WASHINGTON COUNTY COMPREHENSIVE PLAN

A Vision Statement for the People of Washington County

The people of Washington County will lead the region and the Commonwealth in working together to encourage a vibrant and prosperous quality of life for people of all ages. We will serve as an example of responsible and sustainable use of land and natural resources. With this as our foundation, we will create a climate that promotes economic diversity and emphasizes education while celebrating our agricultural character, historical significance and scenic beauty.

Adopted November 23, 2005

WASHINGTON COUNTY COMPREHENSIVE PLAN

Historical Washington County

1781

WASHINGTON COUNTY COMPREHENSIVE PLAN

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TECHNICAL FILE

Copies of agendas, meeting minutes, correspondence, data collection efforts, interviews, etc. may be obtained from the technical file held at the offices of the Washington County Planning Commission, 100 West Beau St. Suite 701, Washington, PA 15301.

LISTING OF ACRONYMS

Listing of Commonly Used Acronyms

ACOE	Army Corps of Engineers
DCED	Pennsylvania Department of Community and Economic Development
DCNR	Department of Conservation and Natural Resources
DEP	Department of Environmental Protection
FEMA	Federal Emergency Management Agency
MPC	Pennsylvania Municipalities Planning Code
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
PennDOT	Pennsylvania Department of Transportation
PFBC	Pennsylvania Fish and Boat Commission
PGC	Pennsylvania Game Commission
SALDO	Subdivision and Land Development Ordinance
SWOT	Strengths, Weaknesses, Opportunities and Threats
UNT	Un-Named Tributary
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
WWF	Warm Water Fishery

WASHINGTON COUNTY COMPREHENSIVE PLAN

CHAPTER 1. INTRODUCTION & PUBLIC PARTICIPATION PROCESS

A Vision Statement for the People of Washington County

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CHAPTER 1. INTRODUCTION & PUBLIC PARTICIPATION PROCESS

What is the Washington County Comprehensive Plan?

Properly done, the comprehensive plan will describe how, and at what pace, Washington County desires to develop physically, economically and socially. It will help County Officials to guide future growth and development in the direction of the plan.

The Comprehensive Plan is an important tool that elected officials will use to manage natural resources, preserve prime agricultural land, protect historic buildings, strengthen the economic base, provide efficient public services and improve the quality of the housing stock.

The comprehensive plan is the only public document that describes a community as a whole in terms of its complex and mutually supporting networks. Although the final Comprehensive Plan that Washington County adopts will not be a legally binding document, it will be considered the official statement for how the future of the county should be developed.

The Washington County Comprehensive Plan will be prepared in accordance with the Pennsylvania Municipalities Planning Code (Act 247 of 1968) and the amendments made by Acts 67 and 68 of 2000.

In short, the Washington County Comprehensive Plan will be:

- The general guideline for future development that will promote the public health, safety, morals and general welfare of all residents;
- A promotion of the public interest of all residents;
- A public policy guide to decision making regarding the physical development of the county;
- The collection of strategies for future land use, housing, economic development, natural, cultural and historic features, transportation, community facilities and services and parks, recreation and open space;
- A current statement of the past and present conditions of the county;
- A description of how, and at what pace, the county desires to develop physically, economically and socially;
- An expression of the county's "vision" of its optimally desirable pattern of development for the future; and
- A public document adopted by the County Commissioners.

CHAPTER 1. INTRODUCTION & PUBLIC PARTICIPATION PROCESS

Washington County Comprehensive Plan Public Participation Process Summary

Public participation is the most important part of any planning process and this may be especially true for a countywide comprehensive plan. Washington County implemented an approach to public participation that showcase the commitment to gaining the highest level of public participation possible.

The public participation approach for Washington County began with the Steering Committee and a wide range of stakeholders in the county. Methods such as focus groups, telephone interviews, surveys, newsletters, web site and open house forums were used to identify and prioritize key issues and initiatives deemed important by the community. The analysis of the information gathered was the foundation of the plan's recommendations.

The Washington County Comprehensive Plan uses the information gathered during public involvement efforts as a foundation for the recommendations and action steps included in the Plan. This is a plan for the people of Washington County. With this said an aggressive and concentrated approach to public involvement was developed and implemented to assist the Planning Team in fulfilling the vision and needs of the future of the County, as guided by those that live, work and play in Washington County.

The public involvement efforts implemented during plan development go beyond traditional public involvement efforts. To showcase the commitment in gaining the highest level of public participation possible, Washington County and the Mackin/McCormick Taylor Team formed a partnership with the Pennsylvania Economy League (PEL). PEL is a non-profit group that assisted in spearheading a significant portion of the public participation process, without cost to the County.

The attitudes and opinions of those most impacted by the plan – the citizens, community leaders, business owners, elected officials, and youth of Washington County, must be heard and incorporated into the plan. A three-phase approach was implemented to accomplish the planning team's goals of identifying priorities, developing goals and objectives, and crafting recommendations and implementation strategies. Public involvement activities occurred during critical points in plan development, to ensure that the most accurate information was gathered and that the goals and implementation steps were feasible, and most importantly, reflected the vision of the general public, Steering Committee members and municipal officials.

The first phase of public involvement, referred to below as Round 1, was designed to gather data and information from Steering Committee members, municipal officials and members of the public. The information gathered during this phase of public involvement assisted the planning team in identifying regional concerns and issues including potential areas for development,

preservation and addressing specific issues such as infrastructure. This information would provide a basis for developing the issue statements for each of the nine planning elements.

The second phase of public involvement, Round 2, was designed to assist the project team in identifying expectations and opinions about growth and development, and the overall future of the County. More specifically, during this round of public involvement, the issue statements were refined and development objectives and action steps to fulfill those goals were developed.

The third phase served to present the final plan to the public. Community members were given an opportunity to review the plan's recommendations for a wide range of plan elements, including housing, transportation, community facilities, historic preservation, natural resources, agriculture, and land use. Final comments were received regarding the plans recommendations and future land use plan. These comments were considered in the final revisions of the plan.

Role of Steering Committee

The Washington County comprehensive planning effort was overseen by a Steering Committee, comprising community experts and leaders in the wide spectrum of issues that are addressed by the plan. This group of over 75 individuals was surveyed to help understand the values that the community held in order to provide a foundation for the creation of a county vision. In those areas where the questions related to development patterns, the vision was clear: plan growth and infrastructure to provide for jobs, but do it in such a way as to ensure the preservation of open space and vistas. The Steering Committee embodied a cross-section of citizens representing businesses and industry, civic and social organizations, human service agencies, government bodies, and residents. The mission of the Steering Committee was to engage the residents of Washington County in the comprehensive planning process and to identify and articulate a vision and set of goals for the County. Steering Committee members also served as a liaison to their respective municipality and organizations to share and receive information about plan development. Additionally, members served the Plan by acting as an expert in their particular field, providing input along the way.

The Steering Committee was divided into sub-committees where each member was asked to join a group where their expertise and interest was most beneficial. The sub-committees were appointed according to the nine planning elements; parks and recreation, environment and open space, economic, public infrastructure, facilities and services, housing, historic and culture, transportation, and agriculture.

The work of the Steering Committee and subcommittees assisted in identifying both local and regional concerns, as well as set the foundation for developing consensus for plan recommendations. A list of Steering Committee Members can be found in the Appendices.

CHAPTER 1. INTRODUCTION & PUBLIC PARTICIPATION PROCESS

Steering Committee Meeting #1

The Steering Committee convened for the first time on April 30, 2003 at the Western Area Career and Technology Center from 6:00 p.m. – 8:30 p.m. Fifty-one members of the Committee attended this introductory meeting; 76% of the total number of Committee members.

The purpose of the first organizational Steering Committee meeting was to emphasize the role of the committee members and how their input would assist in plan development, to introduce the members of the planning commission and the planning team, to identify the purpose of the comprehensive plan and how the plan would develop based on public input, to explain the planning elements, and to assist with the development of the Plan's vision. Committee members participated in a visioning exercise to assist in drafting the vision statement for the future of Washington County. The vision statement would be reviewed during each Steering Committee, and would evolve as the plan developed. (The final vision statement is included in the Public Involvement Round #3 section of this report.)

Steering Committee members were each pre-assigned to focus groups, where they were given the opportunity to concentrate their discussion on a particular key area of county investment and policy setting. Each focus group was asked to develop three goals that the corresponding planning element should fulfill and address in the Comprehensive Plan.

Steering Committee members assisted the planning team with developing and fulfilling outreach goals, and identifying methods to reach the people of Washington County and encourage their engagement in the planning process. Steering Committee members were encouraged to attend the upcoming public meetings, distribute the public survey and also the distribute flyers announcing the public meeting(s). Additionally, members were provided with sample text regarding the Plan for publication in announcements and newsletters to add in their organizations' bulletins, newsletters, etc.

In addition to distributing the survey, Steering Committee members were also asked to complete the survey and to contribute their thoughts about the quality of life in Washington County. A total of 34 surveys were returned.

When asked how they felt about the overall economic opportunities available in the county, the members of the Steering Committee responded that the opportunities were fair (40%) or good (24%). Their impression of the County was that it was growing, but at the same time, the population was aging, in part due to a loss of young people.

When asked what could be done to improve the situation, they responded that planned, strategic investments were called for, and that investments in existing communities and industrial sites were at the top of the list. They were eager to see new economic opportunity and the influx of vitality and diversity that would accompany it. Overall, the key to the future is planned economic development. The members of the Steering Committee felt strongly that there was

only one way that this agenda could be accomplished effectively – the community needed to work together to build the future. When asked what was standing in the way of achieving the vision, they responded with a lack of municipal cooperation (23%), lack of leadership (21%), and inefficient growth and lack of planning (16%). Clearly, the group felt that the County has strong inherent assets and good economic potential that they wished to see managed effectively. They are looking for leadership that can help drive planning and cooperation.

Public Involvement Round #1

The first round of public involvement for the development of the Washington County Comprehensive Plan was conducted to educate the public about the Plan and the planning process, and also to gather information about regional issues and concerns that the people of Washington County feel is important for a successful future. This round of public involvement was designed to collect feedback critical to each of the nine planning elements. The information gathered during the first round of public involvement became the foundation for the Plan's development.

Website Development

In August 2003, a project specific website (www.washingtoncountyplan.com) was launched to provide steering committee members, municipal officials and the general public with easy access to the most current information related to the Plan. A press release was distributed to local media announcing the launch of the website. Initially, the website provided an overview of the comprehensive planning process, the planning team, and Washington County data and resources. As the Plan, evolved different elements were posted on the website including an electronic survey that was developed during the first phase of plan development (see Public Survey), press releases and news articles, the development objectives, goals and eventually action steps, and results of public involvement meetings. Contact information is provided on the website so that any member of the public could address the planning team with questions related to the planning process.

Public Survey

A public survey was distributed during the first round of public involvement. The purpose of the survey was to solicit information from citizens of Washington County regarding quality of life, and their thoughts about Washington County and what improvements they would like to see in the future; ultimately becoming a part of the Comprehensive Plan to assist in guiding the future of the county. A total of 60,000 surveys were distributed throughout the county via newspapers, libraries, municipalities, Washington County Tourism Promotion Agency, and the Washington County Comprehensive Plan Steering Committee. A total of 4,249 surveys were returned, of which 3,995 were from Washington County residents. The surveys were designed to provide specific data that would assist the project team in drafting the Comprehensive Plan.

CHAPTER 1. INTRODUCTION & PUBLIC PARTICIPATION PROCESS

The Voices of the Community

To help develop the plan, input was sought from a number of sources, including the citizens at large, community leaders, business leaders, elected officials, and new and recent college graduates. Nearly four thousand citizens of Washington County responded to a survey that was performed to help provide guidance to the decision-making processes associated with the creation of the Washington County Comprehensive Plan. About one third of the respondents are over the age of 65, and 53% are over the age of 55. The answers to the survey accordingly reflect the opinions of this age group.

When asked about what the two most important issues are facing Washington County over the next ten years, the overwhelming response was a single answer: jobs and economic opportunities, with over half of the respondents selecting it, clearly it is the top of mind issue for county residents.

Figure 1: Public View on the Most Important Issues Facing Washington County Over The Next Ten Years

Region	Jobs and economic opportunities	Open space and the environment	Transportation	Agriculture	Recreational opportunities	Housing	Government services	Cultural and historical assets
North	**41%**	**13%**	10%	13%	7%	8%	5%	4%
Southwest	**43%**	9%	8%	**15%**	8%	8%	5%	4%
South Central	**44%**	**10%**	9%	7%	10%	9%	6%	4%
North Central	**40%**	**17%**	13%	7%	7%	6%	5%	5%
North East	**48%**	6%	**11%**	6%	6%	9%	9%	5%
South East	**44%**	10%	**12%**	9%	8%	6%	7%	5%
Outside Washington County	**42%**	10%	**13%**	10%	8%	6%	5%	5%
Washington County	**43%**	**11%**	11%	8%	8%	8%	6%	5%

*Percentage of Respondents Indicating Issue as Most Important
Source: Tabulation of 3,772 responses to the question: "What do you feel are the two most important issues facing Washington County over the next ten years (Please select up to two.)" Top issues are indicated in bold. Responses from those who indicated that they did not live or work in Washington County are shown in the "Outside Washington County" category, but are not included in the County total.

The responses to the question about their reaction to the rate of development in their community, as one might expect, were region specific. Those in the Northeast and Southeast, communities along the Mon River, generally felt that development was proceeding too slowly, whereas those in the North Central region (Peters, Cecil, North Strabane Townships etc.) felt that development was proceeding entirely too quickly (See Figure 2). The remainder of the County seemed satisfied with their growth rate. All were generally satisfied to varying degrees by the nature of the development.

When asked how the County should spend its limited Economic Development resources, the highest scoring answer across all regions of the County was "Encouraging development where it is most likely to create new family sustaining jobs." A strong second was "Making Washington County more business friendly through reducing taxes and giving financial incentives" (See Figure 3). There was also strong acknowledgement of the value of agriculture in the County, with 33% of respondents saying that helping farmers keep their farms active was the most important support the County could give its agricultural community (See Figure 4).

Figure 2: Public Views on the Rate and Quality of Development in Washington County

Would you say that the rate of new development (such as new shopping centers housing development industrial parks etc.) in your community is ...

Region	Much to fast	A little fast	About Right	A little slow	Way too slow	Not sure / don't know
North	18%	13%	**27%**	12%	26%	3%
Southwest	19%	19%	**33%**	9%	13%	6%
South Central	23%	27%	**32%**	10%	6%	3%
North Central	**35%**	29%	25%	7%	3%	2%
North East	8%	8%	21%	24%	**35%**	5%
South East	10%	11%	24%	19%	**31%**	4%
Outside Washington County	17%	16%	**22%**	14%	18%	13%
Washington County	21%	20%	**27%**	13%	16%	4%

How satisfied are you with the kind of development that is occurring in your community?

Region	Much to fast	A little fast	About Right	A little slow	Way too slow	Not sure / don't know
North	18%	13%	**27%**	12%	26%	3%
Southwest	19%	19%	**33%**	9%	13%	6%
South Central	23%	27%	**32%**	10%	6%	3%
North Central	**35%**	29%	25%	7%	3%	2%
North East	8%	8%	21%	24%	**35%**	5%
South East	10%	11%	24%	19%	**31%**	4%
Outside Washington County	17%	16%	**22%**	14%	18%	13%
Washington County	21%	20%	**27%**	13%	16%	4%

Satisfaction With Development By Perceived Rate of Development

	Satisfaction With Development						
Rate of Development	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	Not sure/ don't know	Total
Much to fast	2%	13%	31%	**32%**	20%	3%	21%
A little fast	5%	**39%**	35%	14%	4%	2%	20%
About Right	12%	**45%**	29%	9%	2%	3%	**27%**
A little slow	4%	17%	**43%**	28%	5%	3%	13%
Way too slow	1%	3%	14%	39%	**40%**	3%	16%
Not sure / don't know	3%	9%	37%	9%	8%	35%	4%
Total	**5%**	**26%**	**30%**	**22%**	**13%**	**4%**	100%

Sources: Tabulation of 4,011 survey responses. Top responses are indicated in bold. Responses from those who indicated that they did not live or work in Washington County are shown in the "Outside Washington County" category, but are not included in the County total.

Figure 3: Public Views on How to Allocate Limited County Resources on Economic Development in Washington County

Region	Encouraging development where it is most likely to create new family-supporting jobs	Making Washington County more business friendly through reducing taxes and giving financial incentives	Encouraging development and job growth in all communities that want it	Supporting businesses and shops in established community downtown areas	Supporting small businesses	Job training and education
North	**22%**	**18%**	17%	13%	18%	11%
Southwest	**25%**	**21%**	14%	11%	15%	15%
South Central	**27%**	**20%**	13%	14%	13%	14%
North Central	**24%**	**20%**	13%	14%	16%	13%
North East	**27%**	**20%**	14%	18%	11%	9%
South East	**26%**	17%	**18%**	11%	15%	14%
Outside Washington County	**23%**	**21%**	16%	16%	12%	13%
Washington County	**25%**	**19%**	14%	14%	14%	13%

Source: Tabulation of 3,877 survey responses. Top responses are indicated in bold. Responses from those who indicated that they did not live or work in Washington County are shown in the "Outside Washington County" category, but are not included in the County total.

Figure 4: Public Views on How to Allocate Limited County Resources on Agricultural Needs in Washington County

Region	Help farmers keep their farms active	Support and advertise sale of local goods and local farmers markets	Educate and attract the next generation of farmers	Extend water and sewer service to support the agriculture industry	Help farmers become more profitable by growing higher-value products	Create one central location for agricultural services in the County
North	**31%**	**19%**	14%	18%	11%	6%
Southwest	**33%**	**18%**	15%	15%	13%	7%
South Central	**33%**	**22%**	14%	13%	12%	5%
North Central	**35%**	**21%**	16%	13%	11%	4%
North East	**33%**	**22%**	15%	14%	10%	6%
South East	**33%**	**20%**	16%	15%	11%	5%
Outside Washington County	**33%**	**22%**	17%	13%	9%	6%
Washington County	**33%**	**21%**	15%	14%	11%	5%

Source: Tabulation of 3,788 survey responses. Top responses are indicated in bold. Responses from those who indicated that they did not live or work in Washington County are shown in the "Outside Washington County" category, but are not included in the County total.

Figure 5: Public Views on Areas in the County to Focus Development and Job Growth

Region	In and around the City of Washington	Mon Valley	Along I-70	Rural areas	Along I-79	Along SR 22 and SR 18
North	23%	4%	6%	**23%**	10%	**35%**
Southwest	**32%**	6%	**25%**	22%	10%	5%
South Central	**49%**	7%	**15%**	10%	14%	4%
North Central	**27%**	11%	15%	12%	**29%**	5%
North East	6%	**55%**	**24%**	12%	3%	0%
South East	11%	**36%**	**26%**	18%	8%	1%
Outside Washington County	**25%**	**19%**	18%	17%	14%	7%
Washington County	**27%**	**19%**	18%	15%	14%	7%

Source: Tabulation of 3,876 survey responses. Top two responses to the question: "Where..." are indicated in bold. Responses from those who indicated that they did not live or work in Washington County are shown in the "Outside Washington County" category, but are not included in the County total.

Figure 6: Public Views on Where Investment in Government Services Should Go Over the Next 10 Years in Washington County

Region	More cooperation among communities to plan for future development and growth	Ensure that control over where and how development occurs stays with local communities	Combine local fire police and EMS services where appropriate	Increase the use of zoning and code enforcement	More county provided services (such as planning code enforcement zoning etc.)
North	**29%**	**30%**	27%	7%	8%
Southwest	**33%**	**30%**	24%	7%	6%
South Central	**32%**	24%	**29%**	9%	6%
North Central	**28%**	**29%**	26%	11%	6%
North East	**34%**	**27%**	24%	9%	6%
South East	**32%**	24%	**28%**	8%	9%
Outside Washington County	**29%**	**28%**	23%	10%	10%
Washington County	**31%**	**26%**	**26%**	9%	7%

Source: Tabulation of 3,809 survey responses. Top two responses are indicated in bold. Responses from those who indicated that they did not live or work in Washington County are shown in the "Outside Washington County" category, but are not included in the County total.

Municipal Engagement Round #1

Officials representing each municipality were invited to attend the first municipal officials meeting on May 28, 2003. Out of the County's 67 municipalities, 23 municipalities were represented - a total of 49 attendees. The purpose of the meeting was to gather input from the municipal officials regarding issues that they felt should be important to Washington County, and to get feedback on how they felt the county should focus on issues pertaining to the nine planning elements for the next 10 years. Municipal officials were separated into nine focus groups, one group for each of the planning elements, and were asked to brainstorm the issues regarding that plan element and how they felt the issue should be addressed.

The outcome of this feedback would result in assisting the planning team to identify key issues and initiatives that should be addressed, and ultimately, provided the foundation for the goals and objectives that would be developed based on this input. Municipal officials were also encouraged to attend the public meetings and assist in spreading the word about the upcoming meetings.

When asked what the top economic challenges facing their communities, they replied deteriorating infrastructure; a declining, aging population; tax base erosion through loss of business; and the need for planned economic development. They claimed that the development that was occurring was largely uncontrolled, and there was a need for rehabilitation of old industrial areas and construction of new parks to provide needed jobs.

CHAPTER 1. INTRODUCTION & PUBLIC PARTICIPATION PROCESS

The communities are looking to the County to act as a leader to bring in new business, keep taxes low to attract business, foster small business development, create a business friendly environment, and provide an adequate transportation system to support the development. They also called for a continuation and expansion of main street revitalization. They said that most small towns need attention in the County. Building reuse, façade improvements, and increased main street funding would go far toward restoring wealth to the older communities. They also saw the County airport as an underutilized asset.

The municipal leaders also supported the diversification and expansion of the employment base as well as workforce and educational programs to provide the correspondingly trained workforce. They called for the County to lead the way in attracting, keeping taxes low, and fostering small business development.

Finally, they acknowledged the advantages of creating joint economic development plans across multiple municipalities.

Public Meetings Round #1

In order to gather regional opinions about the County, six sub-regional meetings were conducted during the first round of public involvement. The sub-regional approach was used to make it more convenient for citizens to attend a meeting that was close to where they work or live, and ultimately to ensure that when completed, the Plan represented regional opinions and issues throughout the County. As a result, each regional meeting was well attended and although the general themes of concerns were consistent, the priorities of these themes for each region differed. (For a complete summary of Round 1 Public Meetings please refer to the Appendix of this report.) A “Live and Work” map was available at each of the six meetings. Attendees were asked to identify where they live or work in Washington County. At the conclusion of the first round of public meetings, the results of the “Live and Work” map reflect that most attendees live or work in a close proximity to the sub-regional meeting that they attended.

Press releases were distributed to local media each week during the public meetings to announce the public meeting to members of the public. Additionally, public meeting flyers were posted by Steering Committee members to assist in advertising the public meetings.

The purpose of the meetings was to introduce the planning team to provide the public with an understanding of the planning process, and to gain feedback on specific issues including culture, the environment, development, agriculture, recreation and services.

Attendees divided themselves into breakout groups according to which issue they were most interested in discussing. Attendees also identified positive and negative effects of their subject on the county. At the conclusion of each brainstorming session, each group identified three issues related to their topic that should be addressed in the Plan.

Each meeting was conducted from 6:00 – 8:30 p.m. The meetings were held as follows (the number of attendees at each meeting is included in parenthesis next to the meeting region):

Northwest Region (70)
June 3, 2003
Pepsi Roadhouse, Hanover Township

Southwest Region (20)
June 5, 2003
Buffalo Township Municipal Building, Buffalo Township

South-Central Region (74)
June 9, 2003
Washington & Jefferson College, Washington

North-Central Region (32)
June 10, 2003
Peters Township Library, Peters Township

Northeast Region (23)
June 17, 2003
Carroll Township Social Hall, Carroll Township

Southeast Region (23)
June 19, 2003
Intermediate Unit I, California, PA

PUBLIC INVOLVEMENT ROUND TWO

Steering Committee Meeting #2
The second round of public involvement began with a Steering Committee meeting held on September 22, 2003 at the Western Area Career and Technology Center. A total of 32 members attended the meeting. Steering Committee members were divided into small working groups and were asked to review the county development objectives that were established for each of the nine planning elements during the first round of public involvement, and to develop primary action steps to achieve the objectives. Members were also asked to review the development objectives to ensure that they accurately represented priorities for the County.

Municipal Officials Meeting #2
The second municipal officials' meeting was conducted on October 8, 2003 at the Washington County Fairgrounds. Prior to attending the meeting, a resolution was distributed to each official. Officials were asked to review and sign the resolution, which indicated their interest in being involved in plan development and adoption.

During the meeting, municipal officials' were asked to identify areas of preservation, deficiencies and growth for their municipality using a base map of the County. This information assisted the planning team in identifying potential areas for economic development, while other areas were identified for preservation. This information also provided the planning team with particulars about existing infrastructure, historical sites, agriculture areas, natural resources, mining sites, etc. Additionally, officials were asked to prioritize issue statements for each planning element. Officials were provided with a list of the statements prior to the meeting to assist with their involvement during the meeting. Based on the feedback received during the first round of public involvement, development objectives were designed to meet the goals established by members of the Steering Committee and municipal officials. Officials were asked to identify what they felt should be the top three priorities for each of the planning elements. Municipal officials also completed action step ballots where they provided actions steps to reach each of their prioritized issue statements.

A community imaging exercise was incorporated during the meeting. This exercise included a series of images from throughout the County that related to various land uses. Attendees were provided a scorecard and were asked to score each of the images based on if they thought the image was positive, neutral or negative. The results of this exercise provided the planning team with a visual representation of what municipal officials feel is important to improve the overall quality of life in the County, ultimately to be reflected in the Comprehensive Plan.

Public Meetings Round #2

During this round of public meetings, citizens were asked to prioritize the goals developed for each of the nine planning elements, using the same information provided during the municipal officials meeting held on October 8, 2003. The feedback gathered during this round of meetings assisted the planning team in identifying what aspects of the County are most important to those that live in the County. Action step ballots were also available for attendees to complete. Suggested action steps, if applicable, would be implemented into the plan later and reviewed by Steering Committee members.

All of the public meetings during this round were conducted from 3:00 – 7:30 p.m. The meetings were held as follows (the number of attendees at each meeting is included in parenthesis next to the meeting region):

- Northwest (11)
  October 14, 2003
  Slovan VFW Barto Post 6553, Run Street, Smith Township

- Southwest (11)
  October 16, 2003
  Buffalo Township Municipal Building, 400 Buffalo Center Lane, Buffalo Township

- Northeast (24)
  October 21, 2003
  Mon Valley Career and Technology Center, One Guttman Boulevard, Charleroi

- North-Central (15)
  October 23, 2003
  North Strabane Social Hall, 2550 Washington Road, North Strabane Township

- Southeast (24)
  October 28, 2003
  Performance Center, Natali Student Center, California University of Pennsylvania, California

- South-Central (38)
  October 29, 2003
  Ballroom, Rossin Campus Center, Washington & Jefferson College, Washington

PUBLIC INVOLVEMENT ROUND 3

Steering Committee #3
In March 2004, a newsletter was distributed to members of the Steering Committee to update them on plan development and report back on what the planning team heard during the first round of public involvement, including results from the public survey and the public meetings. The newsletter also included an advertisement announcing the third Steering Committee meeting.

The third Steering Committee meeting was conducted on May 17, 2004 at Western Area Career and Technology Center. A total of 33 members attended the meeting. Commissioner Bracken Burns also attended the meeting. Steering Committee members reviewed the prioritized development objectives for each of the planning elements. The objectives were developed based on input received throughout the first round of public involvement. Steering Committee members were divided into nine focus groups, a group for each planning element, and were asked to brainstorm possible action steps to reach each of the objectives. Although the overall responsibility for implementation and guiding the course for future investments lies with the County, it was necessary to ensure that regional issues are addressed in the Plan.

Steering Committee Meeting #4

The final Steering Committee was held on Monday, June 06, 2005 from 4:00 p.m. – 6:00 p.m. at the Western Area Career and Technology Center. The presentation given to the steering committee included an overview of the planning process, the results of the public participation, and a summary of the plan's recommendations. The steering committee was given the opportunity to provide final review and comment on the draft Comprehensive Plan prior to public review.

Public Meetings Round #3

Three public meetings were held during this phase. Plan maps and recommendations were placed on presentation size posters to create visual interest and an ease of understanding. The meetings were held from 3:00 PM until 6:00 PM in an open house format. Presentations were given and staff was on hand to provide one-on-one assistance to community residents and elected officials.

- Meeting #1
  Tuesday, June 21, 2005
  Charleroi Area High School, Charleroi
- Meeting #2
  Wednesday, June 22, 2005
  Courthouse Square, 100 West Beau Street, Washington
- Meeting #3
  Thursday, June 23, 2005
  Burgettstown Area Elementary Center, Burgettstown

Municipal Officials Meeting #3
The final municipal officials' meeting was conducted on September 01, 2005 at the Washington County Courthouse. A presentation was made to allow the officials an opportunity to understand the planning elements, county responsibility for land use planning, and the Comprehensive Plan recommendations. Officials were able to provide comments and input as to the plan's consistency to local planning efforts.

Live and Work Map Exercise Analysis

The Live and Work Map (Figure 5.1) provides a spatial analysis of travel patterns for county residents who attended the first round of public meetings during June of 2003. Each participant was asked to identify their place of residence and employment (if employed) on a Penn DOT Type 10 Map. As shown in Figure 5.1: Live and Work Map (2003), red dots were used to represent place of residence while the blue dots were used to represent place of employment. The exercise was conducted to increase the understanding of where county residents work in relation to their place of residence and summarize travel patterns. This exercise was replicated at each of the six (6) sub-regional meetings conducted during the first round of public involvement. As shown in Figure 5.2: Washington County Sub Region Map (2003), the county was divided in six regions at which one public meeting was held over a period of four weeks in June of 2003.

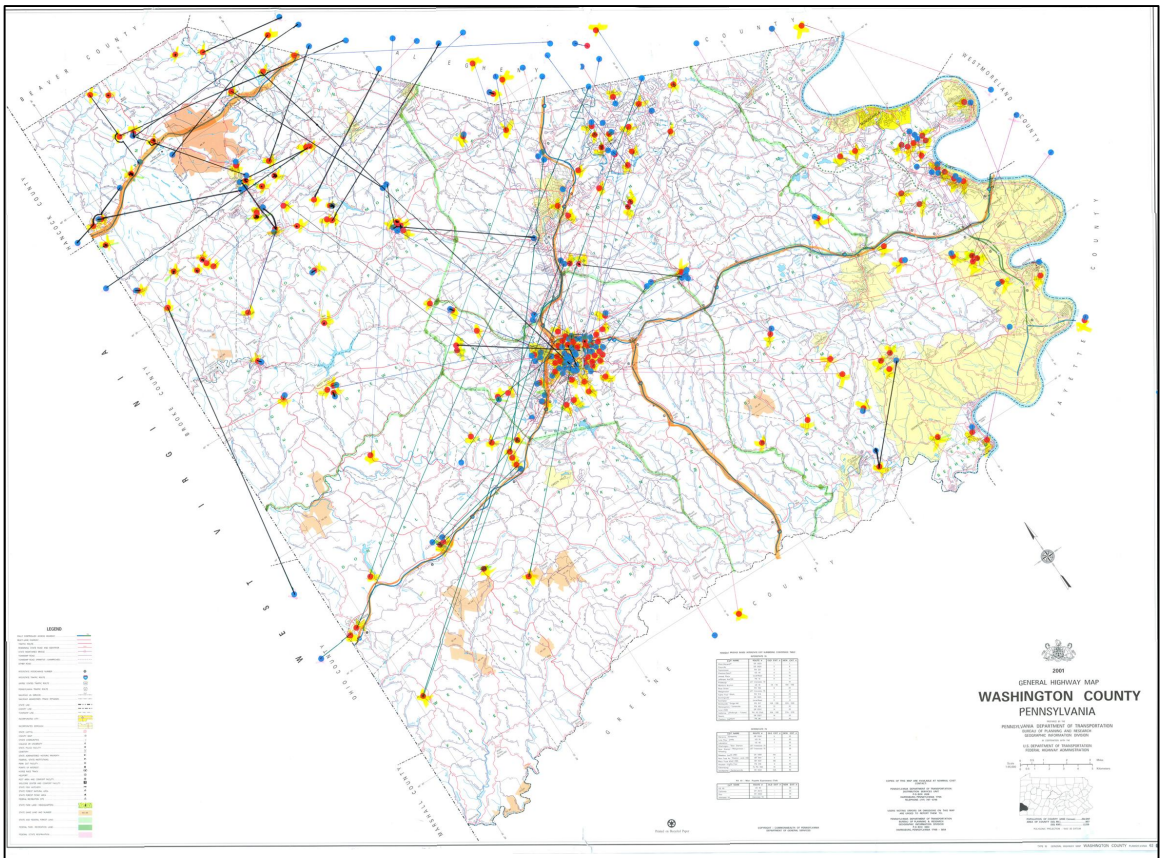

Figure 5.1: Live and Work Map (2003)

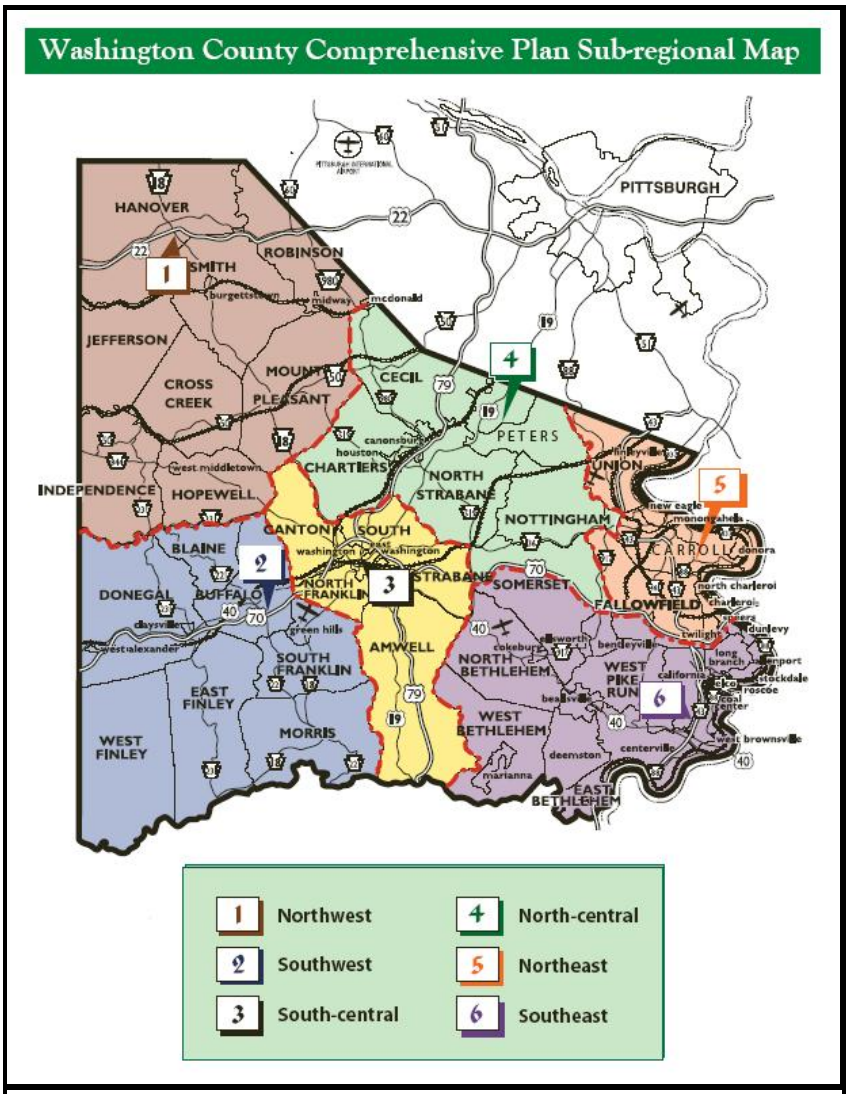

Figure 5.2: Washington County Sub Region Map (2003)

Attendee Representation

Two hundred forty-two people attended the first round of public meetings, of which, 176 participated in the exercise. Of the 176 attendees, 95 percent identified their residence as within Washington County. Sixty-nine percent worked in the County while 14 percent identified themselves as retired. Seventeen percent of participants listed their employment as being outside of Washington County. Allegheny County was listed as the place of employment for 70 percent of the 17 percent persons who were employed outside of Washington County.

The majority of persons who work outside of their county of residence live in the north and central parts of Washington County. Forty percent of participants who work outside of

Washington County reside in the Northwest Region, 23 percent are from the North-Central region, and the remaining 37 percent reside in various locations throughout the remainder of Washington County.

The exercise reflects high participation rates from residents in the Northwestern Region (30%) with the South-Central region close behind at 26 percent. The Southwestern region had a participation rate of 9 percent, while the North-Central region had 14 percent, the Southeastern region had 12 percent, and the Northeastern region had 9 percent.

Identifying Travel Patterns
The live and work map provides a graphic depiction of travel patterns for employed residents of Washington County. Based on the information provided during this exercise it can be determined that the persons who attended the first round of public meetings most often travel to work in and around the City of Washington. As indicated previously, residents in the northern section of the county travel most often to Allegheny County for employment.

With this data, a spatial projection can be made to predict which particular roadways citizens are most likely to travel to reach common destinations. These roadways are important for their use to access population centers and are identified as Significant Roadways. With two interstates serving Washington County, both Interstate 70 and Interstate 79 should be considered significant transportation routes for all regions. Significant roadways are discussed for each of the six sub-regions as follows:

1. Northwest Region
For the Northwestern Region, Pa Route 18 is significant roadway and is used most often to access employment and shopping destinations. PA Route 18 provides access to the City of Washington and Beaver County. US Route 22 and PA Route 50 were also identified as significant transportation routes which most often are used to travel to Allegheny County and the City of Pittsburgh.

Major Roadways Traveled to City of Washington: PA Route 18
Average Distance Traveled: 18.5 miles

Major Roadways Traveled to Allegheny County: US Route 22, PA Route 50
Average Distance Traveled: 26 miles

Major Roadways Traveled to Beaver County: PA Route 18
Average Distance Traveled: 34 miles

2. Southwest Region
Pa Route 18 is also a significant roadway for residents in the Southwestern Region. This transportation route provides access to the City of Washington, Allegheny County and Greene

County. Interstate 70 is frequently used to access the regional transportation network and major population centers and should be considered a significant roadway.

Major Roadways Traveled to City of Washington: I-70, US Route 40, PA Route 18
Average Distance Traveled: 12 miles

Major Roadways Traveled to Allegheny County: I-70 to I-79
Average Distance Traveled: 40 miles

Major Roadways Traveled to Greene County: PA Route 18, PA Route 231
Average Distance Traveled: 15 miles

3. North-Central Region

Two roadways are identified significant to the North-central Region—I-79 and US Route 19. These two roadways parallel each other and provide access to the City of Washington County, Allegheny County and Greene County.

Major Roadways Traveled to City of Washington: I-79, US Route 19
Average Distance Traveled: 6 miles

Major Roadways Traveled to Allegheny County:I-79, US Route 19
Average Distance Traveled: 29 miles

4. South-Central Region

Both interstates serving Washington County should be considered significant transportation routes for all regions, but especially for the South-central Region. Other significant roadways include US 19 and US 40. US Route 19 provides access to the City of Washington, Allegheny County and Greene County.

Major Roadways Traveled to City of Washington: I-79 to I-70, US Route 19, PA 136, US Route 40
Average Distance Traveled: 3 miles

Major Roadways Traveled to Allegheny County: I-79, US Route 19
Average Distance Traveled: 30 miles

Major Roadways Traveled to Neighboring Greene County: I-79, US Route 19
Average Distance Traveled: 15 miles

5. Northeast Region

The Northeast Region relies on Interstate 70 to access the City of Washington, County of Westmoreland, and travel east to West Virginia. PA Route 136 is a significant roadway that provides local access to the City of Washington and Westmoreland County. PA Route 88 is also

a significant roadway providing local access to areas along the Monongahela River, Allegheny County and Greene County. PA Route 43-a toll road-also serves a significant roadway for the Northeastern section of Washington County.

Major Roadways Traveled to City of Washington: PA Route 136, I-70
Average Distance Traveled: 12.5 miles

Major Roadways Traveled to Allegheny County: PA Route 837, PA Route 88, PA Toll Road 43
Average Distance Traveled: 30 miles

Major Roadways Traveled to Westmoreland County: I-70, PA Route 136
Average Distance Traveled: 10 miles

6. Southeast Region

Significant roadways in the southeast region include both interstates and US Route 40. As a historically significant roadway, US Route 40 has long been associated with travel patterns in the county and continues to provide local access to population centers. PA Route 43 serves a significant roadway for the Southeastern section of Washington County.

Major Roadways Traveled to City of Washington: US Route 40, I-70, PA Toll Road 43 to I-70
Average Distance Traveled: 15.5 miles

Major Roadways Traveled to Allegheny County: US Route 40 to I-79, PA Toll Road 43 to I-70 to I-79
Average Distance Traveled: 45 miles

Major Roadways Traveled to Green County: I-79
Average Distance Traveled: 10 miles

Major Roadways Traveled to Neighboring Fayette County: PA Route 88, US Route 40

CHAPTER 1. INTRODUCTION & PUBLIC PARTICIPATION PROCESS

Contiguous Municipalities Statement

The Pennsylvania Municipalities Planning Code (MPC), Article III - Section 301 (5) mandates that comprehensive plans include a statement indicating that the existing and proposed development of the county is compatible with the existing and proposed plans of surrounding counties. Also, if there are any inconsistencies in transition areas at the county boundaries, the statement should include the measures being taken to provide buffers or other transitional devices.

Washington County is bordered by Allegheny County and Beaver County to the north, Fayette County and Westmoreland County to the east, Greene County to the South and the West Virginia counties of Brooke, Hancock, Marshall and Ohio to the west. With most of these counties sharing the same regional economy, the impacts of future developments may be felt outside of their respective borders and in neighboring counties. Completed county comprehensive plans (Beaver, Fayette, and Westmoreland) were reviewed to ensure that the recommendations contained in the Washington County Comprehensive Plan were in concert with that those contained in the completed plans.

The Washington County Comprehensive Plan promotes the concepts of regional planning and intergovernmental cooperation and the Smart Growth Principles established by the Commonwealth. The goals and recommendations of the plan have been developed so as to not have an adverse affect on surrounding counties as well as the municipalities within the county. A discussion of the comprehensive plans for these counties can be found in Chapter 10.C Land Use. The Washington County Commissioners, Planning Commission, Planning Commission Staff and the comprehensive plan steering committee believe that the goals and objectives of this plan are in concert with those of adjacent counties. The plan was submitted to each of the adjacent counties and all of the Washington County School Districts. There were no objections by these entities to the recommendations stated in this plan, and the plan is to be adopted by resolution as required by the MPC, Article III – Section 302.

In addition to ensuring consistency with the surrounding counties, the Washington County plan has been developed to be consistent with adopted municipal comprehensive plans in the county. Adopted plans were collected and reviewed to incorporate into the overall county plan and a discussion of those recommendations for each municipal plan can also be found in Chapter 10.C Land Use. The Washington County Planning Commission, in accordance with the MPC, will prepare and publish advisory guidelines to promote general consistency with the adopted county comprehensive plan.

CHAPTER 1. INTRODUCTION & PUBLIC PARTICIPATION PROCESS

Interrelationship Among Various Plan Components

It is the purpose of the comprehensive plan to ensure that the development of a community, or communities, is orderly and consistent with the identified goals of the plan. In order to function properly, the plan must serve as an overriding guide for future development. As each element of the comprehensive plan is interrelated, substantial changes to any of the elements will have an impact and effect on all the others within the county, its municipalities, and the region.

The plan elements were developed in accordance with the Pennsylvania Municipalities Planning Code (MPC), Article III – Section 301 (4.1) and the scope of work issued by Washington County. Recommendations for each of the plan elements were prepared that are reflective of the overall goals of the comprehensive plan. After providing a careful analysis and review of the existing conditions in the county, specific goals were developed to provide for new development opportunities throughout Washington County. These opportunities were identified utilizing criteria that included having adequate infrastructure capable of supporting the development in place while protecting natural resources and preserving historic and cultural areas.

Specific needs for county services were based on an analysis of the demographic features and trends as well as the results from various public participation efforts. These recommendations were developed to promote and improve the available facilities and services within Washington County. As stated in the MPC, future infrastructure improvements will be completed concurrently as new lands are planned for development.

The recommendations for the movement of people and goods (transportation) identified specific issues and integrated countywide, regional and municipal plans in order to meet the goals that have been identified within the Washington County Comprehensive Plan. Deficiencies should be included into future projects of the county so that they can be incorporated into the Pennsylvania Department of Transportation's planning process and the Southwestern Pennsylvania Commission's regional transportation plan

Previously completed planning documents and studies were reviewed and considered in order to identify existing needs, develop recommendations and strategies, and complete a plan that is reflective of the vision established by the county.

RESOLUTION NO. 779

A RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE COUNTY OF WASHINGTON, COMMONWEALTH OF PENNSYLVANIA, ADOPTING THE WASHINGTON COUNTY COMPREHENSIVE PLAN PURSUANT TO THE PROVISIONS SET FORTH IN THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE.

WHEREAS, the Washington County Planning Commission serves as the official planning agency for Washington County and has a variety of responsibilities including the orderly development of land and the preparation of studies regarding environmental, economic and general issues that impact county development and natural resources; and

WHEREAS, the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247 as reenacted and amended) requires that counties prepare and adopt a comprehensive plan, and that municipal plans be generally consistent with the adopted county comprehensive plan; and

WHEREAS, the Washington County Board of Commissioners and the Washington County Planning Commission established a steering committee to oversee the preparation of the county comprehensive plan which included an extensive public participation process that was used to help identify the goals, policies and actions in order to achieve the vision created for the county; and

WHEREAS, this planning process addressed the major issues facing Washington County which are specified in each of the elements found in the comprehensive plan; and

WHEREAS, the Washington County Comprehensive Plan is a tool to assist county officials with future growth and development; and

WHEREAS, the Washington County Comprehensive Plan is a land use and growth management plan prepared by the county planning commission and adopted by the county commissioners which establishes broad goals and criteria for municipalities to use in the preparation of their comprehensive plans and land use regulations; and

WHEREAS, the Washington County Planning Commission has distributed the plan to all municipalities and school districts in the county, adjacent counties, and the Pennsylvania Department of Community and Economic Development for review and comment and has taken the comments from these entities into consideration in preparing the final draft of the comprehensive plan; and

WHEREAS, the Washington County Planning Commission has held at least one public meeting in accordance with the provisions of the Pennsylvania Municipalities Planning Code and has been recommended for adoption by the Washington County Board of Commissioners; and

WHEREAS, the Washington County Board of Commissioners has held a public hearing pursuant to the Pennsylvania Municipalities Planning Code to consider public comments; and

WHEREAS, the Washington County Board of Commissioners, after consideration of comments received (or lack thereof, as the case may be), has determined that the Washington County Comprehensive Plan, should not be substantially revised in whole or in part; and

WHEREAS, the Washington County Board of Commissioners has found the comprehensive plan to be beneficial to the health, safety and welfare of the citizens of the county.

NOW, THEREFORE, BE IT RESOLVED, the Board of Commissioners of the County of Washington hereby adopts the Washington County Comprehensive Plan, dated November 2005, as the official Comprehensive Plan for the County; and

BE IT FURTHER RESOLVED, THAT:

1. The November 2005 Washington County Comprehensive Plan supersedes all previous comprehensive plans completed for the county; and
2. The Washington County Board of Commissioners will follow the guidelines and policies contained in the plan when dealing with issues requiring action by the Board; and
3. The Washington County Board of Commissioners encourages all Authorities, Boards, Commissions and Municipalities in Washington County, as well as state agencies, to review and consider the Washington County Comprehensive Plan in their decision making processes when it applies to them; and
4. Any resolution, or part of a resolution, conflicting with the provisions of this resolution, is hereby repealed insofar as the same affects of this resolution; and
5. The Chief Clerk of the County shall distribute copies of this Resolution to the proper officers and other personnel of Washington County whose further action is necessary to achieve the purpose of this resolution.

Resolved and enacted this 23rd day of November 2005 by the Washington County Board of Commissioners.

By: _____ Larry Maggi, Co-Chairman

By: _____ Bracken Burns, Co-Chairman

By: _____ Diana L. Irey

ATTEST:

By: _____

Mary Helicke, Chief Clerk

APPROVED AS TO FORM AND LEGALITY

_____
COUNTY SOLICITOR

per minute # 779
dated 11-23-05

WASHINGTON COUNTY COMPREHENSIVE PLAN

ACKNOWLEDGEMENTS

The Washington County Comprehensive Plan was prepared and produced by the Washington County Planning Commission and Mackin Engineering Company. The following organizations provided financial and technical resources throughout the planning process:

Pennsylvania Department of Community and Economic Development
Pennsylvania Department of Transportation
Southwestern Pennsylvania Commission

The County Commissioners would like to thank the Pennsylvania Economy League for their efforts to ensure that a public involvement strategy was included in each phase of the planning process.

The Washington County Commissioners would also like to thank the following contributors who have helped to make the Washington County Comprehensive Plan a success:

84 Lumber Company
Abate-Irwin, Inc.
Buffalo Township
Burgettstown Area Elementary Center
California University
Carroll Township Social Hall
Charleroi Area High School
Dr. Richard Feldstein
Highway Appliance Company
Intermediate Unit 1
Jaycee Foods, Inc.
Mon Valley Career and Technology Center
Monongahela Valley Hospital, Inc.
North Strabane Social Hall
Observer Publishing Company
Pepsi-Cola Roadhouse
Peters Township Library
Schneider's Dairy, Inc.
Senate Engineering Company
Slovan VFW Barto Post 6553
Washington and Jefferson College
Washington County Fairgrounds
Washington County Library System
Washington County Tourism
Western Area Career & Technology Center

WASHINGTON COUNTY COMPREHENSIVE PLAN

ACKNOWLEDGEMENTS

The County Commissioners would like to recognize the efforts of the Washington County Comprehensive Plan Steering Committee members who guided the planning process and helped to refine and prioritize the strategies contained within the Comprehensive Plan.

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Laura Walker
W. Ernest Watson
John Weidert
Bill West
Christopher Wheat
Ned Williams
Libby Wilson
Jeff Yates

The County Commissioners would like to thank the Washington County Planning Commission members and the Planning Commission staff for their participation during the planning process.

Washington County Planning Commission

Robert R. Tracht
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David B. Miller
Thomas Jennings
Milton Kubik
W. Ernest Watson
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WASHINGTON COUNTY COMPREHENSIVE PLAN

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Vincent P. Ley - Project Engineer

The Washington County Planning Commission and Comprehensive Plan Steering Committee Members, and residents of Washington County would like to thank the Washington County Commissioners for their support of the planning process and for their ongoing promotion of the development polices contained herein.

Washington County Commissioners

J. Bracken Burns, Sr.
Lawrence O. Maggi
Diana L. Irey

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WASHINGTON COUNTY COMPREHENSIVE PLAN

CHAPTER 2. HISTORICAL PERSPECTIVE AND COMMUNITY CHARACTER

A. Introduction

The comprehensive planning process includes an assessment of past development patterns that contributed to the current condition of a municipality. In the case of a county comprehensive plan, this assessment is especially important as it influences large geographic areas, population centers, and future economic and social characteristics. Many comprehensive plans provide only a brief historical sketch of a municipality. While this plan is not intended to be an historical document, the Washington County Comprehensive Plan does attempt to establish a sense of the rich heritage and colorful past that attracted people to the region as well as influenced the development of the nation as a whole.

To guide future historic preservation and tourism development efforts in Washington County, the following objectives have been identified as overarching policies.

County Development Objectives

- Capitalize on the wealth of cultural and historic resources in Washington County
- Develop partnerships between existing organizations to help educate the public about the County's cultural and historical assets
- Market historic and cultural resources as a means for economic growth

B. Background

Washington County's history is one found in the records of our nation's development and is chronicled by numerous events that contributed to settlement of America. Indeed, Washington County sat at the forefront of westward expansion and colonization. Although the nature of its first inhabitants is still a mystery, historic records maintain that the first inhabitants were Native Americans of the Six Nations of New York. The tribes included Shawnee, Delaware, and the Iroquois (or Mingo Indians) who lived near the waterways and availed themselves to the plentiful wildlife found in the region. The Native American Tribes were left to themselves until French and English colonization began to encroach on these traditional hunting grounds.

French expansion into what is now Washington County came as early as the mid 1660's when Robert Cavelier La Salle (Crumrine, 1882) set out to discover the existence of the Mississippi River. Although this initial trip was not successful, and did nothing to promote the colonization of the region, later attempts by both the English and French resulted in conflicts with native peoples to lay claim to the southwestern area of Pennsylvania.

CHAPTER 2. HISTORICAL PERSPECTIVE AND COMMUNITY CHARACTER

It was in 1749 (Crumrine, 1882) that the French formally laid claim to the Ohio Valley by proceeding down from Canada, across Lake Erie to the Conewango Creek, and eventually to the Allegheny River. It was at this point that the French explorers came across English traders and promptly wrote to Governor Hamilton of Pennsylvania demanding that future English trading cease at once. Over the next several years a variety of expeditions took place by both the French and English governments. Increasingly these expeditions resulted in skirmishes between forces that led to French control of the land west of the Alleghenies and marked the beginning of the French and Indian War.

From this point on, Native American unrest in the region limited white settlement. It wasn't until 1758 that the English finally overthrew French occupation and began to renew their old alliance with the resident tribes. Unfortunately, as history attests, a peaceful European and Native American allegiance was never to be and it wasn't until near the end of the 1700's that peaceful occupation of the region began to be realized. The first white settlers who braved the Indian unrest were primarily of English, Scottish, and Scotch-Irish descent. This lineage would be the primary ethnic caste of the county until the industrial revolution of the 19th Century.

The Revolutionary War between the Colonies and England came at a time when both Pennsylvania and Virginia were claiming the land west of the Alleghenies as their own. Upon the establishment of Westmoreland County in the beginning of 1773, there ensued a long controversy over which government held jurisdiction over what is now Washington County. Although the original charter to William Penn for Pennsylvania occurred as early as 1681, it was not until 1780 that the boundary of Pennsylvania was established and the following year Washington County was formed from Westmoreland County. The new county was quite large and contained what are now Greene, Allegheny and Beaver Counties. However, it wasn't long before the new county was reduced in size, when Allegheny County was established in 1788 and in the following year, more lands were annexed from Washington County to Allegheny. Established in 1796, Greene County's boundary was modified in 1802 to return a portion back to Washington County.

The character of Washington County has been significantly influenced by its agricultural history, location along major transportation routes, abundance of natural resources and strength of its educational institutions. The early residents of Washington County were strong willed, as they had to be to conquer the wilderness and carve out a living. This spirit gave rise to a fierce drive for self-determination and independence.

An example of this independent spirit was evidenced by a well-known event in early American history. The act by the new federal government in 1791 to impose a tax on whiskey and liquor stills brought about significant unrest by the general public in the newly formed county of Washington as well as that of the surrounding region. Previous to this act, the Commonwealth of Pennsylvania had attempted for many years to pass such a tax, but efforts to collect the excise proved to be so exacting that each tax bill was repealed. The tax hit home the hardest in the

western portion of the state where farmers had for many years come to rely on liquor as a form of payment and on their own stills to produce the spirits from their grain.

Quick to organize against what was felt as an outrageous affront to their independence, a committee representing the four counties of Allegheny, Washington, Westmoreland, and Fayette began to prepare their case against the unfair taxation. To the extent that this taxation caused civil unrest and disobedience cannot be understated. By 1794, events had grown so violent and out of control, that President George Washington dispatched a military force to quell the "Whiskey Insurrection." Following the dispatch of the federal forces, the local resistance faded as arrests were made and the leaders of the rebellion fled Pennsylvania.

One of the first major economic pursuits for Washington County was of an agricultural nature. Raising sheep to produce wool for the markets was widely successful in the county and was the largest revenue generating industry throughout the 1900's. Known for its fine sheep stock, Washington County farmers shipped animals across the nation. Even today, Washington County has the second highest number of sheep farms in Pennsylvania.

Contributing to the growth of the county was its location along major transportation routes. Ever since the first visitors came to Southwestern Pennsylvania, the Monongahela River was instrumental in the development of Washington County as it was recognized as major transportation system for the region. During the pre-Revolutionary times, individuals utilized this waterway as a method of traveling westward to the Ohio River. During the industrial era, the Monongahela River was a source of moving materials from the busy coalmines located along its shores to industrial centers. The Monongahela River spawned the boat building business along its shores in California, Washington County, and in adjacent Brownsville, Fayette County. Located next to the river, California capitalized on the waterway and soon became a leader in the boat building business. Well over 130 steamboats were built in California Borough (Serinko, 1992) but with the advent of the railroad to the town in 1879, the demand and need for boats declined and the boat building industry died in Washington County (Hornbake, 1949). Today, the river is still considered a commercial waterway due to the number of barge companies that transport coal, petroleum products, scrap metal and other materials.

In 1818, the first federally funded road was finished linking Cumberland, Maryland to Wheeling, West Virginia, and eventually Illinois. This road, the National Pike, eased the hardship and time of traveling and brought about an increase in travelers and goods to the region. The National Pike, now called US Route 40, played a significant part in the prosperity of Washington County until the railroad companies began their expansion in the middle 1800's.

The advent of the railroads to the county was initially fought as people along the National Pike and the river foresaw an end to their major source of economic prosperity—travelers along these transportation routes. The railroads did bring an end to the stagecoach, wagon and steamboat. As a result many businesses died, but at the same time other businesses and towns grew up around the new, more efficient and speedier mode of transportation. Three major railroads were

centered in Washington County, the Baltimore & Ohio, the Pennsylvania, and the Waynesburg and Washington Railroads. These and other smaller regional rail lines were instrumental in making the county a dominant player in the industrial market.

The expansion of the rail system was a logical response to the discovery of the Pittsburgh coal seam in Washington County. The Appalachian Coal Field is one of the most profitable coal regions in the world and includes 8,000 square miles of Southwestern Pennsylvania (Branton, 1980). Washington County can attribute much of its development in the 19th and 20th centuries from the extraction of coal and the corresponding industrial development that capitalized on the expanded rail system built to move coal.

In fact, when the abundant natural mineral resources of Washington County were discovered, new industrial pursuits soon outpaced the agriculture industry in the creation of jobs. The commercial mining of coal first occurred through crude methods in the early 1800s. Laborers were expected to dig approximately 100 barrels a day directly from the hillside. Initial methods were definitely seasonal as the hand-dug coal was piled along the Monongahela River until boats came by in the spring when the waters were higher. The coal was then transported to Pittsburgh by so called French Creek boats.

It wasn't long before the extraction and transportation of coal became much more advanced and the need for workers escalated. Rail lines were built exclusively to move the coal from the mines to Pittsburgh. Many mining companies soon recognized that more men were needed and mining operations became major employers. The Greenfield Mine (located in what is now known as Coal Center), the Allison Mine in McGovern, the Locust Grove Mine in Canonsburg, and the Brier Hill Mine in McDonald are just a few of the mines that produced thousands of bushels of coal on a daily basis and employed hundreds of men (Branton, 1980). By the early 20th century, the coal companies in Washington County employed 16,000 men and produced 14,545,599 tons of coal (Branton, Vol. 2. p. 7. 1980).

In 1907, Washington County ranked fifth in the state in bituminous coal production (Marotta, p. 83, 1985). This massive production of coal is perhaps the most significant industrial pursuit associated with the county. The success of the county at mining this abundant resource created a real estate boom and lands near the Monongahela River sold at a premium. The wealth of coal also generated interest in the region for the employment opportunities. Although the work was dirty and dangerous, it provided a good living for workers and their families.

Although the extraction of oil played a lesser role in the extraction of natural minerals, Washington County had a brief oil boom in the early 1900s that contributed to the industrial development of the county. Oil fields were found in the western portion of the county and the McDonald Oil Field was the largest in the world until the oil resources in Texas were tapped (Branton, 1980). Natural Gas was another mineral wealth that the county had in abundance. Together, oil, gas, and coal literally created the incentive for new industries to spring up around the established transportation routes developed to move the resources to market.

The production of glass was so successful in Washington County in large part due to the presence of natural gas. Washington County's own Atlas Glass Company was the first in the world to use a glass-blowing machine, which resulted in large scale manufacturing of glass and glassware (Marotta, p. 83, 1985). The development of the glass industry grew at such a rate that it attracted so many new residents to Canonsburg that the town doubled in size within one short decade (Branton, 1980). The river towns of Charleroi and Monongahela also benefited from the presence of natural resources such as sand and coal as well as the available transportation systems. Glass companies soon built factories in these river towns, which attracted more people to the area and supporting commercial ventures.

Glass companies, coalmines and factories soon dotted the river valleys of the Monongahela and Chartiers Creek as national and international interests found the waterways and railroads an economical way to transport raw and finished goods. Washington County became known for its industrial prosperity and many people came here looking for work. It was during this industrial era when a new wave of immigrants came seeking a better life. Primarily from eastern and southern European counties, these people were from Croatian, Slovak, Polish, Russian, Greek, and Italian backgrounds. During the 1920's another wave of immigration occurred from the southern United States as African-American men and women moved to the north in search of work.

As the population grew to meet the availability of jobs, many workers began to organize to improve working conditions. The glass industry was one of the first to move towards unionization. Glassmakers were considered a highly skilled profession encompassing people who actually hand made glass to the blacksmiths who made the equipment (Branton, 1980). The unionization of the glass industry was a successful venture for both the worker and employer, which was not the case in coal mining.

The coal industry was primarily independent mines that sent coal to the market through private transportation sources—water or rail. Organization under holding companies lent to the movement for reduction of transportation costs. The first example of this was the Monongahela River Consolidated Coal and Coke Company located in the City of Monongahela. The consolidation of the independent operators provided enough wealth to purchase barges to expedite the shipment of coal in a more costly fashion. It wasn't long that most of the industry was organized in this fashion; usually incorporating a dedicated source of transportation.

These consolidated coalmining companies came to have enormous power and influence over their workers and Washington County. As the need for workers was great and the corresponding influx of immigrants overtaxed available housing, coal companies began to construct company-sponsored housing. These company towns, termed "patch-towns", became small micro-communities that were initially company built, owned and controlled for the profitability of the coal company itself. Ellsworth, Cokeburg, and Marianna are just a few examples of communities that were built to support the mining industry. The towns remain, although the coal

industry is gone, as significant reminders of the County's industrial heritage and reliance on "King Coal."

However, the coal industry was not a kind benefactor. Working conditions in the coal mine were dangerous and Washington County had several major mining disasters. In 1908, the Marianna Mine disaster killed 152 men and just a few years later in 1913 a mine explosion occurred in a Monongahela River Consolidated Coal and Coke Company mine that killed 97 men. Unionization of the coal industry was finally successful due in large part to the overwhelming power wielded by the companies, the extent to which the company controlled the lives of the workers and the families, and the unsafe working conditions of coal miners. The United Mine Workers Union is perhaps one of the best-known unions and it is still in existence today.

Following on the heels of the coal industry was the production of iron and steel. The availability of iron ore supported new foundry companies along the already established rail and water routes. Iron fabrication was most profitable prior to the turn of the 19th century but it was the manufacturing of steel that created large-scale growth for the county. In their heyday, steel mills employed tens of thousands of Washington County residents. Men and women were both employed in the mills located along the Monongahela River. Mills located in Allenport, Monessen, and Donora created population booms as people located to the "Mon Valley" to work in the mills.

Like most of the country, Washington County was hit hard during the Great Depression of the 1930's. It wasn't until after World War II that the county's economy again turned for the better. From 1940 until mid-1970, Washington County and the Pittsburgh region once again enjoyed industrial domination with its steel mills and towns like Donora and Allenport serving as major employment centers. However, the natural progression of the economy and the aging of the industrial plants led to the decline of the profitability of the steel industry and its supporting manufacturing jobs. Throughout the late 1970's and 1980's the Pittsburgh region suffered with economic struggles as traditional employment in mines and factories shifted to jobs that required new skills and an educated labor pool. As the aging plants closed, thousands of workers lost their jobs and livelihoods and a substantial population loss occurred in much of the Southwestern Pennsylvania Region as people moved elsewhere in search of work. However, Washington County fared much better than the surrounding counties of Allegheny, Beaver, or Fayette in terms of overall population loss.

Washington County has experienced many changes over the years and yet it remains at the forefront of the regional economic picture. The county has always been a major player in the social, agricultural, and industrial contributions of the Commonwealth and this legacy provides a wealth of resources upon which to build a new future. As the county moves forward into the new century, it has all of the pieces in place to encourage new ventures and direct growth in a desirable and logical fashion.

C. Existing Conditions

Washington County remains tied together by a strong heritage and offers many opportunities to relive the past. With its rich heritage steeped in agriculture, education, transportation, and industry offer diverse experiences for those interested in exploring what once was. As one might expect with any community established in the 1700 and early 1800s, many of Washington County's municipalities have structures that were built in that era, which remain standing. Older boroughs and cities retain many buildings that have been preserved and others that may soon be lost due to the ravages of time. Some of these resources have been identified and dutifully preserved but many more have been neglected or destroyed.

Preservation efforts have occurred as institutions have grown to meet the changing times. The oldest educational institution in the county was the Washington Academy, which was chartered in 1787. This school joined with Jefferson Academy in 1865 to form Washington & Jefferson College, which has gained a national reputation for its academic standards. The college has an impressive collection of structures with period architecture at its campus in the City of Washington.

Founded in 1874 as a "normal school," California University of Pennsylvania's mission was to train individuals in the methods of teaching. Staying true to its tradition, the normal school became a state owned Teachers College in 1920 (Marotta, 1985). In 1960, the term teacher was removed and California State College began an amazing transition from college to a full-fledged university in 1983. Enrollment skyrocketed from 1959 to the 1970's, and many new buildings were constructed to accommodate this growth. Fortunately, the need for additional classrooms led to officials abandoning their plans to raze the original structures built in the mid 1800's. These beautiful buildings remain, preserving a link to the past through architecture.

One of the most interesting links to the earliest residents of Washington County can be found at Meadowcroft, Museum of Rural Life, located in Jefferson Township. The museum provides a reincarnation of what life was like during the late 1800's at the Meadowcroft Village. Visitors to the village can experience a working blacksmith shop, one room schoolhouse and the daily operations of rural living in the frontier.

However, perhaps the most significant site in Washington County is the Meadowcroft Rockshelter, which was recently designated as a National Historic Landmark by the National Parks Service. The Rockshelter is an outcropping of rock that provided shelter for the earliest inhabitants of the region. Artifacts found at the Rockshelter provide evidence of habitation by Paleo-Indians and other indigenous peoples who occupied this site up until the late 1800's. This site, which provides evidence of human occupation for over 16,000 years, lay unknown until the mid 1950's. However, it was not until 1973 that professional excavation of the site began and within the past several years that it became accessible to the public.

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The wealth of historic resources that exist in Washington County includes the impressive architecture of historic homes and businesses. The LeMoyne House is home to the Washington County Historical Society and was built in 1812 and is Pennsylvania's first National Historic Landmark of the Underground Railroad. Many historical structures remain along the county's first formal road, the National Pike – US 40. The Century Inn in Scenery Hill that once served travelers on their way to the uncharted wilderness in the West is now a well-known fine dining establishment providing sustenance to people in four-wheel vehicles not horse drawn carriages.

Century Inn (Mackin, 2003)

Other period architecture for which Washington County is known for are the covered bridges that dot the landscape. Covered bridges once provided the means by which people crossed the many streams and creeks of Washington County. The geography of the land necessitated the construction of many river and gully crossings but the land was well forested and the presence of lumber mills provided inexpensive building materials for the bridges. Out of necessity, bridges were built with a cover over the decking to preserve the wooden flooring. With the production of metal building materials this quaint covering no longer was necessary. Although covered bridges were once commonplace, the effect of several devastating floods, the ravages of time and the call of progress has left few standing. While it is thought that Washington County once had around 300 covered bridges, there remain 23 structures that have been preserved for future generations to enjoy.

The loss of historical resources can occur in many ways. Many times things of the past are erased, though not from an act of nature, but rather from a conscious effort to forget unfortunate actions. One such event was an industrial incident that led to the founding of one of the first anti-pollution groups in the nation (Observer-Reporter, 2004). Donora gained national attention in 1948 when a thick cloud descended on the borough causing respiratory sickness and the death of 20 residents. Today, the location that once housed blast furnaces, steel mills and coke ovens

now is home to a modern industrial park. No longer spewing thick smoke into the air, the companies that line the Monongahela River remain shrouded in the industrial heritage of these river towns that fueled the industrial revolution.

Several community events are organized throughout the county that capitalize upon the historical character of the county. The Covered Bridge Festival and National Pike Days are two events that celebrate the heritage of Washington County. The Covered Bridge Festival is an annual event that celebrates the architectural heritage of covered bridges. According to the Washington County Tourism Agency, of the 218 covered bridges in the Commonwealth of Pennsylvania, 23 are located in Washington County. The Covered Bridge Festival was organized in 1970 and has grown to include the covered bridges in Greene County.

National Pike Days is another annual event, which promotes the first federally funded roadway in the nation, U.S. Route 40 or National Toll Road. The annual festival held in May crosses three counties (Somerset, Fayette and Washington) and is billed as the "world's longest festival" as it encompasses over 300 miles from Baltimore, Maryland to the Ohio state line. National Pike Days is a period oriented festival celebrating the days when the pioneers first began settling the west. U.S. Route 40 remains an important feature of Washington County and was designated as a Pennsylvania Heritage Park in 1994, a State Scenic Byway in 1996, and in 2001 a National Scenic Byway—All American Road. This latest designation by the U.S. Department of Transportation, places U.S. Route 40 on the list of America's Scenic Byways along with other national transportation routes that have significant cultural, scenic, historic, archaeological or recreational features. This newest designation for U.S. Route 40 will play an important role in attracting federal and state attention and funding to the county.

The National Road Heritage State Heritage Park was renamed the National Road Heritage Corridor (NRHC) and has an administering board of directors to oversee the preservation of the corridor. The overall mission of this effort is to celebrate the history, culture and scenery of the one of the oldest transportation routes in the nation and includes volunteers in Somerset, Fayette and Washington Counties. The National Road Heritage Corridor organization provides technical assistance, grants, and marketing support to areas identified in NRHC's Management Action Plan (MAP).

The Monongahela River and its river towns are steeped in historical significance, which has been recognized by the Steel Industry Heritage Corporation. Created by Congress in 1996, the Rivers of Steel National Heritage Area is committed to preserving, interpreting, and managing the historic, cultural, and natural resources related to the steel industry as well as its related industries. Encompassing 3,000 square miles in the seven counties of Allegheny, Armstrong, Beaver, Westmoreland, Greene, Fayette, and Washington, the Rivers of Steel is building on the transition from heavy industry to high technology and diversified services. A benefit to Washington County is this will help to bolster the new regional economy by promoting tourism and economic development based on the industrial saga of the Monongahela Valley and Washington County. The Steel Industry Heritage Corporation (SIHC) manages the River's of

Steel program provides technical assistance, grants and grant workshops, and marketing support to areas identified in SIHC's Management Action Plan (MAP). The River's of Steel "Fueling a Revolution Journey" focuses on the Upper Mon Valley region. This program provides opportunities for grant funds specifically through the Pennsylvania Heritage Parks Program.

Washington County officials have been aggressive in the effort to develop new industrial parks and are encouraging local revitalization efforts. Today Washington County is becoming known more for its quality of life, housing, and technology oriented employment base instead of its smokestacks. New housing starts in the county are growing once again and new businesses are finding economic profitability in the county. Many municipalities are once again growing in population and the county is having to respond to new development pressures of the 21st Century.

Alta Vista Industrial Park (Mackin, 2003)

D. Analysis & Recommendations

The historical significance of Washington County is too rich and detailed to do it justice in this document. Suffice it to say, that many important events occurred here in the county that shaped the state and the nation. Indeed, many people who lived in the county are celebrated in the annals of history and who in some way contributed to the county's character.

Over the years, the appeal of historic buildings has gained in popularity and several efforts across the county are spearheading the preservation of period architecture. The Washington County Historical Society, Washington County History and Landmarks Foundation, and other local historical organizations contribute to the preservation of the historical significance of the county and are instrumental in cataloguing significant places, events, people, and artifacts. Currently almost 100 structures are identified on the National Register of Historical Places, including several historic districts that contain hundreds of historic structures, and it is estimated that many more are eligible for inclusion. It is recommended that the county continue to identify and catalogue important structures and places that contributed to the development of the county.

The Washington County Jailhouse is a structure that has gained the attention of preservation efforts. A $6.1 million renovation project began in January 2003 to refurbish the century-old landmark as the new Family Court Center. California University of Pennsylvania has also begun to renovate its historic buildings and the updated Master Plan focuses all new building around the historic character of the original structures. Washington County officials should assist non-profit organizations and local governments to identify funding opportunities for historic preservation, structural rehabilitation, and restoration of historic properties thus making historic preservation more attractive and feasible to complete.

