over Marsh Creek on the Freedom Township/Cumberland Township line. The project was added to the TIP in 2011-14 for construction. The construction of the bridge was completed and the facility is now open to traffic. The total construction cost was \$2,191,000.
- Marsh Run Bridge (SR 3013) The Marsh Run Bridge carries Knoxlyn Road over Marsh Run in Highland Township. The project was added to the TIP in 2011-14 for final design, right-of-way, and construction. The construction of the bridge was completed and the facility is now open to traffic. The total construction cost was \$1,737,000.

Section 10 – Community Facilities and Services

Community facilities and services are essential to the health and function of a community and its residents. Most services are either operated or supported by local or regional governments, or are at least impacted by policy decisions made at the local level. Map 2-13 depicts a variety of community facilities within the planning areas. An inventory of existing community facilities and services within the planning area is provided below.

Public Education

Two school districts, the Fairfield Area School District (FASD) and the Gettysburg Area School District (GASD), operate within the planning area.

Fairfield Area School District - FASD serves all of Carroll Valley Borough, Fairfield Borough, Hamiltonban Township, and Liberty Township. The District operates a school campus immediately to the west Fairfield Borough along PA Route 116 in Hamiltonban Township. The campus includes a high school, a middle school, and an elementary school.

Gettysburg Area School District - GASD serves Freedom Township and Highland Township within the planning area, as well as all or portions of five municipalities outside the



Fairfield Area School District campus, Hamiltonban Township

Region. The District includes a high school, a middle school, three elementary schools, and a formal elementary school converted to charter school use. The high school and middle school serve the entire school district. Elementary students within Freedom attend James Gettys Elementary. Elementary students within roughly the western half of Highland Township attend Franklin Township Elementary while elementary students within roughly the eastern half of Highland Township attend James Gettys Elementary.

Enrollment - Table 2-42 depicts enrollment trends within the two districts over the past decade. Both school districts have experience an enrollment decline during the past decade, although the GASD rate of decline is substantially more than that of FASD.

Table 2-42: Enrollment

School District	Enrollment (2000- 2001)	Enrollment (2005- 2006)	% Change (2000- 2005)	Enrollment (2010- 2011)	% Change (2005- 2010)	% Change (2000- 2010)
FASD	1,283	1314	2.4%	1208	-8.1%	-5.8%
GASD	3,601	3290	-8.6%	3141	-4.5%	-12.7%

Projected Enrollment - Table 2-43 depicts projected enrollment for the two school districts. Both school districts, according to the Pennsylvania Department of Education, are projected to see an additional decrease in enrollment over the next decade. However, while GASD exhibited a higher rate of decrease in enrollment from 2000 to 2010, FASD is projected to experience a much higher rate of enrollment decrease in the coming decade.

Table 2-43: Projected Enrollment

School District	Enrollment (2010-2012)	Proj. Enrollment (2015-2016)	% Change (2010 - 2015)	Proj. Enrollment (2020-2021)	% Change (2015-2020)	% Change (2010-2020)
FASD	1208	1075	-11.0%	908	-15.5%	-24.8%
GASD	3141	3067	-2.4%	2851	-7.0%	-9.2%

Continuing Education - Table 2-44 provides information regarding the proportion of graduates who continue their education after high school graduation. In general, roughly three-quarters of students graduating from high school in the planning area decide to continue their education in some form of post-secondary education. Most of these students, and roughly two-thirds of all students graduating from high school in the planning area, decide to pursue a college education. These figures are comparable to the same figures for Adams County as a whole for both 2005 and 2011 graduates.

Table 2-44: Continuing Education (2006, 2011)

School District	Total Graduates – 2006	College Bound	%	Other Post- Secondary Bound	%	Non- College Bound	%
FASD	87	54	62.1%	11	12.6%	22	25.3%
GASD	245	162	66.1%	13	5.3%	70	28.6%
Adams County	1014	669	66.0%	55	5.4%	290	28.6%

School District	Total Graduates – 2011	College Bound	%	Other Post- Secondary Bound	%	Non- College Bound	%
FASD	82	51	62.2%	8	9.7%	23	28.0%
GASD	257	189	73.5%	11	4.3%	57	22.2%
Adams County	1064	728	68.4%	73	6.9%	263	24.7%

Droupout Rates - Table 2-45 provides information regarding the proportion of students who discontinue their secondary education. Generally, well less than 2% of students drop out from either middle school or high school within the planning area. These figures are consistent with countywide totals for both the 2005 and 2010 reporting years.

Table 2-45: Dropout Rates

School District	2005 Grade 7-12 Enrollment	Droupouts	2005 Dropout Rate	2010 Grade 7-12 Enrollment	Dropouts	2010 Dropout Rate
FASD	654	14	2.1%	625	4	0.6%
GASD	1723	22	1.3%	1600	25	1.6%
Adams County	7273	117	1.6%	6969	90	1.3%

Public Safety

All six municipalities within the planning area are either directly or indirectly involved in the provision of public safety services. These services include police protection, fire and ambulance service, and emergency response. These services are inventoried as follows.

Police Service - Three municipal police departments operate within the planning area. The Carroll Valley Police Department has a staff of four officers and one administrative employee. The Department serves Carroll Valley Borough and provides contracted police coverage to Fairfield Borough. The Liberty Township Police Department has a staff of one full time and seven part time officers. The Department serves Liberty Township and provides contracted police coverage to Freedom Township. Hamiltonban Township disbanded its police department in 2012, and therefore currently relies upon the Pennsylvania State Police for coverage. Highland Township has neither a municipal police department nor a police coverage contract, and therefore relies upon the Pennsylvania State Police for police coverage.

Fire and Ambulance Service - Volunteer fire and Emergency Medical Service (EMS) serve all of the residents of the planning area either in a first response or a mutual aid capacity. Table 2-46 lists, by municipality, those departments with first response responsibility for all or part of said municipality.

Table 2-46: First Response Fire and EMS Service Responsibility

Municipality	First Response Department(s)
Carroll Valley Borough	Fairfield Fire and EMS Fountaindale Volunteer Fire Company Emmitsburg Volunteer Ambulance Company
Fairfield Borough	Fairfield Fire and EMS
	Fairfield Fire and EMS
Freedom Township	Greenmount Community Fire Company
	Emmitsburg Volunteer Ambulance Company
	Fairfield Fire and EMS
	Fountaindale Volunteer Fire Company
Hamiltonban Township	South Mountain Restoration Center Fire Department & EMS
	Cashtown Community Fire Company
	Blue Ridge Mountain EMS
	Fairfield Fire and EMS
Highland Township	Gettysburg Fire Department and EMS
	Cashtown Community Fire Company
	Fairfield Fire and EMS
Liberty Township	Fountaindale Volunteer Fire Company
	Emmitsburg Volunteer Ambulance Company

The local EMS companies provide basic life support services, while advanced life support service is currently provided by the Medic 28 service from Wellspan's Gettysburg Hospital. Although service is currently provided, Wellspan announced in 2013 that it will eventually discontinue this service. While no time-table is currently known, Wellspan has indicated that it will work with local providers to develop advanced life support capability.

Solid Waste

Each municipality within the planning area periodically negotiates solid waste removal contract with solid waste haulers. These contracts provide for weekly solid waste pickup as well as recycling (paper, cardboard, aluminum, and plastic) pickup once every two weeks.

Library Facilities



Fairfield Area Library, Fairfield Borough

The planning area is served by the Adams County Library system. The system operates one branch within the planning area. The Fairfield Area Library is located in Fairfield Borough. Adams County Library system users can access all resources of the library system through the Fairfield Library branch. Residents within the planning area can also access the resources of the Frederick County, Maryland library system through the Emmitsburg Library. Users of the Frederick County library system do not have to be Frederick County, Maryland residents to access and check out library resources, although a small fee to non-residents is required to obtain a library card.

Senior Centers

The planning area is served by one centrally located senior center in Fairfield Borough. The Fairfield Area Senior Center is supported by the Adams County Office for Aging and by Fairfield Borough itself, and provides a variety of activities and programming.

Regional Health Care

The regional Wellspan Health system is the most proximate comprehensive health care provider to the planning area. Most functions are located either within Gettysburg Borough or with the townships immediately surrounding Gettysburg Borough. Gettysburg Hospital is the closest hospital to the planning area. Wellspan offers various services in satellite locations throughout Adams County, and specifically operates a small patient services and pharmacy center just west of Fairfield Borough in Hamiltonban Township.



Welspan healthcare facilities, Fairfield Towne Center, Hamiltonban Township

Section 11 - Economic Profile

Understanding the basics of the regional economy is essential from the perspective of planning for the future of an area. This section provides basic information regarding the economy of the Southwest Adams region. The information focuses on employment of residents within the planning area within the context of the overall Adams County economy.

Employment by Occupation

Table 2-47 provides employment by occupation information for the municipalities within the planning area, the Southwest Adams region as a whole, and Adams County for the 2000 and 2010 reporting years.

The data indicates that the distribution of employment by occupation for residents of the planning area is generally consistent with that of Adams County as a whole for both reporting years, although there are some measurable differences. The planning area includes a somewhat higher percentage of residents employed in management, professional, and related occupations than Adams County as a whole, although the variation has decreased over the past decade. The planning area has increased its percentage of service and sales employees over the past decade when compared to Adams County as a whole. At the same time, the percentage of employment in the production, transportation, and material moving occupation category has decreased more rapidly than that of Adams County as a whole over the past decade.

Table 2-47: Employment by Occupation (2000, 2010)

Occupation (2000)	Carroll Valley		Fairfield Borough		Freedom Township		Hamiltonban Township	
	#	%	#	%	#	%	#	%
Management, business, science, and arts occupations	664	38.20%	56	24.45%	148	30.33%	256	22.70%
Service Occupations	239	13.75%	41	17.90%	62	12.70%	177	15.69%
Sales and Office Occupations	423	24.34%	55	24.02%	122	25.00%	215	19.06%
Farming, Fishing, and Forestry Occupations	18	1.04%	0	0.00%	9	1.84%	10	0.89%
Construction, Extraction, and Maintenance Occupations	223	12.83%	31	13.54%	72	14.75%	183	16.22%
Production, Transportation, and Material Moving Occupations	171	9.84%	46	20.09%	75	15.37%	287	25.44%
Total	1738		229		488		1128	

Occupation (2000)	Highland Township		Liberty Township		Southwest Adams Region		Adams County	
	#	%	#	%	#	%	#	%
Management, business, science, and arts occupations	134	29.19%	147	25.30%	1404	30.38%	11490	24.88%
Service Occupations	63	13.73%	112	19.28%	694	15.02%	6886	14.91%
Sales and Office Occupations	110	23.97%	110	18.93%	1035	22.39%	10979	23.77%
Farming, Fishing, and Forestry Occupations	9	1.96%	0	0.00%	46	1.00%	780	1.69%
Construction, Extraction, and Maintenance Occupations	63	13.73%	103	17.73%	675	14.60%	5436	11.77%
Production, Transportation, and Material Moving Occupations	80	17.43%	109	18.76%	768	16.62%	10617	22.99%
Total	459		581		4622		46188	

Occupation (2010)	Carroll Valley		Fairfield Borough		Freedom Township		Hamiltonban Township	
	#	%	#	%	#	%	#	%
Management, business, science, and arts occupations	833	39.03%	69	24.30%	159	33.26%	291	22.63%
Service Occupations	383	17.95%	26	9.15%	59	12.34%	314	24.42%
Sales and Office Occupations	487	22.82%	81	28.52%	155	32.43%	222	17.26%
Natural resources, construction, and maintenance occupations	258	12.09%	49	17.25%	48	10.04%	226	17.57%
Production, Transportation, and Material Moving Occupations	173	8.11%	59	20.77%	57	11.92%	233	18.12%
Total	2134		284		478		1286	

Occupation (2010)	Highland Township		Liberty Township		Southwest Adams Region		Adams County	
	#	%	#	%	#	%	#	%
Management, business, science, and arts occupations	100	25.38%	158	21.41%	1610	30.30%	14902	28.64%
Service Occupations	84	21.32%	150	20.33%	1016	19.12%	8573	16.48%
Sales and Office Occupations	133	33.76%	173	23.44%	1251	23.54%	11785	22.65%
Natural resources, construction, and maintenance occupations	12	3.05%	160	21.68%	753	14.17%	6388	12.28%
Production, Transportation, and Material Moving Occupations	65	16.50%	97	13.14%	684	12.87%	10380	19.95%
Total	394		738		5314		52028	

Source: United States Census Bureau

At the individual municipal level, some movement between occupation types has occurred, but the pattern continues to generally reflect the median income date reported in Section 3. Municipalities reporting higher median household incomes in both reporting years (such as Carroll Valley Borough and Highland Township) also report proportionally higher percentages of persons employed within the management and professional occupation category. Those municipalities with proportionally lower median household incomes are somewhat more weighted in service and sales occupations for both reporting years.

In analyzing this data, it is important to note that the 2010 data no longer includes a specific occupation category for farming, fishing, and forestry occupations. Employed persons in these occupations have been reallocated into other occupation categories. However, given the relatively low number of persons employed in this occupation category, reallocating this data does not appear to have a significant effect on the overall employment by occupation pattern.

Employment by Industry: Table 2-48 provides employment by industry information for the municipalities within the planning area, the Southwest Adams region as a whole, and Adams County for the 2000 and 2010 reporting years.

Table 2-48: Employment by Industry (2000, 2010)

Industry (2000)	Carroll Valley Borough		Fairfield Borough		Freedom Township		Hamiltonban Township	
	#	%	#	%	#	%	#	%
Agriculture, forestry, fishing, hunting, and mining	20	1.15%	1	0.44%	31	6.35%	51	4.53%
Construction	171	9.84%	34	14.85%	41	8.40%	124	11.00%

Industry (2000)	i .	Valley ough		Fairfield Borough		Freedom Township		Hamiltonban Township	
	#	%	#	%	#	%	#	%	
Manufacturing	266	15.30%	58	25.33%	72	14.75%	254	22.54%	
Wholesale Trade	33	1.90%	3	1.31%	16	3.28%	28	2.48%	
Retail Trade	128	7.36%	25	10.92%	56	11.48%	106	9.41%	
Transportation and warehousing, and utilities	48	2.76%	2	0.87%	24	4.92%	43	3.82%	
Information	77	4.43%	2	0.87%	14	2.87%	39	3.46%	
Finance, insurance, real estate, rental and leasing	76	4.37%	5	2.18%	33	6.76%	38	3.37%	
Professional, Scientific, Management, Administrative, and Waste Management Services	142	8.17%	16	6.99%	27	5.53%	49	4.35%	
Educational, health and social services	409	23.53%	38	16.59%	85	17.42%	190	16.86%	
Arts, entertainment, recreation, accommodation and food services	207	11.91%	12	5.24%	29	5.94%	86	7.63%	
Other Services (except Public Administration)	79	4.55%	19	8.30%	30	6.15%	45	3.99%	
Public Administration	82	4.72%	14	6.11%	30	6.15%	74	6.57%	
Total	1738		229		488		1127		

Industry (2000)	Highland Township		Liberty Township		Southwest Adams Region		Adams County	
	#	%	#	%	#	%	#	%
Agriculture, forestry, fishing, hunting, and mining	21	4.58%	12	2.07%	136	2.94%	2623	5.56%
Construction	53	11.55%	95	16.35%	518	11.21%	3718	7.88%
Manufacturing	68	14.81%	102	17.56%	820	17.74%	10439	22.12%
Wholesale Trade	25	5.45%	18	3.10%	123	2.66%	1773	3.76%
Retail Trade	48	10.46%	37	6.37%	400	8.65%	5381	11.40%
Transportation and warehousing, and utilities	16	3.49%	35	6.02%	168	3.63%	1954	4.14%
Information	18	3.92%	3	0.52%	153	3.31%	1188	2.52%
Finance, insurance, real estate, rental and leasing	13	2.83%	25	4.30%	190	4.11%	1719	3.64%

Industry (2000)	High Towr	land iship	Liberty Township		Southwest Adams Region		Adams County	
	#	%	#	%	#	%	#	%
Professional, Scientific, Management, Administrative, and Waste Management Services	25	5.45%	46	7.92%	305	6.60%	2272	4.81%
Educational, health and social services	84	18.30%	88	15.15%	894	19.34%	8634	18.30%
Arts, entertainment, recreation, accommodation and food services	37	8.06%	49	8.43%	420	9.09%	3445	7.30%
Other Services (except Public Administration)	25	5.45%	49	8.43%	247	5.34%	2046	4.34%
Public Administration	26	5.66%	22	3.79%	248	5.37%	1996	4.23%
Total	459		581		4622		47188	

Industry (2010)	Carroll Boro	Valley ough		field ough	Free Towr			tonban iship
	#	%	#	%	#	%	#	%
Agriculture, forestry, fishing, hunting, and mining	0	0.00%	16	5.63%	22	4.60%	35	2.72%
Construction	294	13.46%	26	9.15%	58	12.13%	159	12.36%
Manufacturing	188	8.61%	51	17.96%	51	10.67%	203	15.79%
Wholesale Trade	0	0.00%	0	0.00%	5	1.05%	26	2.02%
Retail Trade	165	7.55%	45	15.85%	49	10.25%	129	10.03%
Transportation and warehousing, and utilities	62	2.84%	22	7.75%	27	5.65%	38	2.95%
Information	57	2.61%	24	8.45%	15	3.14%	54	4.20%
Finance, insurance, real estate, rental and leasing	238	10.90%	3	1.06%	21	4.39%	17	1.32%
Professional, Scientific, Management, Administrative, and Waste Management Services	170	7.78%	6	2.11%	39	8.16%	104	8.09%
Educational, health and social services	395	18.09%	42	14.79%	118	24.69%	158	12.29%
Arts, entertainment, recreation, accommodation and food services	331	15.16%	11	3.87%	39	8.16%	210	16.33%
Other Services (except Public Administration)	32	1.47%	17	5.99%	8	1.67%	86	6.69%

Industry (2010)		rroll Valley Borough		Fairfield Borough		Freedom Township		Hamiltonban Township	
	#	%	#	%	#	%	#	%	
Public Administration	252	11.54%	21	7.39%	26	5.44%	67	5.21%	
Total	2184		284		478		1286		

Industry (2010)	High Town		Liberty Township		Southwest Adams Region		Adams County	
	#	%	#	%	#	%	#	%
Agriculture, forestry, fishing, hunting, and mining	19	3.94%	22	2.98%	114	2.09%	1525	2.93%
Construction	43	8.92%	133	18.02%	713	13.08%	4645	8.93%
Manufacturing	48	9.96%	105	14.23%	646	11.85%	9677	18.60%
Wholesale Trade	12	2.49%	9	1.22%	52	0.95%	1431	2.75%
Retail Trade	70	14.52%	57	7.72%	515	9.45%	5894	11.33%
Transportation and warehousing, and utilities	25	5.19%	15	2.03%	189	3.47%	2543	4.89%
Information	11	2.28%	9	1.22%	170	3.12%	819	1.57%
Finance, insurance, real estate, rental and leasing	36	7.47%	30	4.07%	345	6.33%	1926	3.70%
Professional, Scientific, Management, Administrative, and Waste Management Services	20	4.15%	53	7.18%	392	7.19%	3149	6.05%
Educational, health care and social services	91	18.88%	135	18.29%	939	17.22%	10830	20.82%
Arts, entertainment, recreation, accommodation and food services	37	7.68%	80	10.84%	708	12.99%	4555	8.75%
Other Services (except Public Administration)	36	7.47%	27	3.66%	206	3.78%	2240	4.31%
Public Administration	34	7.05%	63	8.54%	463	8.49%	2794	5.37%
Total	482		738		5452		52028	

The employment by industry data for the planning area has generally followed the pattern for Adams County as a whole over the past decade. At both the regional and countywide level, the proportion of persons employed in the construction and manufacturing industries has decreased in the past decade, with proportionally fewer Southwest Adams residents employed in these industries than Adams County as a whole. Conversely, proportional increases in employment in industries such as retail trade, finance and insurance, arts and entertainment, and public administration have occurred in the planning area. This pattern of change is somewhat difference than Adams County as a whole where a proportional increase in the educational and

health services category was the predominant change.

At the individual municipal level, the pattern changes again are consistent with data such as median household income. Municipalities with higher median incomes demonstrated proportional shifts into categories such as education, arts, and finance while municipalities with somewhat lower median household incomes showing pattern shifts over the past decade toward industries such as retail trade and other services. In just about all of the municipalities, significant proportional decreases of persons employed in construction and manufacturing were exhibited over the past decade.

Employers

The Southwest Adams region contains relatively few of the largest employers located within

Adams County as a whole. In total, only four of the fifty top employers within Adams County are located within the planning area. These include the following.

- Knouse Foods Cooperative
- World Color Printing (formally Quebecor)
- Fairfield Area School District
- Ski Liberty Operating Group

It is noted that only a portion of Knouse Foods Cooperative's employment base is located within the planning area, notably their facility



Knouse Foods Orrtanna Plant, Hamiltonban Township

at Orrtanna Village in Hamiltonban Township. Further, it is noted that much of employment associated with Ski Liberty Operating Group is seasonal in nature given the seasonal nature of the skiing business.

Countywide Economic Indicators

A variety of economic indicators associated with Adams County as a whole provide valuable information regarding the Southwest Adams planning area.

Unemployment - Unemployment rates for Adams County are typically lower than that of Pennsylvania and the United States as a whole. Pennsylvania Department of Labor and Industry statistics indicate that unemployment in Adams County ranges typically a percentage point below the Pennsylvania rate and up to two percentage points lower than the national rate.

Wage - Average annual wages for jobs held within Adams County have traditionally been significantly less than the average annual wages for jobs held within Pennsylvania as a whole. Adams County annual wages have improved when compared to other Pennsylvania counties over the past two decades, but remain significantly below statewide levels. That said, the percentage annual change of Adams County wages is larger than that of surrounding Pennsylvania counties and that of Pennsylvania as a whole.

Commuting Pattern - Section 8 of this Chapter discussed commuting patterns for residents within the planning area. It is well documented that a very significant proportion of Adams County residents commute to locations outside of Adams County for employment. The municipality specific information is provided above. However, within the context of describing local economic conditions, it is important to note that Adams County as a whole has a significantly lower percentage of residents working within their county of residence when compared to any surrounding Pennsylvania county. Correspondingly, the mean travel to work time for Adams County residents is significantly more than that in surrounding Pennsylvania counties. When nearby Maryland counties are taken into account, only one county (Carroll County, Maryland) has a lower percentage of persons working in their county of residence. However, mean travel time for Maryland county residents is typically longer than that for Adams County residents.

Section 12 - Parks, Recreation, Open Space, and Greenways

Parks and recreation programming and lands are essential community elements and critical to the well-being of the community's residents. Open space and greenways are often viewed as components of a community-wide parks and recreation system. These features also strongly contribute to other aspects of community character including natural, cultural and heritage, agricultural, landscape, and ecological resources. This Plan includes specific discussion of parks, recreation, open space, and greenways resources to ensure that these features are addressed in a comprehensive and consistent manner within the Planning Area.

Inventory

Any discussion of parks, recreation, open space, and greenways issues requires an inventory of current resources within the Planning Area. The following inventory of resources has been compiled through reviewing previous planning initiatives, detailing site specific identification of resources with field checks as necessary, and conducting various public participation activities. This inventory serves as the "starting point" for the needs analysis and policy recommendations presented in Chapter 4, Section 10.

Parks and Recreation Lands and Facilities - A detailed inventory of the existing recreation and park land and properties, regardless of ownership, and a complete analysis comparing these conditions to the National Recreation and Parks Association (NRPA) standards was completed. NRPA has established national guidelines that address the minimum standards a community should achieve with regard to recreation and park lands. Within the context of establishing its recommended guidelines, NRPA identifies ten classifications for parks and recreation lands, as shown in Table 2-49. Park and recreation areas within the Southwest Adams County region have been categorized as one of the ten classifications based on size, facilities available, and general service area. Map 2-14 depicts the location and extent of each of these existing recreation facilities. It is specifically noted that the Planning Area does not contain an example of each type of recreation classification identified in Table 2-49. A description of each area identified in the inventory.

Table 2-49: NRPA National Parkland Guidelines

Classification	General Description	Location Criteria and Service Area	Size Criteria
Mini Park	Used to address limited, isolated or unique recreational needs	Less than a 1/4 mile distance in residential setting	Between 2500 sq.ft. and one acre in size
Neighborhood Park	Remains the basic unit of the park system and serves as the recreational and social focus of the neighborhood. Focus is on informal active and passive recreation.	1/4 to 1/2 mile distance and uninterrupted by non-residential roads and other physical barriers	Five acres is considered minimum size(5 to 10 acres is optimal)
School-Park	Depending on the circumstances, combing parks with school sites can fulfill the space requirements for other classes of parks, such as neighborhood, community, sports complex and special use.	Determined by location of school district property	Variable-depends on function
Community Park	Serves a broader purpose than the neighborhood park.	Determined by the quality and suitability of the site. Usually serves two or more neighborhoods and 1/2 to 3 miles distance	As needed to accommodate desired uses. Usually between 30 and 50 acres.
Large Urban Park	Serves a broader purpose than community parks and are used when community and neighborhood parks are not adequate. Focus is on meeting community-based recreational needs as well as preserving unique landscapes and open spaces.	Determined by the quality and suitable of the site. Usually serves the entire community	As needed to accommodate desired uses. Usually a minimum of 50 acres, with 75 or more acres being optimal
Natural Resource Areas	Land set aside for preservation of significant natural resources, remnant landscapes, open space and visual aesthetics/buffering.	Resource availability and opportunity	Variable
Greenways	Effectively tie park system components together to form a continuous park environment	Resource availability and opportunity	Variable
Sports Complex	Consolidates heavily programmed athletic fields and associated facilities to larger and fewer strategically located sites.	Strategically located community- wide facilities	Determined by projected demand. Usually a minimum of 25 acres, with 40 to 80 acres being optimal

Classification	General Description	Location Criteria and Service Area	Size Criteria
Special Use	Covers a broad range of parks and recreation facilities oriented toward single-purpose use.	Variable-dependent on specific use	Variable
Private Park / Recreation Facility	Parks and recreation facilities that are privately owned yet contribute to the public park and recreation system.	Variable-dependent on specific use	Variable

Mini Park - There is one (1) mini-park in Southwest Adams County region.

 Lake Kay, located in Carol Valley Borough, offers public fishing, boating, and a small playground area in the "K" Section of the borough and can be accessed from Trout Run Trail. A boat ramp is also available at Lake Kay.

Neighborhood Park - There is one (1) neighborhood park located in the Southwest Adams County region.

- Ranch Trail Commons is located in Carroll Valley Borough along Ranch Trail Road, and was completed in October 2007. The park comprises 13.5 acres and consists of a playground, walking trail, a softball / little league field, and soccer fields, as well as two pavilions. Specific recreation facilities include the following:
 - Softball / Little League Fields:
 - Soccer Fields: 3

School Park - As indicated in Section 10, the Planning Area is located in two school districts. Carroll Valley and Fairfield Boroughs, and Hamiltonban and Liberty Townships comprise the Fairfield Area School District, while Freedom and Highland Townships form a portion of the Gettysburg Area School District. Both school districts include significant recreation lands, but only the Fairfield Area School District maintains recreation lands within the planning area. Thus, the following school park is listed as part of this inventory.



Ranch Trail Commons, Carroll Valley Borough



Fairfield Area School District Athletic Field



Carroll Commons Park, Carroll Valley Borough

• The Fairfield Area School District campus is located in Hamiltonban Township along Fairfield Road. The campus is a total of 35 acres, with approximately 20 acres dedicated to recreational facilities. Recreational facilities include one baseball field, one softball / little league field, one soccer field, three multi-purpose fields, one basketball court, two small playgrounds and two volleyball courts. The campus also includes a multi-purpose stadium for soccer, football, field hockey, and track and field. A running track circles the stadium field. A well driven hatchery is also located behind the Fairfield High School and is run by McSherrystown Fish and Game Association. The hatchery is sponsored by the PA Fish and Boat Commission. Specific recreational facilities include the following:

•	Baseball Fields:	1
•	Softball / Little League Fields:	1
•	Soccer Field:	2
•	Football Fields:	1
	Volleyball Court	2

Community Park - There is one (1) community park located in the Southwest Adams County region.

Carroll Commons, located just off PA Route 116 in Carroll Valley Borough, is the
largest municipal park located in the project area. The park covers approximately
20 acres and includes two waterways, Lake Carroll and Toms Creek. Carroll Commons
features a large playground, picnic area, small pavilion, softball field, restrooms,
basketball court, bocce court, horseshoe pits, and shuffle board. A combination
indoor / outdoor pavilion is also provided on this site. Specific recreational facilities
include the following:

Softball / Little League Fields: 1
 Basketball Courts: 1
 Soccer Fields: 0*

Natural Resource Areas - There are two (2) large natural resource areas located within the Southwest Adams County region.

• Michaux State Forest includes portions of Adams, Cumberland, and Franklin Counties. Within the Project Area, approximately 6,500 acres are located within Hamiltonban Township. The state forest provides opportunities for hunting, fishing, camping, hiking, horseback riding, bicycling, and snowmobiling. Two recreation access areas are located within Hamiltonban Township; one off of Teaberry Road and the other south of Waynesboro Reservoir. Michaux also features the Appalachian Hiking Trail, although the trail does not enter into either the Project Area specifically or Adams County as a whole.

^{*} It is noted that land within Carroll Commons is often striped for youth soccer program purposes. However, the periodic use of lands for youth soccer purposes is not included in the soccer field inventory given that these areas are not designed and permanently dedicated to such use.

• Strawberry Hill Nature Preserve includes 609 acres of land in Hamiltonban Township and features a variety of habitats, such as wet and dry woodlands, three ponds, and two mountain streams. The preserve has more than 10 miles of trails throughout the property that are open to the public daily from dawn to dusk. It also includes and environmental education center building, a pavilion, and a historic cabin, all of which host the preserve's programming. The preserve is managed by a 501(c)3 nonprofit environmental education and conservation organization that relies upon membership dues, contributions, grants, program receipts, endowments, and special events to support its work.

Special Use - There is one (1) park located in the project area that is categorized as "Special Use" because of its unique characteristics.

• Lake May is located along SR 116 in Carol Valley Borough and offers public fishing, boating, and a picnic area. The lake is the largest of the three in the Borough and has a small access area off SR 116 featuring a public boat ramp.

Private Park and Recreation Facilities - A variety of privately operated facilities contribute to the inventory of parks and recreation resources within the planning area. These facilities may be operated on a non-profit or a profit basis, and include the following.

- Adams County Fish and Game Nursery #3 is located at 1000 Jack Road in Hamiltonban Township and has been operated by the Adams County Fish and Game Association since 1970. The Association is part of the Pennsylvania Fish and Boat Commission's (PFBC) Cooperative Nursery Program, "Coops", which helps the Commission supplement its trout stocking program.
- Blue Ridge Sportsman Association is located in Hamiltonban Township along PA Route 16. The Association was established in 1949 and consists of 3,200 members.
 Recreation resources including archery, camping, fishing, horseshoes, and a baseball diamond are offered to members:
- Camp Eder is part of the Southern Pennsylvania District Church of the Brethren
 and is located along Mt. Hope Road in Hamiltonban Township. The camp offers
 year-round activities on approximately 390 acres. Facilities at Camp Eder include
 lodges, cabins, archery range, pool, climbing wall, challenge course, and a meeting
 house.
- Camp Happy Valley: The Girl Scouts in the Heart of Pennsylvania own Camp Happy Valley along Girl Scout Road in Liberty Township. The facility offers year round camping and day camps throughout the summer for Girl Scouts. The facility includes four lodge units, a tent camping unit, and a pavilion.
- Fairfield Recreation Association: The Association owns and maintains three softball / little league fields



Liberty Mountain Resort, Carroll Valley Borough

along Steelman Street in Fairfield. The facility encompasses 3.75 acres. Specific recreational facilities include the following:

- Softball / Little League Fields:
- Fairfield Fire Company: The Fire Company occasionally allows use of the fields south of the fire station along Steelman Street in Fairfield to be used for midget football. The field encompasses approximately 2.5 acres.
- Rouzerville Gun Club: This facility is located along Cold Springs Road in Hamiltonban Township and includes 9.54 acres.
- Spring Grove Gun Club: This facility is located along Green Ridge Road along the border of Hamiltonban and adjoining Franklin Township. Approximately half of the 24 acre property is located in Hamiltonban Township.
- Middle Creek Bible Conference: This facility lies on approximately 535 acres
 located partially within Liberty Township and partially within Freedom Township,
 and bounded by Pumping Station Road, Bullfrog Road, and Water Street. Current
 facilities are limited to a small portion of the property in Liberty Township, although
 significant facilities for overnight and daily visitors are planned.
- Carroll Valley Resort is a private, four seasons resort headquartered in Carroll Valley Borough. The resort consists of two 18-hole championship courses, a lodge, a ballroom with seating for up to 350 guests, and two dining facilities. Carroll Valley Golf Course is a component of the main resort complex and adjacent to the Liberty Mountain Ski Resort. The golf course includes a pro shop. Mountain View Golf Club is located Bullfrog Road in Hamiltonban Township just to the east of Fairfield Borough. The golf course includes a pro shop located in a restored pre-Civil War farmhouse.
- The Liberty Mountain Ski Resort is a commercial ski resort located in Carroll Valley Borough and consists of 275 acres, with 100 acres of skiing, snowboarding, and snow tubing rails. The resort also offers meeting spaces, lodge, and hotel. Other recreational amenities include the Boulder Ridge Challenge Course, an outdoor swimming pool, hiking, volleyball, horseshoes, and exercise facilities.
- Gettysburg Campground is located along PA Route 116 in Highland Township and offers recreational vehicle camping, rustic tent camping, cabins, and cottages.
 - Recreational facilities include a game room, softball field, bingo, hayrides, fishing, mini-golf, shuffleboard, volleyball, horseshoes, pool, and a playground.
- Gettysburg KOA Campground is a commercial campground located along Knoxlyn-Orrtanna Road in Highland Township. Accommodations include recreational vehicle camping, tent camping, and cabins. Recreational amenities include a swimming pool, basketball court,



Gettysburg Campground, Highland Township

- shuffle board, horse-shoes, dog park, playground, game room, play cabin, mini golf, nature trail, and bicycle rentals.
- Granite Hill Resort is a commercial campground located on PA Route 116 in Highland Township. The resort is a 150-acre Civil War era farm with recreational vehicle and tent campsites and cabins. Recreational amenities include a swimming pool, tennis courts, paddleboat and kayak rentals, four playgrounds, a trout fishing pond, bass fishing lake, hayrides, basketball, shuffle board, sand volleyball, horseshoes, softball field, and a game room.
- Land of Little Horses is a seasonal performing animal theme park located in Highland Township on Glenn Wood Drive. The horse farm allows children and adults to visit the farm to view, pet, and ride horses. A summer day camp is also offered for young children to teach basic animal care and responsibility.

Recreation Programming

None of the municipalities within the planning area offers formal public recreation programming. Therefore, no summary of current recreation programming or administrative capacities can be provided. Accordingly, any formal recreation programs are organized by entities other than municipal government, although municipal facilities may host such programs. For example, youth soccer programming is conducted at Carroll Commons in Carroll Valley Borough. Formal recreation programs are also conducted at non-municipal facilities. For example, the Fairfield Recreation Association organizes little league baseball at its fields in Fairfield Borough.

None of the municipalities within the planning area have a parks and recreation department, and accordingly there is no municipal staff within the planning area dedicated solely to the management of park facilities and the delivery of recreation programming. Two of the municipalities within the planning area have established either a Parks and Recreation Committee or a Parks and Recreation Commission. The Hamiltonban Township Parks and Recreation Commission was established in 2007 with the purpose of evaluating recreation needs within the Township and providing advisory recommendations to the Township Board of Supervisors regarding parks and recreation issues. The Carroll Valley Parks and Recreation Committee performs a similar function for Carroll Valley Borough, and specifically provides review of the Borough's Capital Improvement Program from a parks and recreation perspective.

It is also important to note that the Fairfield Area School District authorizes public use of its recreational facilities, although it does not currently offer public recreation programming. Facilities are available for public use during daytime hours, and when there is no other schedule School District activity. Organized groups are required to reserve ballfields.

Open Space and Greenways

The open spaces and landscapes within a region define, to a significant degree, the character of an area and contribute to the overall quality of life within the community. Open spaces include a variety of attributes and play a variety of roles. Many of the attributes have been described in previous sections of this Chapter, but will be summarized here to provide an overall context within which these broad range of resources are organized and evaluated. Map 2-15 provides a graphic representation of these resources.

One means of evaluating landscapes and open spaces is by considering the concept of Greenways. The publication *Pennsylvania Greenways: An Action Plan for Creating Connections*, prepared by the Pennsylvania Department of Conservation and Natural Resources in 2001, defines Greenways as follows:

"A greenway is a corridor of open space. Greenways vary greatly in scale, from narrow ribbons of green that run through urban, suburban, and rural areas to wider corridors that incorporate diverse natural, cultural, and scenic features. They can incorporate both public and private property, and can be land or water based. They may follow old railways, canals, or ridge tops, or they may follow stream corridors, shorelines, or wetlands, and include water trails for non-motorized craft. Some greenways are recreational corridors or scenic byways that may accommodate motorized and non-motorized vehicles. Others function almost exclusively for environmental protection and are not designed for human passage. Greenways differ in their location and function, but overall, a greenway will protect natural, cultural, and scenic resources, provide recreational benefits, enhance natural beauty and quality of life in neighborhoods and communities, and stimulate economic development opportunities."

Open spaces and greenways are often organized using a "hub and spoke" approach to identify patterns of these resources as one moves through the landscape. "Hubs" are typically considered to be are access points that are intended for human use, where many people will be able to utilize the ecological and recreational benefits available. Examples of hubs include recreational destinations such as state parks, municipal parks, campgrounds, natural and historic sites, and developed areas such as borough and schools. Greenways can be considered to be the "spokes" that link various "hubs" together. Examples of spokes include state forests, agricultural areas, streams, and travel corridors.

Hubs - The inventory of hubs within the existing open space and greenways system is extensive, and various types of hubs have already been identified in this Chapter. Map 2-16 depicts many of these hubs. Identified hubs include Fairfield Borough and the center of Carroll Valley Borough, as well as the various unincorporated villages throughout the planning area. Hubs also include the various public and private recreation sites identified above, and identified on the map as "Public / Private Park or Recreation Areas." Strawberry Hill Nature Preserve can also be considered to be a hub within the overall network.

Greenways - The "spokes" that connect the identified hubs together are broadly defined and are often layered. Within this context, the existing greenways network can be described as including the following elements.

Mega-Greenways - Mega-Greenways are formally identified, multi-jurisdictional, landscape scale designations designed to addressed a common conservation theme or themes over a wide area. The planning area as a whole is included in two Mega-Greenways, each focusing on conservation issues from specific perspectives. These include the following.

Journey Through Hallowed Ground: All of Adams County, and therefore all
of the Southwest Adams County planning area, is included in the federally

designated Journey Through Hallowed Ground National Heritage Area. This area is focused on interpreting American history within an area roughly centered on the US Route 15 corridor, and extending from Gettysburg in the north to Charlottesville, Virginia in the south. Conservation efforts of the Journey Through Hallowed Ground Partnership focus on the homes and lives of 8 US Presidents, Revolutionary War and Civil War conflicts conducted within the area, and the landscapes that helped define the lives and settlement patterns of the people of the region.

• South Mountain Conservation Landscape Initiative: Roughly the western half of Adams County, and therefore all of the Southwest Adams County planning area, is included in the South Mountain Conservation Landscape Initiative, as established by the Pennsylvania Department of Conservation and Natural Resources. Comprising of portions of four Pennsylvania counties, the South Mountain Partnership conducts conservation efforts and regional promotional activities focusing on identified themes within the area. These themes include local agricultural preservation and promotion, natural resources conservation, business and tourism development, and cultural heritage preservation.

Landscape Greenways - A variety of broad, landscape-level greenways exist within the planning area. Many of these either overlap or adjoin one another in complementary fashions throughout the planning area. The landscape-level greenways are identified on Map 2-16. Several of these landscape greenways are already fully or partially conserved through public ownership or through participation in a conservation easement program. These conservation easements include easement purchases through the Adams County Purchase of Agricultural Easements (PACE) program as well as easements donated to the Land Conservancy of Adams County. Given the relationship of these easements to greenways planning, they are also depicted on Map 2-16.

Specific landscape greenways are discussed below. Many of these are more thorough discussed in either this section other sections of this Chapter, and are therefore only briefly presented to ensure inclusion in the greenways component of the Plan.

• Michaux State Forest: The planning area includes roughly 6,500 acres of

the Michaux State Forest. This acreage is located within the western half of Hamiltonban Township, and includes the recent addition of acquisition of the roughly 2,400 acres Glatfelter Tree Farm. The Michaux State Forest helps frame the western portion of the planning area and is the dominant physiographic feature of the setting.