As evidenced by the public participation efforts completed during the comprehensive planning process, Washington County residents are proud of their heritage and support the preservation of historic and cultural resources. Residents overwhelmingly wanted to identify and preserve the historic resources so prevalent in Washington County. To address this desire, Washington County officials should promote the use of historic preservation provisions as authorized by the Pennsylvania Municipalities Planning Code. Ordinances focused on demolition, historic zoning overlays, zoning bonuses for the preservation of specific resources and protection of such features as scenic areas and historic sites could be particularly effective to preserve the architectural and historical character of the county.

However, as the county does not have the governing authority over local municipalities regarding historic preservation, this will be a local issue. Local controls have to be incorporated into a municipal zoning ordinance and then the municipality can exercise control over historic resources. The role that the county must play will be one of advocacy and education. Efforts to educate local elected officials and residents will need to be taken if the historical integrity of Washington County is to be preserved.

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To lead municipal officials to a policy that enhances existing structures and invests in the character of their communities would seem to be an easy task. However, many people do not realize the economic benefits that come from the revitalization of historic structures or following heritage promotion. While, there are many tools available to help fund historic preservation, a list has been provided below that apply to communities in Washington County.

Program	Description	Contact
Certified Local Government Program	Federal incentive-based program created under the National Historic Preservation Act of 1966 that provides technical assistance and funding to local governments to enhance their ability to implement historic preservation.	Pennsylvania Historical and Museum Commission (PHMC) Bureau for Historic Preservation. (717) 787-4363
Historic District Act of 1961	Local municipalities are empowered to designate historic areas and to establish a board of historical and architectural review who advises the governing body on alternations, new construction, and demolition in the historic area.	Pennsylvania Historical and Museum Commission (PHMC) Bureau for Historic Preservation. (717) 787-4363
Historic Preservation Zoning	The Pennsylvania Municipalities Planning Code provides the authority to enact demolition ordinances, historic zoning overlays, zoning bonuses for preservation of historic resources, scenic views and historic roads.	Pennsylvania Historical and Museum Commission (PHMC) Bureau for Historic Preservation. (717) 787-4363
Historic Preservation Grants	Funding available to non-profits and local governments for planning efforts that identify, evaluate, and preserve historic resources. Rehabilitation and restoration grants are available.	Pennsylvania Historical and Museum Commission (PHMC) Bureau for Historic Preservation. (717) 787-4363
Tax Credits for Historic Preservation	Tax credits are available for qualified projects that rehabilitate properties listed in the National Resister of Historic Places.	Pennsylvania Historical and Museum Commission (PHMC) Bureau for Historic Preservation, The State Historic Preservation Ofice (SHPO) (717) 787-4363

The county should base their outreach efforts regarding historic preservation off of the Secretary of the Interior's Standards for Rehabilitation. Established as guidelines for the rehabilitation of historic properties for contemporary use, these standards are nationally accepted. These standards are, by necessity, general.

The Standards for Rehabilitation:

- A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
- The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
- New additions and adjacent or related new construction will be undertaken in a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

These standards, although general, provide guidelines for Washington County preservation efforts. However, it must be recognized that in some instances it is not always feasible to rehabilitate historic properties to such standards. Oftentimes it is extremely costly to bring older structures up to acceptable safety standards because of such issues as the structural integrity or cost of renovation. In such instances, efforts should be made to document the historical significance of the structure prior to any renovations.

Preserving the heritage of Washington County will result in economic benefits. By establishing the county as a destination rich in historical significance can provide new business development opportunities. Washington County should continue to market itself as a tourist destination and develop a strategy to grow the concept of heritage tourism. Investing in heritage tourism is, economically, a sound dedication of resources. The National Trust for Historic Preservation reports that the Travel Industry Association of American identified heritage tourists as spending more, over a longer period than any other type of U.S. traveler (Hargrove, 2000). The National Trust defines heritage tourism for Historic Preservation as:

> "Traveling to experience the places, artifacts and activities that authentically represent the stories and people of the past and present." (On line : www.nationaltrust.org)

Contributing to the strength of heritage tourism is the fact that the numerous resources exist within Washington County that people wish to visit. However, collaborative efforts must be fostered if the county is to realize the full economic benefits associated with tourism. The County should work with the Tourist Promotion Agency to develop a marketing strategy that will attract visitors to the area as well as strengthen the existing tourism industry. Other partners, such as the Washington County Historical Society and Washington County Historic Landmarks Society, must be involved to continue the preservation of historic resources if the county wishes to capitalize upon heritage tourism. Additionally, the county must aggressively pursue opportunities that are available for heritage tourism and preservation by partnering with the Steel Industry Heritage Corporation and National Road Heritage Corridor. These entities can provide regional and even national clout to support the Washington County tourism effort.

E. Implementation Strategies

To fulfill the County Development Objectives, Washington County should work with appropriate agencies to meet the following goals. For each goal statement, one or more action steps are provided. It is recommended that the County conduct an annual review and assessment of the goals and action statements to determine their applicability and ongoing relevance.

Preserve the county's rural landscape and work to improve the aesthetics of developing areas

Action: Develop model ordinances for municipalities to use in site design

- The county will research model ordinances and distribute these to municipalities
- The county will include education sessions or informational packets to each municipality on how these model ordinances may be enacted and the benefits they provide

Enhance cultural opportunities for senior citizens and youth

Action: The Washington County TPA should work with Area Agency on Aging and senior centers to develop Senior friendly tourist events and bus tours

Action: The Washington County TPA should work with local school districts, YMCA's and other youth facilities to develop youth oriented tourist events and bus tours

Action: Washington County TPA should develop an outreach strategy and provide technical assistance

Identify and preserve historical and cultural assets

Action: Create and manage a GIS database of historical and cultural sites

Action: Promote tax incentives for historic preservation

Action: Develop model ordinances for historic preservation

Action: Identify capital funds for historic sites

Action: Assist museums and other organizations with letters of support and efforts to secure funding

Action: Washington County should develop a GIS layer that includes all historic and cultural sites

Action: Washington County should develop an informational packet on historic preservation funding sources and tax incentives. This information should be available as needed in addition to being sent to municipal officials

Action: Washington County should research model ordinances regarding historic preservation and provide these to municipalities

Action: Washington County should continue its efforts to support historic preservation by providing support letters and technical assistance to identify funding

Maximize the potential of tourism assets through a long-range strategy

Action: Provide lobbying efforts to state and federal agencies and representatives and legislators to promote the tourism industry of Washington County and its particular needs

Action: Support an education campaign that will provide information regarding the economic benefits of tourism

Action: Continue the use of hotel taxes and other revenue sources to promote tourism

Action: Maintain connections with regional historic and cultural assets outside of Washington County for tourism promotion

Action: Washington County and the Washington County TPA should develop a strategy to advocate the benefits of tourism and need for funding at the state and federal level.

Utilize the Monongahela River and rail network as a tourism resource

Action: Conduct ongoing reviews municipal riverfront development plans to identify consistency with County Development objectives

Action: Encourage regional riverfront development plans

Action: Identify and preserve rail excursion opportunities and support tourism efforts

Action: Washington County should focus on the creation of a regional riverfront development strategy. The plans should be consistent with county development objectives and support tourism efforts. In addition, a strategy should be developed to identify potential rail lines for future development as tourism excursions, trails, or linear parks.

Support and enhance the cultural renaissance of Washington County

Action: Support funding opportunities for programming by providing technical assistance to organizations and businesses

Action: Washington County should continue its efforts to support local businesses and organizations by providing support letters and technical assistance to identify funding.

Promote local, county and state history and culture in the local schools

Action: Develop and support internship and volunteer programs

Action: Washington County should work with local educational institutions and volunteer organizations to identify internships and volunteer efforts. Internships within the county government structure should be developed and a formal administration plan created.

Improve cooperation & coordination between historic and cultural groups

Action: Host meetings for non-profit and for-profit organizations to foster networking

Action: Encourage cultural and historical organizations to provide website presence to each other

Action: The Washington County TPA should establish a regular meeting schedule and provide meeting space for this effort. Website development assistance should be provided.

Expand information services to underserved areas

Action: Improve the Washington County website

Action: Develop an internship program that will provide no or low cost solutions to communities and organizations that desire web presence

Action: Washington County should develop the information technology component of the county government. The existing website provide minimal linkages and information. Personnel should be sought who can upgrade existing website capacity as well as internal technology and capabilities. Digital mapping, digital access to information should be a priority.

Promote volunteerism

Action: Support local and county civic recognition programs and participate in awards ceremonies

Action: Partner with schools and educational institutions to develop volunteer programs

Action: Encourage newspaper article series that focuses on volunteer opportunities and benefits

Action: Washington County should continue their efforts to support acknowledge volunteer efforts. Outreach to schools and local media should be a focus of this administration.

CHAPTER 2. HISTORICAL PERSPECTIVE AND COMMUNITY CHARACTER

Historical Resources and Support Information

HISTORICAL SOCIETIES

Name	Address	City	State
Morris Township Historical Society	186C Dunns Station Rd.	Prosperity	PA 15329
Monongahela Area Historical Society	P.O. Box 152	Monongahela	PA 15063
Jefferson College Historical Society	220 N. Central Ave	Canonsburg	PA 15317
Donora Historical Society	922 Meldon Avenue	Donora	PA 15033
David Bradford House	175 South Main St	Washington	PA 15301
Washington County History & Landmarks	PO Box 274	Washington	PA 15301
Peter's Creek Historical Society c/o Fred Braun	115 Great Oaks Rd.	McMurray	PA 15317
Jefferson Twp. Historical Society	PO Box 383	Burgettstown	PA 15021
Duncan Glass Journal The Nat. Duncan Glass Society	PO Box 965	Washington	PA 15301
California Area Historical Society	429 Wood Street	California	PA 15419
Venetia Heritage Society	117 McCombs Road	Venetia	PA 15367
Washington County Historical Society	49 E. Maiden St	Washington	PA 15301
Greater Canonsburg Heritage Society	169 E. Pike St.	Canonsburg	PA 15317
McKeever Study/Library Association	84 W. Main St.	West Middletown	PA 15379

**This list should not be considered as an official listing of all the historical societies or related organizations in Washington County*

NATIONAL REGISTER OF HISTORIC PLACES

Owner	Structure	Location
Local Government	"S" Bridge	6 mi. W of Washington on US 40, Washington
Private owner	Edward G. Acheson House	908 Main St. Monongahela
Private owner	Administration Bldg Washington & Jefferson College (Washington Academy)	Washington & Jefferson College campus
Local Government	Bailey Covered Bridge	Spans Ten Mile Creek, Prosperity
Private, local gov't	Beallsville Historic District	Main St. Chestnut Alley & South Alley between West Alley and Oak Alley, Borough of Beallsville, Ellsworth
State	David Bradford House	175 S. Main St. Washington, PA
Private	Samuel Brownlee House	N. of Eighty-Four on PA 519, Eighty-Four
Local Government	Scott Brownlee Covered Bridge	Off PA 231, West Finley

NATIONAL REGISTER OF HISTORIC PLACES		
Owner	**Structure**	**Location**
State	Brownsville Bridge	LR 268 over Monongahela River, W. Brownsville
Private	Caldwell Tavern	Jct. Of US 40 and TR 474, Buffalo Township, Claysville
State	Canonsburg Armory	W. College St. & No. Central Ave. Canonsburg
Private	Cement City Historic District	Roughly, Chestnut & Walnut Sts. from Mooisette Ave. to Bertha Ave. and along Ida and Bertha Sts., Donora
Private, local gov't	Centerville Historic District	Roughly, Old National Pike-US 40 from Linton Rd to jct. Of Old National Pike-US 40 and PA 481, Centerville
State	Charleroi-Monessen Bridge	LR 247 over Monongahela River, Monessen
Local Government	Crawford Covered Bridge	Spanning Robinson Fork Creek, West Finley
Local Government	Danley Covered Bridge	Spanning Robinson Fork Creek, West Finley
Local Government	Davis, Horn, Overholtzer Bridge	SE of Fairfield, North Fredericktown
Local Government	Day Covered Bridge	Spans Short Creek, Prosperity
Private	Margaret Derrow House	W. Main St. Claysville
Local Government	Devil's Den, McClurg Covered Bridge	N. of Paris crossing King's Creek, Hanover Twp, Paris
Private	Doak-Little House	US 40 .5 mi. West of South Strabane, South Strabane Township
Private	Joseph Dorsey House	113 Cherry Ave West Brownsville
Private	Dusmal House	E. of Gastonville off Gilmore Rd. Gastonville
Private	East Washington Historic Dist.	Roughly North, East, and Wade Aves. Wheeling, Beau, and Chestnut Sts. East Washington
Local Government	Ebenezer Covered Bridge	W. of Ginger Hill crossing South Fork of Maple Creek, Nottingham Township, Ginger Hill
Local Government	Erskine Covered Bridge	Spans Middle Wheeling Creek, W. Alexander
Private	Molly Fleming House	616 Wood St. California
Private	Philip Friend House (Stonehill Farm)	105 Little Daniels Run Rd. North Bethlehem Twp
Private	Harrison House	Old Rt. 40, Centerville

NATIONAL REGISTER OF HISTORIC PLACES		
Owner	**Structure**	**Location**
Local Government	Hawthorne School	Hawthorne and Bluff Sts. Canonsburg
Local Government	Henry Covered Bridge	Spans Mingo Creek, Monongahela
Private	Hill's Tavern (Century Inn)	U.S. 40, Scenery Hill
Private	Huffman Distillery & Chopping Mill	LR 62155, 2 mi. north of jct with PA 917, Somerset Township, Cokeburg
Local Government	Hughes Covered Bridge	Spans Ten Mile Creek, Prosperity
Local Government	Jackson's Mill Covered Brdige	NW of Burgettstown crossing Kings Creek, Hanover Township, Burgettstown
Private	Jennings-Gallagher House (Jonathan W. Jennings House)	429 Wood Street, California, Pa
Private	Kinder's Mill	LR 62194 at Piper Rd. Deemston
Local Government	Krepps Covered Bridge	SE of Cherry Valley, Midway
Private	LeMoyne Crematory	Jct. Of Redstone Rd. & Elm St., NW corner, North Franklin Township, Washington
Private	Dr. Julius LeMoyne House	49 E. Maiden Street Washington
Local Government	Leatherman Covered Bridge	N. of Cokesburg, Cokesburg
Private	Moses Little Tavern	438 E. National Pike, Armwell Twp, Laboratory
Private	David Longwell House (Miale House)	711 W. Main St. Monongahela City
Local Government	Lyle Covered Bridge	N. of Raccoon crossing Raccoon Creek Hanover Township, Raccoon
Private	Malden Inn	W. of Blainsburg on U.S. 40, Blainsburg
Private	Isaac Manchester House (Plantation Plenty)	2 mi. s. of Avella on PA 231, Avella
Private, local gov't	Marianna Historic District	Roughly bounded by Ten Mile Creek, Beeson Ave. Hill, 6th, and 7th Sts., Marianna
Private	Martin Farmstead	PA 136, 2 mi. W of town of Eighty-Four, South Strabane Twp, Washington
Local Government	Martin's Mill Covered Bridge	W. of Mariana crossing Ten Mile Creek, West Bethlehem Township, Marianna
Private	Dr. Joseph Mauer House	97 W. Wheeling Street, Washington
Local Government	Blaney Mays Covered Bridge	Spans Middle Wheeling Creek, Claysville
Private	Meadowcroft Rockshelter	W. of Avella, Avella
Local Government	Longdon L. Miller Covered Bridge	NW of West Finley, West Finley

NATIONAL REGISTER OF HISTORIC PLACES		
Owner	**Structure**	**Location**
Local Government	Mingo Creek Presbyterian Church and Churchyard	Jct. Of PA 88 and Mingo Church Rd., Union Township, Courtney
Private	Monongahela Cemetery (aka St. Mary's Cemetery)	Cemetery Hill Rd. at Gregg St., Monongahela City
Private	Montgomery House	W. Main St. Claysville
Private	Thomas Munce House	Rt. 136, 3 mi. east of Washington, S. Strabane Township, Washington
Private	John H. Nelson House	104 Colvin Rd., Fallowfield
State	Old Main, California State College	California State College campus, California
Private	Robert Parkinson Farm	PA 18, 0.4 mi. N of Old Concord Village, Morris Township
Private	Pennsylvania Railroad Freight Station (aka Chartiers Valley Railway Freight Station)	111 Washington St., Washington
Local Government	Pennsylvania Railroad Passenger Station (aka California Public Library)	Water and Wood Streets, California
Private	Pine Bank Covered Bridge	SW of Studa crossing Rouine, Cross Creek Township
Local Government	Plant's Covered Bridge	Spanning Templeton Fork Creek, West Finley
Local Government	Ralston Freeman Covered Bridge	N. of Paris crossing King's Creek, Hanover Twp, Paris
Private	Regester Log House	N. of Fredericktown off PA 88, Fredericktown
Private	Ringland Tavern	US 40, W. Bethlehem Township, Scenery Hill
Private	Roberts House	225 N. Central Avenue, Canonsburg
Private	Frank L. Ross House	PA 519, 0.3 mi. N. of US 40, Noth Bethlehem
Private	Sackville House	309 E. Wheeling Street, Washington
Local Government	Sawhill Covered Bridge	PA 221, Taylorstown
Private, local gov't	Scenery Hill Historic District	Roughly, National Pike East - US 40 between Scenery Hill Cemetery and Kinder

NATIONAL REGISTER OF HISTORIC PLACES		
Owner	**Structure**	**Location**
		Rd., Scenery Hill
Local Government	Stephenson--Campbell House (aka Stephenson Log House)	At the end of Tomahawk Claim Lane off of Reissing Rd, Cecil
Private	Taylorstown Historic District	Main St., Taylorstown
Private	James Thome Farm	213 Linnwood Rd., N. Strabane Township, Eighty Four
Local Government	Trinity Hall	1 mi. S. of Washington on PA 18, Washington
Private	US Post Office--Charleroi (aka John K. Tener Library)	638 Fallowfield Avenue, Charleroi
Private	Ulery Mill (aka Pollock's Mill)	SE of Marianna, Marianna
State	Washington Armory	76 W. Maiden St., Washington
Local Government	Washington County Courthouse	S. Main Street, Washington
Local Government	Washington County Jail	Cherry Street, Washington
State	Webster Donora Bridge	A 143 over Monongahela River, Donora
Private	Welsh--Emery House	114 Emery Rd., Centerville Borough, Richeyville
Private, local gov't	West Alexander Historic District	Roughly bounded by Main, N. Liberty and Mechanic Sts., West Alexander Borough
Private	West Middletown Historic District	Main St., West Middlesex Borough
Local Government	John White House	2151 N. Main Street Extension, Chartiers Township
Local Government	Wilson's Mill Covered Bridge	SE of Avella crossing Cross Creek Township, Avella
Private	Levi Wilson Tavern (aka John Miller Tavern)	US 40, 1.5 mi. E of S Bridge, Buffalo Township
Local Government	Cerl Wright	NW of Bentleyville crossing North Fork of Pigeon Creek, Somerset Township, Bentleyville
Local Government	Wyit Sprowls Covered Bridge	Spanning Robinson Fork Creek, West Finley

CHAPTER 3. SOCIAL CHARACTERISTICS

A. Introduction

Recognizing the interrelationship of the county's demographic composition to factors such as employment, social services, recreation needs, and transportation networks are crucial for future planning efforts. Ongoing analysis of the socio-economic characteristics will enable Washington County to address future service needs for industry and residents. The ability to provide data to schools, employers, and developers will bolster the county's reputation as a desirable place to live and work. As the county meets infrastructure demands and increases its skilled workforce, the quality of life for residents will be enhanced. The resulting benefits will generate a positive effect on municipal revenues and improve services.

Meeting the service and facility needs of county residents, business, and industry sectors necessitates that elected officials understand the socio-economic structure of Washington County. For example, officials, service providers, and employers must understand a population's age stratification, as this will provide an indication of the demand for certain services and facilities. Planning for new educational facilities requires an understanding of the number of children born during a specific period and then identifying the capacity of school buildings. Other factors of a population give many insights into the characteristics of residents, which in turn influence employers' decisions to build their sites in an area. A population with a higher educational attainment level is more apt to have the capacity to meet employer needs for a trained workforce. Examining the population of Washington County will offer an insight into what elected officials will need to address regarding future infrastructure decisions and service demands.

B. Background

The following information provides a brief overview of general social characteristics of Washington County's population. This demographic analysis of Washington County includes a comparison to the counties that are members of the metropolitan planning organization (MPO), the Southwestern Pennsylvania Commission (SPC). The following counties are included in the SPC Region: Allegheny, Beaver, Fayette, Greene and Westmoreland (all of which are contiguous to Washington), as well as, Armstrong County, Butler County, Indiana County and Lawrence County. The Commonwealth of Pennsylvania was included to provide a state level comparison.

Data used in this section was taken from U.S. Census Bureau 1990 and 2000 Census data, the Pennsylvania Department of Education, and the Pennsylvania Department of Labor and Industry. In addition, the population projections contained in this section are taken from the Southwestern Pennsylvania Commission (SPC) Long Range Forecast Cycle 7—(Adopted on July 31, 2003). The Long Range Forecast is the product of a national econometric model created by Regional Economic Models Inc (REMI), and reflects the following adjustments (SPC, 12-10-2004)

1. The REMI model uses 1999 as the last historical year. Its first forecast year is 2000. The co-owner if the Pittsburgh REMI model, the University of Pittsburgh's University Center for Social and Urban Research (UCSUR), has assisted the SPC in calibrating the model so that its forecast of 2000 and 2001 employment matches actual employment data from those years, and its forecast of 2000 population data matches published population data from the 2000 census.
2. REMI manufacturing employment forecasts have been adjusted by SPC to exclude employment at manufacturing non-production sites. Employment at these non-production sites has been reclassified to the "other" employment category.

CHAPTER 3. SOCIAL CHARACTERISTICS

Washington County is classified as a Fourth Class County (having a population of more than 150,000 but less than 225,000). In comparing the county with the Southwestern Pennsylvania Commission Region as shown in Table 3.1, actual population numbers rank Washington County as the third most populated county within the study area. Washington County had a total population of 202,897 people (United States Census Bureau, 2000). Over the last 40 years, the county has experienced slight population fluctuations but its overall population loss of 14,374 from 1960 to 2000 is relatively small compared to other SPC Counties.

Table 3.1: Total Population: SPC Region, 2000

County Class	County Name	1960	1970	1980	1990	2000
2	Allegheny	1,628,587	1,605,133	1,450,195	1,336,449	1,281,666
6	Armstrong	79,524	75,590	77,768	73,478	72,392
4	Beaver	206,948	208,418	204,441	186,093	181,412
4	Butler	114,639	127,941	147,912	152,013	174,083
5	Fayette	169,340	154,667	159,417	145,351	148,644
6*	Greene	39,424	36,090	40,476	39,550	40,672
6	Indiana	75,366	79,451	92,281	89,994	89,605
5	Lawrence	112,965	107,374	107,150	96,246	94,643
4	Washington	217,271	210,876	217,074	204,584	202,897
3	Westmoreland	352,629	376,935	392,184	370,321	369,993
	Pennsylvania	11,319,366	11,800,766	11,864,720	11,881,643	12,281,054

* by petition
Source: Southwestern Pennsylvania Commission

Table 3.2 displays the percent change in population from 1960 to 2000. Although the county has experienced a 6.6 percent decrease in population over the last forty years, the decrease is not as significant as that experienced by Allegheny County, Fayette County, Lawrence County, or Beaver County, all of which had double digit loses. Counties in the SPC region showing growth in population include Butler (51.9%), Indiana (18.9%), Westmoreland (4.9%), and Greene County (3.2%).

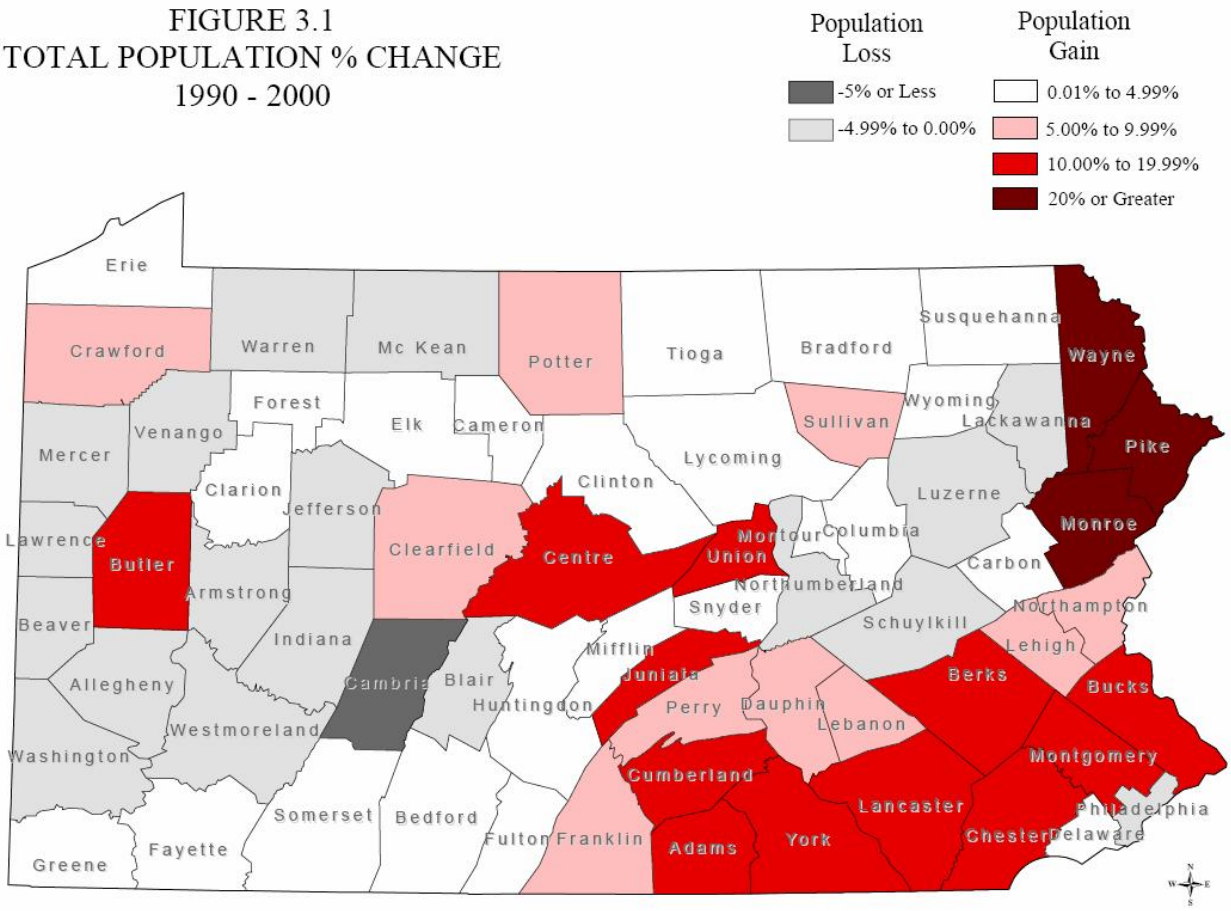
Table 3.2: SPC Region Population Percent Change, 1960-2000

	1960-2000	1960-1970	1970-1980	1980-1990	1990-2000
Allegheny	-21.3	-1.4	-9.7	-7.8	-4.1
Armstrong	-9.0	-4.9	2.9	-5.5	-1.5
Beaver	-12.3	0.7	-1.9	-9.0	-2.5
Butler	51.9	11.6	15.6	2.8	14.5
Fayette	-12.2	-8.7	3.1	-8.8	2.3
Greene	3.2	-8.5	12.2	-2.3	2.8
Indiana	18.9	5.4	16.1	-2.5	-0.4
Lawrence	-16.2	-4.9	-2.2	-10.2	-1.7
Washington	-6.6	-2.9	2.9	-5.8	-0.8
Westmoreland	4.9	6.9	4.0	-5.6	-0.1
Pennsylvania	8.5	4.3	0.5	0.1	3.4

Source: U.S. Census, 2000

Butler County's population increase is most similar to those counties located in the eastern half of the Commonwealth see Figure 3.1: Statewide Population Change (1990-2000). Figure 3-1 displays statewide county population change from 1990 to 2000. As shown, no other county on the western side of the state has come close to the population increases as experienced in Butler County.

FIGURE 3.1
TOTAL POPULATION % CHANGE
1990 - 2000

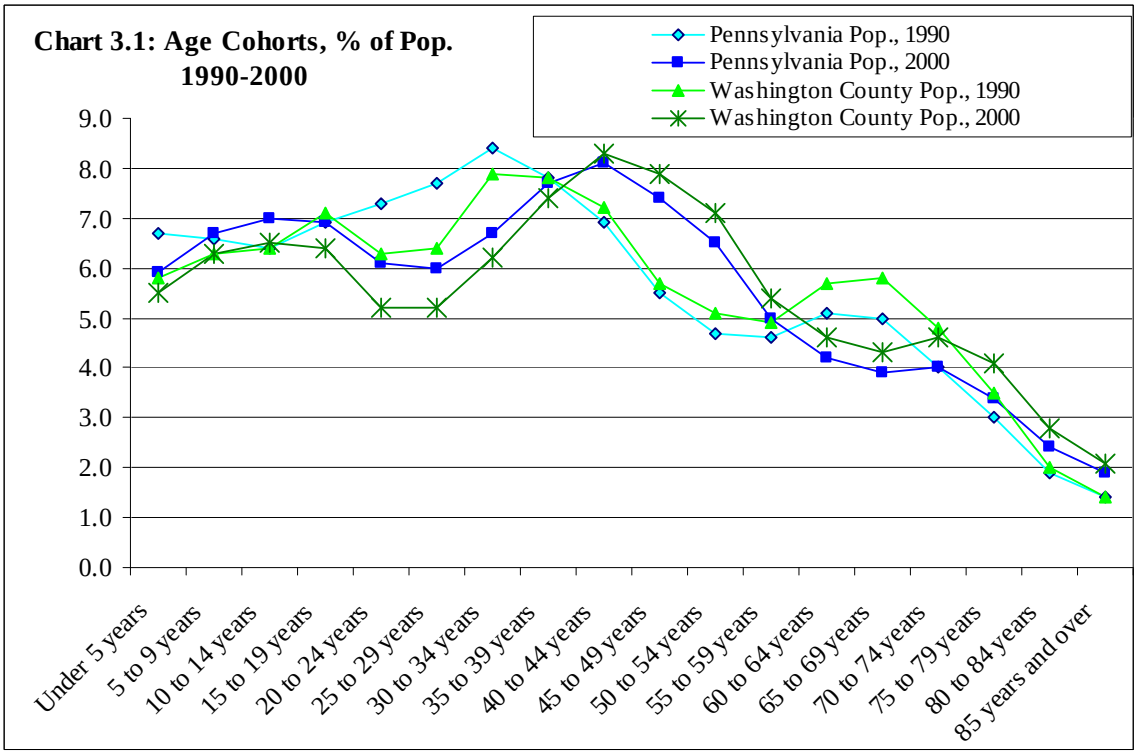


As reported by the Brookings Institution Center on Urban and Metropolitan Policy (2003), nationwide, between 1990 and 2000, Pennsylvania had the ninth-largest percentage loss of persons between 25-34 years of age. As shown in Table 3.3, Washington County experienced a decrease in the following age cohorts: Ages 15-19, Ages 20-24; Ages 25-29, Ages 25-29, and Ages 30-34; all of which closely mirror state averages. However, the increase of persons in the categories of Age Cohorts 40 to 44, 45 to 49, and 50 to 54 is significant. Each of these sectors experienced increases from 1990 to 2000. It is interesting to note the decline in the age cohort of 60 to 69 for both Pennsylvania and Washington County. One explanation for this decrease is the number of persons who retire during this time and move to other parts of the country as a seasonal resident.

It is important to understand that the population of a community is constantly fluctuating. In any given year, the population level can increase or decrease depending on birth rates, death rates or natural migration. A long-range analysis of population numbers show that Washington County has experienced continual losses and gains on a yearly basis, but has remained at a consistent level since the late 1980s.

Table 3.3: Age Cohorts, % of Total Population (1990 & 2000)	Pennsylvania		Washington County	
	1990	2000	1990	2000
Total population	**11,881,643**	**12,281,054**	**204,584**	**202,897**
Under 5 years	6.7	5.9	5.8	5.5
5 to 9 years	6.6	6.7	6.3	6.3
10 to 14 years	6.4	7.0	6.4	6.5
15 to 19 years	6.9	6.9	7.1	6.4
20 to 24 years	7.3	6.1	6.3	5.2
25 to 29 years	7.7	6.0	6.4	5.2
30 to 34 years	8.4	6.7	7.9	6.2
35 to 39 years	7.8	7.7	7.8	7.4
40 to 44 years	6.9	8.1	7.2	8.3
45 to 49 years	5.5	7.4	5.7	7.9
50 to 54 years	4.7	6.5	5.1	7.1
55 to 59 years	4.6	5.0	4.9	5.4
60 to 64 years	5.1	4.2	5.7	4.6
65 to 69 years	5.0	3.9	5.8	4.3
70 to 74 years	4.0	4.0	4.8	4.6
75 to 79 years	3.0	3.4	3.5	4.1
80 to 84 years	1.9	2.4	2.0	2.8
85 years and over	1.4	1.9	1.4	2.1

Chart 3.1 represents the percent of the population, per age cohort, for Washington County and the Commonwealth of Pennsylvania. As shown in Chart 3-3, the county closely mirrors the state trends in the percent of the population as per age cohorts for the year 2000 while 1990 figures are quite different for many of the categories less than 34 years of age. For instance, in 1990, the percentage of persons for Pennsylvania in the categories of 0-5, 5-9 and 20-34 years did not reflect the county trend. In 1990, Pennsylvania had a lower percentage of its population in the 5-19 age cohorts with more in the age cohorts of 20 to 35 while Washington County had a higher percentage in the 5-19 age brackets.



Identifying the potential for future population fluctuations is important for projecting where to dedicate funds to accommodate expected growth. In 2000, SPC formally adopted the most recent Long Range Forecast, which includes population projections for the nine counties that comprised SPC (Lawrence County was not added until 2003). The base year data are estimates for 1997 and the forecasts are for 2002, 2010, 2020, and 2025. As indicated by this forecast, the population projection indicates that Washington County will experience significant population growth over the next twenty years.

However, the SPC Long Range Forecast also predicted that Washington County would have a total population of 217,384 in 2002 but the US Census Decennial report in 2000 identified the population at 202,897, a difference of 14,487 persons. The accuracy or reliability of the SPC report is questionable in this instance as such a large increase in population is doubtful.

Figure 3.2 visually represents population projections provided by the U.S. Census for the period of 2000 to 2020. As can be seen by this representation, Washington County is expected to continue experiencing a slight population decrease. Since there are differing reports on the future population projections for Washington County, the yearly trends should be closely monitored. It will be important to develop a monitoring system that can identify increases in certain age groups if the county wishes to plan for particular services and facilities.

FIGURE 3.2
PROJECTED POPULATION % CHANGE
2000 - 2020

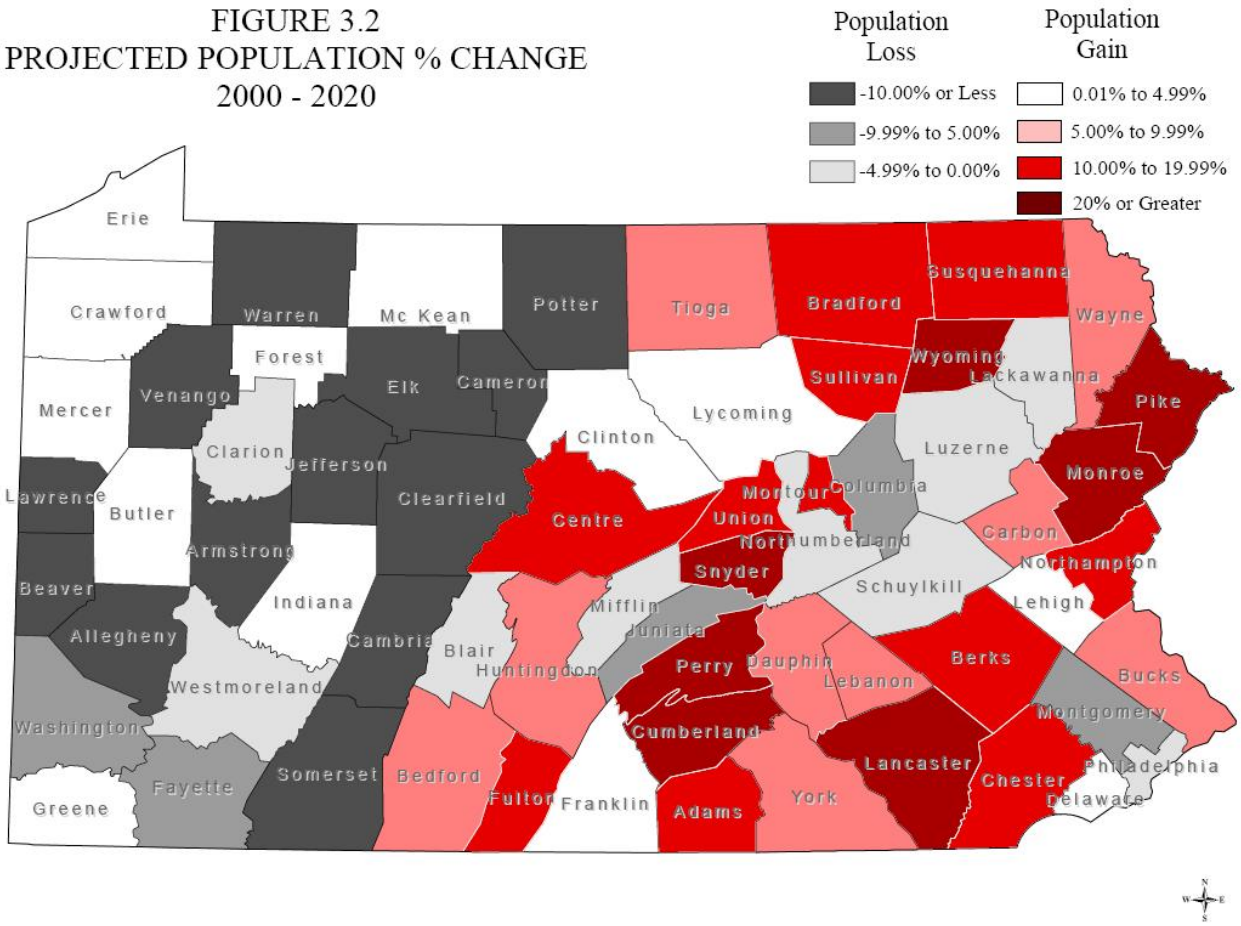


Chart 3.2 displays the median age of the population for the SPC region. As shown, Washington County's median age is one of the oldest in the SPC region. Washington County is comparable to Westmoreland County, Lawrence County, Fayette County, and Beaver County, and almost three years higher than the state's median age. Of the counties included in the SPC region, Indiana County has the youngest median age.

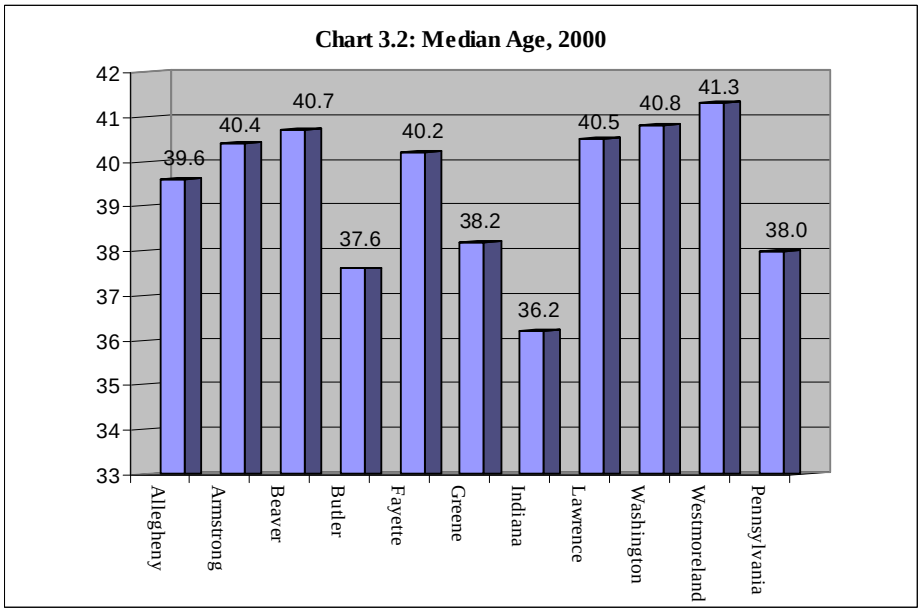
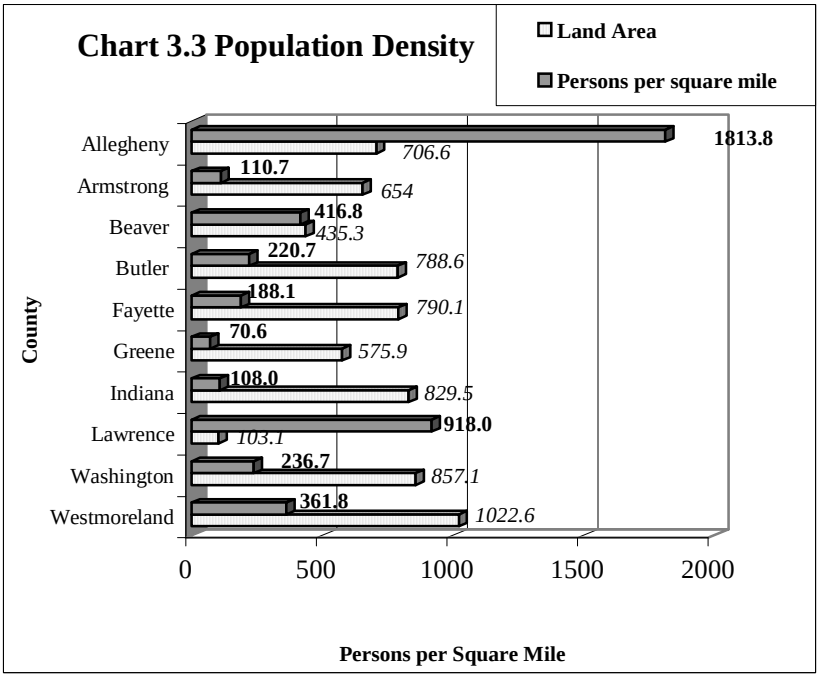


Chart 3.3, Population Density, shows the amount of population per overall land area. Washington County has 857 square miles contained within its political boundary. In terms of land area, Washington County is most similar to Indiana County (829.5 square miles). However, regarding population density Washington County with 236 persons per square mile is most similar to Butler County (220 population density).



The racial composition of the SPC region is primarily homogenous, with the exception of Allegheny County. As shown by Table 3.4: Percent of Population by Race (2000), the majority of the counties included in the SPC region are over 95 percent white. Only Allegheny County is reflective of Pennsylvania in terms of racial composition. Washington County has 95.3 percent of its population who are identified as White, 3.3 percent of the population who are identified as African American, and 0.4 percent who are identified as Asian.

Table 3. 4: Percent of Population by Race, 2000	White	African American	Asian	All Other Races
Allegheny County	84.3	12.4	1.7	1.5
Armstrong County	98.3	0.8	0.1	0.7
Beaver County	92.5	6.0	0.3	1.2
Butler County	97.8	0.8	0.6	0.8
Fayette County	95.3	3.5	0.2	0.9
Greene County	95.1	3.9	0.2	0.8
Indiana County	96.9	1.6	0.7	0.9
Lawrence County	95.0	3.6	0.3	1.1
Washington County	95.3	3.3	0.4	1.1
Westmoreland County	96.6	2.0	0.5	0.8
Pennsylvania	85.4	10.0	1.8	2.8

U.S. Census Bureau, 2000

Much of Washington County's population is also reflective of much of the SPC region when considering the number and type of households. With a total of 81,000 households, Washington County has 69.1 percent of its population classified as a family household. As defined by the U.S. Census, a household consists of all the people who occupy a housing unit including unrelated persons and a a person living alone.
(Retrieved online 05-17-04. http://www.census.gov/population/www/cps/cpsdef.html).

As per U.S. Census definitions, there are two major categories of households, "family" and "nonfamily". The term "size of household" includes all the people occupying a housing unit. "Size of family" includes the family householder and all other people in the living quarters who are related to the householder by birth, marriage, or adoption. "Size of related subfamily" includes the husband and wife or the lone parent and their never-married sons and daughters under 18 years of age. "Size of unrelated subfamily" includes the reference person and all other members related to the reference person. If a family has a related subfamily among its members, the size of the family includes the members of the related subfamily.

(Retrieved online 05-17-04. http://www.census.gov/population/www/cps/cpsdef.html).

The U.S. Census also defines the term “Householder” which indicates the person who owns or rents the housing unit. The number of householders is equal to the number of households. Also, the number of family householders is equal to the number of families. As is noted by the U.S. Census, in 1980 discontinued the use of the terms "head of household" and "head of family." Instead, the terms "householder" and "family householder" are used. Recent social changes have resulted in greater sharing of household responsibilities among the adult members and, therefore, have made the term "head" increasingly inappropriate in the analysis of household and family data. Specifically, beginning in 1980, the Census Bureau discontinued its longtime practice of always classifying the husband as the reference person (head) when he and his wife are living together.”

As displayed in Table 3.5: Households by Type, Washington County has the third highest number of total households and closely mirrors Westmoreland County in terms of family households. As shown, Butler County has the highest percent of households with children under 18 years of age while Fayette County has the highest percent of householders 65 years of age and over who are living alone. Overall Washington County is similar in many categories as that of other counties in the SPC region and of the state. One noticeable difference is the category that address householders who are 65 years and over. As may be expected with its higher median age, Washington County has a higher percentage of householders age 65 and above who live alone as well as higher percentages of households with members age 65 years and over as compared to most of the SPC region and the state.

Table 3.5: Households by Type, 2000	Allegheny County	Armstrong County	Beaver County	Butler County	Fayette County	Greene County	Indiana County	Lawrence County	Washington County	Westmoreland County	Pennsylvania
Total households	537,150	29,005	72,576	65,862	59,969	15,060	34,123	37,091	81,130	149,813	4,777,003
Family households (families)	61.9	70.8	69.6	71.1	68.7	70.3	66	69.8	69.1	69.8	67.2
With own children under 18 years	26.4	29.5	28.6	32.9	28.7	30.6	27.9	28.8	28.4	28.4	30
Married-couple family	46.1	57.9	54.5	59.8	51.8	55.4	54.3	54.5	55.2	57	51.7
With own children under 18 years	18.6	22.7	21.1	26.7	20.2	22.7	21.9	21.1	21.8	22.3	21.8
Female householder, no husband present	12.4	9	11.4	8.1	12.4	10.9	8.2	11.5	10.3	9.6	11.6
With own children under 18 years	6.4	4.7	5.9	4.5	6.4	5.7	4.2	5.9	5	4.7	6.2
Nonfamily households	38.1	29.2	30.4	28.9	31.3	29.7	34	30.2	30.9	30.2	32.8
Householder living alone	32.7	25.9	26.9	24.2	28	25.7	26.5	27	27	26.9	27.7
Householder 65 years and over	13.2	13.7	13.1	10.4	14.5	12.7	11.8	14.4	13.2	13.3	11.6
Households with individuals 65 years and over	29.8	31.2	32	24.7	32.1	28.9	26.9	33.8	31.3	31.4	27.8
Average household size	2.31	2.46	2.44	2.55	2.43	2.48	2.47	2.47	2.44	2.41	2.48
Average family size	2.96	2.95	2.96	3.04	2.96	2.97	2.99	3	2.96	2.93	3.04

US Census, 2000

The level of education attained by the population is often a good indicator of how well that community can meet the demands of employers who desire skilled labor or an educated workforce. Table 3.6: Educational Attainment (population 25 years and older), % of Population (2000), reflects the level of education attained throughout the SPC region. As shown, Washington County ranks above the state's average in terms of the percent of population who are high school graduates. The county also ranks above averages for Pennsylvania in terms of persons who have an Associate's Degree. Compared to the SPC region, Washington County fares well in terms of the percent of its population who have a Bachelor's, Graduate or Professional Degree.

Table 3.6: Educational Attainment, includes a count of the population who are 25 years or older. During the first part of the Twentieth Century, a man could earn a decent living without having a high school or college degree by working in the coalmines or steel mills. Thus, many men in the Southwestern Pennsylvania region quit high school to enter the workforce. Therefore it is not surprising to see higher than average numbers for counties such as Fayette, Greene, and Armstrong where men went to work at an early age where they could earn a good living and provide for a family. With this fact in mind, Washington County ranks high in terms of an educated population.

Table 3.6: Educational Attainment (25 yrs and older), % of Population, 2000	Less than 9th grade	8th to 12th grade	High School Graduate	Some College, No Degree	Associate Degree	Bachelor's Degree	Graduate/ Professional
Allegheny County	3.7	10	33.9	17.0	7.1	17.3	11.0
Armstrong County	7.2	12.9	51.1	12.7	5.7	7.1	3.3
Beaver County	5	11.4	42.4	17.3	8.1	11.1	4.7
Butler County	4	9.2	39.0	17.0	7.3	16.1	7.4
Fayette County	8.5	15.5	47.9	11.9	4.8	7.2	4.3
Greene County	8.7	15.6	47.6	12.0	3.9	8.0	4.3
Indiana County	7.5	11.4	46.4	13.2	4.5	9.3	7.7
Lawrence County	5	13.4	45.7	15.0	5.8	9.9	5.2
Washington County	5.6	11.8	42.6	14.6	6.6	12.8	6.0
Westmoreland County	4.7	9.7	41.2	16.9	7.3	13.6	6.6
Pennsylvania	5.5	12.6	38.1	15.5	5.9	14.0	8.4

U.S. Census Bureau, 2000

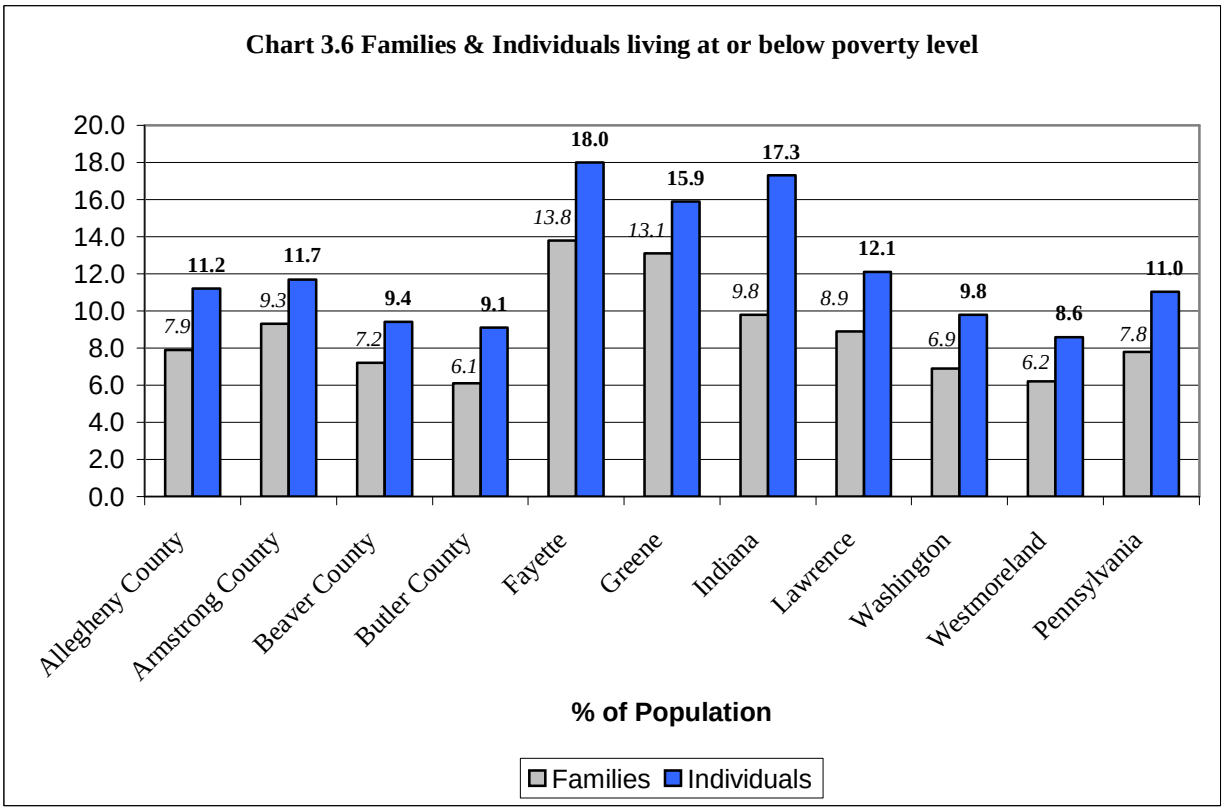
The education attainment level of the resident population also relates to a person' income earning ability. Typically, a well-educated population is better equipped to meet employer demands, adapt to changing workforce demands, and earn more than their less educated peers. As Table 3.7 reveals, Washington County residents are in higher wage earning brackets than many of the SPC region communities. As evidenced, the county has one of the highest Household, Family, and Individual Median Incomes in the Southwestern region. However, Washington County still lags behind the state averages in these income brackets.

Table 3.7: Median Income, 2000			
	Household	Family	Individual
Allegheny County	$38,329	$49,815	$22,491
Armstrong County	$31,557	$38,271	$15,709
Beaver County	$36,995	$45,495	$18,402
Butler County	$42,308	$51,215	$20,794
Fayette	$27,451	$34,881	$15,274
Greene	$30,352	$37,435	$14,959
Indiana	$30,233	$38,386	$15,312
Lawrence	$33,152	$41,463	$16,835
Washington	$37,607	$47,287	$19,935
Westmoreland	$37,106	$45,996	$19,674
Pennsylvania	$40,106	$49,184	$20,880

U.S. Census Bureau

As might be expected by the median income information displayed in Table 3.7, Washington County has a lower rate of persons who live below the poverty level as compared to most of the study area and the state as shown in Chart 3.6: Families and Individuals living at or below poverty level. The poverty level is based upon the US Department of Agriculture's determination that one third of income is spent on food and the basis for the food cost is from a Department of Agricultural economy food plan. For the 2000 Census, the poverty level was determined at $8,350/annually for persons who were 18 and over, and resided in the Contiguous United States and the poverty threshold for a family of four persons was $17,603.

As revealed in Chart 3.6-Famlies and individuals living at or below the poverty level, Washington County fares much better than much of Pennsylvania's average of 7.8 percent of families who live below the poverty level. At 6.9 percent, Washington County is slightly higher than Butler and Westmoreland Counties but less than the remaining SPC Region Counties. Regarding individuals living at or below poverty level, Washington County (9.8%) continues to rank better than much of the state. However, neighboring Westmoreland County, Butler County, and Beaver County have lower rates of individuals living at or below the poverty level than that of Washington.



The labor force in Washington County is representative of much of the SPC region as shown by Table 3.8. As can be seen, the county falls behind Butler in terms of the percentage of persons identified as the Civilian Labor Force. However, Washington ranks above many of the remaining counties in the SPC region.

Table 3.8: Employment Status, Population 16 years and over, 2000	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	Washington	Westmoreland
% in labor force	61.9	61.1	55.8	60.1	63.6	54.2	51.0	56.1	58.1	58.9	59.4
% in Civilian labor force	61.8	61.1	55.7	60.1	63.5	54.1	50.9	56.1	58.0	58.8	59.3
% Employed	58.3	57.3	52.3	56.9	60.7	49.7	46.2	51.5	54.5	55.7	56.3
% Unemployed	3.5	3.7	3.4	3.2	2.8	4.5	4.7	4.6	3.6	3.1	3.1
% of civilian labor force unemployed	5.7	6.1	6.2	5.4	4.4	8.3	9.2	8.2	6.1	5.3	5.1
% Armed Forces	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1
% Not in labor force	38.1	38.9	44.2	39.9	36.4	45.8	49.0	43.9	41.9	41.1	40.6

Source: U.S. Census

Sixty-seven political subdivisions are within the Washington County, which includes 2 third-class cities, 1 first class township, 31-second class townships, and 33 boroughs. Over half of the total population lives within an urbanized area as shown by Table 3.9: Percent of Population, Urban and Rural. The amount of persons residing within these municipalities indicates a more urbanized environment. Urban is defined by the U.S. Census (2000) as "all territory, population, and housing units located within an urbanized area (UA) or an urban cluster (UC). It delineates UA and UC boundaries to encompass densely settled territory, which consists of:

1. Core census block groups or blocks that have a population density of at least 1,000 people per square mile; and,
2. Surrounding census blocks that have an overall density of at least 500 people per square mile"

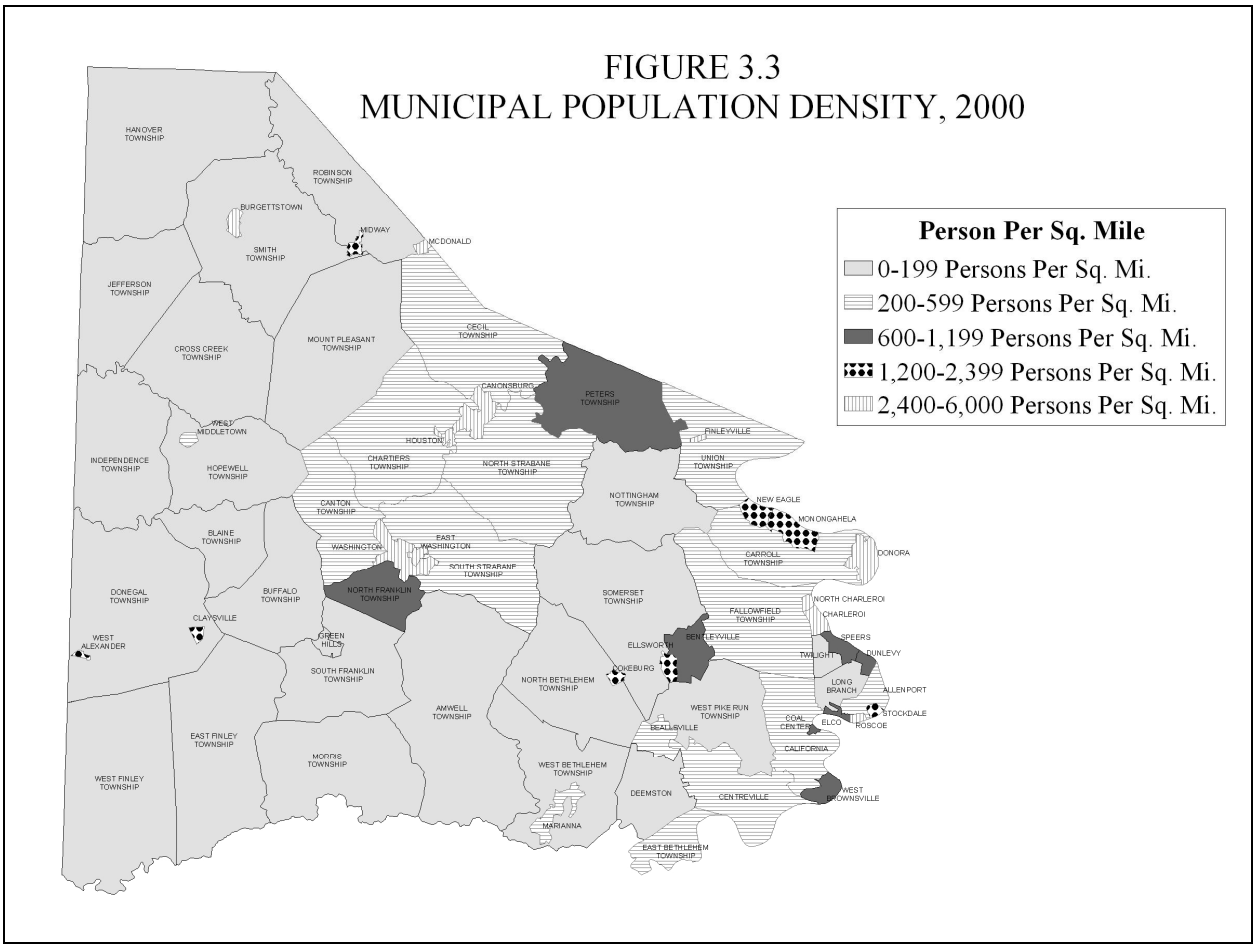
Rural is defined by the U.S. Census (2000) as "all territory, population, and housing units located outside of UAs and UCs" (OnLine: http://www.census.gov/geo/www/ua/ua_2K.html).

Table 3.9 shows that Washington County is classified by the U.S. Census as having a population that is 63% urban, more than other counties except for Allegheny, Beaver and Westmoreland Counties. The relevance of the urban rural category relates to the concentration of the population in particular geographic locations. Of the counties studied, Greene County is the most rural in nature along with having the highest percentage of population classified as farming.

Table 3.9: % of Population Urban & Rural, 2000	Total	Urban	Rural	Farm
Allegheny	1,281,666	97%	3%	0%
Armstrong	72,392	37%	63%	3%
Beaver	181,412	73%	27%	0%
Butler	174,083	53%	47%	2%
Fayette	148,644	53%	47%	1%
Greene	40,672	31%	69%	5%
Indiana	89,605	38%	62%	4%
Lawrence	94,643	59%	41%	0%
Washington	202,897	63%	37%	1%
Westmoreland	369,993	74%	26%	1%
Pennsylvania	12,281,054	77%	23%	1%

Source: U.S. Census, 2000

Understanding where the population lives within Washington County is important when determining the future location of such things as housing and water and sewer facilities. For instance, if the majority of the population is clustered in one section of the county, it would behoove the elected officials to ensure that local municipal services and infrastructure systems are equipped to handle service demands. Figure 3.3, Municipal Population Density, displays municipal population density. As can be readily seen, there are two primary population clusters, which contain the highest population densities of 200 to 6,000 persons per square mile.

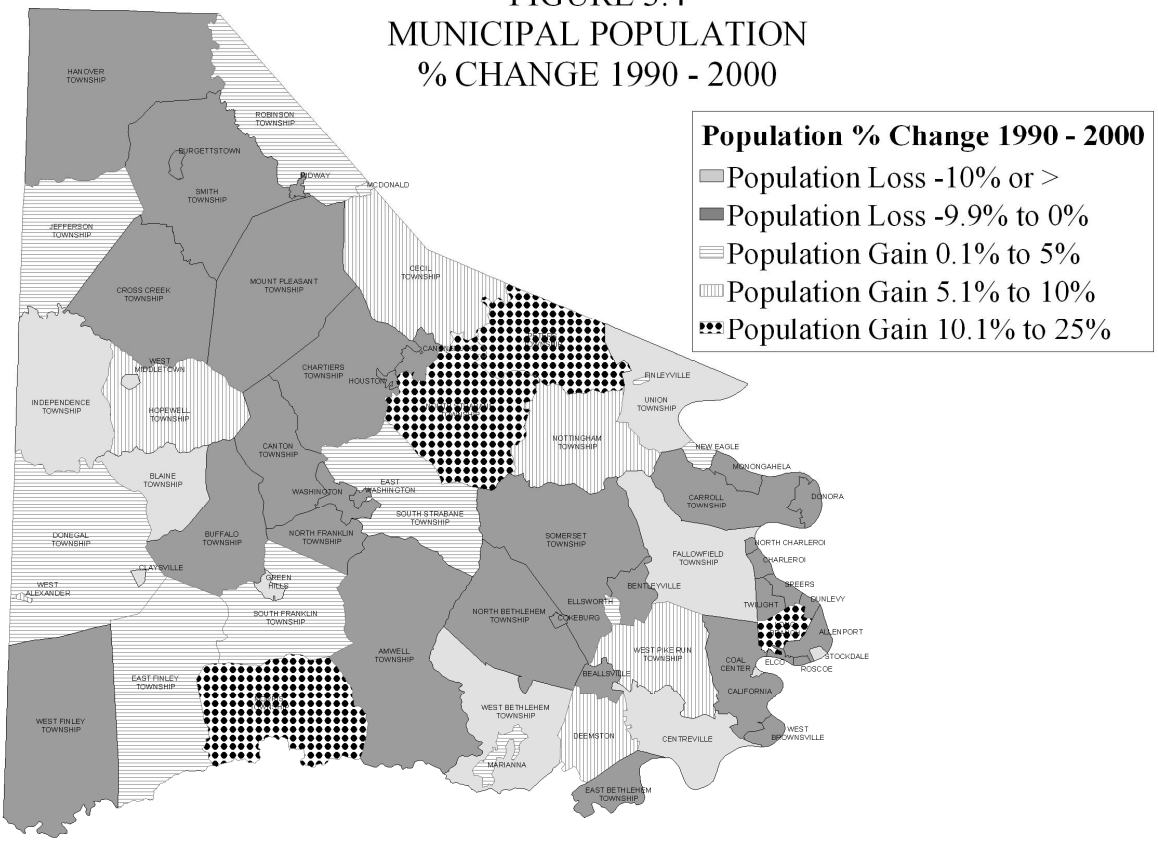


The first population cluster is located along the major transportation routes of I-79 and US 19 and contains the following municipalities: Cecil Township, Chartiers Township, Canton Township, North Franklin Township, North Strabane Township, South Strabane Township, Peters Township, Canonsburg Borough, Houston Borough, East Washington Borough and the City of Washington.

The second concentration is located along the Monongahela River and contains the following municipalities: Finleyville Borough, New Eagle Borough, Monongahela City, Donora Borough, North Charleroi Borough, Charleroi Borough, Speers Borough, Dunlevy Borough, Allenport Borough, Elco Borough, Roscoe Borough, Coal Center Borough, California Borough, West Brownsville Borough, and Centerville Borough. Portions of the following townships contain dense population centers and area also included, East Bethlehem Township, Union Township Carroll Township, and Fallowfield Township.

The municipalities of Washington County have experienced varying degrees of population fluctuation as shown in Figure 3-4, Municipal Population Change. For example, the municipalities of Cecil Township, Deemston Borough, Hopewell Township, Long Branch Borough, Morris Township, North Strabane Township, Nottingham Township, Peters Township, West Alexander Borough and West Pike Run Township have all experienced population increases of over 5.0%. The most significant population increases were experienced in Peters Township (21.4%), North Strabane Township (23.3%), Morris Township (11.1%), and Long Branch Borough (11.8%) as all had an increase of over ten percent in population in the decade since 1990. It should be noted that both North Strabane and Peters Township are considered primarily urban communities while Morris Township and Long Branch Borough are classified as rural communities.

FIGURE 3.4
MUNICIPAL POPULATION
% CHANGE 1990 - 2000



C. Existing Conditions & Analysis

Over the last forty years, in terms of overall population trends, Washington County has suffered minimal population loss. The largest population decrease occurred during the years of 1980 and 1990 when the county lost six percent of its population base. In the last decade, Washington County had less than a one percent population loss.

During the public participation process for the Washington County Comprehensive Plan, many people noted their perception that the county was experiencing a loss of young people and increase in elderly. While this fact may seem alarming, this loss reflects that of the state average. As has been well reported in a recent study by the Brookings Institution, Pennsylvania's overall population of young adults (25-34 years) has declined, while the number of elderly is in fact increasing.

The increase in the number of persons between those ages of 40 to 59 bodes well for Washington County as this age group contributes significantly to a community; often serving as stable members of society and the primary wage earners of a population. A segment of population loss that has received relatively little attention is the loss of persons between the ages of 60 and 74. Ongoing studies should be conducted to investigate why this group would be leaving the county. While this age cohort are retiring or have left the workforce, they are valuable members of society as they may have disposable income and/or time to dedicate to their communities as volunteers.

With a median age of 40.8 years, Washington County residents are just slightly older than Armstrong (40.4), Beaver (40.7), Fayette (40.2) and Lawrence Counties (40.5). The population base is primarily white (95.3%) with a small minority population of less than five percent. While the racial composition is comparable to Southwestern Pennsylvania, it is much lower than Allegheny County or the state.

Washington County is competitive in terms of its median income levels. Within the SPC Region, only Butler, Allegheny, and Westmoreland Counties out pace Washington in terms of income levels. These higher income brackets are reflected by the relatively low number of persons and families who are living at or below the poverty level.

Washington County's Median Income (2000) was $37,607

- 73% of households reported income from earnings
- 34% reported income from Social Security
- 4.5% reported income from Supplemental Security Income
- 2.4% reported income from Public Assistance
- 23.6% reported retirement income

Washington County' employment by sector (2002) includes a strong manufacturing base along with significant portions of the workforce employed in Health Care and Trade sectors. Annual unemployment for the county has ranged from 1998 to 2002 (5.1% to 6.1%). Section 7 of this plan provides a detailed overview of the economic characteristics of Washington County.

CHAPTER 3. SOCIAL CHARACTERISTICS

Over half of Washington County's population has historically concentrated in two locations, the I-79/US 19 corridor from the Allegheny County line to the City of Washington, and in the Monongahela River Valley communities. Within the last decade, a third area has experienced growth, the PA 43 Toll Road corridor. The historic consequence of populations clustering around transportation networks should not be ignored. Elected officials and service providers should prepare for increased demands and population growth near and around these primary road networks.

Washington County has many characteristics that contribute to a quality of life that residents find desirable. With this in mind, it is likely that the county will continue to experience growth and development. County officials must remain diligent in their outreach and education to municipal officials regarding the direction and quality of new development and the importance of revitalization of existing population centers. Municipalities are required to follow certain procedures to adhere to the Pennsylvania Municipalities Planning Code and Municipal Code, which are outlined under the Community Facilities and Services Section. The county must serve as the coordinating factor to guide local decision to the benefit of the county as a whole.

CHAPTER 4. PUBLIC FACILITIES AND SERVICES

A. Introduction

Community facilities and services are the backbone of a community and are often used to assess the quality of life for residents. The ability for a community to provide desired facilities and services will ultimately impact its potential for growth in the future. In the Commonwealth of Pennsylvania the provision of services can be the responsibility of governing bodies, authorities, school districts, and even private agencies. This section contains an inventory and analysis of the community facilities and services available to Washington County residents.

To continue to provide quality community services to residents, Washington County has set forth the following objectives as guiding policies.

County Development Objectives

- Promote the creation of a countywide technology infrastructure
- Assume a leadership role in creating regional partnerships to provide public safety and other community services
- Assure the adequacy of human services for Washington County Residents

B. Background

As one of 67 counties in the Commonwealth, Washington County operates under a "non-executive" style of government, meaning that a three-member board of commissioners acts as the governing body. The County Commissioners serve four-year terms during which time they are responsible for the annual budget, levying taxes and general operation and fiscal welfare of the county. The county governing structure includes other elected officials who operate independently of the County Commissioners including the sheriff, district attorney, prothonotary, clerk of courts, register of wills, and recorder of deeds. Eleven county officers are specified in the Pennsylvania Constitution but the exact roles and duties vary according to various statues and state laws.

Counties in Pennsylvania are organized into nine classes based upon population. Based upon its 2000 population, Washington County is considered a county of the fourth-class. The county has 67 municipalities located within its borders including two third class cities (Washington and Monongahela), 32 townships and 33 boroughs. Under Pennsylvania law, local governments are responsible for the administration of their municipality including such actions as tax levying and budgeting for the cost of municipal services.

The County Code (1955, as amended) outlines the responsibilities of county governments of each class. Nevertheless, in a general sense, all counties in Pennsylvania serve as sub-agencies to the state functions and often play an administrative role for state agencies. For instance, the primary role of counties was traditionally to oversee the judicial system. This role evolved to include public education activities and the provision of human services as well. In contemporary times, county officials are increasingly being asked to develop policies that foster a regional approach to solid waste management, land use planning, growth management, agricultural preservation, watershed management, economic development, emergency service management, and sewer and water infrastructure development. Additionally, County officials are responsible for the distribution of state and federal monies to support local development or preservation projects, such as, transportation improvements, community development activities, and conservation measures.

The County Code places the care of persons who are unable to care for themselves, either mentally or physically, as one of the responsibilities of county government. Activities under this role are usually termed as Human Services and include caring for the aging, abused or neglected children, drug/alcohol addicted, mentally retarded, and homeless. Washington County is organized to oversee the provision of services to county residents through its Human Service Department. This department manages funding of programs as well as provides staffing for direct care.

The care and monitoring of public offenders also falls under the County's auspices. The cost to administer the incarceration of men and women within the county system is significant to the overall county budget and trends indicate that the number of inmates will continue to increase. The county is responsible for the health and well being of all incarcerated persons within the county jail system, which includes meals, health care and counseling services.

Counties also undertake some manner of transportation-related services to residents. Oftentimes, transportation services are provided to supplement the provision of care to persons such as veterans, senior citizens, or mentally challenged persons. Washington County operates such a program to ensure that persons in need can access appropriate human services. Most of the cost to provide transportation services is funded through block grants, Department of Public Welfare, and state lottery programs.

The safety of the public is a growing arena under the domain of county services. Public safety to local municipalities usually means fire or police protection. County governments have a larger, more general role, in that; County officials are called upon to coordinate emergency communications with the passage of the Public Safety Emergency Telephone Act (1990). The Pennsylvania Emergency Management Agency has the authority to ensure that counties comply with all applicable public safety plans. The Emergency Management Service Code authorizes counties to establish an organizational structure for the oversight of public safety services. Washington County operates such a structure and includes under this administration such items as hazardous material response plans and homeland security.