Adams County Fruitbelt Landscape, Hamiltonban Township

- Adams County Fruitbelt: The planning area includes the southern portion of the Adams County Fruitbelt, an area covering roughly 20,000 acres and primarily devoted to growing various fruit. The area is very productive from an agricultural standpoint, and the broad orchard landscapes strongly contribute to the visual character of the area. The Adams County Fruitbelt has been deemed eligible for listing in the National Register of Historic Places given the extent of cultural and historic resources, including the historic agricultural landscape, within this area.
- Carroll's Delight, Carrollsburg Manor, and Manor of Maske: As discussed in Section 2, Carroll's Delight, Carrollsburg Manor, and the Manor of Maske constituted three major land grants within the planning area. These land grants were the precursor to initial European settlement in the area in the 1740s. Today, the landscapes associated with these original land grants remain largely in and agricultural and open space condition. Like the Adams County Fruitbelt setting, the open space associated with these original land grant settings also strongly contribute to the visual character of the area.
- Important Bird Areas: The National Audubon Society has identified two Important Bird Areas within the planning area. These sites are important from the perspective of maintaining existing ecological habitats for specific bird species, and include the following.
 - Freedom Township Grasslands: The Freedom Township Grasslands, also known as Pennsylvania Important Bird Area Site #41, encompasses approximately 2,000 acres along Pumping Station Road in Freedom Township, as shown on Map 2-16. The area includes the Eisenhower Farm National Historic Site and a variety of private owners. Large cattle grazing operations have maintained open, untilled agricultural lands in the area that are attractive to grassland birds. Representative species include the Upland Sandpiper, Loggerhead Shrike, Eastern Meadowlark, Northern Harrier, Barn Owl, Bobolink, Grasshopper Sparrow, and Northern Bobwhite. In addition, the Freedom Township Grasslands is the only nesting location in Pennsylvania for the Loggerhead Shrike.
 - South Mountain, Caledonia State Park, and Michaux State Forest: Known as Pennsylvania Important Bird Area Site #40, the site includes approximately 40,000 acres of mixed forest along the boundary between Adams and Franklin Counties. The area features interior forest species. Specific species found in the mixed forest area include Wood Thrush, Veery, Ovenbirds, Hooded Warbler, and Eastern Pee-Wee. The lakes and reservoirs attract populations of waterfowl and wading birds including Wood Duck, Common Loon, Pied-Billed Grebe, Common Merganser, Canada Goose, Mallard, Great Blue Heron, and Green Heron. Development pressure within the area is limited due to primarily public ownership. However, increasing recreational impacts, particularly from off-road vehicle use, remains a concern. This area is not specifically depicted on Map 2-16, but can be assumed to include those areas designated

within Michaux State Forest.

Natural Corridors - A variety of natural features form existing greenway corridors within the planning area. These are focused on the stream network and associated floodplains within the planning area, as more thoroughly described in Section 6. These features are depicted on Map 2-4. It is specifically noted that Toms Creek, East Branch Antietam Creek, Little Marsh Creek, and Middle Creek are designated by the Pennsylvania Fish and Boat Commission as "Approved Trout Waters," and are depicted accordingly on Map 2-3. These creeks and associated floodplains often include significant wooded riparian area, which help manage the erosive effects that can occur during flooding events and which contribute to habitats in these areas.

Man-Made Greenways - A variety of man-made corridors exist within the planning area and can be considered, within the context of a greenways inventory discussion, to be existing greenways. These features are depicted on Map 2-16 and include the following.

- Journey Through Hallowed Ground Corridor: As discussed above, the entire planning area is located within the federally designated Journey Through Hallowed Ground National Heritage Area. Within this area is the Journey Through Hallowed Ground Corridor, which is focused primarily on the US Route 15 Corridor. Within the planning area, the designated Corridor bisects southcentral Freedom Township. The Corridor specifically follows US Route 15 from the Pennsylvania / Maryland state line to the Emmitsburg Road interchange, then follows Business Route 15 to the Freedom Township / Cumberland Township line, ultimately connecting to the Gettysburg National Military Park in adjoining Cumberland Township. The Corridor offers travellers sweeping views of the landscapes associated with the overall National Heritage Area, and serves as the area's primary manmade connecting feature. Within the planning area, travellers are offered proximate vistas of Freedom Township's rural landscapes, and broader views all the way to the South Mountain landscape to the west.
- Historic Roadways: Various roadways within the planning area have historic significance and significantly contributed to the historic development of the setting.
 - Colonial Settlement Roads: The Nicholson's Gap Road corridor follows current day PA Route 116 from the eastern boundary of the planning area to its intersection with PA Route 16, then follows PA Route 16 to the western boundary of the planning area. Bullfrog Road begins at its intersection with PA Route 116 in Hamiltonban Township, and continues southeast through Hamiltonban and Freedom Townships to the Pennsylvania / Maryland state line. Both roadways played significant roles in the early European settlement of the planning area in the middle of the 18th century.
 - Early Turnpikes: The Waynesboro Turnpike passes through the planning area following the current day PA Route 16 corridor through Liberty and Hamiltonban Townships and Carroll Valley Borough. This original 19th century turnpike provided an important connect

to allow east / west travel from developing areas in Pennsylvania to east coast cities such as Baltimore, Washington DC, and Wilmington.

Trails - A variety of trails existing within the planning area and are depicted on Map 2-16. The existing trails network is primarily recreational in nature and does not serve any significant transportation purposes. Trails exist in Michaux State Forest, at Strawberry Hill Nature Center, and at the Carroll Commons and Ranch Trail Commons parks in Carroll Valley Borough.

Tapeworm Railroad - In the 1830s, prominent Adams County resident and Pennsylvania

Senator Thaddeus Stevens proposed and initiated construction of a branch railroad line to connect iron furnaces in Adams and Franklin Counties to the Philadelphia and Columbia Railroad in Columbia, Maryland. Due to political and financial problems, the full extent of the railroad was never completed. A significant portion of the original and never completed rightof-way of the so-called "Tapeworm Railroad" is located in Hamiltonban Township on the slopes of Jack's Mountain. Although not publicly used at this time, the feature is identified



Swamp Creek Trail, Strawberry Hill Nature Center

in this inventory as an existing physical feature that has long been viewed as having potential to host a regional recreation trail link.

Section 1 - Introduction

The Goals and Objectives section establishes the overall planning policies and vision for the future of the planning area. Essentially, the stated goals and objectives serve as an indication of what the municipalities within the planning area hope to address and achieve during the planning horizon. This section synthesizes the important findings of the Existing Conditions chapter with community visioning exercises conducted as part of the planning process. The resulting goals and objectives reflect the existing issues within the Southwest Adams County community within the context of community visioning.

This chapter includes the following elements.

- Planning Implications
- Summary of Citizen Survey and Key Person Interviews
- Summary of Community Visioning Exercises
- Goals and Objectives

Section 2 - Planning Implications

The following planning implications summarize, in a broad manner, the principal findings of the Existing Conditions chapter. These findings "set the stage" for community visioning exercises and form the basis from which community goals and objectives are developed. The major planning implications from the Existing Conditions chapter are summarized as follows.

Demographics:

- 1. Overall population within the planning area has increased steadily over the past decades, and is anticipated that overall population will to continue to increase steadily through the planning horizon.
- The median age of the population of the planning area has increased during the past decades, and the distribution of school-aged population has shifted gradually to the higher class levels. It is anticipated that these patterns will continue through the planning horizon.
- 3. Educational attainment is proportionally higher in the planning area than in the balance of Adams County.
- 4. The racial and ethnic makeup of the population of the planning area is predominantly white. Although the non-white and Hispanic populations are gradually increasing, the rate of increase is proportionally less than that of Adams County as a whole.
- 5. Income levels in the planning area are proportionally higher than that of Adams County,

and the percentage of households in poverty status is proportionally less than that of Adams County.

Housing:

- 1. The number of housing units in the planning area has steadily increased during the previous decades, at a rate higher than that of Adams County as a whole.
- 2. Housing vacancy rates are low, which is consistent with the very high proportion of owner-occupied households in the planning area. Homeownership rates are significantly higher in the planning area than that of Adams County and Pennsylvania.
- 3. Housing stock is proportionally somewhat newer than that of Adams County as a whole and reflects the constant increase in population over the past decades.
- 4. Single family detached dwellings constitute the predominant dwelling unit type within the planning area with percentages significantly higher than that of Adams County as a whole.
- 5. Quality of housing is comparable to that of Adams County as a whole.
- 6. Median housing values are proportionally higher in the planning area than in Adams County as a whole.
- 7. Housing within the planning area was impacted to a higher degree by the recent economic downturn, as reflected by substantial drops in median sales prices and building permit activity, than that of Adams County as a whole.
- 8. The percentage of households expending 30% or more of gross income on housing has increased proportionally more quickly in the planning area than in Adams County as a whole.

Land Use:

1. The vast majority of the planning area lays within areas that exhibit rural land use character.



Agricultural use, Highland Township



Meadowbrook Commons, Fairfield Borough



Fairfield Community Fire and EMS Facility, Fairfield Borough

- 2. A very low percentage of the planning area is dedicated to single purpose residential, commercial, or industrial settings.
- 3. Most of the significant developed areas lie within or adjacent to either Carroll Valley or Fairfield Boroughs, or within unincorporated villages.

Natural Resources:

- 1. Surface waters are distributed throughout the planning area. However, surface water quality is generally higher in the western portion of the planning area versus the eastern portion.
- 2. Groundwater availability and quality varies from setting to setting within the planning area, but is generally seen to be sufficient to provide for future demand if appropriately managed.
- 3. Soils within the planning area vary significantly in terms of soil quality and capability to support septic systems and other forms of development. In general, soils in the western portion of the planning area a better drained but have other limitations associated with slope, while the reverse conditions exist in the eastern portion of the planning area.
- 4. The majority of steep slopes exists in the western portion of the planning area and is associated with the Michaux State Forest or the Adams County Fruitbelt.
- 5. Designated natural areas are located throughout the planning area, but are most concentrated in the Michaux State Forest setting.
- 6. Large areas of continuous forested area exist in the western portion of the planning area, while smaller, more scattered forested areas exist in the eastern portion. These more scattered forested areas are often associated with stream corridors.

Historic and Cultural Resources:

- 1. The planning area contains a limited number of property or place specific historic resources.
- 2. The planning area contains a wide variety of landscape oriented historic and culturally



Natural resources, view from former Glatfelter Tree Farm, Hamiltonban Township



York Water Company (formerly Section A Water Company) standpipe, Carroll Valley Borough



Properties within Fairfield Local Historic District

oriented resources. These settings often overlap and connote a variety of historic and cultural heritage themes that can be interpreted within the planning area.

Community Infrastructure:

- 1. A relatively small proportion of the population of the planning area (11.5%) is served by community water systems. Of the three community water systems that operate within the planning area, one is publicly operated.
- 2. A wide variety of regulated water systems serving individual properties or uses exist within the planning area.
- 3. Most of the households in the planning area use individual domestic wells for water supply.
- 4. A relatively small proportion of the population of the planning area is served by publicly operated sewer systems. These systems, in general, are operating at or near their permitted capacities.
- 5. Most of the households in the planning area use individual, on-lot septic systems for sewage disposal.
- 6. No area-wide stormwater management system exists throughout the planning area. Stormwater is managed on a lot-by-lot basis as development proposals are submitted and developed.

Transportation:

- 1. The state and municipal roadway system forms the core of the transportation network within the planning area. Only limited non-road transportation systems or infrastructure exist within the setting.
- 2. Overall traffic levels have increased over the past several decades, with secondary roadways beginning to see traffic level increases as travellers seek alternatives to primary roadways.
- 3. Single occupancy vehicles continue to be the predominant travel mode choice for residents within the planning area.
- 4. Travel times to work for many residents of the planning area are high, particularly those residents who travel outside of Adams County for employment.
- 5. Recent and planned transportation projects generally involve bridge replacement or resurfacing of existing roadways.

Community Facilities and Services:

- 1. Enrollment in the two school districts serving the planning area has dropped over the past decade and is projected to continue to drop over the planning horizon.
- 2. Four of the six municipalities within the planning area are served by local police

departments, with service for two of these four municipalities provided through contracted police coverage.

3. All portions of the planning area are covered volunteer fire companies.

Economic Profile:

- 1. Four of the top 50 employers in Adams County are located within the planning area.
- 2. Wage income in Adams County is proportionally less for jobs in Adams County than for similar jobs in Pennsylvania as whole. Yet, within the planning area, median household income exceeds that of Adams County as a whole.
- 3. Employment commuting patterns within the planning area are consistent with that of Adams County, with notable percentages of planning area residents commuting to Maryland counties for employment.

Parks, Recreation, Open Space, and Greenways:

- 1. Four publicly owned, active recreation facilities (including one mini-park, one neighborhood park, one school park, and one community park) are located within the planning area.
- 2. A proportionally high acreage (primarily due to the presence of Michaux State Forest) is available for passive forms of recreation.
- 3. A significant number of commercial and private recreation sites are located within the planning area.
- 4. No formal recreation programming exists within the planning area, although two of the six municipalities have formed either a Parks and Recreation Commission (Hamiltonban Township) or a Parks and Recreation Committee (Carroll Valley Borough).
- 5. A wide variety of landscapes and/or natural or man-made corridors that can be categorized as greenways exist within the planning area. Like the historic and cultural heritage landscapes, many of these settings overlap in terms of physical setting and interpretive theme.



World Graphics, Fairfield Borough and Hamiltonban Township



Fairfield Recreation Association athletic fields, Fairfield Borough



Flat Run Greenway along Tract Road, Liberty Township

Section 3 – Summary of Citizen Survey

The citizen participation component of the Southwest Adams Joint Comprehensive Plan planning process included a citizen survey. This activity was intended to provide information regarding citizen perspectives with regard to various planning issues facing the Southwest Adams community and region. The citizen survey included eighteen questions and was made available through the municipal offices of the six municipalities in the planning area. While a random distribution was not pursued, the results of the citizen survey still reflect the preferences and opinions of citizens within the planning area.

Detailed tabular results of the citizen survey are provided in Appendix A. The following text provides a summary of the general findings of the citizen survey, organized by topical area.

Primary Issues

Questions 2, 3, and 7 addressed positive and negative attributes of the Southwest Adams planning area. The positive attributes in Question 2 with the highest responses where those that related to the rural nature of the planning area. Accordingly, the top five positive attributes were Rural Atmosphere / Open Space, Small Town Atmosphere, Safety, Farmland, and Recreational Opportunities. These responses imply that the responders value the rural nature of the community and suggest that policies designed to retain rural character would be appropriate for the area.

Given the issues to which citizens responded most strongly, the issues to which citizens responded negatively in Question 3 were not surprising. Specifically, the issues were focused on those matters that threaten the positive attributes identified in Question 2. These included Taxes, Rate of Development too Fast, Loss of Farmland, and Loss of Open Space. These responses imply that residents believe many of the positive attributes of the community are threatened and again suggest support for policies design to mitigate these perceived threats.

The responses to Question 3 are reinforced by the responses to Question 7, where respondents were asked to identify those planning issues that need to be addressed in the next ten years. The planning issues with which responders most strongly agreed include Preserving Environmentally Sensitive Areas, Preservation of Open Space and Rural Character, Preservation of Farmland, and Drinking Water Supply. It is noted that responders mostly agreed that a wide variety of other issues need to be addressed as well. Overall, these responses suggest support for need for comprehensive planning to address the overall future of the planning area.

Employment Access and Commuting Patterns

Questions 4 through 6 and Question 8 addressed the issues of employment opportunities and commuting patterns of residents. Many responders indicated that they travel moderate to long distances to work (Question 4). Given the commute length of many residents, it is not surprising that responders indicated a desire for more employment opportunities within the region (Question 5). What is not clear, based on the responses, is where additional employment opportunities should be located (Question 6). While there was support for the location of additional opportunities within the planning area, there was also support for expansion of opportunities in other nearby settings, such as the Gettysburg Borough area.

Given the responses to Question 6, the responses to Question 8 are not surprising. Question 8 asked whether and where residents supported a Regional Service Center within the planning

area. No clear consensus emerged as to where such a facility could or should be located, as particularly evidenced by the size of the "Not Sure" response. However, some support for a regional facility with the Carroll Valley Borough/Fairfield Borough/Hamiltonban Township setting may be evident.

Transportation

Questions 10 through 12 addressed transportation needs facing the Southwest Adams region, particularly with regard to needed transportation improvements. With regard to the roadway system, responses focused on maintaining roadway surfaces and improving intersections along the main travel routes in the planning area (Questions 10 and 11). These responses suggest a degree of comfort with regard to the current roadway system, provided that necessary maintenance and improvements are made. It is further noted that comparably little support was indicated with regard to the construction of new roadways within the planning area.

Question 12 focused on other modes of transportation. Responses to this question were focused on the perceived need for new bicycle and pedestrian path systems. The extent of these responses suggest fairly strong support for additional pedestrian and bicycle travel opportunities within the planning area.

Recreation Facilities and Programming

Questions 13 through 18 address recreation facilities and programming issues within the Southwest Adams area. The responses provide information regarding the perceived level of need for recreation facilities and programming in the region, and begin to address the question of how such facilities and programming should be provided.

Generally, the respondent support the provision of additional parks and recreation facilities within the planning area (Question 13). A majority of respondents supported this position, even if those who responded "Not Sure" were included with those who did not support the position. A roughly equivalent response was received with regard to the question of whether a regional parks and recreation department or authority would be appropriate to address parks and recreation needs (Question 16). Thus, a majority of the respondents support additional parks and recreation opportunities and support working collaboratively on the issue.

The responses to the "what" and "where" questions with regard to parks and recreation provision had broader responses, which may indicate the need for wide ranging approaches and solutions to the issue. Support for new public parks and recreation facilities was strongest in four municipalities - Carroll Valley and Fairfield Boroughs and Hamiltonban and Liberty Township (Question 14). Respondents indicated that a variety of age groups are currently underserved by current parks and recreation facilities. The age groups of 13-18 and 60 or more received the most responses (Question 17). Further, a wide range of facility types were supported by the responders (Question 15). Preserving Historic Sites and Swimming Pools received the highest level of "Strongly Agree" responses. However, a responders indicated that they "Mostly Agree" with a the provision of a wide range of facility types. Of these, Nature Reserves and Natural Greenways, Playgrounds for Children, and Trails for Hiking, Biking, and Horseback Riding received the highest level of supportive responses. From the recreation programming side, respondents indicated a current need for a variety of potential programs (Question 18). Programs with the highest affirmative response levels included Fitness Programs, Family Oriented Programs, and Educational Programs.

Section 4 – Summary of Community Visioning Exercises

The community visioning process for the Southwest Adams Joint Comprehensive Plan was conducted primarily at a Public Meeting held on June 1, 2009. The public participation exercises conducted during the Public Meeting included a SWOT (strengths, weaknesses, opportunities, and threats) Analysis and a Visual Preference Analysis. The participants in these at the Public Meeting provided additional impressions regarding issues facing the Southwest Adams area, and the community's desired future. The detailed results of the SWOT Analysis is provided in Table 3-1. The findings of these two analyses are summarized as follows.

SWOT Analysis

In the SWOT Analysis, participants were asked to identify the strengths, opportunities, weaknesses, and threats facing the Southwest Adams area. Participants were asked to respond to the following statements or questions.

5

Strengths: List the physical, social, and regulatory assets of the community.

- What makes this community unique?
- · What do I like about this community?
- What is contributing to a positive community image?

Weaknesses: List the physical, social, or regulatory obstacles or shortcomings of the community.

- What do I dislike about this community?
- What would I like to see less of in this community?
- What is contributing to a poor community image?

Opportunities: List the physical and social entities or assets of the community that are underutilized or undeveloped.

- Where are opportunities for new development and/ or preservation?
- What are opportunities for change?
- What would I like to see more of in this community?
- What could change the image of this community?

Threats: List the physical and social entities or assets and regulations that detract from the community or, if left unchecked, could diminish quality of life for residents and businesses in the community.

- What prevents this community from flourishing?
- What are obstacles to community development and/or preservation?
- What detracts from a positive community image?

Once the responses to the questions were generated, participants were asked to rank each response using a 1-5 scale with 1 indicating low priority and 5 indicating high priority. Individual participant rankings for each response were then added and averaged. Those responses with the highest cumulative ranking generally reflect the consensus of the participants in terms of the community issues to support and address within the planning process.

Table 3-1: SWOT Analysis Results

Description of Strength	Response Average	Response Ranking
Beauty of the Region	3.95	3 (tied)
Natural Resources	3.62	4
Good Economy / Various Types of Jobs	2.62	11
Good Proximity in the Region (MD and DC)	2.90	10
Perfect Bedroom Community	2.57	12
Small Town / Village Atmosphere	4.30	2
Rural Character / Way of Life	4.55	1
School System	3.33	7
Community College	3.32	8
History / Heritage of the Area	3.95	3 (tied)
Large Amount of Agricultural	3.50	5
Apple Production	3.05	9
Tourism	3.40	6
Description of Weakness	Response Average	Response Ranking
Unfriendly State Laws that Allow Communities to Regulate Growth	3.75	6
Limited Employment Opportunities	3.86	4
Lack of Water Resources	4.30	1
Poor Infrastructure (i.e. Roads, Public Sewer and Water Systems	3.48	8
Lack of Police Protection (Thin Coverage)	3.33	10
Lack of Shopping Opportunities	2.29	14
Limited Recreation (Active - Playgrounds, Pool, Tennis)	2.86	12
Lack of the Ability to Assess Impact Fees on Infrastructure (Roads, Schools, Facilities, etc.)	4.05	2
Open Land Attracts Developers	3.81	5
Lack of Coordination between Municipalities	3.90	3
Brain Drain	2.37	13
Geography is Limiting for Creating a Town Center	1.90	15
Lack of Transportation for Senior Citizens	3.00	11
Limitations for Infrastructure (Sewer, Water)	3.43	9
School Taxes are too High - No Relief for Retired Persons	3.55	7

Description of Opportunity	Response Average	Response Ranking
Preservation / Conservation Similar to Glatfelter Tract	4.00	4
Joint Cooperation for Recreation	3.35	7
Joint Cooperation for Maintenance of Facilities (i.e. Roads, Parks, EMS Services)	3.58	5
Regional Recycling Center	2.90	12 (tied)
Open Space / Recreation	4.20	2
Protecting Water Resources	4.53	1
Housing Options for Retirees	3.14	10
Volunteerism	2.95	11
Recreational Tourism	2.90	12 (tied)
Encourage Industry / Sustainable Jobs / Persuade Government Job Opportunities	3.17	9
Public or Private Transit	3.24	8
Joint Cooperation for Emergency Services	4.05	3
Joint Cooperation for Maintenance of Infrastructure	3.57	6
Description of Threat	Response Average	Response Ranking
T (C)/ D : 4/ 14/	4.10	3
Traffic Volumes on Routes 16 and 116	4.10	: 1
Traffic Volumes on Routes 16 and 116 Transportation System (Impacts from Development; No Good Routes out of and into the Region; Poor Access to Route 15)	3.80	6
Transportation System (Impacts from Development; No Good		6
Transportation System (Impacts from Development; No Good Routes out of and into the Region; Poor Access to Route 15)	3.80	
Transportation System (Impacts from Development; No Good Routes out of and into the Region; Poor Access to Route 15) Potential Sprawl if not Identified as a Growth Area	3.80 3.79	7
Transportation System (Impacts from Development; No Good Routes out of and into the Region; Poor Access to Route 15) Potential Sprawl if not Identified as a Growth Area Water Supply and Water Quality	3.80 3.79 4.60	7 1
Transportation System (Impacts from Development; No Good Routes out of and into the Region; Poor Access to Route 15) Potential Sprawl if not Identified as a Growth Area Water Supply and Water Quality MPC - Lack of Impact Fees	3.80 3.79 4.60 3.95	7 1 4
Transportation System (Impacts from Development; No Good Routes out of and into the Region; Poor Access to Route 15) Potential Sprawl if not Identified as a Growth Area Water Supply and Water Quality MPC - Lack of Impact Fees State Regulations (DEP, Municipal Jurisdictions)	3.80 3.79 4.60 3.95 3.67	7 1 4 8
Transportation System (Impacts from Development; No Good Routes out of and into the Region; Poor Access to Route 15) Potential Sprawl if not Identified as a Growth Area Water Supply and Water Quality MPC - Lack of Impact Fees State Regulations (DEP, Municipal Jurisdictions) Corridor Studies (Development around the Corridors) Open Space (Land Available for Development is Prime Target	3.80 3.79 4.60 3.95 3.67 3.19	7 1 4 8 10
Transportation System (Impacts from Development; No Good Routes out of and into the Region; Poor Access to Route 15) Potential Sprawl if not Identified as a Growth Area Water Supply and Water Quality MPC - Lack of Impact Fees State Regulations (DEP, Municipal Jurisdictions) Corridor Studies (Development around the Corridors) Open Space (Land Available for Development is Prime Target Areas for Development)	3.80 3.79 4.60 3.95 3.67 3.19 3.90	7 1 4 8 10
Transportation System (Impacts from Development; No Good Routes out of and into the Region; Poor Access to Route 15) Potential Sprawl if not Identified as a Growth Area Water Supply and Water Quality MPC - Lack of Impact Fees State Regulations (DEP, Municipal Jurisdictions) Corridor Studies (Development around the Corridors) Open Space (Land Available for Development is Prime Target Areas for Development) Increase of Potential for Criminal Activity	3.80 3.79 4.60 3.95 3.67 3.19 3.90 2.38	7 1 4 8 10 5

The community attributes most strongly identified as "Strengths" generally included those associate with the rural character of the region. The findings of the "Strengths" component of the SWOT Analysis were consistent with many of the responses from the Citizen Survey. Specifically, the five issues or attributes most strongly identified at "Strengths" during the Public Meeting were the following:

- · Rural Character / Way of Life
- Small Town / Village Character
- Beauty of the Region

- History / Heritage of the Area
- Natural Resources

The community attributes most strongly identified as "Weaknesses" generally included those issues associated with difficulties many municipalities face with when dealing with growing communities. Often, these attributes are associated with the costs of development, primarily with regard to public infrastructure and facilities. Specifically, the five attributes most strongly identified as "Weaknesses" during the Public Meeting were the following:

- Lack of Water Resources
- Lack of the Ability to Assess Impact Fees on Infrastructure
- Lack of Coordination between Municipalities
- · Lack of Employment Opportunities
- Open Land Attracts Developers

The community attributes most strongly identified as "Opportunities" included responses directed both toward activities to promote the continuation of rural character and the improvement of some of the conditions associated with the identified "Weaknesses" of the region. Generally, Public Meeting participants understand that local governments have a role to play with regard to many of the issues the local community faces. Specifically, the five attributes most strongly identified as "Opportunities" during the Public Meeting were the following:

- Protecting Water Sources
- Open Space / Recreation
- Joint Cooperation for Emergency Services
- Preservation / Conservation
- Joint Cooperation for Maintenance of Facilities

The community issues most strongly identified as "Threats" includes those issues, similar to those identified in the "Weaknesses" component, that involve potential changes to local rural character and the costs associated with potential development pressure. Again, these responses appear to acknowledge that local governments have the ability to address some of these issues. Specifically, the five issues most strongly identified as "Threats" during the Public meeting were the following:

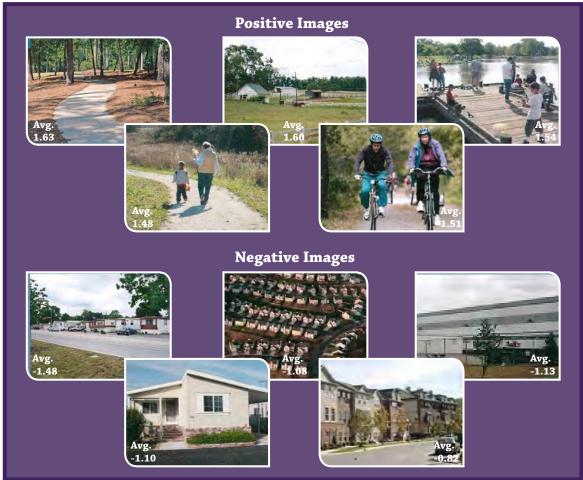
- Water Supply and Water Quality
- Fear of Losing Rural Way of Life
- Traffic Volumes on Routes 16 and 116
- MPC Lack of Impact Fees
- Open Space (Land Available for Development is Prime Target Areas for Development)

Visual Preference Survey

In the Visual Preference Survey (VPS) exercise, participants at the Public Meeting were asked to quantify how they feel about images that represent various attributes of community character. VPS exercises are used to assist participants in expressing their desires regarding existing and potential future components of a community. In the exercise, participants were asked to rate a series of images on a scale from -2 to +2 with -2 being a strongly negative image and +2 being a strongly positive image. Responses from each participant were tabulated, and the average preference level for each image was calculated. The results are displayed on each image.

The five most preferred and the five least preferred images are provided in Table 3-2. Overall, the most strongly preferred images involve those depicting rural and agricultural landscapes, walking and bicycling pathways, and other recreation amenities. The least preferred images were those depicting higher density forms of housing and those depicting intensive commercial operations. These ranges of images closely reflect the findings of both the Citizen Survey and the SWOT Analysis. In this exercise, respondents supported issues associated with the retention of rural attributes of the Southwest Adams region. Simultaneously, respondents were wary of community change, particularly if such change is associated with broad conversion of rural settings to suburban or urban settings. These findings are consistent with the responses received during the SWOT Analysis and the Citizen Survey discussed above.

Table 3-2: Visual Preference Survey



Section 5 - Goals and Objectives

The development of community goals and objectives describes the community's intent for its future and forms the basis for the planning policies and recommendations presented in Chapter 4. The goals and objectives statements describe what the community wants to achieve in the coming years, while the planning policies and recommendations in Chapter 4 describe how these goals and objectives will be achieved.

The following goals and objective statements were developed following the conclusion of the public participation exercises noted in Sections 2 and 3. The project steering committee reviewed and refined these statements over several meetings. These statements broadly express the desired future of the municipalities within the planning area, and begin to address the actions that will be necessary to achieve this desired future.

Land Use Goal: Retain the rural character of the Southwest Adams region while, at the same time, accommodating the current and anticipated future needs for land uses of all categories.

Objectives:

- 1. Establish Primary Designated Growth Areas and Secondary Designated Growth Areas of sufficient size and of appropriate location to accommodate a majority of the current and likely future growth within the region.
- 2. Enhance existing village character (primarily Fairfield Borough and Orrtanna Village) by retaining existing mixed use character and historic and architectural integrity.
- 3. Employ a variety of techniques focused on conserving rural character, landscapes, and uses in settings outside of Designated Growth Areas.

Natural Resources Goal: Retain the broad array of significant natural resources within the Southwest Adams region.

Objectives:

- 1. Employ a variety of techniques designed to conserve resources on a landscape-wide basis outside of Designated Growth Areas, and particularly within the western portion of the planning area.
- 2. Employ a variety of techniques designed to conserve natural resources, based on specific resource settings, within Designated Growth Area in a manner that appropriately integrates and protects such resources in the context of new development.

Water Resources Goal: Ensure that water of sufficient quality and quantity remains available to provide for the current and future needs of residents within the Southwest Adams region.

Objectives:

- 1. Focus efforts on development of additional public / community water supply within the Gettysburg Formation portion of the planning area.
- 2. Pursue a variety of techniques to protect groundwater supply in areas where groundwater is currently or is expected in the future to be relied upon for future public / community water supplies.
- 3. Employ a range of techniques to protect groundwater quality in all settings within the planning area.

Housing Goal: Ensure that housing of a variety of types remains available and affordable for current and anticipated future residents of the Southwest Adams region.

Objectives:

- 1. Retain existing housing stock.
- 2. Focus the development of new housing within Designated Growth Areas and where said housing can be serviced by necessary public / community infrastructure.
- 3. Ensure that municipal land use regulations provide for the dwelling unit types and densities necessary to address changing demographics and lifestyle choices.

Community Facilities Goal: Ensure that a broad range of necessary community facilities are provided to meet the current and future needs of the residents of the Southwest Adams region.

Objectives:

- 1. Pursue regionalization of public / community water and sewer services within Designated Growth Areas where such services already exist.
- 2. Pursue active cooperation with private water and sewer system providers to address needs within Designated Growth Areas where such services do not currently exist.
- 3. Work cooperatively with local school districts to ensure that school facilities are renovated, expanded, and / or constructed to meet current and future demands of the residents of the planning area.
- 4. Cooperatively pursue regionalization of local police, fire, and emergency response provides to ensure that such essential services are provided in a manner sufficient to protect current and future residents.

Transportation Goal: Retain and enhance the existing transportation network in the Southwest Adams region to ensure the safe and efficient movement of persons and goods within and through the region.

Objectives:

- 1. Pursue improvements to existing roadways as needed to ensure that roadway capacities meet the needs of current and future residents of the planning area.
- 2. Program improvements at intersections to address current and future safety concerns associated with such intersections.
- 3. Encourage the enhancement of alternative modes of transportation (pedestrian, bicycle, public transportation) to decrease reliance upon the private automobile.

Economic Development Goal: Retain and expand the economy of the Southwest Adams region and ensure access to economic opportunities for current and anticipated future residents.

Objectives:

- 1. Work cooperatively with entities within and outside the region to encourage appropriate economic development projects within Designated Growth Areas.
- 2. Enhance elements of the region's existing rural-based economy by actively promoting existing agricultural and cultural / recreation resources.

Heritage and Cultural Resources Goal: Conserve the wide variety of historic and cultural resources that help define the Southwest Adams region.

Objectives:

- 1. Retain and protect existing historic structures and historic districts.
- 2. Employ a variety of techniques and participation in regional efforts to conserve the extensive historic and cultural resources associated with various landscapes within the region.

Parks, Recreation, Open Space, and Greenways Goal: Expand and enhance the existing network of parks, open space, and greenways to meet the current and future needs of residents of the Southwest Adams region, and to conserve existing natural and cultural resources.

Objectives:

1. Expand and enhance existing park lands and park facilities to ensure that all current and future residents of the planning area have access to parks and park facilities that cater to persons with wide recreation interests.

- 2. Evaluate the potential for cooperatively deliver park lands, park facilities, and recreation programming at a regional level.
- 3. Formalize an open space and greenways system that includes mega-greenways, landscape-oriented greenways, and greenways along streams and mad-made corridors.
- 4. Develop a regional trail system that connects schools, neighborhoods, parks, and other activity centers with each other and with corridor and landscape-oriented greenways.

Section 1 - Introduction

The Policy Plan builds on the development of Goals and Objectives from Chapter 3. This Chapter details a series of recommendations that the municipalities of the planning area should follow to achieve the Goals, Objectives, and preferred alternative future. These recommendations are organized by topic area and reflect, but are not limited to, the required plan elements of a Comprehensive Plan as established in the Pennsylvania Municipalities Planning Code (MPC). Topic areas covered in the Policy Plan include the following.

- Land Use Plan
- Natural Resources Plan
- Water Resource Plan
- Housing Plan
- · Community Facilities Plan
- Transportation Plan
- Economic Development Plan
- Historic and Cultural Resource Plan
- Parks, Recreation, Open Space, and Greenways Plan

Section 2 - Land Use Plan

Article III of the MPC requires a plan for land use, which may include provisions for the amount, intensity, character and timing of land use proposed for all classifications of land use. The Land Use Plan for 2030 designates the proposed distribution and general location for residential, commercial, industrial, open space/recreation, community facilities and other categories of public and private uses of land. Maps 4-1 through 4-3 illustrate the land use policy and future strategies for growth management. These include the establishment of Primary Designated Growth Areas and Secondary Designated Growth Areas, and the exploration of infill development opportunities, conservation strategies, and residential and non-residential development options within the designated growth areas.

The Land Use Plan was prepared based upon input from the public and Steering Committee working collaboratively ACOPD staff to identify areas of preservation/conservation and areas for growth. The plan reflects the Goals and Objectives established in Chapter 3, and seeks to achieve a preferred future. The Land Use Plan identifies three critical landscapes within the planning area, then establishes a recommended land use pattern and designates growth areas that reflect these critical landscapes.

Critical Landscapes

Three major landscape classifications have been identified within the planning area. These include the Village Landscape, the Rural Landscape, and the Natural Landscape. Map 4-1 graphically depicts these landscapes, and descriptions of these landscape classifications are as follows:

Village Landscape - Lands that have been developed having historic character related back to development from a specific time period. Villages serve as a service center and contain a mixture of residential with limited-scale commercial uses. A village usually contains a major travel corridor where pedestrian and vehicle travelers predominately use. Lands outside the village core are primarily used for residential, parks and recreation and education uses. Village Landscapes may include Village Core areas, Traditional Neighborhoods, and Suburban Residential development patterns, and described as follows.

- Village Core: Considered to be the center of commerce and usually includes the village's major travel corridor(s) containing a mix of commercial uses, upper floor residential uses and public center spaces or focal points.
- Traditional Neighborhood: Urban residential neighborhoods located connected to the Village Core that is pedestrian-friendly and may have a small mix of uses, housing types and lot sizes, and contains a network of narrow streets and or alleyways.
- Suburban Residential: Lands containing orderly or rectilinear designed residential development within or adjacent to service centers containing retail goods and services that cater the local population.

Fairfield Borough represents the primary example of a Village Landscape within the planning area, although Orrtanna Village also fits into this category. Fairfield and Orrtanna both contain a significant Village Core characterized by a mix of residential, commercial, and institutional uses. Fairfield includes a couple examples of Traditional Neighborhoods (notably the Water Street and Franklin Street neighborhoods. Both villages include some Suburban Residential neighborhoods at their edges, notably the Beechwood Drive neighborhood just to the west of Fairfield.

Rural Landscapes - These areas contain farms and farm-related businesses, as well as other settings where a variety of limited and low density development has occurred. Rural Landscapes also include Hamlets, Crossroads, Rural Suburban Residential, and related development patterns.

- General Agriculture: Existing and preserved lands containing crop or feed fields, tree farms, timber, dairy farms, animal-raising on parcels with agriculture auxiliary structures and agri-businesses. Important agricultural settings within the planning area include northcentral Hamiltonban Township between Fairfield and Orrtanna, central and northern Highland Township, northern and southeastern Freedom Township, and central Liberty Township to the east of Carroll Valley Borough. Smaller agricultural areas can be found in each municipality, including both boroughs.
- Fruitbelt: The Adams County Fruitbelt, deemed eligible for listing in the National Register of Historic Places, covers approximately 20,000 acres of rolling hills stretching from southwest to northeast Adams County. This setting is identified

separately from the General Agriculture landscape given its unique topography, agricultural function, and scenic, historic, and cultural values. The area contains a unique combination of soils, slopes, and micro-climate historically recognized as prime land for fruit growing. The southern extent of the Fruitbelt is located in Hamiltonban Township between Fairfield and Orrtanna, and to the west of Carroll's Tract Road.

- Hamlet: A land area considered to be a rural settlement which is too small to be considered a village. A hamlet, historically, may have been formed around a single source of economic activity such as a farm, mill, or mining operation that originally employed its working population. Examples within the planning area include Virginia Mills, Fountaindale, Fairplay, and Knoxlyn.
- Crossroads: A land area developed specifically due to its location at intersecting roadways. A Crossroads area can be described as having a small conglomerate of residential uses mixed with several commercial uses located at a historically traveled intersection; or may contain mostly new development containing a mix of convenience goods and services with limited-scale. Central Carroll Valley Borough near the Route 116 / Sanders Road intersection can be described as a Crossroads landscape.
- Rural Suburban Residential: These areas contain primarily residential housing removed from any urban or village area. Rural Suburban design may include rectilinear or curvilinear street design, and may also include conservation-based or clustered design that is built to be considerate of the landscape. Typically there are no commercial amenities, although the suburban neighborhoods generally have direct access to the Region's existing travel corridors. Examples of this setting include much of Carroll Valley Borough, particularly in the southern portions of the Borough were central sewer and/or water service is not available.
- Rural Commercial: Lands containing existing commercial uses removed from any urban or village area. Such commercial uses are sparsely scattered throughout the Region's rural setting primarily located along state roadways including Waynesboro Pike (PA Route 16) and Fairfield Road (PA Route 116).

Natural Landscapes - Land areas that generally retain a natural appearance. These landscapes include public and private property, and may include a variety of rural residential uses integrated into the landscape. These landscapes include managed and unmanaged woodlands, stream corridors, steep hillsides, ridge tops, wetlands, marshes, and unique habitat areas. Agricultural uses may be located within this landscape, but agricultural uses are typically not the dominant landscape feature is these settings. These settings are found primarily in the westernmost portion of the planning area, and are typically located within or immediately adjacent to the Michaux State Forest and include significant portions of western Hamiltonban and Liberty Townships. Smaller components of this landscape can be found in northern Liberty Township to the east of Carroll Valley Borough and west-central Highland Township.

Designated Growth Areas

A critical component of the Land Use Plan is the designation of Designated Growth Areas that are of sufficient size and appropriately located to accommodate current and future development demand. The identification of appropriate Designated Growth Areas takes into account existing land use patterns, applicable policies of the Adams County Comprehensive Plan, the various landscapes discussed above, and the community goals and objectives presented in Chapter 3 of this Plan. The planning process has resulted in the development of a Designated Growth Areas Map (see Map 4-2). These areas are focused on established community centers and/or locations characterized by existing sewer, water, and principal roadway infrastructure. This Plan establishes both Primary Designated Growth Areas and Secondary Designated Growth Areas. These areas are described as follows:

Primary Designated Growth Area (Primary DGA) - A region within the planning area that is designated to accommodate most of the current and anticipated future demand for residential, commercial, employment, and institutional development within the planning area.

- Fairfield / Carroll Valley: This is a Primary DGA within the Southwest Adams County region. It includes all of Fairfield and Carroll Valley Boroughs and portions of Hamiltonban Township immediately surrounding Fairfield Borough and adjacent to Carroll Valley Borough. Small portions of Liberty Township along PA Route 16 are also included. This area includes two existing public sewer system, a public water system and a privately operated community water system. It also includes two of the main transportation corridors through the planning area (PA Routes 116 and 16), and includes the two largest established communities within the planning area.
- Emmitsburg Road / US Route 15 Interchange: This is another primary DGA within the Southwest Adams County region. It includes the area surrounding the Emmitsburg Road interchange with US Route 15 as well as significant land area to the south of the interchange between Emmitsburg Road and Bullfrog Road. While only a Crossroads development pattern exists in this setting currently, this Plan recognizes long standing Freedom Township planning policy to allow development in this setting. Specifically, substantial review and approval regarding the proposed Mason-Dixon Country Club and related residential and commercial components has already taken place at this setting. Necessary central sewer and water service is to be provided by the developer.
- Orrtanna Village: A small DGA is identified for the Orrtanna Village area reflecting
 the established community in this location and the presence of a central sewer
 system. Significant expansion of this DGA is not envisioned in this Plan for at least
 the short to moderate term planning horizon in this setting.