Homeland Security and Counter-Terrorism Preparedness includes both intelligence aspects and response to situational occurrences. The Commonwealth of Pennsylvania has organized into nine Regional Counter-Terrorism Task Forces that are responsible for localized emergency response to homeland security issues. Washington County, located within the Southwestern PA Emergency Response Group, has organized its homeland security program through an intergovernmental and inter-departmental approach. The Washington County Public Safety department provides training to municipal governments, emergency service providers, and county residents.

In Pennsylvania, all counties, being responsible for the general oversight of land development, are required to prepare a Comprehensive Land Use plan. It is also the county's responsibility to review and comment on all municipal plans, zoning ordinances, subdivision and land development ordinances, and proposals for land development such as plats and plans. Municipalities within Washington County are required to submit proposed items for the county's review as specified by the Municipalities Planning Code (MPC).

Counties are required by the MPC to update their county plan every ten years to identify existing land uses and the impact on natural resources. Additionally, counties must include:

- Current and proposed land uses which have a regional impact and significance
- A plan for the preservation and enhancement of prime agricultural land and encourage the compatibility of land use regulation with existing agricultural operations
- A plan for historic preservation
- A plan for the reliable supply of water

County Planning Commissions have the responsibility to prepare advisory guidelines that promote the general consistency with the adopted county comprehensive plan. These guidelines are to serve as uniform measures for local municipal governments to apply when developing zoning language and other land use regulations. Additional information relating to the County and the requirements outlined in the MPC is included under the discussion of the Washington County Planning Commission.

The oversight for the removal of solid waste also falls under the auspices of county government. All counties within Pennsylvania must develop solid waste plans that direct resources for the proper removal of municipal waste, industrial waste, and medical waste. Washington County updated its Solid Waste Plan in 1999 as required by Act 101 of 1988: The Municipal Waste Planning, Recycling and Waste Reduction Act. This plan presents a thorough examination and analysis of the solid waste needs at both the county level and at the municipal level. In short, the plan found that the current system of collection and disposal of solid waste is sufficient. The plan offers several policy recommendations for local municipal officials to follow in order to reduce cost and improve services to residents. The plan strongly encourages a more aggressive and proactive approach to recycling programs. The plan also outlines the county's policy of

providing technical expertise and coordinating activities to facilitate improvements to local solid waste plans. There are no new waste facilities planned for Washington County at this time.

Counties must follow specific procedures in relation to their operating and capital budgets. All financial procedures taken by a local governing body, by state law, must be outlined in an annual budget. The annual budget includes all expenditures and revenues, which must be balanced against each other. The taxing structure of counties and local municipalities is dictated by Pennsylvania Law. Local taxes include Real Estate, Occupational, Per Capita, Local, and School, and the collection of these taxes rest with an elected Tax Collector. Certain properties (including churches, non-profit cemeteries, public property, schools, libraries, etc) are classified as tax-exempt, which means they pay no local taxes. The state law also provides certain tax allowances for senior citizens and low-income persons who are disabled.

C. Existing Conditions

Table 4.1: Washington County Revenue shows the total revenues for the county every five years from 1990 through 2005. The table also shows the percent change in revenue from 1990 to 2005. The largest source of revenue for Washington County is real estate tax. The Washington County Tax Assessment assigns a Real Estate Tax to each parcel of land upon which revenues are collected.

As shown in Table 4.1, the county has had a dramatic increase in revenues from 1990 to 2005. The total revenues have increased from $47,234,448 in 1990 to $147,139,585 in 2005 with the total available funds available for appropriation increasing by 200% percent during this 15 year time. The largest percent increase in revenues occurred under the line item of Intergovernmental Revenues (230%) with Charges for Service (230%) and Taxes (109%) also showing large increases. The only revenue source that decreased during this time frame was fines and forfeits (-13.8%).

Table 4.1: Washington County Revenue

	1990	**1995**	**2000**	**2005**	***% Change 1990-2005***
Assets	$6,644,000	$300,000	$12,165,000	$9,125,000	*37.3%*
Revenues and Other Funding Sources					
Taxes	$13,436,800	$16,142,900	$21,134,000	$28,203,384	*109.9%*
Licenses and Permits	$18,000	$24,000	$24,000	$24,000	*33.3%*
Intergovernmental Revenues	$22,652,555	$28,582,967	$48,233,904	$96,726,887	*327.0%*
Charges for Services	$4,337,000	$6,599,530	$12,613,956	$14,313,297	*230.0%*
Fines and Forfeits	$232,000	$330,000	$130,000	$200,000	*-13.8%*
Miscellaneous Revenues	$1,770,450	$1,392,930	$2,144,322	$2,237,233	*26.4%*
Other Financing Sources	$4,787,643	$11,733,506	$7,394,620	$5,434,784	*13.5%*
Total Revenues	$47,234,448	$64,805,833	$91,674,802	$147,139,585	*211.5%*
Total Available for Appropriation	**$101,114,886**	**$129,913,661**	**$195,516,604**	**$303,406,175**	*200.1%*

Source: Washington County

Table 4.2: Washington County Expenditures reflect the trends of county expenditure from 1990 to 2005. County expenditures reflect a smaller increase than that of revenues with an increase of 98 percent or $101,029,332. The largest line item increases during the fifteen year time period occurred in public safety, which includes corrections, (541.6%); human services (366.0%) and miscellaneous (169.6%). The line item of Conservation and Development experienced a

decrease of 38.8 percent while Other Financing Uses and Public Works also reflect losses of 14.8 percent and 5.2 percent, respectively.

Table 4.2: Washington County Expenditures

	1990	1995	2000	2005	*% Change 1990-2005*
Expenditures or Expenses and Other Financing Uses					
General Government-All Other	6,114,406	6,717,244	7,968,815	9,687,447	*58.4*
General Government-Judicial	5,493,531	7,433,556	9,174,106	11,657,912	*112.2*
Public Safety (including corrections)	2,342,819	6,161,001	11,498,777	15,031,258	*541.6*
Public Works	5,750,562	1,862,341	8,744,209	5,452,997	*-5.2*
Human Services	20,232,573	31,655,221	36,619,787	94,277,182	*366.0*
Culture-Recreation	101,500	299,150	274,350	163,886	*61.5*
Conservation and Development	469,974	331,703	1,070,200	292,125	*-37.8*
Debt Service	2,297,610	6,070,993	3,670,354	3,621,663	*57.6*
Miscellaneous	2,550,604	1,600,000	6,092,000	6,877,300	*169.6*
Other Financing Uses	4,583,643	6,578,506	13,742,000	3,904,784	*-14.8*
Total Expenditures	***49,937,222***	***68,709,715***	***98,854,598***	***150,966,554***	***98.0***

Source: Washington County

The efficient administration of county government requires many supporting roles and partnerships. Washington County has a variety of departments all of which are identified as a level within the Washington County Administration. Figure 4.1: County Organizational Chart provides a visual display of the county departments.

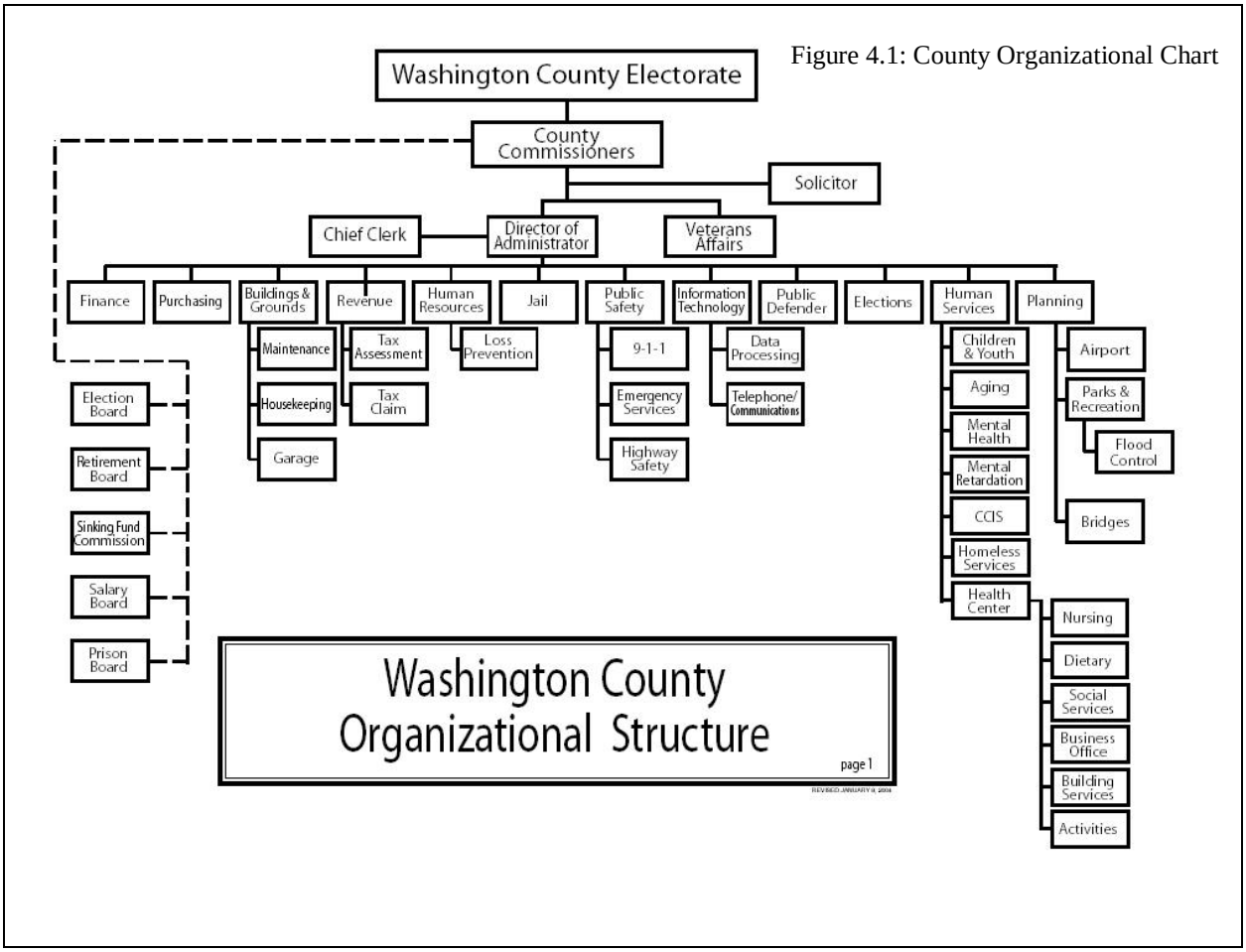


Figure 4.1: County Organizational Chart

Building & Grounds—The building and grounds department provides day-to-day maintenance of the physical campus of the Courthouse, County Jail, Millcraft Building, and Courthouse Square Building.

Chief Clerk—The Chief Clerk coordinates county operations such as record keeping and scheduling.

Director of Administration—The Director of Administration serves as a public liaison between residents and the County Commissioners. This department provides services to the county departments as well.

Election Office—Federal and state law regulates the accommodations that must be made for registered voters during the election process. The Washington County Election Office is responsible for overseeing this process and ensuring that all eligible voters have full access to engage their constitutional right to participate in the electoral process. The Election Office is

specifically responsible for preparing the county to accommodate elections and records the results of all elections.

Finance—This department is responsible for monitoring the County budget on an annual basis. Other duties include the preparation of state and federal fiscal reports, and investing County funds.

Human Resources—The Human Resource Department develops those policies related to benefit programs for workers, the selection of new employees, labor contracts, employee counseling, and oversees training activities for employees.

Human Services—Provides administration of contracts for human services in Washington County. The department works with non-profit service agencies to ensure that services are provided efficiently and organized to reduce duplication. In addition to managing the food, transportation, and homeless and housing assistance programs, the Human Services Department coordinates the following programs:

- Aging
- Children and Youth
- Child Care Information Services
- Mental Health/Mental Retardation
- County Health Center

Information Technology—All electronic information needs are met by the Information Technology Department. Coordination of these services is provided by a core IT group, a Court Automation group, and support services to the Human Services department, the health center, the county correctional facility, and emergency services.

Public Safety—This department is comprised of several levels of professionals working together to ensure the safety and physical well-being of residents and the environment. The Department of Public Safety includes the divisions of Emergency Management, Emergency Medical Services, Chemical Preparedness, the Washington County 911 Dispatch Center, the Highway Safety Department, and the Washington County Haz-Mat Team. The Public Safety Department works in conjunction with local municipalities to respond to county and local emergencies. The 911 Dispatch Center dispatches over 200,000 calls annually. In addition, the department maintains the following response plans:

! 67 Municipal Emergency Response Plans
! 14 School Plans
! 73 Dam Emergency Plans
! 42 Emergency Operation Plans for Chemical Facilities

Purchasing—The Purchasing Department coordinates all purchasing activities for the county. This department manages the procurement of all county materials, supplies, and specific services. The Purchasing Department also manages the sale of surplus property.

Solicitor—The county solicitor is appointed by the County Commissioners and provides legal counsel to the county. The solicitor creates and reviews contracts and ordinances for the Commissioners and other County departments. The solicitor must attend all meetings that involve the Commissioners and advise them on governmental laws.

Tax Revenue Department—This department is comprised of two divisions, Assessments and Claims. The Tax Assessment office levies the assessments on all real estate in Washington County. The Tax Claims office collects delinquent taxes owed to Washington County.

Veterans Affairs—This Department maintains the death and burial records for Washington County wartime service persons. The department also provides general assistance to veterans and serves as an advocate for veteran's rights.

The Washington County Correctional Facility—This County owned and operated facility averages between 320 and 340 inmates annually. Inmates include those who are held in custody while charges are pending or those who are sentenced to two years or less. The facility is administered by a Prison Board, which includes the County Commissioners, President Judge, Sheriff, District Attorney and County Controller. The County Correctional Facility was opened in 1996 to replace the old County Jail, which was built in 1896. The new facility was constructed and furnished at a cost of $22 Million. The former jail was recently renovated to serve as the Family Court Center and remains under county ownership and control.

Planning Commission—The Washington County planning commission is responsible for the mapping of Washington County, the review of all land development and subdivisions in Washington County, and for the overall development within the county. The Washington County Planning Commission conducts surveys and data gathering regarding demographic and service needs of residents and will provide this information to interested parties. Some of the additional duties include the preparation of studies regarding environmental, economic and social issues that would affect county development goals. The Planning Commission oversees the activities of the Bridge Department, County Airport (more detail on the airport is provided under Section 7: Movement of People and Goods) and the Department of Parks and Recreation. Additionally all flood control projects are the responsibility of the Planning Commission.

The duties undertaken by this department are numerous and will be discussed in detail, as this department is responsible for the development of the Washington County Comprehensive Plan and has many responsibilities regarding land development and preservation in Washington County.

Washington County Planning Commission

Section 209.1 (Powers and Duties of Planning Agency) of the MPC, Act of 1968, P.L. 805, No. 247 as reenacted and amended, outlines duties of the planning agency. Washington County operates under a county department planning commission that

oversees the adherence to development policies along with an appointed planning commission board who serves as an advisory body to the department and County Commissioners. Counties are required to prepare a county comprehensive plan and publish advisory guidelines to promote general consistency with the adopted county comprehensive plan. These guidelines are to "promote uniformity with respect to local planning and zoning terminology and common types of municipal land use regulations." Counties may consider amendments to their comprehensive plan if proposed by a municipality to achieve general consistency. The County Plan is to be updated every ten years.

Once a county has adopted it comprehensive plan, the MPC (Section 304. a.) requires that municipalities must notify the county planning agency regarding:
"Any proposed action of the governing body of a municipality, its departments, agencies and appointed authorities within the county shall be submitted to the county planning agency for its recommendations if the proposed action relates to:

- The location, opening, vacation, extension, widening, narrowing or enlargement of any street, public ground, pierhead or watercourse;
- The location, erection, demolition, removal, or sale of any public structures located within the municipality;
- The adoption, amendment or repeal of any comprehensive plan, official map, subdivision or land ordinance, zoning ordinance or provisions for planned residential development, or, the construction, extension or abandonment of any water line, sewer line or sewage treatment facility;"
- Municipalities in Washington County are required to forward a certified copy of their municipal comprehensive plan (including amendments) to the county planning agency within 30 days of adoption.

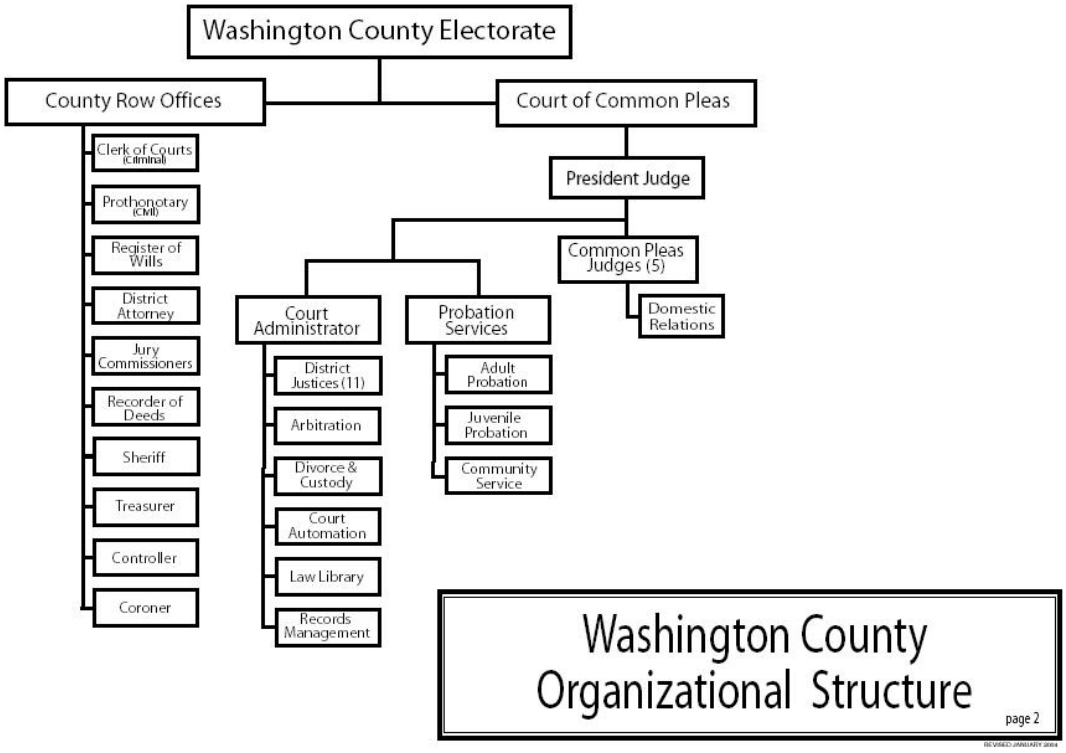
The county planning agency has 45 days in which to review the action and provide a recommendation to the governing body of the affected municipality. The municipality must not take action prior to receiving the recommendation or after 45 days have passed. Washington County has defined what the county planning agency requires from municipalities regarding their review and report for all subdivision and land development applications. This information is available online at the County's website.

School districts in Washington County also must comply with the MPC and provide notice to the Washington County Planning Commission regarding specific actions that the district may take regarding land development. Section 305 of the MPC states that the governing body of a public school district must submit notice of the location, demolition, removal, sale or lease of any school district structure or land to both municipal and county planning agencies within 45 days for comment.

Washington County Row Offices

There are nine County Row Offices that are directed by an individual who is elected by the voters for a term of four years. Figure 4.2: County Row Office and Court of Common Pleas Organizational Structure, provides an understanding of the organizational structure for the Row Offices and Court structure of Washington County.

Figure 4.2: County Row Office and Court of Common Pleas Organizational Structure



XI

Clerk of Courts—The clerk of courts keeps and dockets records of criminal court, issues bonds, collects court costs and pays witness fees.

Coroner—The coroner investigates suspicious and violent deaths, and completes all autopsy, coroner and toxicology reports.

Prothonotary-- The prothonotary is the clerk of Common Pleas Court who administers public records involving civil procedures and processes naturalization papers. All files relating to civil

divisions of courts are kept by the Prothonotary including cases involving divorce, child custody, abuse, malpractice, etc.

Recorder of Deeds—The recorder of deeds maintains the records of real estate property. The Washington County Recorder of Deeds was established in 1781 to provide three functions:

1. To record deeds, mortgages, subdivisions and other documents.
2. To collect fees and taxes levied for recording
3. To assemble and preserve the documents

Register of Wills and Clerk of the Orphan's Court—The register of wills is the clerk of the Orphans Court who probates wills, issues marriage licenses, collects inheritance taxes and determines who should be the executors of estates.

Controller—The duties of the Controller's Office are primary fiscal in nature, in essence serving as a "finances watchdog." This office is responsible for processing payroll, accounts payable, and revenue for al County row offices and departments, as well as, being responsible for all financial record keeping and audit duties. The Controller also performs audits for row offices, all County District Justice offices, and various other departments as required or requested. They also are responsible for posting all County revenue and maintaining financial reports.

District Attorney—The district attorney is the chief prosecuting attorney for all crimes committed in Washington County. Private complaints filed with the District Justices are reviewed by the District Attorney to be considered by the Accelerated Rehabilitative Disposition Program.

Sheriff—The sheriff, who serves writs, warrants and summons, and conducts sheriff's sales. The sheriff is the chief law enforcement officer of the county and is empowered to enforce the Pennsylvania motor vehicle code throughout Washington County. The Washington County Sheriff's office includes other duties such as:

- County park patrol
- Courthouse security
- Service of civil process issued by the courts
- Transportation of prisoners, juveniles, and mental patients.

Treasurer—The County Treasurer is the mailing agent for county bills. The treasurer issues payroll and checks, collects county taxes, receiving money from grants, and issuing dog, fishing, fur trapping, etc.

Jury Commissioners—Two elected Jury Commissioners (one from each political party) prepare a list of qualified voters from which prospective jurors are selected.

Court of Common Pleas

District Justices—This elected position is a 6-year term and carries the responsibility to hear suites filed by individual citizens that entails a complaint against a person or business where the amount of money does not exceed $4,000.

Domestic Relations—This county office approves amounts for spouses and children sentenced by the court judge to receive monetary support from the spouses or natural parents.

The Law Library—The Law Library serves the legal research needs of the bench, bar and citizens of Washington County. The library houses state and federal statutes, case law and legal publications, genealogy records recent legislation changes, case reporters, and local ordinances.

Adult Probation—Probation offices supervise individuals deemed adults by the court who are on probation or parole. A probation officer has police powers to arrest any person under supervision with or without a warrant.

Juvenile Probation—The Juvenile Probation Office is a social service agency which makes decisions in cases involving alleged criminal acts committed by youths under 18 years of age. After the finalization of a case, the office is responsible for the supervision of the youth and develops treatment programs to assist in rehabilitation.

Public Defender—The public defender is an appointed position required by state law. The office of the public defender represents individuals who are arrested and/or sentenced to jail and who cannot afford an attorney. The public defender represents clients for mental health hearings, juvenile hearings, and child welfare hearings.

Court Administrator—The Court Administrator is responsible for the supervision of the Court of Common Pleas, District Justice courts, development of court schedules, preparation of court reports and statistical records, and other such administration items.

Other County Service Agencies & Authorities

The following section describes several important agencies and authorities that operate independently but cooperatively with the county. While this section does not exhaust the many entities that work with the county it does briefly describe those whose work is integral to the overall operations and general quality of life in the county. Additional information can be obtained by contacting the Washington County Planning Commission.

Conservation District—The Conservation District is an independent environmental agency affiliated with the Department of Environmental Protection that has the responsibility to protect Washington County's soil and water resources. The Washington County Conservation District

operates under the auspices of the State Conservation Commission and coordinates federal, state, and local conservation programs.

Cooperative Extension Service—This program is sponsored by Penn State University (PSU) and the county and is basically an outreach arm of agricultural sciences of PSU. The Cooperative Extension provides non-formal education in four areas: Agriculture/horticulture, Children and Youth Development, Family Living, and Community and Economic Development.

Washington County Health Center—located in Chartiers Township, adjacent to the Fairgrounds, the Health Center provides a source of direct care services. The Health Center has a 250-room nursing home that provides professional nursing and rehabilitation services. Additional services include adult day care.

Job Training Agency—This agency serves both Washington and Greene Counties. It not only provides workforce development and retraining programs, but also summer youth programs

Southwestern Pennsylvania Area Agency on Aging—Located in the City of Washington, the Area Agency on Aging offers services to Washington, Fayette and Greene County Senior Citizens. The agency operates 25 senior community centers and provides such programs as employment, legal and protective services.

Community Action Southwest—This agency located in Washington County supports the county administration to provide services to low-income residents in both Washington and Greene Counties. Programs include food banks, shelters, Head Start, Adult Literacy, and WIC.

Washington County Council on Economic Development—Located in the City of Washington, this agency was formed to promote economic development in the county and is addressed in more detail under Section 9: Economic/Business Analysis, of this comprehensive plan. The Washington County Council on Economic Development (Council) is a non-profit 501(c)(3) organization dedicated to a mission of community economic development through providing businesses the opportunity to develop life-sustaining jobs. The Council has been a dynamic Gap Loan Finance and a Small Business Microlender in rural Southwestern Pennsylvania and portions of West Virginia since 1993. Its most recent project has been the development of the Starpointe Business Park which is expected to bring 9,000 jobs to Washington County while sewer systems developed to respond to the park will provide this public utility to 14,000 acres in Hanover and Smith Township for the first time.

Washington County Human Service Authority—serves a leadership role in the coordination of human and social services to residents of the county.

Washington County Hospital Authority—This authority has the responsibility to assist in financing to support various hospitals and medical clinics in the county.

Washington County Chamber of Commerce—As the largest business association in Washington County and the fourth largest chamber of commerce in Southwestern Pennsylvania (http://www.washcochamber.com), the Washington County Chamber of Commerce is an important partner to the economic health of the county. The Chamber seeks to support existing businesses, and assist new business development by providing information to new firms.

Washington County Authority—This agency acts as a funding vehicle for county projects and other organizations. To date the Authority has secured over 300 million dollars in Bonds that helped finance the new county prison, 911 Center, and renovation of the County Jail. The Washington County Authority was incorporated in 1951 and is often referred to as the General Purpose Authority. The Authority provides significant funding in terms of bond financing towards a variety of public projects. Perhaps the most significant recent accomplishment is the award of the contract to develop the former Western Center property that is adjacent to Southpointe Industrial Park. The project, which is called Southpointe II, will be a multi-use development that includes office buildings, housing, retail, and senior housing.

Washington County Housing Authority—This agency develops and administers low rent public housing for income eligible families and senior citizens. Housing consists of one and two bedroom apartments and conventional single and multi-family housing. The Housing Authority provides direct services to residents in regards to housing. As the Housing Authority directly impacts the health and welfare of county residents by providing housing services, the programming budget will be examined in detail. Table 4.3: Washington County Housing Authority, Combined Statement of Revenues and Expenditures- 1990-2003, displays the percent change in total revenue and expenditures from 1990 to 2003. As shown, the Washington County Housing Authority has experienced an increase over 600 percent in operating revenue while its total operating expenditures have had a smaller increase of 77.3 percent.

Table 4.3: Washington County Housing Authority, Combined Statement of Revenues and Expenditures- 1990-2003

	1990	2003	*% Change 1995-2004*
Operating Revenue			
Charges to tenants		$1,831,409.00	N/A
Investment Income	$115,530.75	$31,481.00	-72.8%
Other Income	$53,812.78		-100.0%
Operating Grants		$8,469,033.00	N/A
Miscellaneous		$1,736,758.00	N/A
Dwelling Rental	$1,530,285.70		-100.0%
Non Dwelling Rental	$3,999.00		-100.0%
Total Operating Revenues	$1,703,628.23	$12,068,681.00	608.4%
Operating Expenses			
Administrative	$723,911.51	$1,999,139.00	176.2%
Utilities	$773,464.77	$1,108,892.00	43.4%
Maintenance	$681,769.31	$1,237,323.00	81.5%
Non-routine maintenance	$127,077.66	N/A	N/A
Protective Services	N/A	$154,907.00	N/A
General Expenses	$651,039.97	$482,375.00	-25.9%
Extraordinary Maintenance	N/A	$60,907.00	N/A
Depreciation	N/A	$1,850,137.00	N/A
Housing Assistance Payments	$2,985,588.95	$3,646,735.00	N/A
Independent Public Accounting	$3,000.00	N/A	N/A
Total Operating Expenses	$5,945,852.17	$10,540,415.00	77.3%

Source: Housing Authority of Washington County Financial Statements and Audit Reports, 1990, 2003

Washington County Redevelopment Authority—This multi-faceted agency administers programs such as the Community Development Program, the HOME Program and the State Redevelopment Assistance Funds on behalf of the county government. Services include administration of 5.3 million dollars of Community Development Block Grants, 1 million dollars for the HOME program as well as oversight of 6 elderly housing facilities. The redevelopment authority will be discussed in more detail as it directly affects the living conditions of county residents as well as serving as a funding source for many municipal development projects.

The County Redevelopment Authority was established in 1956 under the Pennsylvania Redevelopment Law. The redevelopment authority has the responsibility for programs that redevelop and improve blighted areas within the county. The Redevelopment Authority established Washington County as a Community Development Program in 1975 to develop urban communities, provide housing, and expand economic opportunities, with a focus on persons of low to moderate income. The federal funding that supports the Community Development Program is directed to the following objectives (Auditor Report, 2004):

1. The elimination of slums and blight and the prevention of blighting influences and the deterioration of property, neighborhood, and community facilities of importance to the welfare of the community, principally for persons of low and moderate income;
2. The elimination of conditions, which are detrimental to health, safety, and public welfare through code enforcement, demolition, interim rehabilitation assistance, and related activities;
3. The conservation and expansion of the nation's housing stock in order to provide a decent home and a suitable living environment for all persons but principally those of low and moderate income;
4. The expansion and improvement of the quantity and quality of community services, principally for persons of low and moderate income, which are essential for sound community development and for the development of viable urban communities;
5. A more rational utilization of land and other natural resources and the better arrangement of residential, commercial, industrial, recreational, and other needed activity centers;
6. The reduction of the isolation of lower income groups within communities and geographical areas and the promotion of an increase in the diversity and vitality of neighborhoods through the spatial concentration of housing opportunities and persons of lower income and the revitalization of deteriorating or deteriorated neighborhoods to attract persons of higher income; and,
7. The restoration and preservation of properties of special value for historic, architectural or aesthetic reasons.

The redevelopment authority is a development component that is integrated into the county development policy and integral to local municipal planning and development efforts. For instance, the redevelopment authority achieves this by: (Auditor Report, 2004)

1. Providing assistance on an annual basis, with maximum certainty and minimum delay, upon which communities can rely in their planning;
2. Encouraging community development activities, which are consistent with comprehensive local and area-wide development planning;
3. Achievement of the national housing goal of a decent home and suitable living environment for every American family; and,
4. Fostering the undertaking of housing and community development activities in a coordinated and mutually supportive manner.

Table 4.4: Washington County Redevelopment Authority, Statement of Revenues and Expenditures- All Fund Types, provides a display of the percent change of the redevelopment authority's revenue and expenditures from 1995 to 2004. As can be seen, the total amount of revenue has risen by 82.6 percent since 1995. Expenditures have risen by 51.8 percent despite a decrease in the amount of funding directed to rehabilitation (-66%). The line item of Administration has increased by 39.3 percent while Loan Programs have risen most dramatically.

Table 4.4: Washington County Redevelopment Authority, Statement of Revenues and Expenditures- All Fund Types, 1995-2004

	1995	2004	*% change 1995-2004*
Revenues			
Grants			
County	$576,911	$285,248	-50.6%
County used as matching	$83,479	N/A	**
State	$1,897,970	$710,763	-62.6%
State used as matching	$93,015	N/A	N/A
Federal	$5,073,164	$10,681,158	110.5%
Federal used as matching	$610,459	N/A	**
Local communities	$244,566	$913,419	273.5%
Other			
Redevelopment, primarily management fees	$618,400	N/A	**
Redevelopment, used as matching	$93,497	N/A	**
Investment Income	N/A	$231,192	**
Loan Repayments	N/A	$840,375	**
Management Fees	N/A	$822,096	**
Miscellaneous	N/A	$3,146,430	**
UDAG pay backs	$47,689	N/A	**
Program income	$317,401	N/A	**
TOTAL	$9,656,551	$17,630,681	82.6%
Expenditures			
Loan Programs	$60,720	$9,757,131	15969.1%
Property Operations	$90,568	N/A	**
Relocation	N/A	N/A	**
Site Improvements	$4,465,044	N/A	**
Administration	$1,715,777	$2,390,272	39.3%
Planning and Surveys	$137,870	N/A	**
Property Acquisition	$165,197	N/A	**
Professional Services	N/A	$386,309	**
Other Development Costs	N/A	$1,245,128	**
Disposition	$18,627	N/A	**
Demolition and Clearance	$415,792	N/A	**
Rehabilitation	$2,586,956	$880,573	-66.0%
TOTAL	$9,656,551	$14,659,413	51.8%

Source: Redevelopment Authority of Washington County Year End Reports

Washington County Transportation Authority—This authority was created in 2001 to direct and manage the human service transportation programs. Existing transportation services provided by the Washington County Transportation Authority (WCTA) will be discussed under Section 7: Movement of People and Goods, while the overall operation and philosophy of the authority will be discussed in this section. The authority became an independent entity in 2003 and currently operates under the following mission statement (Washington County Transportation Authority Strategic Plan, 2004):

> *To promote and provide high-quality, cost effective transportation to the citizens of Washington County and surrounding areas as appropriate, especially older adults, persons with disabilities, and economically disadvantaged individuals, including those on Medical Assistance.*

The WCTA recently completed a Strategic Plan (2004) to investigate the feasibility of expanding transportation-related services. Table 4.5: Washington County Transportation Authority Ridership & Expenses, 2001-2004, provides an understanding of the percent change for the number of passengers served, and level of expense incurred, by the WCTA. According to the WCTA, the increase in costs occurred because of a sizable rate increase granted to the incumbent private operators. The size of the increase was necessitated because of the lack of any increase during the previous eight years.

Table 4.5: Washington County Transportation Authority Ridership & Expenses, 2001-2004

	2001-02	**2003-04**	***% Change 2001--2004***
Passengers	296,553	300,370	1.3%
Expense	$2,952,048	$4,435,056	50.2%

Source: Washington County Transportation Authority Strategic Plan, 2004

The WCTA has evolved its service level from sub-contracts with private taxi companies to contracts with public agencies and a national transportation company. The strategic plan for the authority identifies other steps that will need to be taken over the next five years to maintain quality service levels, including:

1. Application to Penn DOT for fare restructuring and increases
2. Developing a marketing plan for the WCTA
3. Identify target markets
4. Increase staff development and training

A key element of the WCTA Strategic Plan is a proposed county-wide study of transit needs. This study would examine needs across the County for additional transportation services, both urban and rural, including demand-responsive, fixed-route, and commuter service into Pittsburgh. It would also examine the fact that there are now three different agencies providing

transportation services (the City of Washington, WCTA, and the Mid-Mon Valley Transit Authority), ad consider whether there are other institutional arrangements that might work better. WCTA has already begun work on securing the funding for this study, which is planned to begin in 2006.

Table 4.6: Washington County Transportation Authority Projected Income & Expenses, 2004-2009, shows the percent change in the projected income and expenses for the WCTA. As can be seen, the WCTA expects to see a three percent decrease in operating revenues and a 12.3 percent increase in operating expenses.

Table 4.6: Washington County Transportation Authority Projected Income & Expenses, 2004-2009

	2004-2005	**2008-2009**	***% Change 2004-2009***
Income			
Agency Income	$43,963.00	$43,963.00	0.0%
Passenger Fare Collected	$231,499.00	$211,788.27	-8.5%
Sponsorship Income	$229,782.00	$229,782.00	0.0%
Contract Revenues	$3,867,458.00	$3,753,838.94	-2.9%
Vehicle Usage Fee	$15,000.00	$15,000.00	0.0%
Total Operating Revenues	$4,387,702.00	$4,254,372.21	-3.0%
Expenses			
GG&C	$816,900.00	$981,254.64	20.1%
TCA	$441,164.35	$522,213.06	18.4%
TCA-VETS	$19,920.00	$24,212.88	21.6%
LTS	$1,078,551.00	$1,309,780.46	21.4%
Aging (per trip)	$325,055.00	$394,152.64	21.3%
WL	$498,179.05	$575,298.69	15.5%
Other WTW	$431,033.00	$249,487.29	-42.1%
MATP (Client Reimbursement	$183,169.00	$222,643.06	21.6%
Administrative	$680,173.00	$745,844.75	9.7%
Total Operating Expenses	$4,474,144.40	$5,024,887.47	12.3%

Source: Washington County Transportation Authority Strategic Plan, 2004

Since the completion of the WCTA Strategic Plan (2004), the Authority experienced another round of rate increases from its subcontractors, largely due to spikes in fuel and insurance costs. It has also requested and received fare increases to offset the aforementioned increases. The fare

increase will generate an additional $800,000 annually, and should meet the financial needs of the authority at least through FY 2006-07.

Washington County Owned Buildings and Property

Courthouse—The current Courthouse was constructed between the spring of 1898 and fall of 1900 on Main Street in the City of Washington. This new Courthouse eliminated problems such as overcrowding of offices and storage space for valuable documents. Designed by prominent Pittsburgh architect, F. J. Osterling, and built at a cost of $1 million, the County Courthouse continues to serve the citizens of Washington County while maintaining its Beaux-Arts Classical style and beauty. Originally designed with three courtrooms, the Courthouse now contains five courtrooms and judges chambers. It provides office space for row offices and departments whose duties relate directly to the Washington County Court of Common Pleas. In order to maintain and preserve the original architectural beauty of the Courthouse for future generations, extensive renovation projects are periodically initiated. As a notable structure on the National Register of Historic places, the citizens of Washington County can be pleased to know that their Courthouse not only provides government services, but also serves as a link to our historic past.

Courthouse Square Office Building—The Courthouse Square Office Building, located on West Beau Street in the City of Washington, directly behind the County Courthouse, was completed in 1980, and built at a cost of $6.5 million. This building contains over 400 rooms and seven floors and provides office space for at least 30 departments and agencies, as well as county

Administrative offices—Two public meeting rooms and conference rooms on each floor provide space where citizens can voice their concerns about government policy.

Correctional Facility—Dedicated in March of 1996, the facility holds prisoners in custody pending acquittal of their charges and those who are sentenced to two years or less. The facility believes in the rehabilitation of those in custody. It is essential to identify problems and attitudes relating to the inmates criminal history and to implement, maintain and monitor programs that will prepare inmates to confront their problems in a constructive manner once they return to society. The facility holds 258 inmates with the capability of adding 98 more cells. Special construction techniques, the addition of acoustic panels and floor coverings and a central controlling room aid in better supervision of the inmates and allow officers to maintain discipline in the facility.

Other county owned facilities include the Washington County Airport, Ten Mile Park, Cross Creek Park, Mingo Park and the Washington County Health Center.

In addition to county owned establishments, there are numerous facilities and locations that the county leases:

- District Justice Offices
- 911 Sites
- Senior Centers
- Drug Task Force Office
- Highway Safety Program
- Aging Service Offices
- Archival Storage
- Offices at the Millcraft Center
- JPO Leader Program

Washington County Fairgrounds

The Washington County Fairgrounds located in Chartiers Township is owned by the County and managed through a lease agreement by the Washington County Agricultural Fair Board. This 100-acre facility has 31 buildings, which include numerous barns, exhibit halls, a show arena, a historical house, etc. The primary annual event is the agricultural fair held in August of each year. Other special events that take place throughout the year include craft shows, antique shows, wedding receptions, tool sales, auctions, etc. August 2005 will mark the 207 anniversary of the Washington County Agricultural Fair making it one of the longest running agricultural fairs in the Commonwealth.

Educational Amenities

The Public School Code governs the provision of education in Pennsylvania. School districts, Intermediate Units, and the Pennsylvania Department of Education are responsible for ensuring that residents are afforded the opportunity of a quality education. A board of directors serves as the controlling agency and has the authority to hire personnel, levy taxes, and approve bond issues governs each school district. School districts generally encompass more than one municipality. Washington County has 14 school districts and two vocational/technical schools providing public educational services to county youth.

As shown by Table 4.7: Public, Private, and Nonpublic Enrollments by County % Change, all school enrollments fell by 2.4 percent from the 1997-1998 school year to the 2003-2004 school year. This statistic reflects a decrease in the percent of children attending the private and nonpublic elementary schools. In comparison to other counties, Washington fares remarkably well in terms of its stability in total school enrollments and it reflects the trend for decreasing enrollment in private and nonpublic schools.

Table 4.7: Public, Private, and Non-Public Enrollments by County % Change from 1997 & 1998 to 2003 & 2004

	Total			Elementary			Secondary		
	Total	Public	Private & Nonpublic	Total	Public	Private & Nonpublic	Total	Public	Private & Nonpublic
Allegheny County	-5.4%	-3.2%	-15.9%	-12.3%	-10.8%	-17.4%	4.5%	5.8%	-10.2%
Armstrong County	-6.8%	-5.9%	-21.1%	-7.6%	-6.5%	-18.2%	-5.9%	-5.4%	-46.7%
Beaver County	-2.1%	-1.5%	-10.5%	-10.8%	-11.1%	-8.2%	8.8%	9.8%	-18.6%
Butler County	0.7%	0.9%	-3.3%	-1.8%	-1.2%	-6.8%	3.8%	3.4%	25.5%
Fayette County	-8.6%	-7.2%	-22.7%	-10.4%	-9.1%	-19.6%	-6.4%	-5.1%	-32.5%
Greene County	-9.5%	-9.7%	2.4%	-11.0%	-11.4%	9.8%	-7.8%	-7.7%	-18.2%
Indiana County	-12.9%	-13.4%	-0.8%	-13.1%	-14.5%	8.7%	-12.7%	-12.2%	-45.6%
Lawrence County	-7.1%	-5.9%	-27.1%	-11.8%	-10.1%	-27.6%	-1.3%	-1.2%	-18.5%
Washington County	-2.4%	-1.8%	-11.6%	-4.8%	-4.0%	-12.5%	0.5%	0.6%	-3.1%
Westmoreland County	-4.9%	-3.8%	-16.6%	-10.4%	-8.9%	-21.7%	2.1%	1.9%	9.4%
Pennsylvania	-1.1%	0.3%	-9.0%	-7.0%	-5.7%	-11.8%	6.9%	7.6%	-0.5%

Source: PA Department of Education

Table 4.8: Washington County Public Schools provides detailed information relating to the location, current and projected enrollment, cost of education, tax revenues, subsidy, millage and employees for each of the county's public schools. Canon-McMillan has the largest number of students (4392) while Avella has the fewest (747). The largest total increase in the number of students over the last ten years occurred in the Peters Township School District, which grew by 1184 students. In contrast, the McGuffey School District suffered the largest drop with a 497 decrease in enrollment. School enrollment projections provided by each school district to the Washington County Planning Commission show that three school districts expect to have a decrease of over 33 percent in enrollments from 2003 to 2015. However, the largest number decrease is projected to occur in the Ringgold School District with a loss of 886 students. Only Peters Township School District, Canon-McMillan, and Fort Cherry reflect an increase in enrollment with Peters Township School District projecting the largest with a 33.38 percent increase from 1314 additional student enrollments.

4.8: Washington County Public Schools

School District	Enrollment			Projected		2003 - 2015		Cost of Education per Student	Yearly tax Revenue	State/Federal Subsidy per year	Millage	# of Employees
	2003	2004	# Change Last 10 years	2010	2015	% Change	# Change					
Avella 1000 Avella Road Avella, PA 15312 724-222-7380	751	747	-103	690	695	-7.46%	-56	$7,246.78	$2,661,371	$5,215,025	104	101
Bentworth 500 Lincoln Ave Bentleyville, PA 15314	1273	1185	-129	1104	1007	-20.90%	-266	$10,498.00	$4,821,032	$7,987,933	100	155
Bethlehem Center 194 Crawford Road Fredericktown, PA 15333	1524	1393	300	1474	1374	-9.84%	-150	$10,242.73	$3,524,358.00	$11,032,687.38	90.2	198
Burgettstown Area 100 Bavington Road Burgettstown, PA 15021	1544	1535	0	1403	1326	-14.12%	-218	$6,520.00	$4,928,911	$3,960,270.00	96	190
California Area 750 Orchard Road California, PA 15417	1047	1029	-132	1055	976	-6.78%	-71	$6,277.28	$3,704,658.00	$6,785,378.00	91.07	110

4.8: Washington County Public Schools

School District	Enrollment 2003	Enrollment 2004	# Change Last 10 years	Projected 2010	Projected 2015	2003 - 2015 % Change	2003 - 2015 # Change	Cost of Education per Student	Yearly tax Revenue	State/Federal Subsidy per year	Millage	# of Employees
Canon-McMillan 1 North Jefferson Ave. Canonsburg, PA 15317	4325	4392	641	4826	5145	18.96%	820	Elem. $6,851.00 Sec. $6,921.00	$27,810,000.10	$14,922.54	89	513
Charleroi Area Fescen Drive Charleroi, PA 15022	1668	1682	-236	1412	1205	-27.76%	-463	Elem. $6,571.70 Sec.$ 7,378.99	$7,094,767	$8,760,477.00	111	214
Chartiers-Houston 2020 West Pike Street Houston, PA 15342	1234	1222	73	1100	800	-35.17%	-434	$6,132.00	$5,490,000	$5,618,000	90	148
Fort Cherry RD#4, Box 145 McDonald, PA 15057	1325	1391	-142	1220	1460	10.19%	135	$10,402.01	$5,218,810.00	$7,294,336.00	112.5	148
McGuffey 117 Main Street Claysville, PA 15323	2357	2320	-497	1884	1569	-33.43%	-788	Elem. $6,300.00 Sec. $7,500.00	$9,750,000	$10,600,000 ($10,670,000)	106	290
Peters Township 631 East McMurray Road McMurray, PA 15317	3937	3944	1184	4733	5251	33.38%	1314	Elem. $5,791.00 Sec. $7,079.00	$23,203,000	$7,655,063	80	460

4.8: Washington County Public Schools

School District	Enrollment 2003	Enrollment 2004	# Change Last 10 years	Projected 2010	Projected 2015	2003 - 2015 % Change	2003 - 2015 # Change	Cost of Education per Student	Yearly tax Revenue	State/Federal Subsidy per year	Millage	# of Employees
Ringgold 1200 Chess Street Monongahela, PA 15317	3755	3704	31	3265	2869	-23.60%	-886	Elem. $5,470.00 Sec. $6,967.00	$14,979.85	$16,217.08	105	414
Trinity Area Park Avenue Washington, PA 15301	3739	3748	-317	3333	3274	-12.44%	-465	Elem. $6,728.73 Sec. $7,195.23	$22,497,648.00	$16,152,792.00	105	390
Washington 201 Allison Avenue Washington, PA 15301	2083	1990	8	1599	1328	-36.25%	-755	Elem. $5,938.76 Sec. $6,993.69	$9,825.974.00	$12,254	120	252
Total	**30804**	**30282**	**N/A**	**29098**	**28279**	**-9.00%**	**-2525**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Source: Washington County Planning Commission

Private Schools

There are nine private schools serving residents of Washington County. The enrollment or financial data was unavailable to incorporate into this plan, however, Table 4.9: Washington County Private Schools provides detailed information relating to the location and current contact information for each of the nine private schools.

4.9: Washington County Public Schools

School	Principal
Ava Maria Grade School PO Box 590 Oak Street Ellsworth, P A 15331 724-239-2226	Sister Martha Baier, CDP
Faith Christian School and Institute 524 East Beau Street Washington, PA 15310 724-222-5440	Dr. George Hall
Grace Bible Christian School PO Box 42 West Middletown, PA 15301 724-345-3700	Barry Somerville
John F. Kennedy Grade School 111 West Spruce Street Washington, PA 15301 724-225-1680	Lauragenn Berdine
Madonna Catholic Regional Schools 1 Park Manor Road Donora, PA 15033 724-379-5977	Mary Ann Knoll
624 Washington Ave. Charleroi, PA 15022 724-489-9055 724-489-9055	Mary Ann Knoll
Madonna Catholic Regional Schools 731 Chess Street Monongahela, PA 15063 724-258-3199	Mary Ann Knoll
Our Lady of Lourdes School 1111 Main Street Burgettstown, PA 15021 724-947-5076	Mary Ann Knoll
St. Patrick's School 200 Murdock Street Canonsburg, PA 15317 724-745-7977	

Source: Washington County Planning Commission

Intermediate Unit 1
The Commonwealth of Pennsylvania is divided into 29 intermediate units that encompass all of the school districts across the state. Located in California Borough is the central office of Intermediate Unit I (IU-1). The IU-1 is responsible for serving as an intermediary between local school districts and the Pennsylvania Department of Education. Intermediate units also provide coordination, teaching support and technical assistance to the school districts located in three counties, Fayette, Greene and Washington counties.

Vo-Technical Schools
The Washington County Vo-Technical Schools include the Mon Valley Career and Technology Center and the Western Area Career and Technology Center. The Mon Valley Career and Technology Center is located in Speers adjacent to I-70 and offer the following instruction focuses: health, home economics, and trades and industry. The Western Area Career and Technology Center is located in Chartiers Township on State Route 519. The Western Area Career and Technology Center offers instruction in the following areas: business, health, home economics, and trades and industry

California University of Pennsylvania
California University of Pennsylvania (CUP) is located within the borough of California. Founded as a teachers college in 1865, CUP is now a part of the State System of Higher Education and offers a wide-range of both undergraduate and graduate programs within the College of Liberal Arts, the Eberly College of Science and Technology, and the College of Education and Human Services. In the 2001-2002 school year, the university had 4,416 Undergraduate and 324 Graduate students combined with 240 full-time faculty members for an average student/faculty ratio of 19/1 and conferred 919 Bachelor's degrees and 257 Master's degrees.

Washington & Jefferson College
Founded in 1781, Washington & Jefferson College (W&J), a private liberal arts college, has evolved into an internationally known academic institution. The college is located in the City of Washington on 51 acres and is home to 80 percent of its students. The college offers a myriad of program options in such areas as accounting, biology, business administration, chemistry, economics, education and more. W&J has 89 full-time faculty and 19 adjuncts with a student-faculty ration of 12/1. During the 2001-2002 school year, W&J had 1,176 students and conferred 245 Bachelor's degrees.

Hospitals

Three hospitals are located in Washington County: Canonsburg Hospital, Washington Hospital and Monongahela Valley Hospital.

Canonsburg General Hospital is located in North Strabane Township directly off SR 519. The hospital is a member of the West Penn Allegheny Health System, which includes Allegheny

General Hospital, Western Pennsylvania Hospital, Alle-Kiski Medical Center, and Forbes Regional Hospital. Together, these hospitals serve the regional Pittsburgh area admitting more than 80,000 people each year as well as serving as a major employer with over 13,000 employees.

The Monongahela Valley Hospital (MVH), located in Carroll Township, is the single largest employer in the Mid-Monongahela Valley with approximately 1,000 employees in 2002. MVH has a 253 bed capacity with a 180-member medical staff providing a wide range of health related care including, critical and cardiac care, oncology, emergency, medical and surgical, obstetrics/gynecology, psychiatric, and rehabilitation services.

Washington Hospital is located in the county seat in the City of Washington. The hospital employs over 2,000 personnel and has a 239-bed capacity plus a Transitional Care Unit. The hospital provides 24-hour primary care and specialty services.

Police Services

Each municipality within Washington County has the authority to provide for services to ensure the public safety of it residents. However, this service is oftentimes dictated by a municipality's ability to pay for police services. When a municipality is unable to provide public safety services, the Pennsylvania State Police is responsible for providing police protection to residents.

Pennsylvania State Police

In 1905, the Pennsylvania Motor Police was created as an executive department of the state government—and was the first of its kind in the nation. The mission of this department was to provide a dependable measure of law enforcement across Pennsylvania. In 1943, the department officially became the Pennsylvania State Police with the added responsibility to enforce the Uniform Firearms Act and Pennsylvania's liquor laws. The responsibilities of the department and its organizational structure have changed significantly over the years, but the Pennsylvania State Police remain an important component to ensuring the safety of Washington County residents.

The City of Washington is the current location of the Pennsylvania State Police Troop B Headquarters for the Southwestern region and has been since 1948. However, there are plans to move the headquarters to North Bethlehem Township. The new site is a 30-acre site on State Route 519 that was donated to the state by CONSOL Energy. The design and construction of the new headquarters is expected to cost $5.65 Million dollars for the 25,000 square foot facility, which is planned to be open by 2008.

Municipal Police Services

There are 36 police departments serving Washington County, including the California University of Pennsylvania Office of Public Safety and Washington County Sheriff

department. There are three multi-municipal police departments—the RESA Regional Police, the Southwest Regional Police Department, and the ELLCO Regional Police. It is expected that the provision of police services in many municipalities will become increasingly rare as costs for such services outpace municipal revenues. Table 4.10: Police Services, lists the police departments for the County, areas not listed rely on the Pennsylvania State Police.

Table 4.10: Police Services

Department	Service Area	Paid	Service Coverage
Beallsville Police Dept.	Beallsville Borough	2	Part Time
Bentleyville Police Dept.	Bentleyville Borough	8	Part Time
Burgettstown Police Dept.	Burgettstown Borough	11	Part Time
California Police Dept.	California Borough	19	Part Time
Canonsburg Police Dept.	Canonsburg Borough	17	Full Time
Carroll Twp. Police Dept.	Carroll Township	14	Full Time
Cecil Twp. Police Dept.	Cecil Township	14	Full Time
Centerville Police Dept.	Centerville Borough	3	Part Time
Charleroi Police Dept.	Charleroi Borough, Twilight, Speers	26	Full Time
Chartiers Police Dept.		11	Full Time
Donegal Police Dept.	Donegal Twp., Claysville Borough	5	Part Time
Donora Police Dept.	Donora Borough	20	Full Time
East Bethlehem Police Dept.	East Bethlehem	2	Part Time
East Washington Police Dept.	East Washington Borough	8	Full Time
EllCo. Regional Police Dept.	Ellsworth, Cokeburg	2	Part Time
Fallowfield Police Dept.	Fallowfield Township	3	Part Time
Hanover Police Dept.	Hanover Township	12	Full Time
Houston Police Dept.	Houston Borough	8	Part Time
Jefferson Police Dept.	Jefferson Township	3	Part Time
McDonald Police Dept.	McDonald Borough	10	Full Time
Midway Borough Police Dept.	Midway Borough	2	Part Time

Table 4.10: Police Services

Department	Service Area	Paid	Service Coverage
Monongahela Police Dept.	Monongahela, Finleyville	12	Full Time
Mt. Pleasant Twp. Police Dept.	Mt. Pleasant Township	2	Part Time
N. Charleroi Police Dept.	North Charleroi Borough	2	Part Time
N. Franklin Twp. Police Dept.	North Franklin Township	12	Full Time
N. Strabane Police Dept.	North Strabane Township	15	Full Time
Peters Twp. Police Dept.		25	Full Time
Resa Regional Police Dept.	Roscoe, Elco, Stockdale, Allenport	9	Part Time
Smith Twp. Police Dept.	Smith Township	8	Part Time
South Strabane Police Dept.	South Strabane Township	15	Full Time
Union Twp. Police Dept.	Union Township	9	Full Time
City of Washington Police Dept.	City of Washington	29	Full Time
Washington County Sheriff's Dept.	Washington County	37	
W. Brownsville Police Dept.	West Brownsville	7	Part Time
West Pike Run Twp. Police Dept.	West Pike Run Township	3	Part Time
California Univ. Campus Police	California University of Pennsylvania Campus	14	Full Time
Southwest Regional Police	Long Branch, Speers	7	Part Time

Source: Washington County Planning Commission, Washington County Public Safety Department

Fire Protection Services

Fire protection services are also another Pennsylvania first with the establishment of the first volunteer fire department in Philadelphia in 1836 (http://www.brooklinefire.org/history.htm). Today, many communities in Washington County are fortunate to have volunteer fire departments (VFD) whose mission is to provide an organized response to fire fighting. There are 51 volunteer fire departments throughout Washington County and one paid fire department in the City of Washington. Many long standing VFD's have strong community ties and cultural traditions that link them to the character of the municipality they serve. However, fire officials have indicated that the level of volunteerism has decreased although need has not. Additionally, cost to respond to fires and other calls have grown, as have insurances costs.

Table 4.11: Fire Protection Services, provides a listing of all fire departments and companies serving Washington County.

Table 4.11: Fire Protection Services

Department	Service Area
Allenport Vol. Fire Dept.	Allenport
Amwell Vol. Fire Dept.	Amwell
Avella Vol. Fire Dept.	Crosscreek, Independence
Bentleyville Vol. Fire Dept.	Bentleyville , West pike
Burgettstown Vol. Fire Dept.	Burgettstown,
California Vol. Fire Dept	California, Coal Center
Canonsburg Vol. Fire Dept.	Canonsburg
Canton Vol. Fire Dept.	Canton
Carroll Vol. Fire Dept.	Carroll
Cecil Vol. Fire Dept. #1	Cecil
Cecil Vol. Fire Dept. #2	Cecil
Cecil Vol. Fire Dept. #3	Cecil
Charleroi Vol. Fire Dept.	Charleroi, Speers, Dunlevy, Twilight
Chartiers Vol. Fire Dept. #1	Chartiers
Claysville Vol. Fire Dept.	Claysville , Donegal, East Finley
Cokeburg Vol. Fire Dept.	Cokeburg
Denbo Vesta Vol. Fire Dept.	Centerville
Donora Vol. Fire Dept.	Donora
E. Bethlehem Vol. Fire Dept.	East Beth, Deemston
Ellsworth Vol. Fire Dept.	Ellsworth ,Somerset, North Bethlehem, Nottingham
Elrama Vol. Fire Dept.	Union
Fallowfield Vol. Fire Dept.	Fallowfield, Somerset,
Finleyville Vol. Fire Dept.	Finleyville, Union
Hanover Vol. Fire Dept.	Hanover Twp.
Houston Vol. Fire Dept.	Houston

Table 4.11: Fire Protection Services	
Department	Service Area
Jefferson Vol. Fire Dept.	Jefferson Twp.
Lock 4 Vol. Fire Dept.	North Charleroi
Lone Pine Vol. Fire Dept.	Amwell, North Beth
Marianna Vol. Fire Dept.	Marianna ,West Beth
McDonald Vol. Fire Dept.	McDonald , Robinson,
Midway Vol. Fire Dept.	Midway, Robinson
Monongahela Vol. Fire Dept.	Monongahela
Morris Twp. Vol. Fire Dept.	Morris Twp. East Finley
Mt. Pleasant Vol. Fire Dept.	Mt. Pleasant Twp., Crosscreek
N. Strabane Vol. Fire Dept.	North Strabane
New Eagle Vol. Fire Dept.	New Eagle
North Franklin Vol. Fire Dept.	North Franklin
Peters Twp. Vol. Fire Dept.	Peters Twp.
Richeyville Vol. Fire Dept.	Centerville, West Pike
Roscoe Vol. Fire Dept.	Roscoe, Elco, Long Branch
S. Franklin Vol. Fire Dept.	South Franklin
S. Strabane Vol Fire Dept. #1	South Strabane
S. Strabane Vol. Fire Dept	South Strabane
Slovan Vol. Fire Dept.	Smith
Somerset Vol. Fire Dept.	Somerset, Ellsworth, North Beth, Nottingham
Stockdale Vol. Fire Dept.	Stockdale
Taylorstown Vol. Fire Dept.	Blaine , Buffalo
Valley Inn Vol. Fire Dept.	Carroll, Somerset, Nottingham
W. Alexander Vol. Fire Dept.	West Alexander, Donegal
W. Brownsville Vol. Fire Dept.	West Brownsville
W. Finley Vol. Fire Dept.	W. Finley twp., East Finley
W. Middletown Vol. Fire Dept.	W. Middletown, Hopewell,
Washington Fire Dept. #1	Washington, East Washington

Emergency Medical Services

The PA Department of Health coordinates the provision of emergency medical services via state level policies while the state itself is divided into EMS Councils, which are regional districts to address services on a local level. Washington County falls within the southwestern region and has 12 emergency medical service providers. Emergency service personnel require ongoing training and certification for all staffing. Some emergency medical service providers are volunteer-oriented but most are paid positions with for-profit providers. It is expected that emergency medical service providers will also face obstacles as service related costs increase.

Libraries

Public access to libraries has a long history in Washington County. The Citizens Library in the City of Washington was founded in 1870 by Dr. LeMoyne, a Washington County physician who worked tirelessly to rid America of slavery. The Citizens Library is the District Center for both Washington County and Green County public libraries and currently serves as a liaison between state level agencies and local public libraries. According to information received from the Citizens Library, there are 14 public libraries in Washington County (Source: http://www.citlib.org/district.html).

1. Avella Area Public Library, Avella Borough
2. Bentleyville Public Library. Bentleyville Borough
3. Burgettstown Community Library, Burgettstown Borough
4. California Public Library. California Borough
5. Chartiers-Houston Community Library, Houston Borough
6. Citizens Library, City of Washington
7. Donora Public Library, Donora Borough
8. Fredericktown Area Public Library, East Bethlehem Township (Village of Fredericktown)
9. Greater Canonsburg Public Library, Canonsburg Borough
10. Heritage Public Library, McDonald Borough
11. Marianna Community Library, Marianna Borough
12. Monongahela Area Public Library, City of Monongahela
13. Peters Township Library, Peters Township (McMurray)
14. John K. Tener Library, Charleroi Borough

D. Analysis & Recommendations

Washington County residents have a strong awareness of, and dedication to, community issues. This fact is shown by the number of volunteer fire departments, libraries, and socially oriented agencies. County officials have supported this commitment with one of their own—the dedication of financial resources to providing appropriate services to county residents. It is this blend of governmental support and individual pride that creates a quality of life that makes Washington County a desirable place to live.

However, the future will bring about challenges that officials must prepare for if the delivery of services is to continue in an efficient and cost effective manner. County government should continue to find new ways to increase efficiency, but not at the expense of important services. Technological advances can provide needed support to reduce duplication of services and staffing hours. Washington County officials will need to install computerized programs and geographic information systems within various county departments to ensure that efficiency and cost effectiveness does not come at the expense of services to residents—or limit the county's economic sustainability.

There are also programs available at the federal and state level to assist communities with expanding their technological infrastructure. One partnership that has been fostered in the County is the program provided by the University of Pittsburgh Small Business Development Center (SBDC). This program realizes that successful business requires sufficient capital and the knowledge to use it wisely. The SBDC's consultants help entrepreneurs to develop planning strategies, management techniques and financial skills that are necessary to a thriving business. One-on-one consulting is provided at no cost to the public. In addition to business consulting services, the University of Pittsburgh's SBDC can help to identify funding sources such as the Small Business Innovation Research Program (SBIR) and the Small Business Technology Transfer Program (STTR) from the U.S. Small Business Administration (SBA). SBIR is a highly competitive program that encourages small business to explore their technological potential and provides the incentive to profit from its commercialization. By including qualified small businesses in the nation's R&D arena, high-tech innovation is stimulated and the United States gains entrepreneurial spirit as it meets its specific research and development needs. STTR is program fosters innovation necessary to meet the nation's scientific and technological challenges of the future. The STTR program requires small businesses to work jointly with a non-profit research institution, such as federally funded research and development centers (FFDRCs), universities, and university-affiliated hospitals. Like the SBIR, the STTR is a three-phase program. STTR's most important role is to foster the innovation necessary to meet the nation's scientific and technological challenges in the 21st century. More information regarding these two federal programs can be found on SBA's web site at www.sba.gov.

The Pennsylvania Department of Community and Economic Development also has several programs to assist with technology training for residents ranging from pre-school students to college graduates.

The CyberStart program is a tool specifically designed to help licensed child day care facilities that serve children ages 3 to 5 find the resources they need to harness the power of technology. Day care facilities participating in CyberStart will receive:

- 1 to 3 new computers
- Color inkjet printer
- Interior wiring infrastructure and computer installation
- Internet access with filtering
- Email
- Educational resources
- Training on basic computer use and the integration of technology into the preschool classroom
- Technical assistance
- Help desk support

The Keystone Innovation Zones Program (KIZ) was developed to create "knowledge neighborhoods" close to Pennsylvania's colleges, universities and training institutions to keep new graduates and budding entrepreneurs in Pennsylvania. KIZs are designated zones that may be established in communities that host institutions of higher education (ie, colleges, universities, and associate degree technical schools). Partnerships among institutions of higher education and private sector businesses, commercial lending institutions, and economic and workforce development organizations are forged to establish the boundaries for a KIZ. This particular program would be applicable in California (California University of Pennsylvania) and the City of Washington (Washington and Jefferson College).

The County's support and understanding of land use planning, and the role that the planning commission plays, will be vital to the future of Washington County. The Planning Commission will face an increasingly challenging job as development pressures continue. Although, economic development is not the charge of the planning commission, true economic sustainability will not be realized if sound land use practices are not in place to direct how and where growth will occur.

Washington County will need to serve as a leader to local municipalities in following the county's predetermined land use policies as many of Washington County's municipalities do not have the resources to implement such practices by themselves. In fact, the county government and agencies will be looked upon in the future for guidance and information relating to how municipal services and emergency services will be delivered. Advances in technology, state and federal mandates, and rising costs will contribute to municipalities failing in their role to provide services to residents. It is recommended that Washington County coordinate efforts to regionalize services, consolidate municipal governments, and foster intergovernmental partnerships.

The provision of human services to county residents will remain a significant component of county responsibilities and budget. Human services, combined with the judicial and

incarceration responsibilities, will necessitate that County officials establish innovative partnerships and policies to remain fiscally solvent. The County Jail is sufficient to meet needs, but it is expected that other county facilities will need capital improvements in the coming years to address aging facilities and the accommodation of additional staffing to meet increased service demands. As such, Washington County will need to develop a Capital Improvement Program to address facility needs.

Understanding residential trends will be essential if Washington County is to prepare for the effects on county schools. For instance, if an area were to experience several new residential developments, the corresponding school district would have an increase in enrollments thereby creating potential overcrowding. Thus, school districts in Washington County should all have a long-range facility plan that addresses the current and future instructional program and delivery issues as well as the age, condition and educational appropriateness of facilities. Additionally Washington County and local governments should consider the effects of land development plans on the local school district prior to awarding approval of the development. Finally, Washington County must foster an increased accountability of the school districts themselves to the municipalities and residents they serve.

New development also effects the provision of municipal services such as fire and police. It will be important for municipal officials to understand the correlation between residential developments and an increased demand for service by residents. As the population grows, there will be an increased demand for emergency response by fire, police, and medical personnel. The County must play a leadership role in educating elected officials of the impacts associated with new residential, and even commercial, growth. For instance, an increase in traffic can relate to a rise in vehicle-related incidences requiring emergency response actions. Such effects have a direct impact on municipal and service provider budgets.

Public education is a facet that is overwhelmingly important to the desirability of a community. It is imperative that County Officials place the quality of education as a top priority for the coming years. Washington County is in the enviable position to have two institutions of higher learning as well as vo-technical schools that can assist with fostering a county-wide initiative to improve testing, college placements, and life skills training. As such, Washington County should investigate the opportunities to foster Keystone Innovation Zones that promote collaboration between colleges, universities, local economic developers, local government and businesses.

Access to quality health care is sufficient in Washington County. With three hospitals and numerous clinic facilities, Washington County is positioned to become a regional presence in the medical field. Washington County Officials should continue to support the expansion and development of medical facilities.

Washington County also has numerous locations where residents can avail themselves to library services. Public library access is a valuable resource and service to a community. County

officials should encourage networking opportunities among libraries and support funding opportunities through state and federal programs.

E. Implementation Strategies

To fulfill the County Development Objectives, Washington County Officials should work with appropriate agencies to meet the following goals.

Support and strengthen the educational system.

Action: Develop a forum to coordinate strategic planning of school districts with municipal comprehensive planning.

Action: Establish processes for collaborative planning and decision making on population projections and public school siting to accomplish coordination between adopted comprehensive plans and long range plans of the school board.

Action: Lobby state officials and agencies to support accountability of school districts to comply with County planning initiatives and requests for information

Action: Encourage approval of new housing plans based upon facility planning of local school district

Action: Encourage municipalities to enact an ordinance that includes community impact assessments that determine development impact on educational facilities.

Encourage land use planning across political boundaries

Action: Educate the public and local municipal officials about planning concepts that must traverse political boundaries, such as watershed planning, greenways planning, habitat management, etc.

Action: Publicly acknowledge municipalities who plan from a regional approach

Action: Encourage the creation of Council of Governments

Action: Encourage intergovernmental relationships to initiate multi-municipal planning efforts (develop model agreements for local application)

Action: Educate elected officials on the benefits of tax revenue sharing

Action: Provide incentives for municipalities to implement multi-municipal planning efforts

Action: Lobby to increase state funding for intergovernmental cooperation and consolidation

Promote regional thinking to encourage creative, efficient municipal service delivery.

Action: Conduct regular review of municipal plans and land use regulations to determine compatibility with the County Comprehensive plan

Action: Provide technical review of municipal ordinances and make recommendations as to updates and consistency with county goals

Action: Identify opportunities for municipalities to develop Council of Governments

Develop strategies to expand the technological infrastructure and improve access to information and services.

Action: Continue a partnership with University of Pittsburgh Small Business Development Center, a state-sponsored organization working to seed technology companies in Southwestern Pennsylvania, to increase the number of technologically oriented companies in Washington County

Action: Increase the awareness of two technology and information federal programs from the U.S. Small Business Administration (SBA)—the Small Business Innovation Research Program (SBIR) and the Small Business Technology Transfer Program (STTR).

Action: Support the CyberStart Initiative, a DCED program that provides computers, printers, Internet access, e-mail, educational resources, training, and technical support free of cost to eligible childcare providers throughout Pennsylvania.

Action: Support new DCED Keystone Innovation Zone (KIZ) projects in Washington County

Maintain the viability of municipal emergency service providers

Action: Create a forum to identify shared facility and service opportunities

Action: Provide grant writing and technical assistance to municipal service providers

Action: Create a regular evaluation of local service provider capabilities

Action: Develop cooperative relationships between EMS and other community agencies and governments

Action: Develop collaborative strategies to identify and address community health and safety issues

Action: Identify and develop sources of EMS-related funding

Action: Coordinate a forum to identify and resolve the financial conflicts for reimbursement of EMS providers

Facilitate the provision of health and human services to meet local needs and serve as a regional resource

Action: Develop cooperative relationships between social service agencies and governmental entities

Continue to provide quality public safety services in Washington County.

Action: Enhance the use of mobile telephone services as resources for EMS system communications

Action: Foster the interoperability of communication systems of all emergency service providers

Action: Identify barriers to local emergency service provision and identify measures to share resources

Support and enhance access to libraries.

Action: Increase awareness of the Pennsylvania Bureau of Library Development to increase subsidies and grants for improved services, technology, public library construction and networking among all types of libraries in Washington County

WASHINGTON COUNTY COMPREHENSIVE PLAN

CHAPTER 5. PUBLIC INFRASTRUCTURE

A. Introduction

Public infrastructure includes water and sewerage systems as well as natural gas, electric, and telecommunications systems. Each one of these services is critical to the health and welfare of residents. While the provision of many of these services is the responsibility of local governments or authorities, others are under the oversight of private companies and corporations. The Washington County Comprehensive Plan provides a brief overview of the status of public infrastructure and outlines potential strategies that will foster sustainable energy sources and support the stewardship of clean water and removal of waste products.

To guide future development efforts in Washington County, the following objectives have been identified as overarching policies.

County Development Objectives

- Ensure a desired quality of life by providing coordinated and reliable infrastructure
- Guide development to locations that have public utility infrastructure in place
- Identify and develop funding sources to provide communities with the best available technology and infrastructure systems

B. Background

The building of public water and sewerage systems was a result of health issues that caused outbreaks of disease in populated areas and the pollution of waterways. Chicago Illinois developed the first comprehensive city sewer plan in the nation during the mid 1800s. By 1905, all U.S. towns with population over 4,000 had city sewers (Kovarik, 2005). Public water systems were also developed around this same time in an effort to prevent the spread of typhoid and cholera. Many of the county's systems that were built around the turn of the twentieth century are still in operation today.

The presence of natural resources that contributed to the development and prosperity of Southwestern Pennsylvania also caused the degradation of air quality. The smoke from industrial plants led to the reputation of Pittsburgh as the "Smoky City". Andrew Carnegie was reputed to believe that the conditions of the city were so bad that people were moving to other places just so they could breathe (Kovarik, 2005). The City of Pittsburgh took steps to address the pollution by establishing an office to monitor air conditions and smoke emissions of city companies. However, it wasn't until the city was challenged in court that the state legislature enacted statues allowing local governments to monitor the air conditions of their municipality.

Unfortunately, many felt that economic benefits outweighed potential health risks and environmental oversight was not quick in regulating industrial pursuits. In 1948, the borough of Donora brought such issues to the forefront when atmospheric conditions coupled with large amounts of industrial pollution created such a severe case of environmental pollutants that 20 people died and many more reported respiratory illnesses.

Some people felt a responsibility to the public and to the environment and sought to provide cleaner energy solutions. Alternative energy sources were being researched as early as the 1800s with experiments in solar and wind energy. With the construction of the Shippingport Nuclear Power Plant in 1957, Pennsylvania became the first full-scale nuclear power plant in the United States (Kovarik, 2005). Duquesne Light Company constructed and operated the plant to supply electricity to the Pittsburgh area. The plant remained in operation until 1982 when it was closed and began the decontamination and decommissioning process. The United States Department of Energy has determined the area to be safe for recreational purposes and has since released the site, which is located across the Washington County Border in Beaver County.