Secondary Designated Growth Area (Secondary DGA) - A region within the planning area that is designated to accommodate future, long-term demand for development within the planning area where such demand for development cannot be accommodated within the Designated Growth Area.

• Eastern Liberty Township: This Secondary DGA is located in Liberty Township adjacent to the Fairfield / Carroll Valley DGA. Secondary DGA designation is provided in this

area in acknowledgement of significant proposed residential development centered on the intersection of Tract Road with Crum and Wenchoff Roads. This area also includes several outlying sections of the former Charnita Development. Although development has been formally proposed in this setting, it is recognized that implementation of these development proposals is years away and will continue over an extended phasing schedule. Necessary central sewer and water service is to be provided by the developer.

 Orrtanna Village: A small Secondary DGA is proposed immediately to the east of Orrtanna Village and located primarily in Hamiltonban Township with a small portion in Highland Township. This designation provides for modest expansion of Orrtanna Village over the moderate term planning horizon.

Land Use Classifications

Land Use Classifications, as expressed on the Land Use Plan Map (Map 4-3), form the core of the land use element of the Southwest Adams Comprehensive Plan. The Land Use Classifications establish broad policy guidance with regard to the desired land use future of each portion of the planning area. They reflect appropriate and desirable goals within each of the three identified critical landscapes of the area. The Land Use Classifications are also structured to reflect the broadly defined Designated Growth Areas and provide more details as to how development within the Designated Growth Areas and the Secondary Designated Growth Areas should be accommodated. Outside of the Designated Growth Areas, where the conservation or rural lands and resources is broadly recommended, the Land Use Classifications detail appropriate land use approaches for various rural resources in different rural settings. The Land Use Classifications are described as follows.

Rural Conservation - Lands within the Rural Conservation classification are intended to retain current rural conditions observed in areas located outside the designated growth boundary area. These lands are designated for future rural and open space conservation and may accommodate very low density residential development to occur using conservation oriented design practices. Future residential development within the Rural Conservation area should be limited to no higher than 1 unit for every 10 acres. Land uses encouraged for this classification include single-family dwellings, agricultural operations, agri-businesses, family farmsteads, and animal raising recreation, open space conservation, greenway corridors, forest preserves, fish hatcheries, and similar rural resource supporting uses.

Low Density Residential - Lands within the Low Density Residential classification are intended to include primarily single-family dwelling units with a maximum residential density of no higher than 1 unit for every 3 acres. New residential developments are encouraged to utilize conservation and smart growth design techniques.

Moderate Density Residential - Lands within the Moderate Density Residential classification are intended to accommodate a variety of dwelling unit forms including single-family detached, two family, single-family attached and multi-family dwellings. Maximum residential density in these areas should be no higher than 4 units per acre. Use of traditional neighborhood design and other smart growth design techniques are recommended for new residential neighborhoods in this setting. These settings can accommodate a mixture of nonresidential uses designed to provide appropriately scaled community service areas (for example, professional and personal service uses).

High Density Residential - Lands within the High Density Residential classification are intended to include a variety of dwelling unit forms including two family, single-family attached and multi-family dwelling units. These areas should be developed with a minimum density of 4 units per acre. Like the Moderate Density Residential classification, the High Density Residential classification should include traditional neighborhood design and other smart growth design techniques. These settings should also accommodate a mixture of nonresidential uses, and could include mixed-use designs where nonresidential uses provide some regional level of service beyond the immediate community.

Mixed Use - Lands within the Mixed Use classification are intended to encompass a variety of development types. Development within this classification should be concentrated to increase job opportunities; foster sustainable businesses; and expand housing opportunities. Development within this classification may include many different forms and land use patterns including the following:

- Mixed Use Neighborhood: Mixed Use Neighborhoods include development forms characterized by a variety of types, styles, and designs of land uses located. This classification consists of primarily residential development and includes provisions for recreation, common open spaces, and small-scale neighborhood serving commercial uses. The intent is to enable residential uses, supported by amenities such as personal services, professional services, and commercial uses. Land use patterns may allow a mix of development types within a single project. Future land use patterns should provide easy accessibility to major transportation corridors and intersections within the Region. Lands within this classification are intended to serve as the core communities within the planning area, provide employment opportunities to residents, and have a logical spatial relationship with surrounding residential neighborhoods (either existing or proposed).
- Mixed Use Village: Mixed Use Villages are intended to maintain and enhance the village atmosphere within Fairfield and Orrtanna. Emphasis is placed on village-style infill and redevelopment. Commercial uses are encouraged to share building space with residential uses within individual structures. Compatible uses include small-scale, neighborhood serving commercial, office, professional and personal services, restaurants and cafes, retail, intensive residential, public spaces, community services, and similar village appropriate uses. Design elements encouraged include appropriately sized buildings (consistent in scale with existing buildings in the village), as well as signs, landscaping, and streetscape treatments characteristics of village settings.

Commercial - Lands within the Commercial classification are intended to include a wide variety of commercial uses such as retail, personal and professional services, office and/or uses consistent with the needs of residents within the Region as a whole. While uses within the Commercial classification may include automobile-oriented uses, typical strip commercial development designs are specifically discouraged. Design regulations for larger commercial developments are encouraged for parking lot access and design, building placement and scale, building lighting, business signage, and connectivity with surrounding land uses.

Industrial - Lands within the Industrial classification are intended to provide for a wide variety of employment, manufacturing, and/or industrial use such as warehousing, manufacturing,

industrial uses, business and industrial parks, laboratory and technology oriented business, and businesses that support industrially-oriented land uses. New industrial development should have good accessibility to major collectors and arterial roads, access to public water and sewer, and be designed to minimize off-site impacts.

Recreation - The Recreation classification includes existing in public, semi-public, and or privately owned recreation/preservation lands. The conservation of additional lands for recreation purposes is encouraged and should be integrated into development plans as necessary to meet regional needs for recreation services.

Land Use Distribution

Table 4-1 presents the distribution of the various land use classifications on the Future Land Use Plan Map. The table demonstrates that the majority of the planning area is intended to retain a rural land use character, as nearly 81% of the land area is included in a land use classification that envisions retention of rural resources and very low density residential development. Concurrently, only 17% of the planning area is designed with land use classifications that are intended to accommodate significant future development. Even with this distribution, the suggested size of the Designated Growth Areas can easily accommodate anticipated future development demand and population growth.

Table 4-1: Land Use Plan Classifications

LAND USE PLAN CLASSIFICATIONS	Southwest Adams Region	
	Acres	Percent
Rural Conservation (1 unit/10 acres)	31,044	57%
Low Density Residential (1 unit/3 acres)	4,715	7%
Moderate Density Residential (1-4 units/acre)	6,398	12%
High Density Residential (Greater than 4 units/acre)	37	less than 1%
Mixed Use	1,294	2%
Commercial	1,024	2%
Industrial /Quarry	1,066	2%
Recreation (public, semi-public, private) & State or Federal Land	9,059	17%
TOTAL	54,637	100%
Acres in Primary DGAs	9,242	17%
Acres in Secondary DGAs	6,692	12%

Summary of Implementation Strategies

Each municipality within the planning area can strongly contribute to the implementation of the Land Use Plan. Addressing the Land Use Plan will also contribute to efforts to implement the recommendation of other sections of this plan. Each municipality should pursue the following implementation strategies.

Update Municipal Zoning Ordinances - Each municipality should evaluate their existing

zoning ordinance and determine what elements need to be revised or added to implement the Land Use Plan.

Consider Regional Zoning Ordinance Development - The municipalities within the planning area should evaluate the degree to which a multi-municipal effort can be undertaken to improve zoning ordinance standards in the Region. This effort could involve improved coordination of existing individual zoning ordinances or the development of joint zoning ordinances that cover two or more municipalities on a voluntary basis.

Coordination with Utilities - The municipalities should ensure that zoning ordinance provisions and zoning districts that allow higher density forms of development are applied in areas where public or central sewer and water facilities are provided.

Conservation Opportunities - The municipalities, particularly the Townships, should encourage property owners to pursue land conservation opportunities and programs outside of the Primary and Secondary DGAs. Municipalities should work directly with conservation organizations, such as the Land Conservancy of Adams County and the South Mountain Partnership, to advance conservation efforts within rural settings.

Section 3 - Natural Resources Plan

Conserving the natural resources of the Region is crucial to preserving a high quality of life for residents, visitors and businesses. Natural resources should be conserved for their biological, economic and recreational values, as well as their natural beauty and importance to local culture. The Region intends to build upon State and County conservation and preservation policies by implementing various conservation and preservation land management techniques in a manner consistent with the Land Use Plan presented in Section 2.

Section 6 of Chapter 2 describes a variety of important natural resources located within the planning area. Maps 2-2 through 2-11 graphically depict the extent of these resources. The overall policy of the Natural Resources Plan with regard to environmentally sensitive areas is that the municipalities within the planning area, partnering with County government and other supportive organizations, should initiate various actions to improve current efforts and programming regarding such areas.

There is no one single approach to be used to address the protection of sensitive environmental resources. Rather, the municipalities and their partners should be prepared to select from a menu of protection options depending on the type of resource, the location of the resource, and the extent to which the resource is distributed. Approaches will likely vary depending on whether the resource is located within a Designated Growth Area as identified in Section 2 above or whether the resource is located outside of such an area. Approaches within Designated Growth Areas should be focused on conserving specific resource areas and carefully integrating these conserved areas into the overall development pattern for a site and area. Outside the Designated Growth Areas, conservation efforts should be approached from the perspective of landscape-wide approaches at the property level or broader. The following recommendations are provided with regard to specific resources.

Forested Areas

Map 2-11 depicts wooded areas within the planning area. These areas strongly contribute to the character of the Southwest Adams region, help maintain healthy environments, and help mitigate the impacts of erosion. Also, maintaining abundant areas of tree cover is essential in protecting the quality and quantity of groundwater and surface water resources. Therefore, active efforts should be pursued to ensure that areas of significant tree cover are retained within the planning area.

This overall recommendation can be pursued through a variety of means. Within the western part of the planning area where forested cover is the most consistent, municipalities should pursue partnerships with other levels of government and with other conservation organizations to promote efforts to preserve entire properties or groups of properties to expand the extent of protected woodland areas associated with the South Mountain landscape. Within the eastern portion of the planning area, more targeted forest conservation efforts should be pursued. Efforts might include the promotion of programs



Wooded area along Carr Hill Road, Highland Township

to retain or enhance riparian buffers, include wooded areas of a lot within a conserved open space portion of development projects, and establishing requirements to minimize site grading and significant vegetation removal.

All municipalities should consider requirements in their land use ordinances to minimize the removal of forest cover. This can be challenging given the requirement of the Pennsylvania Municipalities Planning Code to allow "forestry" as a permitted use in all zoning districts. However, some flexibility can be provided that can promote sustainable forestry operations rather than simply clear cut operations.

Steep Slopes

Map 2-9 depicts areas of steep slopes within the Southwest Adams region. The locations where steep slopes are predominant overlap to a high degree with areas with forest cover. Accordingly, most of the steep slope areas are located in the western portion of the planning



Steep slope setting along Steelman Marker Road, Liberty Township

area, although smaller areas of moderate to steep slope are located throughout the area. Managing steep slope areas is essential to prevent erosion, maintain visual landscapes, and maintain surface water and groundwater quality.

All municipalities within the planning area should evaluate the potential use of land use regulations designed to limit development on steep slope lands. Proven examples of ordinance provisions, such as steep slope standards within a zoning ordinance, are used widely throughout Pennsylvania and should be evaluated for broader application within the Southwest Adams area. Other ordinance techniques to consider could include provisions requiring that steep slope provisions be

included in required open space areas of a development rather than subdivided into house lots or removed for nonresidential purposes. Approaches limiting the extent of site grading, similar to that suggested above regarding wooded areas, should also be considered. In the western portion of the planning area, conserving entire properties through conservation easements (including agricultural conservation easements for orchard areas) should be pursued in addition to regulatory standards.

Natural Areas

Natural Areas identified in the Adams County Natural Areas Inventory include lands with documented natural settings or recorded instanced of threatened or endangered plant or animal species. Given land preservation efforts already conducted within the planning area, many of the designated Natural Areas are either fully or partially preserved. Several areas are included

within the Michaux State Forest, while several other Natural Areas in Freedom and Highland Township have been at least partially conserved through donated conservation easements. The remaining designated Natural Areas that have not been conserved are located in Hamiltonban and Freedom Townships. These two Townships should continue to participate in efforts to conserve these sensitive areas. Likely, ultimate conservation should occur through conservation easement donation by a willing property owner, and the Townships should encourage such actions when opportunities arise. Absent such action, these two Townships should carefully monitor these settings and encourage the retention of



Designated natural area, Plum Run Upland Site, Freedom Township

these designated Natural Areas in a condition conducive to maintaining the Natural Area itself or the threatened or endangered species identified within the area. This can be at least partially achieved through careful consideration of these resources through the development design process.

Floodplains and Wetlands

Map 2-4 identifies the extent of identified wetlands areas and designated 100-year floodplains within the planning area. As discussed in Chapter 2, wetland areas are scattered throughout the planning area, but the broadest floodplain areas are located within the eastern half of the Southwest Adams region.

All of the municipalities within the planning area have adopted and enforce floodplain regulations, either as a component of a municipal zoning ordinance or as a stand-alone ordinance. Further, all designated wetlands are federally regulated. Therefore, at least a minimum level of protection of these resources is currently in effect.

Wetlands and floodplains are critical components of the hydrologic systems within the planning area and should be managed and protected to ensure, in turn, that water quality and water quantity associated with these resources are also protected. Further, and with regard to floodplains specifically, careful management is essential to minimize property impacts during flooding events, particularly within the central and eastern portions of the planning area where

the widest floodplains are located.

With regard to specific actions, all of the municipalities within the planning area should periodically review the wetland and floodplain provisions of their ordinances to ensure that these resources are appropriately addressed and that a high level public safety, particularly with regard to floodplains, is maintained. With regard to floodplains specifically, floodplain management ordinances should preclude new structural development and the location of hazardous materials within the regulated floodplain. Further, and particularly with regard to the wider floodplains in the eastern portion of the planning area (such as Fairfield Borough, and Hamiltonban and Liberty Township were recent damaging flooding has occurred), consideration of additional buffering around regulated floodplain areas should also be given. Means to accomplish this objective could include the use of riparian buffer requirements or ensuring that buffer areas around floodplains are included in required open space elements of new development projects.

High Quality and Exceptional Value Waters

Map 2-3 details the locations of high quality and exceptional value waters within the planning area. As previously discussed, these waters are located primarily in Hamiltonban Township is primarily wooded areas associated with the South Mountain landscape. Given these



Middle Creek at Strawberry Hill Nature Center

designations, certain environmental protections are already in place that should allow the retention of high levels of surface water quality in this area.

The presence of high is essentially limited to those areas that have remained primarily wooded. Once streams transition from the primarily wooded areas in the western portion of the planning area to the central and eastern portions, surface water quality diminishes. While it may not be realistic to achieve water quality improvements along Marsh Creek, the lower portions of Middle Creek, Flat Run, and the

lower portions of Toms Creek to expand high quality or exception value designation to these areas, various municipal actions could be pursued to gradually improve surface water quality over time. Many of these techniques have been mentioned above with regard to conservation of other natural resources, and can include protection and enhancement of riparian buffers and protection of open space around the creeks. Further, all of the municipalities should advocate for and support the actions of individual property owners to protect water quality within streams. These actions could include participation in various streambank and buffer revegetation programs (for example, Pennsylvania Stream ReLeaf administered through the Pennsylvania Department of Environmental Protection (DEP) or the Streambank Fencing Program administered through DEP in support of the Chesapeake Bay Program.

Summary of Implementation Strategies

Each municipality within the Region should evaluate potential efforts that can be taken to encourage the conservation of important natural resources. The following implementation strategies should be pursued.

Zoning Ordinance Provisions - Municipalities should consider updating or adding provisions in municipal zoning ordinance to protect natural resources. Examples can include steep slope, wetland buffers, and riparian areas provisions.

Floodplain Ordinances - Municipalities should review their floodplain management ordinances to ensure that the provisions appropriately address development in regulated floodplain areas. Consideration could be given to strengthening provisions to limit structural development and land disturbance in regulated floodplains.

Coordination with Conservation Organizations - The municipalities should encourage property owners with important natural resources on their property to work with conservation organizations (for example, Land Conservancy of Adams County, Adams County Conservation District) to conserve resources specific to an individual property.

Section 4 - Water Resources Plan

Planning Context

The Pennsylvania Municipalities Planning Code requires that Comprehensive Plans shall "include a plan for the reliable supply of water, considering current and future water resources availability, uses and limitations, including provisions adequate to protect water supply sources." The availability and sustainability of water resources is essential to ensure the sustainability of current residents and businesses and the accommodation of necessary future residents and businesses. Careful planning is required to ensure that water of sufficient quality and quantity is available now and in the future.

In considering water resources planning for the Southwest Adams region, several context statements are applicable and form the basis for the planning discussion regarding this resource. These include the following.

- Water is an essential resource. Water of sufficient quality and quality must be provided to support any use of property, and to support the quality of life of current and future citizens. This said, this plan does not take the position that sufficient water resources do not exist to support future and necessary residential and economic development in the Southwest Adams region. Rather, the water resources plan establishes policies and recommendations designed to ensure that adequate actions are taken to protect and develop water resources in a sustainable manner to meet the future needs of the community as a whole.
- Lawful activity such as extraction of minerals impact water supply sources
 and such activities are governed by statutes regulating mineral extraction that
 specify replacement and restoration of water supplies affected by such activities.
 Understanding this construct of Pennsylvania state law, this water resources plan
 recognizes the role of existing governing statutes and does not include any policies
 or recommendations intended to exceed any existing standards.
- Commercial agricultural production impacts water supply sources. This water resources plan recognizes that a viable and sustainable agricultural economy is reliant upon sustainable current and future supplies of water.

Coordination with Land Use and Related Plan Elements

Within these constructs, it is important to note that planning for water resources involves the development of policies and recommendations regarding issues related to water resources. These include the overall land use recommendations, provision of community infrastructure and services, and protection of natural resources. By association, many of the recommendations elsewhere in this plan are also considered to be components of the water resources plan. A summary of supporting recommendations from elsewhere in this plan follows.

Land Use - The following policies from the Land Use Plan are applicable to the Water Resources Plan.

- Establish a Primary DGA focused on the Fairfield / Carroll Valley area where existing community water service currently exists.
- Establish a Primary DGA focused on the Emmitsburg Road / US Route 15 Interchange area where the development of a new community with new community water service is proposed.
- Establish a Secondary DGA focused on eastern Liberty Township where new development is proposed with new community water service.
- Establish a Secondary DGA at Orrtanna Village.

Natural Resources - The following policies from the Natural Resources Plan are applicable to the Water Resources Plan.

- Carefully manage wetlands and floodplain areas to minimize the impacts of flooding and erosion, thereby protecting surface water and groundwater quality.
- Enhance the protection of existing High Quality and Exceptional Value waters and promote management techniques that will enhance surface water quality in other areas over time.

Community Facilities - The following policies from the Community Facilities Plan are applicable to the Water Resources Plan.

- Plan for an increase in water demand within the planning area of 323,125 gallons per day.
- Provide for a significant portion of the additional future water demand within the Fairfield / Carroll Valley DGA. Consider regionalizing water service in this area.
- Provide for a significant portion of additional future water demand within the Emmitsburg Road / US Route 15 Interchange DGA. Allow a privately developed water system to service this area, but only with detailed involvement from Freedom Township in the permitting process, and with assurances that the private water system is designed to allow connection of other properties within the DGA.
- Provide for a portion of water demand within the Eastern Liberty Secondary DGA in support of future proposed development in this location. Ensure that any water supply system in this setting is designed to allow connections from additional properties.

 Provide for the development a water system (preferably, but not necessarily, a public water system) in the Orrtanna Village Secondary DGA.

These policies and recommendations form the constructs regarding water provision for the planning area over the planning horizon. However, as identified in Section 6 of Chapter 2, various challenges with regard to water quality and water quantity existing with the Southwest Adams planning area. Water demand within the Southwest Adams area will increase and the municipalities within the planning area should mutually support policies to ensure that most of the additional water is provided through community water systems serving designated growth areas. The remaining portion of this Section addresses, from a broad planning perspective, how future water demand should be met and how water supplies should be managed and conserved to ensure that sufficient water is available through the planning horizon.

Water Quantity

As noted in Section 6 of Chapter 2, groundwater supply is generally available to meet future development needs of the Southwest Adams planning area, as well as Adams County as a whole. However, various studies indicate that some areas of the Southwest Adams planning area, and Adams County as a whole, can become stressed with regard to groundwater supply in times of drought. Therefore, and as a supplement to water supply recommendations from other sections of this Plan, the following additional recommendations are provided as a component of the Water Resources Plan.

Development of Groundwater Supply - When additional water supply is necessary to serve development within a designated growth area, the municipalities within the planning area (and private partners where such exist) should focus efforts in areas where fewer groundwater constraints are known to exist. For example, well development for community water systems within Gettysburg Formation should be prioritized over well development within the Blue Ridge Formation or within diabase areas. Further, given the degree to which water supply is stressed in the Marsh Creek watershed, well development for community water systems should be focused within other watershed, particularly when intended to service development within the Fairfield / Carroll Valley DGA.

Protect Recharge Areas - If the focus of development of expanded or new groundwater sources is areas within the Gettysburg Formation, steps should be taken to ensure that recharge areas within the Gettysburg Formation are protected. Land conservation measures could take the form of agricultural easements (the Adams County Purchase

of Agricultural Easements program or otherwise), conservation easements through the Land Conservancy or Adams County or comparable conservation organizations, or other means. Potential areas to focus such efforts may be the area around Fairfield Borough, eastern Liberty Township, portions of Highland Township, and northwestern Freedom Township.

Maximize Recharge - All municipalities within the planning area should implement



Waynesboro Reservoir, Hamiltonban Township

various means to maximum groundwater recharge. This recommendation is applicable in all areas, and is equally relevant to those areas within designated growth areas as well as those areas outside such areas. The primary means by which the municipalities can maximize groundwater recharge is the full implementation of the Adams County Stormwater Management Plan, a plan drafted and adopted in accordance with Pennsylvania Act 167 standards. Use of stormwater best management practices (BMPs) that maximize infiltration to the extent local soil conditions allow is recommended for all municipalities. While such techniques should be employed in all locations, special emphasis should be placed on those locations where future groundwater development may be necessary to meet future needs.

Evaluate Maximum Impervious Coverage Requirements - All municipalities should review their impervious cover standards within their land use regulations. Minimizing the extent of impervious cover directly relates to the volume of stormwater that must be managed, and accordingly the volume of stormwater that can successfully be infiltrated. All municipalities should consider reducing their maximum impervious coverage standards, particularly in nongrowth areas. Further, all municipalities should consider other means that would reduce the extent of impervious cover (for example, alternative pervious parking lot designs for smaller or low traffic volume parking lots).

Pursue Recommendations from the March and Rock Creek Watershed Critical Area Resource Plan (CARP) - Although this Plan only covers a portion of the Southwest Adams planning area, many of the water quantity recommendations within the Plan are relevant within the Southwest Adams area. Examples of particularly applicable recommendations include, at a minimum, the following.

- Community water supply systems should perform a water audit at least once a year to manage water loss.
- Seek, promote, and implement wastewater treatment system reuse, beneficial reuses of wastewater.
- New developments should include/incentivize water conservation equipment in homes when built.
- New developments need to provide additional storage capacity.
- Investigate use of quarries as water storage facilities, particularly in the diabase.
- Community systems should prepare and get Pennsylvania DEP approval for Source Water Protection Plans for all wells and surface intakes.
- Import water into the Southwest Adams planning area.

The previous are examples of recommendations from the CARP and should not be viewed as an exhaustive list of recommendations that are potentially applicable throughout the Southwest Adams planning area. However, these recommendations represent actions that individual municipalities can influence through the development approval process or by other means.

Protection of Groundwater Quality

Ensuring that water quality is retained is a central element of the Water Resources Plan. Generally, groundwater quality is good, although there are some instances of groundwater contamination and modest but wide ranging issues with water hardness within the planning area. Surface water quality is more variable, with lower water quality generally exhibited in locations where either development has occurred or where natural vegetative cover has been removed. This is particularly an issue within the Little Marsh Creek and Upper Marsh Creek subwatersheds, where water quality impairment has already been measured. While broad programming that addresses water quality on a wide scale is likely beyond the capacity of individual municipalities to manage, the municipalities within the planning area should follow the recommendations listed below as their contribution to addressing regional water quality concerns.

Stormwater Best Management Practices - mplementation of stormwater BMPs can contribute to improved groundwater quality in addition to the groundwater recharge benefits referenced above. Use of various techniques such as infiltration trenches, rain gardens, and wetland plantings can serve to filter out pollutants as the water is recharged to the groundwater supply. Use of these types of techniques throughout the planning area is recommended.

Develop and Implement Wellhead Protection Areas - Wellhead protection areas should be developed and implemented for all wells within community serving water systems within the Southwest Adams planning area. Wellhead protections areas should be based on scientific analysis and should reflect known characteristics of local hydrology. Once wellhead protection areas are delineated, the municipalities should establish ordinance provisions that will limit the expansion of existing land use and the development of new land uses within these areas that could potentially contaminate the well supplies. Where new well sources are proposed by private developers, the municipalities should consider ordinance language (for example, in the municipal subdivision and land development ordinances) that would require that wellhead protection areas be developed by applicants as a component of new development submissions.

Enact Well Drilling Ordinances - Practically all current and future water users (domestic or otherwise) will continue to rely on groundwater supplies through the planning horizon.

Water wells must be located and constructed properly to ensure that the well itself does not contribute to a degradation of groundwater quality. Therefore, all municipalities should develop and implement a well drilling ordinance to ensure that wells are properly constructed. This is particularly important for those areas outside of designated growth areas where individual domestic wells are more prevalent and where community supply wells may be located.

Pursue Recommendations from the March and Rock Creek Watershed Critical Area



Private wellhead in residential neighborhood, Carroll Valley Borough

Resource Plan (CARP) - In addition to various recommendations that address water quantity, the CARP also includes various recommendations that address water quality. Again, many of these recommendations are applicable to the Southwest Adams planning area as a whole and are therefore included in this Plan. Examples of particularly applicable recommendations include, at a minimum, the following.

- All municipalities in the Southwest Adams area should adopt and enforce ordinances regarding on-lot septic system maintenance and the establishment of sewage management districts.
- Municipalities should consider establishing groundwater protection ordinance for water quality protection.

Summary of Implementation Strategies

Each municipality within the planning area must be involved in managing water resources, and should contribute to addressing the recommendation provided above. In summary, each municipality should pursue the following implementation activities.

Coordination with Water Providers - The municipalities must work collaboratively with public municipal authorities and private water supply companies to ensure that service areas are consistent with the Primary and Secondary DGA designations of this Plan.

Expansion of Capacity - The municipalities should work collaboratively with public municipal authorities and private water supply companies to ensure that sufficient water capacity is developed in existing and future systems to serve a majority of the projected 2030 population.

Protection of Groundwater Quantity - Municipalities should ensure that groundwater quantity issues are addressed by working to conserve lands around groundwater sources. Municipalities should also maximize groundwater recharge through use of stormwater management techniques that focus on infiltration and through use of low maximum impervious coverage standards in municipal zoning and subdivision and land development ordinances,

Protection of Groundwater Quality - Municipalities should address groundwater quality through use of stormwater management techniques that focus on infiltration. Municipalities should develop wellhead protection areas around community water system wells, and should develop well drilling ordinances to ensure proper construction.

Section 5 – Housing Plan

Article III of the MPC requires a plan to meet the housing needs of present residents and of those individuals and families anticipated to reside in the Region. When addressing this requirement, the municipalities within the planning area must evaluate the number of new dwelling units that will be needed to accommodate existing and anticipated future populations. While the Region is statutorily and ethically obligated to provide for all dwelling unit types, housing policies should reflect the size, age, lifestyles, and relative income levels of the households that are anticipated to be located in the community within the planning horizon. The provision of necessary housing should take into account a variety of factors such as regional

demographic and employment trends, availability of developable land and central utilities, obstacles to housing affordability,

Meeting Housing Needs

The evaluation of housing needs in this Plan addresses how to ensure that an appropriate supply of housing units either exists or will be created to accommodate existing and future new households within the planning area. Ensuring that the new dwelling units to be constructed reflect current and future demographic trends is essential.

As noted in Section 3 of Chapter 2, the Region is anticipated to increase in population from 9,766 people in 2010 to 12,703 people in 2030, an increase of 2937 persons over the planning period. Assuming that the planning area remains at approximately a 2.5 persons per household level, 1,175 dwelling units will need to be developed to accommodate the projected population. While this figure may be tempered by regional or national economic conditions, it remains reasonable from a planning perspective to consider given the Region's proximity to employment, shopping, recreation, and other regional factors.

The Designated Growth Areas and Land Use Classifications elements of this Plan are closely coordinated to ensure that sufficient land area is available to accommodate the vast majority of anticipated population growth within areas designated for growth. The Primary DGAs include sufficient land area to easily accommodate the projected population and housing unit increase. Assuming that the Moderate Density Residential, High Density Residential, and Mixed Use areas of the Land Use Plan are fully developed at the densities suggested in the Land Use Plan, the Primary DGAs alone could accommodate a total of 26,817 dwelling units. Thus, the Primary and Secondary DGAs easily provide sufficient land area for the market to provide the additional 1,175 dwelling units by 2030 anticipated by this Plan.

The municipalities within the Planning Area should also ensure that future housing stock within the area reflect the area's likely future demographic pattern. The demographic information presented in Chapter 2 indicates that median age within the Region is generally increasing. Coupled with known tax advantages of moving to Pennsylvania at retirement age, it is likely that increased demand for housing units designed for residency by older householders will occur during the planning horizon. At the same time, it is likely that growing demand will occur for dwelling units suitable for younger households will also occur during this period.



Existing residential neighborhood, Carroll Valley Borough

This is evidenced by the large young generation now entering the housing market, and will likely be augmented by persons who work in the expanding Frederick area but who will choose to reside in Pennsylvania. Both of these household types will likely desire smaller homes with less property maintenance needs, and many of these households may seek dwelling unit types of than the traditional single-family detached house. Other dwelling unit types may be pursued based on lifestyle choice or from an overall affordability perspective. Land use ordinances should be amended to include provisions that enable these important segments of the housing market to be

met. This should principally be accomplished by ensuring that appropriate types and densities of housing can be accommodated within the Designated Growth Areas of this Plan.

Current Housing Stock

While it is clear that the development of new housing stock will be necessary to accommodate projected population increases, the retention of existing housing stock is also essential. Given the high percentage of owner-occupied residences in the planning area (see Chapter 2), much of the maintenance needed to ensure the retention of existing housing stock can and will be accomplished privately. However, municipalities within the planning area should all encourage participation in programs designed to assist lower income home owners in conducting necessary rehabilitation. Demographic and household information in Chapter 2, for example, indicates that proportionally higher percentages of lower income and older households are located in Fairfield Borough and Hamiltonban Township when compared to other municipalities in the planning area. Interestingly, residential structures are generally older in these settings. It may be appropriate to target housing rehabilitation efforts within the planning area in these two municipalities.

Summary of Implementation Strategies

The municipalities should ensure that housing opportunities exist for all current and potential future residents within the planning area. The following implementation strategies should be pursued.

Zoning Ordinance Provisions - Municipalities must ensure that housing of various types and densities are accommodated within the planning area. Zoning ordinance provisions should ensure that all dwelling unit types can be accommodated within the Primary DGA settings as established in the Land Use Plan.

Demographic Appropriateness - Municipalities should monitor demographic trends within the planning area and broader region. Land use ordinances should be structured to ensure that dwelling unit types likely demanded by current and future residents of all income levels can be accommodated within mostly within the Primary DGA setting.

Maintain Current Housing Stock - Municipalities should encourage homeowners to maintain and rehabilitate existing housing stock. Municipalities in particular should direct income qualified residents to community organizations such as South Central Community Action Programs Incorporated (SCCAP) for assistance that could be provided to ensure that residents can make repairs and upgrades necessary to maintain existing housing in the planning area.

Section 6 - Community Facilities Plan

Infrastructure and services provision is critical to ensure that future growth and development to occur within the designated growth areas identified in Section 3. Availability of sewer, water, utilities for energy and heating, and school facilities helps determine future investment patterns, including the type, location, and timing of future development. Infrastructure provision can serve as an economic development tool and incentive for future growth to locate within designated growth areas while maintaining the quality of life for those who already live and work in these areas. This section addresses infrastructure and services provision needed to support the Future Land Use Plan presented in Section 3. Measures that promote development

in the designated growth areas can also contribute to reducing growth in the rural portions of the planning area where substantial growth is discouraged.

Section 3 of Chapter 2 presents a population projection for the planning area of 12,703 people by 2030. This population increase implies a potential household increase of 1,175 dwelling units, assuming a persons per household figure of 2.5. If achieved, this population would represent an increase from the 2010 population of 9,766, distributed among the six municipalities within the planning area. The following section provides recommendations as to how the Region should address infrastructure and community services needs given the projected 2030 population.

Water

The provision of a water supply in sufficient quality and quantity to service future population growth is an essential element of this plan. Throughout the planning area, and given

the potential increase in number of households, additional capacity of 293,750 gallons per day may be necessary to service potential residential demand. This figure assumes water use of 250 gallons per day per household. An additional volume of available water will be necessary to service nonresidential uses that may develop concurrently with residential uses. This plan further projects that additional water demand resulting from nonresidential development may be 10% of what may be necessary for residential demand. Using this percentage figure, an additional 29,375 gallons per day may be necessary. Therefore, this plan includes recommendations regarding how the planning area should coordinate its efforts to achieve an additional water supply throughout the planning area of 323,125 gallons per day.



Fire hydrant in Fairfield Borough

Two community water systems currently operate within the planning area. These include the former Section A Water Company (now owned and operated by York Water Company) in Carroll Valley Borough and the Fairfield Municipal Authority water system serving Fairfield Borough and a small number of customers in adjoining Hamiltonban Township. As indicated in Section 8 of Chapter 2, the York Water Company system has a permitted service capacity of 300 persons. Further, it can treat approximately 50,000 gallons per day. The Fairfield Municipal Authority system has a treated water storage capacity of 483,000 gallons and can treat 352,800 gallons per day.

A significant portion of the necessary water supply should be publicly provided (or provided by a private water company working in close coordination with local municipal governments). Within the Fairfield / Carroll Valley Primary DGA, efforts should be focused on extending existing public and / or existing private water systems within this area. Fairfield and Carroll Valley Boroughs and Hamiltonban Township specifically should work together to evaluate the potential for a regional water system in this area. How this is accomplished from a technical perspective

is outside the scope of this Plan. System expansion costs should be borne by the development community as new projects are proposed and implemented, but with the clear understanding that the resources developed will be added to the community water system(s) serving the Fairfield / Carroll Valley Primary DGA. The municipalities should consider operating any consolidated system under the auspices of a regional authority with proportional membership from each municipality.

In areas of the planning area where existing public or private community water systems do not currently exist, consideration should be given to relying on private development interests to development, maintain, and operate necessary systems. This recommendation is particularly applicable to the Emmitsburg Road / US Route 15 Interchange Primary DGA. Development in this setting is envisioned to include upwards of 1,200 dwelling units and a significant portion of the nonresidential development envisioned for the overall Southwest Adams planning area. The pending development may serve to absorb a fair proportion of residential and nonresidential demand over the coming years, which may in term help provide other municipalities within the planning area some time to address long term water supply needs from a detailed perspective. At the same time, Freedom Township should maintain a detailed level of involvement in the permitting process for future community water supply service to ensure that the likely future system will sustainably provide water of sufficient quantity and quality for this setting without harming other resources. Freedom Township should also ensure that the water system serving the Emmitsburg Road / US Route 15 Interchange Primary DGA is designed and is operated in a fashion that would allow appropriate connection of other properties within the designated growth area when and if they are developed.

It is acknowledged that the planning, permitting, and design process for eventual community water system service in the Emmitsburg Road / US Route 15 Interchange area has been challenging. It remains unclear as to whether the proposed use of surface water supply from Marsh Creek is a sustainable solution for water provision in this area. This issue is discussed in further detail in the Water Resources Plan above.

Any significant development outside the designated growth areas should also be serviced by privately developed and operated community water systems. This is particularly necessary for any significant projects within the Secondary DGAs. The Eastern Liberty Township Secondary DGA is the most significant example in this category. This Plan recommends the continuation of existing Liberty Township policy that requires the development community to develop, operate, and maintain private community water systems to service development projects in this setting. However, Liberty Township should be prepared to play a role similar in scope to that recommended for Freedom Township above. Liberty Township should actively engage in the permitting and system review process to confirm that water of sufficient quantity and quality is available for any development proposal. Further, and like Freedom Township, Liberty Township should ensure that privately developed community water systems are designed and implemented in a fashion that will allow additional connections if development is proposed on properties surrounding an initial development.

Hamiltonban Township should be prepared to address potential community water system development within the Orrtanna Village Secondary DGA when and if significant development is proposed in this setting. If a significant development project is proposed, Hamiltonban Township should consider pursuing a partnership with the applicant, and perhaps local industry in the immediate setting as well, to provide for community water service. It would likely be

prohibitive from a cost perspective for the Township to provide water service within Orrtanna Village without pursuing such partnerships. But, the Township should leave open the potential of being involved with public water supply in this setting if a cost effective opportunity arises in the future.

Finally, this Plan recommends that only properly developed on-lot wells be utilized outside the Primary and Secondary DGAs. While the municipalities must allow for some development within rural settings, enacting development standards that address the recommendations of the Land Use Plan will help minimize new development in rural settings, which concurrently will minimize the extent to which individual domestic wells will need to be utilized in low density areas. This approach supports the recommendations of the Water Resources Plan by limiting the number of well sites particularly in rural area, which in turn can limit overuse and contamination of the groundwater resource in these rural settings. Ensuring that a significant majority of new development will be located within areas served by public or centralized water systems is a central element of this Plan.

Sewer

Like the provision of water supply, dealing with sewage treatment demands is also an essential element of this Plan. The recommendations in this Plan are similar in scope to those involving water supply given the potential for significant future development coupled with a relatively low level of available public sewer system treatment capacity. The increasing costs associated with even maintaining existing sewer systems within the current regulatory environment will require that the municipalities within the planning area take advantage of opportunities and potential partnerships when they arise.

Throughout the planning area, and given the potential increase in the number of households, an additional 235,000 gallons per day of sewage treatment capability may be necessary to meet residential demand. This figure assumes sewage flow of 200 gallons per day per household. An additional volume of sewage flows will be associated with concurrently developed non-residential uses. Using a formula similar to that used in projecting nonresidential water demand, nonresidential flows are estimated to be 10% of projected additional residential flows, or an additional 23,500 gallons per day. Therefore, this plan addresses how the Southwest Adams area should accommodate additional sewage flows of 258,500 gallons per day. It is again clearly evident that current systems do not offer this volume of additional capacity in their current configurations. A percentage of these flows will be accommodated through the

development of additional on-lot septic systems. However, given the recommendations of this Plan to encourage a significant portion of new development to locate within Designated Growth Areas, careful attention will be needed over the planning period to provide additional community sewer treatment capabilities.

Like water supply, a significant portion of necessary sewer treatment capacity should be public provided and operated. Within the Fairfield / Carroll Valley Primary DGA, efforts should be focused on extending the existing



Fairfield Municipal Authority Sewer Treatment Plant

public systems within the area. Fairfield and Carroll Valley Boroughs and Hamiltonban Township should work together to evaluate the potential for a regional sewer system in this area. This could involve merging the Carroll Valley and Fairfield Municipal Authority treatment systems. System expansion costs should be borne by the development community as new development projects are proposed and implemented. Again, all parties should maintain a clear understanding that any additional capacity to be developed will be added to the regional system serving the DGA. The municipalities should consider operating any consolidated system under the auspices of a regional authority with proportional membership from each municipality.

The approach for providing sewer treatment capability in areas not currently serviced by public sewer systems should mirror that recommended above for areas not served by public or semi-public community water systems. Within the Primary DGA surrounding the Emmitsburg Road / US Route 15 Interchange, the proposed residential and associated nonresidential development should be serviced by the privately developed and operated sewer system currently envisioned for this site. Freedom Township, in a manner similar to the approach recommended for the community water system in this location, should maintain involvement in the development of the central sewer system for this location to ensure that extension to other properties within the Primary DGA may occur as necessary.

Privately developed, owned, and operated sewer systems should also be the selected choice for any significant development proposal outside the Primary DGAs, and particularly for any proposal located within a Secondary DGA. Within the Eastern Liberty Township Secondary DGA, the Plan recommends a continuation of current Liberty Township policy that the development community provide and operate the sewer treatment systems necessary to support private development proposals. Again, Liberty Township should maintain involvement in the permitting and system design and review process to ensure that any privately developed system can provide for additional connections if development on surrounding properties is proposed. The proliferation of small sewer treatment systems serving individual developments should be discouraged in favor of a single regional system, even if such system is operated by a private entity.

Hamiltonban Township should be prepared to address potential additional sewer system capacity needs within the Orrtanna Village Secondary DGA. The Plan recognizes that Hamiltonban Township is in the process of selling the existing sewer treatment facility currently serving the Orrtanna village area to Pennsylvania American Water Corporation (PAWC), who will then merge the operation of this system with the existing treatment facility in adjoining Franklin Township. Even though Hamiltonban Township will discontinue public operation of this facility, the Township officials should continue to participate in decision-making regarding future service areas and capacity increases, should such occur. Should significant development proposals occur in this Secondary DGA in the future, the Township should pursue a partnership with the potential developer and with PAWC to enhance system capacity to serve the needs of the development as well as the broader needs within the Secondary DGA. The Township should discourage any capacity increases or sewer service area expansions that result in service being provided outside of the Orrtanna Village Secondary DGA.