The natural resources so plentiful in Washington County, truly directed land development and fostered the construction of public infrastructure systems to accommodate the growing population. Municipalities built public water systems and sewer lines were installed to remove waste from populated areas. As the county became more and more populated, private companies began to extend utility services such as electric, natural gas, telephone, and eventually, cable lines. Private companies direct a significant portion of revenues back into maintenance and upgrades in an effort to remain competitive. As such, this category of infrastructure is typically well maintained, as they are important forms of revenue for the corporations that manage the gas, electric and telecommunications systems across the nation. These services provide valuable energy sources and contribute to healthful living conditions.

Unfortunately the condition of public water and sewerage systems has not kept pace. Much of the existing public infrastructure is now experiencing the decay of old age and neglect. As well, many communities are discovering the presence of wildcat sewers where lines were installed to remove waste into nearby waterways rather than to treatment facilities. As demands increase and environmental regulations become stricter, municipally provided water and sewerage systems are becoming strained and many are facing rising debt loads and failing infrastructure.

The deregulation of the electric and natural gas industry effectively changed the nature of business for many companies in the nation. Deregulation has left the generation or production portion of service open for competition among competitors while the transmission of the electric or gas service remains the responsibility of local utility providers. The deregulation of utilities makes analysis difficult due to the extent nature of transmission versus generation. For the purposes of the Comprehensive Plan, a general overview of transmission companies will be provided.

C. Existing Conditions

The utility networks in Washington County will be discussed according to service type.

Telecommunications

Telecommunication services in Washington County are provided by eight companies. The Telecommunications Act of 1996 (TCA) was intended to end monopoly power in the telecommunications industry by dismantling state and local barriers to competition (Sullivan, 2005). The Telecommunications Act was also intended to preserve local government authority over zoning and management of rights of ways, but has resulted in many instances of a restriction of effective local control over the siting of wireless telecommunications facilities and the management of rights of ways (franchising). Many legal challenges have been initiated by the telecommunications industry that has effectively eroded local government's authority to direct where wireless facilities can be located. The increasing popularity of cell phones has lead to many new tower sites creating a significant expansion of wireless telephone service across the nation.

The Washington County Department of Public Safety is currently planning to deploy E-911 service for wireless callers. Wireless E-911 service is divided into Phase I and Phase II. Phase I E-911 service will provide the 911 Center the ability to view the location of the tower in which a wireless call is being placed from, as well as the caller's phone number. Phase II E-911 service will provide the 911 Center with the ability to locate a wireless caller via geographic coordinates that will be provided by a GPS chip inside the phone.

Tower site information is proprietary to most of the eight wireless phone service providers within Washington County. Once the Department of Public Safety E-911 Center is ready to deploy Phase I service a formal request will be made to the wireless providers to provide the county with tower site location information so that the County will have a better grasp of the number of wireless towers located within the County. Currently, there is no time line of when deployments or requests for service will take place due to the fact that technological upgrades have to be completed within the 911 Center.

Telephone and wireless companies operating in Washington County include:

1. T Mobile
2. Verizon & Verizon Wireless
3. Trac Phone
4. Nexte
5. Cricket
6. Next Wave
7. Cingular
8. AT&T Wireless
9. Hickory Telephone Company
10. Sprint PCS

Electric Service

Allegheny Energy provides electric service in Washington County and can be contacted at the Greensburg facility located at 800 Cabin Hill Drive in Greensburg, PA 15601. Historic rates for electric service provision to Washington County were unavailable from this energy supplier. However, Allegheny Energy has a significant impact on the economics and environmental health of Washington County. According to information available on their corporate Website, Allegheny Energy burns an average of 18 million tons of coal a year, predominantly at power stations located in West Virginia and Pennsylvania (alleghenyenergy.com, 2005).

Duquesne Light provides electric services to locations bordering Allegheny County. Their service area is relatively small as it pertains to Washington County, but they remain an important part of the utility network .

Natural Gas Service

Several companies located in the Southwestern Pennsylvania Region provide Natural Gas service to Washington County residents. Columbia Gas of Pennsylvania and Columbia Gas of Maryland are subsidiaries of NiSource Inc., the second largest natural gas distributor in the United States (www.columbiagaspamd.com). Columbia Gas serves more than 410,000 customers in 27 counties in the Commonwealth of Pennsylvania but was not able to provide information on historic trends for natural gas service in Washington County. Columbia Gas of Pennsylvania and Columbia Gas of Maryland can be contacted at its location at 501 Technology Drive in Canonsburg, Washington County, Pennsylvania.

Oil and Natural Gas Wells

Washington County has numerous oil and natural gas wells located throughout the county. These wells aren't known for large amounts of production of natural gas and oil, but do contribute to the overall energy supply due to the number of wells present throughout Pennsylvania and other states. The presence of oil and natural gas wells can pose complications for land development if the wells are not properly maintained. It is the responsibility of the Department of Environmental Protection to monitor the well sites to ensure compliance with regulatory standards.

Once a well has outlived its productive capacity, owners are responsible for capping or plugging the wells. Unfortunately, the practice of plugging inactive wells is a fairly recent occurrence and many wells were abandoned prior to regulations outlying procedures to ensure the safety of the public. While some wells can be traced to existing companies or persons, many wells are termed to be *orphaned*—meaning there is no responsible party who will plug the well. The presence of abandoned wells remains a problem in many parts of the state and especially in locations where oil and natural gas extraction occurred during the 1800s.

Sewerage

Public sewerage to Washington County residents is handled by a variety of providers, which includes both public and private entities. Table 5.1 list all entities providing sewerage services to Washington County residents. The most recent Washington County Sewerage Facilities Plan

(Act 537 Plan) was completed in 1972. While the plan is over 30 years old, it remains as the guiding document for municipalities without a current Act 537 plan. The Washington County Act 537 Plan provides a historical background for sewerage issues and remains relevant to several areas within the county.

Public sewerage facilities are usually under the oversight of an authority or the municipality itself. Authorities are not governmental entities per se, but they are in the sense that an authority has the ability to borrow money and provide services to residents on behalf of the municipality. It should be noted that authorities are established by the action of a governing body, which remains ultimately accountable for actions taken by the authority. However, public sewerage facilities are facing stricter environmental regulations and treatment control in addition to the deterioration of existing infrastructure, which can result in inefficient, or even failing systems.

Septic systems are a valuable means by which residents in rural areas can dispose of waste in a safe manner. Septic systems are sewage systems located on the property of a private dwelling and are maintained by the homeowner. The sewage treatment process uses a treatment tank that holds solid waste and releases liquids where it percolates through the soil of an absorption field and is neutralized. Septic systems are a fact of life for many residents of Washington County and it is essential that proper maintenance of existing systems continue in order to protect the environmental integrity of the county.

The Pennsylvania Department of Environmental Protection, Bureau of Water Quality Protection, Division of Wastewater Management provides regulations for sewage disposal facilities as per Title 25. Environmental Protection, Chapter 73. Standards for Sewage Disposal Facilities, Current through 28 Pa. B. 348 (17 January 1998). These regulations provide a guide as to what systems are acceptable for the proper disposal of wastewater in Pennsylvania.

- Composting Toilets: under Chapter 73.1 are defined as devices for holding and processing human and organic kitchen waste employing the process of biological degradation through the action of microorganisms to produce a stable, humus-like material. Composting toilets are permitted under Ch. 73.65. Toilets must bear the seal of the NSF indicating testing and approval by that agency under Standard No. 41. The device utilized shall meet the installation specifications of the manufacturer and shall be operated and maintained in a manner that will preclude any potential pollution or health hazards. When the installations of a recycling toilet, incinerating toilet or composting toilets is proposed for a new residence or establishment, an on-lot sewage system or other approved method of sewage disposal shall be provided for treatment of wash water or excess liquid from the unit. For existing residences, where no alteration of the on lot system is proposed, a permit is not required to install a composting toilet.
- Greywater: under Chapter 73.11. Liquid wastes, including kitchen and laundry wastes and water softener backwash, shall be discharged to a treatment tank.
- Constructed Wetlands: No existing regulations.

- Ch. 73.71 governs Experimental Sewage Systems, which may be implemented upon submittal of a preliminary design plan. Experimental systems may be considered for individual or community systems in any of the following cases:
  1) To solve existing pollution or public health problem;
  2) To overcome specific site suitability deficiencies, or as a substitute for systems described in this chapter on suitable lots;
  3) To overcome specific engineering problems related to the site or proposed uses; and,
  4) To evaluate new concepts or technologies applicable to on-lot disposal.

Based upon information received from representatives of the Pennsylvania Department of Environmental Protection—California District Office, several locations in Washington County have been identified as high priority areas for sewerage remediation efforts (Table 5.1).

Table 5.1: High Priority Areas Lacking Public Sewerage	
Amity	Amwell Township
Avella	Independence Township
Eighty Four	Somerset Township
Eldersville	Jefferson Township
Florence	Hanover Township
Gambles Area	North Strabane Township
Granville	California Borough
Hendersonville	Cecil Township
Hickory	Mt. Pleasant Township
Lawrence	Cecil Township
Lagonda Area, Rt. 18 corridor	South Franklin Township
Midland	Chartiers Township
Paris	Hanover Township
Prosperity	Amwell Township
Scenery Hill	North Bethlehem Township
Taylorstown	Blaine Township
Van Voorhis	Fallowfield Township
West Brownsville	West Brownsville Borough
West Middletown	West Middletown Borough
Westland	Mt. Pleasant Township
Source: DEP-California District Office	

The locations of concern in regards to sewage treatment will be addressed in relation to data received by the DEP—California District Office which remain pertinent to locations addressed in the Washington County 1972 Act 537 Plan.

Sewerage District #1: Paris-Florence

Two locations within Hanover Township, Paris and Florence, were addressed in the 1972 Act 537 Plan for Washington County. The Act 537 Plan (1972) listed sewerage services to this area (identified as Sewerage District #1) as "imperative, and specified that the construction of a sewerage facility to serve this area be completed as soon as possible. Both locations were identified as a High Priority Area for Lacking Public Sewerage by the DEP—California District Office. The Sewerage District has recently completed an Act 537 Plan, which was approved by DEP although funding has not been committed as of April 2005. Pending funding, sewerage services will be provided in compliance with the Act 537 Plan. It should be noted that Washington County is actively working with the affected municipalities to include them into the sewerage preparations for the land development plans proposed for Starpointe.

Sewerage District #2: Upper Raccoon Creek

Sewerage District # 2 includes Burgettstown Borough and areas of Smith Township. This location was not identified by PA DEP as a high priority area.

Sewerage District #3: Upper Robinson Run

Sewerage District #3 encompasses all land drained within the Robinson Run Watershed, which also includes the boroughs of Midway and McDonald. The 1972 Act 537 Plan specifically identifies McDonald as contributing to sewage flows into area waterways. Measures were taken to construct a sewerage facility for the Midway area and connect McDonald into the Allegheny County Sanitary Authority (ALCOSAN) in the early 1990s however; concerns remain regarding the incidence of CSO's into Robbs Run or Robinson Run. The sewer lines in McDonald Borough connect to ALCOSAN and DEP-California District Office identified locations of Combined Sewer Overflows (CSO) in Washington County. However, remediation measures corrected this issue and the area is no longer identified as a concern.

Sewerage District #4: Avella

Sewerage District #4 includes Cross Creek and Independence Township along with the villages of Avella, Avella Heights, Browntown, P&W Patch, Patterson Mill, and Studa. As noted by the Washington County Act 537 Plan, District #4 lies entirely within the Cross Creek Watershed. The Act 537 plan identified Avella as having existing storm water sewers combined with sanitary sewers that discharge untreated sewage into Cross Creek. Other locations within this district were identified as having malfunctioning on-lot sewage treatment systems and a failing treatment plan, which was serving the P & W Patch. The plan recommended that a multi-municipal sewerage authority be established as well as a sewerage feasibility study. The DEP-California District Office identified the Avella area as a high priority area lacking public sewerage. New Act 537 plans were approved to extend sewerage to this district and in March 2002, the "Independence-Cross Creek Joint Sewer Authority" was formed. In May 2003, the

Authority made application to Pennsylvania Infrastructure Investment Authority for financial assistance to fund the design stage of proposed sanitary sewage system, which will serve the population areas of Avella, Avella Heights, Browntown, P & W Patch, Patterson Mill and Studa. In September 2004, funding in the form of a $520,000 grant and a loan of $93,000 was approved. The design phase should be completed during the first half of 2006 and the project should be placed for bidding shortly thereafter. However, funding still remains an issue.

Sewerage District #5: West Middletown/Cross Creek Park

Sewerage District #5 includes the Borough of West Middletown which was recently identified by the DEP-California District Office as a High Priority Area Lacking Public Sewerage. Washington County's Act 537 Plan notes this area as lacking any sewer lines or treatment facilities other than on-lot systems. The plan noted that topographic constraints may cause increased costs to develop proper sewerage for this area and recommended that the borough join with Cross Creek Park to develop a water and sewer plan. The status for this district remains unchanged.

Sewerage District #6: Hickory/Westland

Sewerage District #6 includes the villages of Hickory and Westland in Mt. Pleasant Township, which lie within Chartiers Creek Watershed. As indicated by the 1972 Act 537 Plan, these areas are served by on-lot septic systems and recommended that a treatment plant be built in Westland to serve both communities. The DEP California District Office indicated that Westland was a High Priority Area Lacking Public Sewerage. The Act 537 Plan update by Mount Pleasant Township is currently in progress, but is experiencing delays due to the financial nature of the number of treatment facilities being called for in Southview and Westland. The Act 537 Plan update has not been approved.

Sewerage District #7: West Alexander

Sewerage District #7 includes the Borough of West Alexander and portions of Donegal Township, which lie in the Wheeling Creek and Buffalo Creek Watersheds. A sewerage treatment facility was built in response to the Act 537 plan and this area was not identified by DEP—California District Office as a concern.

Sewerage District #8: Claysville

Sewerage District #8 includes the Borough of Claysville and population centers in Donegal Township all of which lie within the Buffalo Creek Watershed. A sewerage treatment facility was built in response to the Act 537 plan and this area was not identified by DEP—California District Office as a concern.

Sewerage District #9: Upper Millers Run

Sewerage District #9 includes the Millers Run watershed as well as locations in adjacent watersheds. Primary population centers identified in this sewerage district include areas of Cecil Township and the villages of Bishop, Venice, Cowden, Hendersonville, and Southview. In response to the Act 537 Plan, the proposed Mt. Pleasant Township Municipal Authority now

addresses the Southview area. The Act 537 Plan prioritized the Hendersonville, Cecil, and Bishop areas as a first priority as these areas show extreme environmental blight. Hendersonville was listed by DEP—California District Office as a High Priority Area Lacking Public Sewerage. The Cecil Township Act 537 Plan for Millers Run will be placed for bid in 2005. All permits have been secured although funding still remains an issue. Hendersonville is to be addressed in the pending study for sewerage upgrade for Southpointe II and surrounding areas.

Sewerage District #10 Lawrence

Sewerage District #10 includes the Village of Lawrence in Cecil Township. The Washington County Act 537 plan identified this area as a densely populated area with unsuitable soils for septic systems. The Plan noted that there are many malfunctioning systems and predicted this situation to worsen with the planned expansion of a public water system. DEP—California District Office as a High Priority Area Lacking Public Sewerage. Cecil Township's Act 537 Plan is underway and will address Lawrence.

Sewerage District #11 Brush Run

Sewerage District #11 includes the northwestern quadrant of Peters Township and was not identified by DEP—California District Office as a concern. The existing Sewerage Treatment Plant was recently expanded.

Sewerage District #12 Donaldson's Crossroads

Sewerage District #12 includes the southwestern quadrant of Peters Township and was not identified by DEP—California District Office as a concern, however, DEP representatives noted that increased demands will necessitate a plant expansion within the next few years.

Sewerage District #13 Greater Canonsburg

Sewerage District #13 is identified by the Act 537 Plan as containing all of the developed areas in the middle Chartiers Valley, of which, Canonsburg and Houston are the primary population centers. This area is now served by the Canonsburg-Houston Joint Sanitary Authority and has updated portions of its treatment system in response to the Act 537 Plan. The Canonsburg-Houston Joint Sanitary Authority was identified by DEP—California District Office as a concern in regards to increasing development pressures and population growth. According to DEP representatives, the Joint Sanitary Authority is considering an update to its Act 537 plan, which will include the need to expand its existing treatment facilities.

Sewerage District #14 Greater Washington

Sewerage District #14 includes the upper Chartiers Creek Watershed as well as some population centers in adjacent watershed. The primary population centers include the City of Washington, East Washington, and the surrounding urban development. This district was not identified by DEP—California District Office as a concern.

Sewerage District #15 Upper Pigeon Creek

Sewerage District #15 includes Bentleyville, Ellsworth, and Cokeburg and portions of this area were identified by DEP—California District Office as a concern. (DEP Source Water Assessment Reports PWSID# 5630041—Cokeburg Borough Water Department (Cokeburg Reservoir), identified septic malfunctioning. However, as portions of Scenery Hill are in this watershed, it is considered a high priority due to the recent installation of public water in the area.

Sewerage District #16 Beallsville

Sewerage District #16 includes developed portions of Beallsville Borough. This area was not identified by DEP—California District Office as a concern as the area has sewerage.

Sewerage District #17 Walkertown-Daisytown-Crescent Heights

Sewerage District #17 includes the developed areas within the villages of Walkertown, Daisytown, and Crescent Heights. These areas were not identified by DEP—California District Office as a concern as the area has sewerage.

Sewerage District #18 Marianna-West Bethlehem

Sewerage District #18 includes Marianna Borough and villages of West Marianna and West Zollarsville in West Bethlehem Township. This area was not identified by DEP—California District Office as a concern. (DEP Source Water Assessment Reports PWSID #5630050—Marianna Municipal Water Works (Ten Mile Creek) identify raw sewage concerns as affecting water quality). West Bethlehem Township is proposing to extend public water to the West Zollarsville area and hoping to one day extend public sewerage to eliminate raw sewage discharges.

Sewerage District #19 Upper Peters Creek

Sewerage District #19 includes Finleyville Borough and locations within Union Township both of which lie within the Peters Creek Watershed was identified by DEP—California District Office as a concern due to the overload of the Peters Creek Interceptor located in Allegheny County. The Peters Creek Watershed is currently under tap restrictions due to the overload situation. As development pressures increase, this district will need to consider an update to its Act 537 Plan.

Sewerage District #20 Elrama

Sewerage District #20 includes the village of Elrama and small development areas within the Huston Creek Watershed. This area was not identified by DEP—California District Office as a concern as the approval to provide sewerage to Elrama from the West Elizabeth (Allegheny County) was given several years ago. However, due to recent information released regarding the plan capacity at West Elizabeth, DEP is working with Elrama, West Elizabeth and Jefferson Hills to determine potential remediation.

Sewerage District #21 New Eagle

Sewerage District #21 includes the Borough of New Eagle and was not identified by DEP—California District Office as a concern.

Sewerage District #22 Monongahela-Carroll Township

Sewerage District #22 includes the City of Monongahela and the western portion of Carroll Township. This area is now served by the Municipal Authority of the City of Monongahela and encompasses portions of Carroll Township as per the Washington County Act 537 recommendations. This location was identified as a concern for Combined Sewer Overflows. The western portion of Carroll Township is currently utilizing public sewers that have been separated from the storm sewer system.

Sewerage District #23 Donora-Carroll Township

Sewerage District #23 includes Donora Borough and part of the eastern section of Carroll Township. This area is now served by the Monongahela Valley Sewage Authority and encompasses portions of Carroll Township as per the Washington County Act 537 recommendations. This location was identified as a concern for Combined Sewer Overflows and is considered a High Priority Area by DEP—California District Office.

Sewerage District #24 Van Voorhis

Sewerage District #24 includes the village of Van Voorhis in Fallowfield Township. The Washington County Act 537 Plan identified an existing sewer collection system but determined these to be "wildcat" systems that discharged raw sewage in to the environment. Van Voorhis was identified by the DEP—California District Office as a High Priority Area Lacking Public Sewerage.

Sewerage District #25 Greater Charleroi

Sewerage District #25 is served by the Authority of the Borough of Charleroi and encompasses portions of North Charleroi Borough, Speers Borough, Dunlevy Borough, Twilight Borough and Fallowfield Township as per the Washington County Act 537 recommendations. This location was identified as a concern for Combined Sewer Overflows. Currently, Fallowfield Township's storm and sanitary sewers are separated. In addition, Charleroi Borough is addressing combined sewer overflows by planning future remediation projects.

Sewerage District #26 Allenport-Elco-Roscoe-Stockdale

Sewerage District #26 includes the four boroughs of Allenport, Stockdale, Roscoe and Elco all of which are along the Monongahela River. This area was identified in the Washington County Act 537 Plan as a concern for Combined Sewers that discharge raw sewage into the Monongahela River. These systems are now served by the Mid Mon Valley Water Pollution Control Authority, which has since sought to remedy overflow situations. However, this district was listed by DEP—California District Office as a concern for Combined Sewer Overflows. The Mid Mon Valley Water Pollution Control Authority is undertaking a project to address combined sewer overflows by separating storm and sanitary sewer systems.

Sewerage District #27 Greater California

Sewerage District #27 includes California and Coal Center Boroughs both of which are in the Pike Run Watershed. The California Borough Municipal Authority now services portions of

California Borough and all of Coal Center Borough. The Act 537 Plan (1972) identified the presence of combined sewers and wildcat sewers that contributed to overflow situations and discharge of raw sewage. At the time of the Act 537 Plan, the small village of Granville was identified as having a need for sewerage but was identified as not feasible for connecting to the California System. The Municipal Authority has since increased its service area and is undertaking a plan to extend services to the Granville area due to DEP-California District Office identifying locations of septic failure and wildcat systems. The DEP-California District Office has identified this area as a Future Remediation Area.

Sewerage District #28 West Brownsville

Sewerage District #28 includes the Borough of West Brownsville as well as the village of Blainsburg all of which are located within the Pike Run Watershed. The 1972 Act 537 Plan identified West Brownsville as having a partial combination storm and sanitary sewer system that discharged untreated sewage into the Monongahela River. This area was identified by the Dep—California District Office as a High Priority Area Lacking Public Sewerage. The Center West Sanitary Authority was established to provide sewage treatment to West Brownsville and Blainsburg areas along with portions of Centerville Borough along US Route 40. This project is currently in the design phase and has received a commitment for funding.

Sewerage District #29 Richeyville-Beallsville Borough-Centerville-West Pike Run Township

Sewerage District #29 includes population centers along US Route 40. The Act 537 Plan identified an overcapacity treatment facility which provided sewage treatment for the village of Richeyville. Since then, the Centerville Sanitary Authority has been established and now provides treatment services to portions of Centerville Borough and West Pike Run Township, the village of Richeyville, and Beallsville Borough. The DEP-California District Office has identified this area as a Future Remediation Area due to the amount of growth occurring along US Route 40.

Sewerage District #30 Centerville

Sewerage District #30 included the population center of Centerville Borough. The sewerage district is now served by public sewerage through the Centerville Sanitary Authority. The DEP-California District Office has identified this area as a Future Remediation Area due to the amount of growth occurring along US Route 40. This area was addressed in the Center West Sanitary Authority plan.

Sewerage District #31 Malden

Sewerage District #31 identified the Malden area as a small developed area located along US Route 40. The Centerville Sanitary Authority / California Borough Municipal Authority now provides services to this location.

Sewerage District #32 Vesta No. 6

Sewerage District #32 includes a small village of Vesta No. 6 which is located along the Monongahela River in Centerville Borough. The Washington County Act 537 plan identified

this area as having sewers which discharged untreated sewage directly into the Monongahela River. Vesta #6 will be a part of the Center West Project.

Sewerage District #33 Vestaburg

Sewerage District #33 includes the villages of Vestaburg and Mexico both of which lie within the Two Mile Run Watershed and within East Bethlehem Township. The East Bethlehem Township Municipal Authority was formed to provide sewerage to portions of East Bethlehem, Vestaburg, Mexico, and Fredericktown. Sewerage District # 33 was not identified by DEP—California District Office as a concern. The East Bethlehem Municipal Authority is currently treating sewage from Vestaburg and the other identified areas of concern within the township.

Sewerage District #34 Fredericktown-Millsboro

Sewerage District #34 includes portions of East Bethlehem Township that are small populations centers including the villages of Fredericktown, Millsboro, Milfred Terrace, North Fredericktown, Fredericktown Hill and Vesta Heights. The East Bethlehem Township Municipal Authority was formed to provide sewerage to these locations. Sewerage District # 33 was not identified by DEP—California District Office as a concern.

Sewerage District #35 Williamstown

Sewerage District #35 includes several small population centers that lie within the Ten Mile Creek Watershed. The Act 537 plan identified communities in Washington and Greene Counties to encompass environmental concerns within the watershed. The Lower Ten Mile Sewer Authority was formed to provide sewerage to these areas. Sewerage District # 33 was identified by DEP—California District Office as a concern. DEP Source Water Assessment Reports PWSID #5630050—Marianna Municipal Water Works (Ten Mile Creek) identified raw sewage discharge from malfunctioning septic system into Ten Mile Creek) It should be noted that the Williamstown Plant is currently hydraulically overloaded and is on tap restriction. Lower Ten Mile Authority is under consent order to provide sewerage service to the Sandy Plains area due to the numerous malfunctions.

Table 5.2: Washington County Public Sewerage Providers, lists sewage treatment providers for residents in Washington County.

Table 5.2: Washington County Public Sewerage Providers, 2005

Provider	Service Area	Number of Customers in Service Area	Service Capacity	Monthly Cost to Consumers	Present Debt	Contact Information
Burgettstown-Smith Joint Sewage Authority	Burgettstown-Smith Twp.	2500 EDUs	0.8 MGD	$37.50/month	$15 million	P.O. Box 358 Atlasburg, PA 15004-0358
Blaine Township	N/A	N/A	N/A	N/A	N/A	N/A
California Municipal	California & Coal Center	1404 accounts	1.0 MGD	$15.00/month $2 for every 15,000 over 1000	$493,594.00	225 Third Street California PA 15419 (724) 938-8878
Canonsburg-Houston Joint Sanitary Authority	Canonsburg and Houston as well as parts of Cecil, Chartiers, and North Strabane Townships	11,100 homes (approximately 27,000 people)	5.0 MGD daily flow (ADF) and 20.94 MGD peak hourly flow (PHF)	Canonsburg and Houston residents pay $3.50 per 1000 gallons to CHJA. Cecil, Chartiers, and North Strabane residents pay $3.40 per 1000 gallons to CHJA.	$15 million	183 East Pike Street Canonsburg, PA 15317 phone/fax: (724) 743-3917
Carroll Township Authority	Portions of Carrol Township	1917 customers	MACM Interceptor .346 MGD MVA Interceptor .133 MGD	$50.50/ customer Commercial pays $9.79/ 1000 gal after base	$3.2 million	P.O. Box 661 Donora, PA 15033 724-484-4493, 724-489-9589 (fax)
Cecil Township Municipal Authority	Cecil Twp. Cherrybrook Teodori small portion of Peters	1651 customers with 48 tap-ins issued	Cherrybrook plant: .09 MGD Teodori plant: .149 MGD	Minimum $8.75 service charge for all customers. Residential users pay $6.05 per 1,000 gallons. Commercial user rate is $6.25 per 1,000 gallons.	$250,000.00	3599 Millers Run Road Cecil, PA 15321 724 746-4848, 724-745-2905 (fax)

Table 5.2: Washington County Public Sewerage Providers, 2005

Provider	Service Area	Number of Customers in Service Area	Service Capacity	Monthly Cost to Consumers	Present Debt	Contact Information
Center West Sanitary Authority	Centerville & West Brownsville	2,205 EDUs	0.35 MGD	$38-$40/ month and $1,000 tap-in fee	Total estimated project cost is $11.8 million	Center-West Joint Sewer Authority P.O. Box 542 Brownsville PA 15417 724-438-7468, 724-437-6049 (fax)
Centerville Sanitary Authority	Richeyville, portions of Centerville Borough, West Pike Run Twp, and Beallsville	797	0.17 MGD	Flat rate of $34.00/month.	$390,000	PO Box 332 Richeyville, PA 15358 724-632-2196, 724-350-0189 (plant)
Authority of the Borough of Charleroi	Charleroi, North Charleroi, portions of Speers, Dunlevy Fallowfield and Twilight	4410 customers	3.0 MGD (Dry weather flow)	$39.00 for the first 10,000/quarter	$6,843,926.44	3 McKean Avenue P.O. Box 211 Charleroi, PA 15022 724-483-3585 (office) 724-483-4833 (plant)
Claysville Donegal Sewage Authority	Claysville boro and Donegal Twp	N/A	N/A	N/A	N/A	N/A
East Bethlehem Township Municipal Authority	East Bethlehem, Vestaburg, Fredericktown	625	350,000 gallons/day	$46.00 per customer or $28.00 debt service only	$5.8 million	500 Front St Box 136 Fredericktown PA 15333 724-377-2511, 724-377-1793 (fax)
Fallowfield Township Municipal Authority	Fallowfield Twp. portions of Charleroi and Twilight	1,100 EDU's plus Charleroi Area Schools and several commercial businesses	900,000 gallons/day	$45.00/month	$5,800,000 at 1% - 20 year term	9 Memorial Drive P.O. Box 55 Charleroi, PA 15022

Table 5.2: Washington County Public Sewerage Providers, 2005

Provider	Service Area	Number of Customers in Service Area	Service Capacity	Monthly Cost to Consumers	Present Debt	Contact Information
Hanover Township Sewer Authority	Hanover Twp: Florence, Paris, Starpointe areas	Hanover: 1140 EDUs	Bavington: 200,000 gallons/day and 170,000 gallons/day to Weirton			116 Stubenville Pike Burgettstown, PA 15021
Independence-Cross Creek Sewage Authority	P and W Patch	53 EDU's	24,000 gpd	$35/month	$36,000	PO Box E Avella, PA 15312 724-587-3518
Lower Ten Mile Sewer Authority	Clarksville	620	0.12 MGD	$40/month	$2 million	R.D. 1 Box 127 Jefferson, PA 15344 724-888-4825
Marianna-West Bethlehem Joint Sewage Authority	XX	XX	307,000 gallons/day	N/A	N/A	P.O. Box 428 Marianna, PA 15345-0428 724-966-7924 (fax)
McDonald Sewage Authority	McDonald Borough	1090	1.7 MGO	17.25/Mo Plus $4.85 Per 1000 Gal	$717,482.00	None
Mid Mon Valley WPC Authority	Allenport, Elco, Stockdale, and Roscoe	1058 customers	7 MGD	97¢/1000 gallons	$163,000	P.O. Box 195 Allenport, PA 15412-0195 724-326-4491, 724-326-4482 (fax)
Midway Sewage Authority	Midway portions of Cecil, Robison McDonald Mt. Pleasant	Approximately 1,400 customers	0.5 MGD	$48.50	18.1 million project cost	P.O. Box 600 Midway, PA 15060 724-796-5936, 724-796-0298 (fax)

Table 5.2: Washington County Public Sewerage Providers, 2005

Provider	Service Area	Number of Customers in Service Area	Service Capacity	Monthly Cost to Consumers	Present Debt	Contact Information
Monongahela Valley Sewage Authority	Donora, Carroll Twp and Monessen in Westmoreland Co.	6,455	daily flow is 4.96 MGD with peak flow at 12.5 MGD	$55.00 per quarter with 10,000 gal max; for every 1000 gal over $5.50 per 1000	As of Nov 30, 2003 Bonds payable: $3,375,000 PENNVEST loan: $174,000	P.O. Box 792 Donora, PA 15033 724-379-4141 Fax: 379-4690
Municipal Authority of the City of Monongahela	Monongahela and Carroll Twp	7379	1.5mgd	N/A	N/A	P.O. Box 20 Monongahela, PA 15063 724-258-9598 Fax: 258-4369
Mt. Pleasant Township Municipal Authority	Mt. Pleasant Phase I: Southview & Westland	Southview: 96 EDUs Westland:102 EDUs	Southview: 30,000 gallons/day Westland: 30,000 gallons/day	Estimated at $45/EDU/mo	None	31 McCarrell Road Hickory, PA 15340
New Eagle Sewage Authority	New Eagle	1020 EDUs; 1000 customers	800,000	$23.00 Debt Service plus $3.00 per 1,000 gallons used	$6,142,022.00	157 Main Street New Eagle, PA 15067 Phone: 724-258-4477 Fax: 724-258-5254
North Strabane Municipal Authority	North Strabane	3600 customers	2 plants; 140,000 gallons/day and 35,000 gallons/day Chartiers-Houston ??	$6.50 per 1000 gallons (average $30/ month)	$6 million	1929B Route 519 S. Canonsburg, PA 15317 724-745-7220 Fax: 745-1471

Table 5.2: Washington County Public Sewerage Providers, 2005

Provider	Service Area	Number of Customers in Service Area	Service Capacity	Monthly Cost to Consumers	Present Debt	Contact Information
Pigeon Creek Sanitary Authority	Bentleyville, Ellsworth, Cokeburg, portions of North Bethlehem, Somerset and Fallowfield Twp.	2414 customers	1.02 MGD	N/A	N/A	724-239-2381
Peters Creek Sanitary Authority	Finleyville boro, parts of Nottingham, Peters, and Union Twps.	Currently 3829 tap-ins but customers varied by unit	25% active flow at 24 inch maximum interceptor sanitary line	Public water users & private metered: 0 - 2,000 gallons used = $13.00 min. (additional usage billed at $4.08/thousand gallons). Flat rate: $22.00 per service period per unit.	$1,960,622.41	P.O. Box 3 Finleyville, PA 15332 724-348-6860 239-2381 Fax: 239-2343
Peters Township Sanitary Authority	North Western portion of Peters Township - approximately 9.5 square miles (Brush Run WPCP service area - 6.5 square miles, Donaldson Crossroads WPCP service area - 3 square miles)	5271(5013 residential and 258 non-residential)	Brush Run WPCP: 2.000MGD Donaldson Crossroads WPCP: 1.200 MGD	$29.25/quarter/per dwelling unit plus a user charge of $3.23/1000 gallons of water consumed.	$6,951,937	3244 Washington Road McMurray, PA 15317 724-941-6709 Fax: 724-941-2283
South Strabane Municipal Authority	N/A	N/A	N/A	N/A	N/A	550 Washington Road Washington, PA 15301
Vestaburg new Hill Joint Authority	N/A	N/A	N/A	N/A	N/A	N/A

Table 5.2: Washington County Public Sewerage Providers, 2005

Provider	Service Area	Number of Customers in Service Area	Service Capacity	Monthly Cost to Consumers	Present Debt	Contact Information
Union Township	N/A	N/A	N/A	N/A	N/A	N/A
West Alexander Donegal Municipal Authority Sewer System	N/A	268 customers	64,000 GPD with an additional 14,000 GPD Can be upgraded to 80,000 GPD with minimal cost at the WWTP	Average bill for 4,000 gallons per month is estimated to be $38.37	$1,267,643	West Alexander Donegal Municipal Authority PO Box 185 West Alexander, PA 15376 304-232-5550
West Pike Run Sanitary Authority	Daisytown, Crescent Heights and Walkertown	238 EDU's	0.063MGD	N/A	N/A	238 Pike Run Drive Daisytown, PA 15427
Washington-East Washington Joint Authority	Washington-East Washington	14200 customers	8.5 MGD	$10.00/month	$7,856,045	60 E. Beau Street Washington, PA 15301 724-225-1010

Source: Washington County Planning Commission, 2005

Water Supplies

Public water provision to Washington County residents is handled by a variety of providers, which includes both public and private entities. Table 5.3 lists all entities providing water services to Washington County residents.

Public water supply systems are owned and operated by municipal governments or private companies. Small water systems (under 1,000 connections) are not regulated as a public utility but do have environmental and safety standards that the systems must comply with. The Safe Drinking Water Act of 1974 established the minimum national standards for all public water systems. As new amendments to the Safe Drinking Water Act were passed, these regulations have become stricter and now address surface water supplies and the disinfections of water supplies.

Private wells serve many Washington County residents with potable water. Private wells are used by residents and by many agriculturally oriented pursuits. Protecting the quality and quantity of the water supplies is essential to many homes and farms in the county. Additionally, source water such as Ten Mile Creek, Pigeon Creek, Cokeburg Reservoir, and the Monongahela River contribute to water resources and the public water supply. The Safe Drinking Water Act Reauthorization of 1996 required the development of a Source Water Assessment and Protection Program to assess raw water quality. The Department of Environmental Protection (DEP) is responsible for this assessment process and has identified the following potential threats to source water supplies [detailed assessments are provided in DEP Source Water Assessment Reports PWSID # 5630044—Ellsworth Borough Water Department (Pigeon Creek), PWSID# 5630041—Cokeburg Borough Water Department (Cokeburg Reservoir), and PWSID #5630050—Marianna Municipal Water Works (Ten Mile Creek)]:

- Accidental release of contaminants along major transportation corridors (Ellsworth, Cokeburg, Marianna)
- Storm water runoff from golf courses, agricultural areas and residential lots (Ellsworth)
- Storm water runoff from non-maintained or malfunctioning on-lot septic systems (Cokeburg)
- Storm water runoff from agricultural areas within the watershed carrying multiple contaminants from fertilizer or pesticide applications (Cokeburg)
- Malfunctioning on-lot septic systems dumping raw sewage directly into the watershed (Marianna)

As federal and state regulations become more stringent, costly treatment initiatives will need to be implemented to provide water service that meets these rigorous requirements. These regulations will require water service providers to take a proactive approach. One water service provider taking a proactive approach is the Authority of the Borough of Charleroi. The Authority is instituting a state of the art treatment system. The new treatment system is a submerged ultra filtration system that provides a positive barrier to the passage of microbial pathogens. This approach was selected to minimize present and future construction costs while

meeting the current new and anticipated future regulations with minimal additional costs. Such projects should be supported by Washington County. With the cooperation of the County and local elected officials, the needed infrastructure will be in place to support the quality of life and provide conditions for a business base that all Washington County residents can enjoy.

Table 5.3: Water Service Providers

Provider	Service Area	Service Capacity	Customers	Monthly Cost to consumers	Present Debt	Water Source	Contact Information
Ellsworth Borough Municipal Water Authority	XX	580,000 Gal/Day Current Level: 90,000 Gal/Day	1,450 Customers 661 Tap-ins	$19.62 /2,000 gallons @2.75 /1,000 gallons	$0.00	Pigeon Creek Impound	13 Todd Avenue Ellsworth, PA 15331 Phone 724-239-3814
Cokeburg Borough Municipal Water Authority	XX	100,000 Gal/Day Current Level: 60,000 Gal/Day	780 Customers 390 Tap-ins	$28.50 /2,000 gallons	$60,890	Cokeburg Reservoir	3 Garfield St. Cokeburg, PA 15324 Phone 724-945-6552
Bentleyville Borough Municipal Water Authority	XX	See Charleroi	1,007 Tap-ins	$19.65 /3,000 gallons $2.85 /1,000 gallons	$159,832 Pennvest loan	Charleroi Water Authority (Cost $2 per 1,000 gallon water	58 Main Street Bentleyville, PA 15314 Phone 724- 239-2381
West Alexander/Donegal Joint Municipal Water Authority Owned by Ohio County Public Service	XX	200,000 Gal/Day	287 Customers	$14.00 flat rate $2.60 /1,000 gallons	$0.00	Ohio River--City of Wheeling	53 B North Liberty St. PO Box 185 West Alexander, PA 15314 Phone 724-484-7736
Claysville Donegal Joint Municipal Authority	XX	520,000 Gal/Day Current Level: 96,000 Gal/Day	1,500 Customers 600 Tap-ins	$38.00 /3,100 gallons	$1,724,765 (water system) $1,222,755 (Sewer System)	Jack Clutter Dam on Route 40 West and School Street Dam in Claysville	314 Main Street, PO Box 467 Claysville, PA 15323 Phone 724-663-7770

Table 5.3: Water Service Providers

Provider	Service Area	Service Capacity	Customers	Monthly Cost to consumers	Present Debt	Water Source	Contact Information
Authority of the Borough of Charleroi	XX	9,000,000 Gal/Day Current Level: 4,500,000 Gal/Day	28,500 Customers 11,500 Tap-ins	$10.00	$4,700,000 bond issues & Pennvest loans	Monongahela River	3 McKean Ave., PO Box 211 Charleroi, PA 15022 Phone 724-483-3585
Marianna Borough Municipal Water Works	XX	425,000 Gal/Day	1,037 Customers 435 Tap-ins	Marianna Borough--$14.00 first 2,000 gals + $2.00/1,000 gals after W. Bethlehem Twp--Bulk sale $5.00 /1,000 gal	Unknown	Ten Mile Creek	919 Oak Street., PO Box 279 Marianna, PA 15345 Phone 724-267-3912
Southwestern Pennsylvania Water Authority	Portions of East Bethlehem Township and Deemston Borough along with 19 other Municipal. In Greene and Fayette	7,500,000 Gal/Day	12,000	$25.00	$1,568,850 per year	Monongahela River	1442 Jefferson Road Jefferson, PA 15344 Phone 724-883-2301
Redstone Water Company	Portion of West Pike Run	64,000 Gal/Day	774	Unknown	Unknown	Ground Water	3 Main Street Daisytown, PA 15427 Phone 724-938-9164
Tri County Joint Municipal Authority	XX	2,100,000 Gal/Day	3500	$11.75 minimum	$7,000,000	Monongahela River	26 Monongahela Ave Fredericktown PA 15333 Phone 724-377-2211

Table 5.3: Water Service Providers							
Provider	**Service Area**	**Service Capacity**	**Customers**	**Monthly Cost to consumers**	**Present Debt**	**Water Source**	**Contact Information**
							Fax 724-377-2212
Pennsylvania American Water	XX	13.0 MGD	48,325	4,000 gallons purchase = $34.44	Unknown	2 Water Treatment Plants on the Monongahela River	300 Galley Road McMurray PA 15317 Phone 724-873-3653
Source: Washington County Planning Commission, 2005							

D. Analysis & Recommendations:

The cost of land development is often directed by the presence or availability of public infrastructure. Every particular system has its own network of pipes, wires, or antennas that will dictate or at least influence where new construction can occur. Federal and state laws govern certain aspects of land development as it pertains to public infrastructure. For instance, natural gas pipelines are often damaged at construction sites when earth is moved during excavation, sometimes with deadly consequences. All public and private companies must meet minimum safety and regulatory compliance standards, such as the Pennsylvania One-Call system. Washington County should continue to monitor the status of compliance and the location of new development activities.

The growing popularity of wireless networks will drive the demand for new communications antennas and other supporting facilities. To avoid an over proliferation of cell towers, the location of existing towers should be mapped and a county policy developed to guide the placement and construction of new towers. However, it should be noted, that local municipalities retain ultimate control or authority for siting of cell towers and the county's role is purely advisory and is concerned ultimately with completing the wireless system. Additionally, the county should assist municipalities in reviewing and updating their zoning ordinances to ensure compliance with federal laws.

Washington County needs to support DEP's efforts to identify and plug orphaned natural gas and oil wells. The presence of such wells is both a safety and environmental hazard. Funds from Pennsylvania's Growing Greener program can assist with this task.

Septic systems, when properly designed and maintained, provide acceptable sewage treatment options for people without access to public systems. However, if a septic system isn't maintained properly it can fail thereby discharging raw sewage into the environment and endangering public health. The Pennsylvania Sewage Facilities Act (Act 537) requires all municipalities to develop and maintain a sewage facilities plan that addresses sewage treatment and protects groundwater supplies. Most municipalities develop the plan in response to public systems. However, Act 537 plans can and should address septic systems. Local oversight of septic systems can include pumping programs, permitting programs, to municipal inspection of on-lot systems. Municipalities can establish their legal authority to oversee on-lot systems through an enactment of an ordinance to manage an on-lot septic administration program—essentially a oversight and management program conducted by the municipality for all septic systems. The county should assist in educating municipal officials on the need for proper oversight of all sewage treatment systems.

Deteriorating infrastructure impacts the environment, municipal revenues, and public health. Most of the public systems in Washington County are experiencing some degree of deterioration and will need to replace lines and/or physical plants. Many older systems are experiencing failure, infiltration, or leakage and are in need of extensive restoration or replacement. Another serious issue is the presence of "wildcat" sewerage systems. These systems are typically older lines that remove waste from a home or business into a nearby waterway or into the ground.

Wildcat systems are noted throughout the county, as discussed earlier in this section, and should be considered a priority to address.

Stricter state and federal regulations, coupled with aging lines and plant facilities such as treatment and purification systems, may soon encourage the privatization and regionalization of public water and sewerage systems. Many areas could be more efficiently served through a regional sewer or water system. However, concerns regarding system backup and contingency measures should be considered prior to wide scale mergers of systems. The county can assist sewerage and water providers to identify feasible options for financially struggling sewerage and water facilities. However, it will ultimately be the responsibility of the local authority or provider and municipality to direct such efforts.

Another important issue facing Washington County is the growing demand for sewer line and capacity expansion. New plants, upgrades to existing facilities, and new line extensions will encourage new development activities in the areas located in the north, central, and eastern areas of the county. The county should provide ongoing review of new development plans and coordinate with the recorder of deeds to ensure that sewage management plans comply with regulatory measures. The county should continue to monitor compliance with DEP mandates and coordinate new expansion efforts with local watershed and environmental issues. Additionally, the county should adopt a policy to support infrastructure expansion to those areas that have been identified as high priority due to high growth area, failing systems, or the discharge of raw sewage. Local municipalities and authorities also need to be responsible in their plans for expansion, in that they review municipal comprehensive plans prior to planning for new service areas or replacement of lines.

The county will need to address policy issues for how new sewerage is provided. For instance, in some areas small treatment systems may serve to address specific needs while other locations would be best served by a larger regional sewage treatment system. The actual sizing of sewer lines must be another consideration when planning for sewerage expansion. Major interceptors should be designed to meet expected capacity however, the size of the interceptor can encourage unsuitable development for existing land uses. The orderly growth of Washington County can be encouraged by extending service areas from existing sewer lines in a progressive fashion versus long sewer lines to open new areas. Additionally, new service areas should have proper land use controls in place so that new development is accommodated in a fashion that is compatible with surrounding development.

New and existing development suffers in areas of the county that have limited soil suitability to accommodate on-lot septic systems. Alternative wastewater systems should be identified and applied in appropriate locations. As Pennsylvania DEP governs what systems are allowed, the county will need to coordinate “test cases or demonstration projects” for systems as per Chapter 73. Standards for Sewage Disposal Facilities. Such systems may include natural or alternative mechanical facilities. Passive or “natural” treatment systems include a variety of biological process to treat wastewater. Alternative mechanical technologies include pressure sewers, small-diameter gravity sewers, and vacuum sewers. The county should investigate the effectiveness of alternative systems and identify acceptable measures for use in Washington County.

Water that is used in sinks, bathtubs, and other residential, commercial, and industrial fixtures becomes wastewater or "greywater" once used. This wastewater is disposed of through the sewer system where is undergoes treatment and disposal. In some communities, the wastewater line is combined with storm water lines that can overtax the treatment system and discharge untreated sewage into the environment. In locations without sewage treatment facilities, wastewater is sent to the septic or on-lot sewage treatment system. Other treatment applications are available for wastewater and can be accomplished safely, effectively and reduce the potential for system failure. By removing greywater from sewerage systems, the cost of treatment becomes less and systems can be built for lower capacity. The County should incorporate alternative wastewater treatment concepts as they investigate methods for alternative sewerage systems.

The county should continue to protect existing water sources. Although the Monongahela River is the primary water source for much of Washington County, other sources such as Pigeon Creek, Ten Mile Creek, and the Cokeburg Reservoir will need protection and continual monitoring. Watershed issues are addressed in detail in Chapter 10, however, the availability and capacity of public infrastructure and private on-lot systems will be dependent upon the on-going protection of water sources and reducing pollution and environmental contaminants. The county should coordinate an educational outreach program to increase the awareness of the measures that can reduce the potential for system failure. The county should educate local communities on the importance identifying and correcting on-lot sewerage failures. For instance, one measure to reduce septic failure is to eliminate the drainage of storm water and greywater into a septic system. However, the most important preventative action must occur at installation of any new septic system. The proper installation of a septic tank is essential to ensure that water infiltration does not occur. These steps coupled with the improved design of septic pumps and filters will increase the effectiveness of sewage treatment for small communities. Finally, the county should encourage the development of sewage treatment plans that address this issue on a watershed basis.

E. Implementation Strategies

Ensure that Washington County has a safe and efficient public infrastructure network that meets local needs and encourages sustainable development that preserves agricultural activities, fosters environmental stewardship, as well as promotes sound economic development

Action: Identify areas within the county where public funding should be dedicated to water and sewer extensions.

Action: Establish growth boundaries to identify locations where public funding should not be directed to construct large-scale public water and sewerage facilities

Action: Review land development plans to ensure that sewage facilities planning is incorporated

Action: Work with the Washington County Recorder of Deeds to ensure that land development plans comply with sewage facilities planning

Action: Provide municipalities with information and technical assistance to obtain grants and funding for infrastructure projects

Action: Identify and coordinate the use of federal and state wastewater treatment funds for communities

Action: Support water and sewer extensions to areas that are located near major thoroughfares and economic development areas

Action: Develop an educational and outreach program for communities that rely on on-lot septic systems

Action: Assist municipalities to implement an on-lot septic system management and oversight program

Action: Incorporate the location of gas and oil wells into a County GIS database to support future mapping efforts

Action: Continue to support DEP efforts to cap abandoned wells

Action: Incorporate the location of communications facilities into a County GIS database to support future mapping efforts

Action: Provide technical assistance to local municipalities for the siting of communication facilities

Action: Investigate alternative treatment methods that are appropriate to local soil, topographic, and hydrological conditions

Action: Lobby DEP to develop an outreach technical assistance and educational program on proven alternative wastewater technical assistance for community officials, consulting engineers, regulatory officials, and community residents

Action: Incorporate watershed planning into water resource management and sewerage treatment decisions

Maintain existing infrastructure for all utilities, including public water and sewer, gas, electric, roads, storm water, bridges and public buildings.

Action: Identify which water and sewerage providers have critical deficiencies in their built systems

Upgrade existing water and sewer systems in older communities

Action: Support public sewage providers to resolve problems associated with combined sewer systems and aging infrastructure.

Action: Identify low interest loan programs for local water and sewerage providers

Action: Update Block Group information for the US Census in regards to sewerage districts, population centers, and future planning efforts

Establish consistent storm water management requirements and practices across the county.

Action: Assist municipalities in their efforts to ensure effective storm water management practices

CHAPTER 6. HOUSING CHARACTERISTICS

A. Introduction

The housing element of a comprehensive plan assesses current residential needs and anticipates the needs of those individuals and families who may choose to reside in the county in the future. This section examines housing trends in order to preserve the existing sound housing base, provide rehabilitation strategies of housing in declining neighborhoods, and project what new housing demands will occur in the next 10 to 20 years. An evaluation of the housing stock provides an indication of the quality of life for residents and the economic vitality of the county. The results of this evaluation are used to develop specific housing programs, services, and strategies to address identified needs.

From communities with rings of housing around small linear commercial areas, Washington County also contains larger urban centers surrounded by suburban style development. Recent housing trends in Washington County include the rehabilitation of many older neighborhoods in boroughs while the conversion of traditional agricultural areas to new housing subdivisions have occurred at an alarming rate within many of the townships. For instance, over the last decade there has been significant new development in the municipalities along the PA Route 19 and I-79 corridors. The Townships of North Strabane, Peters, and Cecil are just a few municipalities that have been experiencing high rates of housing starts within this transportation corridor.

Some would argue that this new development has occurred at the expense of established communities within the Monongahela River Valley, which experienced a high level of growth during the beginning to mid 20th century. However, what most people can agree upon is the diversity of the residential environment of Washington County. Many residential areas were established early in the development history of Washington County and retain the historical characteristics of period architecture to this day. Other communities, where new construction has occurred recently, have a predominance of subdivision style development that lack defined commercial areas.

To guide Washington County in future planning efforts, the following County Development Objectives serve as broad policy guidelines:

County Development Objectives

- Provide housing options to meet the present and future needs of residents of all ages and income levels
- Encourage and promote coordination between county and municipal housing strategies
- Ensure that future planning activities address demographic factors, market forces, infrastructure needs, and existing housing conditions

B. Background

An inventory of housing in Washington County was conducted to gather data on housing units or dwelling units, the density of the development and the affordability of housing. The United States Census Bureau, Southwestern Pennsylvania Commission, and the Washington County Planning Commission provided quantitative data while qualitative data concerning local housing conditions was provided focus group sessions, stakeholder interviews, and municipal surveys.

Housing Units

Housing is defined by the US Census Bureau (2000) as:

> *"A housing unit may be a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or, if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall…Both occupied and vacant housing units are included in the housing unit inventory."*

According to the US Census definition, one or more housing units may exist within a single structure and each unit is included in total housing unit count. Dwelling units are categorized by as one-unit attached, one-unit detached, two units, 3-4 units, 5-9 units, 10-19 units, 20 or more units, mobile home, Boat, RV, Van, etc.

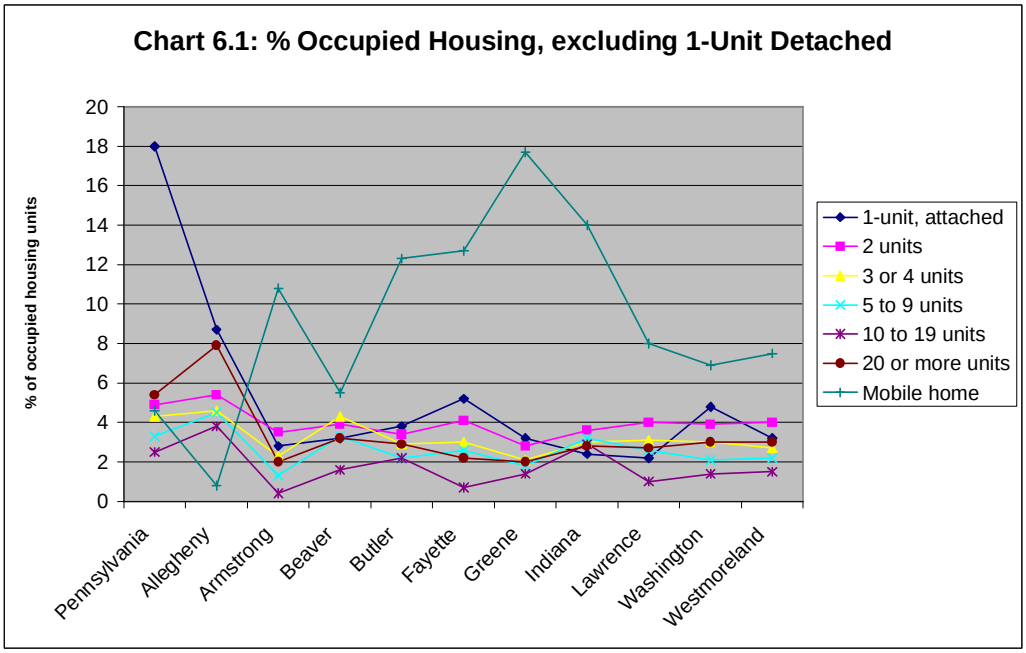
Table 6.1: Housing Units provides housing unit data for the County. As shown, one-unit detached structures are the primary housing structure in Washington County. Compared to the study area, the county has a sufficient mix of 1-unit attached, 2-unit and 3-4-unit structures as well.

Table 6.1: Total Housing Units, 2000	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	**Washington**	Westmoreland
Occupied Housing Units	4,777,003	537,150	29,005	72,576	65,862	59,969	15,060	34,123	37,091	**81,130**	149,813
% of Units in Structure	%	%	%	%	%	%	%	%	%	**%**	%
1-unit, detached	57	64.3	76.8	75	70.3	69.5	69	68	76.3	**74.8**	75.9
1-unit, attached	18	8.7	2.8	3.2	3.8	5.2	3.2	2.4	2.2	**4.8**	3.2
2 units	4.9	5.4	3.5	3.9	3.4	4.1	2.8	3.6	4	**3.9**	4
3 or 4 units	4.3	4.6	2.3	4.3	2.9	3	2.1	3	3.1	**3**	2.7
5 to 9 units	3.3	4.5	1.3	3.3	2.2	2.6	1.8	3.2	2.6	**2.1**	2.2
10 to 19 units	2.5	3.8	0.4	1.6	2.2	0.7	1.4	2.9	1	**1.4**	1.5
20 or more units	5.4	7.9	2	3.2	2.9	2.2	2	2.8	2.7	**3**	3
Mobile home	4.6	0.8	10.8	5.5	12.3	12.7	17.7	14	8	**6.9**	7.5
Boat, RV, van, etc.	0	0	0.1	0	0	0	0.1	0	0	**0**	0

Source: U.S. Census, 2000

Chart 6.1 provides a percentage analysis of housing units, excluding Boats, RV, vans, and 1-unit detached, which were removed to compare the categories that were statistically more similar. As can be seen by this graphic, Washington County is very similar in most of the housing

categories. It should be noted that the 1-unit attached category is higher for Fayette, Allegheny and Washington Counties. This structure is typical of homes that were built for people working in mines, factories and mills, and can be exemplified by many of the "patch" communities that were built close to these employment centers.



Age of Structure

The age of the housing units helps to analyze the condition of the housing stock in terms of physical needs and historical significance. Housing units built before current building codes may present potential hazards from faulty wiring or lead based paint. On a positive note, older homes can also indicate that the structures have historic significance that can lend to a desirable community character. Table 6.2 provides the age in which housing structures were built.

Table 6.2 also provides a comparison between the study area in terms of the median year in which the structure was built. As shown, Washington County has a median age just below the state while Butler County reflects a high rate of new development with 1972 being the median year of construction. As shown, Washington County has enjoyed a higher rate of new residential construction since 1990 than Westmoreland, Lawrence, Fayette, Beaver, Armstrong, or Allegheny Counties.

Table 6.2: Year Structure was Built, 2000	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
1999 to March 2000	1.1	0.6	0.9	0.8	2	1.1	1.3	1.2	1	***1.1***	1
1995 to 1998	4.1	2	3.8	3	9.3	4.1	3.9	4.7	4	***4.2***	3.8
1990 to 1994	5.2	2.8	3.6	3.9	9.4	4.5	5.2	5.9	3.4	***4.9***	4.7
1980 to 1989	10.2	6.6	9.1	6.5	12.9	9.1	10.9	13.2	6.4	***8.6***	9
1970 to 1979	13.7	11.3	14.1	13.5	18.1	13.6	17.3	19.4	12.1	***14***	15.9
1960 to 1969	11.3	13	9.4	11.9	10.1	7.9	7	10.2	9	***11.3***	13.7
1940 to 1959	24.4	32.5	22.2	32.8	18.5	22.5	19.4	16.7	29.4	***24.8***	26
1939 or earlier	29.9	31.2	36.8	27.6	19.7	37	35	28.8	34.7	***31.2***	25.9
Median Age of Structure	1958	1953	1953	1955	1972	1952	1955	1965	1952	***1957***	1959

Source: U.S. Census, 2000

Table 6.3 displays the year in which the householder moved into the structure. Washington County experienced a significant transition period between 1995 and 1998. During this period, most of the study area also had a high rate of people moving into their existing unit. The data also shows that the county has a high rate of persons who have been living in their current home since 1969. This statistic indicates that Washington County enjoys a stable community atmosphere, although it may also result in a lack of housing availability.

Table 6.3: Year Householder Moved Into Unit, 2000	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
Calendar Year	%	%	%	%	%	%	%	%	%	%	%
1999 to March 2000	14.6	15	10.2	11.1	14.1	11.7	12.3	16.2	11.7	***11.2***	10.9
1995 to 1998	23.9	23	19.6	21.3	26.2	19.8	20.8	21.3	21.1	***21.3***	20.4
1990 to 1994	15.4	14.5	14.6	15.4	16.8	14.2	16.2	12.7	14.1	***15.1***	14.9
1980 to 1989	17.2	15.8	17.5	15.4	16.2	17.5	18.3	17.6	15.6	***16.8***	17.2
1970 to 1979	12	12.1	14.5	13.5	11.9	14.4	14.5	14.3	14	***13.9***	14
1969 or earlier	17	19.5	23.6	23.3	14.8	22.4	17.8	17.9	23.4	***21.7***	22.6

Source: U.S. Census, 2000

Size of Housing Unit

Each dwelling unit is also categorized according to the number of rooms within the structure. Determining the number of whole rooms can help to gauge the size of dwelling units and may be used to measure the economic conditions of a community if one assumes that a larger dwelling unit equates to a more costly structure. The Census Bureau (2000) defines a room as including "living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches suitable for year-round use, and lodgers 'rooms. Excluded are strip or pullman kitchens, bathrooms, open porches, balconies, halls or foyers, half-rooms, utility rooms, unfinished attics or basements, or other unfinished space used for storage. A partially divided room is a separate room only if there is a partition from floor to ceiling, but not if the partition consists solely of shelves or cabinets." Table 6.4 identifies the number of rooms per housing unit for the study area while Chart 6.3 shows information specific to Washington County.

The information displayed in Table 6.4, indicates that the majority of communities are similar in respects to the number of rooms within a structure. Chart 6.3 shows that most dwelling units in Washington County have six rooms that are used for living purposes. As is shown, the county is comparable to many other counties within the study area but falls behind the state in terms of the total number of rooms. Both Westmoreland and Butler Counties have a higher median number of rooms, both of which also have higher median values as indicated in Table 6.5: Housing Value of Owner Occupied Units.

Table 6.4: Total Number of Rooms Within Housing Units, 2000	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
Occupied Housing Units	4,777,003	537,150	29,005	72,576	65,862	59,969	15,060	34,123	37,091	***81,130***	149,813
Total # of Rooms											
1 room	1.1	1.2	0.7	0.4	0.7	0.2	0.5	0.8	0.6	***0.4***	0.3
2 rooms	2.6	2.7	1.1	1.1	1.5	1.4	1.2	2.3	1.2	***1.3***	1.2
3 rooms	7.2	8.8	4.3	5.7	5.3	5.2	4.9	6.1	5.1	***5.6***	4.8
4 rooms	11.9	13.1	13.8	14.7	12.5	18.3	16.4	13.3	14	***14.4***	13.2
5 rooms	17.3	18.7	26	24.1	20.3	23	25.6	22.5	23.1	***22.5***	21
6 rooms	23.6	23.8	27.9	25.7	22.1	23	21.9	23.1	28.1	***23.3***	24.5
7 rooms	15.2	13.6	13	14.1	15.1	13.1	14.1	14.9	13.5	***13.8***	15.4
8 rooms	11.2	9.9	8	8.8	11.6	9	8.6	9.4	8.2	***9.8***	10.8
9 or more rooms	9.9	8.2	5.2	5.5	10.9	6.8	6.7	7.6	6.1	***8.8***	8.7
Median (rooms)	5.9	5.7	5.6	5.7	5.9	5.6	5.6	5.7	5.7	***5.7***	5.9

Source: U.S. Census, 2000

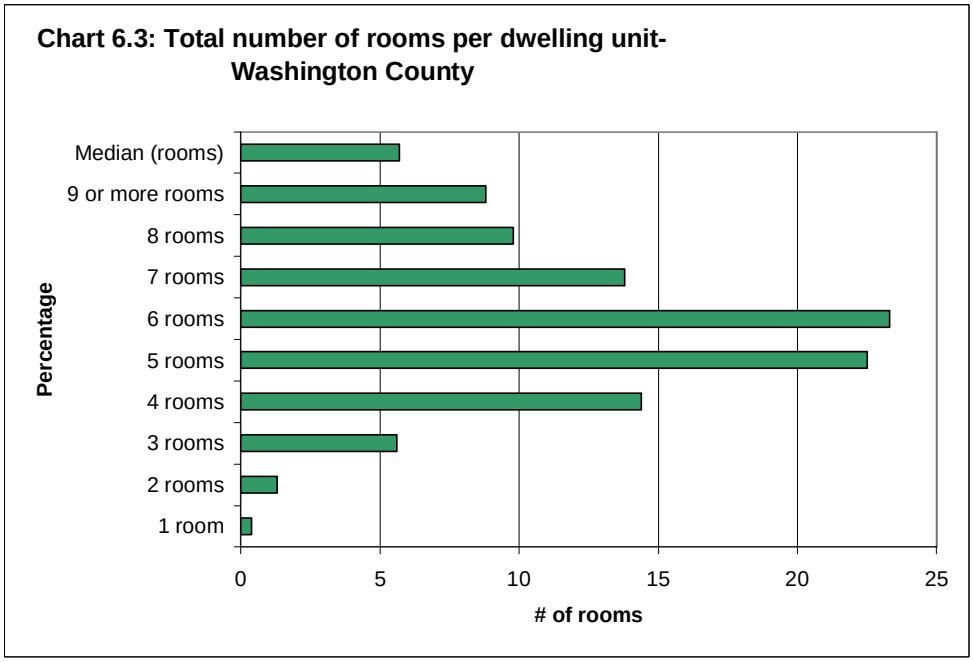
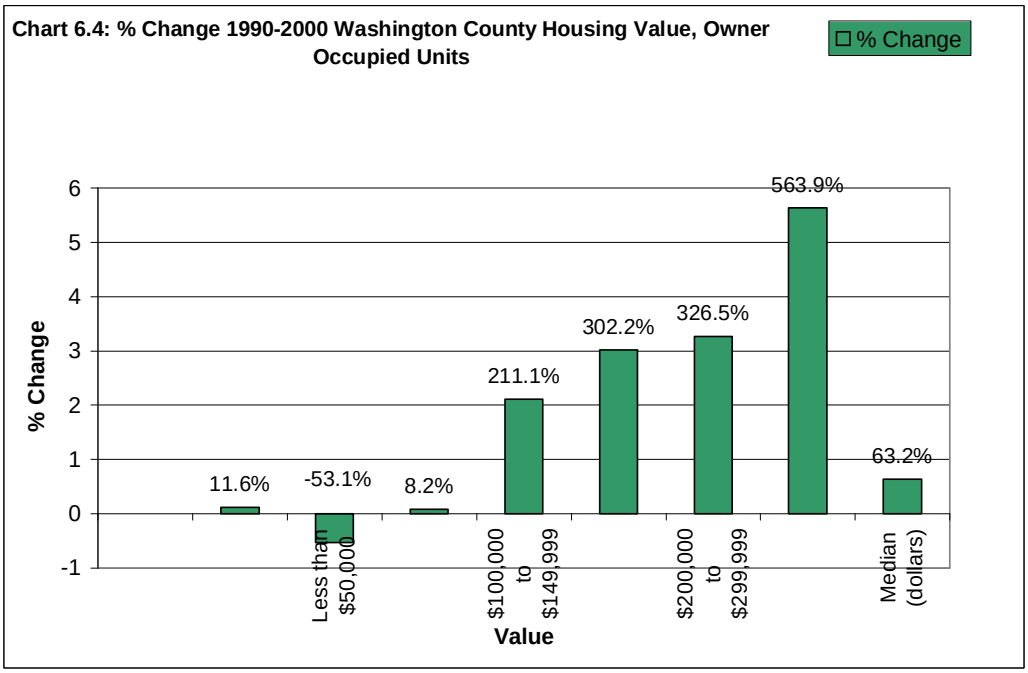


Table 6.5 shows that Washington County's Median Housing Value falls below the state average by $10,000, while Butler County has a Median Housing Value of $17,000 more. With its higher total number of whole rooms and median housing value, one would expect that quality of life to be improved in these communities. However, a further review of the data indicates that Butler County may be suffering from a lack of affordable housing, which may place undue hardship on persons with a low income, for instance senior citizens on fixed incomes. For instance, the Butler County has the lowest rate of housing units under $99,999 while Washington County enjoys a range of housing options from low to high cost housing with a solid amount of mid-cost homes.

Table 6.5: Housing Value of Owner Occupied Units, 2000	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
Specified owner-occup	2,889,484	331,436	16,785	46,498	38,755	34,118	6,999	17,070	23,244	***51,774***	98,739
Dollar Value	%	%	%	%	%	%	%	%	%	**%**	%
Less than $50,000	15.1	19.5	32.6	18.1	6.4	34.1	42	27	29.1	***19.2***	13.4
$50,000 to $99,999	37.4	43.8	50.1	47.3	34.1	47	42.5	50.5	45.6	***40.6***	45.2
$100,000 to $149,999	24.3	20	11.3	22.5	30.7	12.3	10.7	14	15.8	***21.3***	23.5
$150,000 to $199,999	11.9	8.2	4.6	7.9	14.3	3.6	3	5.1	6.2	***9.5***	10
$200,000 to $299,999	7.4	5.2	1.1	3.4	10.9	2	1.4	2.2	2.7	***5.8***	5.5
$300,000 or more	3.9	3.2	0.3	0.7	3.7	1	0.2	1.2	0.6	***3.5***	2.4
Median (dollars)	$97,000	$84,200	$64,500	$85,000	$114,100	$63,900	$56,900	$72,700	$72,200	***$87,500***	$90,600
Source: U.S. Census, 2000											

CHAPTER 6. HOUSING CHARACTERISTICS

While some consider that the quality of life within a community is improved with higher median home values, it is also significantly influenced by its cost of living. While housing values play an important factor, elements such as rent levels, and mortgage costs provide an evaluation of housing quality and the affordability of a community. Chart 6.4 presents the overall percent change of median housing values for owner occupied units in Washington County from 1990 to 2000. The county has experienced a significant rise in the value of owner-occupied units with large increases in the number of home values of $300,000 or more.



The total number change in housing units and median housing values from 1990 and 2000 is shown in Table 6.6: Washington County Housing Value of Owner Occupied Units. Within the specified ten-year period, Washington County gained 5,400 owner-occupied housing units (11.6%) and the median housing value increased by $33,900 (63.2%). The highest total number change in housing units occurred in the housing value category of $100,000-$149,000 while the highest percentage change occurred in the $300,000 housing category.

Table 6.6: Washington County Housing Value of Owner Occupied Units, 1990-2000	1990	2000	% Change	Total # Change
# Of specified owner-occupied units	46,374	51,774	11.6%	5,400
Less than $50,000	21,162	9,919	-53.1%	-11,243
$50,000 to $99,999	19,457	21,043	8.2%	1,586
$100,000 to $149,999	3,547	11,034	211.1%	7,487
$150,000 to $199,999	1,222	4,915	302.2%	3,693
$200,000 to $299,999	709	3,024	326.5%	2,315
$300,000 or more	277	1839	563.9%	1,562
Median (dollars)	$53,600	$87,500	63.2%	$33,900

Source: U.S. Census, 2000

Table 6.7: Mortgage Status, 1999, indicates that the number of Washington County residents with a mortgage is four percent less than the state average while it is reflective of most of the study area. Once again, Butler County is the exception, rating higher than the state by almost four percent and having the highest median mortgage of the study area.

Table 6.7: Mortgage Status, 1999	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
% With a mortgage	62.2	60.9	48.7	56.8	66.1	49.3	51.3	50.6	51.7	***56.3***	57
Median (dollars)	$1,010	$971	$729	$898	$1,025	$704	$713	$785	$762	***$890***	$899
% Not mortgaged	37.8	39.1	51.3	43.2	33.9	50.7	48.7	49.4	48.3	***43.7***	43

Source: U.S. Census, 2000

While a community may assume that its residents are economically stable and that there are no housing issues because they report low vacancy rates, and average rents, this is not really an accurate indicator of the affordability of a community. According to the Office of Housing and Urban Development (HUD), a person is *cost burdened* if the total monthly costs to reside in a household are greater than a percentage of the household's total income. A household is considered *cost burdened* if the percentage of total household cost is thirty percent *(30%)* of the

total household income. A household is considered *severely cost burdened* that percentage is thirty-five percent *(35%)* or greater.

The US Census Bureau (2000) defines monthly owner/renter costs as "selected monthly owner costs are the sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgage, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood insurance on the property; utilities (electricity, gas, and water and sewer); and fuels (oil, coal, kerosene, wood, etc.). It also includes, where appropriate, the monthly condominium fees or mobile home costs (installment loan payments, personal property taxes, site rent, registration fees, and license fees). Selected monthly owner costs were tabulated separately for all owner-occupied units, specified owner-occupied units, and owner-occupied mobile homes and, usually, are shown separately for units 'with a mortgage 'and for units 'not mortgaged.'

Washington County homeowners rank well in terms of cost-burden as indicated in Table 6.8: Selected monthly owner costs as a percentage of household income. As shown, the percent of persons in the 30-34-percentile category is lower than the state and most of the study area. For the category of severely cost-burdened, Washington County fares even better with the lowest percent of homeowners in this category of the study area.