Finally, this Plan recommends that only properly designed and permitted on-lot septic systems be authorized for use within areas outside the Primary and Secondary DGAs. While the municipalities must allow for some development within rural settings, enacting development standards that address the recommendations of the Land Use Plan will help minimize new

development in rural settings, which concurrently will minimize the potential that new public sewer service or extensions of existing public sewer will have to be made in low density areas. Ensuring that a significant majority of new development will be located within areas served by public or centralized sewer systems is a central element of this Plan.

Education

Careful coordination between public education provides and municipal governments within the planning area is essential if educational services are to be maintained at an appropriate level given likely future school-aged population levels. As indicated above, this Plan envisions a potential population increase from 9,766 persons in 2010 to potentially 12,703 persons in 2030. Regional demographic, economic, and economic factors will impact the length of time it will take for the Southwest Adams area to achieve this population level. Regardless of the rate of population increase, however, a concurrent increase in school-aged population and public school enrollments should be anticipated. It is noted that Pennsylvania Department of Education enrollment projections for the Fairfield Area School District forecast a slight decrease in enrollment through 2018 (see Section 8 of Chapter 2). The same projections for the Gettysburg Area School District forecast a decrease in enrollment through the middle part of the coming decade followed by a gradual increase nearly back to the enrollment level experienced in 2005 through 2007.

This Plan acknowledges these enrollment projections and realizes that they may hold given current uncertainly about the national economy. A continued weak economy may result in a slow rate of new housing starts, which in turn could result in stable or slowly increasing enrollments. However, this Plan envisions that regional determinants will eventually result in development projects being implemented in this setting, which in turn will likely impact enrollments toward the latter part of the current decade and into the 2020-2030 decade. The degree of increase in enrollments is difficult to predict, but this Plan acknowledges that the degree of enrollment increase will, in large part, depend on the types of households attracted to the area. Given regional economic activity, particularly to the south in Maryland, a strong potential exists that many new households may be younger households with the potential of having one or more school-aged children. Even if only 1 school-aged child for every 10 new households results, an overall enrollment increase of over 400 students would be possible between the two school districts. It is anticipated that a majority of these additional students, if realized, would live in the Fairfield Area School District.



Gettysburg Area High School

Given the apparent mismatch between moderate term Pennsylvania Department of Education enrollment projections and the overall population projections of this plan, the participating municipalities should carefully coordinate with school district officials when significant development proposals are submitted. Discussions regarding the potential types of households that may result from a given potential development should guide this coordination with regard to determining an anticipated enrollment increase. The school districts should use this information, once received, to help fine-tune

long range facilities decisions to ensure required facilities are available when enrollments increase.

Emergency Services

Police, fire, and ambulances are essential in any community, and providing for these services within an area where population and household growth is expected can be difficult. While this Plan does not provide specific recommendations with regard to how many additional emergency responders will be necessary to meet anticipated demand, the Plan does recognize that demand for these services will increase as the population increases. Given the potential costs of these services, careful consideration must be given to ensure that necessary services are provided in an efficient manner that ensures appropriate levels of protection for current and future residents. This will likely involve continued regional coordination between municipalities and providers.

With regard to police services, some regionalization of service has already occurred. Within the Primary DGAs specifically where most new development is envisioned, further coordination of police services should be considered to ensure uniform and constant protection. The municipalities within the Primary DGAs should closely monitor, with their police agencies, numbers and types of police calls, as well as police officer per population statistics. This information should help the parties to plan for police capacity (including staff) enhancements gradually as the population increases. Further regionalization beyond the current levels of cooperation could be evaluated.

Maintaining appropriate levels of fire protection within the planning area will continue to be a significant challenge, particularly as municipal populations rise. Dramatic reductions in levels of volunteer fire fighters have occurred throughout Pennsylvania, and the volunteer force within the planning area reflects this statewide trend. Concern exists that existing volunteer companies are experiencing difficulties meeting minimum turnout standards when responding to daytime calls. Over the short term, the municipalities and the volunteer fire departments should maintain communication to ensure that the fire departments are aware of development proposals and have a role in decision-making regarding those infrastructure components that related to fire protection. Further, and beyond the short term, the municipalities and fire departments should work cooperatively to ensure that appropriate development standards are employed to minimize fire risk in all new developments. Over the longer term, however,

exploration of the potential of merging operations may be necessary to ensure consistency of coverage. Within this conversation, exploration of how to stabilize necessary operating revenue for the fire departments should also occur.

Finally, with regard to local ambulance companies providing basic life support services, it is noted that the ambulance companies within the planning area are already staffed with paid responders. This has occurred even given the overall revenue challenges of the fire departments that provide the ambulance services. Funding for ambulance services should be viewed as an



Greenmount Community Fire Company, Freedom Township

essential service, and the local municipalities should maintain an appropriate level of awareness regarding demand for and cost of ambulance service. Ensuring that ambulance service is maintained should be a part of every conversation held between municipal and fire department officials regarding the planning for and maintenance of these services.

With regard to advanced life support services, each municipality should be involved in forthcoming discussions regarding the discontinuation of the Wellspan's Medic 28 advanced life support service. It is beyond the scope of this Plan to provide a solution to what is an Adams County-wide service provision issue. However, the municipalities in the Southwest Adams area should participate in the discussions and be prepared to assist in the transition of advanced life support service away from Wellspan.

Other Services

A variety of other community services and facilities exist within the planning area. While these services and facilities are not directly provided by the participating municipalities, awareness and support of these services and facilities should be maintained. The Fairfield Senior Center and the Fairfield Area Library are both important community institutions and need to be retained and enhanced when necessary.

With regard to health care, it is noted in the Section 8 of Chapter 2 that a variety of health care services are located relatively short distances from the planning area municipalities. However, very few health care providers or related health care services are located within the planning area itself. As the regional population increases, the municipalities within the planning area should be prepared to advocate for health care facilities within the local area when a critical mass of population is achieved that can support such services. Periodic communication with regional health care institutions regarding this matter is recommended.

Summary of Implementation Strategies

The municipalities can and must provide the coordination between the Land Use Plan and the provision of community facilities. Accordingly, the municipalities should pursue the following implementation strategies.

Sewer and Water Systems - Municipalities must ensure that sewer and water system capacities will exist to service most of the projected 2030 population and at the locations envisioned in the Land Use Plan. Municipalities should work directly with municipal authorities and private utility companies to ensure that system capacities are increased when necessary at that service areas reflect the Designated Growth Areas of this Plan.

Education - Municipalities do not have a direct role in the provision of education. However, municipalities should maintain frequent communication with school boards and school district administrators, particularly when development proposals are submitted that will impact school enrollments.

Emergency Services - Municipalities should maintain direct and frequent communication with emergency service providers. Discussions should be held in particular when development proposals are submitted that would impact emergency services provision. Any discussions involving the regionalization or consolidation of emergency services should include municipal government representation.

Section 7 - Transportation Plan

Article III of the MPC requires the plan to include an element that addresses the movement of people and goods. The following describes transportation improvements needed to support anticipated short-term and long-term growth as identified in the Land Use Plan. The Transportation Plan identifies existing and future roadways, intersection improvements and improvements for non-vehicular modes of transportation.

Transportation recommendations for the Region are based on existing conditions coupled with anticipated transportation needs given a projected regional population of 12,703 persons by 2030. Projected transportation needs address data and issues presented in the Adams County Comprehensive Plan, the Adams County Long-Range Transportation Plan and community identified issues.

Roadway Functional Classifications

The Transportation section of the Existing Conditions chapter of this Plan describes primary road corridors in and adjacent to the Region. Section 9 of Chapter 2 specifically describes the functional classification of the major roadways within the planning area. Land use is an important determinant of the function of an area's roads and the classification of roadways. Given proposed Land Use Plan, it is envisioned that the function of several major roadways within the planning area will be forced to change over time as "levels of development" and resultant travel patterns also change.

Table 4-2 establishes the recommended functional classification system for roadways within the planning area and details design standards that are characteristic of each functional classification. Table 4-3 assigns these roadway classifications to the major roadways within the area. Map 4-4 graphically represents the recommended funtional classification system. Even with the projected population increase in the area, the functional classifications of most of the area's roadways are recommended to remain constant. The exceptions include Route 116 (Fairfield Road) and Route 16 (Waynesboro Pike), both recommended to be upgraded to Principal Arterials. Also, Bullfrog and Jack's Mountain Roads are recommended to be upgraded to Minor Collectors. These recommended upgrades in functional classification recognize that these roadways will serve increasingly important regional purposes as population is added to the area. These roadways will be required to accommodate potentially significant commuter traffic, particularly if housing is developed in the Fairfield / Carroll Valley Primary Designated Growth Area and occupied by persons who may rely on employment opportunities in Maryland. These upgrades in functional classification imply that these roadways will be required to accommodate higher traffic volumes over time. Accordingly, the municipalities within the planning area should be prepared to advocate for improvements along these corridors designed to increase the effective capacity of these roadways. Typical improvements that may be needed may include:

- Improved shoulders.
- Expanded runoff areas.
- Elimination of sharp curves and steep elevation changes.
- Improved sight distances.

- Improved traffic controls, including traffic signals and /or warning signs as may be appropriate.
- Added turning lanes.
- Relocation of potential obstacles further from the pavement.

Table 4-2: Roadway Functional Classification and Design Standards

Classification				Lanes			
Urban System Classification	Rural System Classification	Average Daily Traffic	Right- of-Way Width (feet)	#	Lane Width (feet)	Shoulder Width (Feet)	Type of Shoulder
Arterial	Arterial	All Volumes	120 plus median	4 or more	12	10 - 12	Paved/ Stabilized
Interstate/ Freeway (principal or	Interstate/ Freeway	6,000 - 20,000	120 plus median	4	12	8 - 10	Paved/ Stabilized
minor)	(principal or minor)	3,000 - 6,000	80	2	12	8 - 10	Paved/ Stabilized
Collector				2	11	8	
(major or minor)		800 - 3,000	60	(36 Feet minimum pavement includes parking lanes)			Stabilized
	Collector			2	10	4	
	(major or minor)	800 - 3,000	60	(28 Feet minimum pavement)			Stabilized
				2	10	6 - 8	
Local		Less than 800	50	(36 Feet minimum pavement including parking lanes)			Stabilized
				2	10	4	
	Local	ocal Less than 800		(28 Feet minimum pavement)			Stabilized

Table 4-3: Future Roadway Functional Classifications

Road Name	State / Local Road	Current Functional Classification	Proposed Future Functional Classification	
Bullfrog Road	SR 3005	Local Road	Minor Collector	
Camp Gettysburg Road	SR 3013	Local Road	Local Road	
Carroll's Tract Road	SR 3011	Rural Major & Minor Collector	Rural Major & Minor Collector	
Cunningham Road	SR 3008	Local Road	Local Road	
Emmitsburg Road	Business Rt. 15	: Minor Arterial / Local Road	Minor Arterial / Local Road	

Road Name	State / Local Road	Current Functional Classification	Proposed Future Functional Classification	
Fairfield Road	PA Rt. 116	Minor Arterial	Principal Arterial	
Fairfield Station Road	SR 3016	Local Road	Local Road	
Harbaugh Valley Road	SR 3009	Local Road	Local Road	
Iron Springs Road	SR 3014	Rural Minor Collector	Rural Minor Collector	
Jacks Mountain Road	SR 3021	Local Road	Minor Collector	
Knoxlyn-Orrtanna Road	Knoxlyn-Orrtanna Road SR 3020 Rural Minor Collector		Rural Minor Collector	
Knoxlyn Road	SR 3013	Rural Minor Collector / Local Road	Rural Minor Collector / Local Road	
Mason-Dixon Road	SR 3002	Local Road	Local Road	
Orrtanna Road	SR 3020	Rural Major Collector	Rural Major Collector	
Pumping Station Road	SR 3005	Rural Minor Collector	Rural Minor Collector	
Tract Road SR 3007		Rural Minor Collector	Rural Minor Collector	
US Route 15 (North & South)	U.S. Rt. 15	Other Principal Arterial	Other Principal Arterial	
Water Street SR 3010 Local Road		Local Road	Local Road	
Waynesboro Pike	PA Rt. 16	Minor Arterial	Principal Arterial	

Safety and Intersection Improvements

In addition to proposed functional classification changes, a variety of improvements to existing roadway intersections are envisioned in response to the potential land use and travel patterns that may result from implementation of the Land Use Plan. These improvements are envisioned to improve current intersection designs to help accommodate higher travel demand resulting from the population level projected in this Plan.



PA Route 116 / Jack's Mountain Road intersection, Carroll Valley Borough



Bullfrog Road / Pumping Station Road intersection, Freedom Township

Table 4-4: Recommended Intersection Improvements

Roadway	Municipality(ies)	Improvement / Enhancement
Fairfield Road (PA Rt. 116)	Carroll Valley	Modify the difficult turning angle.
and Jacks Mountain Road		Improve sight distance.
		Modify the difficult turning angle.
Fairfield Road (PA Rt. 116) and Iron Springs Road	Hamiltonban	Reduce traffic congestion.
		May warrant a traffic signal.
		Reduce traffic congestion.
Fairfield Road (PA Rt. 116)	Fairfield /	May warrant a traffic signal.
and Carroll's Tract Road	Hamiltonban	Attempt to align with any main circulation road designed to access new development immediately south of Fairfield Borough.
Fairfield Road (PA Rt. 116)	Liberty / Carroll	May warrant a traffic signal.
and Waynesboro Road (PA Rt. 16) intersection	Valley	Improve lighting.
Waynesboro Pike (PA Rt. 16)	1.9.	May warrant a traffic signal.
and Orchard Road	Liberty	Improve lighting
Fairfield Road (PA Rt. 116) and Bullfrog Road	Hamiltonban	Improve turning conditions onto Fairfield Road going north.
		Reduce traffic congestion.
Waynesboro Pike (PA Rt. 16)	Liberty / Carroll	May warrant a traffic signal).
and Jacks Mountain Road	Valley	Improve right turns.
		Improve site distance.
Orchard Road and Tract Road	Liberty	Improve site distance from south to north
Pumping Station Road and	-	Upgrade from a 2-way stop to a 4-way stop.
Bullfrog Road	Freedom	Improve turning capacity onto Bullfrog Road.

Many intersections and roadways in the Planning Area currently exhibit poor sight distance, poor alignment, and occasional congestion. These intersections and roadways will experience increases in traffic volume and should be evaluated in detail, at the appropriate time, for signalization or changes in intersection geometry. These intersections were identified by the project Steering Committee and / or the public in general and may or may not meet technical criteria for warranted improvements. Table 4-4 identifies the range of intersection improvements that this Plan recommends be further and formally evaluated in the coming years. Map 4-4 depicts the location of each proposed intersection improvement within the planning area.

Intersection recommendations noted in Table 4-4 are solely based upon committee and

public input. Other intersections primarily along the major roadways in the planning area should also be fully evaluated as development occurs and intersections problems may become evident. The municipalities within the planning area should continually monitor intersections within each jurisdiction to ensure their continued safe and efficient function. When problems are identified, each jurisdiction should be prepared to coordinate with the Pennsylvania Department of Transportation (PennDOT), the Adams County Transportation Planning Organization (ACTPO), the development community, and others, as may be appropriate, to address intersection problems as they become evident.

Nonmotorized Transportation

Transportation infrastructure within the planning area dedicated to accommodating nonmotorized modes of transportation is limited. A sidewalk system exists throughout most of Fairfield Borough, and a sidewalk has been installed along Ski Run Trail adjacent to the Lake Kay dam in Carroll Valley Borough. No dedicated bicycle infrastructure (for example, dedicated bicycle lanes) exists within the planning area. The planning area features a variety of walking and / or bicycle trails in various locations, but these are primarily recreation oriented in nature and will be further discussed in the Parks, Recreation, Open Space, and Greenways Plan section of this report. As the area grows and population increases, the planning area as a whole should increase the ability of its current and future residents to use nonmotorized modes of transportation within the community.

Given limited nonmotorized transportation facilities, the municipalities within the planning area should work cooperatively to ensure that such facilities are developed in a consistent and coordinated fashion. Specific efforts should be focused on ensuring that such facilities are viewed as a required infrastructure in any new development proposal. Within the Primary DGAs (the Fairfield / Carroll Valley and the Emmitsburg Road / US Route 15 Interchange Primary DGAs), the following features should be required when new developments are proposed:

- Sidewalks should be installed along both sides of all new streets.
- Sidewalks should be installed along existing street frontage of the development site if sidewalk is not already present.
- Dedicated bicycle lanes should be included along all streets with a functional classification of collector or higher within or adjoining a development site.
- Pedestrian and bicycle connectivity from the development site to existing developed areas should be provided, especially if street connections are not feasible for some reason. Facilities should be located to ensure that the facilities function appropriately.
- Accessibility standards (Americans with Disabilities Act or otherwise) should be incorporated into all facility designs.

It is acknowledged that the development community cannot be held responsible for implementing all nonmotorized transportation infrastructure that may be necessary to meet future needs. Improvements from the development community will, in all likelihood, be focused only on those segments within or immediately adjacent to a development site. The municipalities should be prepared to pursue other connections within the community, particularly those that would "bridge the gap" between new development sites and existing activity centers. For

example, enhanced pedestrian and bicycle infrastructure connecting Carroll Valley Borough to Fairfield Borough and the Fairfield Area School District campus should be explored. This could involve pedestrian facilities along Fairfield Road (PA Route 116) or other off-road facilities may be included in such a system. The 2004 Carroll Valley Path System Master Plan could be used as a starting point to evaluate nonmotorized transportation facility connections beyond Carroll Valley Borough but within the Fairfield / Carroll Valley Primary DGA.

Outside the Primary DGAs, the need for nonmotorized transportation facilities may be somewhat diminished, but appropriate facilities should be installed where appropriate. Within the Eastern Liberty Township Secondary DGA, for example, the focus of nonmotorized transportation facility provision may be limited to ensuring that walking or bicycling opportunities exist within new developments to ensure that residents can safely walk within their community for access to their neighbors, school bus stops, mailbox locations, or recreation venues. If opportunities to connect nonmotorized transportation facilities within individual developments to surrounding properties or to activity centers within the Secondary DGAs arise, these types of connections should of course be pursued by, at a minimum, attempting to reserve rights-of-way to enable facilities to be installed when possible in the future.

Regarding bicycle transportation specifically, municipalities with land area outside the Primary or Secondary DGAs should advocate for improvements along existing roadways to accommodate increased bicycle use. Such improvements would likely and primarily involve improvements to promote safe bicycle use, but could involve the use of dedicated bicycle lanes as well in locations where connectivity to activity centers within Primary or Secondary DGAs is desired.

Public Transportation

No fixed route public transportation system currently operates within the planning area. Residents currently have access to the demand responsive paratransit service offered by the Adams County Transit Authority, but this service will not likely meet the public transit needs of current and future residents of the planning area over the longer term planning horizon.

As traffic volumes and fuel prices continue to increase, opportunities to enhance public transportation options within the planning area should be fully explored. Several municipalities within the planning area have already indicated support for fixed route transit service to connect the planning area with the existing fixed route transit serving the Gettysburg area. Municipalities within the planning area should maintain contact with the Adams County Transit Authority to determine when and how the Freedom Transit system could be extended along PA Route 116 to service the Fairfield / Carroll Valley Primary DGA.

As development and population growth occur within the planning area, it is very likely that a substantial portion of new residents will be oriented to employment opportunities south of the Mason-Dixon Line. It is recognized that many of these employment opportunities may involve long commutes, and that many of the commute to and from work trips will impact surrounding communities outside the planning area (such as Emmitsburg, Maryland). Therefore, from a variety of perspectives, the municipalities within the planning area should be receptive to working with and advocating for other regional transit providers to extend public transit opportunities into Pennsylvania. These may involve fixed route or "park-and-ride" services to Fort Ritchie, the Frederick, Maryland area, the Westminster, Maryland area, or beyond.

Regional Transportation Plan

Many of the projects recommended in this Transportation Plan are based on community derived and public comment, as well as a general planning understanding of likely impacts of the Land Use Plan and population projections. As such, precise guidance regarding the design and prioritization of necessary system improvements is not included in this Plan. To achieve the precise guidance that is needed, the municipalities within the planning area should undertake a detailed planning analysis that can help further identify necessary transportation system improvements, prioritize those improvements, and develop at least initial cost estimates for these improvements. The preparation of a Regional Transportation Plan should therefore be considered as a "follow-up" study in support of the Southwest Adams Joint Comprehensive Plan.

When considering the development of a Regional Transportation Plan, the municipalities within the planning area should understand the forthcoming processes by which projects involving existing state roadways (road corridor improvements, intersections, traffic signals, etc.) will be programmed and funded in coming years. This involves trying to identify all local and site specific issues that will have to be considered when programming new projects. As such, a Regional Transportation Plan should evaluate the following:

- Increase in traffic volumes given the proposed Land Use Plan, as well as pending and likely future development.
- Identify and prioritize transportation improvements of all types to address the projected increase in traffic volumes.
- Identify local and site specific factors (environmental, historical, cultural, public opinion, etc.) that will influence site design, project cost, and project implementation.

Once this type of project is completed, the planning area and its municipalities will be in a good position to nominate needed transportation improvement project to the Long Range Transportation Plan developed by the Adams County Transportation Planning Organization (ACTPO). Once on the Long Range Transportation Plan, a recommended improvement can then get programmed for engineering and ultimately construction. This process is essential for virtually all improvement involving or being connected to state facilities (especially roadways).

Summary of Implementation Strategies

The municipalities should play a central and coordinated role in continued transportation planning and advocacy for needed transportation improvements within the planning area. The municipalities should pursue the following implementation strategies.

Regional Transportation Plan - The municipalities should prepare a Regional Transportation Plan to specifically and technically assess future transportation improvements that may be necessary given the overall Land Use Plan.

Long Range Transportation Plan - The municipalities should work collaboratively and in cooperation with ACTPO and PennDOT to place needed transportation system improvements on the Adams County Long Range Transportation Plan.

Improve Subdivision and Land Development Ordinances - Each municipality should review

its Subdivision and Land Development Ordinance to ensure that pedestrian and bicycle system improvements are required elements of development plan submissions, particularly those within Primary and Secondary Designated Growth Areas (DGAs).

Official Map Power - Each municipality should establish an Official Map in accordance with applicable provisions of the Municipalities Planning Code (MPC) to identify rights-of-way for necessary street connections, as well as locations for pedestrian and bicycle transportation features.

Section 8 - Economic Development Plan

Economic sustainability plays a vital role in improving the Region's quality of life. The Region intends to foster economic development opportunities that encourage private investment, provide primary employment for current and future residents, and shorten employment commuting distances. Realizing a healthy local economy is vital to the community's ability to sustain a desirable quality of life while providing necessary services and amenities for existing and future residents.

The Economic Development Plan establishes recommendations and strategies designed to promote a healthy local economy in the Southwest Adams County Region. The recommendations in this Plan result from a local planning process focused on evaluating the economic future of the region. Implementing these recommendations will require a continuing economic development planning process, developed with broad based and diverse community participation.

Economic Development Plan Elements

The planning process that resulted in this Economic Development Plan element identified a variety of general recommendations and initiatives viewed as essential to enhance the Southwest Adams County economy. These identified recommendations and initiatives are intended to enhance and diversity the existing economy of the Region, and to provide additional opportunities for current and future residents to enhance their quality of life through participation in a robust economy. These initiatives include the following.

- Retain the Regional Agricultural / Rural Economy
- Enhance Economic Development Opportunities within Designated Growth Areas
- Enhance Cultural, Historic, Recreational, and Related Economic Development Opportunities

These recommendations and initiatives are discussed in more detail as follows.

Retain the Regional Agricultural / Rural Economy

The agricultural and rural settings within Southwest Adams County strongly contribute to the economic vitality of the Region, and of Adams County as a whole. The Region includes a wide range of agricultural and agriculturally related uses that are essential to the regional economy, and that continue to enhance the rural character of the area. Maintaining this critical element of the Region's economy will be essential over the planning horizon of this Comprehensive Plan. This section identifies core recommendations and initiatives that should be pursued to maintain the rural and agriculturally based components of the Region's economy. These should include,

at a minimum, the following.

Establish Regulations Designed to Maintain Agricultural Lands and Uses - The Land Use Plan element of this Comprehensive Plan establishes large Rural Resource Areas within the Southwest Adams County Area. The Region's significant agricultural lands and uses are predominantly located within the Rural Resource Area as identified. Municipalities should evaluate and apply various regulatory techniques that support the continuation of agriculture and that limit non-agricultural uses from intruding into agricultural settings. These techniques should include, at a minimum, the following

Effective Agricultural Zoning - This term refers to a specific type of zoning district that allocates the extent of permitted nonagricultural development based on the size of the parent parcel. The amount of nonagricultural development is limited to ensure that most of the property will be retained for agricultural use. This type of zoning district typically employs a maximum lot size, and also employs standards to ensure that new development is placed on the least valuable lands of a parent parcel from an agriculture production perspective.



Woerner's Farm Market, Carroll's Tract Road, Hamiltonban Township

The municipalities within the planning area, most notably the townships, should evaluate the use (or expanded use, if appropriate) of this zoning technique. Specific areas where effective agricultural zoning should be evaluated for application include much of Highland Township, northeast Hamiltonban Township along Carroll's Tract Road, eastern Liberty Township, and portions of Freedom Township perhaps including areas along Pumping Station and Bullfrog Roads.

Encourage Income Generating Farm Activities - Many farm operations are seeking to establish a variety of on-farm activities or direct to customer sales operations to enhance farm income. Several of these operations already exiting within the planning area. The municipalities should include language in their zoning ordinance, if such language does not already exist, to allow a wide range of on-farm agriculturally supportive operations to occur. These can include "U-Pick" operation, farm markets, corn mazes or other forms of entertainment, farm tours, and similar activities. Enhancing the ability of farmers to employ these revenue generating operations can help sustain farm operations, and can also add vitality to the local agricultural economy.

Consider Use of a Transferable Development Rights (TDR) Program - A TDR Program is incorporated into a municipal zoning ordinance and offers the farm owner the opportunity to sell development rights from their property to others who may choose to employ those development rights within areas designated for growth. Participation in a TDR Program is always voluntary - neither the person selling the development rights nor the person purchasing the development rights for use elsewhere is ever

obligated to participate in the program. TDR offers the farm owner to preserve their land resource while still receiving equity from their land resource when regional development occurs. TDR offers the purchaser of the development rights the opportunity to apply purchased development rights to a project to increase project density in appropriate locations beyond what is ordinarily authorized. In the Southwest Adams County setting, all municipalities (including the boroughs) should consider drafting appropriate zoning ordinance language that could allow a TDR Program to function on a regional level. If established, a TDR Program should authorize the transfer of development rights from properties within the Rural Resource Area to one of the Primary DGAs.

Authorize Appropriate Home Occupations / Cottage Industries in Rural Settings - Beyond agricultural operations, many people in rural settings choose self-employment or choose to work from home to avoid long distance commutes. The municipalities in the planning area should evaluate means by which working from home can be accommodated and, indeed encouraged. For the self-employed, this means that opportunities must exist for residents to establish home occupations or cottage industries. The municipalities should ensure, particularly in rural settings, the municipal zoning ordinances allow appropriate home occupations and other home-based businesses to be established. For those working from home, the municipalities should participate in any discussions or projects intended to ensure that critical infrastructure is provided that allows for "work-from-home" opportunities. This may involve enhancing internet connectivity or ensuring that appropriate wireless telecommunications infrastructure exists to support the "work-from-home" option.

Support Programs and Incentives Designed to Protect Agricultural Land and Uses - A variety of programs and incentives are employed to promote the retention of agricultural lands and uses. Among these are the Agricultural Security Area (ASA) program, the Purchase of Agricultural Conservation Easements (PACE) program, and the Clean-and-Green preferential assessment program. Each municipality within the planning area should continue to support the use of these programs and incentives.

Coordinate with Economic Development Organizations - Various economic development organizations and agencies offer programs designed to assist farm owners to sustain and expand their agricultural operations. The Adams County Economic Development Corporation (ACEDC) specifically has offered a variety of load assistance programs that benefit Adams County farm owners and operators, although the number of property owners assisted within the Southwest Adams County planning area is limited. The municipalities (particularly the Townships) within the planning area should become aware of ACEDC's programming (as well as programming offered by other entities at the state and federal levels) and be in a position to direct property owners to these agencies and programs as appropriate.

Enhance Economic Development Opportunities within Designated Growth Areas

The Future Land Use element of this Plan designates two Primary DGAs. These Primary DGAs are intended to accommodate the majority of future growth and development within the Southwest Adams County region, and are sized in a manner that will accommodate the projected population increase within the setting. The Primary DGAs should, at the same time, accommodate a significant proportion of the Region's potential nonresidential development.

Economic development opportunities within the Primary DGAs should be evaluated and pursued. Specifically, the following recommendations are made.

Evaluate Specific Business Attraction and Employment Opportunities - If economic development is to occur within the Planning Area, such efforts should be carefully managed and coordinated to ensure that any resultant projects benefit the area to the highest possible degree. The development of specific and detailed components of a potential economic development effort is beyond the scope of this Comprehensive Plan effort. However, it seems evident that any effort should include, as a central component, an evaluation of potential opportunities that may be associated with Federal Government and related activities immediately to the south of the Planning Area in Maryland. As detailed in the Existing Conditions Report of this Plan, significant development and employment expansion at Forts Deatrick and Richie in Maryland are either ongoing or forthcoming. It is highly likely that the municipalities within the Planning Area could attract businesses that are related to this expansion to locate facilities within the Planning Area, and particularly within the Fairfield / Carroll Valley DGA.

To pursue this potential, the municipalities within the Planning Area should work cooperatively with the Adams County Economic Development Corporation, the Adams County Office of Planning and Development, and appropriate Commonwealth of Pennsylvania entities (such as the Department of Community and Economic Development) to develop a strategy to capitalize on these potentials. Such an analysis should evaluate what types of businesses could locate in the Planning Area, what types of community facilities or infrastructure may be necessary to succeed in attracting such businesses, and what type of incentives may be necessary.

If successful, the attraction of new businesses to the area would result in a variety of benefits. Foremost of these benefits could be a reduction on reliance on residential property taxes to fund much of the cost of municipal government and local school district operations in the Planning Area. But, facilitating the ability for people to work near where they live will have significant additional benefits as well. These include lower commuting times, which in turn will result in lower energy consumption rates. Taking less time to travel to and from work will also allow persons to spend more time with their families and community.

Evaluate Potential for Employment Center - The municipalities within the Planning Area should carefully evaluate how potential employers can be integrated into the setting. Consideration should be given to the potential for a reasonably sized business complex located within the core of the Fairfield / Carroll Valley Primary DGA. Such a project may or may not take the form of a full-featured business park (such as the Adams Commerce Center in Straban Township, Adams County or the Rossmoyne Business Center in Mechanicsburg, Pennsylvania). However, any complex should include the following core attributes.

- Integrated fully with surrounding residential neighborhoods. Scale and orientation
 of buildings and uses should be provided in a manner that is supportive of surrounding
 neighborhoods.
- Connectivity should be provided to allow multi-modal access to the setting, including by pedestrian and bicycle modes of travel.
- Carefully designed and neighborhood oriented signage should be provided.

- Mixed-use opportunities, including with residential uses and neighborhood serving commercial uses, could be provided and integrated into an employment center.
- Ensure that appropriate service from community infrastructure will be provided.
 Such a project would be dependent on central sewer and water service, proximity to community recreation and cultural elements, and related community amenities.

Enhance Cultural, Historic, Recreational, and Related Economic Development Opportunities

The Southwest Adams County region hosts a wide variety of cultural, historic, recreational, and related resources, as documented in various sections of the Existing Conditions chapter of this Plan. These resources are wide ranging, and should be recognized not only for their intrinsic value, but also for their values from an economic development perspective. While some of these resources are already heavily marketed (for example, Ski Liberty), others may not be as readily recognized even locally. Broadening awareness of these features and amenities within the community and beyond can help sustain these resources, but can also help enhance economic development opportunities as well. Several potential strategies to enhance economic development opportunities associated with these community resources follow.

Capitalize on Regional Recreation Amenities - Existing major commercial recreation oriented businesses in the Planning Area are well known and marketed. Liberty Mountain Resort and its associated golf courses offer year-round recreation and entertainment possibilities to residents and visitors alike. However, enhanced marketing and promotion of other recreation and related venues in the Planning Area can serve to enhance the visitor experience by ensuring that the full range of available recreation activities are known and explored. Additional activities include, for example, hiking and mountain biking opportunities in Michaux State Forest. The municipalities and major recreation providers should enhance their degree or coordination with the Gettysburg Convention and Visitors Bureau to development marketing strategies that focus on Southwest Adams County recreation opportunities, and that can fold these opportunities into a broader visit to Adams County as a whole.

Enhance Understanding of Cultural, Historic, and Heritage Resources - The Region includes a variety of cultural, historic, and heritage resources that should be integrated into any effort to market local businesses. The municipalities within the planning area should work cooperatively with local and regional cultural, historic, and heritage organizations to expand knowledge of and to market local resources. Organizations such as the South



Liberty Mountain Resort, Carroll Valley Borough



Sach's Covered Bridge, Freedom Township

Mountain Partnership, the Appalachian Trail Conservancy, the Pennsylvania Department of Conservation and Natural Resources, Strawberry Hill Nature Center, the Pennsylvania Historic and Museum Commission, and others, should be engaged to help develop strategies to augment tourist promotion activities. Accordingly, enhanced tourist promotion can help facilitate additional business retention and business development opportunities within the region.

Summary of Implementation Strategies

The municipalities within the planning area should play an active role in pursuing economic development opportunities within the planning area. These opportunities include measures that the municipalities can initiate directly, as well as opportunities that could be pursued in partnership with other organizations. Such efforts include the following.

Zoning Ordinance Updates - Municipalities should update local zoning ordinances to ensure that appropriate economic development activities can occur throughout the planning area. This effort should focus on, but not necessarily be exclusive to, providing for rural economic development opportunities such as home occupations, farm-based businesses, and related activities outside of the DGAs proposed in this plan.

Pursue Business Center - The municipalities within the Fairfield / Carroll Valley Primary DGA should work collaboratively to evaluate the potential for a business / employment center within the DGA. The evaluation should investigate potential locations, business mix, infrastructure needs, and main design components for such a facility.

Expand Partnership with ACEDC - The municipalities should establish a working partnership with the Adams County Economic Development Corporation (ACEDC) to enhance business retention and attraction efforts within the planning area.

Market Existing Recreation / Cultural Resources - The municipalities within the planning area should work collaboratively with the Gettysburg Convention and Visitors Bureau, the South Mountain Partnership, and similar organizations to expand marketing of recreation and cultural resources within the planning area.

Section 9 - Historic and Cultural Resources Plan

As inventoried in Section 7 of Chapter 2, the Southwest Adams region contains a variety of cultural and heritage resources. These resources range from individual historic site or buildings to overall landscapes with historic or cultural significance. Conserving these resources is critical with regard to maintaining overall quality of life and a sense of community identity. This section provides recommendations regarding the management and conservation of these existing community resources.

Historic Districts and Landscapes

The Southwest Adams region includes a variety of settings that are either designated historic districts, areas designated as eligible for listing on the National Register of Historic Places, or other landscapes identified as important given their historic and cultural importance. Recommendations for each of these areas follow.



The South Mountain Landscape, Hamiltonban Township

Mountain Partnership.

South Mountain Conservation Landscape **Initiative** - The region as a whole is located within the South Mountain Conservation Landscape Initiative (CLI) as designated the Pennsylvania Department Conservation and Natural Resources. Culturally and historically, this multi-county CLI is important from a variety of themes including its relationship to the statewide and national conservation movements, Civil War history, and local agricultural history. Each municipality within the planning area should involve itself with the planning and programming organized by the South

Adams County Fruitbelt - The region includes the southern portion of the Adams County Fruitbelt, an agricultural landscape within Adams County that has been deemed eligible for listing in the National Register of Historic Places. Conserving this agricultural landscape is essential from not only the perspective of maintaining the region's agricultural economy, but as a cultural and historic resource as well. The municipalities that include portions of this landscape (namely Hamiltonban and Highland Townships) should continually review their land use ordinances and policies to ensure that the southern portion of the Adams County Fruitbelt is conserved to the highest degree possible. Both municipalities should also promote partnerships with individual landowners, county and state levels of government, and other conservation organizations to pursue direct conservation of specific contributing properties.

Fairfield Borough - Fairfield Borough hosts both a National Register Historic District and a local historic district. Both of these historic districts are focused on the historic downtown of the village. While the establishment of these historic districts has been vitally important, these actions do not, in and of themselves, result in the long-term conservation of the contributing resources within the historic districts. Accordingly, Fairfield Borough should continually review its land use regulations and historic district guidelines to ensure that these resources are conserved in an appropriate manner. Specifically, the Borough should perform the following and similar activities.

- Develop and periodically update, as needed, a design guidelines document that will guide the decision making of the Fairfield Historic and Architectural Review Board regarding the appropriateness of building additions, new buildings, and signs.
- Evaluate the use of regulations designed to strongly discourage the demolition of contributing historic structures while at the same time allowing for appropriate economic use of such structures.
- Employ development regulations around the perimeter of the Historic District to ensure that any development adjoining the Historic District complements the historic character of the Borough. Coordinate with Hamiltonban Township to ensure that Township land use regulations applied within those portions of the Township that border the Borough also contribute to the historic and village character of the

Borough.

Fairfield Cavalry Action Historic District - This primarily agricultural setting has been deemed eligible for listing in the National Register of Historic Places given cavalry engagements that took place during the Civil War. Agricultural conservation easements are already in place over a portion of this landscape, so a portion of the setting is conserved. However, other portions of the deemed eligible historic district are not conserved. Hamiltonban Township has



Carroll's Delight, Hamiltonban Township

included the extent of the historic district within the Hamiltonban Township Official Map, which indicates the intent of the Township to pursue conservation of the remaining portions of the site should development of individual properties be proposed. While these are highly appropriate and necessary actions, Hamiltonban Township should pursue partnerships between individual property owners and conservation organizations to facilitate the conservation of the balance of the Fairfield Cavalry Action Historic District.

Land Grants - As detailed in Section 7 of Chapter 2, two important landscapes that reflect original land grants from the 1740s exist within the planning area. The Carroll's Delight land grant included lands now located along Carroll's Tract Road in Hamiltonban Township while the Carrollsburg Manor land grant included lands now located in eastern Liberty Township along Tract Road. The landscapes that represent these original land grants are important from the perspective of interpreting early European settlement in the Southwest Adams region. Conservation of these landscapes is therefore recommended. Specific recommendations regarding conservation approaches for these two landscapes are proved in within the Greenways element of Section 10 of this Chapter.

Other Sites - Only a limited number of individual structures or properties are listed on the National Register (see Table 2-27). However, individual structures are scattered throughout the planning area and contribute to the wealth of historic and cultural resources in the area. Many of these can be directly related to the interpretation of the more broadly define historic and cultural landscapes and districts. Given that these resources, however, have not been thoroughly inventoried for several decades, updating the resource inventory is recommended. The municipalities within the planning area should partner to update the region's historic resource inventory. The municipalities should investigate partnerships with statewide or national governments or organizations to perform this task.

Implementation Strategies

Conserve Landscape-based Resources - The municipalities should utilize the zoning and official map powers of the MPC to conserve the landscape-based resources in the region. Zoning districts, for example, that minimize development potential in agricultural settings, the rural landscapes associated with the South Mountain, and the landscapes associated with the Carroll's Delight and Carrollsburg Manor land grants.

Update Historic Resources Inventory - The municipalities should partner with Adams

County, the Pennsylvania Historic and Museum Commission (PHMC), and/or other partners to update the historic resources inventory within the planning area.

Conserve the Fairfield Cavalry Action Historic District - Hamiltonban Township should advance efforts to conserve the properties associated with this deemed eligible historic district by advocating property owner participation in some form of conservation easement purchase or donation program.

Section 10 - Parks, Recreation, Open Space and Greenways Plan

The provision of both active and passive recreation opportunities is essential to maintain a high quality of life for both current and future residents of the Southwest Adams County area. This section provides analysis and recommendations designed to ensure that all forms of recreation, both passive and active, are provided within the planning area.

The provision of dedicated lands and programming to meet the current and future active recreation needs of residents should be viewed as a core responsibility of municipalities within the planning area. To address these needs, this section evaluates current and future recreation lands and facility needs, and provides recommendations regarding the provision of future lands and facilities. A component of this analysis is the provision of appropriate administrative capacity to ensure that necessary lands and programming is delivered to current and future residents.

Addressing passive recreation needs within the community involves a wide range of attributes, and is therefore more difficult to quantify. However, in many respects, passive recreation activities and programming can be evaluated by evaluating open space and greenways elements of an area. Necessarily, such an evaluation addresses a broad range of topics beyond simply recreation. Examples include natural resources, agricultural resources, landscape resources, and cultural resources. Therefore, the open space and greenways component of the overall Parks, Recreation, Open Space, and Greenways element synthesizes recommendations from other elements of this plan into a common strategy to promote open space and greenway resources within the planning area.

Land and Facilities Needs Analysis

A critical element of the Parks, Recreation, Open Space and Greenways element of the Southwest Adams Comprehensive Plan includes an analysis of any existing parkland and recreation facility deficiencies and a plan to meet such deficiencies should they exist. Therefore, a needs analysis is presented below to determine whether existing lands and facilities meet the needs of current and projected future residents. This analysis is based on comparing existing land acreage and facilities with accepted guidelines. For the purpose of this analysis, guidelines from both the National Park and Recreation Association (NRPA) and the Adams County Vision for Parks, Recreation, and Open Space are used.

Parkland Needs Analysis - Table 4-5 provides parkland needs analysis information for the planning area given the area's 2010 population of 9,766 residents. Table 4-6 provides parkland needs analysis information for the planning area given the area's projected 2030 population of 12,673 residents.

The park land needs analysis indicates that the Region is currently deficient in the community park category but meets the standards for neighborhood parks and subregional parks. However, the needs analysis indicates that the Region will increase its deficiency with regard to community parks when the population projection is achieved. The Region will retain a surplus in the sub-regional park category even when the population projection is achieved.

This analysis assumes the inclusion of recreation lands other than those owned and operated by municipalities. The analysis includes lands held by the Fairfield Area School District, as well as those owned and operated by non-profit organizations. If these lands are removed from the needs analysis, the projected deficits become exacerbated. Such removal, from a planning perspective, may be appropriate to consider given that these lands may not always be available to service a public function. The municipalities within the planning area should consider the long-term availability of School District lands when planning for recreation lands needs of current and future residents.

Table 4-5: Parkland Needs Analysis (2010 Population)

Type of Park*	NRPA Guideline: per population	Recommended Adams County Guideline: per population	Existing Acres	Current Need (pop 9,766)	Current Surplus / Deficiency
Neighborhood Park	1-2 acres per 1,000	1 acre per 1,000	15	10 acres	5
Community Park	5-8 acres per 1,000	9 acres per 1,000	60	90 acres	-30
Subregional Park	5-10 acres per 1,000	5-10 acres per 1,000	600	50-100 acres	500

^{*} Neighborhood Park includes Ranch Trail Commons and Fairfield Recreation Association. Community Park includes Carroll Commons and Fairfield School District. Subregional Park includes Strawberry Hill Nature Preserve.

Table 4-6: Parkland Needs Analysis (2030 Population)

Type of Park*	NRPA Guideline: per population	Recommended Adams County Guideline: per population	Existing Acres	Projected Need (pop 12,673)	Projected Surplus / Deficiency
Neighborhood Park	1-2 acres per 1,000	1 acre per 1,000	15	12 acres	3
Community Park	5-8 acres per 1,000	9 acres per 1,000	60	117 acres	-57
Subregional Park	5-10 acres per 1,000	5-10 acres per 1,000	600	65-130 acres	470

^{*} Neighborhood Park includes Ranch Trail Commons and Fairfield Recreation Association. CommunityPark includes Carroll Commons and Fairfield School District. Subregional Park includes Strawberry HillNature Preserve.

The measured current and future deficiency in parkland (in particular, community parks) is consistent with the views of residents involved in the Citizen Participation processes described in Chapter 3. Specifically, the current land deficiency is reflected by those respondents to the citizen survey who indicated that the provision of additional parkland is appropriate. Interest in parkland was also expressed in the Opportunities element of the SWOT Analysis and the Visual Preference Survey.

Recreation Facility Needs Analysis - Table 4-7 provides recreation facility needs analysis information for the planning area given the area's 2010 population of 9,766 residents. Table 4-8 provides recreation facility needs analysis information for the planning area given the area's projected 2030 population of 12,673 residents.

Table 4-7: Recreation Facility Needs Analysis (2010)

Activity / Facility	NRPA Guideline: 1 facility/# of persons	Recommended Adams County Guideline: 1 facility / # of persons	Existing	Current Need (pop 9,766)	Current Surplus / Deficit (Adams County Guideline)
Baseball	5,000	3,000	2	4	-2
Softball / Little League	5,000	1,500	6	7	-1
Basketball Courts	5,000	3,000	2	4	-2
Football / Soccer Fields	15,000	2,000	4	5	-1
Tennis Courts	2,000	2,000	0	5	-5
Volleyball Courts	5,000	5,000	2	2	0
Swimming Pools	20,000	20,000	0	0	0



Lake Kay, Carroll Valley Borough



Ranch Trail Park, Carroll Valley Borough

Table 4-8: Recreation Facility Needs Analysis (2030)

Activity / Facility	NRPA Guideline: 1 facility / # of persons	Recommended Adams County Guideline: 1 facility / # of persons	Existing	Current Need (pop 12,673)	Current Surplus / Deficiency (Adams County Guideline)
Baseball	5,000	3,000	2	5	-3
Softball / Little League	5,000	1,500	6	9	-3
Basketball Courts	5,000	3,000	2	5	-3
Football / Soccer Fields	15,000	2,000	4	7	-3
Tennis Courts	2,000	2,000	0	7	-7
Volleyball Courts	5,000	5,000	2	3	-1
Swimming Pools	20,000	20,000	0	0	0

The recreation facility results show that the Region is currently deficient with regard to all evaluated facilities except volleyball courts and swimming pools. Accordingly, the Region's deficiencies for these five recreation facilities types will increase given projected populations levels. Further, a deficiency with regard to volleyball courts will also develop. It is noted that this statement is based on a review of necessary facilities based on a comparison to the facilities standards established in the Adams County Vision for Parks, Recreation, and Open Space. With regard to soccer fields and softball / little league fields specifically, it is noted that the Vision anticipates that these facilities are desired in Adams County at a rate above national trends.

In a manner similar to the evaluation of parklands, this analysis assumes the inclusion of recreation facilities other than those owned and operated by municipalities. The analysis includes facilities managed by the Fairfield Area School District, as well as those owned and operated by non-profit organizations. If these lands are removed from the needs analysis, the projected deficits become exacerbated. Such removal, from a planning perspective, may be appropriate to consider given that these facilities may not always be available to service a public function. The municipalities within the planning area should consider consistency of facilities availability when planning for recreation facility needs of current and future residents.

Recreation facilities needs relate to the Citizen Participation exercises described in Chapter 3 in a manner similar to that noted in the parkland needs analysis. Responders to the citizen survey expressed support for a variety of recreation facility types, and many of these facility types are identified as being at deficient levels currently and in 2030. Specifically, the citizen survey results indicating that additional sporting fields and courts are necessary are consistent with the current and future needs analysis.

Lands and Facilities Assessments

Ensuring that existing public recreation facilities are properly maintained and operated is an essential element in any parks and recreation plan. This section summarizes the current status of each of the public recreation sites in the planning area from and operational and maintenance perspective.

Lake Kay Mini-Park - This mini-park includes minimal playground and picnic facilities, as well as a boat ramp and small dock overlooking Lake Kay. The following statements and recommendations are provided.

Playground Equipment - All of the playground equipment (two swings and two animal spring riders) is older metal equipment surrounded by a mulch surface. Other playground equipment has been removed over recent years.

Recommendation: The playground equipment should be inspected for wear and safety by a park and recreation practitioner to ensure that any maintenance and safety issues are addressed.

Other Facilities - Other facilities at the site include some wooden picnic tables, the boat ramp, and the small wooden dock. These features are older, and are showing signs of wear. The boat ramp is poured concrete and is frequently used for launching small boats.

Recommendation: The state of repair of park facilities should be monitored by a park and recreation practitioner. Given the age of some of the facilities, consideration of replacement should occur. Further, given the limited amenities provided at this facility, an evaluation should occur as to whether and how to enhance this facility to increase its attractiveness and usage.

Site Accessibility - Given its small size, the Lake Kay mini-park is not provided with a formal parking area. The limited parking area is sufficient for two to three cars, and is provided with a gravel surface. No designated parking spaces for disabled residents are provided. Further, no designed walking areas are provided within the mini-park to provide access to the park equipment or to the dock and boat ramp.

Recommendation: The degree to which compliance with Americans with Disabilities Act (ADA) standards is necessary for this site should be assessed by a park and recreation practitioner and any necessary improvements should be programmed.

Ranch Trail Commons - As indicated in Chapter 2, the Ranch Trail Commons neighborhood park has a range of recreation facilities developed over the 13.5 acre property. The following assessment statements and recommendations are provided.

Playground Equipment - As a newer park, the playground equipment at Ranch Trail Commons is primarily plastic, although a metal set of swings also exists. The playground equipment is surrounded by a wood mulch playing surface.

Recommendation: The playground equipment should be periodically inspected

for wear and safety by a park and recreation practitioner to ensure that any maintenance and safety issues are addressed.

Sports Fields - The sports fields are actively used and appear to be regularly maintained by Carroll Valley Borough staff. Accessory equipment associated with the sports fields are limited, and include dugouts and foul ball fencing with the softball / little league field and soccer nets and a small set of metal bleachers associated with the soccer fields.

Recommendation: The sports fields should be evaluated for their frequency of use by a park and recreation practitioner to ensure an appropriate schedule of maintenance. Accessory equipment and facilities should be monitored and maintained as necessary to ensure usability and safety.

Walking Trail - The walking trail is approximately a half-mile in length and is located around the perimeter of the park. The trail surface is crushed stone and is popular with local walkers and runners. No major maintenance issues are immediately evident with the facility.

Recommendation: The trail should be periodically inspected by a park and recreation practitioner to ensure continued maintenance and functionality.

Site Accessibility - Ranch Trail Commons is served by a paved parking lot with designated parking spaces for disabled residents. A concrete walking surface leads from the parking lot to the restroom building, playground equipment, and small pavilion. The crushed stone walking path is used to access the sports fields.

Recommendation: Accessibility needs to the various recreation facilities should be evaluated by a parks and recreation practitioner. This evaluation should include an assessment of the extent to which compliance with ADA standards is applicable given the range of facilities on the site.

Fairfield Area School District - The School District campus includes approximately 20 acres of land area dedicated to recreation facilities. A majority of these facilities are sports fields (either fields dedicated to one sport or multi-purpose fields). There are also two small playgrounds. The following assessment statements and recommendations are provided.

Playground Equipment - Two small playground areas serve the elementary school portion of the site. The playground equipment includes swings, slides, and climbers, and is primarily of metal construction. The playground surfaces are wood chips, although rubber mats are located underneath each swing to prevent erosion.

Recommendation: Particularly if playground use by the general public is enhanced, the playground equipment should be periodically inspected for wear and safety by a park and recreation practitioner to



Playground, Fairfield Area School District Campus

ensure that any maintenance and safety issues are addressed.

Sports Fields - The sports fields associated with this site are heavily used during the school year by school sports teams, and for both team practices and games. The facilities are actively maintained by school district maintenance staff, and no substantial maintenance issues are known. The multi-purpose stadium facility specifically has only recently been constructed, and serves as the primary venue for football, soccer, and track-and-field activities.

Recommendation: If enhanced used of the sports fields facilities by the general public is pursued, detailed review of the facilities from an operations and maintenance perspective by a parks and recreation practitioner should occur to ensure that the facilities can meet the needs of both the school system and the general public.

Site Accessibility - The school district campus is a large site with recreation facilities located throughout the site and interspersed with the school buildings. Dedicated parking spaces for disabled residents are located both at the school buildings and near the multi-purpose stadium. However, the extent to which dedicated pedestrian facilities internally link the facilities on site is limited. Further, connectivity to off-site pedestrian systems is also limited, although this is partially a function of the limited extent of these off-site systems.

Recommendation: As an existing public school facility, the internal site design likely meets ADA requirements. However, if enhanced use of school district facilities by the general public occurs, overall site access from off-site locations and ADA considerations in general should be evaluated by a parks and recreation practitioner.

Carroll Commons - As indicated in Chapter 2, the Carroll Commons community park has a range of recreation facilities developed over the approximately 20 acre property. The following assessment statements and recommendations are provided.



Carroll Commons Park, Carroll Valley Borough

Playground Equipment - Carroll Commons includes newer plastic playground equipment and older metal playground equipment (swings and climbers). Some of the metal playground equipment has been removed in recent years. The plastic playground equipment is located in a chipped rubber play surface, while the remaining metal playground equipment is surrounded by wood chips.

Recommendation: The playground equipment should be periodically inspected for wear and safety by a park and recreation practitioner to ensure that any maintenance and safety issues are addressed.

Sports Fields and Courts - The basketball court and softball field are in active use and appear to be regularly maintained by Carroll Valley Borough staff. The shuffleboard

and bocce courts are used infrequently and do not appear to receive regular maintenance. The horseshoe pits are occasionally used and appear to be maintained in usable condition.

Recommendation: Active recreation facilities should be evaluated for their frequency of use by a park and recreation practitioner to ensure an appropriate schedule of maintenance. Consideration should be given to replacing unused or under-used facilities with new facilities that reflect the needs of current and future users.

Walking Trail - The existing walking trail extends approximately one mile through the park, is approximately five feet in width, and is provided with a crushed stone surface over most of its length. Portions of the trail are subject to flood damage during heavy rain events. The trail is popular with local runners and walkers.

Recommendation: An evaluation by a park and recreation practitioner as to whether surface or design changes to the trail can be made to mitigate damage from periodic flood events.

Site Accessibility - Carroll Commons includes designated parking spaces in the main parking lot for disabled residents. A paved walkway connects these parking spaces to the indoor/outdoor pavilion area. However, walking paths (either hard or crushed stone surface) are not provided to the playground equipment or other sports fields or courts.

Recommendation: Accessibility needs to the various recreation facilities should be evaluated by a parks and recreation practitioner. This evaluation should include an assessment of the extent to which compliance with Americans with Disabilities Act (ADA) standards is applicable given the range of facilities on the site.

Lands and Facilities Recommendations

Given the lands and facilities needs evaluations provided above, some deficiencies with regard to regional recreation availability will exist through the planning period. The analysis indicates that the most pressing need is for additional community parks of a scale comparable to Carroll Valley Commons in Carroll Valley Borough. With a community park land deficit projected to be 57 acres, the Plan recommends that the municipalities within the planning area promote the acquisition and development of two or three community parks. At least one park should be located within each of the Primary DGAs. Thus, one or two community parks could be located in or near Fairfield Borough and an additional community park could be located within the Emmitsburg Road / US Route 15 Interchange Primary DGA in Freedom Township in conjunction with the proposed, large new community proposed at this location. Map 4-5 depicts generalized areas where additional community parks could be proposed consistent with this recommendation.

Within the Fairfield Borough area, it is noted that Hamiltonban Township already owns land bounded by PA Route 116, Carroll's Tract Road, and Bullfrog Road. The Township intends to development a portion of this area for recreation purposes over time. Further, Fairfield Borough and Hamiltonban Township adopted the *Hamiltonban Township and Fairfield Borough Joint Recreation Plan* in 2008. This Plan recommended the development of two community



Future site, Hamiltonban Township Park site along Bullfrog Road, Hamiltonban Township

parks within the jurisdictions - one to the east of the Borough and one to the west of the Borough. The Township's land holdings will help achieve the recommendation regarding the first community park. The two municipalities should continue to work cooperatively to evaluate opportunities to acquire and develop the second community park facility to the west of the Borough. It is noted that both municipalities have enacted recreation fees following the adoption of the *Joint Recreation Plan*. Fees collected should be allocated toward the development of these two community park facilities.

At the Freedom Township location, the timing for acquisition and development of new park facilities is less certain, but should correspond to if and when development within the Primary DGA commences. Once development approvals occur

and construction activity begins, the Township should initiate efforts to plan for the proposed facility. In the interim, Freedom Township should consider implementing recreation fees similar in scope to what Hamiltonban Township and Fairfield Borough have enacted to enable funding to be collected that can contribute to land acquisition and facility development.

Each municipality should carefully consider the appropriate mix of facilities to include within new community parks. Given the facility needs analysis provided above, a range of active recreation facilities should be provided within each of the three proposed community parks. Facilities within the community parks proposed for the Fairfield area should include various sports fields. In this area, given the demographic patterns identified in Chapter 2, it is likely the future population will be proportionally younger and include more children than other areas of the region. Therefore, more facilities that allow organized team sports should be provided. The proposed community park in Freedom Township should be less focused on team sports fields, but should instead include active recreation opportunities focused on individual or small group activities. All three parks should include facilities, similar to the pavilion in the Carroll Commons Park in Carroll Valley Borough, to support community gatherings or other events that are not necessarily sports related. Ultimately, for each proposed community park, a park master plan that details the facilities to be provided should be prepared before park development occurs.

The recommended development of new community parks and associated facilities closely aligns with the findings of the Citizen Participation processes described in Chapter 3. Respondents to the citizen survey indicated support for new parks and recreation facilities, and those responders from Carroll Valley and Fairfield Boroughs and Hamiltonban Township (and to a somewhat lesser degree, Liberty Township) indicating support for such facilities. Providing a variety of recreation facility types was supported by the responders to the citizen survey, and this position is reflected by the above recommendations to develop facilities targeted to anticipated demographic patterns. Again, and as noted above, the SWOT Analysis and Visual Preference Survey both indicated general support for enhanced public recreation opportunities.

Park and Recreation Administration

As indicated in Chapter 2, none of the municipalities in the planning area have staff solely dedicated to parks and recreation management and programming. To improve and expand parks and recreation opportunities within the Southwest Adams region, all of the municipalities should consider the establishment of a regional organization to address these issues. Such an organization could take the form of a regional parks and recreation authority with proportional representation from each municipal government. An authority, or comparable type of organization, would oversee community-wide parks and recreation development and programming for the area.

Discussions between several of the municipalities within the planning area have already begun. Carroll Valley and Fairfield Boroughs and Hamiltonban Township are, concurrently with the development of this Plan, developing a *Southwest Adams Recreational Study*, a peer-to-peer process supported by the Pennsylvania Department of Conservation and Natural Resources (DCNR) to evaluate this issue and related issues with regard to parks and recreation programming in the area. The Fairfield Area School District is also participating in this project. This Study should be completed and the participating entities should move to implement applicable recommendations regarding the administration and delivery of recreation programming and services at the regional level. The participating entities should explore opportunities in the future to include other municipalities within the planning area within any regional recreation programming delivery solution.

This Plan recommends that a regional organization be created as an outcome of the Southwest Adams Recreation Study peer-to-peer project. Upon the creation of this entity, a parks and recreation practitioner should be retained and should immediately conduct the operation, maintenance, usage, and accessibility reviews referenced in the *Lands and Facilities Assessments* section above. Such review will serve as a baseline for regional management of these resources, for regional coordination of usage, and for coordination of enhancement of the facilities over time as population increases.

A regional approach to provision of parkland and delivery of recreation programming was strongly supported in the Citizen Participation processes performed for this Plan. Specifically, a majority of responders to the citizen survey indicated support for the concept of a regional parks and recreation department or authority. Further, a common theme in the SWOT Analysis indicated participant support for municipal cooperation in a variety of forms, including municipal cooperation with regard to recreation provision within the region.

Greenways and Open Space

Significant planning and programming for greenways and open space has already occurred within the planning area and is anticipated to continue into the future. The municipalities within the planning area should be active participants in these ongoing processes to ensure that greenways and open space activities at various levels are coordinated and are mutually supportive of regional goals and objectives. This section details a range of greenways and open space related activities and programming and suggests means by which the individual municipalities and the region as a whole should contribute to these efforts. Map 4-6 provides a graphic representation of the recommended greenway settings as disucssed below.

Mega-Greenways - The Southwest Adams municipalities recognize that the planning area as

a whole forms a component part of two designated mega-greenways - specifically the Journey Through Hallowed Ground National Heritage Area and the South Mountain Conservation Landscape Initiative. While none of the municipalities within the planning area bear the responsibility of managing these programs, all municipalities should participate in the activities and programming of these organizations to help advance their work in a manner that supports the conservation goals of the region. Both organizations have partnering opportunities (for example, the South Mountain Partnership Mini-Grant program) that could allow local municipalities or the region as a whole to advance locally significant projects.

Landscape Greenways - Section 12 of Chapter 2 identified a variety of landscape-level greenways that exist within the planning area. Many of these landscapes overlap and include complimentary themes or attributes. Every effort should be taken to ensure that these landscapes are conserved given the degree to which they contribute to the rural character and quality of life of the region. The following provides recommendations for each landscape greenway inventoried in Chapter 2.

Michaux State Forest - The municipalities, and in particular Hamiltonban Township, should closely coordinate with the district forestry staff to ensure that the Michaux State Forest setting is maintained as a natural and wooded landscape. Hamiltonban Township should evaluate its land use ordinances to ensure that an appropriate rural buffer is maintained around the state forest. Further, the Township should consult closely with the district forestry staff and with the Pennsylvania Department of Conservation and Natural Resources (DCNR) to identify potential future additions to the State Forest. Maintaining and enhancing the Michaux State Forest greenway will be essential in terms of retaining rural and natural character, groundwater and surface water quantity and quality, ecological diversity, and the natural resource elements of the region's tourism economy.

Adams County Fruitbelt - The municipalities, in particular Hamiltonban and Highland Townships, should continuously maintain involvement in efforts to maintain and enhance the Adams County Fruitbelt. The southern portion of the Fruitbelt lies within these two jurisdictions. The Fruitbelt as a whole is a critically important component of the agricultural economy of Adams County and should be conserved for this reason alone. Its substantial cultural, visual, and historic significance adds to the need to ensure the conservation of this landscape. To ensure the conservation of this essential landscape, Hamiltonban and Highland Township should continuously review their land use policies and regulations to protect this area. A variety of approaches to land use regulation, as discussed in Section 8 above, should be considered for application in this area. The Townships should also play active roles in promoting individual farm owners within the Fruitbelt to voluntarily conserve their properties. Conservation programming could involve the Adams County Purchase of Agricultural Easements program, conservation easement donation to the Land Conservancy of Adams County, and other means.

Land Grant Landscapes - The landscapes associated with the Carroll's Delight, Carrollsburg Manor, and Manor of Maske landscapes remain largely intact and reflect the rural character of the Southwest Adams region when initially settled in the mid-1700s. These landscapes constitute some of the most attractive rural landscapes in Adams County, and conservation of these landscapes is essential from the perspective

of visually interpreting early settlement in the region and Adams County as a whole. Given the location of these original land grants, all four townships within the planning area should actively pursue the conservation of these rural landscapes. Within Hamiltonban and Liberty Townships, the "Conservation by Design" development technique has been integrated into municipal land use ordinances. Both municipalities should continuously review these standards to ensure that development design resulting from these standards results in the conservation of the visual landscapes to the highest degree possible. Further, and similar to the recommended approach to the Adams County Fruitbelt, all four townships within the planning area should promote voluntary conservation of land in these settings by individual property owners.

With regard to the Carrollsburg Manor setting in Liberty Township specifically, it is acknowledged that significant portions of the area are proposed to be developed for suburban residential use. If the proposed development occurs, significant changes to the historic landscape will undoubtedly occur. However, efforts to conserve the balance of the rural landscape in eastern Liberty Township should continue. Further, given changing housing market conditions and lifestyle desires of likely future home buyers, there may be opportunities to reopen the conservation discussion on the development site. Liberty Township should consider opportunities to work with conservation organizations toward conserving the property proposed for development should market conditions make full-fledged suburban development of the site unlikely.

Natural Greenways - The Adams County Greenways Plan identifies four specific recommended greenways oriented along existing creeks within the Southwest Adams region. Formal establishment and conservation of these greenways will play an important role in terms of providing open space connectivity between various activity centers in the Southwest Adams region and between activity centers and broader landscape greenways. By inclusion of these recommended greenways in this Plan, the municipalities indicate their support of these greenways as originally discussed and envisioned in the Adams County Greenways Plan. These greenways include the following.

- Toms Creek Greenway: This greenway is designated as a proposed passive greenway in the *Adams County Greenways Plan*. The proposed greenway would begin at the fork with Copper Run in the headwaters for a distance
 - of approximately 2.4 miles near Iron Springs Road. The plan envisions a trail along the greenway for approximately 5.0 miles, near Iron Springs Road, to the Maryland state line making the greenway an active greenway. The Toms Creek Greenway passes through Liberty Township, Carroll Valley Borough, and Hamiltonban Township.
- Flat Run Greenway: This greenway is proposed as a passive greenway in the Adams County Greenways Plan. The proposed greenway begins at the fork in the headwaters west of Tract Road and north of Crum Road south to the Maryland state line. The Flat Run



Toms Creek Greenway at Ski Run Trail, Carroll Valley Borough

Greenway is relatively short (approximately 3.0 miles) and is contained entirely in Liberty Township.

- Middle Creek Greenway: This greenway is proposed as a passive greenway in the *Adams County Greenways Plan*. The proposed greenway is centered on Middle Creek from Swamp Creek south to the Maryland line, a distance of approximately 12.0 miles. The Middle Creek Greenway also includes an extension off of Middle Creek along Muddy Run and through the Mountain View Golf Club outside the Borough of Fairfield. The extension ends near the Strawberry Hill Nature Preserve. The greenway and extension pass through Fairfield Borough and the Townships of Freedom, Liberty, and Highland.
- Marsh Creek Greenway: This greenway is proposed as a combination passive / active greenway in the Adams County Greenways Plan. The greenway begins in the headwaters south of US Route 30 near Michaux State Forest as a passive greenway. After approximately 3.1 miles, at a point west of Flohrs Church Road, a trail begins and continues to the Maryland state line, making the final 23.6 miles of the main stem of the Marsh Creek Greenway an active greenway. The concept includes an extension from the headwaters along Poplar Spring and Little Marsh Creek that add approximately 7.4 miles to the greenway and are passive in nature. Just as the Marsh Creek is one of the major southerly flowing waterways in the county, the Marsh Creek Greenway is one of the key north-south anchors of the greenway system, passing near the Borough of Gettysburg and historic sites such as the Eisenhower National Historic site, the Gettysburg National Military Park (GNMP), and the Sachs Covered Bridge, in addition to forming the eastern edge of the Region.

It is acknowledged that each of these proposed greenways cross multiple jurisdictions, and therefore it is unrealistic to anticipate that any one municipality should bear full responsibility for implementing greenway conservation and development activities. However, each municipality should participate in future efforts to formally establish and conserve these greenways, and should actively engage neighboring municipalities, conservation groups, citizens groups, and others to advance greenways goals and objectives.

In addition to these specific greenways associated with major creeks, all of the municipalities within the planning area should pursue the conservation of other greenways involving natural



Flat Run Greenway at Wenchoff Road



Middle Creek Greenway at McGlaughlin Road, Liberty Township



Marsh Creek Greenway along Black Horse Tavern Road, Highland Township

or open space settings. This should be pursued to ensure that important natural features, open spaces, and ecological habitats are retained when property development occurs. Although this recommendation is applicable throughout the planning area, it is particularly important for those municipalities, mainly townships, where development outside of the designated growth areas established in this Plan is possible. To promote greenway and open space conservation beyond the corridors identified above, each municipality within the planning area should prepared and adopt and Official Map in accordance with applicable provisions of the Pennsylvania Municipalities Planning Code. Hamiltonban Township prepared an Official Map in 2012 that included a primary focus of identifying open space and greenway lands that should be included in the mandatory open space within any development proposed under the Township's Conservation by Design development regulations. Liberty Township specifically should consider a similar approach given that the Township also uses the Conservation by Design technique.

The above recommendations related to greenways strongly correlate to the findings of the Citizen Participation exercises conducted in support of this Plan. The identified Mega-Greenways, Landscape Greenways, and Natural Greenways all strongly contribute to the rural and open space character that citizen survey respondents identified as a most important characteristic of the Region. Other citizen survey responses indicating support for open space preservation and conservation efforts also are consistent with the recommendations this Plan. The SWOT Analysis and Visual Preference exercises also indicate that those residents who participated in these exercises recognize the need for the municipalities in the planning area to participate in regional greenway efforts.

Trails

Trail development is a critically important component of the overall strategy for parks, recreation, open space, and greenways for the Southwest Adams region. Trail development offers a wide variety of benefits to a region and it citizens. These include recreation, transportation, health, and economic development benefits at a minimum. Therefore, the central recommendation regarding trails is that the municipalities within the Southwest Adams region pursue the development of a region-wide trail network.

A variety of trails already exist within the planning area as noted in Section 12 of Chapter 2. However, many of these trails serve only a specific setting and are not necessarily connected to other activity or population centers within the region. Enhancing the degree of connectivity is a central focus of the trail development strategy. Specific trails that should be considered



Trail, Strawberry Hill Nature Center



Carroll Commons Path, Carroll Commons Park, Carroll Valley Borough



Footpath on Fairfield Area School District property

include the following, many of which have already been envisioned, but which may not have been considered within an entire Southwest Adams regional context. Map 4-5 depicts generalized routes that these recommended trails could follow based on the following discussion.

Hamiltonban Township Park to Strawberry Hill Nature Preserve - Over the past two years, Hamiltonban Township, through its Parks and Recreation Commission, has been evaluating the potential for a pedestrian trail connecting the future Hamiltonban Township Park along Carroll's Tract Road to Strawberry Hill. A corridor has been identified and has been included in the Hamiltonban Township Official Map. This trail would provide a trail link between the Fairfield Borough area and Strawberry Hill (including the trail system there) and ultimately to the Michaux State Forest trail system and the nearby Appalachian Trail in Franklin County. This plan recommends that Hamiltonban Township pursue the partnerships and funding necessary to develop this trail connection as a short-term priority.

Carroll Valley Path System - In 2004, Carroll Valley Borough developed a conceptual Master Plan for a Carroll Valley Path System. This system would provide a significant north-south pedestrian trail connection from Ranch Trail Park in the southern portion of the Borough to the Borough's northern municipal boundary line near Lake Kay. The trail would provide a pedestrian connection between four of the Borough's primary recreation areas and would follow, for much of its length, Toms Creek. This trail would be a significant and valued recreation feature for Carroll Valley Borough residents and could serve a transportation function if connected to other trail segments north of the Borough. Some of the core trail segments needed for this trail, notably within existing Borough parks, already exist. This plan recommends that Carroll Valley Borough initiate efforts and develop partnerships to develop additional segments of this trail system.

Tapeworm Railroad - As indicated in Section 12 of Chapter 2, the Tapeworm Railroad right-of-way within Hamiltonban Township has long been viewed as a potential recreation trail. The Tapeworm Railroad trail would provide region-wide recreational opportunities, and could provide residents in western Carroll Valley Borough and the Iron Springs Road area with pedestrian connectivity to the Fairfield Borough area, Strawberry Hill, and Michaux State Forest. The corridor is identified on the Hamiltonban Township Official Map as a future trail. This Plan recommends that Hamiltonban Township continue to explore funding sources and potential partnerships to advance this trail proposal as a moderate term project.

Fairfield Area Trail Network - Several of the recommended trail links above will advance the potential of providing connectivity between the Fairfield Borough area and surrounding activity centers and recreation sites. However, a local trail network in and around Fairfield Borough will be necessary to connect these various systems together in a central "hub." The Fairfield Area School District campus could form the core of such a "hub." The northern terminus of the proposed Carroll Valley Path System is also the southern boundary of the campus, and adjacency of the campus to Fairfield Borough should help facilitate other connections. The Hamiltonban Township Official Map depicts various corridors near Fairfield Borough that could serve to provide connections from the school campus north to Strawberry Hill, and east to the proposed Hamiltonban Township community park. Carroll Valley and Fairfield Boroughs, Hamiltonban Township, and the Fairfield Area School District should jointly evaluate how to provide pedestrian trail connections in the immediate vicinity of Fairfield Borough as a short term project. This could be a project that a regional recreation entity formed as a result of the Southeast Adams Recreational Study could pursue.

Other Trail Connections - All of the municipalities within the planning area should continue to evaluate the potential for other regional trails. This effort should likely be pursued over a longer term planning horizon, but with the understanding that projects over the short term could be pursued if opportunities arise. Such connections that should be evaluated include the following.

Marsh Creek Trail - The Natural Greenways section above indicates that trail development should be pursued along Marsh Creek. Such a trail link could connect potential future development within the Emmitsburg Road / US Route 15 designated growth area with points north, most notably the Gettysburg National Military Park and Gettysburg Borough. Such a link could also form the "spine" from which other trails could be developed to provide pedestrian links from the eastern to the western portions of the planning area.

Flat Run and Middle Creek Greenways - Although the Adams County Greenways Plan designates these settings as purely passive greenways, some consideration should be given to providing trail linkages in portions of these greenways to provide linkages between the eastern and western portions of the planning area. Trail segments in this area could also traverse conserved open space areas integrated into future development projects. Accordingly, the municipalities should ensure that any open spaces that are retained as a component of future residential development are of sufficient width and appropriate location to be able to host components of a future regional trail network.

The Citizen Participation exercises conducted for this Plan indicate that respondents strongly support pedestrian and bicycle facility development from the perspectives of recreation and transportation. Respondents to the citizen survey supported bicycle and pedestrian pathway development at a level approaching 78%. Further, respondents to the citizen survey supported bicycle and pedestrian pathways at a comparable level with a wide range of other types of facilities. These observations from the citizen survey were consistent with the findings from the Visual Preference Survey, where participants most strongly supported images that included open space and recreation trail features.

Summary of Implementation Strategies

The municipalities within the planning area should actively pursue efforts to enhance the provision of parks and recreation opportunities within the planning area. The municipalities should also explore opportunities to conserve important open spaces and greenways within the planning area. The following summary of implementation efforts should be pursued.

Facilitate Regional Administrative Capacity - The municipalities, particularly those within the Fairfield Area School District, should formalize the partnership recommended in the *Southwest Adams Recreation Study*, and should retain a parks and recreation practitioner to provide regional coordination of parks and recreation efforts.

Complete Detailed Assessment of Existing Facilities - Once retained, a parks and recreation practitioner should conduct a detailed evaluation of existing recreation lands and facilities with regard to issues such as, but not limited to, facility maintenance access.

Address Current and Future Recreation Lands and Facilities Deficits - The municipalities should explore opportunities to develop additional recreation lands and recreation facilities to address the future lands and facilities deficits envisioned in this Plan. All municipalities

should, either independently or jointly, develop local recreation plans and implement the recreation land dedication / fee-in-lieu of land dedication powers enabled in the MPC.

Pursue Trail Development Opportunities - The municipalities should, either independently or jointly, pursue recreational trail development opportunities. All municipalities should consider the adoption of an Official Map as enabled by the MPC as a first step to identify and conserve potential trail corridors.

Conserve Important Greenways - The municipalities should utilize a variety of techniques to advance the conservation of important greenways. Techniques could include zoning districts or zoning overlay standards that conserve or enhance greenway settings, pursuit of conservation easements for important properties, and partnerships with other organizations that are focused on greeways issues.

Section 11 - Statement of Inter-Relationships:

Section 301(a)(4.1) of the Pennsylvania Municipalities Planning Code requires comprehensive plans to include a statement of inter-relationships between plan components. This statement confirms that each section of the plan, and the recommendations contained within the plan, are logically related and coordinated to achieve the desired community outcomes expressed in the plan.

Comprehensive plans establish policies and recommendations that are designed to promote the best community possible for current residents as well as for residents that will reside in the planning area in the future. Accordingly, the population projections established in Chapter 2, Section 3 of this Plan establish the foundation around which the Plan is compiled. The Plan projects that regional population will increase from its level of 9,766 persons in 2010 to 12,703 persons in 2030, an increase of 2,937 persons, or 30.1% over the 20 year period.

The various plan elements all take this anticipated increase into account. A statement regard how each plan element relates to the increase of population over the planning period follows.

Land Use Plan - The Land Use Plan element acknowledges the need to accommodate future population growth by identifying Primary and Secondary Designated Growth Areas. Most of the population growth is recommended to occur within the Fairfield / Carroll Valley and Emmitsburg Road / US Route 15 Interchange Primary DGAs. These Primary DGAs are of sufficient size to enable market forces to provide the developments necessary to accommodate the population increase. However, they are not so large that uncontrolled or unplanned development will occur in areas recommended to be conserved due their rural, agricultural, natural resource, or cultural value.

Natural Resources - The Natural Resources Plan element recognizes the need to protect the natural resources of the region within the context of accommodating future population growth. Most of the identified concentrations of natural resources within the planning are located in the western half of the region, and not included in either the Primary or Secondary DGAs of the Land Use Plan. Further, the DGAs are of sufficient size to allow proper conservations of those natural resources within the DGAs without negatively affecting their ability to accommodate the projected population growth.

Water Resources Plan - The Water Resources Plan, in its most fundamental form, addresses water supply and demand issues within the planning area. The section recommends addressing the water demand issue by recommending that most of the population increase be served by existing and expanded community water systems within the DGAs. Water supply (including water quantity and quality elements) is addressed through recommendations designed to protect water resources outside of the DGAs.

Housing Plan - The Housing Plan recognizes the need to ensure that appropriate types and densities of housing units can be provided to accommodate the anticipated population increase of the region. A majority of the projected 1,175 dwelling units necessary to meet the projected 2030 population are recommended to be located within the Primary DGAs. The Primary DGAs are of sufficient size to easily accommodate the needed housing units, and the locations of the Primary DGAs are suitable to accommodate the variety of dwelling unit types that will likely be desired by the increased population through the planning period.

Community Facilities Plan - The Community Facilities Plan addresses infrastructure and facilities needs and is based anticipated population growth. Sewer and water facilities within DGAs are recommended to be utilized, and expanded as necessary, as population increases. Consideration of potential future school facilities needs are also based on the projected population, as are other facilities such as emergency services.

Transportation Plan - The Transportation Plan evaluates future transportation needs and bases recommended future system improvements based on the needs of the projected future population. Enhanced mode choice (including pedestrian and bicycle options) is recommended within the DGAs, and regional upgrades to roadways, intersection, and transit is recommended throughout the region.

Economic Development Plan - The Economic Development Plan recognizes that economic opportunities must be provided for current and future residents of the region. Accordingly, appropriate economic development activities are recommended both inside and outside of the DGAs established in the Land Use Plan. New opportunities are recommended within the Primary DGAs and enhancement and expansion of existing agricultural, tourism, and outdoor recreation activities are recommended outside of the Primary DGAs. These types of activities not only support economic development opportunities, but support the conservation of those resources identified in the Historic and Cultural Resources Plan as well.

Historic and Cultural Resources Plan - The Historic and Cultural Resources Plan focuses on those resources that define the historic and cultural character of the region. Within the Primary DGAs (in particular, the Fairfield / Carroll Valley Primary DGA) development supportive of recommendations is supported, but should be consistent with this section to maintain the cultural and historic character of Fairfield Borough. Conserving various natural and rural landscape settings addresses the historic and cultural important of these areas, while also being consistent with the Economic Development Plan and the Parks, Recreation, Open Space and Greenways Plan.

Parks, Recreation, Open Space and Greenways Plan - The Parks, Recreation, Open Space and Greenways Plan evaluates the recreation and open space resources that must be retained and enhanced to provide for current and future residents of the region. The 2030 population projection serves as the basis for evaluating future recreation lands and facilities needs,

and a majority of these needs are recommended to be provided within the Primary DGAs. The open space and greenways recommendations focus on those areas with documented natural, cultural, and historic resources. Conserving the settings and landscapes associated with these resources is a common theme of this Section, as well as the Natural Resources Plan and the Historic and Cultural Resources Plan.

Section 12 – Statement of Compatibility

Section 301.A(5) of the Pennsylvania Municipalities Planning Code requires that comprehensive plans include a statement describing the degree of compatibility of the comprehensive plan with those of surrounding jurisdiction and of the county comprehensive plan. Consideration of these relationships is essential to ensure that the planning and policy recommendations of the planning area are consistent with those of the overall county and with those of adjoining jurisdictions.

Consistency with the Adams County Comprehensive Plan

The Adams County Comprehensive Plan was adopted in 1991. The Adams County Vision for Parks, Recreation, and Open Space was adopted as an amendment to the County Plan in 1998. The Adams County Greeenways Plan was adopted as an additional amendment to the County Plan in 2010.

The Southwest Adams Joint Comprehensive Plan is consistent with the Adams County Comprehensive Plan, as amended. Both plans focus on accommodating most of the anticipated population increase and development within growth areas. The Primary DGAs of the Southwest Adams Plan are larger than those of the County Plan. This difference results from decision-making in the Southwest Adams Plan to acknowledge known proposed development. It is also acknowledged that the growth areas designated within the County Plan are over two decades old.

The two plans are highly consistent with regard to how rural settings and important agricultural, natural resource, historic, and cultural settings are addressed. Both plans advocate for significant conservation of rural settings in general, and of the South Mountain area, greenways along major streams, and the Adams County Fruitbelt specifically. With regard to parks and recreation policies, the two plan share a common methodology of evaluating these resources, and accordingly offer consistent evaluation results and recommendations.

Compatibility with Adjoining Plans

The Southwest Adams planning area borders Franklin Township, Adams County to the north, Cumberland Township, Adams County to the east, Frederick County and Emittsburg to the south, and Franklin County, Pennsylvania to the west. The Southwest Adams Plan is consistent with the various planning efforts for all of these settings as follows.

Franklin Township - Franklin Township, Adams County adopted the Northwest Adams Joint Comprehensive Plan in 2010. This multimunicipal comprehensive plan encompasses six municipalities, including Franklin Township, in the Northwest quadrant of Adams County. The border between the Northwest Adams and Southwest Adams planning areas is comprised of portions of Michaux State Forest, the Adams County Fruitbelt and related agricultural settings, and Orrtanna Village. Planning policy in both plans recommend that the area

along this border remain rural, and that agricultural, cultural, and natural resources in this setting be conserved. Both plans acknowledge Orrtanna Village as a small DGA. Accordingly, the two plans are compatible.

Cumberland Township - Cumberland Township, Adams County adopted the Cumberland Township Comprehensive Plan in 2000. Marsh Creek constitutes the border between Cumberland Township and the Southwest Adams region. Both plans recognize the predominantly rural nature of most of the Marsh Creek setting, and include policies and recommendations intended to retain this rural setting. In addition, both plans anticipate potential development along the US Route 15 and Emittsburg Road corridors. It may be advisable for representatives of the Southwest Adams region and Cumberland Township to coordinate with land use, transportation, infrastructure, and related issues in this area should significant development proposals advance over the planning period. The similar policies and recommendations with regard to the Marsh Creek setting and the US Route 15 and Emittsburg Road corridors indicate general compatibility between the two plans.