Table 6.8: Selected monthly owner costs as a percentage of household income, 1999	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
Less than 15 %	37.8	38.5	43.9	38.9	38.6	47.3	46.7	45.8	43.8	***45.1***	42.2
15 to 19 %	17.6	18.1	17.2	18.6	18.4	15.5	16.7	15.8	16.8	***16.9***	17.6
20 to 24 %	13.8	13.3	12.5	13.6	14.7	10.5	10.9	12.3	12.3	***12.7***	12.3
25 to 29 %	9.1	9	6.9	8.8	8.6	7	7	7	8.2	***7.7***	8.2
30 to 34 %	5.7	5.3	4.9	4.8	5.6	4.2	4.5	4.7	5.6	***4.6***	5.1
35 % or more	15.1	15	13.3	14.4	13.3	14.4	13.1	13.7	12.5	***12.5***	13.9
Not computed	0.8	0.9	1.2	0.8	0.7	1	1.1	0.8	0.9	***0.5***	0.7

Source: U.S. Census, 2000

A comparison over a ten-year period is provided in Table 6.9: Gross Mortgage and Housing Costs 1989-1999. The comparison shows that the county may fare well when compared to other areas, but that the number of homeowners who are considered cost-burdened or severely cost-burdened has increased over this ten-year period. Should this trend increase, the county could experience an unstable housing market and a rising incidence of home loss. Table 6.9 also reveals that the total number of mortgages has increased between 1989-1999 by 7,770 (36.3%).

The US Census Bureau (2000) defines gross rent as "the contract rent plus the estimated average monthly cost of utilities (electricity, gas, water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else). Gross rent is intended to eliminate differentials that result from varying practices with respect to the inclusion of utilities and fuels as part of the rental payment. The estimated costs of utilities and fuels are reported on an annual basis but are converted to monthly figures for the tabulations. Renter units occupied without payment of cash rent are shown separately as ''No cash rent ''in the tabulations."

Table 6.9: Washington County gross mortgage and housing costs, 1989-1999	1989	1999	% Change	Total # Change
Total # Mortgaged	21,399	29,169	36.3%	7,770
Less than 20 % of total housing costs	14,297	32,068	124.3%	17,771
20 to 24 % of total housing costs	2,572	6,559	155.0%	3,987
25 to 29 % of total housing costs	1,587	4,002	152.2%	2,415
30 to 34 % of total housing costs	888	2,396	169.8%	1,508
35 % or more of total housing costs	2,425	6,477	167.1%	4,052
Not computed	127	272	114.2%	145

Source: U.S. Census, 1999 & 2000

Housing information data also provides an understanding of the affordability and availability of rental units. Rental units are extremely important housing options for residents. Renting is an important component as this housing element often is less expensive in terms of monthly costs and maintenance. Rental units are often a preferred mode of housing for persons who do not want the responsibility of caring for property or who may be transient in nature. Table 6.10 Gross Rent, 1999, displays the gross monthly rent for the study area. Washington County has a median monthly rate that falls below the state and is comparable to the study area.

Table 6.10: Gross Rent, 1999	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
Specified renter-occupied units	1,348,824	176,537	6,274	17,979	14,181	15,798	3,663	9,214	8,240	***18,076***	32,413
Median (dollars)	$531	$516	$395	$438	$487	$367	$367	$426	$424	***$423***	$432

Source: U.S. Census, 2000

The level of cost burden for renters in Washington County indicates affordable rental units may be difficult to find. As shown in Table 6.11: Gross rent as a percentage of household income, the rate of persons who are within the 30-34 percent of gross rent as compared to total housing income is at 7.4 percent, which is higher than the state and more than many of the study communities. The rate of persons in the severely cost-burdened falls below the state average, but remains high at 26 percent.

Table 6.11: Gross rent as a percentage of household income, 1999	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
Less than 15 %	19.2	19.3	23.2	25.1	21.4	19.7	19.9	16.9	17.2	**19.8**	22.7
15 to 19 %	14.4	14.1	11.3	13.6	13.6	11.2	11.4	10.6	11.9	**12.7**	14.2
20 to 24 %	12.3	12.1	12.8	11.1	11.9	11.5	12.7	8.5	10	**11.8**	11.4
25 to 29 %	10.4	10.8	9.5	9.7	8.8	8.2	8	8.7	10.9	**10.3**	10.4
30 to 34 %	6.9	6.9	6.9	8	6.2	5.4	7.2	6.7	7.9	**7.4**	6.4
35 % or more	28.6	29.9	24	24	28.7	28.6	25.3	35.4	28.8	**26**	24.5
Not computed	8.2	6.9	12.3	8.5	9.5	15.4	15.4	13.1	13.3	**12**	10.4

Source: U.S. Census, 2000

The rate at which rental housing has changed for Washington County between 1989 and 1999 is shown in Table 6.12: Gross rents and housing costs. The total number of renter occupied units has decreased by 317 units (1.7%). As well, the total number of persons who are considered severely cost-burdened has fallen by 1,141 (19.5%), which bodes well for the economic stability of Washington County.

Table 6.12: Washington County gross rent and housing costs, 1989-1999	*1989*	*1999*	% Change	Total # Change
Specified renter-occupied housing units	18,393	18,076	-1.7%	-317
Less than 20 percent	5,452	5875	7.8%	423
20 to 24 percent	2,072	2,126	2.6%	54
25 to 29 percent	1,881	1,865	-0.9%	-16
30 to 34 percent	1,332	1,343	0.8%	11
35 percent or more	5,847	4,706	-19.5%	-1,141
Not computed	1,809	2,161	19.5%	352
Median (dollars)	$320	$423	32.2%	$103

Source: U.S. Census, 1990 & 2000

Dwelling unit tenure is a useful variable to describe the housing character of a community as the ownership of a home can lend to improved property maintenance. However, communities must also have rental units for persons who require dwelling units that are smaller or which require less maintenance. Table 6.13 displays the percent of housing units that are owner occupied and renter occupied. Washington County has one of the lowest renter-to-owner occupancy rates of the study area while Allegheny has one of the highest.

Table 6.13: Housing Tenure, 1999	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
Owner-occupied housing units	71.3	67.0	77.3	74.9	77.9	73.2	74.1	71.7	77.3	**77.1**	78.0
Renter-occupied housing units	28.7	33.0	22.7	25.1	22.1	26.8	25.9	28.3	22.7	**22.9**	22.0

Source: U.S. Census, 2000

The housing market in Washington County has changed in relation to an increase in total housing units and the occupancy of those units. The housing market in Washington County has increased by 3,154 units (3.7%) despite a decrease of 1,686 persons (-0.8%). This change is reflected in the number of owner occupied units, which has increased by 3,193 units (5.4%) while the number of rental units has declined by 596 units (-3.1%). The addition of owner occupied housing units bodes well for local municipal revenues, however the increase of housing units compared with the actual loss of population indicates that additional land is being

consumed for new housing development which can result in vacant structures in established neighborhoods.

Table 6.14: Washington County housing units, occupancy, & tenure, 1989-1999	*1990*	*2000*	% Change	Total # Change
Total population	204,584	202,897	-0.8%	-1,687
Total housing units	84,113	87,267	3.7%	3,154
Occupied housing units	78,533	81,130	3.3%	2,597
Owner occupied	59,368	62,561	5.4%	3,193
Renter occupied	19,165	18,569	-3.1%	-596

Source: U.S. Census, 1990 & 2000

Table 6.15 reveals the age of homeowners in the study area. Washington County has its single largest homeowner category in the 45-54 year age bracket, with those persons 35-44 years of age ranking just behind with 21 percent and 20 percent respectively. Typically, these two segments of the population desire the element of stability that homeownership provides as they either have families and/or are firmly entrenched in careers. Washington County should be aware that it has a higher level of elderly homeowners than many other communities in the SPC region.

Table 6.15: Age of householder, 2000	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
	%	%	%	%	%	%	%	%	%	**%**	%
15 to 24 years	4.1	4.5	2.7	2.8	3.7	3.4	3.7	9.1	3	***3***	2.4
25 to 34 years	15	15	12.8	12	14.9	13	14.4	13	12.2	***13***	12.3
35 to 44 years	21.5	20	20.8	21	23.7	19	19.4	19	19.5	***20***	20.5
45 to 54 years	20.1	20	19.9	20	21.2	20	21.4	20	19.7	***21***	20.6
55 to 64 years	13.9	13	14.3	14	13.7	15	14.3	14	14.3	***15***	14.9
65 to 74 years	12.8	14	14.3	15	11.2	15	12.7	12	14.8	***14***	14.6
75 to 84 years	9.9	11	11.9	12	8.9	12	10.8	10	13.1	***12***	11.7
85 years and over	2.7	3	3.3	2.8	2.6	3.3	3.4	2.8	3.5	***3***	2.9

Source: U.S. Census, 2000

Understanding the demographic composition of persons who are renting or who own their home is important in order to predict future housing needs. Table 6.16 indicates that a family household is more likely to own their home, especially persons under the age of 65. This number increases significantly for married couples. As noted, single head of households typically choose to rent rather than own. This tendency increases for a female who is the head of a household versus a male.

Table 6.16: Washington County household composition, 1999	% Owner-occupied	% Renter-occupied
Family households	76	47.3
Householder 15 to 64 years	57.5	41.3
Householder 65 years and over	18.6	6
Married-couple family	65.4	25.4
Male householder, no wife present	2.9	4.6
Female householder, no husband present	7.8	17.2

Source: U.S. Census, 2000

Table 6.17: Source of heat, indicates that the predominant heating method for the study area is natural (utility) gas. Washington County has a very small percent of housing units that rely on bottled gas, coal, wood, or solar energy. A fairly significant portion of county houses rely on electricity (15.2%) or fuel oil or kerosene (13.4%). Fuel oil is a common source of heating in rural areas.

Table 6.17: Source of Heat	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
	%	%	%	%	%	%	%	%	%	**%**	%
Utility gas	51.3	88.3	76.1	72	66.4	44.5	57.8	51.7	62.4	**67.7**	65.4
Bottled, tank, or LP gas	3	0.8	3.3	2.9	4.3	3.8	5.1	4.7	2.5	**1.6**	2
Electricity	16.5	8.5	6.1	8.4	12.4	12.5	13.9	12.4	11.5	**15.2**	11.1
Fuel oil, kerosene, etc.	25.5	1.5	11.4	15.1	14.6	35.1	18.6	25.8	21.3	**13.4**	19.6
Coal or coke	1.4	0	0.8	0.1	0.2	2.1	0.8	1.9	0.4	**0.2**	0.4
Wood	1.6	0.1	1.5	0.9	1.6	1.6	3.3	2.6	1.5	**1.4**	1
Solar energy	0	0	0	0	0	0	0	0	0	**0**	0
Other fuel	0.4	0.5	0.5	0.5	0.4	0.3	0.4	0.8	0.4	**0.4**	0.4
No fuel used	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	**0.1**	0.1

Source: U.S. Census, 2000

Table 6.18 provides information related to specific housing characteristics. Items such as plumbing availability, the presence of kitchen facilities, and telephone service all contribute to the desirability of housing units as well as the overall quality of life within a community. Washington County ranks well in terms of housing that lacks these important amenities.

Table 6.18: Selected Characteristics, 2000	Pennsylvania	Allegheny	Armstrong	Beaver	Butler	Fayette	Greene	Indiana	Lawrence	***Washington***	Westmoreland
	%	%	%	%	%	%	%	%	%	**%**	%
Lacking complete plumbing facilities	0.5	0.4	0.7	0.4	0.3	0.6	1.2	1.2	1	***0.5***	0.3
Lacking complete kitchen facilities	0.5	0.4	0.5	0.3	0.5	0.4	0.5	1.1	0.8	***0.5***	0.4
No telephone service	1.4	0.9	1.1	1.2	1	1.7	2.4	2.3	1.7	***0.9***	0.8

Source: U.S. Census, 2000

C. Existing Conditions

Housing issues are indicators of an area's quality of life and, while not all housing issues are an indicator of poor quality of life, they certainly influence the desirability of a community in the future. The following are housing goals as voiced by the community during the public participation process, housing providers, developers, and program administrators.

Overall Goals:

- Improve school district quality and overall student performance to increase desirability of communities as a place to raise families.
- Revitalize existing neighborhoods by demolishing and rehabilitating blighted housing.
- Provide rural landowners options to avoid selling to developers.
- Require green or open space as part of new subdivision and development plans.
- Limit the number of houses per acre in rural areas identified as 'non-growth areas'.
- Address the impacts of market forces, infrastructure needs, and existing housing stock when performing long-range planning efforts.
- Identify specific housing needs for all income levels, family sizes, and age groups.
- Provide affordable housing for young people and young families.
- Address the impacts associated with the uniform construction code.
- Enhance the county's role with municipalities by providing technical assistance and communication.
- Encourage higher-density housing where appropriate while addressing any negative effects on the community.
- Investigate the effects of managing development through impact fees.

Quantitative data reveals that Washington County has a high rate of single-family detached structures. This style of housing lends itself well to stable neighborhoods and high rates of owner occupancy. In comparison to the region, the county has a high rate of one-unit attached dwellings and is comparable to other counties in terms of multi-family dwelling units. The median age of residential structures, show that the county is comparable to the region. With its median age of housing units, the county's dwelling structures reflect an older style of housing that is indicative of a community that experienced an earlier settlement period. However, Washington County has had one of the higher rates of new residential construction since 1990 in the region.

Washington County homes typically contain six rooms per dwelling unit. This relates to larger homes and, generally, higher median values. Washington County does have one of the higher median housing values ($87,500) within the SPC region, although it trails behind Westmoreland County by $3,100 and is $26,600 less than Butler County. However, the level of affordability is determined to be better in Washington County than Butler County. This assessment can be made by rate of the county's population who has housing costs of less than 30 percent.

Making the argument that Washington County has become an extremely desirable place to live can be supported by the rise in owner-occupied dwelling units and mortgage rates since 1990. Since 1990, Washington County has had an increase of 5,400 owner-occupied housing units. The majority of these dwelling units were in the $100,000 to $149,000 range, providing a level of affordable housing well within what can be considered desirable and quality homes.

Owner-occupants in Washington County are more likely to live within their means as reflected by the percent of persons who are identified as cost-burdened. Washington County has one of the lowest rates of owner costs as a percentage of household income within the SPC region. This statistic indicates that housing in the county is indeed an affordable place to live. Unfortunately, these numbers of affordability have decreased since 1990 with an increase in the rate of persons who spend over 30 percent of their income on housing costs.

There is some concern as to the affordability of the rental housing market in Washington County. For renters, the data indicates that more persons spend 30 percent or more of their monthly income in housing costs than other counties in the SPC region. As discussed within the demographics section of this plan, Washington County has 10.3 percent of female householders with children. As single-women with children are most likely to rent a home as compared to their married counterparts, the rental market will need to remain strong if this population sector is going to be able to find appropriate housing. In addition, the number of householders who are over 65 and living alone is high for Washington County and it is this population segment that is also very likely to prefer renting over owning a home.

Public Housing

Washington County Housing Authority's Public Housing Program exists in nine of Washington County's largest municipal areas. Multifamily Housing Sites are in Washington, Canonsburg, Donora, Fredericktown, California, and Monongahela. Senior Citizen Housing is located in Washington, California, North Charleroi, and Bentleyville. The Housing Authority has additional Senior Citizen Housing not designated as Public Housing, but affordable to all Senior Citizens in Monongahela and New Eagle. The total housing inventory managed by the Authority in 2005 is 1,057, but is expected to change over time to address Program goals. Housing under the Public Housing Program is affordable to very low income families who are charged 30 percent of the household's income for rent, as well as lower income working families who may pay a flat rent, which remains the same regardless of income.

One of the criteria for developing Public Housing is to locate where Community Services are either within walking distance, or where Public Transportation is available. An effort to integrate Public Housing with the larger Community is underway whereby Community Organizations such as Head Start are provided a building location to operate within the Public Housing Site. For security of its Residents the Authority has partnered with law enforcement through special funding to provide more of a presence than is available in other parts of a municipality.

As set forth in a Section 504 Plan to accommodate people with disabilities, the Housing Authority will provide accessible housing for people with special needs, including people in wheelchairs. To this end, the Authority has 53 Wheelchair Accessible Apartments, and will spend an estimated $1.3 million by 2010 upgrading existing Apartments and Community Facilities, as well as adding new Wheelchair Accessible Apartments to its inventory. Housing for families with special needs for accessibility does not appear to be readily available in the private sector. Funding for these activities comes from the Authority's Capital Fund, which is provided by HUD to Housing Authorities for the purpose of renovating Public Housing to address large-scale improvements.

D. Analysis & Recommendations:

The analysis of housing trends and projected changes in population characteristics coupled with public input provides the basis for identifying and assessing housing issues, housing needs and housing capacity. The results of this analysis lends to specific implementation strategies involving various housing partners to address current and future housing needs. The housing recommendations are made based on observations of existing data, trends, and projected conditions. Included in this section is a discussion of rehabilitation tools and techniques, new construction strategies, historic preservation opportunities, and development strategies for consideration.

County Development Objectives

- Provide housing options to meet the present and future needs of residents of all ages and income levels
- Encourage and promote coordination between county and municipal housing strategies
- Ensure that future planning activities address demographic factors, market forces, infrastructure needs, and existing housing conditions

The Pennsylvania Municipalities Planning Code (MPC) specifies requirements for municipalities to follow when enacting new planning and land use regulations to guide development. While these regulations and requirements will be discussed under the Land Use section of this plan, it is strongly recommended that the county remain proactive in reviewing subdivision plans and zoning regulations to ensure the consistency of local regulations to the goals contained within the county comprehensive plan. By employing a cooperative approach to educate local governing bodies and developers, the county will actualize the goal to retain the rural character of the county while promoting economic revitalization and sustainability.

During the public participation process, the desire to retain the rural character of the county became a high priority goal. While the county has little authority over housing regulations, a policy guide should be established for municipalities to follow to achieve countywide development objectives. Traditional land use regulations will do little to achieve the goals identified during the public participation process. Instead, the application of zoning and subdivision ordinances that preserve natural resources while protecting individual property rights should be promoted to borough councils and township boards of supervisors.

Generally, rural preservation should be a priority for the western and southwestern section of the county. These locations have minimal public water and sewerage infrastructure to support large-scale development. Additionally, most of this area is removed from transportation networks that would support efficient access to commercial and employment centers. However, some aspect of rural preservation can be readily applied to many developing areas of the county. For instance, those townships and larger boroughs that are facing development pressures should understand how traditional residential sub-divisions could encourage sprawl and overtax municipal resources and infrastructure.

Conventional subdivision ordinances support the development of site designs that consume every parcel of land. Correcting the inherent weaknesses in these subdivision designs was the goal of planned residential developments (PRD). PRD's allow a more significant degree of flexibility through lenient requirements for lot sizes with the provision of open space or conservation elements. Unfortunately, standards to define open or shared space or conservation were never developed and the result became the same cookie cutter approach to subdivisions with stormwater basins sufficing for wetlands and steep slopes for open space.

Concepts put forth by Randall Arendt support a conservation design approach. His concept of Conservation Subdivision Design can be readily applied to achieve many of the goals specified for the Washington County Comprehensive Plan. The following concepts apply under this theory:

- Half or more of the buildable land area is designated as an undivided, permanent open space, which results in smaller lot, village style residential neighborhoods.
- Identify the land that is to be preserved before the site design stage.
- Reduce infrastructure and maintenance costs by reducing street surfaces and utility lines.

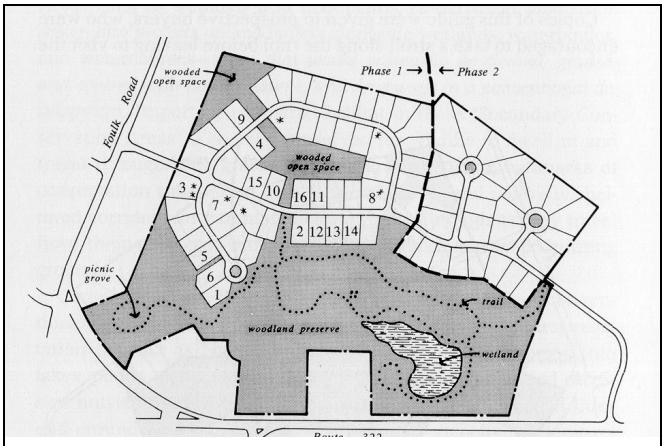


Figure 6.1: Conservation Subdivision Design (Arendt, 1996)

The cost of conservation development has been used as an excuse to avoid such practices. However, designs following the conservation methodology provide many social and environmental benefits. Conservation design practices reduce the demand for publicly provided open spaces such as recreation areas thereby reducing the demands for publicly funded play lots and passive recreation areas. In addition, conservation subdivisions provide protection for fragile natural areas and reduce storm water damage typical in many traditional housing subdivisions. Perhaps the most effective argument to promote this design philosophy is the cost savings realized by the developer. The conservation design approach reduces that length of roadways and utility infrastructure lines, thus realizing significant cost savings.

Figure 6.2: Site Plan Comparison (Arendt, 1996)

Figure 6.2 shows a comparison between a traditional subdivision design to a conservation subdivision design. The example shows how the conservation design has a more dense style of development resulting in shorter utility runs and large areas of open space. The design depicted in Figure 6.2 includes a mix of housing options including single-family detached units, single-family attached, as well as apartment dwellings above commercial establishments. This style of mixed-use development is consistent with the Traditional Neighborhood Concept (TND).

Allowing for a denser style of development and still appealing to a developer's goal to maximize the financial return on the land requires flexibility and imagination, especially as the individual dwelling site locations are determined. Many larger lot traditional subdivisions are designed in order to allow for a more expensive lot with views of open space. However, by incorporating creative housing and lot design, a municipality can preserve a more natural or rural atmosphere while still allowing profitable development. One such lot design that is suggested by Arendt (1996) is the flag lot. These irregular shaped lots have minimal street frontage and should be limited to 15 to 20 percent of the total number of lots, but are useful in low-density subdivisions where cul-de-sacs are present.

Figure 6.3 provides an example of creative street design and the use of flag lots in a conservation subdivision. As noted in the graphic on the right, all four lots on the far right of the subdivision have views of the meadow and wooded areas. The street design on the right, with its curved design, provides a level of speed control desired in family-style developments while allowing the same lot size as the design on the left.

Proper street design is essential to safe and attractive housing developments. In neighborhood areas where lower traffic speeds are desired, the use of curved road segments or straight roadways with 90-degree and 135-degree bends can achieve both aesthetic and traffic control goals (Arendt, 1996). Additionally, designing housing developments with houses located only on one side provides scenic vistas and areas for conservation purposes. By using smaller lot

sizes and creative lot design, single-loaded streets give homebuyers lots with scenic views and improved quality of life.

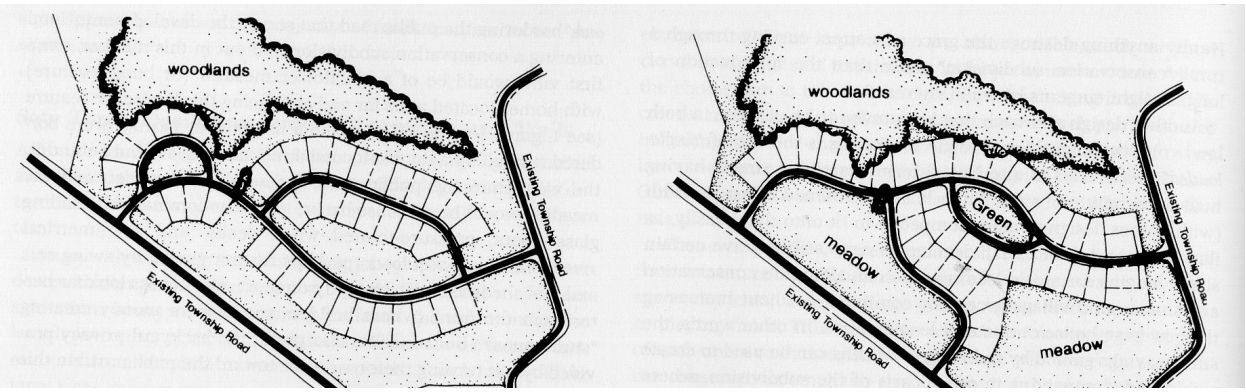
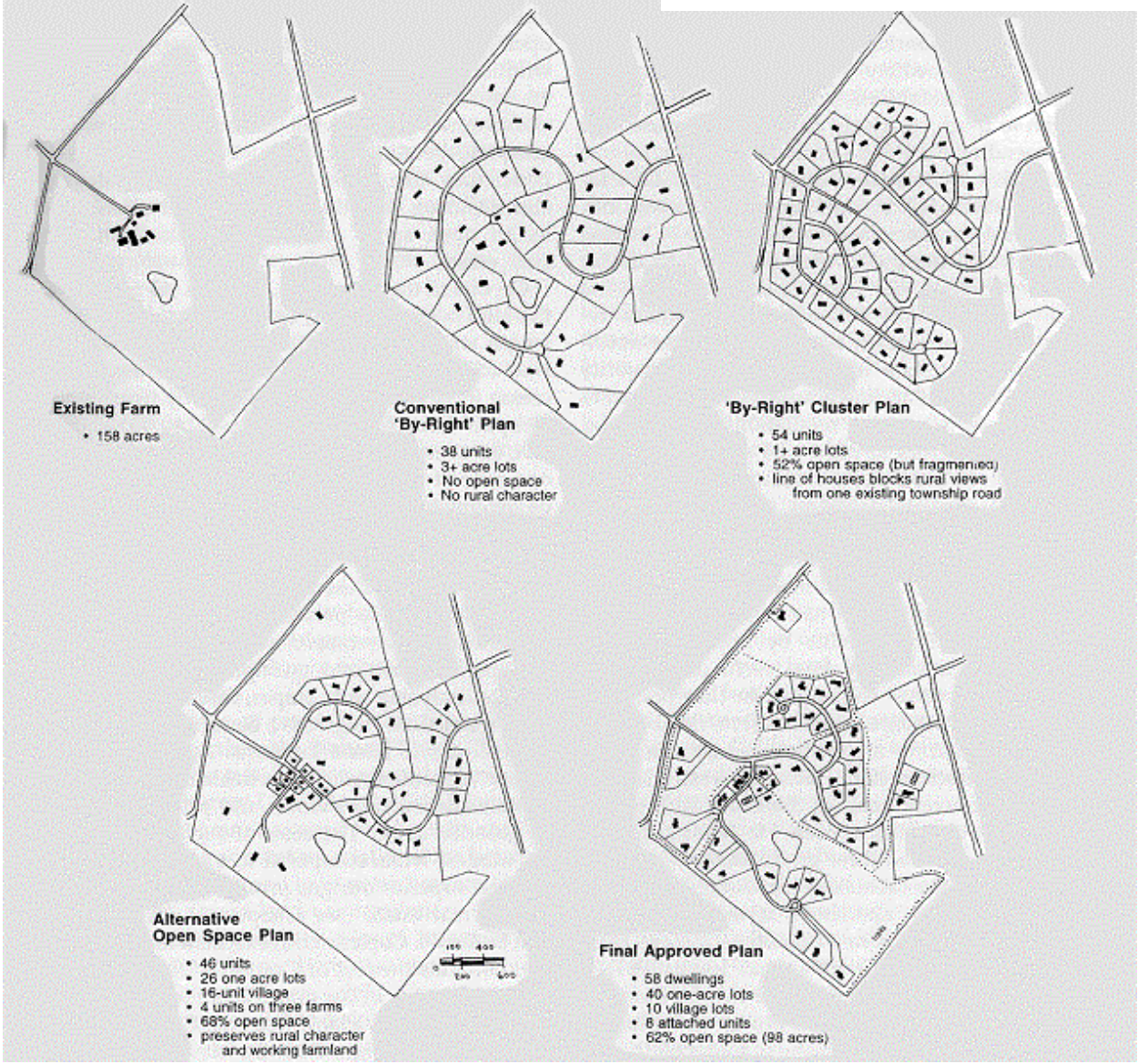


Figure 6.3: Street design and example of flag lots in conservation design (Arendt, 1996)

Figures 6.4 and 6.5 display potential development scenarios through the use of conservation design versus traditional design. As is shown, the conventional lot designs shows a 100 percent build out scenario while the conservation designs preserve natural features through the use of cluster design. This development scenario occurs in a rural location where large parcels of agricultural uses connect with existing housing development. Existing conditions shown in both Figure 6.4 and 6.5 are typical of current land uses within much of Washington County, but unfortunately so is the traditional subdivision design or cookie cutter approach where massive areas are developed leaving little to no natural areas.

Figure 6.4: Potential development scenarios (Arendt, 1994)

Figure 6.5: Development scenarios for agriculture areas (Arendt, 1994)



Although Washington County cannot mandate the following recommendations, they can offer guidance and technical assistance to local officials. It is essential that the county assume a leadership role in this effort. New developments are increasing residential capacities in locations with insufficient utility and transportation infrastructure. Overtaxing the road network will lead to increased congestion and a higher likelihood of vehicular conflicts.

The Washington County Planning Commission should assist borough councils and township board of supervisors to enact zoning and subdivision and land development ordinances that encourage developers to follow conservation design standards. Where the preservation of open space or natural areas are desired, conservation developments should be permitted while traditional subdivision and housing densities are allowed by special exception. For instance, local municipalities can require developers to choose from a conservation design which allows a full-density (50 –75 percent of the land is undeveloped and undivided) or designing a conventional subdivision with reduced housing density.

Housing revitalization and increasing the affordability of housing should be a priority for county officials. As shown in the housing data, residential costs have increased since 1990 and rental costs are much higher than owner-occupied housing. The following housing programs are available to support revitalization efforts and increase affordable housing options. While the county itself cannot apply for these programs, they can serve as a partner to local communities.

Housing and Urban Development Section 8 New Construction
This program insures loans for multifamily housing projects in urban renewal areas, code enforcement areas, and other areas where local governments have undertaken designated revitalization activities. Loan rates are typically very low since they insure lenders against mortgage defaults.

Housing and Urban Development Section 8 Housing Choice Vouchers
This housing program assists very low-income families, the elderly, and the disabled to afford decent, safe, and sanitary housing in the private market. Since housing assistance is provided on behalf of the family or individual, participants are able to find their own housing, including single-family homes, townhouses and apartments. The participant is free to choose any housing that meets the requirements of the program and is not limited to units located in subsidized housing projects. A family that is issued a housing voucher is responsible for finding a suitable housing unit of the family's choice where the owner agrees to rent under the program.

Pennsylvania Housing Finance Agency
Pennsylvania Housing Finance Agency provides capital for decent, safe, and affordable homes and apartments for older adults, persons of modest means, and those persons with special housing needs. The following, derived from the PHFA webpage (www.phfa.org) describes several programs available in Washington county.

Homeowner's Emergency Mortgage Assistance *(Foreclosure Abatement)* HEMAP
HEMAP provides short-term, temporary funding to cure loan delinquencies, by providing mortgage payments to lenders on behalf of qualifying homeowners for up to 24 months. Recipients must meet eligibility guidelines defined in state law *(35 P.S. Section 1680.401 et seq, as amended)*. Repayment of assistance is required.

Multifamily Rental Housing Development
Programs to finance affordable rental housing offer project sponsors financing from a wide variety of sources: PHFA general fund set-asides and; the sale of Agency-issued securities; federal HOME dollars; the allocation of housing tax credits and allocation of private activity bond cap for qualified residential rental facilities. Restrictions and application deadlines vary among programs.

PENNVEST - Individual On-Lot Sewage System Loans
This program provides up to $25,000 for 20 years, very low interest rate loans to homeowners for the repair or upgrade of malfunctioning on-lot sewage systems. These loans are insured under the FHA Title I Home Improvement Loan Program.

Single Family Homeownership
PHFA offers a number of opportunities for Pennsylvania families to buy homes of their own. Qualification factors vary among programs and, in some cases, from county to county. All PHFA homeownership programs are available to persons with disabilities.

Mixed Use Facility Financing Initiative
PHFA's new initiative designed to encourage the revitalization of commercial corridors. PHFA recognizes through this initiative that stimulating the distribution of investment capital for community and neighborhood revitalization projects can serve to increase a geographic area's economic diversity and marketability, build optimism and hope in a community, and signal that urban neighborhoods hold promise for becoming healthier, more attractive places in which to live, shop and work. On April 8, 2004, the PHFA approved the preliminary reservation of funding for the financing of eight development proposals under this initiative.

CDBG/HOME Program
This federal program provides money for housing that ia allocated and distributed to communities through the United States Office of Housing and Urban Development (HUD). Eligible communities can receive funding through an entitlement process or a direct allocation is made to state agencies; whereby the state agencies determine eligibility and accept applications from communities and distribute monies to them. In Pennsylvania, the state agency that directs and allocates monies to state entitlement communities is the Department of Community and Economic Development (DCED). In addition, a community can apply for funding including entitlement communities if the additional funding is to enhance or supplement existing programs.

Revitalization of older communities that have a defined commercial presence can be supported through the application of the Elm Street Program (Act 7 of 2004), This program, administered by the Department of Community and Economic Development, provides funding for preparing a plan to develop and revitalize established residential neighborhoods, improve infrastructure, and market urban residential living. Act 7 defines established residential living as an area of land that has historically been used for residential living since 1961. Grant funds from the Department of Community and Economic Development (DCED), in amounts up to $250,000, are available for planning, technical assistance, and physical improvements to residential and mixed-use areas in proximity to central business districts.

Washington County should encourage the application of Elm Street funding assistance in such locations that are currently addressing commercial revitalization. The Elm Street program is designed to provide assistance and resources to those mixed use and residential areas in proximity to central business districts to further enhance the downtown area and to improve the viability of older neighborhoods. The goals of the program are to:

- Revitalize neighborhoods in proximity to the existing downtown by improving the exterior appearance of the buildings and streetscapes.
- Formalize a connection between established residential neighborhood areas with downtown revitalization activities.
- Prevent neighborhood decline by developing a plan that includes the establishment of a sustainable community organization that will implement a five-year strategy.
- Assist the municipality in preparing and implementing a revitalization strategy for established residential neighborhoods either in the vicinity of a Main Street Program project or in proximity to an existing commercial district.

An effective housing option that also serves to support commercial areas is the utilization of commercial structures as residential dwellings. It should be noted that the conversion of commercial spaces should support first floor commercial occupants, not displace them. By directing residential units to areas above the street level, the existing commercial area receives a ready population to patron downtown establishments. Rehabilitation of second floor space for residential apartments or condominiums can require improvements to comply with codes *(including ADA compliance)* as well as appeal to middle to upper income households. The Washington County Housing Authority may be a partner for implementation of this strategy.

It should be noted that the county will have to adhere to two basic understandings for a successful market-rate “for sale” and rental residential housing in the downtown. First, the physical environment of the commercial area must be of a character and quality that people will want to live there. Second, downtown residences must offer prospective purchasers an investment motive for home or mixed-use ownership. This strategy should be promoted in established boroughs and villages that have a defined commercial area. The conversion of commercial buildings to a mixed-use orientation, offers a key means of stabilizing and revitalizing downtowns. This residential strategy will attract and retain businesses by providing

a constant population base that will access services and purchase goods within that commercial area. With the increased housing opportunities for local residents, the community will realize a better income mix and improved access to goods and services. Ultimately, this approach will encourage commercial anchors in visible corridors that stimulate additional investment.

As many communities in Washington County have significant historic character that often relates back to the early settlement of the region, it would serve elected officials to encourage the preservation of these resources. Such an effort makes good economic sense as historic structure rehabilitation restores valuable resources to productive use. Although design guidelines and code requirements often increase costs, historic building codes should be flexible and historic tax credits may improve financing prospects. This strategy is applicable to both residential and mixed uses *(commercial with residential)* within the county as well as within the target areas of Washington City, Burgettstown, Canonsburg, and the Mon Valley river communities.

Older communities may desire to encourage new construction but wish to retain their historic charm. Design standards that encourage the application of historic architectural characteristics can significantly affect design and construction costs because of the design guidelines. However, compatibility with surrounding buildings may increase public acceptance and enhance the value of any established Historic District. This new construction could be in the form of mixed-use development including retail, commercial, residential and/or street level community spaces.

New housing strategies in older communities will need to encourage the development of infill housing. This housing concept targets vacant lots and abandoned structures for new construction opportunities. An important benefit of this concept can be the promotion of more affordable housing in previously undesirable locations. Often times county agencies can promote a sound mixed-income housing approach that can be an effective economic development tool as well. Public Housing Authorities *(i.e. Washington County Housing Authority)* play a key role in developing well-designed affordable housing when local non-profits lack capacity and when the public housing authority has a positive relationship with the community.

The county should encourage redevelopment efforts that are consistent with the aesthetics of the surrounding neighborhood. The following review tools should be incorporated into the county's site selection and design criteria for redevelopment/infill development.

- Secure land of more versatile shape or size by acquiring more than one lot or lands from adjacent lots or select larger corner sites.
- Garages and parking areas should be sited so that they do not dominate the view from the street or other public spaces.
- Do not design blank end walls, design buildings that address the street(s).
- Situate the building consistent with the layout pattern of the area.
- Buildings and spaces should relate to neighboring properties. As a general rule, fronts should face fronts of properties and backs should face backs.

- Buildings should be placed so that they receive sun but do not cast undue shadows on neighboring properties.
- The design should maintain the open, green view along the street and maximize opportunities for on-site plantings.
- The scales of the building should respect the scale of surrounding developments.
- Structures should be placed and designed to provide safety and security to the neighborhood. For example, windows should overlook the street and open spaces, access and parking areas should be visible to residents from their homes and clear lines of sight and well lit direct routes.
- High fences and walls should be avoided at all costs. Low front walls and living fences *(hedges, shrubs and plantings)* should be used to define boundaries.
- Parking areas should be screened with plantings.

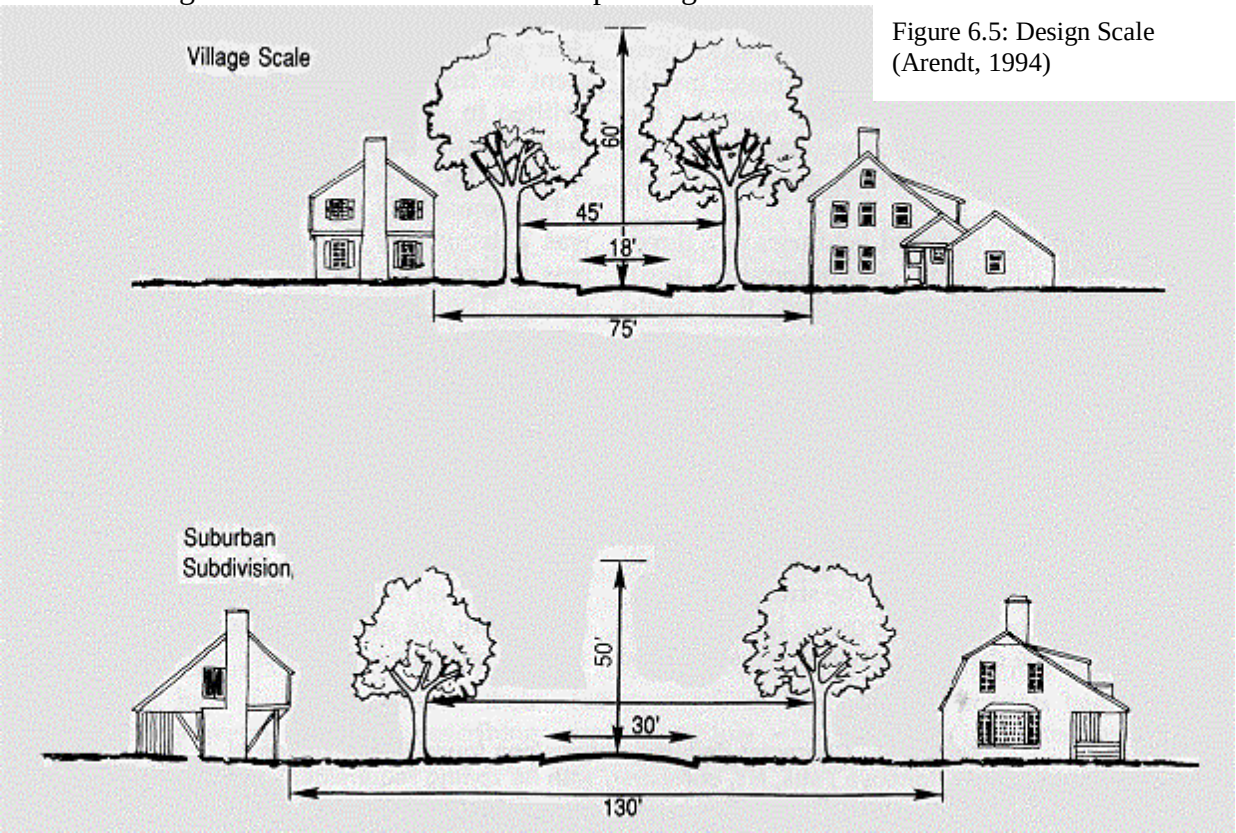
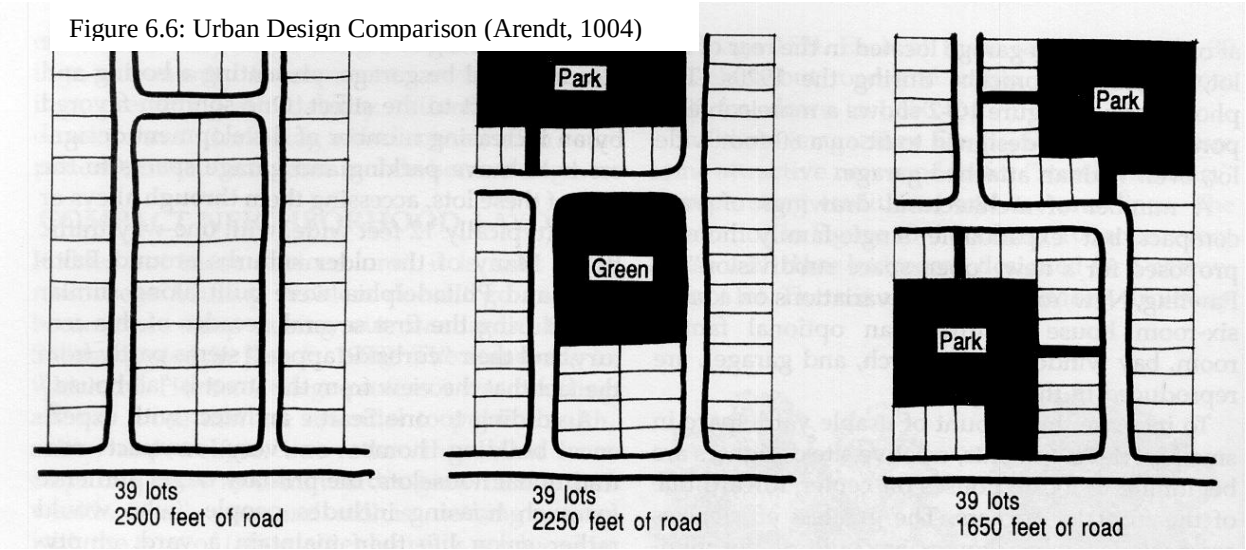


Figure 6.5: Design Scale (Arendt, 1994)

- Lots of similar size and shape make up a residential neighborhood. Lot sizes may be small, medium, or irregular shape and size.
- The position of buildings in the neighborhood is consistent with houses typically centrally located between side boundaries, setbacks are of a similar distance from the road, buildings are usually square with the street and buildings tend to occupy a standard proportion of their site generally between 20% and 35%.

- Larger homes and buildings can be successfully integrated into residential areas provided the size and scale of the building is appropriate for the lot size, the larger building be designed so that it appears to be a group of smaller buildings *(maintain domestic scale)* and the building setback be the same or similar to the existing buildings with similar orientation to the street.
- Attention should be paid to the amount of planting and vegetation within both private and public spaces. The goal is to have greenery more predominant than buildings. Developers should strive to retain existing vegetation, while providing design of new plantings.
- Preserve natural features and maintain open space by utilizing cluster development or conservation by design techniques instead of conventional development design standards.

Figure 6.6: Urban Design Comparison (Arendt, 1004)



E. Implementation Strategies

To fulfill the County Development Objectives, the county planning commission should work with appropriate agencies to meet the following goals. For each goal statement, one or more action steps are provided.

Preserve the county's rural landscape in developing areas

Action: Support the enactment of ordinances for municipalities to encourage open space preservation and conservation design

Action: The County will support efforts to educate each municipality on how these ordinances may be enacted and the benefits they provide

Encourage the use of conservation residential subdivisions

Action: The County will support education efforts for municipalities about the benefits of conservation design that will include:

1. Existing Features and Site Analysis Map
2. Yield Plan to show proposed housing density
3. Conceptual Sketch Plan that show all conservation/preservation areas
4. Comparison of traditional subdivision plan and a PRD sketch plan with cost analysis

Increase the availability of dwelling units for the older residents that are near physical amenities and social resources

Action: Support the enactment of zoning language that will allow for residential dwellings in appropriate locations within commercial districts

Action: Support the enactment of zoning language that will allow "granny flats/in-law apartments" in appropriate residential areas

Action: Encourage second story and above residential units in commercial areas

Encourage a revitalization of older communities

Action: Develop a Historic Rehabilitation Implementation Strategy

Action: Educate municipalities about Redevelopment Plans ensuring that such plans contain a housing component

Action: Support amendments to zoning ordinances that contain elements of a Traditional Neighborhood Development (TND) in residential areas surrounding the commercial districts

Action: Provide technical assistance to municipalities to develop effective building code enforcement mechanisms

Action: Support private/public partnerships between the County Housing Authority, County Redevelopment Authority, state agencies

Action: Identify communities that would benefit from the Elm Street program and work to implement this program

Increase residential options for families

Action: Support mixed-income housing developments and scattered site development in communities with high levels of vacant lots and abandoned dwelling units.

Action: Partner with the County Housing Authority and the County Redevelopment Authority to develop a housing revitalization program for older communities.

Enhance the county's knowledge and oversight of residential trends

Action: Develop a GIS database to record all subdivisions in the county

Action: Coordinate with the recorder of deeds to develop an enhanced recording system based on the GIS capabilities

Action: Work with the county housing authority and redevelopment authority to direct public subsidies for housing rehabilitation and demolition

Action: Develop a public funding strategy to encourage for-profit and non-profit housing developers to rehabilitate residential dwelling units

Action: The County should coordinate with municipalities to develop a county-wide approach to compiling and releasing information related to housing, crime, school statistics, land use regulations, code enforcement, etc.

Encourage high-density living areas in locations close to regional highway networks and community services/facilities

Action: Support land use regulations that direct residential and mixed-use residential development to locations around major road networks.

Action: Educate municipal officials and planning commissions on the principles of new urbanism and smart growth concepts into future land use regulations.

Action: Support the enactment of regional land use regulations that will encourage well-designed mixed-use development that fosters walkable neighborhoods with access to transit facilities or major road networks.

Action: Give priority funding consideration to municipalities that enact zoning ordinances to direct high-density residential areas in proximity to regional transportation networks.

Direct new housing development to locations that will not overload the existing utility infrastructure.

Action: Support zoning regulations that direct development in a manner compatible with existing infrastructure.

Action: Coordinate with the County Recorder of Deeds to review sewage management plans prior to approving new subdivisions.

Protect rural resources by limiting residential areas within designated areas.

Action: Designate Rural Resources areas with the understanding that public funds will not be dedicated to infrastructure expansion within these locations.

Action: Review local zoning regulations to determine if the ordinances achieves the county goal to limit development densities and uses in rural resource areas.

Plan regionally so that realistic housing strategies can be developed to meet market demands.

Action: Encourage the development of multi-municipal comprehensive plans

Action: Give funding priority to intergovernmental cooperative efforts that coordinate housing needs within plan area

Action: Give funding priority to comprehensive plan communities that promote infill development and mixed use housing strategies in commercial areas

WASHINGTON COUNTY COMPREHENSIVE PLAN

CHAPTER 7. MOVEMENT OF PEOPLE AND GOODS

A. Introduction

Historically, transportation corridors have influenced population growth and directed patterns of development. The ability to move people and goods from one location to another in a manner that is effective, efficient and safe is one of the primary goals of transportation planning. A comprehensive transportation system is actually an integration of subsystems modes that provides access and mobility to residents and travelers. Such subsystems are usually associated with the most familiar mode of transportation—the roadway, but it also encompasses waterways, air, sidewalks, trails, and public transit. The modes of transportation are very diverse and create administrative challenges to maintain, operate, and rehabilitate the various modes.

As Washington County continues its comprehensive transportation planning, the following County Development Objectives serve as broad policy guidelines:

County Development Objectives

- Support the completion of transportation projects that will facilitate the movement of people and goods throughout the region
- Ensure that future transportation network improvements support and enhance communities through the effective and efficient use of land and resources
- Ensure that future improvements to the transportation system include alternative modes of transportation (mass/public transit, pedestrian and bicycle facilities, rail, water, and air)

B. Background

The Monongahela River, the railroads, and National Pike (US Route 40) were perhaps the most significant forms of transportation in Washington County in respect to its historic settlement patterns. Section 2: Historical Character and Community Perspective of this plan provides a more detailed historical view of these particular transportation resources, but suffice it to say the development of the county was directly influenced by these transportation modes. Early development patterns in Washington County consisted of dense population centers along the early transportation routes with additional settlements occurring in outlying areas only as far as could be accessed by walking or by horse. As the railroad, trolley and automobile evolved, they too influenced settlement patterns by dispersing the area in which people could live. However, within the last half of the twentieth century, construction of the interstate highway system accessed new lands within the County attracting development along Interstate 70 and Interstate 79. Recent completion of the Mon Fayette Expressway from State Route 51 in Allegheny County to Interstate 70 in Washington County will soon create new development patterns, and redevelopment opportunities in existing communities, as the toll road advances to completion.

CHAPTER 7. MOVEMENT OF PEOPLE AND GOODS

Transportation systems play a fundamental role in the livability and economic prosperity of any community. Providing connectivity to and from residential areas, commercial centers, and industrial hubs is essential for economic development. Transportation planning is now encouraging alternative means to improve accessibility by applying "smart growth" principles to realize a mix of land uses and transportation design.

The Institute of Transportation Engineers (2003) has issued the following goals in relation to "smart growth" initiatives:

1. Pursuing compact, efficient land-use patterns to maximize transportation efficiency and improve neighborhood environment;
2. Improving multi modal mobility within developed areas;
3. Improving the accessibility within existing built-up areas;
4. Making the most efficient use of transportation infrastructure; and
5. Supporting smart growth through pricing and sustainable funding.

The smart growth concept, applied in this manner, seeks to integrate all modes of transportation with land use planning in an effort to improve mobility and foster well-planned communities. Incorporating these concepts into transportation planning has created a new way of thinking that has shifted from the traditional, cost-benefit and utility paradigm to a more inclusive approach that also encompasses aspects of aesthetics, and the health of the social and economic character of a community. The evolution of transportation planning addresses shared rights of way, context sensitive design, and access management.

The public Right-of-Way has traditionally been viewed as an engineering concern with a primary focus on the accommodation of the roadway. Smart growth concepts have encouraged a more innovative use of the right-of-way such as incorporating landscaping elements, bicycle lanes, public transportation shelters, and pedestrian pathways into roadway design. Smart growth concepts encourage context sensitive design elements that address the visual aesthetics of a transportation amenity. Construction practices that resemble natural features or architectural methods that use decorative elements provide a more pleasing visual presence. Other smart growth elements foster innovative solutions for access management strategies, which can help to reduce congestion and improve traffic flow while reducing potential conflicts with other vehicles or pedestrians. Such achievements come from the design of the roadway itself or through limiting where egress and ingress is allowed.

Land uses and transportation networks are intertwined in a complex and mutually dependent relationship. Perhaps the most obvious is the aspect of industrial and heavy manufacturing land uses with the need to have access to regional transportation networks to move freight and other goods. Such intense development use requires accessibility to rail, regional highways, and airports. Large employment centers near regional road networks will tend to increase the number of housing developments as well. Commercial development has varied characteristics such as downtown retail or strip mall development with each being dependent on or influenced by the surrounding transportation systems.

CHAPTER 7. MOVEMENT OF PEOPLE AND GOODS

Transportation planning is affected by both the type and location of land development. Smart growth concepts favor compactness of development that reduces the length of roadways and cost of supporting infrastructure. In contrast, land regulations that foster linear style development increases costs to construct and maintain road systems. Additionally, planning for the effects of development and the corresponding effects of the supporting transportation element is crucial to ensure compatibility. For instance, uses relying on freight access are usually development types that have aspects of noise and safety that would not be conducive to residential uses. Likewise, the transportation mode itself may include factors of incompatibility resulting from the level of commercial truck traffic or railroad noise and safety conflicts.

According to the Institute of Transportation Engineers (ITE), a Transportation Plan should address "local, regional, and state mobility and development objectives, as well as federal air quality standards, to improve the quality of life (p. 23. 2003)." Such a lofty goal necessitates the involvement of many levels of partnerships—municipal officials, metropolitan planning organizations, councils of governments, county planning agencies, state transportation departments, conservation districts, etc. Ultimately, the transportation plan should incorporate issues of "connectivity, accessibility, mobility, and multi-modal travel options" (ITE, P. 24, 2003).

The Institute of Transportation Engineers identifies the following parameters for the connectivity, mobility and multi modal travel (ITE, P. 25, 2003):

- Connectivity is what makes an area accessible and mobile, both of which affect the overall quality of life, but also there must be a compatibility with local and system-wide objectives.
- Accessibility is the ease in which people can reach their destinations.
- Mobility is the ability of people to freely and easily travel to their destination.
- Multi modal travel is a concept that incorporates many transportation elements into one cohesive system. Common modes of travel that are often identified in a multi-modal approach include pedestrian, bicycle, public transit, freight, water, and aviation as well as automobiles and trucks.

The Washington County Comprehensive Plan will address existing conditions for each of these modes and will assess conditions based upon commonly accepted standards for urban and rural transportation networks as well as the level to which the county meets the ITE goals of connectivity, accessibility, mobility, and multi modal travel.

C. Existing Conditions

Washington County has approximately 2,858 linear miles of roadway within its municipal boundaries. As shown in Table 7.1: Mileage Jurisdiction, Washington County ranks third within the SPC region in the total number of road miles. As shown, Washington and Westmoreland are comparative in terms of linear miles of roadways under Penn DOT jurisdiction while Westmoreland has more linear miles of municipal roadways. Within the SPC region, Westmoreland County has the highest linear miles of Pennsylvania Turnpike Commission roadways while Washington ranks fourth in this area.

Table 7.1: Mileage Jurisdiction, Linear Miles, 2003

	Land Area (sq. miles)	PennDOT	Other Agencies	Turnpike	Toll Bridges	Local Municipal
Allegheny County	730.2	1,176.2	6.7	34.1	0.0	4,512.2
Armstrong County	654	658.1	14.1	0.0	0.0	1,148.7
Beaver County	435.3	604.7	23.6	24.4	0.0	1,021.7
Butler County	788.6	655.5	44.2	4.4	0.0	1,572.1
Fayette County	790.1	756.8	13.9	6.2	0.3	1,299.0
Greene County	575.9	576.4	13.5	0.0	0.0	931.7
Indiana County	829.5	800.8	29.7	0.0	0.0	1,255.9
Lawrence County	360.5	387.1	2.7	17.4	0.0	786.9
Washington County	857.1	1,096.1	10.9	19.5	0.0	1,731.9
Westmoreland County	1022.6	1,200.3	34.6	54.4	0.0	2,359.5

Source: Penn DOT, Bureau of Planning and Research

Regional Transportation Network

Washington County has two interstate highways within its borders. Interstate 70 (I-70) traverses the United States from Baltimore, Maryland, to Salt Lake City, Utah. I-70 enters eastern Washington County in Speers and exits the county in West Alexander. I-70 provides connections to other major roadways including Interstate 76/Turnpike, the Mon-Fayette Expressway, and State Route 51. Interstate 79 (I-79) connects Charleston, West Virginia, to Erie, Pennsylvania. I- 79 enters the southern edge of Washington County in Amwell Township and exits to the north in Cecil Township. I-79 connects to I-279, US 22/30, State Route 60, and Interstate 68.

Principal arterial highways, such as US Route 19, US Route 22, PA Route 88, and PA Route 837 provide access from surrounding counties to regional business and industrial centers such as the City of Washington, the Borough of Canonsburg, and the Monongahela River Valley. Minor arterial roadways, such as PA Route 18, PA Route 50, PA Route 519, PA Route 980, PA Route 40, and PA Route 481 provide access through the county from the major economic centers to the smaller towns.

Mon Fayette Expressway

The Mon Fayette Expressway is a Pennsylvania Turnpike Commission (PTC) transportation project that is planned to be a significant economic development generator. In its entirety, the Mon Fayette Expressway will be over 70 miles in length and will provide redevelopment opportunities for many communities in the Monongahela River Valley. Additionally, the roadway will improve safety and mobility, as it will relieve traffic congestion on many roadways such as State Routes 51, 88, 837, which are at or over capacity now. If the project continues as planned, the linking of Interstate 68 in West Virginia through Fayette County and to I-376 in Pittsburgh and the planned Southern Beltway extension to I-79 will generate additional economic development opportunities for communities in the Mon-Valley area.

Currently, the Mon Fayette Expressway has about 35 miles of roadway that is open for daily travel. 17 miles of toll road is functional north of I-70 in Washington County to State Route 51 in Allegheny County. The Mason Dixon Link is 6.2 miles of tolled roadway which is operational south of Uniontown and is planned to link to Interstate 68 in West Virginia. The 6.2-mile Mason Dixon Link connects to four miles of non-tolled roadway (US Route 119) that links to US Route 40 and eventually to the California Toll Road (Turnpike 43), which is a 6-mile toll road that connects to I-70 in Washington County. The Mon Fayette Expressway section from US Route 40 north to California was constructed in the late 1970s to 1980s. Presently this section has low traffic volumes which is expected to increase once the Mon Fayette is completed. The final component of the Mon Fayette Expressway is the State Route 51 to Interstate 376, which is currently under Final Design.

The Mon Fayette Expressway consists of four independent projects as noted above, while the Southern Beltway consists of three separate projects. More information on both projects can be found at the Turnpike Commission website http://www.paturnpike.com/MonFaySB/. It is recommended that roadways in the vicinity of the Mon-Fayette Expressway and Southern Beltway be monitored throughout the life of the projects. As new sections are constructed, the supporting road network may need improvements to accommodate increased levels of traffic.

Southern Beltway

State Route 60 to US 22 / Findlay Connector—This section is the State Route 60 to US 22 portion of the Southern Beltway and is located in Findlay Township, Allegheny County and Robinson Township, Washington County. This roadway segment will provide transportation and safety improvement and economic development opportunities for Washington County as well as areas surrounding the Pittsburgh International Airport. Construction on this segment is expected to begin in 2003 and conclude by 2006 (PTC, 2005).

US Route 22 to Interstate 79—The section will provide transportation mobility and safety improvements in addition to supporting future economic development plans south and west of Pittsburgh. The roadway will improve access for employers, and the cargo

industry. The US Route 22 to Interstate 79 Project is located approximately 15 miles west of the City of Pittsburgh and encompasses the Boroughs of Canonsburg, Houston, Midway, and McDonald, as well as portions of Robinson, Mount Pleasant and Cecil Townships in Washington County, and the Borough of Oakdale and portions of South Fayette and North Fayette Townships in Allegheny County. Three alternatives have been advanced for detailed study within the Draft Environmental Impact Statement, the B-1 Alternative, the B-2 Alternative, and the B-3 Alternative (PTC, 2005, http://www.paturnpike.com/monfaysb/22to79/projectinfo.htm).

Interstate 79 to Mon Fayette Expressway—This portion of the Southern Beltway is projected to alleviate safety and access concerns with existing roadways in the Mon Valley area. The final alignment for this roadway is still under investigation with PTC completing a Detailed Alternative Analysis. The project area for the I-79 to Mon/Fayette Expressway was divided into two sections to facilitate the development and analysis of the alternatives. Section 1, the western portion, starts at I-79 and ends at the North Strabane/Nottingham Township boundary. The eastern portion, Section 2, begins at the North Strabane/Nottingham Township boundary and ends at the Mon/Fayette Expressway in Union Township. According to the PTC, any combination of the alternatives may be considered to form a project alternative (http://www.paturnpike.com/monfaysb/79tomfexpress/projectinfo.htm).

Road Classification

All transportation planning must begin with an inventory of resources and to aid in that task the Pennsylvania Department of Transportation has developed a classification of all road systems within the Commonwealth. There is a basic relationship between functionally classified highway systems in serving traffic mobility and land access, as illustrated in Figure 7.1. Arterials provide a high level of mobility and a greater degree of access control, while local facilities provide a high level of access to adjacent properties but a low level of mobility. Collector roadways provide a balance between mobility and land access. For the purposes of the Washington County Comprehensive Plan, Penn DOT Functional Classifications will be used to describe the roadway inventory (Penn DOT, 2003).

Figure 7.1: Functional Classification and Mobility

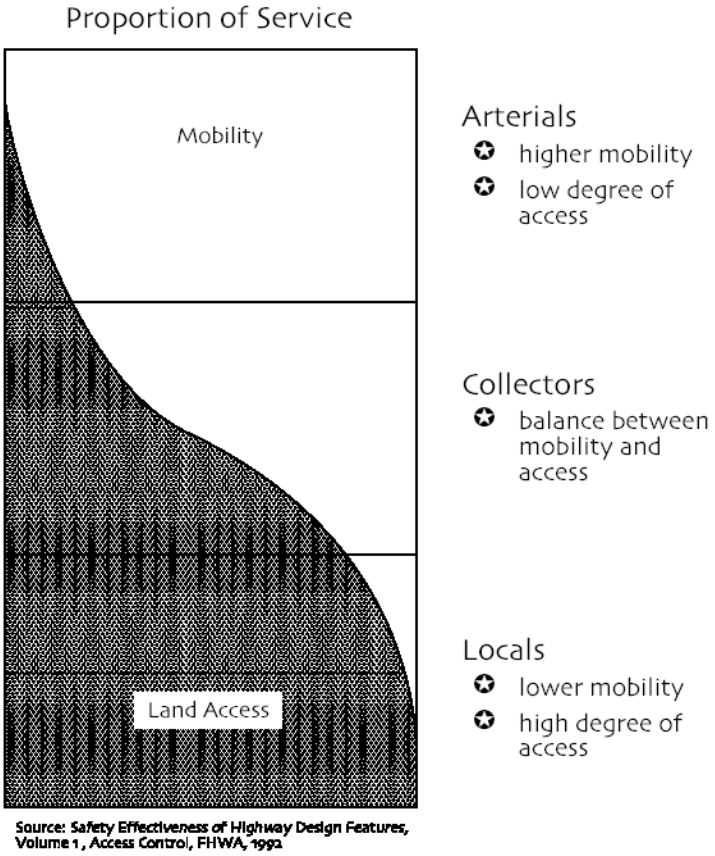


Table 7.2: Highway Functional Classification displays the Daily Vehicle Miles Traveled (DVMT) per Penn DOT functional classifications in 2003. As can be seen, Washington County has significant levels of daily vehicle miles, primarily because of its extensive interstate network. As well, the level of DVMT for Minor Arterials, Major Collectors, Minor Collectors, and Local Roads are extremely high.

Table 7.2: Highway Functional Classification, 2003

		Allegheny County	Armstrong County	Beaver County	Butler County	Fayette County	Greene County	Indiana County	Lawrence County	Washington County	Westmoreland County
Federal Aid Daily Vehicle Miles of Travel (DVMT)	Interstate	5,462,624	0	417,781	989,291	0	394,342	0	297,547	2,376,732	2,259,669
	Other Freeway/Expressway	2,314,909	67,338	569,946	162,959	278,838	0	50,278	180,020	146,777	650,760
	Other Principle Arterial	6,860,640	596,278	1,044,795	1,074,161	1,047,404	111,278	837,880	568,809	902,777	2,289,622
	Minor Arterial	5,468,504	543,101	837,502	1,219,497	401,068	243,938	474,445	405,840	1,250,472	1,893,504
Non Federal Aid DVMT	Major Collector	2,343,244	198,039	514,209	595,746	585,183	220,904	383,284	411,888	701,054	1,284,661
	Minor Collector	14,047	84,483	62,427	103,265	105,501	27,256	110,103	53,194	157,358	131,475
	Local	3,170,309	261,973	610,771	572,215	295,963	188,851	352,293	258,000	802,150	1,348,783
	Total DVMT	25,634,277	1,751,212	4,057,431	4,717,134	2,713,957	1,186,569	2,208,283	2,175,298	6,337,320	9,858,474

Source: Penn DOT, Bureau of Planning and Research

Table 7.3 displays the Vehicle Miles Traveled for Washington County as compared to the SPC region. As can be seen, Washington County has a high percent of Interstate and Minor Collector roadways, which significantly impacts access, road maintenance, and safety. It is important to note that the high percent of interstate roadways in Washington County when compared to the SPC region. With such a high percent of interstate roadways, it is twice as important for the County to ensure that transportation planning efforts address interstate roads as they serve the same role assumed by non-interstate expressways and principal arterials in other counties. As well, state level policy on interstate maintenance will have more of an impact on Washington County than other counties in terms of public travel, safety, and the overall performance of the transportation system.

Table 7.3: VMT Washington County and SPC Region

	Washington			SPC Region	
Vehicle Miles Traveled by Functional Classification	VMT	% of Wash. Co VMT	% of Regional Total	VMT	% of Region VMT
Interstate	2,376,732	37.5	19.5	12,197,986	20.1
Other Freeway	146,777	2.3	3.3	4,421,906	7.3
Other Principal Arterial	902,777	14.2	5.9	15,333,644	25.3
Minor Arterial	1,250,472	19.7	9.8	12,737,871	21.0
Major Collector	701,054	11.1	9.7	7,238,212	11.9
Minor Collector	157,358	2.5	18.5	849,109	1.4
Local	802,150	12.7	10.2	7,861,308	13.0
Local Total	1,660,562	26.2	10.4	15,948,629	26.3
Federal Aid Total	4,676,758	73.8	10.5	44,691,407	73.7
All Roads	6,337,320	100.0	10.5	60,640,036	100.0

Source: SPC, Washington County Planning Commission, 2005

Interstate Highways, Other Freeways, and Expressways

The Pennsylvania interstate system includes presently designated freeway routes, which meet the interstate geometric and construction standards for future traffic demands. This designation is the highest classification of arterial roads and provides the highest level of mobility at the highest speed for the longest uninterrupted distances (Penn DOT, 2005). These major highways or streets with a multilane design serve a large volume of traffic and provide limited access facilities. Within Washington County, Interstate 70, Interstate 79, and Toll PA Route 43 (Mon-Fayette Expressway) are classified as Interstate Highways or Freeways and Expressways. Table 7.2 shows that Washington County has the second highest daily vehicle miles of travel on the interstate system within the SPC region.

Interstates 70 and 79 bisect Washington County in a north/south and east/west fashion and intersect near the City of Washington. The section of I-70 from Washington to Speers was constructed in the late 1950's to early 1960's. This section plus a section of Interstate 79 from US Route 40 north to I-70 are old concrete sections that are continually being structurally overlaid with bituminous material. The aforementioned section of I-70 was designed with pre-interstate standards thus resulting in lane widths, shoulder widths, median, acceleration and deceleration lanes being deficient by today's design standards. This section of interstate should be completely replaced to comply with current design and material standards to meet ever increasing traffic demands.

Other Arterials

Other arterials may include limited access freeways, multi-lane highways, and other important highway networks that provide interconnections for urbanized areas, industrial centers, and cities. Many sections of these Arterials show levels of deterioration and do not meet current design standards.

Principal Arterial Roadways

Principal arterials provide statewide or interstate travel to urbanized areas. They provide integrated movements without stub connections. Design of the roadway usually consists of two (2) 12-foot lanes with 8-10 foot shoulders with speeds typically ranging from approximately 45-65 miles per hour. Within Washington County, some of the major principal arterials are US Route 19, US Route 22, PA Route 88, and PA Route 837.

Minor Arterial Roadways

Minor arterials link cities, larger towns and other traffic generators to provide integrated interstate and inter-county service. Minor arterials are spaced at proper intervals consistent with population density. Design of the roadway usually consists of two (2) 12-foot lanes with 8-10 foot shoulders and with speeds typically ranging from approximately 35-45 miles per hour. Within Washington County, some of the minor arterial roadways are PA Route 18, PA Route 50, PA Route 519, PA Route 980, PA Route 40, and PA Route 481.

Major Collector Roadways

Major collectors are highways or streets provide connections within towns by distributing trips to small areas or neighborhoods. They provide for a greater amount of mobility and land access and are intended to convey traffic from medium travel distances (generally greater than one mile) and serve motorists between local streets and arterial roads. The design of major collectors usually consists of two (2) 12-foot lanes with 8-10 foot shoulders and design speeds of approximately 35 miles per hour or greater. Within Washington County, some of the major collectors are PA Route 917, PA Route 221, PA Route 231, and PA Route 331.

Minor Collector Roadways

Minor Collector roads enable moderate quantities of traffic to move between arterial and local roads. These roadways provide for an equal amount of mobility and land access, providing access to adjacent properties. Minor Collector roads are usually designed with two (2) 12 foot lanes and 4-10 foot shoulders and design speeds of approximately 30 miles per hour. Within Washington County, some of the Minor Collector roads are McCarrell Road/Old Hickory Ridge Road (S.R. 4047), Cherry Valley Road (S.R. 4016), Water Dam Road (S.R. 4015), California Drive (S.R. 2030), and Brush Run Road (S.R. 2005).

Local Roadways

The principal function of a local roadway is to provide direct access to adjacent properties. Local roads are intended to provide mobility within a particular neighborhood, or to one of the other road types. Local roads are usually designed to be 20-22 feet wide (one lane in each direction) with 2-8 foot shoulders and design speeds of approximately 25 miles per hour.

Roadway Demand

The Annual Average Daily Traffic (ADT) numbers for the primary roadways within the project area are shown in Table 7.4: Annual Average Daily Traffic (2001). Washington County has significant levels of traffic on all roadways listed. As would be expected, Interstates 79 and 70 have the highest levels of vehicular trips. However, Interstate 79 traffic levels vary greatly with higher ADT levels north from the City of Washington to Allegheny County versus ADT levels south of the City of Washington to the Greene County border. With this information, an analysis can be made regarding roadway demand and the daily traffic trips to various geographic destinations. For instance, US Route 19 from US Route 40 to the Allegheny County line has a high ADT, but traveling southward to Greene County the ADT levels drop significantly. Therefore, county officials can expect higher congestion levels to occur in the northern section of US 19 and should coordinate with SPC and Penn DOT to direct funding to this area to mitigate for traffic impacts that may occur from additional new development. Such mitigation measures may include revisions to local zoning ordinances and other land use controls that incorporate concepts associated with traffic management.

Table 7.4: Annual Average Daily Traffic (ADT), 2003

Interstate 79 (north of Interstate 70 to Beaver County border)	60,000
Interstate 79 (south of Interstate 70 to Greene County border)	18,000
Interstate 70 (west of Interstate 79 to Ohio State Line)	39,000-30,000
Interstate 70 (east of Interstate 79 to Westmoreland County border)	33,000 – 43,000
Interstate 70/79 (Junction of Interstates on the eastern side of the City of Washington)	59,000
US Route 19 (from US Route 40 to Allegheny Co. border)	17,000 – 40,000
US Route 19 (border of Greene Co to US Route 40)	650 – 1,800
US Route 22 (border of Allegheny Co. to West Virginia state line)	20,000 - 19,000
US Route 40 (border of Fayette County to City of Washington)	12,000 - 5,400
US Route 40 (City of Washington to the West Virginia state line)	10,000 - 1,300
Toll Road 43/Mon Fayette Expressway (border of Allegheny Co. to I-70)	5,800 – 11,000
Toll Road 43/Mon Fayette Expressway (from I-70 to US 40)	11,000 – 6,600
PA Route 50 (from Allegheny Co border to SR 18)	12,000 – 7,100
PA Route 88 (from Allegheny Co border to Finleyville)	7,900 – 11,000
PA Route 88 (from Finleyville to SR 837)	6,500 – 5,800
PA Route 88 (from City of Monongahela to Charleroi)	9,300 – 13,000
PA Route 88 (from I-70 to California)	5,600 – 6,500
PA Route 88 (from US 40 to Fredericktown to the Greene Co border)	4,300 – 5,800 – 3,900
PA Route 18 (from Allegheny Co to SR 50)	4,200 – 5,800
PA Route 18 (from SR 50 to City of Washington)	7,100 – 13,000
PA Route 18 (from City of Washington to Greene Co border)	1,800 - 650
PA Route 50 (from SR 18 to SR 844)	7,100 – 1,100
PA Route 136 (from SR 88 to City of Washington)	3,500 – 6,600
PA Route 519 (from US 40 to I- 70)	6,800
PA Route 519 (from I- 70 to US 19)	8,200 – 11,000
PA Route 519 (from US 19 to SR 50)	4,500 – 2,000
PA Route 837 (from Allegheny Co border to SR 88)	7,800 – 10,000
PA Route 837 (from SR 88 to Donora)	3,800 – 9,400
PA Route 917 (from US 40 to I- 70)	1,800 – 8,700
PA Route 917 (from I- 70 to SR 136)	1,400

Source: Pennsylvania Department of Transportation, 2004

Table 7.5: Linear Annual Growth Rate, shows the expected traffic growth for Interstate Highways, Freeways, Expressways, and Arterial roadways, which was based upon information provided by the Southwestern Pennsylvania Commission. Based on the data provided by SPC (Cycle 7 projections), it was determined that the average annual linear growth rate for these roadways is approximately 0.6 percent per year. The linear annual growth rates were determined to be as follows:

Table 7.5: Linear Annual Growth

Interstate Highways	
Interstate 79	0.6% to 0.8%
Interstate 70	0.4% to 1.3%
Freeways and Expressways	
PA Route 43	0.5% to 0.9%
Principal Arterial Highways	
PA Route 88	0.2% to 0.7%
US Route 19	0.5% to 1.5%
US Route 22	0.5% to 0.6%
US Route 40	-0.5% to 0.3%
PA Route 837	0.2% to 0.7%
SR 1083	0.4% to 0.5%
Minor Arterials	
PA Route 136	0.0% to 1.8%
PA Route 18	0.2% to 0.6%
PA Route 481	0.4% to 1.2%
PA Route 50	0.5% to 1.1%
PA Route 519	0.0% to 1.7%
PA Route 980	1.0% to 1.7%

The *2003 Pennsylvania Traffic Data* book published by the PennDOT Bureau of Planning and Research in August 2004 determined the statewide growth trends for the different classifications of roadways. The yearly percent change for each type of roadway is as follows, as shown in Table 7.6.

Table 7.6: Statewide Annual Traffic Growth Trends

Rural Interstate	2.40%
Rural Principal Arterials	1.30%
Rural Minor Arterials	1.30%

Source: PennDOT Bureau of Planning and Research, 2004

The projected linear growth trends from the county roadways were compared to the statewide average for the corresponding roadway classification. The following roadways exceed the statewide average:

- PA Route 136
- PA Route 519
- PA Route 980

Of these roadways, there are two (2) projects for PA Route 136, two (2) projects for PA Route 519, three (3) projects for PA Route 980, and one (1) project for SR 1009 on the 2005 – 2008 Transportation Improvement Program (TIP). There are no projects for SR 1010 and SR 1053 on the 2005 – 2008 TIP. These routes will need to be monitored for planned developments and increases in traffic. Most likely as economic development occurs, these routes will need to be improved to accommodate additional traffic. Improvements should include lane and shoulder widening, addition of lanes, signalization, and urban intersections and interchanges.

Bridges

Bridges in Washington County are of two types: Grade separation for highways and railroads, and waterway crossings. A majority of the County bridges are waterway crossings. Bridges are critical to the full use of a transportation network. Bridges must comply with the following general criteria to satisfy their functional part of a transportation system and the class of roadway being bridged:

- Support both dead and live loads
- Adequate waterway opening
- Vertical grade clearance
- Pavement and shoulder width aligned with roadway
- Parapet impact strength
- Deck drainage
- Load sufficiency rating

Bridges failing to satisfy these criteria become functionally inadequate and limit the highway networks' ability to serve the public. The most serious inadequacy is loss of structural strength that limits a bridge's ability to carry design loads. When a bridge becomes structurally inadequate, the bridge must be posted for a lower safe load, or closed, if a safe load is less than 3 tons. A typical ambulance is 7 tons, school busses 12 to 15 tons, fire engine 15+ tons, and delivery trucks 5+ tons. Only vehicles permitted on a 3-ton posted structure are automobiles and small pick-up trucks. A 3-ton posting is a hardship on the quality of life for residents and businesses using the posted structure. Closed structures cause a greater hardship on residents by denying access or forcing lengthy detours. Posted and closed bridges cause safety, inconvenience, and restricted mobility problems for residents, motorists, and public service (fire, police, utility, and parcel delivery). Presently, Washington County has 54 Penn DOT maintained bridges that are posted for reduced weight, and 97 posted and 10 closed County maintained bridges. The combined total of 161 posted and closed bridges are affecting safety and quality of life for Washington County residents. These bridges must be programmed for rehabilitation and/or replacement to make the highway network, which is vital to motor vehicle dependent Washington County, a whole transportation system.

Funding for bridge rehabilitation is available from federal, state, and county budgets. Bridges that meet federal criteria for length, traffic volume, and sufficiency rating can qualify for 80 percent federal, 15 percent state, and 5 percent local funds for bridge rehabilitation and/or

replacement. Bridges not meeting federal criteria may qualify for state funds at 80 percent state and 20 percent local funds. Washington County receives approximately $600,000 annually from liquid fuel taxes that has historically been allocated for bridge repair and replacement. Liquid fuels revenues for bridge replacement and rehabilitation are inadequate in addressing the continuous deterioration of Washington County's bridge infrastructure. This is the primary reason 161 bridges are either posted or closed in Washington County.

Bicycle Access

Three forms of bicycle routes may be found in Washington County. BicyclePA, the statewide bicycle routing system, traverses the county from north to south (BicyclePA Route A) and from east to west (BicyclePA Route S). The BicyclePA Routes are signed routes that direct long distance bicyclists along state roadways with improved shoulders and other features designed for bicycle riders. In some cases, these routes divert from existing roadways onto improved rail trails to bypass difficult sections. In Washington County, BicyclePA Route A follows PA Route 19, and traverses Washington County in a north-south direction. The northern end of Route A near Erie, where it connects to BicyclePA Route Z and the Seaway Trail (www.bikepa.com). BicyclePA Route S is the longest of the BicyclePA routes and extends 435 miles from Washington County (east of Wheeling, WV) to Washington's Crossing Military Park on the Delaware River in Bucks County. Route S follows portions of US Route 40 and PA Route 136 in Washington County. .

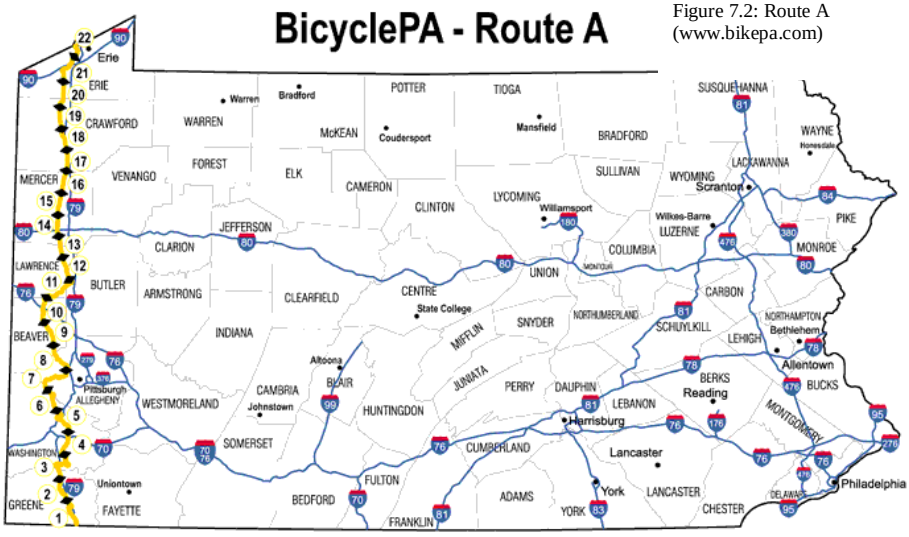


Figure 7.2: Route A (www.bikepa.com)

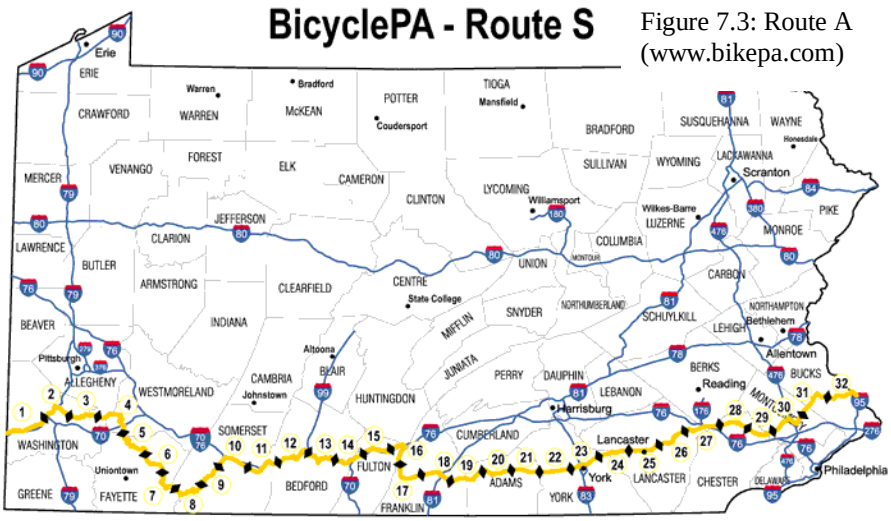


Figure 7.3: Route A (www.bikepa.com)

Where the BicyclePA routes are designed to serve the transportation needs of the long distance bicyclist, they are not necessarily intended for use as local recreational rides. Information on local roads that are "bicycle friendly" has been gathered by the Western Pennsylvania Wheelmen, one of the largest bicycle organizations in Pennsylvania. They have published a series of maps that includes approximately 170 different recreational bike rides in western Pennsylvania. The WPW rides generally follow roads with a lower than average traffic volume or traffic speed, moderate terrain and wide shoulders or other features that make them bicycle friendly. The WPW has mapped sixteen (16) routes within Washington County as follows:

- Peterswood Park to Mingo Creek Park
- Hickory Loop Ride
- WPW Fall Bicycle Rally
- Cecil Park
- Lone Pine Wanderer
- Park to Park
- Festival Ride
- Cecil Park
- Debbie's Delight Too
- Debbie's Delight Again
- Meander Through Washington County
- A Ten Mile Creek Ride
- Prosperity 50 Mile Loop
- WPW Fall Bicycle Rally
- Weirton Sub Ride
- WPW Fall Bicycle Rally

None of the above bike routes uses any of the freeways, expressways, or interstates, but do use the arterial roadways as follows:

- PA Route 88
- PA Route 18
- PA Route 50
- PA Route 519
- PA Route 980

Washington County recognizes the value of maintaining the "bicycle friendly" nature of these roadways. Several of the roadways have projects on the 2005 – 2008 Washington County Transportation Improvement Program (TIP). State Route 88 has five (5) projects, State Route 18 has three (3) projects, State Route 519 has two, three (3) projects for State Route 980, two (2) projects for SR 1006, and one (1) project for SR 1009. In 2004, the Commonwealth of Pennsylvania implemented a series of Pedestrian –Bicycle Checklists for highway projects advancing through the programming, design and implementation phases of project development. The inclusion of these projects on the TIP ensures that PennDOT will review the bicycle utilization of these roadways in the design and implementation of future projects along these roadways.

There are no projects for PA Route 50, SR 1010, SR 1053, and SR 4012 on the 2005 – 2008 TIP.

Trails

The third type of bicycle route in the County is the regional trail network. The Montour Trail, and associated Panhandle Trail, serves the northern part of the County. The Arrowhead Trail, serves residents of Peters Township and adjoining areas. These trails provide off road bicycling opportunities for families and recreational bicyclists. The Montour Trail forms the western link of the Great Allegheny Passage, an off road bicycle trail that will link Pittsburgh with Washington, DC. Although the trail is used mostly by local residents for recreational use, there is a growing number of "through bikers" who use the trail for long distance rides. A planned connection to Pittsburgh International Airport, is likely to result in increased through ridership on the Washington County portions of the trail, providing opportunities for tourism related economic development. Portions of these trails are used for local transportation access to and from parts of downtown areas, schools, etc. Future design standards should incorporate mobility and access concepts to facilitate the use of trails as an alternative mode of transportation.

Montour Trail

The Montour Trail travels through the northern section of Washington County, linking trail systems in Allegheny County and West Virginia. The trail, when completed, will extend 47 miles, from Coraopolis to Weirton. Currently, multiple sections of the trail totaling over 40 miles are available for public use with new sections being added each year. The trail is paved with a smooth surface of crushed limestone, which makes it ideal for all forms of non-motorized use: bicycling, walking, running, cross-country skiing, nature appreciation and in certain sections, horseback riding is also permitted. The Trail is under the ownership of the Montour Trail Council (MTC), a non-profit group. The MTC is responsible for trail development, operation

and maintenance. MTC relies on corporate, foundation and government grants and private donations for funding. MTC has an active volunteer base who assist with maintenance and light construction (http://www.montourtrail.org/index.shtml).

Panhandle Trail

The Panhandle Trail is a 29-mile trail that runs from Walker's Mill, near Carnegie in Allegheny County, through the northern portion of Washington County and then over to Weirton, West Virginia. The trail is constructed along the former Conrail railroad line, which was known as the Panhandle Railroad that connected Pittsburgh to Cincinnati, Chicago and St. Louis. The portion of the trail within Washington County is 17.3 miles long. When the trail is completed, it will link the municipalities of Burgettstown, Midway and McDonald to a trail system in Weirton, WV, Pittsburgh, PA and ultimately Washington D.C. The Montour Trail Council manages the portion of the trail in Allegheny County while the Weirton Park Board is the trail manager in West Virginia.

Future plans for the Panhandle Trail are to convert an abandoned railroad to a trail appropriate for multiple forms of alternative transportation. With 17.3 miles of grade-separated pathway, alternative modes of commuting such as walking, jogging, cross-country skiing, bicycling and even horseback riding can be accommodated. The Washington County section of the Panhandle Trail is centrally located through nine (9) densely populated areas where over 6,000 people will be within ¼ mile of the trail. The trail provides a form of transportation between Burgettstown, McDonald, Midway and surrounding villages to many of the amenities located in northwest Washington County. Also, under federal rail-banking statues, the right-of-way that is being developed for trail use, will be protected for future industrial, commercial and alternative transportation needs should they arise. This right-of-way is the absolute shortest route between Pittsburgh and Weirton, West Virginia. The project should be completed between 2005-2008.

Transit

There is a limited public transit service area within Washington County as shown by Map 7.2 Intermodal Map. As shown, there are two corridors that have transit service – the I-79/US 19 corridor and the communities in the Monongahela River Valley. Within this area, County residents may rely on fixed route service while public transit service is also available to dependent populations such as the elderly or disabled on an as needed basis. Washington County currently has three public transportation entities as noted below:

- Mid Mon Valley Transit Authority
  - Operates in 23 municipalities within the Mid Mon Valley Region from California Borough to the Finleyville area, as well as portions of Fayette and Westmoreland Counties
  - Operates seven (7) routes in Washington County
  - Provides service to the City of Pittsburgh
  - Operates Fixed Route, Contracted Services, Urban Routes
  - As per 2005 (SPC):

    - Operating Budget was $2,610,861
    - Vehicle Hours per Year—45,946
    - Vehicle Miles per Year—653,349
    - Passengers per Year—415,286
    - Maximum Vehicles in Peak Service—26
    - Service Area Population—127,088
    - Cost per Passenger—$6.29
    - Cost per Vehicle Hour—$56.82
    - Cost per Vehicle Mile—$4.00
    - Cost per Capita—$20.54
    - Local Funds per Capita—$0.74

- GG&C Bus Company
  - Private company contracted by the City of Washington and neighboring municipalities to provide transit service
  - Receives funding through the City of Washington
  - Provides service to the City of Pittsburgh
  - Operates Fixed Route, Contracted Services, Urban Routes
  - As per 2005 (SPC):
    - Operating Budget was $1,925,695
    - Vehicle Hours per Year—58,223
    - Vehicle Miles per Year—767,851
    - Passengers per Year—163,555
    - Maximum Vehicles in Peak Service—29
    - Service Area Population—61,634
    - Cost per Passenger—$11.77
    - Cost per Vehicle Hour—$33.07
    - Cost per Vehicle Mile—$2.51
    - Cost per Capita—$31.24
    - Local Funds per Capita—$3.51

- The Washington County Transportation Authority
  - The Washington County Transportation Authority (WCTA) provides a variety of human service transportation to individuals eligible for its programs, which include
    - Senior Shared-Ride Program (ages 65 and over)
    - Persons with Disabilities
    - Medical Assistance Transportation
    - Welfare-to-Work Transportation
    - Veterans Transportation
  - WCTA's primary services are shared-ride in nature and door-to-dorr, requiring reservations be made the business day before.
  - WCTA also provides special services, such as mileage reimbursement for MATP-eligible individuals, after-hours services for MATP and Welfare-to-Work program.

- Actual operation of service is provided by one of five subcontractors depending upon geographic area.
- For fiscal year ending June 30, 2005, WCTA actually delivered or provided reimbursement for 306,085 trips, a 1.8 percent increase over the previous year. The major categories of trips showed the following changes:
    - § Senior Shared Ride (-3.4%)
    - § Persons with Disabilities 10.4%
    - § MATP Shared-Ride 20.8%
- Financial and Operating Statistics for the fiscal year ended June 30, 2005:
    - § Operating Budget was $4,252,412 (Shared Ride Only--$3,365,083)
    - § Vehicle Hours—125,196 (Shared Ride Only)
    - § Vehicle Miles—1,899,888 (Shared Ride Only)
    - § Annual Passengers—312,322 (Shared Ride Only)
    - § Maximum Subcontractor vehicles in service—55
    - § Cost per Passenger—$13.62 (Shared Ride Only--$12.97)
    - § Cost per Vehicle Hour—$26.88 (Shared Ride Only)
    - § Cost per Vehicle Mile—$1.77 (Shared Ride Only)
    - § No local funds, other than passenger fares, contribute to the operation of WCTA

Transportation Programs offered by WCTA

All of the services provided by WCTA are intended for specific populations, although anyone may take advantage of the services if they are willing to pay the full fare (an average of about $15.00 per trip, depending upon distance). The type of service provided by WCTA, such as advance reservation, demand-responsive, and door-to-door services are sometimes referred to as Para-transit. Additional information can be obtained by contacting WCTA at 724-223-8747. Specific services are as follows:

- Senior Shared Ride—This program provides trips for any purpose to individuals age 65 years or older, who pay a fare equal to 15 percent of the cost of the trip. Funding for these trips is provided by PennDOT using PA Lottery funds. Also available are trips for limited purposes for persons 60-64, paid for by the Area Agency on Aging.
- Rural Transportation Program for Persons with Disabilities—Washington County was among the first counties in the state to provide service under this new program. It serves qualifying individuals with disabilities, who can ride for any purpose while also paying 15 percent of the trip cost. PennDOT also provides funding and Washington County residents account for 15 percent of the program's statewide ridership.
- Medical Assistance Transportation Program—This transportation program is offered for persons on Medical Assistance, to allow them to access appropriate medical services. Funded by the Department of Public Welfare, it is by far the fastest growing of WCTA's programs.
- Welfare to Work—This is a temporary federal and state-sponsored program that transports passengers to and from their place of employment.

- Veterans Transportation Program—This service provides transporatation for ambulatory veterans to VA medical centers. Funding comes from the Human Services Development Fund, a program of the State's Department of Public Welfare.

Park-n-Rides

Park-n-Rides provide an essential sub-component of the transportation system as it relates to the reduction of passenger vehicles on area roadways. The following Park-n-Rides are located in Washington County:

1. I-70 Exit 20, Beau St. - Washington
2. I-70 Exit 16, Sheffield St. - Washington
3. I-79 Exit 43, Houston/Eighty Four - Rt. 519
4. I-79 Exit 48, Southpointe/Hendersonville
5. MMVTA Transit Center - McKean Ave. - Charleroi
6. Rt. 19 at Rt. 519 - Canonsburg

Freight

The provision of an effective transportation network in Washington County calls for the ability to move both people and goods into, through and out of the County safely and efficiently. Freight service is characterized by large amounts of goods that are distributed by highways, rail, water, and air. The vast majority of all freight moves by truck along local roadways. However, freight also moves by air, rail and water into and out of Washington County. Map 7.3 Freight Movement, displays roadways most heavily utilized for the shipping of freight.

The economic value of the product being shipped, its weight or bulk, and the time sensitivity of its delivery schedule determine the most efficient mode of shipping. Low value, high bulk products such as coal, or aggregate materials used in construction are frequently shipped by barge, the most cost effective method of shipping. Products such as automobiles and other large consumer goods are often shipped by rail, a more cost effective means of transporting large bulky products. Extremely valuable, low bulk items such as computer component, or time sensitive materials such as cancelled checks, or parts for emergency repairs, are frequently shipped by air. Trends for freight service include "just in time" delivery. Such methods place an emphasis on timely delivery for business operations with low storage capacity. Such a method requires an efficient transportation network and the well-planned coordination of freight centers from which to transfer goods from one transportation mode to another. Connectivity is key for freight centers as it reduces the dependency on costly improvements by raising productivity through linkages.

Freight movement by commercial trucking or "heavy trucks" (trucks with five or more axles-Penn DOT 2005) is dependent upon the interstate system and supported by the local road system to provide door-to-door service. Rail freight is cost effective for large, bulky goods. Rail freight provides connections to commercial trucking so that deliveries can be made to various locations inaccessible by rail. Historically, shipping by water was the first mode of freight. Today, water

freight remains an important component of the freight network of Washington County due to the presence of the Monongahela River and the close proximity of the Port of Pittsburgh in Allegheny County.

However, trucks carry the majority of all freight in the County. The Pennsylvania Motor Truck Association estimated that 12 percent of all vehicles on Pennsylvania roads in 2000 were trucks. On some roads, such as the Interstate Highways, the percentages are much higher.

Trucks on local roadways carry materials to manufacturers, finished product to market, and merchandise to customers. In each case, the timely delivery of freight is critical. In isolated cases, local manufacturers and retailers may rely on "just in time" delivery of needed materials, which eliminates the need for the local manufacturer to keep every component used in their production process stocked locally. Instead, items can be delivered when they are needed, eliminating the need to warehouse them locally.

Truck traffic is expected to increase substantially in coming years. As freight activity and truck traffic grows in the region, local roads will be subjected to increased wear and tear as a result of the high truck densities, and may experience increased delay as a result of the mix of truck and automobile traffic. The safe accommodation of trucks on these roadways may suggest the need for increased roadway design standards for the most heavily utilized truck routes. Two such truck routes include Interstate 70 and Interstate 79. Recent legislative changes have placed strict limits on truck drivers' "hours of service." These new hours of service limitations have resulted in an increased need for truck rest areas along long distance truck routes, including Interstate routes. Currently, there are two highway rest areas in Washington County. One rest area is located along Interstate 79 near the border of Allegheny County and the second is located on Interstate 70 near Claysville.

However, neither of these rest areas offers amenities such as fuel, convenience retail, showers or other facilities that serve the personal needs of the long distance truckers. The nearest such facility is located off Interstate 70 in New Stanton, Westmoreland County. The Southwestern Pennsylvania Commission has identified the need for a full service truck rest area along Interstate 79 or Interstate 70 in Washington County as a regional need.

While airfreight does not have a large role in terms of the amount of freight, it is valuable for low-weight and high cost items that must be shipped in an expedited fashion. No other mode of freight can match air for efficiency in time. In 2004, the U.S. Department of Transportation-Bureau of Transportation Statistics (Smallen, D. 2004) reported that the total value of airfreight doubled from 1993 to 2002. This increase makes airfreight the fastest growing component of the cargo industry.

The cargo industry is reported to be the fastest growing segment of the U.S. economy according to the U.S. Department of Transportation-Bureau of Transportation Statistics (Smallen, D. 2004). As reported, the cargo industry grew by 18 percent from 1993 to 2002 while the total value of goods shipped increased by 45 percent. This information was released in the Freight Shipments in America report (U.S. Department of Transportation, www.bts.gov.).

There are approximately 20 trucking companies and 50 warehousing companies with headquarters in Washington County. For the following freight shipper identification each has

been identified as providing intra-state, regional, national or international services. Intra-sate indicates local or within Pennsylvania shipping, Regional refers to shippers that have regional markets but do not serve the entire continental United States. National indicates shippers that serve regional markets throughout the continental United States and International refers to shippers that serve either Mexico or Canada as well as the continental United States. The following freight shipping companies are located within Washington County (SPC, 2002 & 2005):

1. All Ways Moving & Storage (Washington)—National and International
2. Anderson Transfer, Inc. (Washington)—National and International
3. Best Moving & Storage Company (Meadowlands)—Regional
4. Brownlee Trucking (West Middletown)—National and International
5. CDS Lines (Canonsburg)—Intra-state
6. DAAB Leasing (Bentleyville)—Regional
7. Edmonds Trucking, Inc. (McDonald)—Regional
8. Estes (Eighty Four)—Regional
9. Fife Moving & Storage (Washington)—National and International
10. Five Points Trucking, Inc. (Burgettstown)—Intra -state
11. Gardner Moving Company (McDonald)—Regional
12. Gregory S. Edwards, Inc. (West Finley)—Regional
13. Kash's Transfer and Storage (North Charleroi)—Regional
14. KMX International (Charleroi)—National and International
15. Overnite Transportation (Meadowlands)—National and International
16. Pitt Ohio Express (Eighty Four)—Regional
17. Prism Trucking (Washington)—Intra-state
18. R.L. Yost Trucking & Supply Co (Canonsburg)—Intra-state
19. Rischitelli Brothers, Inc. (Charleroi)—Intra-state
20. Roadway Express Inc. (Washington)—Regional
21. Starck Van Lines, Inc. (Burgettstown)—National and International
22. Weavertown Group (Houston)—National and International
23. Veltri Inc. (Washington)—Regional
24. Zappi Oil & Gas Company, Inc. (Washington)—National

The final link in the freight transportation network in Washington County is the waterborne barge traffic on the Monongahela River. The Port of Pittsburgh Commission reports that there are three public river terminals located on the Mon River in Washington County – the Mon Valley Intermodal facility at Donora, the McGrew Welding and Fabrication Company in the Mid Mon Valley Industrial Park in Donora, and Three Rivers Marine and Rail Terminal in Charleroi.

There is one regional carrier for water freight located within the project area—Campbell Transportation Company. Campbell Transportation Company is headquartered in Dunlevy adjacent to the Monongahela River at milepost 43.9. Campbell has a 200-ton capacity dry dock, approximately 30 Towboats and 400 barges. Besides providing freight services, Campbell provides dry-barge cleaning.

River Terminals are an essential component of the freight-shipping network. A river terminal handles cargo before and after the cargo is shipped by one method to another. Some terminals serve only as distribution modes while others are actual production centers for the goods that are shipped. Cargo is shipped upon the water by a barge that has the cargo carrying capacity of 15 rail cars, or 60 trucks, making river transport a key contributor to congestion reduction on local roadways. Although specific information on the amount of cargo handled at these two river terminals is not available, data is available from the Port of Pittsburgh Commission for the USX Clairton Works in Clairton, Allegheny County. This facility handles 9 million pounds of coal per year. This is the equivalent of 1800 trucks per day, or 75 trucks per hour, every day.

There are three River Terminal facilities within the project area— Mon Valley Intermodal, Inc, McGrew Welding and Fabricating, and Three Rivers Marine and Rail Terminal.

Mon Valley Intermodal, Inc.—This facility is located on the Monongahela River at milepost 34.5 in Donora. The facility has one river terminal and rail access via the Norfolk Southern Rail Company. This facility is capable of trans-loading materials from river barge to truck or rail, from truck or rail to river barge and is directly served by Norfolk Southern Railroad and State Route 837. Interstate 70 is eight miles from the facility. Mon Valley Intermodal ships steel, bulk commodities and lumber through the following methods:

- Barge to truck
- Barge to rail
- Truck to barge
- Rail to barge

McGrew Welding and Fabrication Company—This facility is situated in the Mid Mon Industrial Park located at river milepost 38.4 in Donora. McGrew Welding has one river terminal and rail access via the Norfolk Southern Rail Company. The company ships steel and steel products, coal, and other bulk commodities.

Three Rivers Marine and Rail Terminal—This facility is located at milepost 43.2 in Charleroi. The facility has one river terminal and rail access via the Norfolk Southern Rail Company. Three Rivers Marine and Rail provides rail and water freight services for coal, lumber, stone, salt, gypsum, scrap, and steel.

Rail

Pennsylvania has an extensive system of railroads that provide freight service within the Southwestern Pennsylvania area through two national (Class 1) railroad systems - Norfolk Southern Railway (NS) and CSX Transportation (CSX) and one short line railroad, the Wheeling and Pittsburgh Steel railroad as shown in Figure 7.1: Transportation Network. Services include shipping coal and other goods to distribution and manufacturing destinations along the East Coast. Map 7.3: Freight graphically displays the rail network within Washington County.

The Class I rail lines serve the region by connecting Washington County to the rest of the North American market. The Norfolk Southern line extends in a mostly East West direction,

connecting Chicago and points west with the New York City area. The CSX line also extends mostly east west from Washington County, and connects the Chicago area with Washington, DC.

Norfolk Southern—Norfolk Southern is a Virginia-based holding company, which operates in 22 Eastern States. Norfolk Southern has 12,500 miles of road and 31,300 miles of rail track nationwide. Norfolk Southern has a rail line along the Monongahela River and a spur that enters Washington County near the City of Monongahela to access property in South Strabane Township.

CSX—CSX Corporation has a variety of subsidiaries that provide freight transportation services nationally and internationally. The rail company was formed in 1980 and now operates the largest rail network in the eastern United States. CSX companies provide freight and other transportation services as well as maritime operations. CSX rail lines extend into Washington County from river terminals in Allegheny County to the City of Washington.

Short line and regional railroads are dispersed throughout Washington County and provide connections to the Class 1 railroads. Short line systems are one of the most important elements of the rail transportation system. The short line railroads provide access to local industrial properties and function as an economic development tool for businesses that want to locate on industrial sites. Pennsylvania is served by seventy regional and short line railroads, more than any other state (Penn DOT, 2004).

Regional railroads are somewhat smaller than the Class I railroads, with less than $250 million in annual revenues, and generally having less than 350 miles of track. They frequently connect to the Class I railroads, providing opportunities to "transload" materials from a regional to a national distribution network. The Wheeling and Lake Erie (WLE) and Ohio and Pennsylvania (OHPA) regional railroads operate in Washington County.

Shortline railroads are much smaller operations, often serving a single customer. The Wheeling Pittsburgh Steel line is such an example, serving the Monessen coke works exclusively. Shortline and regional railroads connect with the Class I railroads, and they are one of the most important elements of the transportation system. They provide access to many excellent business properties and function as an economic development tool for businesses willing to locate on theses industrial sites. Washington County is served by two regional railroads and one shortline railroad.

Short-line rail companies operating in Washington County include the following:

Pittsburgh & Ohio Central (POC)
- Regional rail line
- 42 miles of track

Wheeling & Lake Erie (WLE)
- Regional rail line
- 98 miles of track in SPC region

Although products shipped by rail are not as time sensitive as products shipped by air, railroads seek to enhance their operational efficiency and reduce the time that products spend in transit.

Track geometry and condition are key determinants in train speed. The Pennsylvania Rail Freight Assistance Program has grants available to assist railroad operators and shippers dependent on freight with the costs of track maintenance and improvement.

Other key issues to the Class I railroads are the operational efficiencies permitted by the use of heavier trains, and double stacking rail cars. Currently, all Class I railroad lines in Washington County are capable of accommodating the industry desired 286,000 lb. rail cars. This is not true of all of the regional and shortline railroads in the County. Both Norfolk Southern and CSX have also confirmed that they maintain double stack clearance on all rail rights of way in the county. Again, this is not necessarily true of all regional and shortline railroad lines.

The ability of regional railroads, and to a lesser extent, shortline railroads, to accommodate the same weight and clearance standards as the Class I railroads facilitates the movement of rail freight from Class I rail lines to individual industrial sites. To the extent that regional railroads are unable to accommodate railcars of 286,000 lbs. capacity, or lack the vertical and horizontal clearances required for the passage of double stack rail cars, the operational efficiency of the regional rail system is jeopardized.

The maintenance of the rail infrastructure in Washington County is crucial to the long term viability of the County's highway network. Every rail car of cargo represents the equivalent of four truckloads. In other words, for every trainload of material that passes through the County, four trucks have been removed from the local roadway.

Maglev

The construction of a low-speed magnetic levitation (Maglev) rail system in California Borough will provide commuter service for California University of Pennsylvania. The project is estimated to begin construction within two years at a cost of $188 million. This demonstration project has generated national attention as an example of urban transit. Phase 1 of the project will connect the California University football stadium and student housing with a parking lot thus eliminating potential pedestrian and vehicular conflicts on State Route 88. Eventually, the Maglev is to traverse the terrain from the parking area to the main campus along the Monongahela River.

Aviation/Airport

The economic impacts of aviation facilities are a result of many aspects of an existing airport – private or public. Such economic benefits include employment, governmental spending, visitor spending, and supporting service costs.

Currently, three (3) airports provide service for the Washington County area. These airports and their locations are as follows:

- Washington County Airport – South Franklin Township
- Finleyville Airpark Airport – Finleyville
- Bandel Airport – North Bethlehem Township

The Washington County Airport—This County owned and operated facility is located in South Franklin Township. The facility can accommodate 100 aircraft and has 37 T-hangers and seven corporate hangars. The airport has over 300 acres and has an asphalt runway that is 5000 feet in length. The full parallel taxiway system is fully lit for night operations. The airport has many technological advances including a partial electronic guidance system consisting of a Localizer, Distance Measurement System (DME) and Nondirectional Beacon (NDB), a Remote Communications Outlet (RCO), an automated Weather Observation System, and an Instrument Landing System (ILS). The Washington County Airport is expected to complete a Master Plan and Environmental Impact Assessment and complete runway renovations beginning in 2005. The total economic benefit derived from this facility in 1999 was estimated to be $16,568,6000 (PA Bureau of Aviation).

Over the past 15 years, several projects have been completed to expand and improve the airport for business and recreational users. Both Special Project Grants and Capital Project Grants administered by Penn DOT Bureau of Aviation have totaled over $10,000,000 since 1988. Projects consisted of general maintenance and rehabilitation, purchasing of equipment and major capital improvement.

1. Complete Runway Rehabilitation $2.1M – 1988-1991.
2. New T-hangars $800,000 – 1993-1994.
3. Construction of taxiways $3,400,000 – 1994-2001.
4. Instrument Landing System (ILS) $1.29M – 2005.
5. Safety Improvement to Runway $1.67M – 1997.

Future improvements to the Washington County Airport are depicted in Table 7.7. As shown by the overall schedule and budget, the County is placing a high priority on improvements to the County owned facility.

Table 7.7: Twelve-Year Plan (TYP) and Airport Capital Improvement Plan (ACIP)

Year	Project Description	Total Cost
2004	Obstruction Removal Runway 9 Approach (Miller Acquisition and Varner Easement) 10 Acres of Trees	$150,000
2005	Conduct Master Plan Update (June 1980)	$200,000
2005	Design Runway Widening, Resurfacing and Lighting System Rehab	$450,000
2005	Construct North Side Access Road with Underground Utilities, 2000' x 24', Phase I	$1,570,000
2005	Acquire Land and Structures for Runway 9-27 Extension, 60 Acres and 6 Structures, Varner's Largest Parcel	$3,000,000
2006	Widen and Rehabilitate Runway 9/27 (75' x 5000') to 100' x 5000'	$3,000,000
2007	Install Airport Perimeter Security Fencing, North side, 6000 LF, Phase I	$400,000
2007	Acquire Land and Structures in Runway 9 RPZ, 10 Acres and 5 Houses (Lowe's plus others)	$850,000
2008	Relocated Terminal Building (3000 sf), 5000 sf	$2,500,000
2008	Relocate Terminal Apron (120,000 sf), 120,000 sf, Service Road 750' x 28' and Relocate Non-revenue Generating Parking Lot (80,000)	$1,300,000
2008	Construct North Side Ramp, 300' x 250' Phase I	$600,000
2008	Install Airport Perimeter Security Fencing, South side, 8000 LF, Phase II	$350,000
2008	Extend Runway 9-27, (5,000') to 5,600'	$5,000,000
2008	Relocate Electrical Vault	$250,000
2009	Relocate Taxiway B, Final Phase 800' x 35' Including 2 - 400' x 35' Connector Taxiways to Runway 9/27	$500,000
2009	Construct 20 Unit T-hangars	$600,000
2009	Construct T-hanger Ramp, 500' x 250'	$800,000
2009	Construct Access Road 1500' x 24' with Underground Utilities, Phase II	$1,250,000
2009	Acquire Land and Structures for Final Phase of Taxiway B Relocation, 2 Hangars and 5 Acres, Sollon Parcels	$1,500,000
2009	Acquire Snow Removal Equipment, Truck and 26' Plow	$150,000
2009	Acquire Snow Removal Equipment, Front End Loader with Ramp Hog	$300,000
2010	Resurface Taxiway A and B (2,500' x 35') and (2,500 x 35")	$600,000
2010	Acquire CFR Vehicle	$250,000
2010	Acquire Land with Structures and Easements for RPZ Runway 9/27, 10 acres, Gantz largest parcel	$2,000,000
2011	Apply Runway 9/27 paint markings (20,000 sf)	$20,000
2011	Construct SRE Maintenance Building, 6,000 sf	$300,000
2011	Construct Sand Storage Building, 2,000 sf	$100,000
2011	Acquire Snow Removal Equipment, Sweeper Truck	$200,000
TOTAL		*$28,190,000*
Extend Runway 9/27 (5,600') to 6,500'		$7,000,000
Extend Taxiway B		$5,000,000
Construct T-Hangars		$750,000
TOTAL		**$12,750,000**

Source: Washington County Planning Commission, 2005

Finleyville Airpark Airport—This facility is located one mile south of Finleyville Borough; approximately 12 miles west of I-79 and 10 miles south of I-70. The airport is within 2 miles of the Mon-Fayette Expressway and serves the Finleyville area. Finleyville Airpark is a general service airport (PA Bureau of Aviation, 2004) that has 42 based aircraft and about 5,400 annual aircraft operations. Finleyville Airport has one paved runway that is 2,505 feet in length. The total economic benefit derived from this facility in 1999 was estimated to be $306,500 (PA Bureau of Aviation).

Bandel Airport—This facility is located three miles south of I-70 and seven miles east of I-79 in North Bethlehem Township. Bandel Airport is classified as a general service airport (PA Bureau of Aviation, 2004) with 23 based aircraft and 5,470 annual operations. The airport serves the Eighty Four area. Bandel Airport has a gravel runway that is 2080 feet in length. The total economic benefit derived from this facility in 1999 was estimated to be $23,200 (PA Bureau of Aviation).

There are no airports in Washington County that handle air cargo on a scheduled basis, although local companies may use Washington County Airport for occasional emergency deliveries in corporate aircraft.

Commercial Waterways

The Monongahela River flows north from the confluence of the West Fork and Tygart rivers at Fairmont, West Virginia to the City of Pittsburgh where it joins with the Allegheny River to form the Ohio River. The Monongahela River serves many purposes including transportation, recreation, and a source of water for many municipalities within the County. Historically, the Monongahela River has been considered a significant form of transportation for all of Southwestern Pennsylvania. During the pre-Revolutionary times, individuals utilized this waterway as a method of traveling westward to the Ohio River. During the industrial era, the Monongahela River was a source of moving materials from the busy coal mines located along its shores to industrial centers. Today, the river still is considered a commercial waterway due to the number of barge companies that transport coal, petroleum products, scrap metal and other materials.

The Monongahela River was improved for year round transportation by the Monongahela Navigation Company in 1837 when a series of seven locks and dams from Pittsburgh towards the West Virginia state line were built. The U.S. Army Corps of Engineers took control in 1897 and began operation of the nation's oldest continuously operating slack-water river navigation systems (US Army Corps of Engineers, 2004). The present navigation system has nine locks and dams of several sizes and types constructed by the U.S. Army Corps of Engineers between 1902 and 1994. These locks allow boats to travel in a series of steps to accommodate the 147-foot difference in pool elevation from Fairmont to Pittsburgh (US Army Corps of Engineers, 2005). Together the U.S. Army Corps of Engineers and the Port Authority of Pittsburgh oversees 200 miles of commercially navigable waterways in an eleven county area including Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland Counties.

The Lock and Dam system is an important component of the Washington County transportation system and ultimately the Inland Waterway Navigation System. Two lock and dam systems influence the navigable water of the Monongahela in Washington County—Locks and Dams 4 and the Maxwell Locks and Dam. According to information supplied by the US Army Corps of Engineers (2005), The Locks and Dams 2, 3 and 4 are the three oldest operating navigation facilities on the Monongahela River and experience the highest volume of commercial traffic. The Lower Monongahela River Project is a series of planned improvements by the Army Corps of Engineers to the Locks and Dams 2, 3 and 4. Locks and Dam 2 (Braddock, Allegheny County) was recently replaced which will allow the removal of Locks and Dam 3 in Elizabeth, Allegheny County, following the replacement of Locks and dam 4 in Charleroi. The Lock and Dam #4 improvements include the replacement of the existing 70-year-old structure with a larger 110 foot wide chamber system, which will result in an increase in the lock-through capability thereby improving the overall efficiency and capacity. The removal of Locks and Dam 3 will result in a 30-mile long pool of water between Braddock and Charleroi. Other improvements to the Braddock Locks and Dams include dredging Pool #3, which will cause a 3.2-foot drop in water elevation between Elizabeth Borough, Allegheny County and Charleroi Borough, Washington County (US Army Corps of Engineers, 2004).

> Locks and Dam 4—This two-chamber lock and gated dam is located on the Monongahela River near Charleroi approximately 41.5 nautical miles from Pittsburgh. The facility was originally built in 1930-1931 and renovated in 1967. According to the US Army Corps of Engineers, Pittsburgh District, Lock and Dam 4 allows for the movement of 19 million tons of freight each year. The pool located upstream to the Maxwell Lock and Dam is 19.7 miles of slack water, which is also available for recreational use and as a source of municipal water supply. There are no public facilities located at this site.
>
> Maxwell Locks and Dam—this two-chamber lock and gated dam is located on the Monongahela River north of Fredericktown. According to the US Army Corps of Engineers, Pittsburgh District, the Maxwell Locks and Dam accommodates approximately 18 million tons of freight each year. This facility was constructed in 1960 and renovated in 1965.

Port of Pittsburgh

The Port of Pittsburgh is the second busiest inland port in the nation. It is the 13th busiest port of any kind in the nation—larger than Baltimore, Philadelphia, and St. Louis in terms of shipping tonnage. The Port district includes the following 11-county service area—Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland. The service area for the Port of Pittsburgh includes over 200 miles of commercially navigable waterways and connects over 200 river terminals and water freight suppliers (Port of Pittsburgh, 2005).

The primary commodities shipped through the Port of Pittsburgh are “steam and metallurgical coal for uses in utilities and steel mills, chemicals and petrochemicals for uses by local chemical companies, sand and gravel used in construction and cement production, and petroleum products for local gasoline stations, and to the Pittsburgh International Airport (Martin Associates, 1998, p

I-2). Coal remains the largest product shipped through the Port of Pittsburgh with over 75 percent of all traffic constituted by this commodity (Martin Associates 1998).

Ferry

The Fredericktown Ferry is located in the village of Fredericktown, which is located in East Bethlehem Township. The ferry has been in operation since the early 1900's when it first provided travelers with safe transport across the Monongahela River. Today, the ferry service is the only one in operation in the Eastern U.S. (SPC, 2004). The Fredericktown Ferry operates transport services daily and can transport six cars at any one time. The ownership and administration of the Fredericktown Ferry is the responsibility of both Washington and Fayette Counties. Operation costs are shared by both counties and the services is funded by liquid fuels dollars.

In 2004, SPC was contracted to study the transportation and land use related impacts that were expected to occur due to the recent opening of the State Correctional Institution in Luzerne Township, Fayette County. The *Labelle Area Transportation Study: An early option analysis* included an in-depth review and analysis of the Fredericktown Ferry. This study identified several options for ongoing operation of the Ferry and it is recommended that Washington County continue to monitor the status of the Ferry and implement recommendations contained in the Labelle Area Transportation Study.

Waterway Access

The ability of residents to use the river or other waterways, as a source of recreation is partly dependent upon the availability of public boat launches. Washington County has the following waterway access areas:

Monongahela River

New Eagle (Private)

- Limited hours of operation, fee for use, shore fishing, large parking area, loading dock, surfaced ramp provides river access for deep-draft, high-powered recreational boats

New Eagle-Howard Street (PA Fish and Boat Commission)

- Fee for use, fishing pier, shore fishing, large parking area, loading dock, surfaced ramp provides river access for deep-draft, high-powered recreational boats

Monongahela Access (PA Fish and Boat Commission)

- Fishing pier, shore fishing, large parking area, surfaced ramp provides river access for deep-draft, high-powered recreational boats

Monongahela Aquatorium (City of Monongahela)

- Fishing pier, shore fishing, large parking area, surfaced ramp provides river access for shallow-draft, lightweight fishing boats, canoes, and inflatable water craft

Speers Landing Access (PA Fish and Boat Commission)

- This facility has a large lot for parking, a surfaced ramp provides river access for deep-draft, high-powered recreational boats

Wayne Street (Roscoe Borough)

- No parking area is provided, surfaced ramp provides river access for deep-draft, high-powered recreational boats

California (California Borough)

- This facility has on-street parking and a small lot parking, shore fishing is allowed, surfaced ramp provides river access for deep-draft, high-powered recreational boats

West Brownsville (West Brownsville Borough)

- Small parking area available, shore fishing and fishing pier, beach-type or unpaved ramp provides river access for deep-draft, high-powered recreational boats

Dammieco Marina (Private Facility)

- Shore fishing, large parking area, loading dock, surfaced ramp provides river access for deep-draft, high-powered recreational boats

Overtime on the Mon Restaurant (Private Facility)

- Facility assesses a fee for use, shore fishing, large paved parking area, loading dock, surface ramp provides river access for deep-draft, high-powered recreational boats

Elrama Street (unknown)

- Shore fishing, no formal parking, surfaced ramp provides river access for deep-draft, high-powered recreational boats

Ten Mile Creek

Ten Mile Creek Park Washington County)

- Fee for use, fishing pier, shore fishing, large parking area, loading dock, surfaced ramp provides water access for deep-draft, high-powered recreational boats

Dutch Fork Lake

West Side Access (PA Fish and Boat Commission)

- Electric motors only, shore fishing, large parking area, beach-type or unpaved ramp provides water access for shallow-draft, lightweight fishing boats, canoes, and inflatable water craft

East Side Access (PA Fish and Boat Commission)

- Seasonal access only, electric motors only, shore fishing, large parking area, beach-type or unpaved ramp provides water access for shallow-draft, lightweight fishing boats, canoes, and inflatable water craft

Cross Creek Lake

Cross Creek Lake Access (Washington County)

- Limited hours of operation (dawn to dusk), fee for use, fishing pier, shore fishing, large parking area, surfaced ramp provides water access for deep-draft, high-powered recreational boats

Canonsburg Lake
Canonsburg Lake Access (PA Fish and Boat Commission)

- Electric motors only, shore fishing, large parking area, surfaced ramp provides water access for shallow-draft, lightweight fishing boats, canoes, and inflatable water craft

Transportation Planning Organizations

Southwestern Pennsylvania Commission
The Southwestern Pennsylvania Commission (SPC) is the federally-designated Metropolitan Planning Organization (MPO) for a ten-county region including the City of Pittsburgh and the counties of Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland. The responsibilities of a metropolitan planning organization include the planning and prioritizing of all state and federal transportation funds allocated to the region and for conducting the transportation planning process for the region in cooperation of PennDOT, Washington County, and other SPC partners. It should also be recognized that SPC serves also as the Local Development District (LDD) and Economic Development District for Southwestern Pennsylvania (as designated by the U.S. Appalachian Regional Commission and the U.S. Department of Commerce), to establish regional economic development priorities.

Together, SPC and its planning partners identify the highest-priority needs on the federal and state highway systems and budget them for funding through the SPC Transportation Improvement Program (TIP), a four-year budgeting tool that directs federal and state highway funding based on specified project schedules and budgets. The program does not typically include any roadways under local ownership and maintenance control. The SPC TIP is updated biannually in conjunction with the State TIP and Pennsylvania's Twelve Year Transportation Program.

Project costs often have to be amended in-between TIP cycles due to new information discovered environmental studies, engineering design, construction costs, or market changes. To change the TIP, each cost increase has to be offset by removing funding from another TIP project to keep the program in financial balance. Thus, the TIP is a dynamic document that needs constant attention to meet the changing needs of a large and diverse region. The current SPC TIP is the "2005-2008 Transportation Improvement Program for Southwestern Pennsylvania."

SPC, working with its partners, identifies the projects that are "waiting in line" through its long range transportation plan, the "2030 Transportation and Development Plan for Southwestern Pennsylvania." The Long Range Plan is updated every three years. The official process to identify a new project for federal transportation funding is to testify to SPC during the next Plan Update (July 2005-June 2006), which Washington County does on an ongoing basis along with other SPC partners.

The capacity to complete transportation projects in a timely manner is directly related to the number and size of the projects that are being advanced and the amount of federal and state gas tax money available to the TIP. Since the late 1990's transportation revenues have been growing more slowly than construction costs, and there are more key regional projects in the construction pipeline that are of significant size. The transportation program in Washington County has continued to advance somewhat more quickly than the region's overall experience because projects in the county that are underway are more moderately sized than elsewhere. It should be noted that the Pennsylvania Turnpike Commission's Mon-Fayette Expressway and Southern Beltway projects have little direct impact on the federal transportation program because they are funded almost entirely through Turnpike Commission funding sources.

Pennsylvania Department of Transportation (PennDOT)
Washington County is included under the Penn DOT Engineering District 12, which also oversees state related transportation projects in Fayette, Greene, and Westmoreland Counties. District 12 is responsible for over 3,715 miles of highway, more than 103 miles of interstate and 2397 state bridges. Penn DOT cooperates within the framework of SPC to establish priorities for transportation projects.

Penn DOT has established the Agility Program to help local governments, school districts, fire companies, and utilities with special projects related to transportation needs. Activities can include boom mowing, street sweeping, bridge cleaning, meeting facilities, graphics, and storage. Penn DOT also works to remove litter and beautify roadways. The Keep PA Beautiful is a Penn DOT program that organizes volunteers to pick up trash and litter. Penn DOT sponsors an annual clean up day, which is held the last Saturday in April.

Transportation Improvement Program

State Transportation Improvement Program/Transportation Improvement Program (TIP) for Southwestern Pennsylvania lists all projects that are anticipated to be funded by state and/or federal money. The TIP is a four-year, fiscally constrained listing of priority multimodal projects. The TIP is updated biannually in conjunction with the state's Twelve Year Transportation Program. A project must appear on the TIP before it can receive financial support. The TIP represents the schedule and cost for the project at the time of TIP development and is the first step in seeking authorized funding. Project costs can change due to unexpected difficulties identified during engineering work.

The 2005-2008 Transportation Improvement Program for Southwestern Pennsylvania was developed through a proactive public involvement process. The SPC in conjunction with their member Agencies or Counties have established Public Participation Panels for each county. The PPP primary purpose is to take public testimony on transportation project and convey them in a logical manner to the State Transportation Commission.

Formed in 1998, the Washington County PPP has identified and prioritized the following five (5) critical issues for transportation related projects and planning (these projects are submitted under the appropriate critical issue category):

1. Safety
2. Maintenance
3. Congestion/Mobility
4. Economic Development
5. Environmental Concerns

Washington County Commissioners have categorized PPP testimony into seven (7) areas.

1. Economic Development
2. Interstate Improvements
3. Local Improvements
4. Proposed Road Improvements/Specific Projects
5. Mon/Fayette Associated Projects
6. Bridge Projects
7. Transportation Enhancement Projects

The County testimony has included all projects submitted by municipalities and other government entities. The following projects were submitted to the State Transportation Board 2003 TIP for consideration. While not prioritized, they do represent the diversity of the projects that are considered for inclusion onto the Washington County TIP. More detailed information can be found be referencing the Washington County 2003 Testimony.

During the previous public participation process, over 116 projects were identified that were funded at various stages on the four (4) year program. Over 50 of these projects were local in nature and were identified as a direct result of public input. Twenty-seven (27) of these projects have been completed through the construction phase in 2003 and 2004. While these projects are all on the Transportation Improvement Program, many are only funded through the engineering phase. "Both the Washington County Commissioners and the PPP testified that it is of vital importance to Washington County that as the engineering phase of these projects is completed, the necessary funding for the construction and completion of the projects is made available" (PPP Testimony 9-11-2003).

Table 7.8: Transportation Improvement Summary (Washington County Projects), shows the year-by-year cost for the projects included on the TIP in relation to engineering, right-of-way acquisition, and construction.

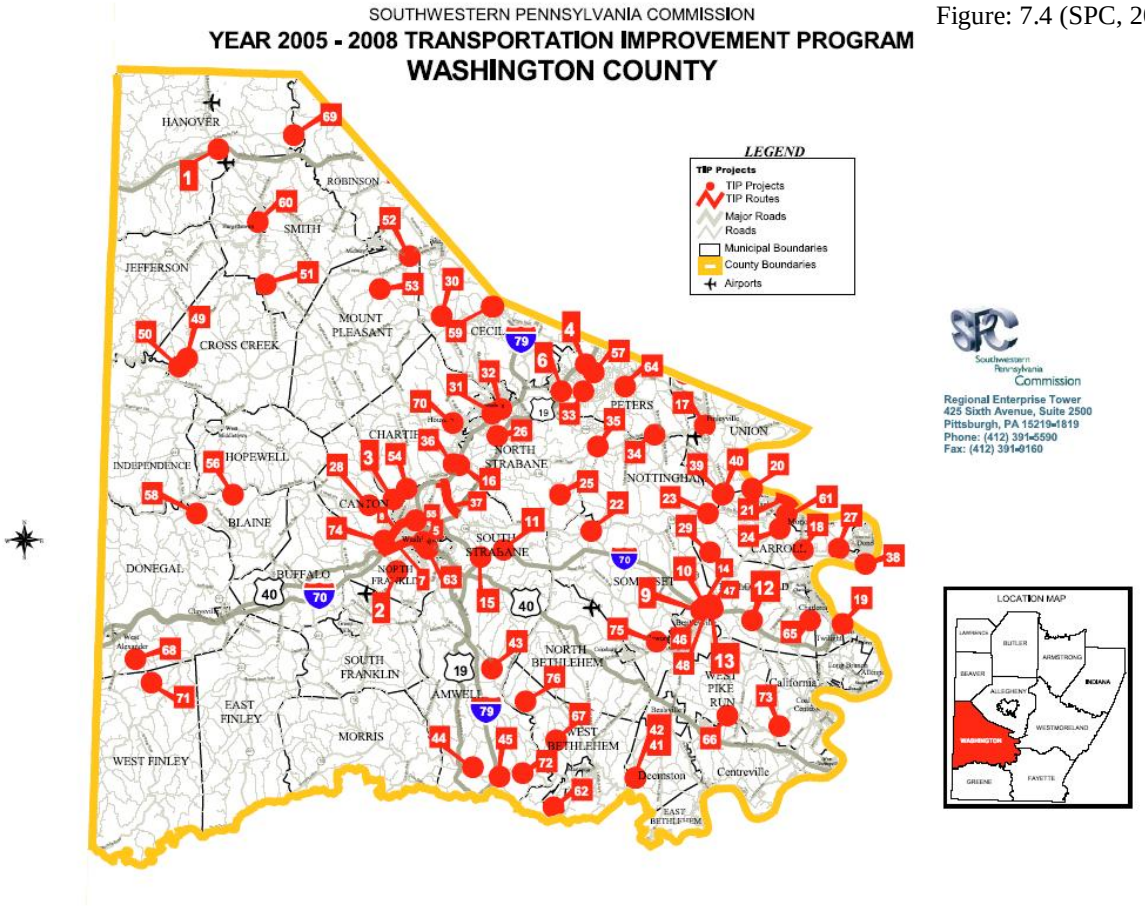
Table 7.8: Transportation Improvement Summary (Washington County Projects)

	2005	2006	2007	2008	TOTAL
Engineering	$2,003,000.00	$4,545,000.00	$2,003,000.00	$210,000.00	$8,761,000.00
Right-of-way	$5,960,000.00	$4,700,000.00	$2,095,000.00	$15,000.00	$12,770,000.00
Construction	$15,311,000.10	$11,315,000.10	$26,533,000.10	$27,717,000.10	$80,876,000.40
Total	$23,274,000.10	$20,560,000.10	$30,631,000.10	$27,942,000.10	$102,407,000.40
Federal	$24,292,000.10	$13,538,000.10	$21,781,000.90	$15,924,000.70	$75,535,001.80
State	$9,039,000.30	$6,665,000.80	$8,477,000.70	$10,873,000.90	$35,054,002.70
Local	$2,219,000.80	$356,000.30	$371,000.50	$1,143,000.50	$4,089,002.10

Source: SPC, 2004

Figure 7.4 is a graphic representation of the projects listed on the 2005-2008 TIP. As can be seen, many of the projects are clustered along or near the I-79 corridor, within the Monongahela Valley area, or near the City of Washington.

Figure: 7.4 (SPC, 2005)



2005-2008 Transportation Improvement Program Cost build out shows individual project cost through construction for each project on the TIP. Based on historic obligated transportation funds and projected inflation, the build out or completion through construction of all current projects on the Washington County 2005-2008 TIP is estimated to be completed in the year 2019. The current TIP is well balanced between large regional projects and projects that are local in nature. Regional project addresses many safety and maintenance issues combined with economic development impacts.

1. I-79/I-70 Interchange
2. Bentleyville Interchange
3. I-70 Bridge over S.R. 519
4. I-79 Meadowlands Interchange
5. I-70/I-79 Murtland Interchange
6. I-70 Master Plan
7. Route 18 Safety Master Plan
8. Washington & Jefferson College area

The Washington County Planning Commission prepared a cost build out synopsis, which is shown in Table 7.9: Washington County Transportation Improve (TIP) Estimated Build Out Summary.

Table 7.9: Washington County Transportation Improvement (TIP) Estimated Build Out Summary

SR	Project Status	MPMS	PROJECT	DESCRIPTION	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2025	2018
18	2	30811	SR 18 CHARTIERS CREEK BRIDGE	Bridge Replacement	150,000	310,000	500,000	452,000											
18	2	30894	SR 18/SR 22	Reconstruct the intersection of 18 and 22 to facilitate the development of an industrial park.	450,000	550,000													
19	2	30891	WASHINGTON & JEFFERSON COLLEGE AREA	RESTORATION	1,100,000	0	4,400,000												
70	2	31084	I-70 @ SR 1049	BRIDGE REPLACEMENT	250,000	1,500,000	3,800,000												
70	2	64190	MIDA Access Road	Alignment and replacement of a 1/2 lane access road for the Bentleyville Industrial Park (Created to track ARC funds)	2,000,000														
79	2	31018	I-79 MEADOWLANDS INTERCHANGE	ADD 2 RAMPS - IMPROVEMENT	1,600,000	0	6,400,000	3,600,000											
88	2	31183	SR 88 & 837 INTERSECTION	ADD LANE & SIGNAL IMPROVEMENT	150,000	500,000													
88	2	47432	SR 88 @ SR 837 CARROLL TOWNSHIP	ADD TURN LANE & SIGNAL IMPROVEMENT	85,000	500,000	300,000												
136	2	30950	SR 136 @ SR 1055 INTERSECTION	INTERSECTION IMPROVEMENT	120,000	80,000	350,000	1,500,000											
481	2	30717	SR 481 PIGEON CREEK BRIDGE	Bridge Replacement	150,000	200,000	70,000	900,000											
519	2	30949	SR 519 @ SR 1055 INTERSECTION	INTERSECTION IMPROVEMENT	250,000	0	700,000	800,000											
837	2	64831	SR 837 @ CEMETERY	Replace Retaining Wall	1,625,000														
844	2	30679	SR 844 CHARTIERS CREEK BRIDGE	Bridge Replacement	150,000	250,000	275,000												
917	2	30899	SAW MILL RUN BRIDGE	BRIDGE REPLACEMENT (UNDER 20 FT)	100,000	525,000													
1002	2	70043	McMurry/Center Church Int	Intersection improvement and signalization at SR 1002 (East McMurray Road) and Center Church Road.	100,000	350,000	1,250,000												
1006	2	31168	LINDEN RD @ SR 1053	INTERSECTION RECONSTRUCTION	100,000	500,000													
1006	2	70044	Venetia/McCombs Rd Inter	Signal upgrade and intersection improvements at SR 1006 (Venetia Road) and McCombs Road; Peters Township.	100,000	250,000	500,000												
1009	2	31170	PIKE/ALLISON HOLLOW	INTERSECTION IMPROVEMENT	1,800,000	500,000													
1047	2	60352	SR 1047 MANIFOLD ROAD	HIGHWAY RESTORATION	550,000	1,200,000	1,200,000												
1087	2	30697	CROOKHAM BRIDGE	Bridge Replacement		125,000	0	500,000											
1087	2	30703	MINGO BRIDGE #2	Bridge Replacement	400,000	0	0	600,000											
2011	2	30725	McCLINTOCK BRIDGE	Bridge Replacement	250,000	200,000	50,000	700,000											
2011	2	30747	DEEMSTOWN BRIDGE	Bridge Replacement	255,000	500,000													
2020	2	30648	TEN MILE CREEK BRIDGE #1	BRIDGE REPLACEMENT	225,000	175,000	70,000	850,000											
2020	2	64942	SR 2020 SEG 80 BRIDGE	Bridge Replacement		200,000	228,000	240,000											
2040	2	60354	SR 2040 WILSON ST CORRIDOR	ADD CENTER TURN LANE	300,000	500,000													
2044	2	60347	MIDA HIGHWAY IMPROVEMENTS	HIGHWAY RESTORATION	1,500,000														
2044	2	60350	SR 2044 BRIDGE	BRIDGE REPLACEMENT	905,000														
4029	2	30576	AVELLA BRIDGE	BRIDGE REPLACEMENT	150,000	370,000	550,000												
4029	2	30632	PATTERSONS MILL BRIDGE	BRIDGE REPLACEMENT	100,000	370,000	525,000												
4029	2	30721	ARDEN BRIDGE	Bridge Replacement	150,000	250,000	390,000												
4037	2	30718	MIDWAY BRIDGE	Bridge rehabilitation	250,000	0	350,000	1,000,000											
4037	2	30896	ROBINSON RUN BRIDGE	Bridge Replacement	200,000	0	250,000	700,000											
4061	2	30635	BRUSH RUN BRIDGE	Bridge Replacement	125,000	450,000													
9900	2	30735	SHADY AVE BRIDGE	BRIDGE REHABILITATION	110,000	295,000	650,000												
9900	2	30829	RACCOON CREEK BRIDGE #7	BRIDGE REPLACEMENT	600,000														
9900	2	30992	TEN MILE CREEK BRIDGE #40	BRIDGE REPLACEMENT	135,000	130,000	20,000	862,500											
9900	2	30995	Chartier's Creek #61	BRIDGE REPLACEMENT. WASHINGTON COUNTY BRIDGE.	640,000														
9900	2	31072	WALL ST BRIDGE PIGEON #2	BRIDGE REPLACEMENT. WASHINGTON COUNTY BRIDGE.	690,000	685,000													
9900	2	31073	PIKE RUN BRIDGE #11	BRIDGE REPLACEMENT	25,000	500,000													
9900	2	47809	MARIANNA BRIDGE #3	BRIDGE REPLACEMENT. MARIANA BOROUGH BRIDGE.			100,000	720,000											
9900	2	47845	Mingo #10 Bridge	Bridge replacement	10,000			550,000											
9900	2	47849	MID WHEELING BRIDGE#4	BRIDGE REPLACEMENT	350,000														
9900	2	47858	PIKE RUN BRIDGE #24	BRIDGE REPLACEMENT	650,000														
9900	2	47865	DUTCH GLORY ROAD BRIDGE	BRIDGE REPLACEMENT		125,000		550,000											
9900	2	48483	BEBOUT ROAD INTERSECTION	INTERSECTION IMPROVEMENT	50,000	110,000	438,000												
9900	2	51261	CHARTIERS CREEK BRIDGE #40	BRIDGE REPLACEMENT		70,000	900,000												
9900	2	51263	WHEELING CREEK BRIDGE #10	Bridge Replacement	100,000	125,000	350,000												
9900	2	51406	T-892 FOX STOP ROAD CROSSING	BRIDGE REPLACEMENT	200,000	150,000	70,000	1,000,000											
9900	2	63590	Arrowhead Pedestrian Bridge	Trail Bridge Replacement on the Arrowhead Trail	350,000														
9900	2	64011	RACCOON BRIDGE #5	Bridge Rehabilitation	30,000	900,000													
9900	2	64013	MID WHEELING BRIDGE #1	Bridge rehabilitation	325,000														

Table 7.9: Washington County Transportation Improvement (TIP) Estimated Build Out Summary

SR	Project Status	MPMS	PROJECT	DESCRIPTION	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2025	2018
9900	2	70281	BUFFALO CREEK BR #4	Bridge replacement carrying T-487 over Buffalo Creek in Donegal Township (Rodgers Bridge); posted for 5 Ton weight limit.	170,000	125,000	0	700,000											
18	3	31190	SR 18/SR 3013 INTERSECTION	INTERSECTION IMPROVEMENT	700,000	650,000	0	3,000,000											
19	3	31191	DONALDSON'S CROSS ROADS	INTERSECTION IMPROVEMENT	200,000	400,000	0	1,025,000											
19	3	61987	19 & Valy Brk Rd New Inte	New InterchangeStudy: The purpose of this project needs analysis is to determine transportation related needs at the intersection of S.R. 19 and S.R. 1010 (Valley Brook Road).	700,000	0	950,000	5,000,000											
19	3	70045	SR 19 Early Opt Analysis	Corridor Safety Improvement Study (40 Miles)		100,000													
40	3	30930	US 40:I-70 to PA 18	WIDEN TO ADD LANE & REMOVE PARKING TO ADD LANE. SAMI-1	500,000	800,000	0	3,000,000											
40	3	50854	US 40 To I-70/79 Intrchng	RECONSTRUCTION			600,000	500,000		30,000,000									
70	3	30555	I-70 @ SR 2040	BRIDGE REHABILITATION	600,000	0	5,000,000												
70	3	30960	I-70 @ SR 2023	BRIDGE REHABILITATION		100,000	100,000	0	5,000,000										
70	3	47022	I-70 BRIDGE OVER SR 481	BRIDGE REPLACEMENT	640,000		180,000	8,000,000											
70	3	70047	Bentleyville Interchange	Upgrade Existing Interchange	1,500,000			1,500,000	27,000,000										
70	3	70048	I-70 Master Plan	Safety Improvement Study	1,000,000														
79	3	31182	I-79/I-70 INTERCHANGE	RECONSTRUCT INTERCHANGE	4,000,000	1,500,000	30,000,000	30,000,000											
88	3	31172	SR 88 @ SR 1006 INTERSECTION	INTERSECTION IMPROVEMENT	500,000	500,000													
88	3	57199	SR 88/ I-70 INTERSECTIONS	INTERSECTION IMPROVEMENTS	100,000	0	200,000	2,000,000											
88	3	57202	MAIN STREET	SIGNAL IMPROVEMENTS			100,000		30,000	200,000									
136	3	31067	GINGER HILL INTERSECTION	INTERSECTION IMPROVEMENT	120,000	310,000		2,000,000											
519	3	57201	SR 519 @ SR 980/SR 19	SIGNAL IMPROVEMENTS/CHANNELIZATION		50,000	175,000	4,000,000											
980	3	30746	SR 980 CHARTIERS CREEK BRIDGE	Bridge Replacement	100,000	175,000	200,000	600,000											
980	3	30898	CANONSBURG BRIDGE #2	BRIDGE REPLACEMENT		225,000	0	750,000											
980	3	31194	SR 980 APPROACH TO SR 50	INTERSECTION IMPROVEMENT	672,000														
980	3	63779	SR 980 BETTERMENT PROJECT	Betterment Improvement	25,000	80,000	1,000,000												
1077	3	30902	DONORA-MONESSEN BRIDGE	Bridge Rehabilitation	750,000	250,000		5,000,000											
2011	3	64947	PLUM RUN BRIDGE	Bridge Replacement	175,000	160,000	850,000												
4020	3	64212	SR 4020 BETTERMENT PROJECT	Betterment Improvement				75,000											
4049	3	30689	ARDEN BRIDGE #1	BRIDGE REPLACEMENT		150,000	0	1,500,000											
4049	3	31187	SR 4049 @ HUMBERT LANE	INTERSECTION IMPROVEMENT. SIGNAL IMPROVEMENT.	50,000	200,000	600,000												
9900	3	30741	WHEELING CREEK BRIDGE #8	BRIDGE REPLACEMENT	160,000	125,000	450,000												
9900	3	30979	PIGEON CREEK BRIDGE #30	BRIDGE REPLACEMENT	55,000			800,000											
9900	3	30985	Raccoon Bridge #33	Bridge Rehabilitation		125,000	140,000		600,000										
9900	3	47864	GRABLE ROAD CULVERT	BRIDGE REPLACEMENT		125,000		500,000											
9900	3	65226	CHARTIERS CREEK # 30	Bridge Replacement	25,000	0	0	700,000											
9900	3	65227	CHARTIERS CREEK #21	Bridge Rehabilitation			150,000	150,000	25,000	600,000									
9900	3	70284	MILLERS RUN #3	Bridge replacement carrying Mawhinney Rd (T-708) over Millers Run in Cecil Twp; posted for 5 Ton weight limit.		110,000	75,000	25,000	600,000										
70	4	31042	I-70 BRIDGE OVER SR 519	BRIDGE REHABILITATION		1,500,000	20,000,000												
70	4	31085	I-70 @ SR 2017 BRIDGE	BRIDGE REHABILITATION		200,000	8,000,000												
136	4	31028	SR 136 CURVE IMPROVEMENT	RESTORATION	730,000														
980	4	30897	SR 980 CANONSBURG BRIDGE #1	Bridge Replacement		25,000	900,000												
2020	4	31026	SR 2020 BRIDGE SEC F01	BRIDGE REPLACEMENT. BETTERMENT PROJECT.	40,000	1,200,000													
2079	4	51508	SR 2079 BRIDGE OVER PIKE RUN	Bridge Replacement		200,000	1,200,000												
9900	4	30732	CHARTIERS CREEK #58	BRIDGE REPLACEMENT		75,000	700,000												
9900	4	30976	CHARTIERS CREEK BRIDGE #63	Bridge Replacement	6,000	600,000													
9900	4	51260	TWO MILE RUN BRIDGE #4	BRIDGE REPLACEMENT				30,000	500,000										
9900	4	65950	Montour Trail Chartiers Creek Section	Construction of 6,200 linear feet of public trail with minor trail access for approximately 10 cars.		40,000													
	2		INTERSTATE PREVENT.MAINT.LI	Line Item	0	2,000,000	0	0	2,000,000	0	0	2,000,000	0	0	2,000,000	0	0		2,000,000
	2		BRIDGE PREVENT. MANT. LI	Line Item	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000		1,000,000
0	2	57140	DISTRICT 12-0 RAIL CROSSING PROJECTS	RAILROAD WARNING DEVICES. HIGH TYPE SURFACES.	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000		125,000
Var			Surface Improvement Projects		2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000		2,000,000
			Year Projects Completely Funded	**2018**															
			Project Costs		36,550,005	28,672,006	99,383,007	89,506,508	38,882,009	33,927,010	3,127,011	5,127,012	3,127,013	3,127,014	5,127,015	3,127,016	3,127,017	2,025	5,127,018
			TIP Revenues		25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000
			Net TIP - Annual		-11,050,005	-3,172,006	-73,883,007	-64,006,508	-13,382,009	-8,427,010	22,372,989	20,372,988	22,372,987	22,372,986	20,372,985	22,372,984	22,372,983	25,497,975	20,372,982
			Net TIP - Cumulative		-11,050,005	-14,222,011	-88,105,018	-152,111,526	-165,493,535	-173,920,545	-151,547,556	-131,174,568	-108,801,581	-86,428,595	-66,055,610	-43,682,626	-21,309,643	182,674,185	-936,661

Project status

1. **Budgeted to completion on the TIP in 2003 or 2004**
2. **Fully budgeted on the draft 2005-2008 TIP to the best of our knowledge**
3. **Partially budgeted on the draft 2005-2008 TIP due to budget shortfall**
4. **Initiated on a previous TIP, but not advanced on the draft 2005-2008 TIP**

***** All poject costs are subject to change as projects advance through construction***

Notes: grey boxes are based on estimates

D. Analysis & Recommendations

Future transportation planning and economic development in Washington County are intertwined. The interrelationship between the movement of people and goods with economic development is critical for long lasting economic sustainability. Land use and transportation are inherently tied together – each being, in some manner, influenced by the other. Washington County must remain diligent in the effort to act as a regional leader for transportation, land use, and economic development partnerships. Many factors are in the County's favor, which eventually could lead to its being known as a regional employment center.

Washington County officials have taken a proactive approach to integrating the role of transportation to the quality of life for residents and the viability of its economic base. Many studies have been completed for the region and the county to assess the compatibility the existing network of transportation linkages with future demands that are projected as well as to maintain a high level of safe travel. All of the previous studies can be viewed at the Washington County Planning Commission offices.

- The Route 19 Corridor Land Use Study was initiated in order to investigate the need for future improvements and changes in policies along State Route 0019. The goal of this study was to improve safety and identify ways to preserve the operational effectiveness of the State Route 0019 Corridor from Oak Springs Road in Washington County to the Allegheny/Washington County line. The study, which was completed spring 2005, analyzed historic, current, and projected land use and development patterns in Peters, North Strabane, and South Strabane Townships while identifying transportation impacts and deficiencies associated with these land use patterns. Various recommendations and implementation strategies have been provided to help address these issues along this corridor. One such recommendation is to develop an Implementation plan Penn DOT, SPC, and Peters, North Strabane, South Strabane Townships. It is recommended that Washington County support this effort.