Frederick County, Maryland - The Frederick County Comprehensive Plan was adopted in April, 2010. The portion of Frederick County bordering the Southwest Adams region lies partially along the South Mountain, and the balance is characterized by rural and agricultural settings. The Frederick County Plan recommends the retention of these rural lands and resources. Portions of two Primary DGAs of the Southwest Adams region adjoin the rural settings in Frederick County. These areas include the southern portion of Carroll Valley Borough (which is already subdivided into residential lots) and the area around the US Route 15 / Emittsburg Road interchange (which has already been proposed as a large, golf community development with associated commercial uses). Both of these areas are oriented towards the Adams County side of the state border, although efforts should be taken to mitigate any impacts of these developing areas on rural resources in Frederick County. Aside from these two settings (both of which existed or were proposed prior to the development of the Southwest Adams Plan), planning approaches and policy for the remainder of the border between these two jurisdictions is compatible.

Franklin County, Pennsylvania - Franklin County has adopted Franklin County Forward, Franklin County's comprehensive plan, in June, 2012. The portion of Franklin County that borders the Southwest Adams region all lies within Michaux State Forest. Both Franklin County Forward and the Southwest Adams Plan recommend the continued conservation and protection of the state forest setting. Accordingly, the two plans are highly compatible along the border between these jurisdictions.

Three townships in Franklin County (Washington, Guilford, and Quincy Townships) border the Southwest Adams region. Only Washington Township has an adopted comprehensive plan, the Washington Township / Waynesboro Borough Joint Comprehensive Plan. Neither Guilford Township nor Quincy Township has an adopted comprehensive plan, although Quincy Township has adopted a zoning ordinance. As noted above, the western border of these three municipalities are all located within Michaux State Forest. The relevant policy guidance from the available documents reflect the presence of the State Forest and attempt to advance the conservation of this setting. Accordingly, the planning documents and policies of the three Franklin County townships that border the Southwest Adams region are consistent with the Southwest Adams Plan.

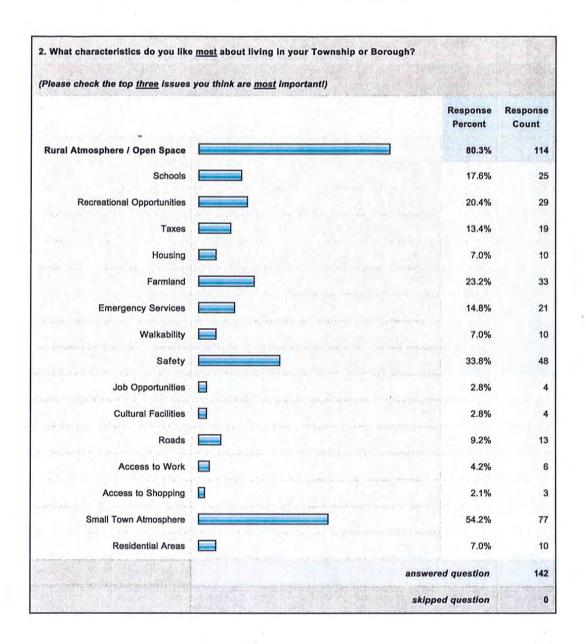
Policy Plan	

Appendix A

Tabular Results — Citizen Survey

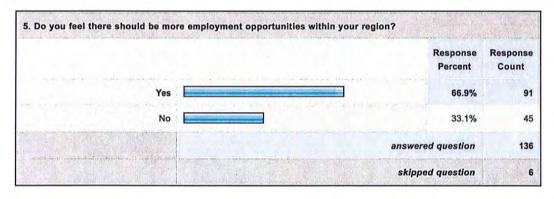
Southwest Adams County Joint Comprehensive Plan

Fairfield Borough Freedom Township 0.0% Hamiltonban Township 46.2% Highland Township 0.0% Liberty Township 0.0% I live outside the study area		Response Percent	Response Count
Freedom Township 0.0% (Hamiltonban Township 46.2% (Highland Township 0.0% (Liberty Township 0.0% (I live outside the study area 0.0% (Carroll Valley Borough	46.2%	
Hamiltonban Township Highland Township 0.0% Liberty Township 0.0% I live outside the study area 0.0%	Fairfield Borough	7.7%	
Highland Township 0.0% 0 Liberty Township 0.0% 0 I live outside the study area 0.0% 0	Freedom Township	0.0%	(
Liberty Township 0.0% (I live outside the study area 0.0% (Hamiltonban Township	46.2%	
I live outside the study area 0.0%	Highland Township	0.0%	(
	Liberty Township	0.0%	(
answered question 1:	I live outside the study area	0.0%	
		answered question	1:



Please check the top <u>three</u> issues	you think are <u>most</u> importanti)		
		Response Percent	Respons Count
Traffic		7.7%	1
Taxes		58.5%	8
Access to Shopping		17.6%	2
Access to Work		8.5%	1
Community Safety		2.1%	
Roadway Condition	2 Sec. 25 10 - 10 - 10 2 10 10 10 10 10 10 10 10 10 10 10 10 10	17.6%	2
Extent of Job Opportunities	27 7 1.7 7.7 T MINE TO SEE THE TO	14.1%	2
Rate of Development too Slow	Control of the contro	4.9%	
Rate of Development too Fast	A CONTRACTOR OF THE STATE OF TH	26.8%	3
vailability of Public Transportation	and the speciment of the state	10.6%	1
Types of Residential Development	Capata care i montani sura a consultatione de della	7.7%	1
Loss of Farmland	e of the particulation of the control of the control of	26.1%	3
Extent of Cultural Facilities	A P C TO A THE TO PASS OF WAY IN PASS OF SPENDING PASSES. AND	7.7%	1
Extent of Recreation	and the second of the second of the second	9.9%	1
Housing Selection		2.8%	
Extent of Public Sewer	a production with a consequence laboration of the file and the consequence of the consequ	19.0%	2
Extent of Public Water		11.3%	1
Loss of Open Space	Control of the second second of the second o	21.8%	3
School System	CAR AND THE RESIDENCE AND ADMINISTRATION OF THE AND ADMINISTRATION OF THE ADMINISTRATION	11.3%	1
Extent of Emergency Services	er en er en er en	1.4%	
Waterway and Groundwater	e allo mali mano di polonio di vici dale e la secono	11.3%	1
Pollution		11.3%	

(check one)		
	Response Percent	Response Count
Work from home	6.1%	1
Less than 5 miles	12.9%	17
5 to 10 miles	10.6%	14
10 to 25 miles	11.4%	15
Over 25 miles	36.4%	48
Unemployed / Retired	22.7%	30
	answered question	13:
	skipped question	10



please check all that apply)		
	Response Percent	Response
Carroll Valley Borough	29.5%	3
Fairfield Borough	31.1%	4
Freedom Township	4.5%	
Hamiltonban Township	20.5%	2
Highland Township	4.5%	
Liberty Township	12.1%	1
Gettysburg Borough	24.2%	3
Areas Immediately Surrounding Gettysburg Borough	51.5%	6
Outside Region in MD	26.5%	3
	answered question	1
un variation and compared the residence of the second	skipped question	1

Mark <u>one</u> column for each issue)					
	Strongly Disagree	Mostly Disagree	Mostly Agree	Strongly Agree	Response
Preservation of Farmland	3.1% (4)	7.1% (9)	40.2% (51)	49.6% (63)	12
Ensuring residential opportunities	11.9% (15)	36.5% (46)	44.4% (56)	7.1% (9)	12
Preservation of open space and rural character	2.4% (3)	3.9% (5)	31.5% (40)	62.2% (79)	12
Preserving environmentally sensitive areas such as creek corridors, woodland, wetlands, and steep slopes	4.0% (5)	5.6% (7)	23.8% (30)	66.7% (84)	12
Improving roadways	2.4% (3)	24.4% (31)	44.9% (57)	28.3% (36)	12
Implementing public sewer & water improvements	9.4% (12)	30.7% (39)	34.6% (44)	25.2% (32)	12
Drinking Water Supply (quantity/quality)	6.3% (8)	18.9% (24)	37.0% (47)	37.8% (48)	12
Zoning (land use regulations)	6.3% (8)	14.3% (18)	42.9% (54)	36.5% (46)	12
Promote economic development opportunities	11.8% (15)	29.1% (37)	40.2% (51)	18.9% (24)	12
Preserving historically significant buildings and structures and areas	8.7% (11)	13.4% (17)	40.2% (51)	37.8% (48)	12
Enhancing employment opportunities	8.7% (11)	25.2% (32)	44.1% (56)	22.0% (28)	12
Tax base	10.3% (13)	18.3% (23)	41.3% (52)	30.2% (38)	12
Emergency services (police, fire, ambulance)	4.7% (6)	21.3% (27)	44.9% (57)	29.1% (37)	12
Revitalizing downtown Fairfield Borough	12.7% (16)	30.2% (38)	38.9% (49)	18.3% (23)	12
Providing additional recreational facilities	8.7% (11)	37.3% (47)	38.1% (48)	15.9% (20)	12
Stormwater management	6.3% (8)	36.2% (46)	38.6% (49)	18.9% (24)	12

May a contra		n – vertrasines viktorė tokinį		712
7.1% (9)	18.9% (24)	46.5% (59)	27.6% (35)	127
7.9% (10)	27.8% (35)	41.3% (52)	23.0% (29)	126
		ans	wered question	127
	7.1% (9) 7.9% (10)	ar new extra participants (e.	7.1% (9) 18.9% (24) 46.5% (59) 7.9% (10) 27.8% (35) 41.3% (52)	7.1% (9) 18.9% (24) 46.5% (59) 27.6% (35)

located? (check one)) was proposed for this region, where do you think the center woul	a best be
i Colominia de 1974 person (April 1 para proprio e trada pado Jespel y capalina inquistibilità de 1974 per pada	Response Percent	Response Count
Carroll Valley Borough	20.5%	26
Fairfield Borough	26.0%	3:
Freedom Township	1.6%	
Hamiltonban Township	15.0%	1
Highland Township	4.7%	
Liberty Township	2.4%	
Not Sure	29.9%	3
	answered question	12
Park and State of the subsection of the subsecti	skipped question	1

(check the appropriate columns)						
	Single Family Dwellings	Duplexes	Townhouses	Apartments	Housing for Seniors (65+)	Response Count
In Fairfield Borough	45.6% (52)	18.4% (21)	25.4% (29)	20.2% (23)	54.4% (62)	114
In Carroll Valley Borough	69.6% (71)	7.8% (8)	9.8% (10)	8.8% (9)	33.3% (34)	10:
In portions of Hamiltonban Township near public facilities	58.2% (57)	27.6% (27)	23.5% (23)	13.3% (13)	33.7% (33)	96
n portions of Liberty Township near public facilities	63.4% (59)	23.7% (22)	24.7% (23)	10.8% (10)	31.2% (29)	9
In the Townships on lands currently farmed or in open space	73.4% (47)	9.4% (6)	3.1% (2)	6.3% (4)	23.4% (15)	6
				answere	ed question	12

10. Please identify up to five important transportation improvements that you believe should be made in your region and check the appropriate improvement column?

-	270	-	
Re			

	Intersection Improvements	Road Rehabilitation	Signage or Signal	New Improvements	Response Count
Route 15	62.9% (22)	20.0% (7)	11.4% (4)	11.4% (4)	35
Route 16/116	51.8% (44)	29.4% (25)	47.1% (40)	11.8% (10)	85
Waynesboro Pike	27.1% (13)	54.2% (26)	10.4% (5)	20.8% (10)	48
Emmitsburg Road	15.6% (5)	56.3% (18)	6.3% (2)	21.9% (7)	32
Fairfield Road	30.8% (16)	51.9% (27)	15.4% (8)	15.4% (8)	52
Tract Road	14.3% (5)	62.9% (22)	2.9% (1)	25.7% (9)	35
Carroll's Tract Road	21.6% (8)	62.2% (23)	10.8% (4)	18.9% (7)	37
Water Street	30.8% (12)	61.5% (24)	7.7% (3)	10.3% (4)	39
Bullfrog Road	24.0% (12)	70.0% (35)	8.0% (4)	12.0% (6)	50
			an	swered question	119
				kipped question	23

11. Please identify up to five important transportation improvements that you believe should be made in your region and check the appropriate improvement column?

Intersections

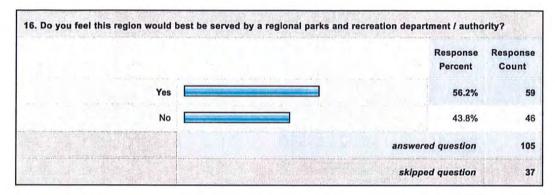
	Intersection Improvements	Road Rehabilitation	Signage or Signal	New Improvements	Response Count
Iron Spring / Fairfield Road	47.4% (27)	31.6% (18)	29.8% (17)	15.8% (9)	57
Route 16/116	66.0% (64)	16.5% (16)	46.4% (45)	17.5% (17)	97
Tract Road / Route 140	50.0% (27)	29.6% (16)	29.6% (16)	11.1% (6)	54
Orchard Road / Route 116	44.6% (25)	35.7% (20)	26.8% (15)	16.1% (9)	56
			an	swered question	117
				kipped question	25

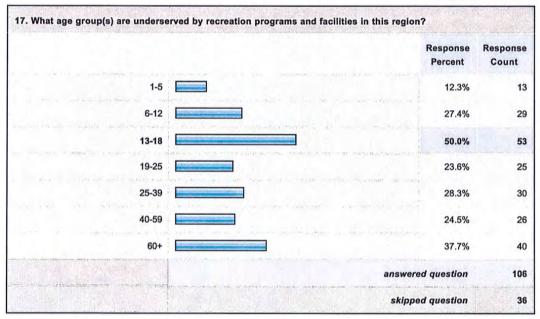
her Modes of Transportation					
	Intersection Improvements	Road Rehabilitation	Signage or Signal	New Improvements	Respons
Bike & Pedestrian Paths	16.8% (16)	23.2% (22)	16.8% (16)	77.9% (74)	9
physical activities are an experience of the party of principles and principles and principles and principles					

			Response	Response
		CONTRACTOR OF THE		
	Yes		55.1%	59
	No		21.5%	23
	Not Sure		23.4%	25
Windowski (1974)		answer	ed question	107

	Response Percent	Response
Carroll Valley Borough	41.1%	4
Fairfield Borough	39.3%	4
Freedom Township	12.1%	1:
Hamiltonban Township	39.3%	4
Highland Township	17.8%	1
Liberty Township	33.6%	3
	answered question	10
	skipped question	35

Mark <u>one</u> column for each issue)					
	Strongly Disagree	Mostly Disagree	Mostly Agree	Strongly Agree	Respons
Parks with facilities or areas for fishing, hunting, camping, boating, etc	20.2% (21)	25.0% (26)	40.4% (42)	14.4% (15)	10
Trails for hiking, biking, horseback riding	9.5% (10)	11.4% (12)	43.8% (46)	35.2% (37)	10
Nature reserves and natural greenways	5.7% (6)	9.5% (10)	45.7% (48)	39.0% (41)	10
Preserving historic sites	9.4% (10)	10.4% (11)	37.7% (40)	42.5% (45)	10
Playgrounds for children	11.5% (12)	18.3% (19)	45.2% (47)	25.0% (26)	10
Areas for field sports such as softball, baseball, football, soccer, etc	13.5% (14)	23.1% (24)	35.6% (37)	27.9% (29)	10
Community recreation centers	13.7% (14)	22.5% (23)	41.2% (42)	22.5% (23)	10
Swimming pools	20.2% (21)	21.2% (22)	26.9% (28)	31.7% (33)	10
Golf courses	39.4% (41)	44.2% (46)	11.5% (12)	4.8% (5)	10
Basketball Courts	17.5% (18)	39.8% (41)	33.0% (34)	9.7% (10)	10
Tennis Courts	16.5% (17)	29.1% (30)	37.9% (39)	16.5% (17)	10
Outdoor ice skating rink	26.0% (27)	33.7% (35)	24.0% (25)	16.3% (17)	10
Outdoor skate park	29.8% (31)	26.9% (28)	32.7% (34)	10.6% (11)	10
Picnic and pavilion areas	9.5% (10)	20.0% (21)	41.0% (43)	29.5% (31)	10
			ans	wered question	10





	Response Percent	Response	
Single's Programs	11.3%	1:	
Family Oriented Programs	50.9%	5	
Summer Day Camp	38.7%	4	
Computer Programs	24.5%	2	
Adult Sports Leagues	36.8%	3	
Fitness Programs	61.3%	6	
Arts & Crafts	30.2%	3	
Dance & Drama Programs	18.9%	2	
Martial Arts Programs	8.5%		
Educational Programs	46.2%	4	
	Other (please specify)		
	answered question	100	
	skipped question	3	

Appendix B

Adopting Resolutions

Southwest Adams County Joint Comprehensive Plan

BOROUGH OF CARROLL VALLEY ADAMS COUNTY, PENNSYLVANIA RESOLUTION #5-2015

A RESOLUTION OF THE BOROUGH OF CARROLL VALLEY, ADAMS COUNTY, PENNSYLVANIA APPROVING THE ADOPTION OF THE SOUTHWEST ADAMS JOINT COMPREHENSIVE PLAN.

WHEREAS, the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247, as reenacted and amended), hereafter referred to as the MPC, empowers boroughs and townships, individually or jointly, to plan for their development and conservation through the development of comprehensive plans and various implementing ordinances and tools, and

WHEREAS, Carroll Valley and Fairfield Boroughs, and Freedom, Hamiltonban, Highland, and Liberty Townships are characterized by similar demographics, identities, and development and conservation issues, and share common municipal boundaries, and

WHEREAS, the governing bodies of Carroll Valley and Fairfield Boroughs and Freedom, Hamiltonban, Highland, and Liberty Townships have agreed to jointly develop the Southwest Adams Joint Comprehensive Plan to address these commons development and conservation issues, and

WHEREAS, the governing bodies of the six municipalities appointed a joint steering committee to oversee development of the Southwest Adams Joint Comprehensive Plan, and

WHEREAS, the steering committee analyzed extensive information including, but not limited to, the demographics, land use, housing, economy, natural features, community facilities, utilities, and transportation of the planning area, and

WHEREAS, the steering committee conducted various exercises to receive public input on the various planning issues and to develop goals and community development objectives for the planning area, and

WHEREAS, the Southwest Adams Joint Comprehensive Plan has been developed in a manner to regionally address the planning issues, goals, and community development objectives identified in the public input and planning process, and

WHEREAS, the Southwest Adams Joint Comprehensive Plan includes the following plan elements.

- Land Use Plan
- Natural Resources Plan
- Water Resources Plan
- Housing Plan
- 5. Community Facilities Plan
- 6. Transportation Plan
- Economic Development Plan
- 8. Historic and Cultural Resources Plan
- 9. Parks, Recreation, Open Space and Greenways Plan

WHEREAS, Planning Commissions of Carroll Valley and Fairfield Boroughs and Hamiltonban and Liberty Townships conducted a Joint Public Meeting on October 29, 2014 to present the draft Southwest Adams Joint Comprehensive to the public and to receive public comment on the draft Plan, and

WHEREAS, the draft Southwest Adams Joint Comprehensive Plan has been distributed to adjoining municipalities, the Fairfield Area and Gettysburg Area School Districts, and the Adams County Office of Planning and Development for review and comment, and

WHEREAS, the Fairfield and Carroll Valley Borough Councils and the Hamiltonban and Liberty Boards of Township Supervisors have conducted a joint public hearing on March 26, 2015 to receive public comment on the draft Plan, and

WHEREAS, it has been determined that the Southwest Adams Joint Comprehensive Plan is consistent with the Adams County Comprehensive Plan of 1991, as amended.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Borough Council of The Borough of Carroll Valley that:

- 1. The Borough Council of The Borough of Carroll Valley hereby adopts the Southwest Adams Joint Comprehensive Plan, incorporated herein by reference, including all text, maps, tables, and charts included therewith, pursuant to Article III of the MPC.
- 2. The Borough Council of The Borough of Carroll Valley recognizes that the Borough has begun work on various recommendations from The Borough of Carroll Valley Comprehensive Plan of 2012, as noted in Attachment A, and the Borough Council of the Borough of Carroll Valley has determined that the continuation of this work is fully consistent with the goals and objectives of the Southwest Adams Joint Comprehensive Plan, and therefore commits to continue to work on these implementation activities.
- The Borough Council of The Borough of Carroll Valley hereby repeals the Carroll Valley Borough Comprehensive Plan of 2012.
- This Resolution shall become effective upon its passing and be in force immediately.

APPROVED AND ADOPTED this 14th day of April, 2015.

ATTEST:

Aglil Marthao

(Seal)

CARROLL VALLEY BOROUGH COUNCIL

Name: VI

itle: Council President

Print: N. Kenneth Lundherg

Date: 4-14-15

ATTACHMENT A

Implementation Activities The Borough of Carroll Valley Comprehensive Plan of 2012

Carroll Valley, through its Planning Commission and Borough Council, has been working on various recommendations from the Carroll Valley Borough Comprehensive Plan of 2012. These recommendations are deemed to be consistent with the Southwest Adams Joint Comprehensive Plan. The Borough Council commits to the continuation of these recommendations specific to Carroll Valley Borough upon adoption of the Southwest Adams Joint Comprehensive Plan.

- 1. The Borough will seek to designate areas or corridors within its limits as "Growth Areas." These Growth Areas will be evaluated by the appropriate Borough staff, committees and elected officials to determine if changes are needed in zoning designation, ordinances, rules or regulations to ensure the identified housing needs can be pursued. It is the desire of the Borough to encourage diversity of housing for residents allowing for individual or multi-unit rental properties at affordable rates.
- 2. It is the belief of The Borough of Carroll Valley that residential growth, although managed, will create a need for commercial growth. It is therefore, the goal of the Plan to evaluate the current zoning delineation and corresponding ordinances for areas that may require modification to allow for business development. The Borough will seek to draw professional offices or suites, restaurants or convenience stores to the area. An alternative to traditional businesses that may work well for the Borough would incorporate a central facility offering conferencing, photo copying, wireless internet access, and meeting space for use by a home-based telecommuting community. The Borough should utilize the Community Survey completed in 2006 and 2009 as justification for future decisions related to Commercial land use.
- 3. Carroll Valley will set up a committee of current and potential home office and small business owners and telecommuters to gauge interest and develop recommendations for the Borough's consideration. Carroll Valley is a community comprised of citizens who are family-centered, environmentally-conscious and supportive of their neighbors. A 2006 survey showed that 50% of Borough citizens commute more than 25 miles to work, thus increasing air pollution.
- 4. One way to develop a better appreciation for the landscape, community and historical value of Carroll Valley is to establish alternative transportation pathways that allow people the opportunity to leisurely view the area. A focus group will be established to develop plans for walking/bike trail(s) that connect our community and travel by areas that are both beautiful and historically significant.
- 5. A focus group will be established to review information/constraints surrounding potential population growth as defined in the Build-Out Analysis of March 2011 and develop plans for sanitary sewer expansion and potable water supply.

RESOLUTION NO. 03 of 2015

A RESOLUTION OF THE BOROUGH COUNCIL OF FAIRFIELD BOROUGH, ADAMS COUNTY, PENNSYLVANIA APPROVING THE ADOPTION OF THE SOUTHWEST ADAMS JOINT COMPREHENSIVE PLAN.

WHEREAS, the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247, as reenacted and amended), hereafter referred to as the MPC, empowers boroughs and townships, individually or jointly, to plan for their development and conservation through the development of comprehensive plans and various implementing ordinances and tools, and

WHEREAS, Carroll Valley and Fairfield Boroughs, and Freedom, Hamiltonban, Highland, and Liberty Townships are characterized by similar demographics, identities, and development and conservation issues, and share common municipal boundaries, and

WHEREAS, the governing bodies of Carroll Valley and Fairfield Boroughs and Freedom, Hamiltonban, Highland, and Liberty Townships agreed to jointly develop the Southwest Adams Joint Comprehensive Plan to address these common development and conservation issues, and

WHEREAS, the governing bodies of the six municipalities appointed a joint steering committee to oversee development of the Southwest Adams Joint Comprehensive Plan, and

WHEREAS, the steering committee analyzed extensive information including, but not limited to, the demographics, land use, housing, economy, natural features, community facilities, utilities, and transportation of the planning area, and

WHEREAS, the steering committee conducted various exercises to receive public input on the various planning issues and to develop goals and community development objectives for the planning area, and

WHEREAS, the Southwest Adams Joint Comprehensive Plan has been developed in a manner to regionally address the planning issues, goals, and community development objectives identified in the public input and planning process, and

WHEREAS, the Southwest Adams Joint Comprehensive Plan includes the following plan elements.

- 1. Land Use Plan
- Natural Resources Plan
- Water Resources Plan
- Housing Plan
- Community Facilities Plan
- Transportation Plan
- 7. Economic Development Plan
- 8. Historic and Cultural Resources Plan
- Parks, Recreation, Open Space and Greenways Plan

WHEREAS, Planning Commissions of Carroll Valley and Fairfield Boroughs and Hamiltonban and Liberty Townships conducted a Joint Public Meeting on October 29, 2014 to present the draft Southwest Adams Joint Comprehensive to the public and to receive public comment on the draft Plan, and

WHEREAS, the draft Southwest Adams Joint Comprehensive Plan has been distributed to adjoining municipalities, the Fairfield Area and Gettysburg Area School Districts, and the Adams County Office of Planning and Development for review and comment, and

WHEREAS, the Fairfield and Carroll Valley Borough Councils and the Hamiltonban and Liberty Boards of Township Supervisors have conducted a joint public hearing on March 26, 2015 to receive public comment on the draft Plan, and

WHEREAS, it has been determined that the Southwest Adams Joint Comprehensive Plan is consistent with the Adams County Comprehensive Plan of 1991, as amended.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Borough Council of Fairfield Borough that:

- 1. The Borough Council of Fairfield Borough hereby adopts the Southwest Adams Joint Comprehensive Plan pursuant to Article III of the MPC.
- 2. The Borough Council of Fairfield Borough hereby repeals the Fairfield Borough Comprehensive Plan of 1984.
- 3. This Resolution shall become effective upon its passing and be in force immediately.

ADOPTED THIS 28th DAY of APRIL 2015, by the Borough Council, Fairfield Borough

Attest:

Susan E. Wagle

Borough Secretary

Patricia T. Smith

Borough Council President

Resolution Number 2015-07

Hamiltonban Township, Adams County, Pennsylvania

A Resolution Approving The Adoption of the Southwest Adams Joint Comprehensive Plan

WHEREAS, the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247, as reenacted and amended), hereafter referred to as the MPC, empowers boroughs and townships, individually or jointly, to plan for their development and conservation through the development of comprehensive plans and various implementing ordinances and tools, and

WHEREAS, Carroll Valley and Fairfield Boroughs, and Freedom, Hamiltonban, Highland, and Liberty Townships are characterized by similar demographics, identities, and development and conservation issues, and share common municipal boundaries, and

WHEREAS, the governing bodies of Carroll Valley and Fairfield Boroughs and Freedom, Hamiltonban, Highland, and Liberty Townships have agreed to jointly develop the Southwest Adams Joint Comprehensive Plan to address these commons development and conservation issues, and

WHEREAS, the governing bodies of the six municipalities appointed a joint steering committee to oversee development of the Southwest Adams Joint Comprehensive Plan, and

WHEREAS, the steering committee analyzed extensive information including, but not limited to, the demographics, land use, housing, economy, natural features, community facilities, utilities, and transportation of the planning area, and

WHEREAS, the steering committee conducted various exercises to receive public input on the various planning issues and to develop goals and community development objectives for the planning area, and

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WHEREAS, the Southwest Adams Joint Comprehensive Plan includes the following plan elements.

- 1. Land Use Plan
- 2. Natural Resources Plan
- 3. Water Resources Plan
- 4. Housing Plan
- 5. Community Facilities Plan
- 6. Transportation Plan
- 7. Economic Development Plan
- 8. Historic and Cultural Resources Plan
- Parks, Recreation, Open Space and Greenways Plan

WHEREAS, Planning Commissions of Carroll Valley and Fairfield Boroughs and Hamiltonban and Liberty Townships conducted a Joint Public Meeting on October 29, 2014 to present the draft Southwest Adams Joint Comprehensive to the public and to receive public comment on the draft Plan, and

WHEREAS, the draft Southwest Adams Joint Comprehensive Plan has been distributed to adjoining municipalities, the Fairfield Area and Gettysburg Area School Districts, and the Adams County Office of Planning and Development for review and comment, and

WHEREAS, the Fairfield and Carroll Valley Borough Councils and the Hamiltonban and Liberty Boards of Township Supervisors have conducted a joint public hearing on March 26, 2015 to receive public comment on the draft Plan, and

WHEREAS, it has been determined that the Southwest Adams Joint Comprehensive Plan is consistent with the Adams County Comprehensive Plan of 1991, as amended.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Board of Supervisors of Hamiltonban Township that:

- 1. The Board of Supervisors of Hamiltonban Township hereby adopts the Southwest Adams Joint Comprehensive Plan pursuant to Article III of the MPC.
- 2. The Board of Supervisors of Hamiltonban Township hereby repeals the Hamiltonban Township Comprehensive Plan of 1991, as amended.
- 3. This Resolution shall become effective upon its passing and be in force immediately.

ADOPTED THIS 7th DAY OF APRIL, 2015.

ATTESTED BY:

Deborah K. Feiler Secretary/Treasurer Board of Supervisors

Hamiltonban Township

Chairman Robert L. Gordon

Vice-chairman Douglas W. Woerner

Supervisor Coleen N. Reamer

Supervisor LuAnn M. Dille

Supervisor J. Edward Deardorff

RESOLUTION NO. <u>2 - 2015</u> A RESOLUTION OF THE BOARD OF SUPERVISORS OF LIBERTY TOWNSHIP, ADAMS COUNTY, PENNSYLVANIA APPROVING THE ADOPTION OF THE SOUTHWEST ADAMS JOINT COMPREHENSIVE PLAN.

WHEREAS, the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247, as reenacted and amended), hereafter referred to as the MPC, empowers boroughs and townships, individually or jointly, to plan for their development and conservation through the development of comprehensive plans and various implementing ordinances and tools, and

WHEREAS, Carroll Valley and Fairfield Boroughs, and Freedom, Hamiltonban, Highland, and Liberty Townships are characterized by similar demographics, identities, and development and conservation issues, and share common municipal boundaries, and

WHEREAS, the governing bodies of Carroll Valley and Fairfield Boroughs and Freedom, Hamiltonban, Highland, and Liberty Townships have agreed to jointly develop the Southwest Adams Joint Comprehensive Plan to address these commons development and conservation issues, and

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WHEREAS, the steering committee analyzed extensive information including, but not limited to, the demographics, land use, housing, economy, natural features, community facilities, utilities, and transportation of the planning area, and

WHEREAS, the steering committee conducted various exercises to receive public input on the various planning issues and to develop goals and community development objectives for the planning area, and

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- Land Use Plan
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WHEREAS, Planning Commissions of Carroll Valley and Fairfield Boroughs and Hamiltonban and Liberty Townships conducted a Joint Public Meeting on October 29, 2014 to present the draft Southwest Adams Joint Comprehensive to the public and to receive public comment on the draft Plan, and

WHEREAS, the draft Southwest Adams Joint Comprehensive Plan has been distributed to adjoining municipalities, the Fairfield Area and Gettysburg Area School Districts, and the Adams County Office of Planning and Development for review and comment, and

WHEREAS, the Fairfield and Carroll Valley Borough Councils and the Hamiltonban and Liberty Boards of Township Supervisors have conducted a joint public hearing on March 26, 2015 to receive public comment on the draft Plan, and

WHEREAS, it has been determined that the Southwest Adams Joint Comprehensive Plan is consistent with the Adams County Comprehensive Plan of 1991, as amended.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Board of Supervisors of Liberty Township that:

- 1. The Board of Supervisors of Liberty Township hereby adopts the Southwest Adams Joint Comprehensive Plan pursuant to Article III of the MPC.
- 2. The Board of Supervisors of Liberty Township hereby repeals the Liberty Township Comprehensive Plan of 1991.
- This Resolution shall become effective upon its passing and be in force immediately.

ADOPTED THIS 7 DAY OF April, 2015, by the Board of Supervisors

Liberty Township

Attest:

LeeEsta Shaffer

Township Secretary

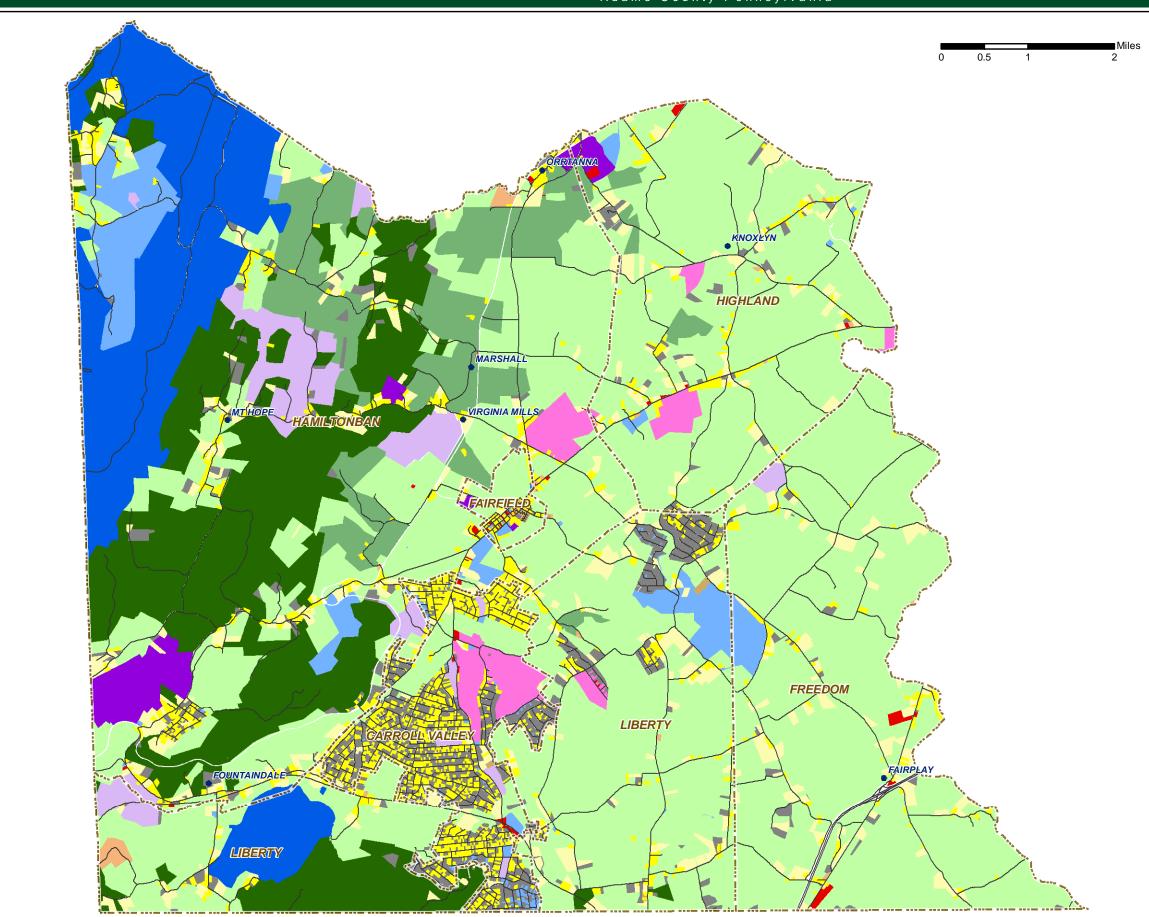
Jøhn Bostek

Chairman

Board of Supervisors

Maps

Southwest Adams County Joint Comprehensive Plan



EXISTING LAND USE

Legend

- Village
- Municipal Boundary
- ✓ Street

Existing Land Use

- Wooded
- Specialized Agriculture
- Agriculture/ Residential/ Vacant (10+ ac.)
- Single Family Residential (3 9.99 ac.)
- Single Family Residential (0 2.99 ac.)
- Attached/ Multi-Family Residential
- Mixed Use
- Commercial
- Industrial/ Quarry
- Public/ Institutional/ Utility
- State/ Federally Managed
- Outdoor Recreation Commercial
- Outdoor Recreation Public/Semi-Public
- Vacant, less than 10 ac

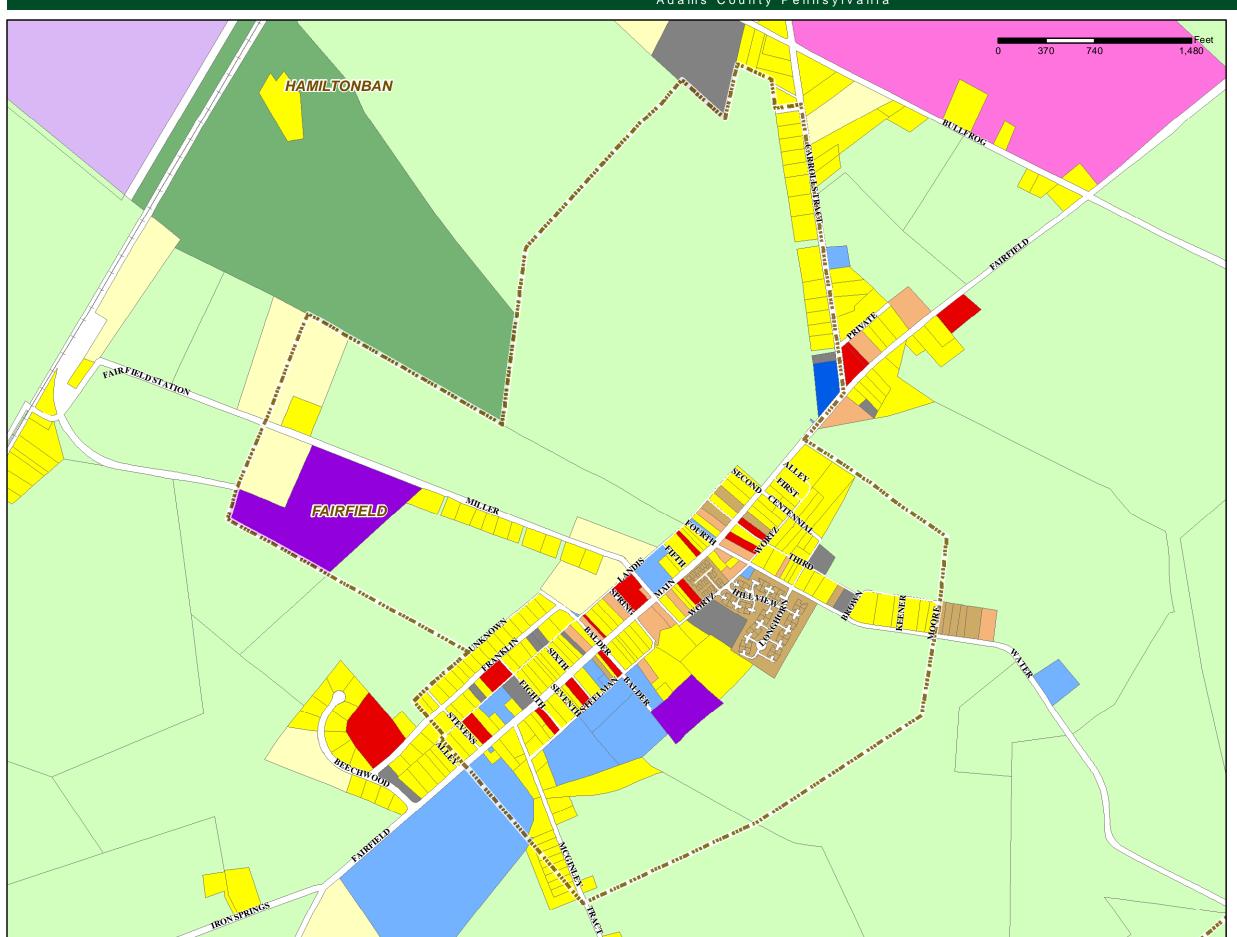
The land use classification is based on the predominant use of a parcel.



Source: ACOPD - GIS Division, Adams County Tax Services,

December 2008 rev. June 24, 2009





EXISTING LAND USE FAIRFIELD BOROUGH

Legend

- Municipal Boundary
- --- Railroad

Existing Land Use

- Wooded
- Specialized Agriculture
- Agriculture/ Residential/ Vacant (10+ ac.)
- Single Family Residential (3 9.99 ac.)
- Single Family Residential (0 2.99 ac.)
- Attached/ Multi-Family Residential
- Mixed Use
- Commercial
- Industrial/ Quarry
- Public/ Institutional/ Utility
- State/ Federally Managed
- Outdoor Recreation Commercial
- Outdoor Recreation Public/Semi-Public
- Vacant, less than 10 ac

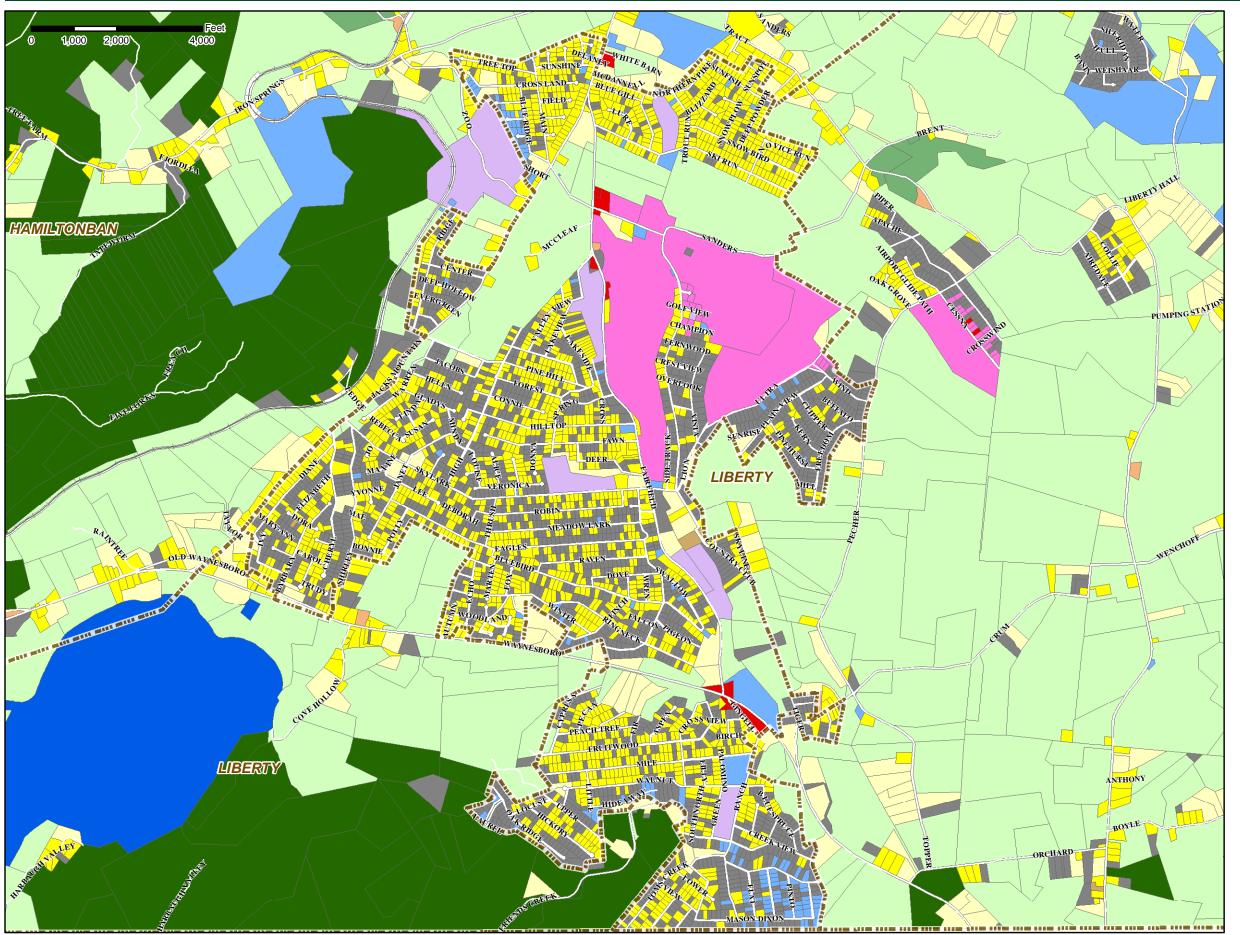
The land use classification is based on the predominant use of a parcel.



Source: ACOPD - GIS Division, Adams County Tax Services,



January 9, 2009



EXISTING LAND USE CARROLL VALLEY BOROUGH

Legend

- Municipal Boundary
- --- Railroad

Existing Land Use

- Wooded
- Specialized Agriculture
- Agriculture/ Residential/ Vacant (10+ ac.)
- Single Family Residential (3 9.99 ac.)
- Single Family Residential (0 2.99 ac.)
- Attached/ Multi-Family Residential
- Mixed Use
- Commercial
- Industrial/ Quarry
- Public/ Institutional/ Utility
- State/ Federally Managed
- Outdoor Recreation Commercial
- Outdoor Recreation Public/Semi-Public
- Vacant, less than 10 ac

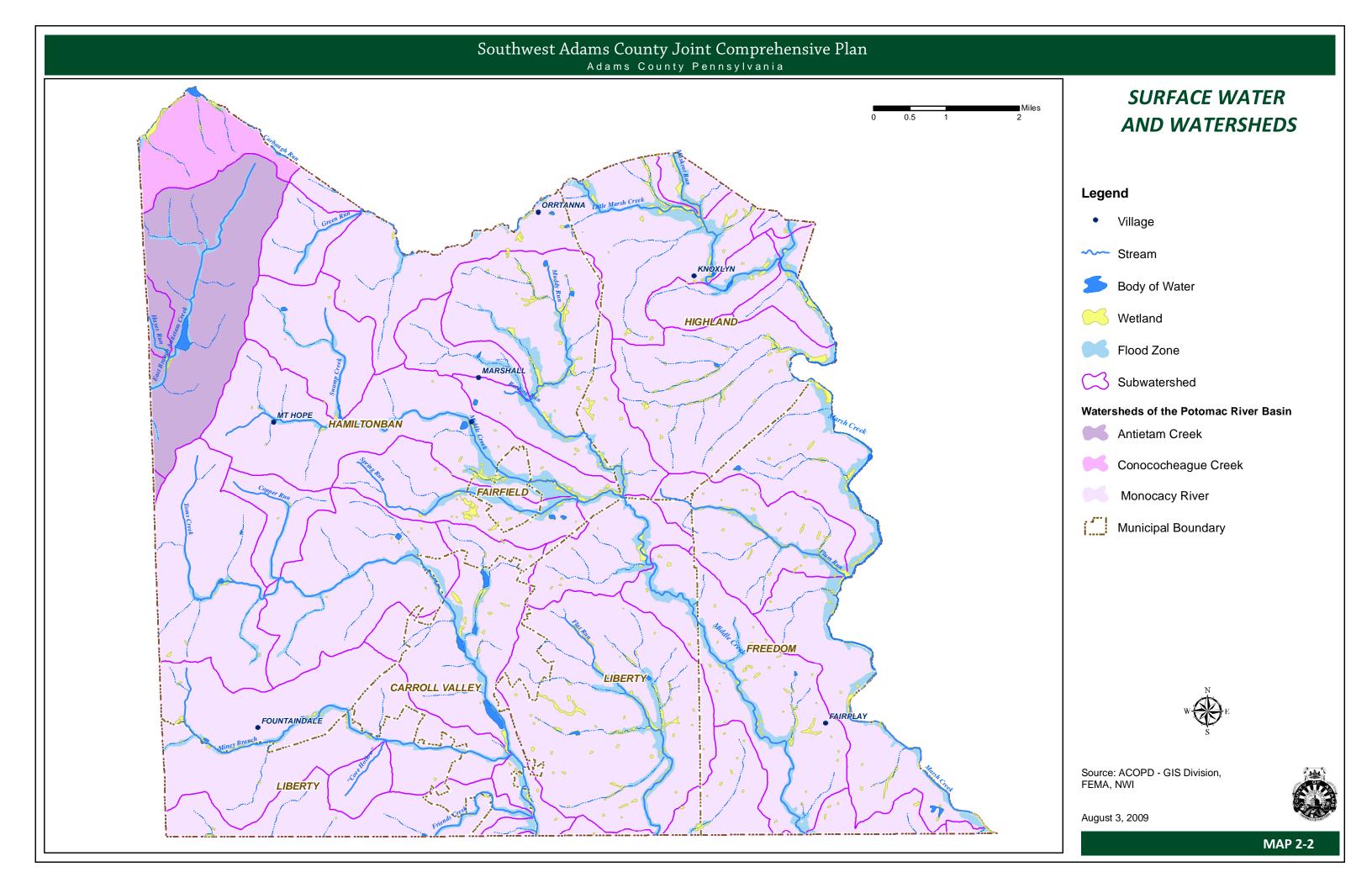
The land use classification is based on the predominant use of a parcel.



Source: ACOPD - GIS Division, Adams County Tax Services

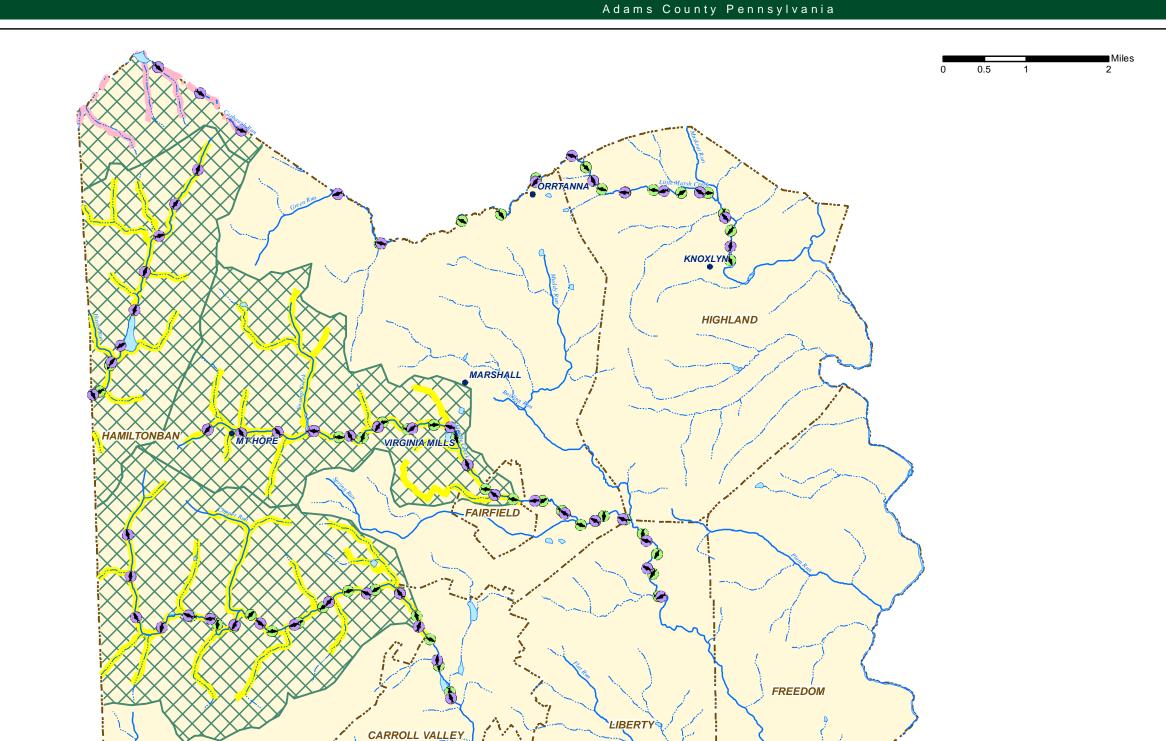


January 9, 2009



Southwest Adams County Joint Comprehensive Plan

FAIRPLAY



LIBERTY

SURFACE WATER QUALITY

Legend

- Village
- Natural Trout Reproduction
- Trout Stocked Stream
- Stream
- Exceptional Value Waters
- High Quality Waters
- Waterbody
- Special Protection Watershed
- Municipal Boundary

Natural Trout Reproduction - Stream sections supporting naturally reproducing populations of trout.

Trout Stocked Stream - Stocked by PA Fish & Boat Commis.

High Quality Waters - Surface waters having quality which exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water by satisfying PA Code § 93.4b(a).

Exceptional Value Waters - Surface waters of high quality which satisfy PA Code § 93.4b(b) (relating to antidegradation).

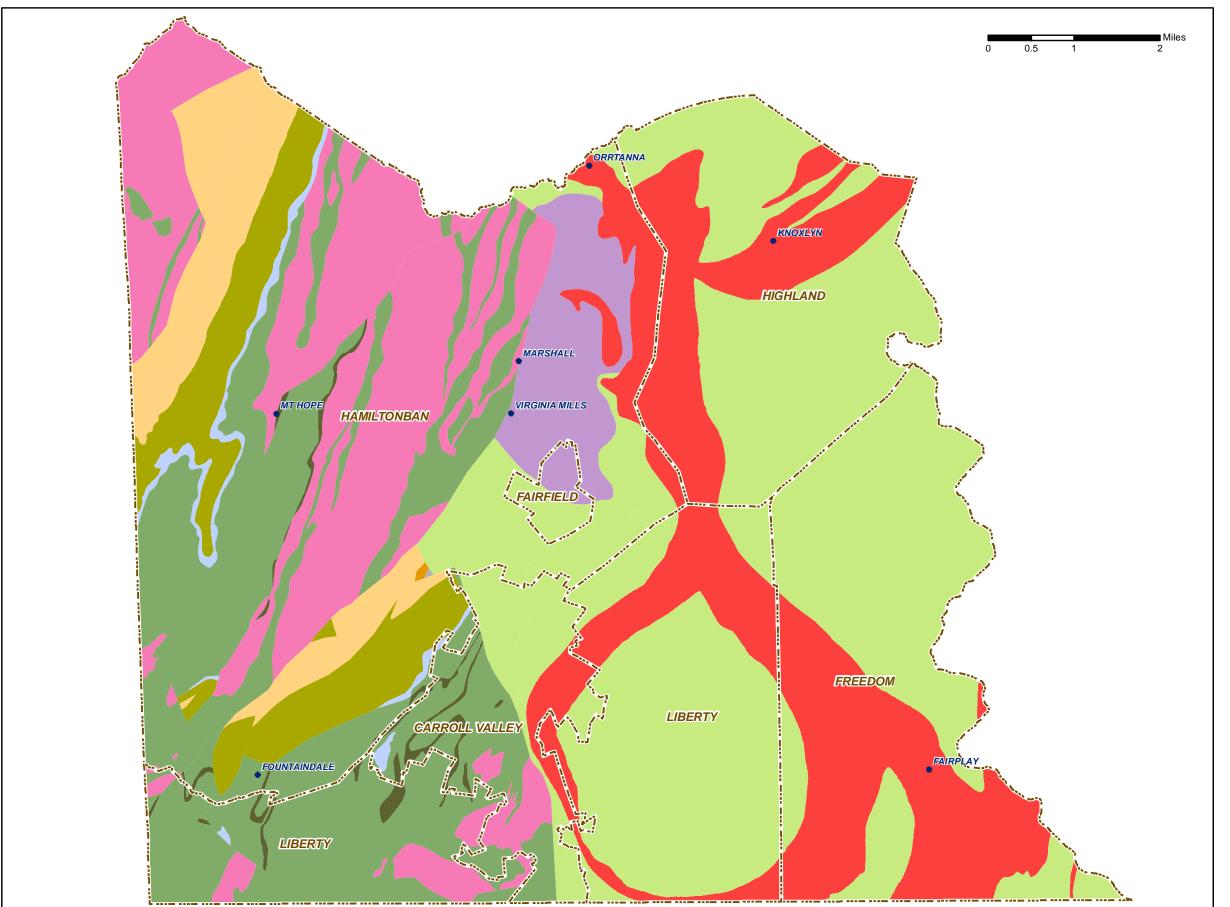
Special protection uses: High Quality (HQ) and Exceptional Value (EV) waters are among the cleanest and most outstanding waters in Pennslyvania.



Source: ACOPD - GIS Division, PASDA, PA Fish & Boat Commission



February 2, 2009



HYDROGEOLOGY

Legend

- Village
- Municipal Boundary

Gettysburg Lowland

- Diabase
- Gettysburg Formation

Blue Ridge

- Antietam Formation
- Beekmantown Group
- Greenstone Schist
- Harpers Formation
- Loudoun Formation
- Metabasalt
- Metarhyolite
- Tomstown Formation
- Weverton Formation



Source: ACOPD - GIS Division

July 29, 2009



Southwest Adams County Joint Comprehensive Plan Adams County Pennsylvania HIGHLAND MARSHALL VIRGINIA MILLS HAMILTONBAN LIBERTY CARROLL VALLEY

SOIL SUITABILITY FOR DWELLINGS WITH BASEMENTS

Legend

- Village
- Municipal Boundary

Soil Suitability

Dwellings with Basements

- Not Limited
- Somewhat Limited
- Very Limited
- Water, Quarry, Urban Land

This map depicts the kind of soil limitations that affect dwellings with basements.

"Not Limited" indicates that the soil has features that are very favorable for the use. Expect good performance and low maintenance.

"Somewhat Limited" indicates that the soil has features that are moderately favorable. Limitations can be overcome or minimized by special planning, design, or installation.

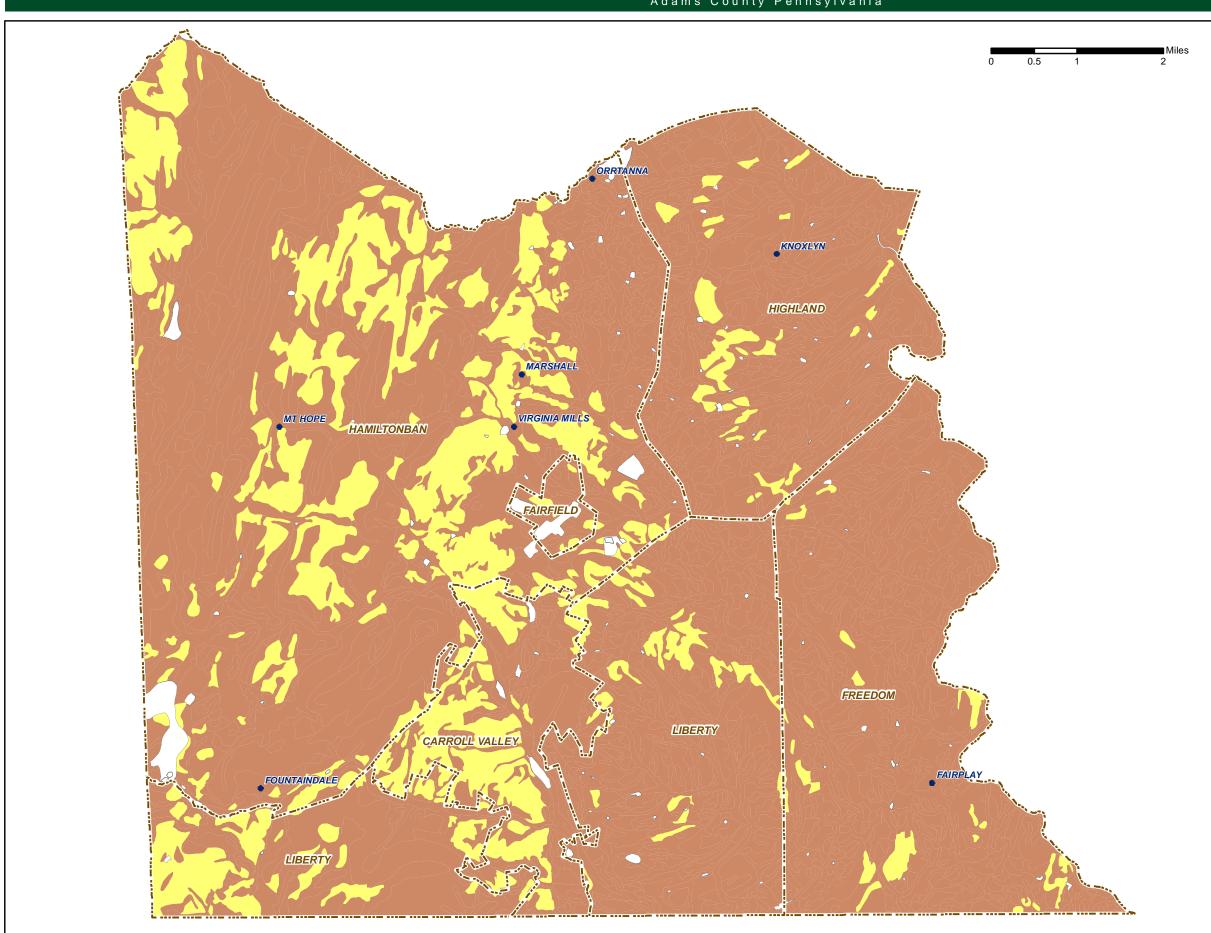
"Very Limited" indicates that the soil has one or more features that are unfavorable. Limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Expect poor performance and high maintenance.



Source: ACOPD - GIS Division, USDA-NRCS



March 30, 2009



SOIL SUITABILITY FOR DWELLINGS WITH ON-LOT SEPTIC

Legend

- Village
- Municipal Boundary

Soil Suitability

Dwellings with Septic Systems

- Somewhat Limited
- Very Limited
- Water, Quarry, Urban Land

This map depicts the kind of soil limitations that affect septic tank absorption fields. Absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe.

"Somewhat Limited" indicates that the soil has features that are moderately favorable. Limitations can be overcome or minimized by special planning, design, or installation. Expect fair performance and moderate maintenance.

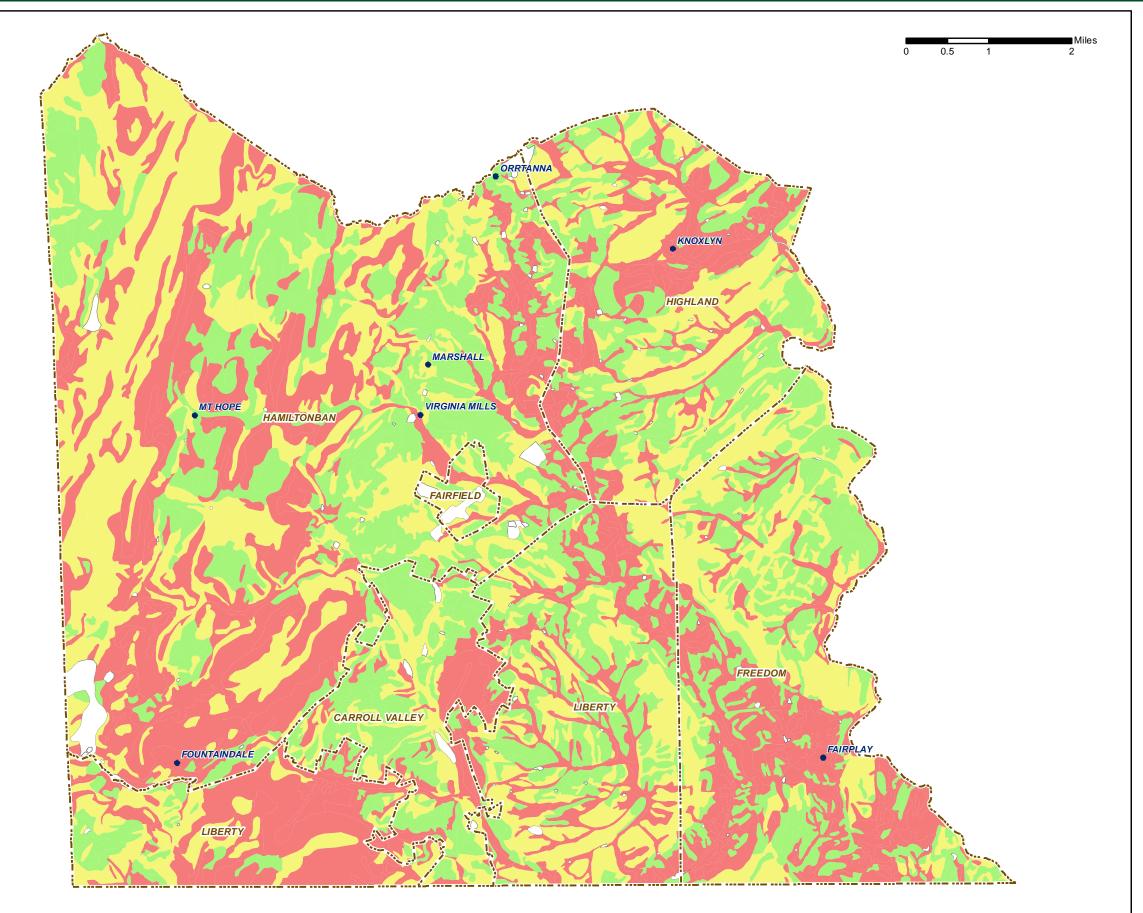
"Very Limited" indicates that the soil has one or more features that are unfavorable. Limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Expect poor performance and high maintenance.



Source: ACOPD - GIS Division, NRCS



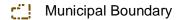
March 30, 2009



SOIL SUITABILITY FOR PATHS AND TRAILS

Legend

Village



Soil Suitability

Paths and Trails

Not Limited

Somewhat Limited

Very Limited

The soils have been rated according to limitations that affect their suitability for paths and trails. Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. Rating terms indicate the extent to which the soils are limited by the features that affect the recreational use.

"Not Limited" indicates that the soil has features that are very favorable for the use.

"Somewhat Limited" indicates that the soil has features that are moderately favorable.

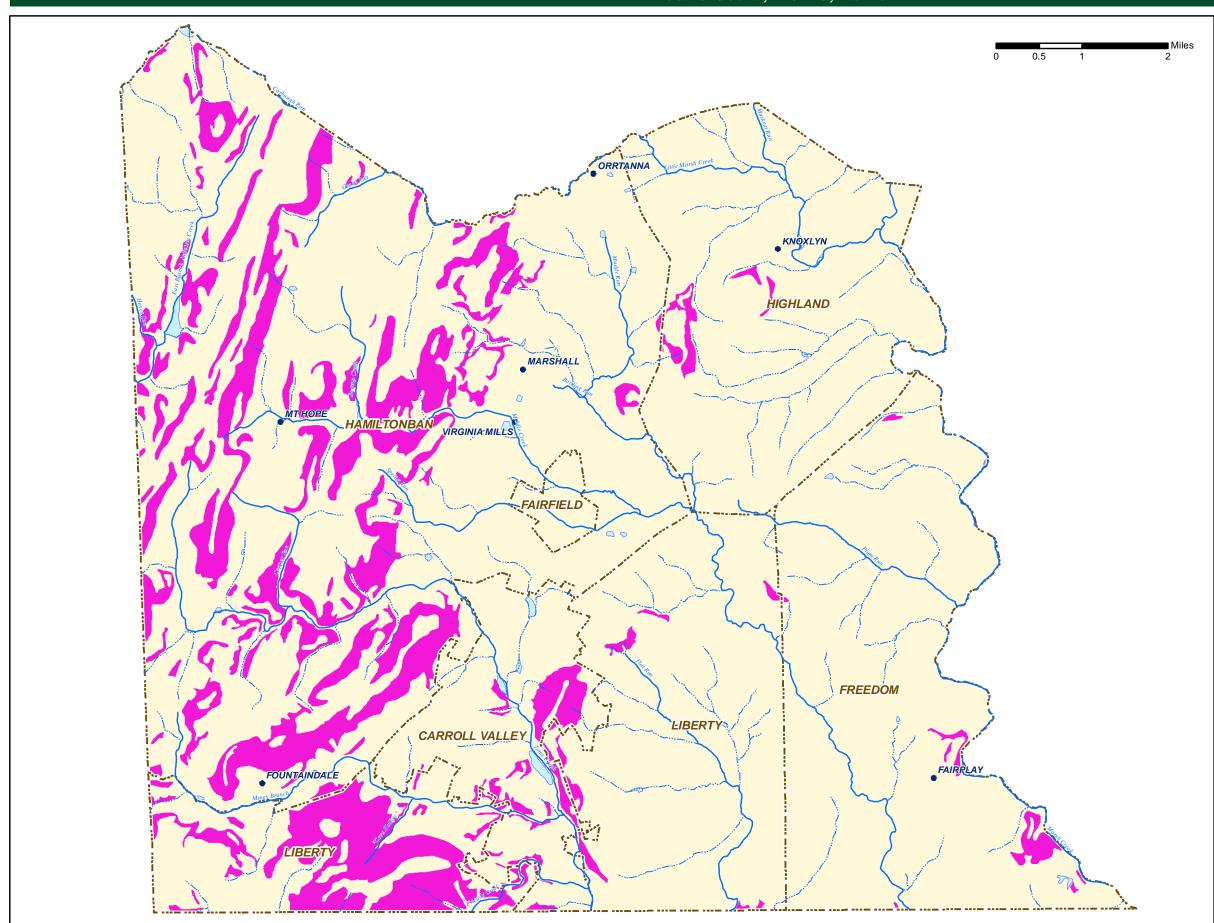
"Very Limited" indicates that the soil has one or more features that are unfavorable.



Source: ACOPD - GIS Division, USDA-NRCS







STEEP SLOPES

Legend

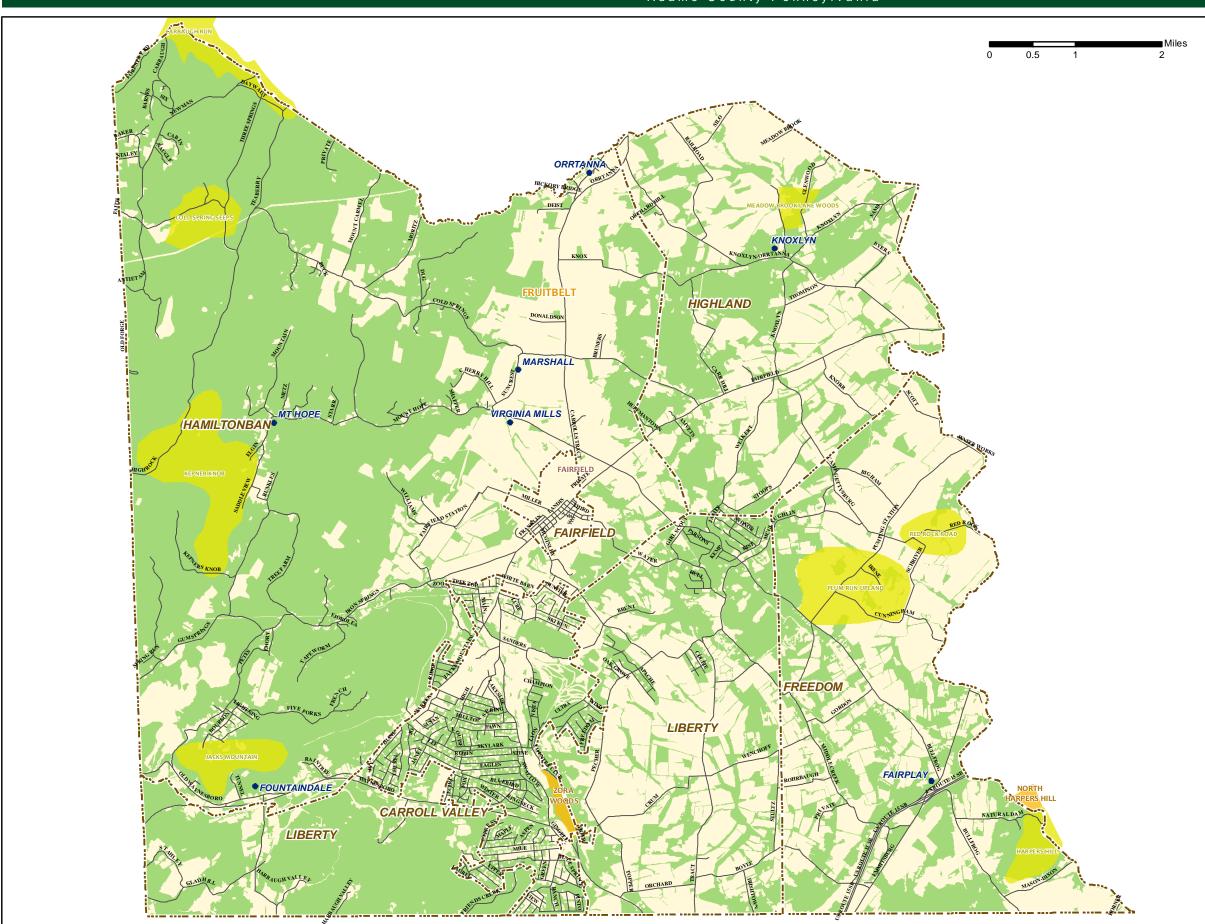
- Village
- --- Stream
- Waterbody
- Steep Slopes (>25%)
- Municipal Boundary



Source: ACOPD - GIS Division

March 15, 2013





NATURAL AREAS

Legend

Village



Natural Areas Inventory Site

Natural Area

Locally Significant

Wooded Area

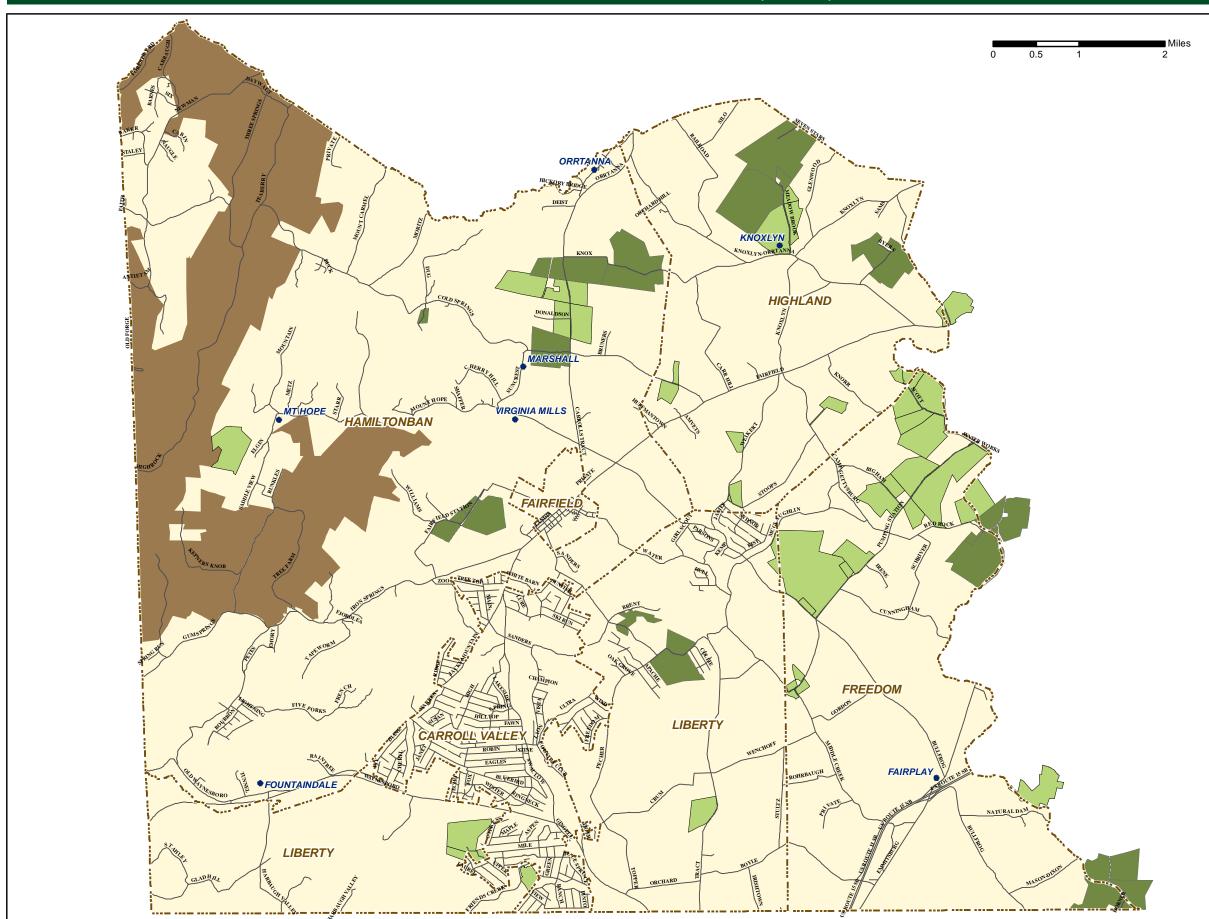
Municipal Boundary



Source: ACOPD - GIS Division, PA Science Office

March 15, 2013, Rev. February 3, 2014





PRESERVED AREAS

Legend

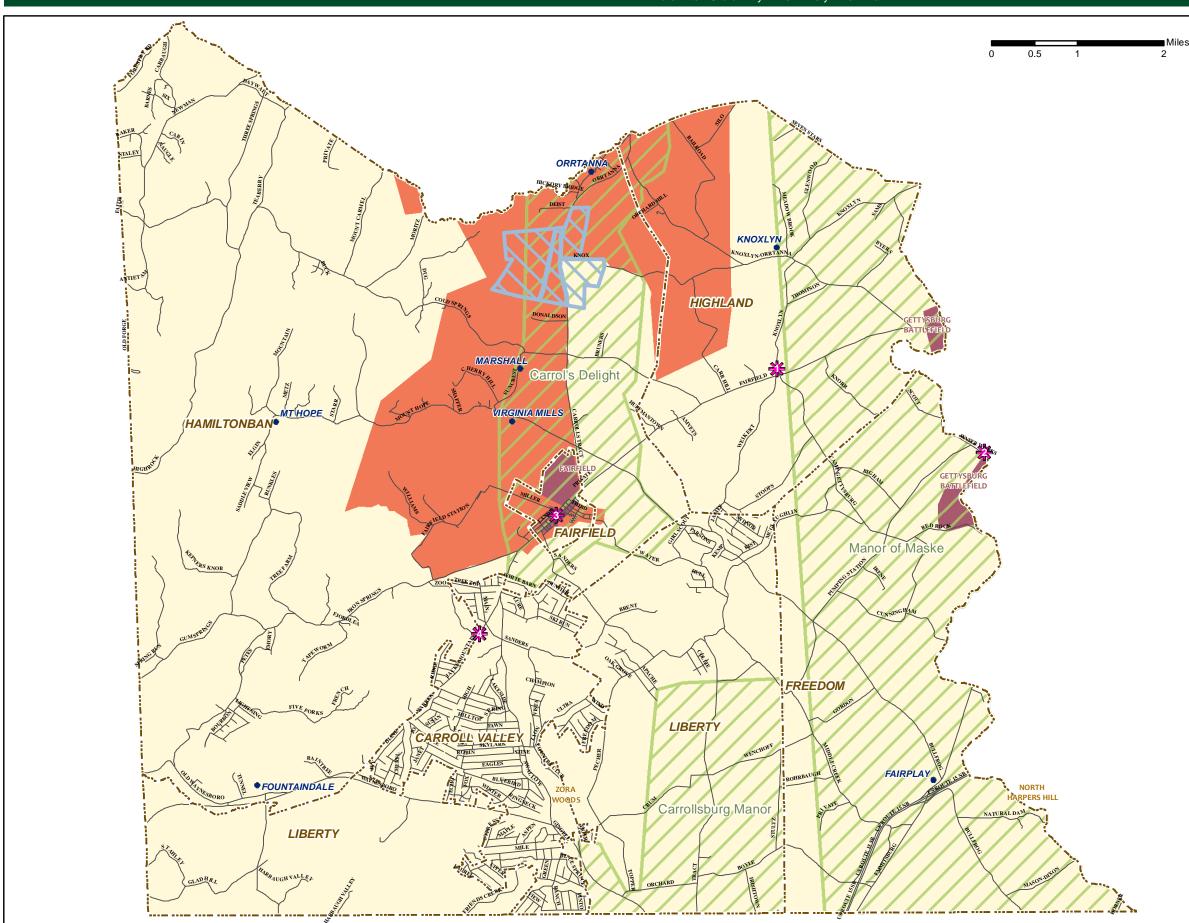
- Village
- ---- Road
- Preserved Farm
- LCAC Easement
- Michaux State Forest
- Municipal Boundary



Source: ACOPD - GIS and Rural Resources Divisions

March 27, 2013, Rev. February 3, 2014





HISTORICAL AND CULTURAL RESOURCES

Legend

- Village
- ✓ Road
- Municipal Boundary
- HIstoric Land Grants

National Register Listed

- Historic District
- # Historic Site

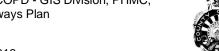
National Register Eligible

- Fruitbelt Historic District
- Fairfield Cavalry Action Historic District

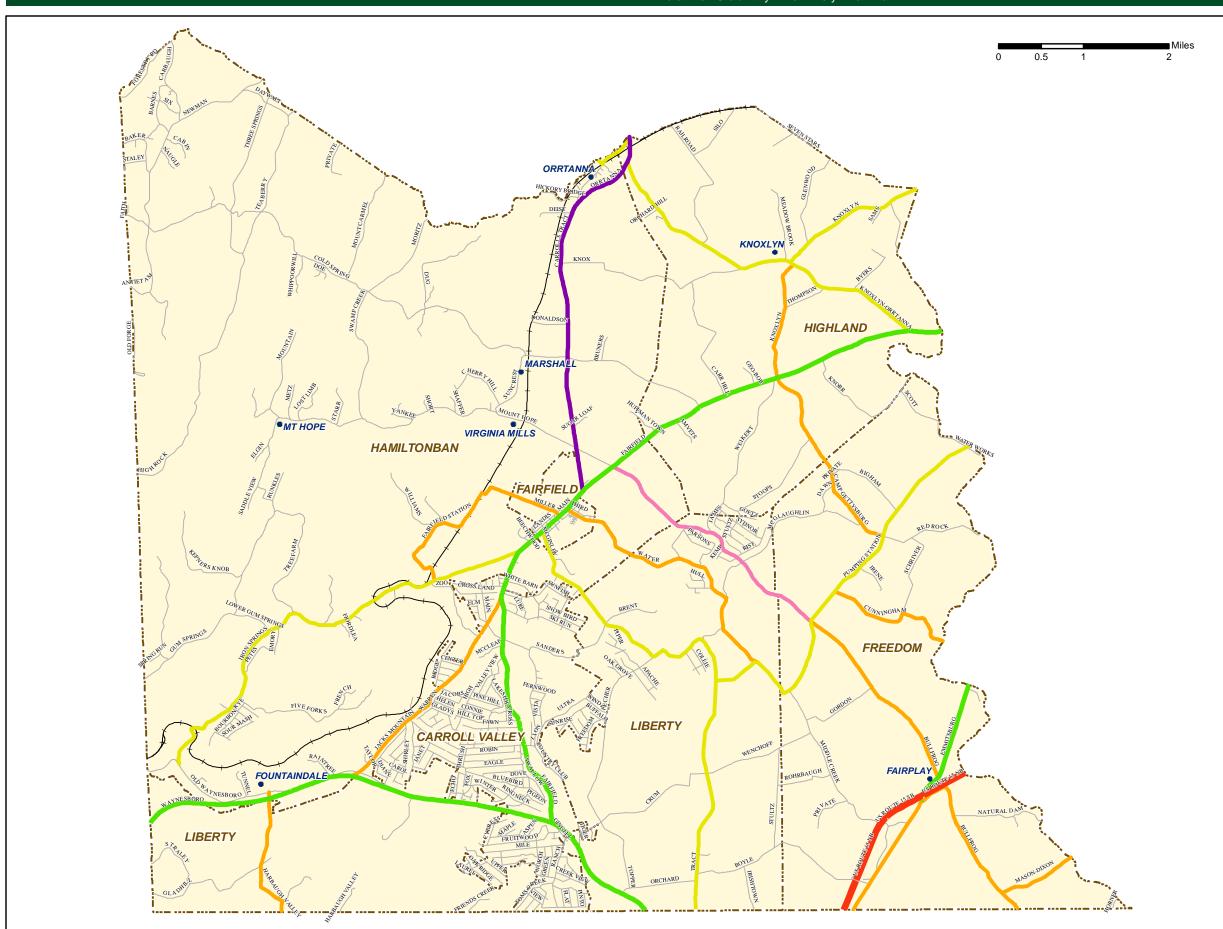
National Register Listed Historic Site			
#	ID		
1	Lower Marsh Creek Presbyterian Church		
2	Sach's Covered Bridge		
3	Fairfield Inn		
4	Jack's Mountain Covered Bridge		



Source: ACOPD - GIS Division, PHMC, AC Greenways Plan



April 16, 2013



FUNCTIONAL CLASSIFICATION OF ROADWAYS

Legend

- Village
- ---- Railroad

Federal Functional Classification

- Other Principal Arterial
- Minor Arterial
- Rural Major Collector
- Rural Minor Collector
- State Owned Local Road
- Other Important Road*
- // Municipal/ Private Road
- Municipal Boundary

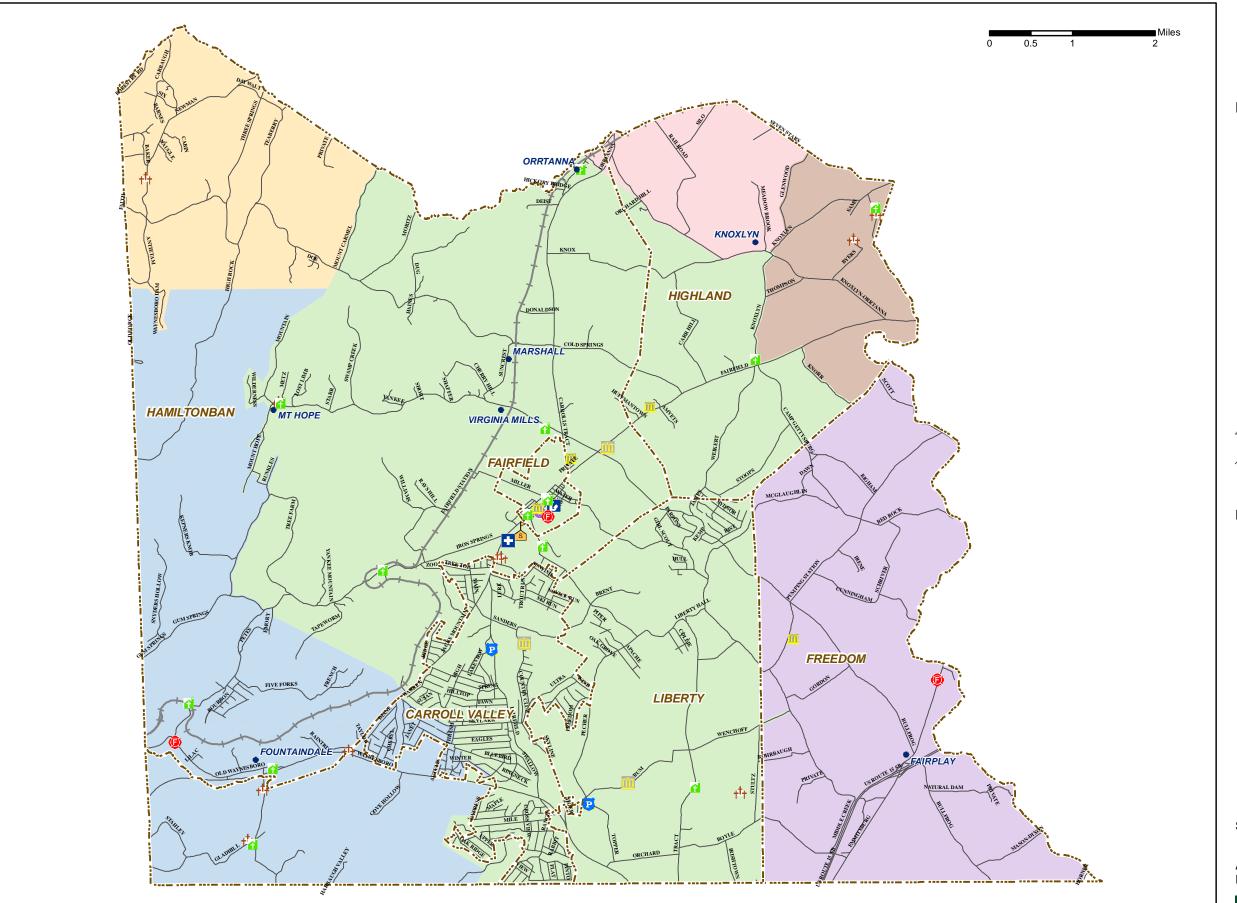
* Other Important Roadways are not state roads, but have been identified in the Transportation Componant of the Adams County Comprehensive Plan and are important from a roadway network perspective. They are not part of the Federal Highway Administration's Functional Classification.