- The Mon/Fayette Expressway project included an Impact Early Options Analysis that addressed I-70 to State Route 0051 Interchange. The Washington County Planning Commission, partnered with SPC and PADOT District 12-0, to develop the Mon/Fayette Expressway, Interstate 70 to State Route 0051 interchange Impact Early Option Analysis Study. Working with local officials, the planning partners identified numerous transportation improvements that need to be addressed in this area. Planning and transportation studies were also reviewed in this corridor. By combining this information a useful tool was developed for scheduling and programming projects. The study identified 20 projects and issues in the Mon Valley Area. Currently 14 projects in various stages are on the 2003-2006 TIP for implementation. It is recommended that Washington County continue to support the projects contained in the Impact Early Option Analysis Study as feasible.

- Route 18 Corridor Safety Study is being developed in a response to the numerous crashes that have been occurring along the State Route 0018 corridor. As development occurs and traffic increases along the study corridor, plans will be in place to mitigate many of the identified areas. Deficiencies include poor horizontal and vertical curves, poorly

planned ingress and egress directly into the State Route 0018 and numerous deficient intersections. The study will develop land use and transportation recommendation for the State Route 0018 in Washington County. The study will also include preparation of a needs study, conceptual plans, and cost estimates for improvements along State Route 0018 from State Route 0050 to State Route 4004 in Washington County. The estimated plan completion is 2006 and County officials should continue to support the completion of this important safety study.

- The Interstate 70/79 corridors continue to have the fastest growing volume of traffic in Washington County. This significant increase can be partly attributed to the increase in vehicle and freight movement across the United States. For instance, Interstate 70 was built in the 1950's, and many of its facilities do not meet today's geometric design standards. These cause operational (congestion) and safety concerns along the corridor. To address these deficiencies, the Master Plan for the Interstate 70 Deficient Corridor Study will start at the north junction and extend to the county line, and will address the above concerns by first identifying needs, developing a project schedule and plan for the necessary upgrades of Interstate 70. It is projected to forecast a 20-year improvement schedule. The anticipated starting date will be the fall of 2005 with the Master Plan completion expected in the fall of 2007. County officials should continue to support the completion of this important study.

  The Traffic study for Interstate(s) 70 and 79 will address the I-70 and I-79 corridors from the south junction of the two (2) interstates to the north junction of the two (2) interstates. A component of the study will be a detailed study of the Murtland Avenue Interchange (State Route 0019). The study will investigate options for congestion reduction and level-of-service improvements; including lane additions to create a six (6) land typical section and its applications. County officials should continue to support the completion of this important study.

- An additional traffic study that will be important for County officials to support is the State Route 0019 Corridor Study. This traffic study for SR 19 begins at the intersection with State Route 1045 – Oak Springs Road to the intersection with State Route 1047 – Manifold Road, South Strabane Township, Washington County.

- The TOPICS Program was established through the 1968 Federal Aid Highway Act, as a means to relieve congestion and reduce traffic accidents within urban areas. The program identified transportation improvements that would relieve congestion and improve traffic safety within an urban area. The TOPICS study involved extensive collection of data relative to traffic operations. This data was systematically evaluated to identify the most severe problem locations and then to assist in developing feasible solutions. Specific improvements wee then recommended which would alleviate the identified problems. While the original program provided a TOPICS Federal funding source, which has since been eliminated, the projects themselves remain valid and continue to be considered for inclusion on the TIP. Such items as signalization, widening for turning lanes, channelization and radius changes, parking modifications, and roadway lighting, along with the utilization of certain operational concepts, are among the more prominent types

of TOPICS improvements identified. Washington County identified two (2) TOPICS studies. The Mon Valley Area TOPICS which was completed in 1983 and the Washington Area TOPICS completed in 1979. Both TOPICS were developed in conjunction with the Pennsylvania Department of Transportation and the Federal Highway Administration.

- Mon Valley TOPICS study area consists of 25 municipalities along the Monongahela River and includes parts of four (4) counties – Washington, Westmoreland, Fayette and Allegheny. To maintain continuity and insure maximum project benefits, 25 recommended TOPICS projects were identified. Of the 25 recommendations, 18 were located in Washington County. A few projects were deemed questionable and removed from the list while other projects were completed or partially completed.
- The Washington Area TOPICS study area consists of a designated urban area comprised of the City of Washington, Borough of East Washington and portions of South Strabane Township, North Franklin Township, Canton Township and Chartiers Township. Improvements for 31 safety deficient locations and 23 capacity deficient locations were combined to arrive at a composite safety and capacity value.

Accessibility is largely dependent upon the design and layout of the street network. If roads are designed to facilitate the movement of people and goods in an effective manner, other modes of transportation will be supported as well. The major interstate and supporting roadway network will serve Washington County well in terms of accessibility issues. Additionally, the presence of the Monongahela River and extensive rail system lend to the county's attractiveness as an industrial center. These transportation resources position the county well in terms of overall attractiveness for businesses that utilize freight transport.

However, the roadway network in Washington County must have the attention of elected officials to address deficiencies and improve its extensive highway network. The County must be diligent in assessing, prioritizing, and programming specific improvements. Such improvements should address the following:

- Alignment geometry to reduce reverse curves, long tangents leading to sharp curves, and inadequate crest and sag vertical curves.
- Surface and subsurface drainage improvements
- Narrow lane width and shoulders
- Offsets in intersecting highways and streets
- Poor sight distances at intersections
- Fixed objects near roadways
- Improvement of intersection turning radii for heavy trucks
- Traffic signal upgrades including actualization, interconnectivity, preemptive, and televised operations
- Improvement of short and non-existent left turning lanes
- Improvement of unconventional intersecting highway configurations
- Pavement structures that are now inadequate for today's increased number of heavy trucks

The presence of the Washington County airport, combined with the close location of the Pittsburgh International Airport, results in aviation amenities that can serve local, regional, and international markets. According to the US DOT-Bureau of Transportation Statistics (2004), airfreight is the fastest growing segment of the American Cargo industry. Since 1993, the commodity value for airfreight has doubled while the total amount being shipped by air increased by 18 percent. Thus, it would benefit the County to direct future activities at the county-owned facility in a manner that will support business markets relying on high-end and time sensitive shipping practices. As well, it will be important to continue regional partnerships to support the Pittsburgh International Airport to County markets that have access to national and international markets.

With the recently commissioned ILS, the pace of business aircraft operations is expected to increase during the next five years from 40,000 operations (take offs and landings) to at least 50,000. Currently, 76 aircrafts are based at the airport. Within five years this number is expected to reach 100. A comprehensive land acquisition process is underway to allow for the expansion of aviation services (T-hangars and private aviation business hangers) on the north side of the airport to accomplish this goal. To complement this expansion, the runway will be widened and lighting systems improved in the short term. Longer term goals will be to relocate the terminal building and complete Taxiway B to fully service the hangers and business on the South side of the field as well as acquire additional properties currently operating off the field but accessing the airport under a “through the fence” agreement which provides a right of way to the airport for off base operators.

Development in this area will be limited by two controlling factors. First, surrounding municipalities have cooperated with Washington County to adopt airport zoning ordinances to control development within the various safety areas of the airport. These measures are critically important to ensure compatible land use around the airport. Second, vehicular access to the airport needs to be addressed. As more development occurs and traffic increases in the area, this issue will be exacerbated. A comprehensive review of traffic patterns in and around the Washington area should be conducted to determine if airport access could be improved as a part of an overall effort to address traffic flow around the city and surrounding area.

It should be noted that there must be a priority for the integration of land use planning and airport planning. While there is enormous potential for the Washington County airport to support economic development efforts, consideration must be given to local impacts in relation to agricultural areas, environmental issues and residential communities. Washington County officials will need to be diligent in their efforts to include all affected stakeholders. For instance, surrounding communities may fear new development at the airport dues to noise impacts. Therefore, there must be a clear understanding of what are compatible and incompatible uses near the Washington County airport.

Freight centers will remain a primary economic and transportation component. According to the US DOT-Bureau of Transportation Statistics (2004), trucks carry three fourths of the value of freight shipped in the United States and two-thirds of the weight. Rail ranks second in the most used mode of freight in terms of weight. Multiple source carriers of freight were second to trucks in terms of value. Connectivity should be the focus of planning for freight centers.

Trucking facilities and transfer areas should be included into any long range planning completed by the County. For instance, the County should capitalize on the existing industrial centers, rail lines and Monongahela River to support the trucking freight industry.

It is clear that local roadways such as State Route 837 would be unable to accommodate the freight demands of the Mon Valley industrial base if the rail and water freight infrastructure were to be permitted to deteriorate. The need for an interconnected, intermodal transportation network is essential. The time benefits of air travel are erased if the airport is not connected to a road system that permits the traveler to get to their final destination in a timely manner. The cost and environmental efficiencies of rail travel are eliminated if industrial development sites are not efficiently served by truck access routes as well.

Ongoing commercial use of the Monongahela River is essential to the efficient and safe movement of people and goods as well as the economic sustainability of the County. Maritime activities contribute significantly to the overall employment outlook for County residents as many jobs are generated because of the Port of Pittsburgh and Lock and Dam system on the Monongahela and other area rivers. As well, the navigable waterways provide a supporting role to local, national and even international shipping of goods. The services provided as a result of the river system lessen the amount of heavy goods being transported on the regional roadway system thereby reducing the negative impacts of freight shipments. Therefore, it will be important for Washington County to actively participating in the ongoing efforts to update the lock and dam system on the Monongahela River.

The replacement of the #4 Locks and Dams at Charleroi is essential to the ongoing utilization of the Monongahela River as a transportation resource and economic development opportunity. The Army Corps of Engineers estimates that an annual loss of over $300 million in transportation savings would be caused with a structural failure of the #4 Lock and Dam system. As well, the Corps identifies significant fiscal impacts from project delays. For instance, the cost of work increases by 2.7 percent each year and results in transportation inefficiencies of $30 million annually. Additionally, the Fiscal Year 2006 Appropriations Request form submitted to Congressman Murphy notes that 14,700 direct jobs and 57,000 indirect and induced jobs would be at risk if the navigation of the Monongahela River were to be disrupted. The Appropriations Request notes that the Lower Monongahela System links the country's largest metallurgical coke plan and coal resources to the Ohio River and other southern ports. Traffic on the Monongahela River is projected to increase from 22.6 million ton logged in 2000 to between 24.3 and 31.4 million tons in 2020.

Public transit will remain a needed, but under-funded, transportation element. Although the county has sufficient public transit amenities within the urban centers of the City of Washington and the Monongahela Valley, there are no public transit service opportunities for rural areas. Without a more thorough understanding of existing needs, this situation will continue. Therefore, Washington County will need to focus efforts on maintaining the existing transit systems and supporting new service connections within the county. County officials and the County Transportation Authority should work together to conduct the planned feasibility study to

asses County transportation needs, which then should be incorporated into the Washington County Comprehensive Plan.

Washington County remains dependent upon vehicular traffic in comparison to other transportation modes. This dependence creates congestion on many roadways as well as environmental concerns from vehicle emissions. As Washington County has a fully functional and well-developed roadway network, County Officials will have to remain diligent to direct resources to maintenance and safety improvements. County officials will need to cooperate with local municipalities, regional planning agencies, and state and federal transportation agencies to prepare improvement programs that align with local, regional, and state level goals.

One such goal will be to develop a multi-modal approach to transportation planning. For instance, there are projects included on Washington County's Transportation Improvement Plan for many roadways used by bicyclists. County officials should include bicycle-friendly concepts to provide improvements needed to accommodate bicyclists. Such improvements include wider shoulders, bicycle actuated traffic signals, bike lanes, and extensions of existing trail systems.

Trail systems will continue to grow in popularity. Washington County officials should continue efforts to acquire right-of-ways and abandoned rail lines for future development as trail amenities. As rail mergers occur, many short line rail lines may be abandoned thus providing additional opportunities for shorter localized trails. Such trails would serve as local transportation elements and provide recreational outlets as well.

Supporting a Countywide policy that promotes public transit and pedestrians access to shopping, parking, employment and recreation areas should be a high priority for County Officials. Oftentimes, parking lots are designed with little thought as to how persons will exit the vehicle and enter their destination. Attractive and highly visible crosswalks and sidewalks provide a range of movement for persons of all abilities and should be included in all new high-density developments—residential, commercial, and industrial. Additionally, public transit opportunities should be extended to provide service to high-density areas.

Access management will continue to be a vexing problem – one that if left unsupervised will increase the potential for vehicular conflicts and add to congestion on roadways. County officials should encourage the concept of shared parking areas, access roads, and reduction of egress and ingress on high traffic roadways. Much of the coordination for this effort will have to occur at the local municipal level. Therefore, Washington County must remain pro-active in its approach to network with local elected officials regarding access management and transportation planning.

Other concepts to include in Washington County's multi-modal approach should be an integration of park-n-ride areas along roadways with high levels of DMVT or when new intersections are constructed. By providing easily accessible and safe parking locations, the County may realize a higher number of persons who share rides to and from work or other activities.

Community character can be enhanced, or detracted, by the appearance of the built environment. No matter if it is a road, bridge, or sidewalk even the smallest of changes can have a dramatic visual effect. The use of natural looking elements or design features can transform the traditional concrete structure into an architectural masterpiece. The County should support the inclusion of context sensitive designs for all transportation improvement projects when possible.

Community character and awareness can be elevated by the signing used to notify a traveler of location, attractions, or amenities. As the County is placing a significant emphasis on its attractiveness as a historic destination, it will be critical to implement a well-thought out signing thematic and policy. The County should work with local and regional transportation entities and tourism agencies to develop a county theme that compliments regional tourism goals.

While many of the rural and more urbanized areas of the County have a sufficient transportation network, many of these systems are aging and becoming deficient in terms of functionality. As these facilities decline, travel becomes more difficult and expensive, thereby decreasing the quality of life and potential for economic development. It will be imperative that County officials work diligently to upgrade all roadways and bridges to ensure accessibility and mobility for all areas of the county.

E. Implementation Strategies

To fulfill the County Development Objectives, Washington County Officials should work with appropriate agencies to meet the following goals.

Continue to maintain and improve existing roads and bridges according to safety and mobility factors.

Action: Develop criteria for prioritizing projects.
Action: Involve SPC Public Participation Panel (PPP) in setting prioritization criteria for transportation projects.
Action: Champion selected projects by giving polished concise presentations at the PPP Transportation Improvement Plan (TIP) public meetings.
Action: Follow up with agency and elected officials and other decision makers once the project proposals are made.
Action: Increase involvement in SW Pa Commission.

Develop alternative transportation systems that are convenient and affordable to provide inter-connections to areas where people live, work and shop.

Action: Extend "T" stop to Southpointe and Canonsburg.
Action: Strengthen partnership between Mid Mon Valley Transit system and California University, creating a transit system that serves the entire Mon River Valley.
Action: Create a trails network that takes bicycle travel beyond recreation into becoming a viable commuter transportation alternative.
Action: Encourage transit-oriented development where amenities such as grocery stores, coffee shops, video stores, etc. are clustered around transit stops
Action: Increase the number of Park and Ride facilities, especially in the northwest area around Southpointe.
Action: Support the MAGLEV project at California University of Pennsylvania
Action: Support the county-wide study of transit needs proposed by the Washington County Transportation Authority.

Develop a long-range transportation plan that parallels the County's economic development strategy and guides the corresponding effect of development to benefit the county.

Action: Create a clear collaborative county-wide economic development strategy, with meaningful involvement from municipal officials, planners and all economic development agencies
Action: Communicate the overall economic development strategy to municipal officials and the public.
Action: Make better use SPC's traffic and land use modeling capabilities to project traffic problems and needs in rapidly developing areas and high volume corridors.
Action: Enhance the County technological abilities by developing a land use/transportation model to predict traffic impacts from proposed rezoning applications and land developments.

Action: Establish a county policy for the integration of rail, air, and truck modes for freight service

Encourage coordination and cooperation between transportation improvement projects and the County's transportation goals.

Action: Provide technical assistance to local municipalities regarding negotiations with transportation entities when local projects are consistent with the county's transportation goals.

Action: Ensure that local transportation projects are reviewed and consistent with county goals when funding applications, ordinance amendments, and development plans are submitted

Action: State and federal transportation agencies will be encourage to support only those transportation projects that are consistent with county goals. Action: Encourage the development of land use regulations that require vehicular inter-connections in new development

Support major transportation projects such as Mon-Fayette Expressway, Southern Beltway, and safety improvements to the Interstate System.

Action: Focus investment on I-70 between Belle Vernon and Washington, particularly at interchanges and bridges.

Action: Actively engage Congressional delegation to help move projects forward

Action: Separate River projects and highway safety projects.

Identify and acquire abandoned rail lines and facilities to make them available for conversion to trails.

Action: Create a functional trail network that serves commuters as well as recreational users.

Action: Conduct a comprehensive trail plan that includes potential corridors for acquisition, and an origin and destination survey.

Enhance waterway transportation on the Mon River for commodities and develop water transportation for the movement of people and goods.

Action: Take a regional approach to Mon River transportation infrastructure improvements.

Action: Educate the public about the recreational benefits of making the proposed river infrastructure improvements.

Action: Build partnerships with private business/industry, recreational users and public agencies to build a critical mass of support for infrastructure improvements.

Action: Actively advocate with the Congressional Delegation to sustain annual funding of at least $40 Million over the next decade to speed the completion of the two replacement locks at Charleroi as part of the Lower Monongahela River Navigation project of the Army Corps of Engineers.

Action: Improve the efficiency and cost effectiveness of the Fredericktown Ferry

Encourage pedestrian and bicycle pathways with new subdivision and development plans and improvements to existing residential/commercial development.

Action: Build partnerships with developers.

Action: Develop design guidelines, drawings, and sample ordinances for municipal officials and developers to use.

Action: Work with municipal officials to adjust/update subdivision ordinances.

Action: Encourage developers and municipal officials to connect individual subdivisions to encourage pedestrian and bicycle circulation and socialization among neighborhoods.

Action: Incorporate traffic calming design techniques in new and existing subdivisions to prevent pass-through/road running traffic in residential neighborhoods.

Improve and manage the Washington County Airport to maximize its economic development potential.

Action: Focus infrastructure investment on improving the interchange to the airport.

Action: Cooperate with other airports in the region to maximize all air facilities and create niches for each airport.

Action: Improve directional/wayfinding signage to the airport.

Action: Focus investments on extending the runway to accommodate bigger jets.

Consider the impacts of major transportation projects on local communities.

Action: Adhere to the NEPA 10-step process to minimize negative impacts to communities.

Action: Incorporate NEPA considerations into the project planning and prioritizing process.

Action: Work with SPC to conduct and manage transportation growth the Congestion Management Systems Program Monitoring Network.

Develop a strategy to capitalize on the regional significance of Pittsburgh International Airport.

Action: Support activities of the County Airport Committee.

Action: Coordinate efforts with the SPC airport planner

Action: Become involved in the Tri-County Airport Partnership founded to increase economic activity at and surrounding Pittsburgh International Airport.

Action: Cooperate with other airports in the region to maximize all air facilities and create niches for each airport.

CHAPTER 8. PARKS AND RECREATION

A. Introduction

The presence of recreational amenities and plentiful open space in Washington County provides a quality of life that is prized by residents and visitors. The county has beautiful vistas of forested and pastureland all of which contribute to the agricultural atmosphere long associated with Washington County. The County has a unique opportunity to capitalize on its many assets such as the Monongahela River, the vast amount of state game lands / state parks, its numerous historical sites, and the many cultural / environmental resources that are present throughout the county. Many of these features can be improved or highlighted as part of a unique outdoor experience. Parks and recreation facilities / activities have been shown to increase property values, attract business and industry, improve the overall health of the residents, and preserve the natural and cultural features of the area. Washington County officials understand these benefits and how they strengthen the economy and quality of life aspects.

To guide future recreation planning efforts in Washington County, the following objectives have been identified as guiding policies.

County Development Objectives

- Encourage cooperation between the public (federal, state, county and local) and private sectors to provide diverse recreational opportunities
- Preserve and strengthen existing recreation amenities
- Develop recreational opportunities that celebrate the natural, cultural, historic resources in the county and region

This section breaks down the facilities located within the borders of Washington County according to ownership in the following categories: State Facilities; County Facilities; and Public / Private Facilities. Regional facilities that are located outside of Washington County, but play a role in the recreation system, will also be addressed.

B. Background

In 2000, Washington County adopted a Comprehensive Recreation, Park and Open Space Plan and Master Plans for Mingo Creek and Cross Creek County Parks (Pashek Associates). The plan includes an inventory of facilities and programs, an assessment of administrative and maintenance procedures in place within the County and an overview of the financing for parks and recreation.

The Comprehensive Recreation, Park and Open Space plan was developed with the following Mission Statement: *"To provide for the leisure needs of residents and broaden the awareness of nature and history through regionally significant educational and wellness opportunities that bring all age groups together and enhance the quality of life."*

CHAPTER 8. PARK, RECREATION AND OPEN SPACE

As a part of the planning process for the recreation plan, a variety of public involvement techniques were used to collect residents' opinions regarding parks and recreation in Washington County. A recreation needs questionnaire was distributed to 6,888 households in Washington County in the spring of 1999 and 964 surveys were returned for a return rate of 14 percent. In addition, four public meetings were held throughout the County along with stakeholder interviews and study group meetings. The public input collected was used to develop the goals, objectives and strategies for the recreation plan. Goal statements were developed for each of the topics and are as follows:

Public Awareness and Communications

- To increase awareness of events, programs and the location of county park facilities and communicate the mission of the County Department of Parks and Recreation.

Intergovernmental Cooperation and Private Partnerships

- To make available opportunities for the development of collaborative agreements and relationships.

History, Tourism and Economic Development

- To promote the value of regionally significant facilities as an impetus for the interpretation of the County's culture, heritage and stimulating tourism and economic development.

Open Space, Greenways and Riparian Buffers

- To acknowledge and support preservation of unique natural resources and promote the value of greenways as linear parks for the enjoyment of future generations

Programming and Special Events

- To provide educational and wellness opportunities and support for special events.

Finance

- To ensure that an appropriate level of funds are available for the department to meet the recreation demands of current and future residents.

Maintenance

- To operate parks in a safe, efficient and effective manner.

Personnel

- To clarify staffing roles and increase the level of staff / volunteers to meet the future demand for programming, safety and maintenance.

Facilities

- To provide regionally significant facilities with an emphasis on nature and history to meet the changing needs of County residents.

Parks

- To maintain the unique character of each facility while expanding the number of safe leisure opportunities.
- Cross Creek Park
  - Develop a water-oriented park that supports fishing, hunting, boating, environmental education, trail use and group camping
- Mingo Creek Park

        - To preserve the special qualities of the stream valley and to provide opportunities for special events, fishing, passive recreation, group activities, trail use and interpretation of the County's history
    - Ten Mile Creek Park
        - To provide boating access to the Monongahela River and offer a variety of passive recreational opportunities
    - Panhandle Trail
        - To develop a safe, regionally important linear County park

With the successful implementation of the recommendations contained within the Washington County recreation plan, county residents would have a wealth of recreational amenities that would be accessible and meet identified needs. However, the actual implementation of the Comprehensive Recreation, Park and Open Space plan recommendations will require significant levels of funding to be dedicated to recreation. These recommendations would supplement other local and regional facilities that Washington County residents can utilize. Section C: Existing Conditions, address facilities available for recreational use including municipally owned, state owned, and County-owned recreation facilities. A brief overview of the Washington County Parks and Recreation Department is included to provide an understanding of the organizational capacity to provide recreational services to county residents.

C. Existing Conditions

State Facilities

The following recreational facilities are owned and/or operated by the Commonwealth of Pennsylvania.

Hillman State Park

The Pennsylvania State Game Commission owns Hillman State Park. Hillman is located in the northwestern portion of Washington County and occupies 3,654 acres of park land. Largely undeveloped, hunting is allowed in the park during regular hunting seasons and hiking trails are open to the public.

State Game Lands (SGL)

The Pennsylvania Game Commission was created in 1895 to manage wild birds and mammals throughout the Commonwealth. The PA Game Commission follows the following vision statement "A leader among conservation agencies, worthy of the public's trust, and champion of all wildlife resources and our hunting and trapping heritage" (PA Game Commission Strategic Plan 2003-2008). There are seven State Game Lands in Washington County, which provide a significant recreational resource for residents and visitors alike. According to the PA State Game Lands: Southwest Region, the State Game Lands in Washington County total 16,982 acres of public land as follows:

1. SGL # 117 2,972 acres
2. SGL # 232 5,266 acres
3. SGL # 245 3,653 acres
4. SGL # 297 631 acres
5. SGL # 302 587 acres
6. SGL # 303 222 acres
7. SGL # 432 3,651 acres

Total SGL 16,982 acres

The PA Game Commission has identified "the Designated Routes for Horses and Bicycles" throughout the Commonwealth. These routes total more than 1,000 miles in Pennsylvania are compliant with State Game Lands use regulations (2003). According to the updated regulations:

> "Anyone who rides a non-motorized vehicle, conveyance or animal on State Game Lands must do so only on designated routes. Such riding activities will not be permitted, except on Sundays or on roads open to public travel, from the last Saturday in September to the third

> Saturday in January, and after 1 p.m. from the second Saturday in April to the last Saturday in May." (http://www.pgc.state.pa.us/pgc/cwp, 2005)

However, it should be noted that these regulations do not apply to persons who are legally pursuing hunting, trapping, or fishing activities on State Game Lands. In Washington County there are several Designated Routes as follows:

SGL # 117—This 2 ¾ mile long route is located north of the Burgettstown High School. The route traverses through a reclaimed surface mine on a defined road to the parking lot just off of route 18 north of Burgettstown.
SGL # 232—This Designated Route is 2 ¼ miles in length and begins at the intersection of route 331 and route 221. The Designated Route leaves route 331 to the south (left) and traverses through the Game Lands to a parking lot along Dog Run Road.
SGL # 245—This Designated Route is approximately 1 1/3 miles and begins at the first gated internal Game Land Road on the south side of "Quaker Ridge Road: when entering from the east. This route follows a Game Lands road approximately 1 1/3 mile to a Game Lands parking lot on Craft Creek Road. A second portion of SGL #245 contains a 3.5 miles Designated Route, which starts on the north side of Quaker Ridge Road and begins at the first parking lot after entering the Game Lands from the east. This route follows an internal road north to Game Land Road where it passes another game land parking lot and turns back down where it ends at a second parking lot on Quaker Ridge Road approximately 1/4 mile west of the parking area.

Steel Industry Heritage Corridor

Created by Congress in 1996, the Rivers of Steel National Heritage Area is committed to preserving, interpreting, and managing the historic, cultural, and natural resources related to Big Steel and its related industries. Encompassing 3,000 square miles in the seven counties of Allegheny, Armstrong, Beaver, Westmoreland, Greene, Fayette, and Washington, Rivers of Steel is building on this area's remarkable transition from heavy industry to high technology and diversified services as well as bolstering the new regional economy by promoting tourism and economic development based on this region's historic industrial saga.

A multi-faceted program, the Rivers of Steel National Heritage Area's mission includes: historic preservation, cultural conservation, education, recreation and resource development. The Steel Industry Heritage Corporation (SIHC) that manages the River's of Steel program provides technical assistance, grants and grant workshops, and marketing support to areas identified in SIHC's Management Action Plan (MAP). In Washington County, the River's of Steel "Fueling a Revolution Journey" focuses on the Upper Mon Valley region.

National Road Heritage Corridor

The National Road Heritage Corridor (NRHC), formerly known as the National Road Heritage Park was designated as such in 1994. The mission of the organization managing this effort is to celebrate the history, culture and scenery of the one of the oldest byways, following U.S. Route 40 through Somerset, Fayette and Washington Counties. Similar to the River's of Steel Program, the National Road Heritage Corridor organization provides technical assistance, grants, and marketing support to areas identified in NRHC's Management Action Plan (MAP). . NRHC provides opportunities for grant funds specifically through the Pennsylvania Heritage Parks Program.

U.S. Route 40 remains an important feature of Washington County with its designation as a Pennsylvania Heritage Park in 1994, a State Scenic Byway in 1996, and in 2001 a National Scenic Byway—All American Road. This latest designation by the U.S. Department of Transportation, places U.S. Route 40 on the list of America's Scenic Byways along with other national transportation routes that have significant cultural, scenic, historic, archaeological or recreational features. This newest designation for U.S. Route 40 will play an important role in attracting federal and state attention and funding.

National Pike Days is an annual event, which promotes the first federally funded roadway in the nation, U.S. Route 40 or National Toll Road. The annual festival held in May crosses three counties (Somerset, Fayette and Washington) and is billed as the "world's longest festival" as it encompasses over 300 miles from Baltimore, Maryland to the Ohio state line. National Pike Days is a period oriented festival celebrating the days when the pioneers first began settling the west.

Fishing Lakes

There are three Washington County lakes that are managed by the Pennsylvania Fish and Boat Commission (PFBC):

- Canonsburg Lake
- Cross Creek Lake
- Dutch Fork Lake (drained 2005)

County Facilities

The Washington County Department of Parks and Recreation is responsible for 4,900 acres of park land in Washington County offering picnic shelters, nature trails, bicycle and bridle trails, hunting and fishing, as well as recreational programs and special events.

The County parks and recreation system is comprised of Cross Creek County Park, Mingo Creek County Park, Ten Mile Creek County Park, and the Panhandle Trail.

Cross Creek County Park

Cross Creek County Park is the largest of the three County parks and encompasses 2,400 acres of land, including a 258 acre fishing lake. Facilities present at the park include the following:

- Pavilions
- Picnic tables
- Grills
- Playground areas
- Boat launch
- Docks
- Handicapped Accessible fishing pier
- Horseshoe pits
- Trails
- Parking areas
- Restrooms

Cross Creek County Park (Mackin Photo, 2003)

Mingo Creek County Park

Accounting for 2,400 acres of land, Mingo Creek County Park lies just twelve miles east of the City of Washington off of PA Route 136. The Washington County Covered Bridge Festival is held annually in Mingo Creek Park, as two of the County's historic bridges (Ebenezer and Henry) are located within the park. It should be noted that other covered bridge sites are scattered throughout the county. Mingo Creek is a designated High Quality Trout Stocked Fisher and four miles of the stream are designated for fishing.

Mingo Creek County Park (Mackin Photo 2003)

The following amenities can be found in Mingo:

- Shelters / pavilions
- Observatory
- Picnic tables
- Grills
- Playground areas
- Restrooms
- Trails
- Multi-use field
- Model airplane field
- Parking areas
- 4 miles of creek

Ten Mile Creek County Park

At 25 acres, Ten Mile Creek County Park is by far the smallest in the County park system. This facility is owned by the Army Corps of Engineers but is managed under a 99-year lease agreement with Washington County. The County leases 12 acres from the US Army Corps of Engineers and owns the remaining 13 acres. Located near Fredericktown off PA Route 88, the park provides boat access to the Monongahela River. Amenities located in Ten Mile include:

- Pavilions
- Picnic tables
- Grills
- Playground areas
- Boat launch
- Dock
- Restrooms
- Parking areas

Ten Mile Creek County Park (Mackin Photo 2003)

Panhandle Trail

The Panhandle Trail is a 29-mile trail that runs from Walker's Mill, near Carnegie in Allegheny County, through the northern portion of Washington County and then over to Weirton, West Virginia. The trail is constructed along the former Conrail railroad line, which was known as the Panhandle Railroad that connected Pittsburgh to Cincinnati, Chicago and St. Louis. The portion of the trail within Washington County is 17.3 miles long. When the trail is completed, it will link the municipalities of Burgettstown, Midway and McDonald to a trail system in Weirton, WV, Pittsburgh, PA and ultimately Washington D.C. In Washington County, the trail is considered the fourth County park and is managed by the Department of Parks and Recreation. The Montour Trail Council manages the portion of the trail in Allegheny County while the Weirton Park Board is the trail manager in West Virginia.

Washington County Parks and Recreation Department

The Department has been in existence for more than 30 years and is housed under the Planning Commission along with the Bridge Department, County Airport and flood control projects. The County Parks and Recreation Department offers numerous recreational and educational programs in the parks. The Department publishes a program brochure annually, which lists and describes each program offered. Special request programs are available to youth and school groups and can be arranged by contacting the main park office. Programming assistance is provided by staff members as needed.

Parks and Recreation Staff

The Parks Maintenance Staff consists of a Superintendent of Recreation, two full-time and two part-time support staff. Seasonal staff is employed during the summer months to assist with the additional maintenance of the parks. The Recreation Staff includes a Superintendent of Recreation, a Program Coordinator, an Activities/Facilities Coordinator, a part-time per diem Program Coordinator, and a seasonal (June – August) weekend employee at Ten Mile Creek County Park.

Washington County Parks and Recreation also employs two full-time staff to monitor and maintain 10 Flood Protection Dams and 18 miles of Improved Stream Channel.

There are plans to add two additional maintenance employees when the Panhandle Trail becomes open to the public

Programming

Programs are offered year around in the Washington County Parks. While majority of the programming takes place in Mingo Creek Park, programs are offered in all three parks as well as the Courthouse Square, and occasionally are provided at "off site"

locations. Programming efforts are focused toward the natural and cultural resources that available in the parks.

Public programming is offered evening and weekends throughout the year. School Field Trip opportunities are available September – November and April through June. Pre-school programs are offered each month of the year. Needle and Yarn Craft workshops are offered nine times annually. Day Camping is offered for children 3 – 12 during the summer months of June – August. Four special events are held each year; these events attract hundreds of people to the County Parks for a day or weekend. The Mingo Creek Observatory was completed in 2005. Owned and operated by the Amateur Astronomers of Pittsburgh, the observatory provides public astronomy programs May – October. A sample of programs that were provided in 2005 is listed below.

Public Programs	
Owl Prowls	Bonkers for Bats
Star Parties	Salamander Search
Needle and Yarn	Fall Group Hayrides
A Visit to Frog Pond	Animal Tracking
Build a Bluebird Box	Spring Peepers
Pre-school Programs	
Diggin ‘dem Bones	Creek Stompers
Feathered Friends	City of Salamanders
Day Camps	
Nature Tracking	Wilderness Survival
Pioneer Living	Earth Explorers
Pee-Wee Camp	
School Field Trip Programs	
Invertebrate Exploration	Tree-mendous Trees
Soil Safari	Habitats are Important
Washington County Envirothon	
Special Events	
Maple Sugaring Breakfast	Morel Mushroom Weekend (2005 PRPS Award Winner)
Fall Fun Day	Spook-tacular Night Hike

The largest event held in annually at Mingo Creek Park is the Covered Bridge Festival. The festival is held at various covered bridges in Washington and Greene Counties the 3rd week of September each year. Mingo Creek Park hosts the festival at the Henry and Ebenezer Covered Bridges. The Washington County Tourism Promotion and the Washington County Mental Health Association in cooperation with Washington County Park and Recreation manage the festivals. The Covered Bridge Festival attracts well over 80,000 visitors to Mingo Creek Park.

Public / Private Facilities

In addition to the recreational facilities owned by either the Commonwealth of Pennsylvania or Washington County, there are numerous facilities that are publicly owned by local municipalities, quasi-publicly owned by non-profit organizations, or privately owned by local residents and businesses. While these facilities contribute greatly to the overall parks and recreation system in the County, they do not fall under the County's jurisdiction but are listed here to show the overall recreational network.

Golf Courses

Within Washington County, there are twelve public and nine private golf courses:

Public:

- Chippewa
- Quicksilver
- Rolling Green
- Village Green
- Indian Run
- Fox Wood Acres
- Dogwood Hills
- Fort Cherry
- Frosty Valley
- Linden Wood
- Maggi's
- Highland Springs
- Scenic Valley

Private:

- Pine Oaks Country Club
- Rolling Hills Country Club
- Southpointe Golf Course
- Valley Brook Country Club
- Washington Country Club
- Lone Pine Country Club
- Monongahela Valley Country Club
- Nemacolin Country Club

Water Access

The ability of residents to use the Monongahela River or other waterways, as a source of recreation is partly dependent upon the availability of public boat launches.

Monongahela River:

- New Eagle (Private)
  - Limited hours of operation, fee for use, shore fishing, large parking area, loading dock, surfaced ramp provides river access for deep-draft, high-powered recreational boats
  - New Eagle-Howard Street (PA Fish and Boat Commission)

- Fee for use, fishing pier, shore fishing, large parking area, loading dock, surfaced ramp provides river access for deep-draft, high-powered recreational boats

Monongahela Access (PA Fish and Boat Commission)

- Fishing pier, shore fishing, large parking area, surfaced ramp provides river access for deep-draft, high-powered recreational boats

Monongahela Aquatorium (City of Monongahela)

- Fishing pier, shore fishing, large parking area, surfaced ramp provides river access for shallow-draft, lightweight fishing boats, canoes, and inflatable water craft

Speers Landing Access (PA Fish and Boat Commission)

- This facility has a large lot for parking, a surfaced ramp provides river access for deep-draft, high-powered recreational boats

Wayne Street (Roscoe Borough)

- No parking area is provided, surfaced ramp provides river access for deep-draft, high-powered recreational boats

California (California Borough)

- This facility has on-street parking and a small lot parking, shore fishing is allowed, surfaced ramp provides river access for deep-draft, high-powered recreational boats

West Brownsville (West Brownsville Borough)

- Small parking area available, shore fishing and fishing pier, beach-type or unpaved ramp provides river access for deep-draft, high-powered recreational boats

Dammieco Marina (Private Facility)

- Shore fishing, large parking area, loading dock, surfaced ramp provides river access for deep-draft, high-powered recreational boats

Overtime on the Mon Restaurant (Private Facility)

- Facility assesses a fee for use, shore fishing, large paved parking area, loading dock, surface ramp provides river access for deep-draft, high-powered recreational boats

Elrama Street (unknown)

- Shore fishing, no formal parking, surfaced ramp provides river access for deep-draft, high-powered recreational boats

Ten Mile Creek:

Ten Mile Creek Park Washington County)

- Fee for use, fishing pier, shore fishing, large parking area, loading dock, surfaced ramp provides water access for deep-draft, high-powered recreational boats

Dutch Fork Lake:

West Side Access (PA Fish and Boat Commission)

- Electric motors only, shore fishing, large parking area, beach-type or unpaved ramp provides water access for shallow-draft, lightweight fishing boats, canoes, and inflatable water craft

East Side Access (PA Fish and Boat Commission)

- § Seasonal access only, electric motors only, shore fishing, large parking area, beach-type or unpaved ramp provides water access for shallow-draft, lightweight fishing boats, canoes, and inflatable water craft

Cross Creek Lake:

Cross Creek Lake Access (Washington County)

- o Limited hours of operation (dawn to dusk), fee for use, fishing pier, shore fishing, large parking area, surfaced ramp provides water access for deep-draft, high-powered recreational boats

Canonsburg Lake:

Canonsburg Lake Access (PA Fish and Boat Commission)

- o Electric motors only, shore fishing, large parking area, surfaced ramp provides water access for shallow-draft, lightweight fishing boats, canoes, and inflatable water craft

Trails

Montour Trail

The Montour Trail travels through the northern section of Washington County, linking trail systems in Allegheny County and West Virginia. The trail, when completed, will extend 47 miles, from Coraopolis to Weirton. Currently, multiple sections of the trail totaling over 40 miles are available for public use with new sections being added each year.

The trail is paved with a smooth surface of crushed limestone, which makes it ideal for all forms of non-motorized use: bicycling, walking, running, cross-country skiing, nature appreciation and in certain sections, horseback riding is also permitted. The Trail is under the ownership of the Montour Trail Council (MTC), a non-profit group. The MTC is responsible for trail development, operation and maintenance. MTC relies on corporate, foundation and government grants and private donations for funding. MTC has an active volunteer base who assist with maintenance and light construction (http://www.montourtrail.org/index.shtml).

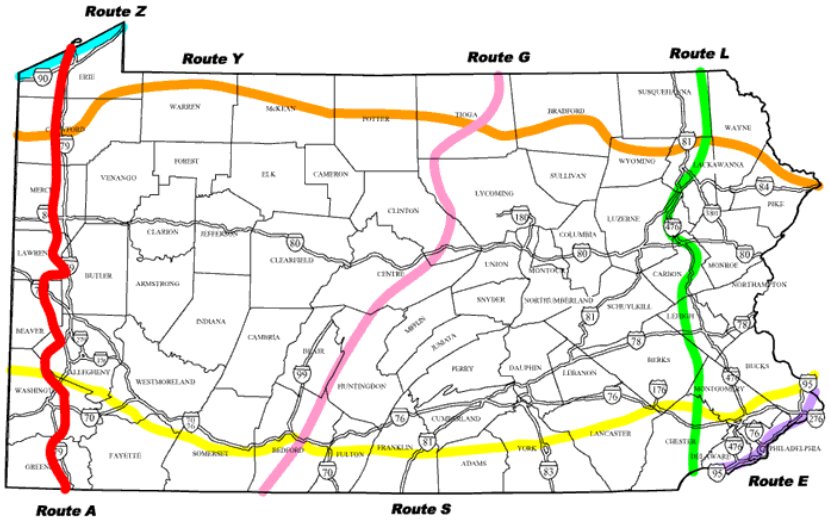
National Pike Trail

This proposed trail is currently under the planning state and is not open for public use. Nevertheless, when finished, the National Pike Trail will follow the US Route 40-National Toll Road through the western half of Washington County. The completed trail is expected to include nine bridges and four tunnels and will connect into the Wheeling Health Fitness Trail in West Virginia. The trail is managed by the National Pike Trail Council, the organization responsible for development of the National Pike Trail, and has currently 1.6 miles of land purchased.

Bicycle Paths

PA Route 19 doubles as BicyclePA Route A and traverses Washington County in a north-south direction. "The route stretches 199 miles from Erie, PA to Greene County, PA, just north of Morgantown, WV. The northern half is generally flat while the southern half is gently rolling to hilly. The northern terminus connects to BicyclePA Route Z and the Seaway Trail (www.bikepa.com).

BicyclePA Route S is the longest route and extends 435 miles from Washington County (east of Wheeling, WV) to Washington Crossing Military Park on the Delaware River in Bucks County, and skirts the metropolitan areas of Pittsburgh, York, Lancaster, and Philadelphia. Part of the route includes 65 miles along the Youghiogheny River and Allegheny Highlands Rail-Trails through southwest Pennsylvania.



BicyclePA Route Map (www.bikepa.com)

Campground Facilities

There are three campground facilities in Washington County.

1. Four Seasons Resort located in West Finley Township this facility has 200 campsites, motel, cabins, apartments, store, pools, and a variety of planned activities for campers. There is also 13 miles of ATV trails and hunting, fishing on 800 acres and 1000 acres of State Game Lands near the campground.
2. Pine Cove Beach Club and RV Resort located in Charleroi has full hook-ups for campers, lake front & large, level sites, a pool with waterslide, a hot tub and a sauna, two fishing lakes, and three pavilions.

Washington KOA this facility is located in Washington and provides full service RV & tent facility, cabins, a pool, store, laundry facilities, fishing areas, volleyball, horseshoes, and a pavilion, which is also available for rent.

Municipal Recreation Facilities

Many municipalities within Washington County offer recreational amenities and services, albeit to a varying degree. Table 4.1 provides a detailed listing of available recreational programming or facilities throughout the County. This information was given to the Washington County Planning Commission on a voluntary basis by each municipality.

Municipal Parks

Table 8: 1: Municipal Recreation Facilities

Municipality (* indicates Borough)	Parks	Acreage	Picnic Areas	Shelters / Pavilions	Playgrounds	Basketball	Baseball	Soccer	Football	Walking Tracks	Tennis	Special Event Areas	Pools	Hiking Trails	Horse Trails	Restrooms:
Allenport *	1	5.00	1	1	0	2	1	1	1	0	2	0	0	0	0	YES
Amwell Twp.	1	35.00	2	2	2	0	4	0	0	0	0	0	0	0	0	YES
Beallsville *	0	0.00	0	0	1	1	0	0	0	0	0	0	0	0	0	NO
Bentleyville *	2	5.00	1	2	1	1	1	1	0	1	1	0	0	0	0	YES
Blaine Twp.	Unknown															
Buffalo Twp.	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
Burgettstown *	3	0.00	1	1	1	1	0	0	0	0	0	0	0	0	0	NO
California *	1	1.00	0	0	4	1	0	0	0	1	0	1	0	0	0	NO
Canonsburg *	1	50.00	1	1	1	1	1	0	0	0	1	1	1	1	0	YES
Canton Twp.	0	1.00	0	0	0	2	2	0	0	0	0	0	0	0	0	YES
Carroll Twp.	Unknown															
Cecil Twp.	Unknown															
Centerville *	Unknown															
Charleroi *	Unknown															
Chartiers Twp.	3	105.40	0	2	2	1	0	0	0	0	0	1	0	0	0	NO
Claysville *	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
Coal Center *	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
Cokeburg *	1	0.00	0	1	1	2	1	0	0	1	0	0	0	0	0	YES
Cross Creek Twp.	1	0.00	1	1	1	0	0	0	0	0	0	0	0	1	0	YES
Deemston *	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	NO

Table 8: 1: Municipal Recreation Facilities

Municipality (* indicates Borough)	Parks	Acreage	Picnic Areas	Shelters / Pavilions	Playgrounds	Basketball	Baseball	Soccer	Football	Walking Tracks	Tennis	Special Event Areas	Pools	Hiking Trails	Horse Trails	Restrooms:
Donegal Twp.	1	8.00	1	4	0	1	5	0	0	0	0	1	0	0	0	YES
Donora *	3	125.00	3	3	3	1	4	2	1	1	2	0	0	1	0	YES
Dunlevy *	0	4.00	0	0	1	1	0	1	0	0	0	0	0	0	0	NO
East Beth Twp.	1	0.00	1	1	2	1	1	0	1	0	1	0	0	0	0	YES
East Finley Twp.	1	36.00	1	3	1	0	1	0	0	0	0	0	0	0	0	YES
East Washington *	0	1.00	0	0	1	0	0	0	1	0	0	0	0	1	0	YES
Elco *	1	6.00	0	0	1	1	1	0	0	0	1	0	0	0	0	YES
Ellsworth *	1	5.00	0	1	1	2	1	0	1	0	0	0	0	0	0	YES
Fallowfield Twp.	0	0.00	0	1	0	0	0	0	0	0	0	0	0	0	0	NO
Finleyville *	Unknown															
Green Hills *	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
Hanover Twp.																
Hopewell Twp.	0	0.25	1	0	1	0	0	0	0	0	0	0	0	0	0	NO
Houston *	1	0.00	1	1	1	0	2	0	0	0	0	0	0	0	0	NO
Independence Twp.	1	43.00	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
Jefferson Twp.	Unknown															
Long Branch *	Unknown															
McDonald *	2	0.00	0	2	3	1	5	0	0	0	1	0	0	0	0	YES
Mariana *	Unknown															
Midway *	1	2.10	0	1	1	1	2	0	0	0	2	0	0	0	0	YES
Monongahela	1		0	0	3	1	2	0	1	0	1	0	0	0	0	NO

Table 8: 1: Municipal Recreation Facilities

Municipality (* indicates Borough)	Parks	Acreage	Picnic Areas	Shelters / Pavilions	Playgrounds	Basketball	Baseball	Soccer	Football	Walking Tracks	Tennis	Special Event Areas	Pools	Hiking Trails	Horse Trails	Restrooms:
City																
Morris Twp.	1	6.56	1	1	1	0	3	0	0	0	0	0	0	0	0	YES
Mount Pleasant Twp.	Unknown															
New Eagle *	0	0.00	0	0	2	1	2	2	0	0	0	0	0	0	0	YES
North Beth Twp.	0	1.00	0	0	1	0	0	0	0	0	0	0	0	0	0	NO
North Charleroi *	Unknown															
North Franklin Twp.	0	0.00	0	0	1	0	0	0	0	0	0	1	0	0	0	NO
North Strabane Twp.	Unknown															
Nottingham Twp.	Unknown															
Peters Twp.	6	885.00	7	7	6	10	15	9	2	1	8	2	0	1	1	YES
Robinson Twp.	0	0.00	0	0	0	0	0	0	0	0	0	0	0	1	0	NO
Roscoe *	Unknown															
Smith Twp.	3	1.50	1	2	3	2	1	1	0	0	2	0	0	0	0	YES
Somerset Twp.	1	6.00	1	0	1	0	1	1	0	1	0	0	0	0	0	NO
South Franklin Twp.	2	13.00	0	2	1	1	5	0	0	1	0	0	0	0	0	YES
South Strabane Twp.	4	8.00	2	2	3	3	4	1	1	1	0	0	0	0	0	YES
Speers *	1	37.13	1	1	0	1	0	0	0	0	0	0	0	0	0	YES
Stockdale *	0	0.50	0	0	1	1	0	0	0	0	1	0	0	0	0	NO
Twilight *	Unknown															

Table 8: 1: Municipal Recreation Facilities

Municipality (* indicates Borough)	Parks	Acreage	Picnic Areas	Shelters / Pavilions	Playgrounds	Basketball	Baseball	Soccer	Football	Walking Tracks	Tennis	Special Event Areas	Pools	Hiking Trails	Horse Trails	Restrooms:
Union Twp.	2	10.00	0	0	2	0	1	1	0	1	0	0	0	0	0	YES
Washington City	1	260.00	1	5	6	3	8	0	0	2	8	0	1	0	0	YES
West Alexander *	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
West Beth Twp.	Unknown															
West Brownsville *	0	3.00	0	0	2	1	1	0	0	0	0	0	0	0	0	NO
West Finley Twp.	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
West Middleton *	Unknown															
West Pike Run Twp.	1	1.00	0	0	1	1	0	0	0	0	0	0	0	0	0	NO
TOTALS	47	1665.44	28	47	63	45	75	20	9	11	31	7	2	6	1	

Source: Washington County Planning Commission, 2005

Regional Facilities

Recreation demand and use transcends municipal and county boundaries. Therefore, it is important to look at the facilities located outside of Washington County as these sites play an important role in the regional parks and recreation system. These parks and recreation facilities range from large regional parks or unique activities that serve the entire Pittsburgh Metropolitan Area.

The following parks and recreation facilities are located within a short drive outside of Washington County's borders.

Raccoon Creek State Park

Located in southern Beaver County, just north of Washington County, Raccoon Creek State Park is 7,323 acres and has a 101-acre lake on site. The park is open for camping, swimming, fishing, hunting, boating, and hiking.

Ryerson Station State Park

As 1,164 acres, Ryerson Station is one of the smaller state parks and is located in the northwestern portion of Greene County. The park is home to the 62-acre Duke Lake and camping, fishing, boating, swimming and hunting are all permitted.

Settler's Cabin Park

This park is located in Robinson Township near the Pittsburgh International Airport in Allegheny County Park, Settler's Cabin is located in. Settler's Cabin is 1,589 acres and is home to the most heavily used wave pool in Allegheny County.

South Park

At 1,999 acres, South Park is the second largest park in Allegheny County. The park is located in both South Park Township and the Municipality of Bethel Park. South Park has numerous recreational amenities including two golf courses (18 hole-course & 9 hole-course), concert area and stage, horse barn and ring, DEK Hockey Rink, and exercise trail.

Round Hill Park

Round Hill is a very unique park within the Allegheny County Park system. Located in Elizabeth Township in southeast Allegheny County, Round Hill encompasses a modern working farm. The farm exhibit is open 365 days a year and hosts many school field trips and visitors alike. In addition to the farm, the park also contains picnic groves, a Visitor's Center, soccer fields and a bridle trail.

Cedar Creek Park

Located along the Youghiogheny River in Westmoreland County, Cedar Creek is a 464-acre County-owned park. Hunting, fishing, hiking, sledding, cross-country skiing, picnicking, playgrounds and biking are all available at the park.

Brooke Hills Park

Located in the Northern Panhandle of West Virginia, Brooke Hills Park is 740 acres and facilities include the Brooke Hills Playhouse, Golf Course, Trails, Batting Cages and a Pool.

National Recreation Standards

The National Recreation and Park Association (NRPA) is the nationally recognized authority on recreation planning and amenities. In 1996, the NRPA published standards for recreational facilities that can be followed by municipalities and counties as the complete recreational planning to determine specific localized needs (Mertes & Hall, 1996). Table 8.2: National Recreation and Park Association Standards for Recreational Amenities, lists the classification of recreational amenity, its general description, location criteria and service area, and size criteria.

Additionally, NRPA has developed a Level Of Service (LOS) formula that can be applied to determine detailed recreation demand. The formula is as follows (Mertes & Hall, 1996, p. 72-79):

1. Determine the type of parks or *Park Classification* for which LOS standards will apply
2. Determine typical *Recreational Activity Menus* for each park classification for which the LOS will apply
3. Determine the Park Size Standards for each park classification for which the LOS will apply.
4. Determine the present *Supply* for each recreation activity
5. Determine the *Demand* for each recreation activity choice
6. Determine the *Minimum Population Service Requirement* for each recreation activity choice
7. Determine the LOS for each Park Classification
8. Determine the Total LOS for the entire Park and Recreation System

Table 8.2: National Recreation and Park Association Standards for Recreational Amenities

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 a residential setting	Between 2500 ft. and one acre
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, combining 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 suitability 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

Table 8.2: National Recreation and Park Association Standards for Recreational Amenities

Classification	General Description	Location Criteria and Service Area	Size Criteria
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
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

Source: Park, Recreation, Open Space and Greenway Guidelines, 1996

D. Analysis & Recommendations

Washington County has a well developed parks and recreation system that encompasses over 4,900 acres. With three County Parks and a 17-mile Rail Trail, the County has a system that provides many recreational opportunities for residents and visitors alike. The existing system of parks and recreation is well maintained and is an example of the dedication that Washington County has shown to improving the quality of life for residents. To continue this trend, it should be a priority for the County to continually maintain and improve the parks. To accomplish this, the County should draw upon the information contained in the Washington County Comprehensive Recreation, Park and Open Space Plan with Master Plans for Mingo Creek Park and Cross Creek County Park (2000). This plan serves as a solid foundation from which to make future improvements to the recreational services sponsored by the County.

The Comprehensive Plan for Washington County included a public participation process that assessed the opinions of residents regarding many issues including recreational services. During the comprehensive planning process, public meetings were held at which residents and municipal officials were asked their thoughts and opinions on recreation facilities and services in Washington County. Figure 8.1: CEDARS Map is a compilation of input gathered at these meetings. The map spatially denotes recreational strengths and opportunities are in the County along with locations where recreation is perceived to be lacking or in need of improvement.

As shown on Figure 8.1, the public perceives many opportunities for trail development. As well, there are locations of historic importance that would provide recreational opportunities for area residents.

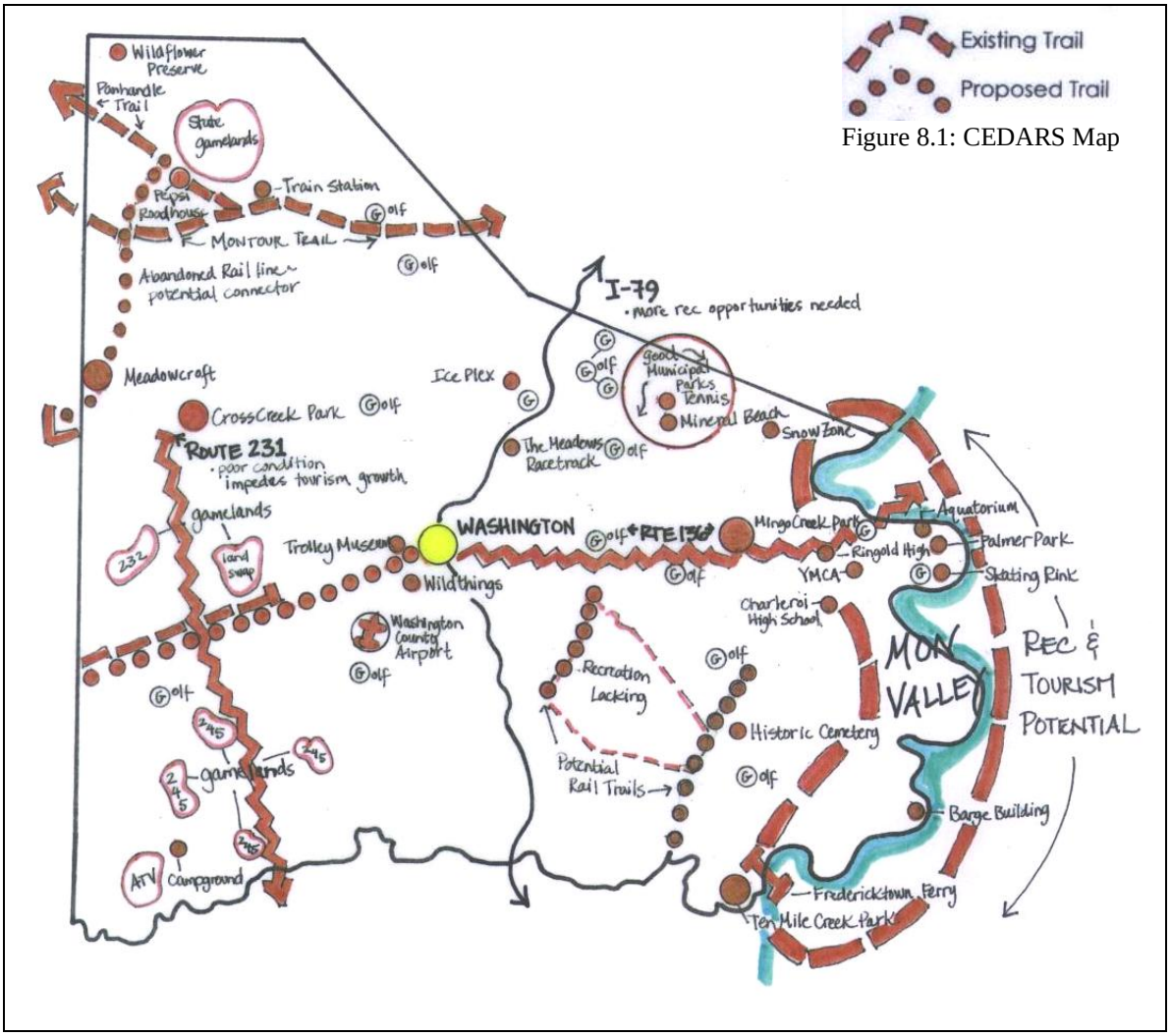


Figure 8.1: CEDARS Map

In addition to the public meetings, the comprehensive planning process included a public survey. The returned surveys were categorized by regions showing that many respondents had similar perceptions regarding recreational services. However, one major exception was that a much greater percentage of respondents in the Eastern regions rated the need for "More recreational assets along the Monongahela River" as the highest priority, (62% of respondents in the Eastern regions compared to 35 percent in the remainder of the County).

With the public participation process showing that, the Monongahela River was considered a top priority in terms of recreation and underutilized as a recreational amenity, it is strongly recommended that the County direct resources to capitalize upon the Monongahela River as a recreational resource. The County can accomplish this goal in numerous ways. Perhaps the most direct is to identify areas that can offer public access to the river and then work to improve those areas. With several public areas available, County officials should partner with local municipalities to secure funding and develop river-oriented recreation plans.

An existing water trail that ends at the southern section of Washington County along the Monongahela River is the perfect opportunity to direct funding to further develop an existing asset. The Upper Mon River Water Trail is a 65-mile section of the Monongahela River that begins in Fairmont, West Virginia and travels north to Ten Mile Creek just downstream of Rice's Landing in Greene County, Pennsylvania. The trail may be accessed from numerous sites on both the Greene County and Fayette County sides of the river. The trail is recognized as one the Major Greenway Corridors in Pennsylvania by DCNR. The trail is a project of the Morgantown Area Chamber of Commerce Vision 2020 and the Upper Mon Water Trail Special Interest Group.

The County should establish natural linkages to preserve open space and develop an extensive trail network. Residents and municipal officials alike felt that the County should concentrate on the development of new trails, with an emphasis on connecting greenways and recreation facilities. Greenways and trails offer many benefits and can enhance the sense of place in a community or region by accentuating the natural scenic beauty of an area. Greenways can protect water resources by buffering non-point sources of pollution as well as provide opportunities to protect and manage wildlife, forests and ecological systems. An additional benefit is the recreational opportunity that trails provide for families and individuals of all ages and abilities. Trails also provide alternatives to automotive transportation and reduce traffic congestion while at the same time fostering better health of trail users.

Washington County has the enviable position to have numerous historic and cultural resources that could be promoted as recreational opportunities to celebrate the natural, cultural, historic resources in the county and region. Tours and trips are an excellent way to capitalize on this form of recreation. These trips can be designed for all age groups and incorporated into other programs. Tours can include field trips for preschool age children to an extended vacation trip for senior citizens. To meet the needs of residents and to reach the different age groups a variety of different trips should be offered. Trips are popular as people of diverse interests can participate. Before adding this type of programming to the schedule, consideration should be given to the potential of developing a cooperative program with private organizations. A cooperative effort will provide a larger base to draw from and more influence when working with tour companies / agencies.

Cooperative programming partnerships are an excellent and effective way to expand recreational services. Small recreation departments usually want to offer their residents a more diversified selection of programs, however, due to limited staffing, financial restraints and facility availability, they are unable to do so. Through cooperative programming, the potential to expand is only limited by the amount of time that can be devoted to developing these programs. The county should support cooperative agreements with municipalities, schools and/or universities, churches, businesses, YMCA, sports associations to further develop recreational programming in Washington County. By engaging in such a cooperative effort, Washington County will realize many benefits. Such benefits may include the ability of the County to provide services to many more people by utilizing local recreational facilities. This can also create new program opportunities and a larger volunteer base from which to draw. By extending such services, the

County's own recreation staff will have access to other groups with a diverse knowledge base and skill set.

Locally provided recreation services are an important component of Washington County's leisure and recreational amenities. Municipal officials in Washington County indicated their need to have the County play a larger role in providing recreation services to residents. One such opportunity for the County to fulfill this need is to provide technical assistance to municipalities in terms of identifying and coordinating funding. Another option would be to provide staffing for recreation services or programs at local parks. The County can provide these types of technical assistance through a County Park Grant Program. This program would assist municipalities with their local park development efforts and completion of grant applications. These services and GIS mapping provided would be eligible to serve as an in-kind service to provide the municipal local match requirement when applying for funding from state agencies.

Pennsylvania has developed a "hub and spokes" approach to a greenways network. The hubs of the network range from destination areas, such as communities, to parks or lakes. The spokes are the actual greenways, which will connect the various historic, cultural and recreational areas with communities. Common types hubs include the following:

> Natural Areas: These include large blocks of publicly owned open space such as national and state parks, forests, game lands, and conservation areas that serve to protect important ecological landscapes and natural features, reserve scenic vistas, provide habitat for wildlife, protect water resources and provide recreational opportunities. Regional and local parks, preserves and ecological sites may also serve as hubs.
>
> Cultural, Historic and Recreational Sites: Community parks or cultural/historic sites that protect and interpret Pennsylvania's heritage also may be incorporated into the greenways network as destinations or "hubs."
>
> Urban and Suburban Areas: On a statewide or regional level, cities and towns can serve as origins or destinations within the greenways network. Within urban and suburban areas, opportunities abound to connect neighborhoods, schools, work places, recreation facilities, natural areas and parks through greenways. A greenways network also can incorporate former industrial sites, or brownfields, and spur the creation of new green space.

Washington County should act now to follow the state's lead and develop a countywide trails and greenways plan. This planning element would mesh with the planning efforts the county has dedicated its resources to thus far. By completing this project, the county would be eligible for additional funding from state agencies to preserve open space and natural areas.

E. Implementation Strategies

Encourage cooperation between the public (federal, state, county and local) and private sectors to provide diverse recreational opportunities

Action: Support the development of cooperative agreements with entities providing recreation and tourism services throughout the county

Action: Provide technical assistance to recreation and tourism facilities and programs

Action: Work with school districts to avail school facilities for use by residents

Action: Develop a recreation-oriented grant database

Preserve and strengthen existing recreation amenities

Action: Maintain and improve existing county and municipal parks and recreation plans

Action: Focus planning and investment on recreation needs of all citizens

Action: Develop new and creative programming for parks, recreational facilities and other recreational resources

Action: Consider the recommendations of the Washington County Comprehensive Parks, Recreation and Open Space Master Plan when developing local recreation plans

Action: Develop a long-range marketing strategy for recreation assets

Action: Upgrade, expand and promote county fairgrounds

Action: Develop a program to actively recruit and program the use of volunteers to develop recreation resources.

Develop recreational opportunities that celebrate the natural, cultural, and historic resources in the county and region

Action: The Washington County TPA should develop a heritage tourism marketing strategy

Action: The Washington County TPA should develop an agricultural tourism marketing strategy

Action: Include various tours in the marketing strategy (vehicular, bicycle, water, pedestrian)

Action: Continue the support and promotion of National Pike Days

Action: Continue the support and promotion of the Covered Bridge Festival

Action: Support the preservation of historical resources along US Route 40

Action: Coordinate with Steel Industry Heritage to develop the “Rivers of Steel Journey”

Action: Support the acquisition of lands for open space and recreational facilities for use by county residents

Capitalize upon the Monongahela River as a recreational resource

Action: Support the efforts of Greene and Fayette Counties to extend the Upper Mon River Water Trail (UMWT) to Pittsburgh

Action: Support river access opportunities

Action: Provide support to municipalities engaged in river conservation plans and other river-oriented development plans

Establish natural linkages to preserve open space and develop an extensive trail network

Action: Washington County should follow the state’s lead and develop a countywide trails and greenways plan

WASHINGTON COUNTY COMPREHENSIVE PLAN

CHAPTER 9. ECONOMIC DEVELOPMENT

A. Introduction

Washington County officials must take the lead to foster an economic environment that provides a profitable climate for employers. By supporting economic development strategies that encourage well-paying jobs, County residents will realize a higher quality of life. Such an environment is the result of sound investments in communities as well as diversifying the economic potential inherent in the urban and rural character of Washington County. The following County Development Objectives outline broad policy directions for Washington County in the effort to cultivate a profitable economic climate.

County Development Objectives

- Build wealth in the communities
- Promote quality employment opportunities that will allow individuals and families to pursue their desired lifestyle
- Balance development and open space/agricultural/recreational space
- Support business and educational strategies to support economic viability
- Guide infrastructure investment to support our existing community assets
- Recognize the value of and support the existing economic base
- Focus economic development efforts in the County

By working with local economic development organizations toward a common purpose, ensuring the responsible use of the land, and establishing policies that promote economic diversity, Washington County will have a bright future.

B. Background

Washington County can be characterized as a diverse landscape with both natural and built settings. According to the 2000 U.S. Census, 37 percent of Washington County's population was classified as "rural" compared to only 23 percent for the Commonwealth of Pennsylvania. This statistic is reflected by high-density residential, commercial and industrial areas coupled with large land tracts of open space present in Washington County. The rural nature of Washington County is protected as approximately 60,000 acres, more than 93 square miles, are enrolled in the Agricultural Security program as discussed in more detail under the Agricultural Section of this plan. This agricultural land accounts for 11 percent of the total land area of the County.

The historical economic trends of Washington County have been based upon fossil fuel (bituminous coal, petroleum, natural gas) extraction, mineral mining and glass production, and agriculture with steel production, metal fabrication, and industrial machinery and equipment production increasing in importance beginning in the early 1900s. Trends for the last 30 years have reflected an emergence of primary metal, metal fabrication, stone-clay-glass, industrial machinery and equipment sectors while coal-mining sectors continued to play a major role in the county's economy. Most recent trends, both locally and nationally, show a dramatic increase in service-related industries.

For instance, in 1970 the goods-producing sector accounted for 57.5 percent of the County's total employment with manufacturing having the largest employment base (42.5%). During this time, the service sector accounted for only 8.4 percent of employment with government at 1.0 percent. By 1996 the County's employment picture had changed drastically as manufacturing had declined to 17.8 percent employment, while the services sub-sector had increased to 26 percent and an increase in the government sector of 12.7 percent (Washington County Economic Development Strategy, 1999).

In 1999, the Urban Research and Development Corporation was commissioned to develop the *Washington County Economic Development Strategy*. The Urban Research and Development Corporation led a group of economic development, business, and government agencies to develop a thorough analysis of the existing economic conditions of the county as well as detailed recommendations to lead the effort for economic sustainability and revitalization. Many of the recommendations from the 1999 strategy have been implemented since the report was issued. The Washington County Comprehensive Plan provides an assessment of the 1999 strategy and builds upon the recommendations, but in no way is meant to replace the Washington County Economic Development Strategy. The Washington County Economic Development Strategy should be developed with consideration to sound land use practices and the recommendations contained within the Washington County Comprehensive Plan when developing general economic policies to guide economic development. It is recommended that the Washington County Economic Development Strategy be updated on a bi-annual basis and work as a living document.

The information gathered for the strategy indicated, "future development growth patterns need to promote greater parity among the communities." (p. 1). The strategy documented the economic

disparity that existed in the County with the less affluent municipalities being concentrated in the southwest, southeast, and northwest while more affluent communities were located, generally, in the middle of the county. Factors lending to more prosperous communities were the high levels of construction activities in Peters Township, North Strabane Township, South Strabane Township, and Somerset Township. The projections included in the Economic Development Strategy suggest that future socio-economic growth will remain concentrated in the center of the County and north with some growth occurring in the Mon Valley area.

The 1999 Washington County Economic Development Strategy noted that the County had only one industrial sub-sector that ranked as a high-growth area – the industrial machinery and equipment sector. The conclusion for the County's economic base was to introduce new industries and enhance the ability for companies to adapt to changing market demands. Such demands were identified as those related to biotechnology, management of information, advanced manufacturing techniques, and the development of advanced materials.

The Washington County Economic Development Strategy documented the swing from goods-producing to service-producing as both a local and national trend. With this trend, a more disturbing result has been the shift from higher-paying industry jobs to lower-paying service employment. However, Washington County was identified as being competitive compared to the SPC region in terms of both employment sectors, which was deemed positive in terms of overall growth and employment. Washington County was determined to have a higher proportion of low-growth industries than the SPC region or the Commonwealth.

The Washington County Economic Development Strategy also identified those industries that serve as export or import industries. As compared to the SPC region, in 1999 the County's export industries were mining, construction, retail, transportation-public utilities, and state and local government. It was noted that the mining, construction and transportation-public utilities sectors were projected to decline in total employment and would require intervention from economic development agencies or the government to lessen these losses. Suggested remediation included actions that would nurture the development of competitive, high-growth industries.

Washington County Sub Regions

The Washington County Economic Development Strategy determined that the different attributes of the County resulted in unique economic development advantages and opportunities specific to each area. Such attributes included waterways, major highways, public water and sewerage, air and rail service, agriculture, and proximity to the City of Pittsburgh. Such characteristics were to be built upon in each of the seven sub-regions identified in Washington County in order to realize economic growth that could be sustained across the county. The sub-regions were identified as follows:

- Route 22 Corridor
- Northern I-79 Corridor
- City of Washington Area
- Washington County Airport Area
- Mon Valley Area

- Rural Areas
- I-70 to West Corridor

The future development growth patterns should be directed in a manner that promotes greater parity by capitalizing on the strengths and minimizing negative impacts of each region. The Washington County Comprehensive Plan includes guiding principles that place the distinctive opportunities and constraints of each sub region into a development framework to tie the seven sub regions into a cohesive development strategy. These recommendations are based on sound land use principles. Further development of specific industry sector recommendations should be addressed by updating the 1999 Washington County Economic Development Strategy (WCEDS).

The Route 22 Corridor

The Route 22 Corridor traverses east and west in the northern part of Washington County through Hanover, Smith, Robinson Townships and Burgettstown, Midway and McDonald Boroughs. The proximity to northern West Virginia and the Greater Pittsburgh International Airport accompanied by excellent highway access make economic development conditions favorable. Since vast amounts of the landscape in this area were previously used for strip mining, emphasis should be placed on the development and reuse of these areas.

Since the completion of the WCEDS plan, two major infrastructure projects have provided public sewage to the Burgettstown and Midway areas. With the sewage infrastructure now in place, community revitalization opportunities exist. A third project is currently seeking financing to provide public sewer service to the Paris, Bavington, and Florence areas, which includes the Starpointe Industrial Park. This project will present business expansion opportunities along Old Route 22 where the lack of public sewage has impeded the economic development potential of this area.

Current initiatives in the Route 22 Corridor include the development of a 1,153-acre brownfield site into the Starpointe Industrial Park in Hanover and Smith Townships in Washington County. The Park will have build-ready pads ranging in size from 2-7 acres with an average size of 4 acres, with larger sites to be available in Phase II. There will be an estimated 9,000 new jobs at the completion of all build outs at the park. An additional economic initiative in this corridor is the Beech Hollow KOZ. The proposed project will consist of a co-generation plant that will consume coal refuse from the largest coal gob pile east of the Mississippi River. This project will not only have a positive economic effect on the region but its environmental benefit will be profound by eliminating coal refuse that has plagued the Route 22 corridor for 22 years.

Other economic activities in the Route 22 corridor include tourism. The aforementioned infrastructure projects will allow for the expansion of the Quick Silver golf course, new Bed and Breakfast type establishments for visitors utilizing the Panhandle and Montour Trails, and other amenities.

Northern I-79 Corridor

The Northern I-79 corridor includes Houston and Canonsburg Boroughs, Cecil, Chartiers, North Strabane, and Peters Townships and a portion Nottingham Township. Two major roadways are

located in this corridor, Interstate 79 (I-79) and U.S. Route 19, which provide excellent access making this corridor regionally significant. This corridor is noted for its available infrastructure, proximity to Allegheny County and high levels of residential, commercial, and industrial growth. Due to the level of new development that has occurred within this corridor, much of the infrastructure network (i.e. roads, sewage) is at capacity and beginning to show signs of deficiency. Future development and transportation planning in this area should be coordinated to assure economic viability and minimize negative impacts on communities in the corridor. Partners in these coordinated efforts should include both private and public sectors such as:

- Existing Businesses
- Developers/Builders
- School Districts
- Local municipalities and authorities
- Residents
- State and County Government agencies

The following is a list of current coordinated efforts between private and public partnerships:

- Route 19 Corridor Study
- Chartiers Creek Flood Task Force
- Southpointe Interceptor Expansion Study
- Canonsburg Lake Master Plan Study
- Chartiers Creek Rivers Conservation Plan

These current partnerships are critical in maintaining the Northern I-79 corridor's status as a regional economic generator.