Source: ACOPD - GIS Division, Penn DOT

March 27, 2009 rev. March 30, 2010





COMMUNITY FACILITIES

Legend

- Village
- Fire Station
- Police Station
- Medical Facility
- School
- Library
- Municipal Building
- d Church
- +t+ Cemetery
- Senior Center
- Railroad
- ✓ Road
- Municipal Boundary

Fire Department Service District

- Gettysburg Fire Department
- Fairfield Fire and EMS
- Fountaindale Volunteer Fire Co.
- Cashtown Community Fire Co.
- Greenmount Community Fire Co.
- South Mountain Volunteer Fire Co.



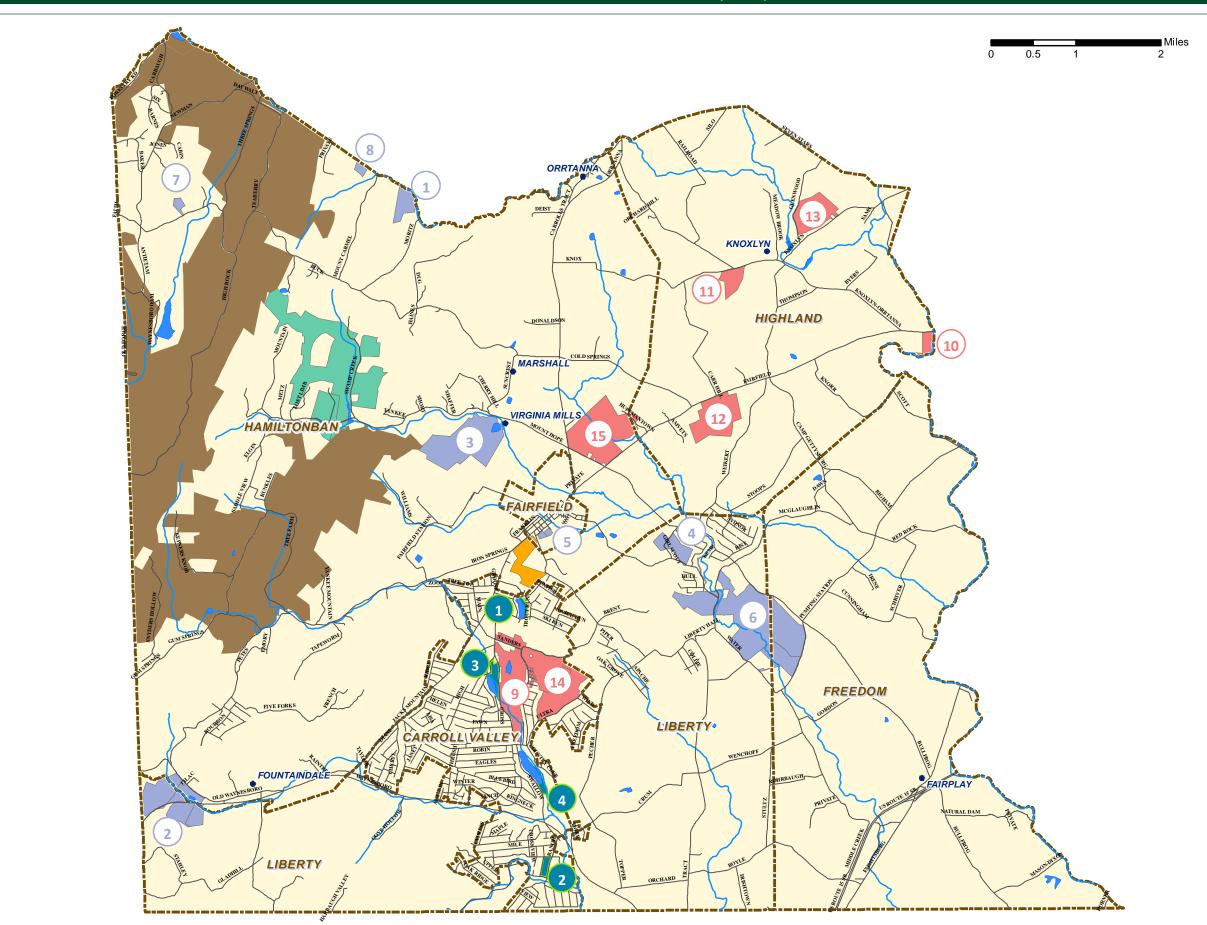
Source: ACOPD - GIS Division

August 5, 2009 Rev. March 28, 2013



Southwest Adams County Joint Comprehensive Plan

Adams County Pennsylvania



PARK & RECREATION INVENTORY

Legend

Public Recreation Facilities

1: Mini-Park: Lake Kay

2: Neighborhood Park: Ranch Trail Commons

3: Community Park: Carroll Commons

4: Special Use: Lake May

Natural Area: Michaux State Forest

Natural Area: Strawberry Hill Nature Preserve

School-Park: Fairfield Area Complex

Private, Non-Profit Recreation Facilities

1: Adams Co. Fish & Game Commission

2: Blue Ridge Sportsmens Club

3: Camp Eder

4: Camp Happy Valley

5: Fairfield Fields

6: Middle Creek Bible Conf. Center

7: Rouzerville Gun Club

8: Spring Grove Gun Club

Private, For-Profit Recreation Facilities

9: Carroll Valley Golf Resort

10: Gettysburg Campground

11: Gettysburg KOA

12: Granite Hill Resort

13: Land of Little Horses

14: Liberty Mountain Ski Resort

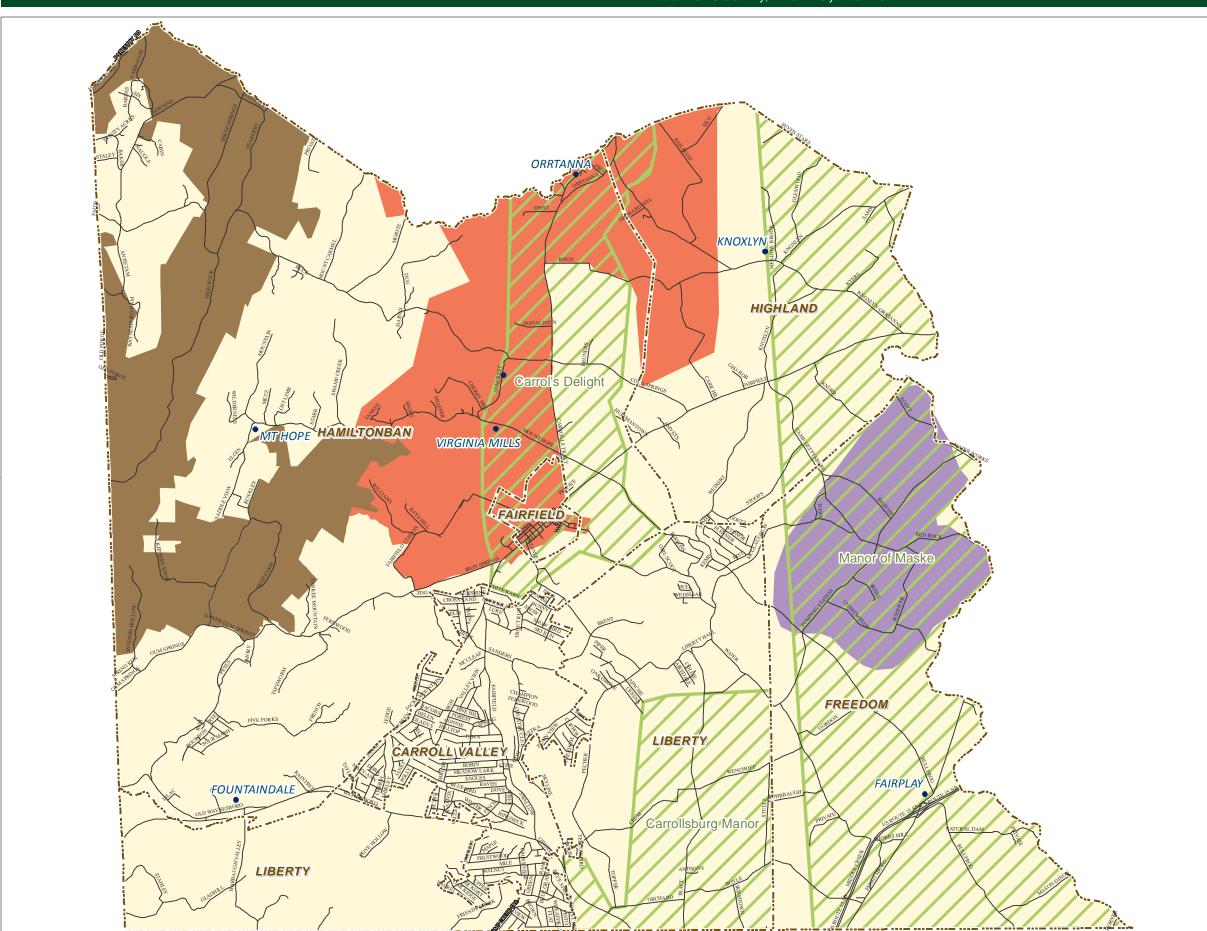
15: Mountain View Golf Club



Source: ACOPD - GIS Division, Mackin

March 2010 rev. March 18, 2013





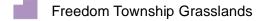
LANDSCAPE GREENWAYS

Legend

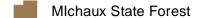
Village



Historic Land Grants







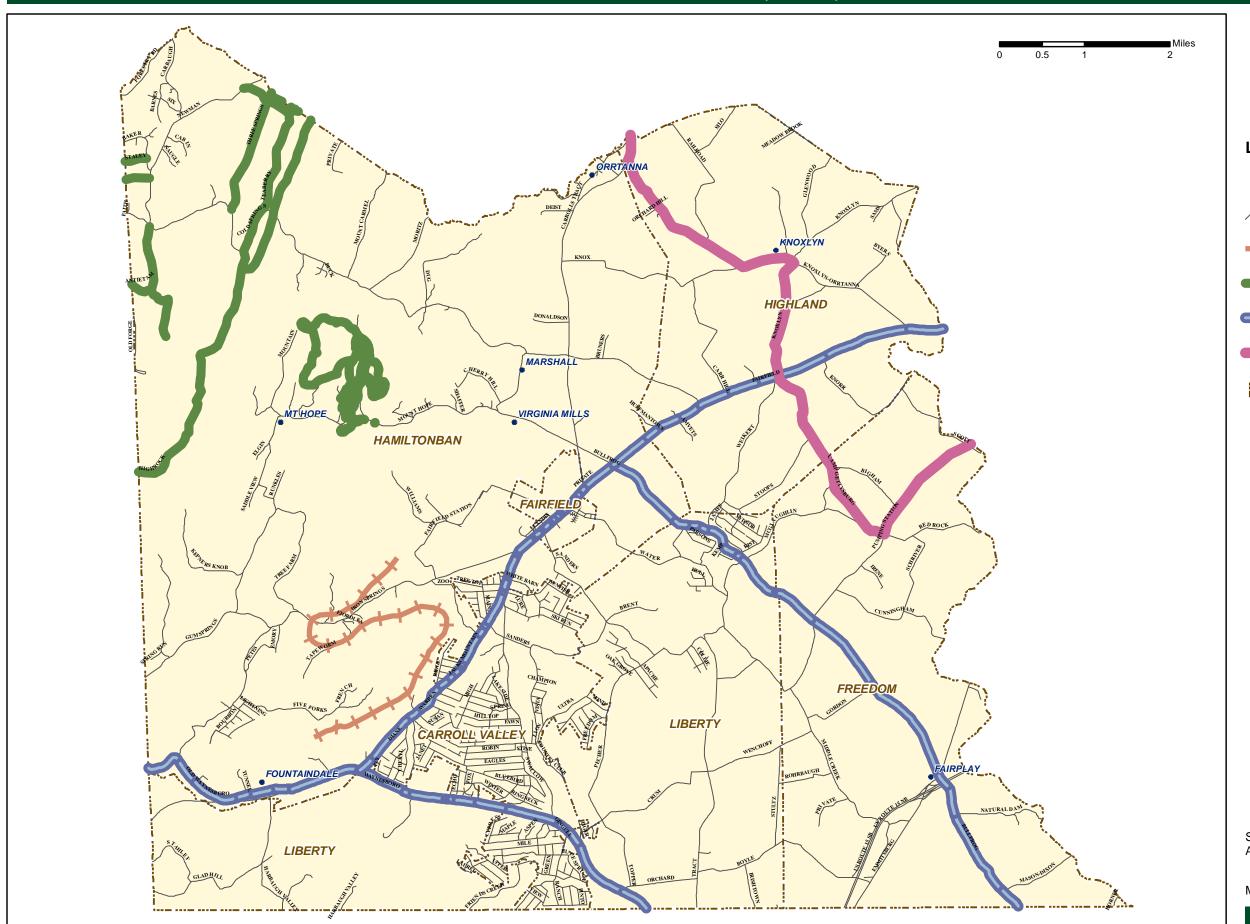




Source: ACOPD - GIS Division, PHMC, Adams County Greenways Plan (2010)

April 16, 2013, Rev. February 3, 2014





MAN-MADE GREENWAYS

Legend

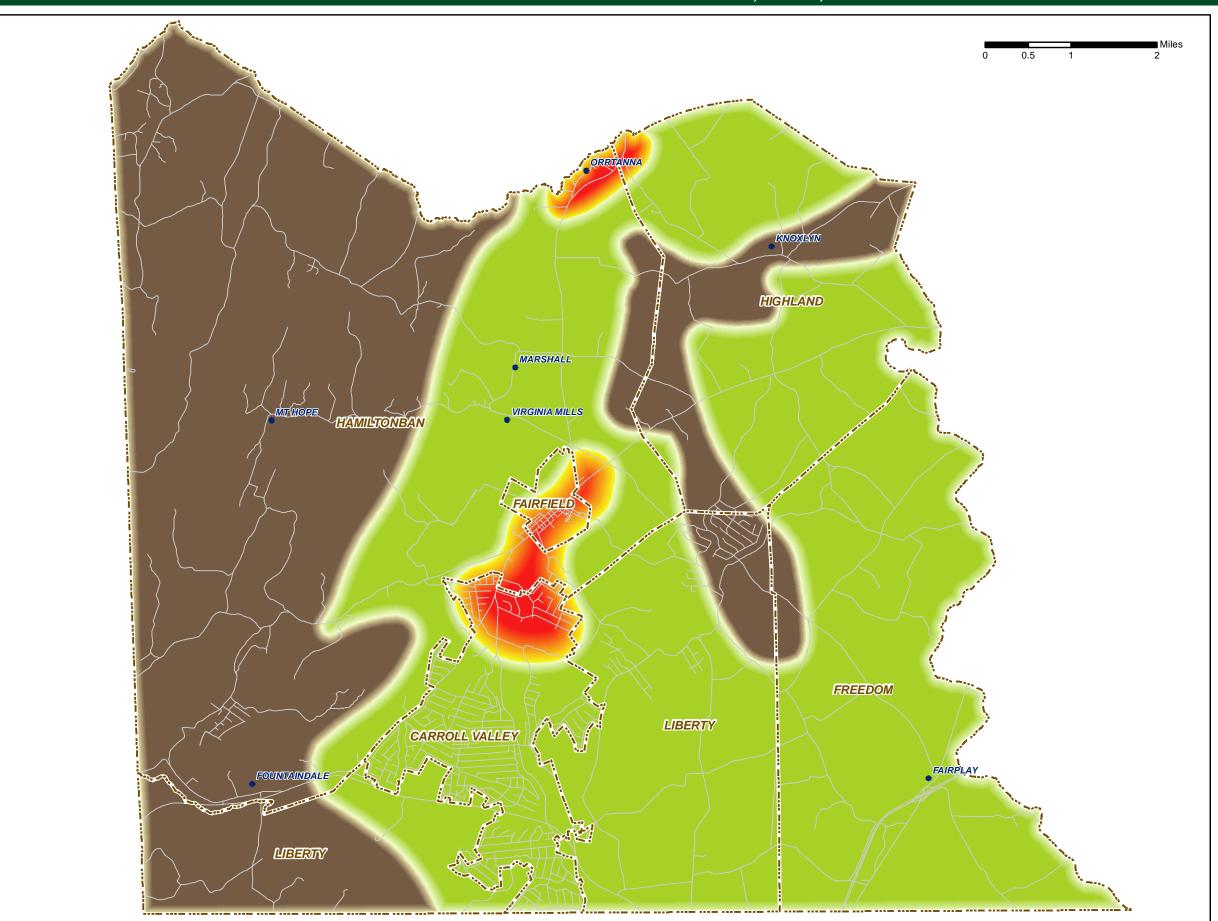
- Village
- / Road
- Abandoned Tapeworm Railroad
- Existing Trail
- Historic Road Corridor
- Scenic Valley Auto Tour
- Municipal Boundary



Source: ACOPD - GIS Division, Adams County Greenways Plan (2010)

March 28, 2013





CRITICAL LANDSCAPES

Legend

Village



Road



Municipal Boundary

Landscape



Natural Landscape



Rural Landscape



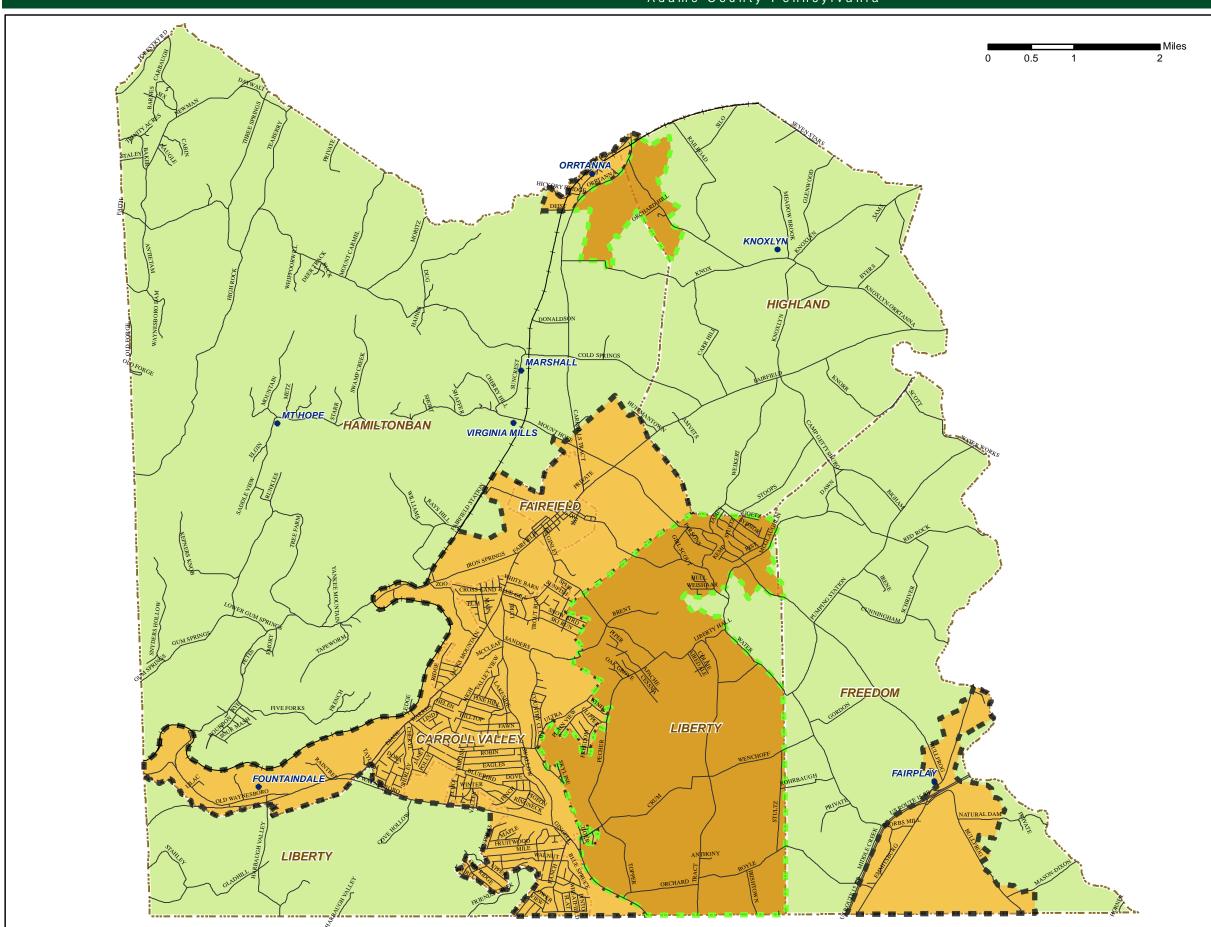
Village Landscape



Source: ACOPD

February 4, 2014





DESIGNATED GROWTH AREAS

Legend

- Village
- ---- Railroad



Areas for Growth and Services - DRAFT



Primary Designated Growth Area



Secondary Designated Growth Area



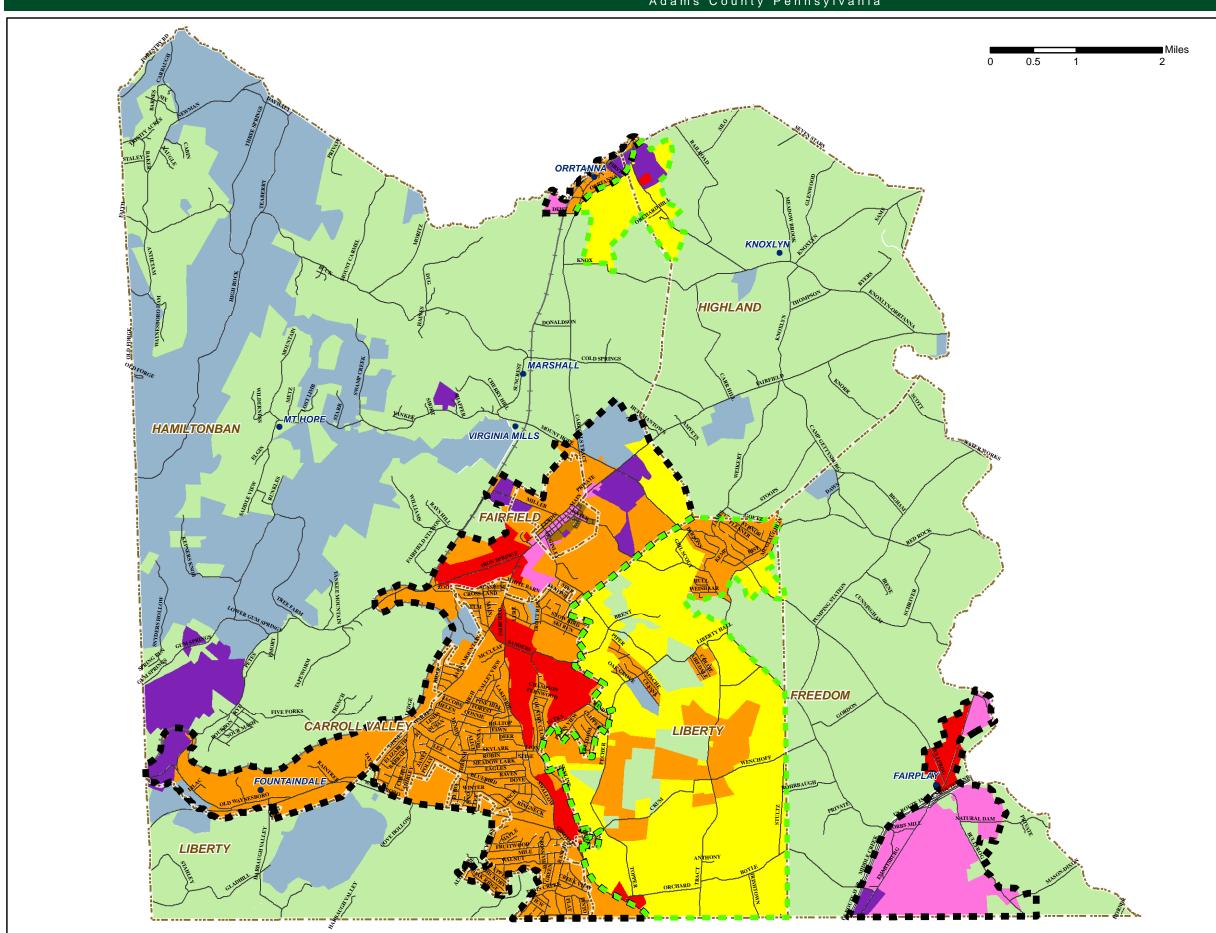
Municipal Boundary



Source: ACOPD - GIS Division, JMT, Steering Committee Input

March 2010 rev. December 2, 2010





FUTURE LAND USE

Legend

- Village
- ✓ Road
- --- Railroad

Areas for Growth and Services

- Primary DGA
- Secondary DGA

Future Land Use

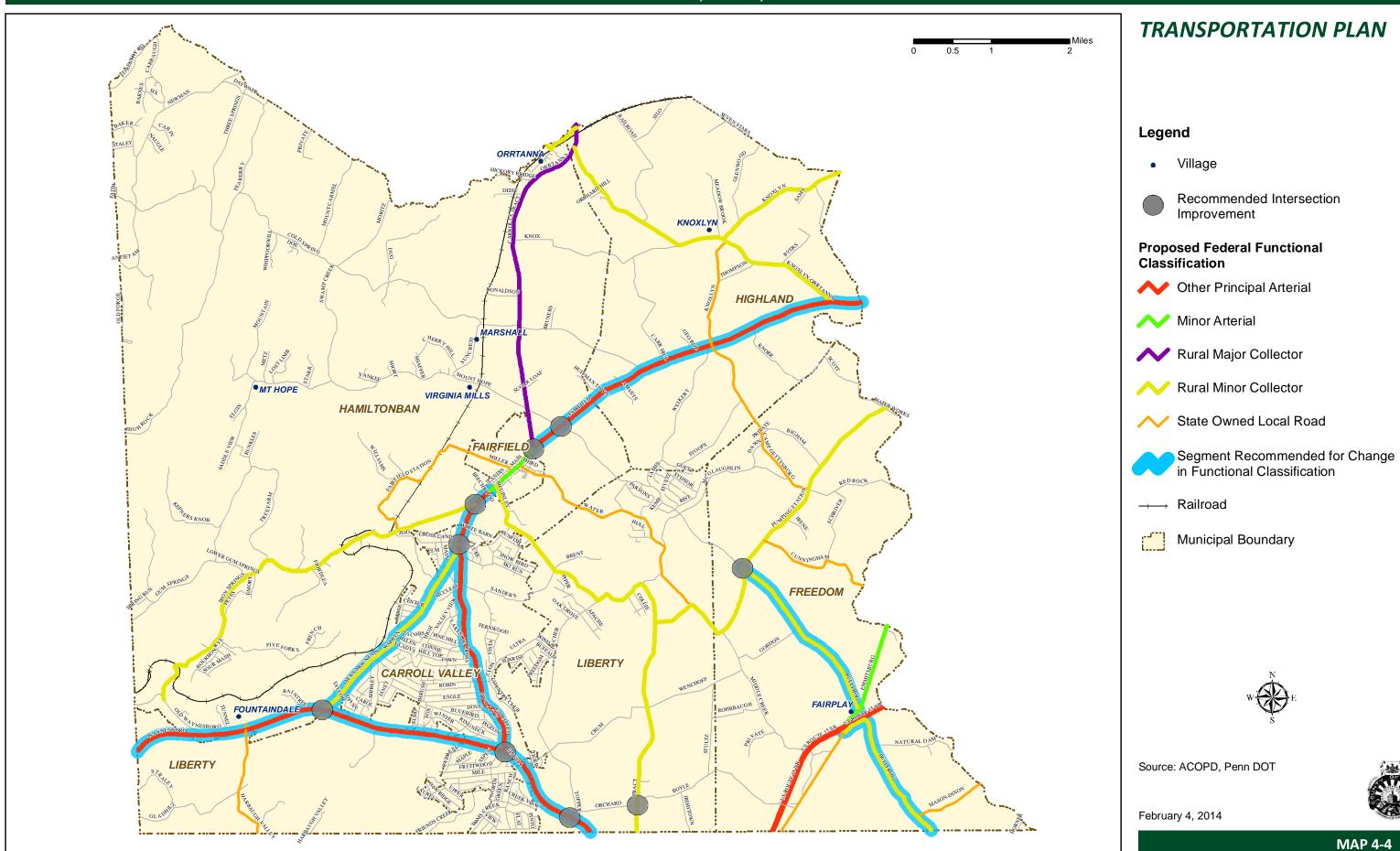
- Rural Conservation
- Low Density Residential (max. 1 unit/3 acre)
- Moderate Residential (1-4 units/acre)
- High Density Residential (min. 4 units/ acre)
- Mixed Use
- Commercial
- Industrial / Quarry
- Recreation (Public/Semi-Public/Non-Public) & State or Federal Land
- Municipal Boundary

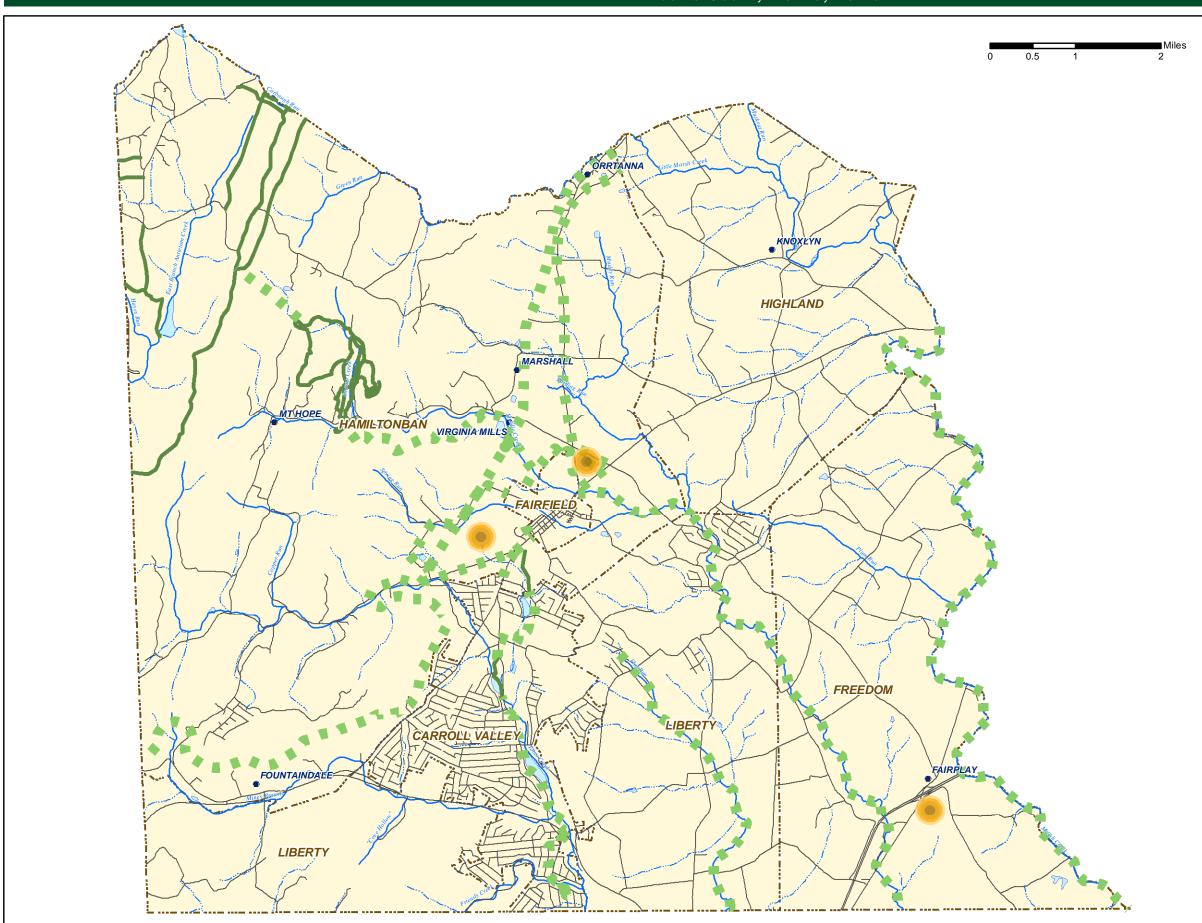


Source: ACOPD - GIS Division, JMT, Steering Committee Input

November 18, 2010, Rev. January 13, 2016







PARK and TRAIL RECOMMENDATIONS

Legend

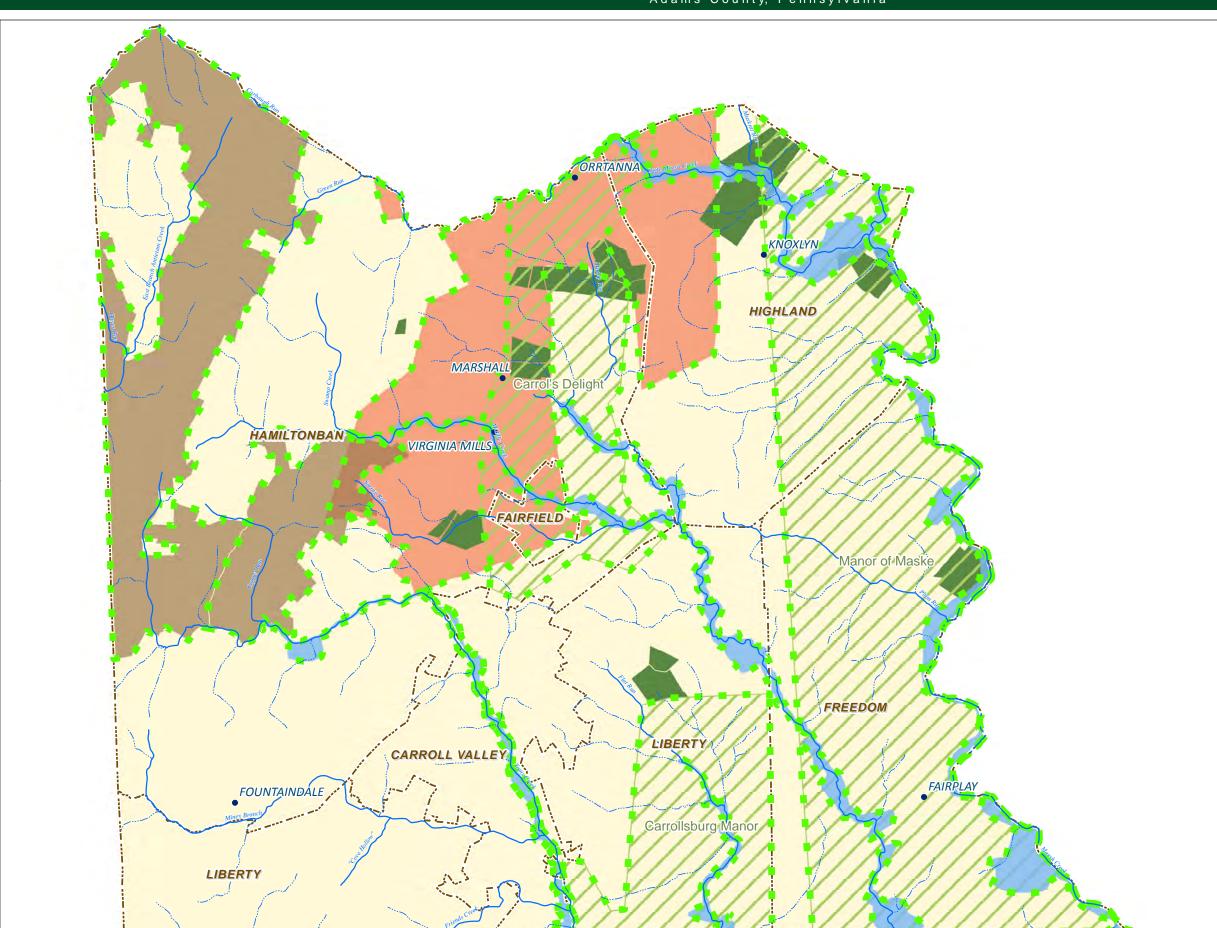
- Village
- /// Road
- Proposed Park
- Potential Trail
- Existing Trail
- --- Stream
- Waterbody
- Municipal Boundary



Source: ACOPD - GIS Division, Hamiltonban Township Official Map



February 3, 2014



PROPOSED GREENWAYS

Legend

Village

Stream

Proposed Greenway

Natural Greenway

Historic Land Grants

Preserved Farm

Fruit Belt

Michaux State Forest

Municipal Boundary



Source: ACOPD - GIS Division, PHMC, Adams County Greenways Plan (2010)