The Meadows

The Meadows is a harness racing facility located off I-79 at Exit 41 in North Stabane Township. It was established in the 1960s and has been a popular destination for people throughout southwestern Pennsylvania and the bordering states of West Virginia, Ohio and Maryland. The year-round racing schedule includes the $1,000,000 Coors Delvin Miller Adios Week every August and is highlighted by Pennsylvania's richest stakes race, the $500,000 Adios Pace for the Orchids. This race attracts some of North America's best Standardbred horses, owners, and drivers. Approximately 225 people work at the Meadows, which is also home to about 600 horsemen.

A major impact to The Meadows and the economy of Washington County may come as a result of the July 2004 Pennsylvania Legislature and Governor Ed Rendell's decision to approve up to 61,000 slot machines at potentially fourteen venues around the state. The Pennsylvania Race Horse Development and Gaming Act states that the venues must include seven horse or harness-racing tracks. Accordingly, The Meadows is in line to become one of the licensees and is anticipating a license by mid-2006. Of the anticipated $3 billion a year that the slots may generate, forty-eight percent will be kept by the licensees, the Commonwealth would receive thirty-four percent, and the remainder would be divided by the equine industry, public construction projects, and counties and municipalities where these slots parlors are located.

If the installation of slots at the Meadows comes to fruition, coupled with existing big box and entertainment developments, there exists a very real possibility that this part of Washington County could become a regional commercial and entertainment destination. The large number of visitors that are anticipated will provide an influx of new dollars into the local economy. The Route 19 Corridor from Racetrack Road to the Murtland Avenue (I-70) interchange has seen an increase in residential and commercial growth over the last 10 years and presently has over 500 acres of proposed developments awaiting approvals.

With the availability of open land around the Racetrack Road / I-79 Interchange and within the Racetrack Road / Route 19 Corridors, any future growth should be managed so that it does not create adverse impacts to existing residential and commercial developments or infrastructure system - including roads, water and sewer. Also, impacts on environmental resources should be minimized through proper site development practices. This is especially important to help reduce stormwater runoff in this watershed because of the current flooding problems associated with Chartiers Creek.

The City of Washington Area

The City of Washington area houses the County Seat and is located at the junctions of Interstate 79 and Interstate 70. This area also encompasses Canton and South Strabane Townships. Excellent highway access in the City of Washington area provides a direct link to major population centers throughout the nation. This particular corridor is one where many older communities remain alongside brownfield and grayfield sites. These once viable communities have suffered from the general decline of former industrial sites. Future economic development strategies for this corridor should include revitalization and reuse of these vacant and/or underutilized brownfield sites. The following is a list of potential active sites for redevelopment:

- Canton Township Industrial Park Revitalization
- City of Washington Detroit Street Project
- Washington Mall
- Washington and Jefferson College Expansion
- City of Washington Main Street Revitalization

As evident by the commercial advancement of Trinity Pointe and Strabane Square in South Strabane Township, the City of Washington corridor is strategically located for retail development. However, the existing road infrastructure is at capacity. While future large scale retail development should be coordinated with the local officials it must also be coordinated with transportation entities providing service within the Northern I-79 corridor to guarantee proper improvements are made to minimize impacts on existing businesses and communities.

As retail development strains the local roadways to below safety standards, other forms of coordinated transportation need to be explored. The City of Washington area has an existing rail system that is not utilized to its fullest potential. To minimize road deterioration from the movement of freight, a multi-modal transportation system should be investigated.

The City of Washington area is pivotal in creating a critical mass of historical and cultural assets strengthening the tourism sector in the region. This area is venerated with a unique blend of historical and cultural amenities such as the following:

- Washington County Courthouse
- B&O Train Station
- Bradford House
- Lemoyne House
- Historical Washington Downtown District which includes the newly renovated Uptown Theater

The continued development and promotion of these sites will greatly benefit downtown commercial businesses and restaurants as well as hotels within the County.

The Washington County Airport Area

The Washington County Airport area encompasses North and South Franklin Townships and Green Hills Borough. This area is fortunate to have two major assets: the Washington County Airport and the Washington Crown Center and sports complex area. Surrounding the developed areas of this sub-region is a transition of land use into a rural area with an agricultural character.

The Washington County Airport generates in excess of $16 million in economic benefits to Washington County. Over the past 15 years, several projects have been completed to expand and improve the airport for business and recreational users. The majority of economic activity in this area has been directly related to providing aviation services. While the airport is identified as an economic generator, there is minimal infrastructure in place to support large-scale development.

Future development in this area can either be enhanced or negated by the municipalities surrounding the airport as well as the current system of vehicular access to the airport. Local officials will need to cooperate with the County to adopt land use regulations such as zoning to control development within the various safety areas of the airport. To address the road capacity, a comprehensive review of traffic patterns in and around the Washington area should be conducted to determine if airport access can be improved as a part of an overall effort to address traffic flow around the city and surrounding areas

The Washington Crown Center area is slowly transitioning from a local retail center into a regional destination with the additions of Falconi Field, Washington and Jefferson College (W&J) Sport Complex, and the Pony League Baseball Fields. These facilities are utilized by the Pittsburgh Riverhounds soccer club, Washington Wild Things baseball team, W&J and California University sports' teams, Pony League Baseball and other entertainment activities. Events at these facilities have attracted over 400,000 visitors to the region. The Washington Wild Things alone will typically generate over $7,165,000 in indirect spending into the local economy.

These venues compliment the City of Washington area and County efforts to create a mass of tourism opportunities. A transportation enhancement of West Chestnut Street from the City of Washington area will provide a link to the Washington Crown Center area. This connectivity is essential to take advantage of the tourism potential of the City of Washington and this sub-region.

Mon Valley Area

The Mon Valley area includes 21 municipalities and runs parallel with the Monongahela River from Union Township in northern Washington County to Centerville Borough in southern Washington County. The major assets in this area are the Monongahela River and the existing transportation network. The general characteristics of this area include communities built around or near industrial plants or mining areas that have since become brownfield and grayfield sites.

These once vibrant communities relied heavily on manufacturing activities for their sustainability. These communities took a major economic blow in the 1960's when US Steel shocked the entire Mon Valley with the devastating news that it was permanently closing the historic American Steel & Wire plant. This plant contained the country's largest zinc works and had over 7500 employees from communities throughout the Mon Valley area. Some of the Mon Valley communities have never recovered from this severe economic set back.

The direct access to highway networks and existing infrastructure can be used to facilitate the revitalization of these communities. The reuse of these sites will create numerous opportunities not only economically but also socially. The Mon Valley area needs to take advantage of excellent infrastructure through reinvesting in existing communities to create family sustaining jobs and additional social and recreational amenities that once prospered in this area. Revitalization efforts need to take into account all facets of quality of life initiatives to help the Mon Valley compete on a regional basis with jobs and amenities readily available in flourishing communities.

The Mon Valley has more industrial redevelopment opportunities than any other area in Washington County. However, the Mon Valley has not been utilized to its fullest potential as it was in its past "economic prime." To reverse this trend a strategic plan that coordinates with neighboring counties should be developed to identify the area's assets such as the Monongahela River, existing rail network, abundant natural resources and transportation system, and develop an economic strategy that is cohesive with the County's.

Rural Area and Interstate 70 Corridor

This sub-region is primarily an "agricultural belt" consisting of the western and southern tiers of Washington County. Many small communities dot the landscape. These communities developed due to the extraction of natural resources around the turn of the century. Interstate 70 (I-70) is the primary transportation system with numerous state roadways providing additional access. I-70 reflects the potential for business relationships and other linkages within the rural areas. Heavier concentrations of economic development should be encouraged along I-70 around communities with existing interchanges such as West Alexander, Claysville and Bentleyville.

Two major impacts have occurred since the most recent County economic development strategy was completed, Alta Vista Industrial Park near the Bentleyville Interchange of I-70, and the development of the West Alexander Sewer Project. The lack of sewage infrastructure in the West Alexander area has been a limiting factor for economic development. Recent sewage expansion and development in the northern panhandle of West Virginia have opened up the potential for the creation of "family sustaining jobs" that will support the rural communities.

Since this sub-region is predominantly agricultural in nature, new development should be low density residential and agribusiness type activities to minimize land use conflicts. Maintaining the rural landscape and agricultural character is an important component of the County's economic development strategy. It is an essential strategy for this sub-region as there are many tourism-oriented destinations within the area, such as:

- Meadowcroft Museum
- Historic Route 40 which includes Scenery Hill
- Weatherby Farm Vacation
- Rosefield Farm Bed and Breakfast
- C.T. Miller Winery

Economic development efforts should be made to incorporate agriculture and tourism in this sub-region to maximize the potential of these two important industries.

Aviation/Airport

The economic impacts of aviation facilities are a result of many aspects of an existing airport – private or public. Such economic benefits include employment, governmental spending, visitor spending, and supporting service costs.

Currently, three (3) airports provide service for the Washington County area. These airports and their locations are as follows:

- Washington County Airport – South Franklin Township
- Finleyville Airpark Airport – Finleyville
- Bandel Airport – Somerset Township

The Washington County Airport—This County owned and operated facility is located in South Franklin Township. The facility can accommodate 100 aircraft and has 37 T-hangers and seven corporate hangars. The airport has over 300 acres and has an asphalt runway that is 5000 feet in length. The full parallel taxiway system is fully lit for night operations. The airport has many technological advances including a partial electronic guidance system consisting of a Localizer, Distance Measurement System (DME) and Nondirectional Beacon (NDB), a Remote Communications Outlet (RCO), an automated Weather Observation System, and an Instrument Landing System (ILS). The Washington County Airport is expected to complete a Master Plan and Environmental Impact Assessment and complete runway renovations beginning in 2005. The total economic benefit derived from this facility in 1999 was estimated to be $16,568,600 (PA Bureau of Aviation).

Over the past 15 years, several projects have been completed to expand and improve the airport for business and recreational users. Both Special Project Grants and Capital Project Grants administered by Penn DOT Bureau of Aviation have totaled over $10,000,000 since 1988. Projects consisted of general maintenance and rehabilitation, purchasing of equipment and major capital improvement. Major projects completed since 1988 include the following:

1. Complete Runway Rehabilitation $2.1M – 1988-1991.
2. New T-hangars $800,000 – 1993-1994.
3. Construction of Taxiway A $3,400,000 – 1994-2001.

4. Instrument Landing System (ILS) $1.29M – 2005.
5. Safety Improvement to Runway $1.67M – 1997.

Future improvements to the Washington County Airport are depicted in Table 7.7. As shown by the overall schedule and budget, the County is placing a high priority on improvements to the County owned facility.

Agriculture

According to the Pennsylvania Farm Bureau, agriculture and its related industries provides one out of every five jobs in the state with about two million people across the state who are employed directly in farming. The importance of the agriculture industry to Washington County cannot be overlooked. Recent numbers provided by the U.S. Department of Agriculture-National Agriculture Statistics Service (2003) indicate that agriculture remains an active industry for Washington County. Washington County ranks third in the Commonwealth in the total number of farms per county—falling closely behind York County's 2,550 (Lancaster County ranks first with 5,305 farms). In 2003, Washington County ranked second in the number of sheep farms (205), although it had the highest total number of sheep; second highest number of Cattle Farms (1,210); fifth highest number of poultry farms (217); and, was tied with Franklin County for the sixth highest number of hog farms (100). In terms of crop production in 2003 Washington County ranked second in the Commonwealth in the production of alfalfa hay, third in dry hay/other, third in dry hay/all, and fifth in forage/all (USDA, NASS 2003). During the planning process, it was determined that the extent to which the Agriculture Industry affects Washington County's economic sustainability, a separate plan element address agricultural issues was warranted. Please see Chapter 10.A: Agriculture for a more detailed discussion of agricultural issues and economic impacts.

Tourism

Recent trends have continued to position tourism as Pennsylvania's second largest industry. In 2003, tourism spending in the Commonwealth reached $23.45 Billion, supporting 555,442 jobs, wages in excess of $16 Billion, and State and Federal taxes of $6.23 Billion. In several categories, Pennsylvania has now outpaced the national average in percentage of tourism growth.

Washington County is strongly impacted by tourism's growth as an economic generator, drawing $234.5 Million in direct and indirect tourism spending in 2003 (D.K. Shifflett, Inc.). At the same time, tourism employment provided more than 5,000 local jobs with combined wages of $154,885,000. County taxes due to tourism product and wages reached a combined $59,500,000 ($36.5M Federal, $23M State & Local).

Washington County is well situated to take advantage of several visitor markets. Its placement at the crossroads of major interstate highways allows quick access for nearby visitors and delivers a pass-through market with huge potential. Ribbons of country roads and the National Road Scenic Byway open up the interior for travelers seeking quieter passage. Visitors from Pennsylvania, parts of Maryland, West Virginia, and Ohio find it especially easy to consider Washington County for a short trip.

Close to the urban attractions of Pittsburgh and the Laurel Highlands, Washington County compliments both in several ways. Authentic and significant early-American history resides here alongside staples of Americana like small-town life, covered bridges, horseracing, and minor league baseball. The Pennsylvania Trolley Museum has a particularly cross-generational appeal.

Recent trends are expected to continue, with many leisure travelers looking to add short, easy get-aways to their anticipated travel plans. These short trips often focus on an immersion by the traveler into a pastime that they love to pursue, such as birding, hiking, antiquing and more. The Washington County Tourism Promotion Agency and County Officials should continue to encourage tourism development that enhances the wealth of existing products and services, and seek out ways to market to the interested traveler.

C. Existing Conditions

Pennsylvania Economy

Between 1990 and 2001, the state's population growth was only one-fourth that of the country and the rate of job growth in Pennsylvania was much lower than the national average (The Pennsylvania State University, Center for Economic & Community Development, 2002). The Pennsylvania State University, Center for Economic and Community Development publishes an annual report that provides long-term and recent changes in total employment, unemployment, population, and per capita income; both statewide and on a county basis. In addition to providing an overview of the most recent economic trends (post-2000), the "Update on Pennsylvania: Road to 2005" also provides short-term statewide forecasts of key economic indicators. Since 2000, Pennsylvania has experienced recession, recovery, and recently slow growth. While unemployment and per capita income levels are on pace with the nation, job growth in Pennsylvania has been slow and not near the rate of the U.S.

Of the top ten largest employing industries in Pennsylvania, only five of them had an increase in employment between June 2001 through 2003, with ambulatory health care services leading the increase with 15,213 new jobs. The administration and support services industry had the largest loss among the top ten employers with (-)17,985 lost jobs. Table 9.1 lists the top ten job growth industries for Pennsylvania (among 3-digit NAICS industries). The table displays the rank order of each industry as well as actual number and percent change in employment. As shown, ambulatory health care services had the largest total number increase with 15,000 new jobs since 2001 (+ 7.0%), while wholesale electronic markets, agents & brokers had the largest percentage increase at 18.2 percent (6,463 total number increase).

Table 9.1: Job Growth: Pennsylvania's "Top 10" Industries, June 2001-2003

Rank	*% Change in Employment*	*Industry & NAICS*	*# Change in Employment*
1	7.0	Ambulatory health care services (621)	15,213
2	2.9	Food services and drinking places (722)	9,898
3	5.4	Nursing and residential care facilities (623)	9,517
4	14.8	Management of companies and enterprises (551)	8,326
5	5.0	Educational services (611)*	7,489
6	7.4	Social services (624)	6,664
7	18.2	Wholesale electronic markets, agents & brokers (425)	6,463
8	18.1	Warehousing and storage (493)	5,178
9	3.8	Credit intermediation and related activities (522)	4,189
10	7.3	Transit and ground passenger transportation (485)	1,964

* does not include state and local government employees in primary and secondary schools and institutions of higher education.

Source: Update on Pennsylvania: Road to 2005

Table 9.2: Job Loss, displays the top ten job loss industries in Pennsylvania in terms of rank order, percent change, and total number change. As shown, the most significant categorical losses occurred in the manufacturing sector. Computer and electronics product manufacturing had the largest percent change with a 31.3 percent loss and the highest total number loss (-20,499).

Table 9.2: Job Loss: Pennsylvania's "Top 10" Industries, June 2001-2003

Rank	% Change in Employment	Industry & NAICS	# Change in Employment
1	-31.3	Computer and electronics product manufacturing (334)	-20,499
2	-6.7	Administration and support services (561)	-17,895
3	-19.6	Machinery manufacturing (333)	-13,694
4	-12.0	Fabricated metal product manufacturing (332)	-12,209
5	-21.3	Transportation equipment manufacturing (336)	-11,154
6	-16.8	Primary metal manufacturing (331)	-8,993
7	-34.3	Apparel manufacturing (315)	-8,315
8	-2.7	Professional, scientific and technical services (541)	-7,719
9	-6.0	Merchant wholesalers - durable goods (423)	-7,525
10	-12.1	Plastic and rubber products manufacturing (326	-5,847

Source: Update on Pennsylvania: Road to 2005

Regional Economy

The Southwestern / Pittsburgh economic region includes Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland counties. Allegheny County, with a population of 1,270,612, is the driving force behind the Southwestern Pennsylvania economic region. The Pennsylvania Department of Labor and Industry breaks this section down further into Workforce Investment Areas (WIA). Washington County is a part of the Southwest Corner WIA along with Beaver County and Greene County.

In an effort to assist the local Workforce Investment Boards (WIB) and training providers, the Center for Workforce Information and Analysis (CWIA) compiles annual demand occupation lists. The demand lists are not meant to be all-inclusive. The Pennsylvania Department of Labor & Industry published the 2004 Demand Occupations broken down by WIA. The Pennsylvania Department of Labor and Industry releases information through the Center for Workforce Information and Analysis (CWIA). Industrial employment projections are produced biennially to estimate future job demand in Pennsylvania. Data is available at a variety of levels which report estimated base and projected year employment as well as annual average percent change for all industries. More detailed information can be obtained online at http://www.paworkstats.state.pa.us/.

Table 9.3 shows the employment projections for the year 2008 for the Southwest Corner WIA. From this information a projection can be made that educational services will continue to grow in terms of overall employment numbers while industrial-oriented occupations of Primary Metal Industries and Coal Mining are projected to have decreases in job growth rates. It should be noted that the category of Business Services is expected to have the largest growth rate at slightly over 3.5 percent.

Table 9.3: 2008 Industry Projections in the Southwest Corner WIA

Industry	*1998 Estimated Employment*	*2008 Projected Employment*	*Annual Growth Rate*
Educational Services	14,221	16,754	1.78
Health Services	13,986	17,403	2.44
Private Households	12,979	14,009	0.79
Eating And Drinking Places	8,426	9,029	0.72
Primary Metal Industries	6,651	4,959	-2.54
Food Stores	5,846	6,010	0.28
Finance, Taxation, & Monetary Policy	5,836	6,356	0.89
Business Services	5,636	7,635	3.55
Coal Mining	4,444	2,546	-4.27
Social Services	4,439	5,574	2.56

Source: PA Dept of Labor and Industry

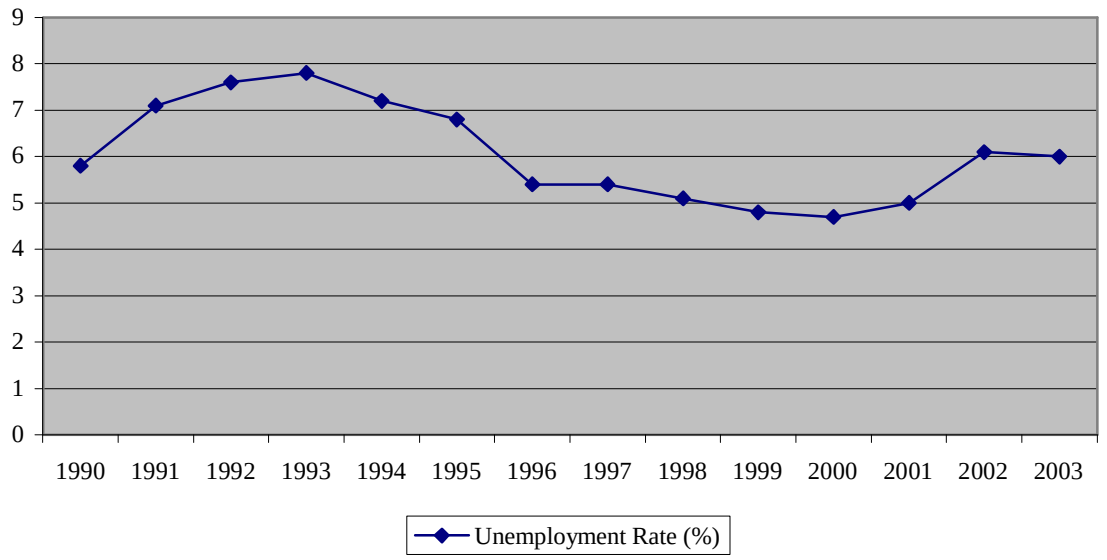
Local Economy

The economic climate of Washington County can be illustrated by examining trends over the years for various economic indicators. Data, including unemployment rates, industry sector employment and prosperity measures was gathered from the US Census Bureau and the Pennsylvania Department of Labor and Industry in order to provide a picture of the county in terms of economic development.

The Washington County economy is currently improving compared to the 1980s and early 1990s, which saw massive lay offs as the steel industry collapsed in Western Pennsylvania. The following tables show that, while there is still work to be done to improve economic conditions in the county, unemployment rates are leveling off, the service producing sectors are increasing, prosperity measures show the county is improving since 1990, and the largest number of county residents are working in Washington County itself.

Figure 9.1 depicts the unemployment rate for the years between 1990 and 2003. As can be seen, Washington County's unemployment rate hit a high of almost 8 percent in 1993 before dropping off to a low of under 5 percent in 2000. Since then, it has risen just slightly over one percent.

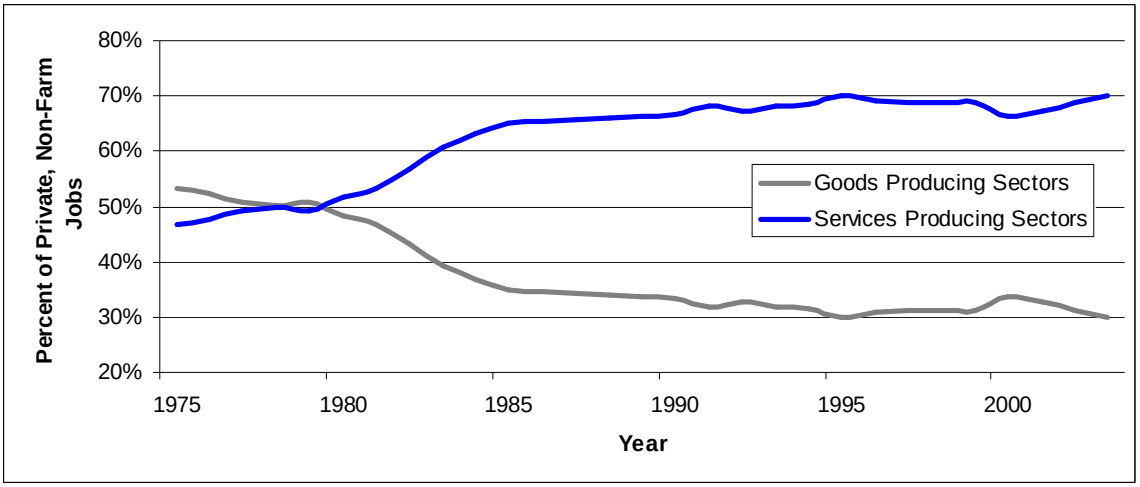
Figure 9.1: Annual Unemployment Rates for Washington County: 1990-2003; (not seasonally adjusted)



Source: PA Dept of Labor and Industry

Figure 9.2 and Tables 9.4 and 9.5 show the decline in employment in the goods producing sectors and the increase in proportion of county employment in the Service sectors between 1975 and 2003. In 1975, 53 percent of Washington County's private sector jobs were in goods producing sectors. Manufacturing alone accounted for 35 percent of private sector employment. The period of the early eighties, well known in western Pennsylvania for mass layoffs in the steel industry, marks the point at which Washington County's economy took a sharp turn away from manufacturing and goods production and towards services. By the late 1980s, the economy had stabilized at roughly 30 percent in goods producing sectors and 70 percent in services. This trend toward services and away from goods production largely tracks regional, state, and national trends.

Figure 9.2: Employment in Washington County By Goods Producing and Service Sectors, 1975-2003



Source: Analysis of Bureau of Labor Statistics Data

Table 9.4: Employment in Washington County For Key Sectors, 1975-2000

	1975	1980	1985	1990	1995	2000
Goods Producing Sectors						
Mining	6,254	5,928	3,063	1,878	1,133	1,760
Construction	3,182	3,653	3,160	5,029	4,032	5,320
Manufacturing	18,367	16,247	10,749	11,079	11,588	12,033
Total	*27,803*	*25,828*	*16,972*	*17,986*	*16,753*	*19,113*
Services Producing Sectors						
Transportation and Public Utilities	2,877	2,885	3,431	4,169	3,357	2,770
Wholesale Trade	2,137	2,253	3,028	2,986	2,943	2,949
Retail Trade	9,894	10,507	11,633	12,692	13,760	9,641
Finance, Insurance, and Real Estate	1,403	1,588	1,556	1,648	1,862	2,052
Services	8,085	10,321	11,764	14,187	17,206	20,285
Total	*24,396*	*27,554*	*31,412*	*35,682*	*39,128*	*37,697*

Source: Analysis of Bureau of Labor Statistics Data

To assess overall prosperity of Washington County residents to other areas, the following factors were used— People living at or below the poverty level, Median Household Income, Median Housing Value, Median Rent, and Per Capita Income (US Census, 1990 & 2000). As shown in Table 9.5: Relative Prosperity Measures, conditions for residents of Washington County improved between 1990 and 2000, based on the identified factors. In fact, between 1990 and 2000, Washington County improved at a faster rate than Allegheny County, the ten County Southwestern Pennsylvania region, and the nation as a whole on every prosperity measure except median rent.

Table 9.5: Relative Prosperity Measures For Washington County Regions and Select Benchmark Regions, 1990 and 2000

1990 Census

	People in Poverty	Median Household Income	Median Housing Value	Median Rent	Per Capita Income
Washington County					
North	12%	$25,628	$50,207	$315	$11,550
Southwest	13%	$27,004	$56,900	$314	$10,750
South Central	16%	$24,178	$55,858	$333	$12,321
North Central	7%	$35,161	$77,377	$419	$16,750
North East	13%	$22,916	$42,504	$312	$11,464
South East	19%	$20,942	$38,405	$297	$10,087
Washington County	*13%*	*$25,469*	*$53,200*	*$320*	*$12,744*
Benchmark Locations					
Allegheny County	12%	$28,136	$56,300	$389	$15,115
10 County Southwestern PA	13%	$26,322	$53,759	$359	$13,419
United States	13%	$30,056	$78,500	$447	$14,420

2000 Census

	People in Poverty	Median Household Income	Median Housing Value	Median Rent	Per Capita Income
Washington County					
North	9%	$38,282	$83,113	$429	$17,831
Southwest	8%	$41,643	$97,567	$382	$17,253
South Central	14%	$33,934	$88,338	$389	$18,412
North Central	5%	$52,697	$125,486	$546	$25,607
North East	11%	$34,063	$64,515	$390	$17,919
South East	15%	$31,146	$63,154	$351	$16,619
Washington County	*10%*	*$37,607*	*$87,500*	*$393*	*$19,935*
Benchmark Locations					
Allegheny County	11%	$38,329	$84,200	$516	$22,491
10 County Southwestern PA	11%	$36,930	$84,545	$478	$20,365
United States	12%	$41,994	$119,600	$602	$21,587

Source: Analysis of 1990 and 2000 Census Data

Given the variety in economic characteristics among the sub-regions in the County, it is no surprise that these measures show varying levels of economic disparity within the County. In both 1990 and 2000, the North Central region outperformed every other region within the County on all five measures. The North and Southwest regions both showed signs of rising prosperity, improving on most measures at a faster rate than the County as a whole.

Wages in various industry sectors and occupational groups are addressed in Table 9.6 by industry sector at the Washington County and Pennsylvania levels. According to this table, Washington County wages are above Pennsylvania in Legal Occupations; Arts, Design, Entertainment, Sports and Media Occupations; Education, Training and Library Occupations; and Construction and Extraction Operations.

Table 9.6: Average Annual Wages by Major Occupational Group: Washington County, 2003

Major Occupational Group	County Wage	PA Wage
Legal Occupations	$90,362	$70,810
Management Occupations	$71,388	$76,920
Arts, Design, Entertainment, Sports and Media Occupations	$52,444	$37,890
Computer and Mathematical Occupations	$52,037	$58,870
Life, Physical and Social Science Occupations	$52,022	$53,930
Healthcare Practitioners and Technical Occupations	$49,752	$52,670
Business and Financial Operations Occupations	$46,888	$52,130
Education, Training and Library Occupations	$45,855	$44,980
Architecture and Engineering Occupations	$45,687	$55,730
Construction and Extraction Occupations	$42,652	$37,640

Source: Pennsylvania Department of Labor and Industry

Table 9.7: Residential Construction by County Sub-Region shows that the North Central Region, which accounted for 70 percent of new residential construction by value in 1997-1998, and again accounted for 70 percent of new residential construction in 2003-2004. Among the top eight townships that account for over 80 percent of new construction by value, the only two (Mt. Pleasant and South Strabane Townships) that fall outside the North Central region are adjacent to it. Mt. Pleasant Township moved from 12th in 1997-1998 with $2.25 million in new residential construction to fifth in 2003-2004 with over $15.8 million in activity. Conversely, the Mon Valley regions, which together represented 11 percent of construction in the County in 1997-1998, fell to 8 percent in the period 2003-2004.

Table 9.7: Residential Construction By County Sub-Region, 1997-1998 and 2003-2004

	1997-1998				2003-2004			
Region	**Buildings**	**Units**	**Cost**	**Rank**	**Buildings**	**Units**	**Cost**	**Rank**
North Central	650	853	$102,800,000	1	1,004	1,108	$209,600,000	1
South Central	126	147	$14,600,000	2	223	314	$33,200,000	2
North	94	94	$9,100,000	3	131	140	$26,300,000	3
Lower Mon Valley	89	89	$8,700,000	4	75	163	$16,200,000	4
Southwest	75	75	$6,600,000	6	106	156	$10,400,000	5
Upper Mon Valley	94	94	$7,800,000	5	52	56	$6,800,000	6
Washington County	**1,128**	**1,352**	**$149,700,000**		**1,591**	**1,937**	**$302,400,000**	

Source: Construction Permit Data through November 2004, as reported by the U.S. Census Bureau

Table 9.8 lists the primary employment centers in terms of county locations for Washington County residents. Table 9.10: County of Employment (Washington County Residents, 2000) reflects the location of employment for residents. This table indicates that the largest numbers of residents in Washington County (53,268) also work in the county.

Table 9.8: County of Employment: Washington County Residents, 2000

#	*Municipality*
53,268	Washington Co. PA
27,645	Allegheny Co. PA
2,718	Westmoreland Co. PA
1,317	Fayette Co. PA
922	Greene Co. PA
556	Beaver Co. PA
452	Brooke Co. WV
370	Butler Co. PA
285	Ohio Co. WV
236	Hancock Co. WV

Source: U.S. Census Bureau, 2000

Major Employers

Table 9.9 lists the major employers in Washington County for the second quarter in 2004. This data shows that institutional and government employers were the highest in the county for this quarter. The Washington Hospital and the Monongahela Valley Hospital ranked first and third, respectively, with Washington County ranked second in terms of employment.

Table 9.9 **Washington County**
Top 50 Employers
3rd Quarter 2004
Initial Data
Federal and State Government Entities Aggregated

Rank	Name of Employer	Rank	Name of Employer
1	THE WASHINGTON HOSPITAL	26	DBT AMERICA INC.
2	WASHINGTON COUNTY	27	ALL-CLAD METALCRAFTERS LLC
3	MONONGAHELA VALLEY HOSPITAL	28	JESSOP STEEL CO
4	WAL-MART ASSOCIATES INC	29	WHEELING-PITTSBURGH STEEL CORP
5	CALIFORNIA UNIVERSITY OF PA.	30	ALLEGHENY ENERGY SERVICE CORP
6	*PENNSYLVANIA STATE GOVERNMENT	31	MCGUFFEY SCHOOL DISTRICT
7	GIANT EAGLE INC	32	WKI HOLDING COMPANY INC
8	84 LUMBER COMPANY	33	COMMUNITY ACTION SOUTHWEST
9	CANON MCMILLAN SCHOOL DISTRICT	34	CHARLEROI AREA SCHOOL DISTRICT
10	UNITED STATES GOVERNMENT	35	ABS
11	CONSOL PENNSYLVANIA COAL COMPANY	36	SEARS ROEBUCK & CO
12	EIGHTY-FOUR MINING COMPANY	37	LIGHTHOUSE ELECTRIC COMPANY
13	PETERS TOWNSHIP SCHOOL DISTRICT	38	WASHINGTON SCHOOL DISTRICT
14	CANONSBURG GENERAL HOSPITAL	39	MCDONALD'S RESTAURANTS OF PA INC
15	RINGGOLD SCHOOL DISTRICT	40	FOSTER WHEELER ZACK INC
16	BLACK BOX CORPORATION	41	DURITZA'S ENTERPRISES INC
17	MON VALLEY FOODS INC	42	ANSYS INC
18	TRINITY AREA SCHOOL DISTRICT	43	PENNSYLVANIA-AMERICAN WATER CO
19	COCA-COLA ENTERPRISES INC	44	FERRO GLASS & COLOR CORP
20	EAT'N PARK RESTAURANTS INC	45	PRESBYTERIAN SENIORCARE
21	INTERMEDIATE UNIT 1	46	OBSERVER PUBLISHING COMPANY
22	PENNSYLVANIA TRANSFORMER	47	BOB EVANS FARM INC
23	NATIONAL APPRAISAL SERVICES CORP	48	ALBERT GALLATIN HOME CARE INC
24	WASHINGTON & JEFFERSON COLLEGE	49	BETHLEHEM CENTER SCHOOL DISTRICT
25	WASHING PENN PLASTICS CO INC	50	ROSS MOULD INCORPORATED

*Pennsylvania State Government includes all state employment except Pennsylvania State University, SEPTA and the System of Higher Education.

Center for Workforce Information && Analysis (paworkstats@state.pa.us, 2005) 3/28/2005

**For specific information on Washington County employer, please reference the Industrial Directory of Washington County (Washington County Redevelopment Authority, 724-228-6875).

Washington County Economic Development Agencies

Many agencies are active in addressing economic development needs in Washington County. The various agencies and their roles can be summarized as follows:

Washington County Chamber of Commerce & Washington County Economic Development Partnership

The Washington County Chamber of Commerce was founded in 1881 and with over 800 members is the largest business membership organization in Washington County and the fourth largest chamber of commerce in Southwestern Pennsylvania. The chamber has two primary focuses: business networking and economic development.

The chamber's business networking goals are accomplished by increasing the number of business contacts and opportunities for its members. The chamber implements this strategy through innovative programs and services. The chamber hosts a monthly networking event as well as special annual events such as the Annual Banquet & Business Exposition and Member Invitational Golf Outing. In addition, the chamber, through its alliance with the Chamber of Commerce Service Corporation, offers competitive health care insurance to members. Furthermore, the chamber functions as an advocate for Washington County's business community and economy through its partnerships with the United States Chamber of Commerce and Pennsylvania Chamber of Business & Industry.

The chamber's economic development goals are served through the Washington County Economic Development Partnership (WCEDP). The WCEDP was developed in 1999 through a public/private initiative consisting of the Washington County Commissioners, Washington County Chamber of Commerce, Washington Industrial Development Corporation and most recently, the Washington County Industrial Development Authority. The purpose of the organization is to create a customer focused, single point of contact for all economic development projects occurring in Washington County.

The partnership also actively works with economic development organizations located outside the county. In addition, the partnership is responsible for attracting new companies to the county through site selection, marketing/sales activities and working with the Commonwealth of Pennsylvania's Department of Community & Economic Development and Pittsburgh Regional Alliance. The Partnership oversees programs and services that include: company location and relocation services, support of growth in indigenous companies, marketing and sales on behalf of the County, both domestically and abroad, access to particular assistance programs, and coordination across projects. Washington County Economic Development Partnership Members include the following organizations:

- Middle Monongahela Industrial Development Association, Inc.
- Washington County Authority
- Washington County Board of Commissioners
- Washington County Chamber of Commerce
- Washington County Council on Economic Development

- Washington County Industrial Development Authority
- Washington County Industrial Development Corporation
- Washington County Planning Commission
- Washington County Redevelopment Authority
- Washington/Greene Job Training Agency
- Washington County Economic Development Partnership Executive Director
- Washington County Economic Development Partnership Private Sector Board Chair

The partnership is responsible for coordinating all activities among the county's economic development agencies as they pertain to company locations, expansions and growth as well as leading the Washington County Economic Development Roundtable. The Washington Economic Development Roundtable was established in the late 1990s as a first step in addressing the lack of focus, cooperation and organization that was characteristic of the County's economic development environment. Through monthly meetings, the Roundtable has increased dialogue among economic development agencies and enabled a level of information sharing that has not previously taken place. Meetings afford agencies the opportunity to discuss economic development projects and form teams to advance them in a more efficient and effective manner.

The Washington County Authority

The Washington County Authority (WCA) was incorporated on April 6, 1951 pursuant to the Municipal Authorities Act of 1945 as amended. The WCA is granted the broad and general powers of a municipal authority and is commonly referred to as a General Purpose Authority. The Authority can own, operate and finance projects and facilities. The WCA is governed by a seven (7) member board appointed by the County Commissioners for a five (5) year term.

The WCA has a long history of supporting County Government and its projects including the development, management and financing of the Justice Center, Washington County Office Building, the 911 Center and the Jail Renovation Project. In addition to the oversight functions associated with the outstanding bond issues, the WCA is currently administering the development of Southpointe II, formerly Western State School and Hospital.

Southpointe II is a mixed use, "life style center" located on 216 acres in Cecil Township. The Master Plan calls for business and professional office buildings, upscale retail development, residential homes and cultural facilities. Final engineering is now underway on the infrastructure for the office building complex. Once completed the project is projected to generate 3000 jobs and between $150 to $200 million dollars in private investment.

It is important to note that the WCA has unique experience in the complex financing of various education and government capital projects. The Authority has the right and powers, under Pennsylvania Law, to apply for and receive grants.

Washington County Council on Economic Development

The Washington County Council on Economic Development (Council) was formed as a 501 (c) 3 in 1989 for the purpose of economic development by Washington County. Through a strategic development strategy that seeks to invest and grow existing businesses, develop pad-

ready sites for growing businesses and provide expansion capital and sites for new business development The key ingredients of this strategy are:

- Business financing and development services through its loan programs
- Development of pad ready sites with its 1,153 acre Starpointe project
- Expansion of key partnerships with other development corporations serving the region.

The Washington County Council on Economic Development was the first certified Community Development Financial Institution that was also an SBA Microlender in Pennsylvania. The primary lending products are start-up capital for micro-enterprises and secondary, subordinated loans for companies experiencing expansion. These loan programs are offered in part or in entirety for Fayette, Greene, Washington and Westmoreland Counties in Pennsylvania and Monongalia County in West Virginia.

> **Starpointe Industrial/Business Park:** The Council was asked by the Washington County Board of Commissioners to undertake the development of a 1,153-acre brownfield site in Hanover and Smith Townships in Washington County and develop it into an industrial park. The site will have build-ready pads ranging in size from 2-7 acres with an average size of 4 acres, with larger sites to be available in Phase II. All infrastructure will be underground, including electric and phone lines. Starpointe will use green building design elements including natural use of lighting, passive HVAC augmentation, environmentally friendly land planning, and low-impact landscaping. There will be an estimated 9,000 new jobs at the completion of all build outs at the park.

Washington County Industrial Development Authority

Established under the Pennsylvania Industrial Commercial Development Authority Law of 1967 (now known as the Economic Development Financing Law), the Washington County Industrial Development Authority was formed in 1969 to provide economic development incentives for businesses interested in expanding or locating in Washington County. The Washington County Board of Commissioners appoints the authority's five member Board of Directors to five-year, staggered terms. The WCIDA is a member of the Washington County Economic Development Partnership along with the Washington County Commissioners, Washington County Chamber of Commerce and Washington Industrial Development Corporation.

The WCIDA is able to provide tax-exempt financing for the construction of qualifying projects. Since interest on loans obtained through the WCIDA is exempt from both federal and state income taxes, WCIDA is able to pass through lower interest costs to qualified applicants. The bonds, notes or other indebtedness of WCIDA issued to finance projects are not supported by the general credit or taxing power of Washington County or the Commonwealth of Pennsylvania or of any other political subdivision but are supported only by the credit of the enterprises receiving the benefit of the tax-free financing. Therefore, enterprises desiring assistance from WCIDA are responsible for obtaining the financing for their particular project. The amount, rate of interest, maturity, security and other loan provisions must be arranged by the enterprise and its lender prior to the submission of an application to WCIDA.

WCIDA may finance a variety of projects including industrial plants and the machinery and equipment necessary for the operation thereof, and certain other specialized projects including solid waste facilities and facilities owned and operated by 501 (c) (3) nonprofit corporations. WCIDA is generally not permitted to aid in the construction or financing of projects which would cause the removal of a facility from one area of the Commonwealth of Pennsylvania to another area of the Commonwealth. Moreover, WCIDA may not assist projects which are primarily for refinancing purposes or for providing working capital to enterprises. Once a project is approved by WCIDA, it must also be approved by the Pennsylvania Department of Community and Economic Development. Pennsylvania Economic Development Financing Authority (PEDFA) – Tax exempt and taxable bonds, both in pooled transactions and stand-alone transactions, which are used to finance land, building, equipment, working capital and refinancing. The following programs and services are coordinated by WCIDA:

Tax-Exempt – eligibility: manufacturing, non-profit, energy, solid waste disposal, wastewater treatment, transportation facilities and assisted living/housing. Loans no less than $400,000 and no more than $10 million for manufacturers. Up to 100 percent of project costs. The terms are 46 percent of prime interest rate, weekly variable interest rate tied to market for tax-exempt bonds, up to 30 year term and borrower must have a secure letter of credit from bank.

Taxable-loans – eligibility: all types of businesses needing access to low cost capital. Loans no less than $400,000 and no more than $10 million for manufacturers. Up to 100 percent of project costs. Terms are 61 percent of prime interest rate, weekly variable interest rate tied to market for taxable bonds, term negotiated letter of credit and borrower must have a secure letter of credit from bank.

Infrastructure Development Program (IDP) – the authority may apply for IDP funds on behalf of eligible private companies engaged in the following enterprises: agriculture, industrial, manufacturing, R&D and export services or real estate developers who are developing sites for eligible private companies. The grants and low interest loans are utilized for public and private infrastructure improvements. Loans and grants up to $1.25 million with no more than 20 percent of the annual appropriation for any one municipality and no more than ten percent of the annual appropriation loaned or granted for speculative greenfield projects not involving private companies. Terms are: grants for public infrastructure and loans to private business at three percent interest rate, up to 15 years. There is a 2:1 private to public match involved and $25,000 cost per job created within five years with a minimum of ten new full time equivalent jobs (whichever is greater).

Washington Industrial Development Corporation

The Washington Industrial Development Corporation (WIDC) was created in the 1950's as a private economic development organization to encourage business development through low-interest loans and industrial park development. Although the Board of Directors is privately selected, the organization shares an executive director through an administrative agreement with the Washington County Chamber of Commerce. The WIDC developed the 84 Industrial Park in the early 1980's and has explored the creation of additional parks throughout the county. In

addition, the WIDC funded a feasibility study of the Washington County Airport to determine industrial park and other economic development opportunities for the property. The WIDC is a member of the Washington County Economic Development Partnership along with the Washington County Commissioners, Washington County Chamber of Commerce and the Washington County Industrial Development Authority. The following programs and services are coordinated by WIDC:

Pennsylvania Industrial Development Authority (PIDA) – the program is utilized for low-interest loan financing for land and building acquisition, construction and renovation, resulting in the creation or retention of jobs. Firms eligible are: manufacturing, R&D, industrial, agricultural, computer/clerical operation centers and firms establishing a national or regional headquarters. Loans are available for up to $1.25 million with no more than 70 percent of total eligible project costs depending on firm size and unemployment rate. The terms are 3.25 percent interest rate depending upon local unemployment rates with up to a 15-year term on land and buildings. Also, PIDA will require no more than a second mortgage on financed assets. Disbursements are based upon reimbursable expenses with a $25,000 cost for jobs created or retained.

Marketing – the WIDC is also designated by the Washington County Commissioners as the county's recipient of the Local Economic Development Assistance program fund which is utilized to develop county-wide marketing programs. In 2005, the WIDC is planning on using the funds to improve the county's image by serving as the county's economic development marketing organization.

Middle Monongahela Industrial Development Association

The Middle Monongahela Industrial Development Association, Inc.(MIDA) was formed in 1966 to develop temporary and future plans for the US Steel—American Steel & Wire plant. This 256-acre site contained the country's largest zinc works and had over 7500 employees. Since its inception, MIDA manages two successful industrial parks located in Donora and Speers. Over 40 companies located in the two industrial parks. MIDA is in the process of developing a third business park, Alta Vista located in Fallowfield Township of I-70 at interchange 32B. MIDA assists companies located in the Mon Valley region with site location, building expansion and low interest rate financing.

Washington County Redevelopment Authority

The mission of the Washington County Redevelopment Authority is to promote community, economic and housing development. Foremost among its economic development projects, are the recently completed 609 acre Southpointe Multi-Use Park along Interstate 79 in Cecil Township, which has generated over $254 million in private investment. The 120 acre California Technology Park in California and the 10 acres Maiden Business Park in the City of Washington which are still under development.

The redevelopment Authority, on behalf of the County Commissioners, administers the Federally funded Community Development Block Grant and Home Investment Partnerships Programs, under which it provides housing rehabilitation assistance to low and moderate income homeowners and undertakes eligible public improvement projects in all Washington County communities. In addition, the Redevelopment Authority has developed and manages six (6)

elderly housing facilities, with a total of 461 units in California, Canonsburg, Charleroi and North Franklin Township. All six (6) of these facilities are on the tax rolls and in 2002 paid over $380,000 in real estate taxes. A five (5)-member board appointed by the County Commissioners oversees the Authorities operations.

Southwestern Pennsylvania Commission

The Southwestern Pennsylvania Commission (SPC) is the Regional Planning Agency for the ten county region surrounding Pittsburgh in Southwestern Pennsylvania. This region includes Armstrong, Allegheny, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland Counties as well as the City of Pittsburgh. SPC's membership includes at least two members from each county's Board of Commissioners. SPC works with its membership as well as PennDOT to produce a Transportation Improvement Program (TIP) every four years. In addition to the TIP, SPC has developed the 2030 Transportation and Development Plan. This plan links more than $33 billion of transportation projects and proposed economic and business development initiatives into a single, integrated plan. Table 9.10 below describes the projects in Washington County that are included in the 2030 plan.

Table 9.10: Washington County Projects on SPC's 2030 Plan

Project Name	*Project Summary*	*Jobs*	*Acres*	*Initial Investment*	*Total Public and Private Investment*
Meadowcroft Rock Shelter	Expansion of the visitor center and exhibit area of the Meadowcroft Museum of Rural Life, and construction of improved facilities for access and interpretation of items from the Rock Shelter.			$2,000,000	$4,000,000
California Technology Park	Expansion of existing park. Work will include utility and roadway extensions and site clearing and grading.	450	40	$1,200,000	$17,750,000
Alta Vista	Construction of complete road and utility infrastructure for a mixed-use business park in Fallowfield Township.	2,000	256	$8,926,500	$140,000,000
Starpointe	Construction of utilities and roadway infrastructure on currently underutilized land along Rt. 22 in preparation for an industrial park.	2,250	148	$4,945,000	$38,508,000
Southpointe Expansion	Expansion of currently filled facilities at Southpointe. Work will include utility and roadway	900	73	$5,000,000	$51,800,000

Table 9.10: Washington County Projects on SPC's 2030 Plan

Project Name	*Project Summary*	*Jobs*	*Acres*	*Initial Investment*	*Total Public and Private Investment*
(inactive)	extension as well as site clearance and grading to prepare for additional private investment.				
I-79 Meadowlands Industrial Park (inactive)	Expansion of water and sewer lines to 106 acres in a 400 acre development park	954	106	$2,500,000	$38,484,076
Starpointe (Phase 2)	Land acquisition and utility and roadway construction for the expansion of the Rt. 22 Industrial Park. The expansion will be on partially reclaimed strip mines.	8,000	1,000	$17,000,000	$221,000,000
Washington County Airport Industrial Park (inactive)	Utility and roadway construction in preparation for private investment for an industrial park adjacent to the Washington County Airport.	320	600	$8,000,000	$217,834,395
Western Center/ Southpointe II	Land acquisition, environmental remediation, demolition, site grading and installation of infrastructure to prepare for private development.	1,600 (3000)	217	$20,000,000 (10,000,000)	$120,000,000 (200,000,000)
Canton Township Exit 16	Property acquisition, environmental remediation, rehab of existing structures and infrastructure improvements.	3,000	350	$9,000,000	$109,000,000

Source: Southwestern Pennsylvania Commission, 2030 Transportation and Development Plan

Washington County Industrial Parks

Washington County has ten industrial parks in various stages of development and occupancy. These parks are sited with good geographic representation in the county and are well positioned both countywide and regionally. Due to size, surrounding uses and local compatibility each park has a target market of heavy, general, or light manufacturing, business or office and of course

mixed. With this basic infrastructure in place Washington County can take up a strategic site development and expansion program based on market forces and industry need.

Industrial Sites/Parks

1. Alta Vista—Located in Fallowfield Township just off of the I-70 Bentleyville exit interchange 32B is a 256 acre industrial site owned by the Monongahela Industrial Development Association. Alta Vista opened in 2002 and has available site pad-ready parcels with underground utilities. Alta Vista is a designated Keystone Opportunity Zone. This designation grants any qualified company that locates in the park tax exemptions from all state or local taxes until 2011. Parcels range from 3-120 acres.

2. Donora Industrial Park—Located within the borough of Donora, this industrial park covers 260 acres at the site of a former iron and zinc processing plant. The Donora Industrial Park is a designated Enterprise Zone where new construction that takes place is subject to a full five year tax abatement from all local real estate taxes. The Donora Industrial Park has access to the Norfolk Southern Rail line, the Monongahela River, and I-70. The site is owned by the Monongahela Industrial Development Association.

3. Speers Industrial Park—Located off the Speers Exit on I-70, this 80-acre business park has no vacant property. This business park is a designated Enterprise Zone where new construction that may occur would be subject to a full five year tax abatement from all local real estate taxes.

4. California Technology Park—Located in California Borough off PA Route 43, this park is owned and managed by the Washington County Redevelopment Authority. The Technology Park was developed to provide a conduit for fiber optics and digital switching, underground utilities and street lighting. In addition, the site is in close proximity to California University of Pennsylvania resources, including business plan and job training grant preparation, government contract assistance and technology transfer. The California Technology Park is authorized to provide tax abatements for all taxing bodies (County, Borough, School District). The site has 120 acres with fully graded sites (5-50 acres) with road access are available.

5. Maiden Business Park—Located in the City of Washington, this 8.4 acre park is vacant and is owned by the Washington County Redevelopment Authority. The site has paved access roads, graded sites, public utilities, low-cost financing for qualified clients, and three-year tax abatement on new construction.

6. Meadowlands Industrial Park—Located in North Strabane Township off of the Meadownlands Exit on I-79, this park is 200 acres, 100 of which are available for development, and is owned by Mosites Development Company.

7. Southpointe—This 600 acre site is located in Cecil Township along I-79, 15 miles south of the City of Pittsburgh. Southpointe is a mixed-use development that includes

commercial and professional sites, residential townhomes, medical and fitness centers and a golf course.

8. Southpointe II—This 217 acre site is located in Cecil Township next to the Southpointe location along I-79. This site will be managed by the Washington County Authority and future development plans include a mix of residential, commercial, and office uses.

9. Starpointe—This 1,153-acre former brownfield site is located in Hanover and Smith Townships near SR 22 where the proposed Findlay Connector will be built. The site is owned and managed by the Washington County Council on Economic Development. At this time there are no businesses located at this site. When completed, the site will have build-ready pads ranging in size from 2-7 acres with an average size of 4 acres, with larger sites to be available in Phase II. All infrastructure will be underground, including electric and phone lines. Starpointe will use green building design elements including natural use of lighting, passive HVAC augmentation, environmentally friendly land planning, and low-impact landscaping.

10. Midway Site—Located in Robinson Township, this property is oriented to industrial and commercial uses. The Midway site comprises 2,300 acres of unimproved land and is owned by the Imperial Land Corporation. This site has limited access however, upon completion of the Southern Beltway, a full intersection will provide access to this site.

For County officials, the Northside of the Washington County Airport is the next planned area for development. The Northside Development will fill an immediate need for buildable space to accommodate corporate hangars for aviation businesses. The current available improved building space is 100 percent occupied. Three tenants are waiting to build on the site immediately.

Additionally, Consol Energy established the CNX Land Resources, Inc. to manage and develop 1,385 acres in South Strabane as a business park. The land is located along I-70 but has limited access. CNX Land Resources is seeking to get approval to have a new interchange built along I-70 so that their land would have direct access to the interstate.

Capacity of Industrial Sites/Business Parks

A sound strategy for site development and expansion is based upon the number of available acres, assuming that all existing parks are made pad ready, in the County. With this in mind, the occupancy in any given classification of a park should reach approximately 75 percent prior to the development of a similar park with the same target industrial demographic. Property for new locations may be optioned and or acquired prior to the 75 percent threshold but infrastructure investment should not take place until existing similar facilities are around ¾ full. The 75 percent should not be considered a hard and fast rule but rather a guideline. The decision to develop additional park acreage would be dependent upon other forces including geographic market, the size of parcels available, their location to critical infrastructure and utilities, and fluctuations in the market.

The main reason for a development strategy of this nature is to limit internal competition. Internal competition for both tenants and more importantly critical infrastructure funding can lead to a drain on both capital and human resources for development and marketing. Washington County should develop a good menu of pad ready industrial park sites or even build to suit office locations for all classifications of possible tenants. This complete menu will allow compatibly for prospective tenants in the type of park they choose so that they may flourish and in turn help insure that Washington County develops diversified business base at these parks.

Table 9.11 is based on industry standard for suburban regions, can be used to ascertain the existing parks abilities to serve prospective tenants and help site and size any new parks when appropriate.

Table 9.11: Industrial/Business Park—Standards for Future Development

Criteria	Heavy Industrial	General Industrial	Light Industrial/Commercial	Office/Business Park
Industries	Heavy industry including glass, clay, primary metals, heavy plastics, raw materials, food processing, etc.	Broad range of light to medium industry and services, pharmaceuticals, light metal working, electronics, light food processing, etc.	Electronics, financial services, computer software support and other light manufacturing uses (apparel, instruments, light plastics, assembly operations etc.)	Financial services, insurance claims processing, computer software support, data centers, customer service centers, small company front office operations, etc.
Park Acreage	100-200 acres	50-150 acres	50-100 acres	50-100 acres
Site Acreage	Large, 20 acres to 100+	Medium, 5+ acres for light industrial, 15+ acres for medium industrial	Small, 2+ acres for office uses, 5+ acres for light industrial	Small, 5-10 acres, with some multi-tenant buildings
Potential Park Employment	200-2,000+	500-1,500	500-2,500	500-2,000+
Infrastructure				
• Electric Power	Distribution Line: 13kv	Distribution Line: 13kv	Distribution Line: 13kv	Distribution Line: 13kv
• Natural Gas	High	Moderate to High	Low to Moderate	Low to Moderate
• Water	Moderate to High	Moderate	Low (sanitary use) to moderate	Low (sanitary use)
• Sewer	Moderate (potential effluent considerations)	Moderate	Low (sanitary use) to moderate	Low (sanitary use)
• Telecom	Limited-Long distance, T-1 desired	T-1 lines required, possible fiber optics	T-1, ISDN, DSL, fiber with carrier diversity	T-1, ISDN, DSL, fiber with carrier diversity
• Rail	Maybe required	Maybe required	NA	NA

Economic Development Projects for Washington County

Four elements of economic development projects are planned in Washington County. These projects may be categorized to target economic development in the following areas industrial development, brownfield redevelopment, community/downtown revitalization, and tourism.

Industrial Development—Table 9.12 lists the existing County-sponsored economic development projects that target industrial development in Washington County. As shown, the County has approximately 375 acres of land currently available in its existing industrial sites with future phased development providing a total of 1,427 acres.

Table 9.12: Washington County Economic Development Projects (2005)

Project Name	Pad Ready Acres	Additional Phase Acreage	Total Jobs	2030 SPC Long Range Plan	Brownfield / Redevelopment
Alta Vista Business Park *Interstate 70 - Exit 32*	80	130	2,000	Yes	Strip-mine
Starpointe Industrial/Business Park *Interchange of U.S. Route 22 and PA Route 18*	150	1,005	12,000	Yes	Strip-mine
Southpointe Phase II *Interstate 79 - Exit 48*	75	217	3000	Yes	Redevelopment
"North Side Development" - Washington County Airport Expansion *Interstate 70 - Exit 15*	0	75	60	Yes	N/A
California Technology Park *Mon-Fayette Expressway Exit 32*	70	0	1,380	Yes	N/A
TOTAL	375	1427	16,340		

Source: Washington County Planning Commission, 2005

Washington County Airport—North Side Development—The Washington County Airport generates in excess of $16 million in economic benefits to Washington County. Over the past 15 years, several projects have been completed to expand and improve the airport for business and recreational users. Both Special Project Grants and Capital Project Grants administered by Penn DOT Bureau of Aviation have totaled over $10,000,000 since 1988. Projects consisted of general maintenance and rehabilitation, purchasing of equipment and major capital improvement.

1. Complete Runway Rehabilitation $2.1M – 1988-1991.
2. New T-hangars $800,000 – 1993-1994.
3. Construction of Taxiway A $3,400,000 – 1994-2001.
4. Instrument Landing System (ILS) $1.29M – 2005.
5. Safety Improvement to Runway $1.67M – 1997.

With the recently commissioned ILS, the pace of business aircraft operations is expected to increase during the next five years from 40,000 operations (take offs and landings) to at least 50,000. Currently, 76 aircrafts are based at the airport. Within five years this number is expected to reach 100. A comprehensive land acquisition process is underway to allow for the expansion of aviation services (T-hangars and private aviation business hangers) on the north side of the airport to accomplish this goal. To complement this expansion, the runway will be widened and lighting systems improved in the short term. Longer term goals will be to relocate the terminal building and complete Taxiway B to fully service the hangers and business on the South side of the field as well as acquire additional properties currently operating off the field but accessing the airport under a "through the fence" agreement which provides a right of way to the airport for off base operators.

Future land development in this area will be limited by two controlling factors. First, surrounding municipalities have cooperated with Washington County to adopt airport zoning ordinances to control development within the various safety areas of the airport. These measures are critically important to ensure compatible land use around the airport. Second, vehicular access to the airport needs to be addressed. As more development occurs and traffic increases in the area, this issue will be exacerbated. A comprehensive review of traffic patterns in and around the Washington area should be conducted to determine if airport access could be improved as a part of an overall effort to address traffic flow around the city and surrounding area.

Keystone Opportunity Zones (KOZ)

- Carroll Township Residential Development
- Fallowfield Health Park
- MIDA Regional Business Park (Alta Vista)
- Route 980 / SR 22 Environmental Remediation Site

Brownfield Redevelopment— Brownfields are "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant" (U.S. Environmental Protection Agency, 2005). Such property is environmentally contaminated, or perceived to be contaminated, and is currently vacant, abandoned, idle or underutilized due to the real or perceived contamination. The redevelopment of brownfield property presents unique redevelopment challenges including:

- Potential legal liability frequently resulting from contamination that predates the current ownership,
- Laws and regulations from multiple state and federal agencies which make the remediation process confusing, as well as the development and permitting processes slow, and
- Costs associated with the clean up may be expensive and difficult to estimate accurately and control.

While there are substantial challenges associated with brownfields, there is a national trend toward the redevelopment of these properties to capitalize upon their location near existing infrastructure and populated areas. Brownfield sites are often situated in areas surrounded by residential and commercial development. These once vibrant neighborhoods have had a related decline in vibrancy due to the presence of the large areas of abandoned or underutilized property so often associated with brownfield sites.

The U.S. Environmental Protection Agency and Pennsylvania Department of Environmental Protection provide support to communities for the remediation and redevelopment of brownfield sites. Such programs integrate smart growth principles and practices into brownfield redevelopment programs, related planning and/or revitalization activities. The redevelopment and reuse of brownfield sites is important for Washington County as many communities were developed around industrial sites or mining areas, which have sat idle for decades. Washington County officials can encourage the redevelopment of brownfield properties and improve environmental quality by offering support to reduce regulatory and market barriers and link redevelopment with open space preservation.

Grayfield Redevelopment—Grayfields in Washington County can be defined as former stripped mined sites that have had their topsoil removed, the coal extracted and now have unknown fill consistency (mine spoils). Grayfield sites fail to generate the revenue that would justify their continued use. They may contain acid mine runoff and other trace elements in the ground water, but have less severe environmental issues as those associated with brownfield sites.

Issues that can make redevelopment of Grayfields a challenge often include the uncertainty of the type of fill or mine spoils present at the site. The concern for developers is the type of fill can make construction more costly due to site stability. Additionally, the presence of trace amounts of runoff can include acid mine runoff that can lead to issues such as groundwater contamination, including aluminum and other metals that result when water tables are moved in the mining process. Water table disruption can cause springs to appear in unpredictable places during earth moving. Finally, many grayfields were created when the land was coal-mined 50 years ago and, because of the older standards for reclamation, this often relates to a minimum amount of topsoil at the site.

However, similar to Brownfields, the presence of Grayfields can result in a loss of tax revenue. With successful redevelopment, localities can prevent the erosion of their tax base and will predictably increase tax revenues. Successful grayfield redevelopment efforts also serve the community at large through the elimination of blight.

Community Revitalization—The effects of decentralization and sprawl have contributed to the decline of the central business districts of municipalities across Washington County, the region, and the nation. Fortunately, the revitalization of downtown communities is more viable now than ever with available governmental funding and technical assistance. Community revitalization can be attained to reverse the negative impacts created by sprawl, which have created a decline of formally viable economic generators, as well as, enhance the quality of life presented by the traditional downtown.

Community revitalization plans should follow a comprehensive approach to sound land use, community renewal, and economic development so that more desirable place for residents to live, work, and play is attained. Specific grant programs that provide municipalities with the tools needed for the revitalization of downtowns are available through state agencies such as the Department of Community and Economic Development and Pennsylvania Department of Transportation. While these programs assist municipalities with funding specific projects, proper planning and cooperation is crucial for the implementation and sustainability of a community revitalization plan.

Community revitalization projects are planned in three communities – Canonsburg Borough, City of Washington, and Charleroi Borough. Table 9.13 outlines the streetscape projects in terms of impact on economic development.

> Canonsburg—This project will implement portions of the Sustainable Canonsburg Report (2003). The $1.4 million streetscape project will revitalize the streetscape in the downtown area. The primary goal of the streetscape revitalization is to raise property values, attract more desirable retail stores, and increase and upgrade the number of jobs and residents in the area.
>
> City of Washington—The project will implement portions of the Washington Economic Development Project Capital Improvements and Service Plan. This phased project will begin with completion of the $12 million streetscape improvements for a twelve block area in the City of Washington. Second, will be the construction of a 140,000 square foot office building and a 90,000 square foot retail development. The retail development is the first project of the Crossroads and Wheeling Street mixed use development consisting of office, retail, and residential in the heart of downtown Washington.
>
> Charleroi Borough—The greater Charleroi Community Development Corporation received a Pennsylvania Heritage Park study grant to develop the Charleroi Riverfront Study. The study addresses the revitalization of the Charleroi area by enhancing the central business district and taking advantage of the riverfront. The $10 million project consists of developing a river walk and landing visitor center/museum, observation tower, amphitheater, and a community park. The proposed Riverfront project will provide a substantial economic impact on the Mid-Mon Valley area through tourism and spin off development.

Table 9.13: Planned Washington County Streetscape Projects

Main Street Development	New Jobs	Retained Jobs	Main Street Designation	Elm Street Designation
Canonsburg	250	1,700	Yes	Yes
City of Washington	600	10,795	Yes	Yes
Charleroi Riverfront	300	1,200	Yes	Yes
TOTAL	1150	13,695		

Source: Washington County Planning Commission, 2005

Tourism—Tourism is the final component of the planned economic development projects. Table 9.14 provides the financial impact of the two planned projects for the Meadowcroft Rock Shelter and the Pennsylvania Trolley Museum.

Meadowcroft Rock Shelter—This project includes the construction of a protective structure over the Meadowcroft Rock Shelter excavation site, Pedestrian walkways, renovations to the existing visitors center, and other infrastructure improvements. Located in Jefferson Township near the West Virginia state line, Meadowcroft is a world-renowned archaeological site.

Pennsylvania Trolley Museum—The construction of a 56,000 square foot visitor center is the third and final phase of this project. The 1920's streetscape theme and an urban streetscape theme together will maximize the educational programming and house the Pennsylvania Trolley Museum's significant archival and photo collections. This heritage complex is ideally located 25 miles from Pittsburgh and minutes from Interstate 70 and 79.

Table 9.14: Planned Washington County Tourism Projects

Tourism Impact Phase	Direct Jobs	Estimated Annual Visitors	2030 SPC Long Range Plan	Natural Heritage Site	Estimated Regional Economic Impact per year
Meadowcroft Rock Shelter Visitors Center	12	20,000	Yes	Yes	$1,000,000.00
Pennsylvania Trolley Era Heritage complex	3	46,000	Yes	No	$2,000,000.00
TOTAL	15	66,000	0	0	$3,000,000

Source: Washington County Planning Commission, 2005

Work Force Development Projects

Washington Greene County Job Training Agency, Inc.—This 501(c)3, non-profit agency was formed in 1995 to assist economically disadvantaged residents of Washington and Green Counties find employment. The Washington Greene County Job Training Agency, Inc. (WGCJTA), serves as fiscal agent and support staff to the 37 member Southwest Corner Workforce Investment Board. WGCJTA, Inc. also operates welfare employment programs. The primary welfare employment program run by WGCJTA, Inc. is Single Point of Contact (SPOC). This program aims to break all barriers to employment for jobseekers. The SPOC program includes intensive case management, education/training, work activities, job readiness, life skills and supportive services targeted to welfare clients with serious employment barriers.

All Welfare Programs offer Supportive Services to participants. These services include:

- Child Care Assistance
- Transportation
- Car Insurance
- Clothing Allowance
- Training Costs

WGCJTA, Inc. also runs the Self-Employment Assistance Program (SEA). This program has been in existence since 1998. The Sea program guides dislocated workers in a business startup. Since 1998, Washington Greene County Job Training Agency has served approximately 370 clients and has enjoyed a self-employment success rate of 65 percent. In addition, there are many businesses currently pending start-ups.

Currently, WGCJTA, Inc. is administering a program to clean areas affected by the fall flood of 2004. This program is funded by a National Emergency Grant and is made up primarily of individuals who have been unemployed long term. The program is operating in all three counties in the Southwest Corner Workforce Investment Area. With over 70 individuals hired in the program over the past six months, the flood cleanup activities are proving to be a great success for all of the communities involved.

D. Analysis & Recommendations:

Washington County has the choice to plan and drive development or to passively let development happen. County officials have chosen to actively plan and manage growth to ensure that its positive characteristics are retained for present and future residents. Such characteristics include the opportunity for a rural lifestyle while remaining within minutes of the City of Pittsburgh with its regional attractions and amenities.

During the 1980s and 1990s, many areas of the United States were enjoying significant levels of economic growth. However, during those 20 years, Southwestern Pennsylvania was struggling to recover from the collapse of the steel industry and Washington County was looking to redefine its economic base. Due to the efforts of many people, the manufacturing sector regained a foothold and technology-based business began to emerge as much of the region saw growth exceeding the national average. Finally, in 2002, employment levels in Southwestern Pennsylvania returned to the levels of the early 1980s.

Unfortunately, with the level of nationwide growth also came the relatively new phenomenon of sprawl. Retail shifted rapidly from its traditional urban locations to strip shopping centers and malls, leaving older communities dying from the "inside out." Industry consolidated into new industrial parks or took over greenfields as it sought less expensive locations in which to expand. The supporting elements of roadways and water and sewerage service raced to keep up with the expansion.

Southwestern Pennsylvania experienced some of this sprawl but, because growth was so impaired, the region was not impacted as much as the rest of the nation. With the region's economic recovery now well underway, Washington County has a unique opportunity to preserve its rolling farms and countryside and still capitalize upon the growth that is beginning to outpace many of its neighbors. However, it will be critical to encourage a high level of cooperation and leveraging of resources, as economic development resources at the federal level are scarce.

Washington County has effectively capitalized on these strategies to deliver economic development services more efficiently. However, there is still more opportunity to centralize certain activities. The 1999 Washington County Economic Development study called for consolidation of economic development organizations. In response, the County leadership formed the Washington County Economic Development Partnership. The Partnership is in charge of executing the County's economic development goals. With that role comes the responsibility and resources to provide certain services or projects that benefit the County economic development activities as a whole. Including the identification of industry clusters toward which the organizations would direct their efforts and the creation of strategies and resources that can be made broadly available.

State level policies for economic development have a direct impact on County agencies. The Economic Development Partnership should continue to explore the best options for taking advantage of state and federal and private resources. Such resources include the Department of Community and Economic Development and PennDOT.

Department of Community & Economic Development (DCED)
The Department of Community & Economic Development (DCED) provides a number of programs designed to address various aspects of community and economic development. Additional information can be found at the official Website for DCED located at http://www.newpa.com/default.aspx?id=15. Grants are available for planning, operations, revitalization and improvement projects and infrastructure improvements through the various programs described below.

Community Revitalization Program (CRP) provides grants for community revitalization and improvement projects to local government, municipal and redevelopment authorities, industrial development authorities or corporations; non-profit corporations and community organizations for projects that meet eligibility criteria.

Local Municipal Resources and Development Program (LMRDP) provides grants which promote community and/or development through stabilizing communities, enhancing local government services through inter-municipal approaches to service delivery; infrastructure and other facilities, business retention, business expansion and creation, promotion of jobs and employment opportunities and enhancing the welfare and quality of life of citizens.

New Communities Enterprise Zone Program provides grants to financially disadvantaged communities for preparing and implementing business development strategies within a designated Enterprise Zone. This program provides grants for planning, basic grants and competitive grants.

New Communities Main Street Program provides grants for the revitalization of communities in order to create a more attractive place to live and encourage business and job expansion and retention within urbanized areas. This program provides grants for planning, operational/basic grants, development grants (downtown investment grants and anchor building grants).

New Communities Elm Street Program provides grants for revitalization of residential and mixed-use neighborhoods for projects including planning, infrastructure improvements, structure improvements to mixed-use buildings, acquisition of historically significant properties and façade improvements. This program provides grants for planning, operational grants and residential reinvestment grants.

Keystone Innovation Zone Program (KIZ) provides grants to community/university partnerships to generate economic and job growth in and around the campus of colleges and universities. This program provides grants for planning, operations and innovation/technology transfer as well as tax credits and PIDA loans for land and structures.

Keystone Opportunity Zone (KOZ) and Keystone Opportunity Expansion Zone (KOEZ) Program provides state and local tax abatement to businesses and residents locating in one of these designated zones. Through credits, waivers and broad-based abatements, total taxes on economic activity in these zones are reduced to nearly zero. Keystone Opportunity Zones are defined-parcel- specific areas with greatly reduced or no tax burden for property owners, residents and businesses. KOZ's are designated by local communities and approved by the state.

Urban Development Program provides grants for urban development and improvement projects.

Team Pennsylvania® Foundation (http://www.teampa.com) is a public/private, economic development partnership that initiates and supports innovative programs to improve Pennsylvania's competitiveness and quality of life. The Foundation has invested over $20 million in many cutting-edge initiatives, as well as participated in many partnerships that have resulted in economic successes for the state. The Foundation has accomplished this with 4 areas of emphasis in mind:

1. Keeping our young talent in-state after graduation
2. Providing business location decision-making information
3. Creating a strong network of Pennsylvania's leaders
4. Funding for economic development needs

Ben Franklin Technology Partners is a statewide network that fosters innovation to stimulate Pennsylvania's economic growth and prosperity. In the Southwestern Pennsylvania region, Innovation Works is the organization working to seed technology companies. Innovation Works provides risk capital, business expertise, and other resources to companies with the greatest likelihood for regional economic impact.

Created in 1988, the Industrial Resource Centers (IRCs) provide technical assistance to small and mid-sized manufacturers by applying advanced manufacturing management and production philosophies and techniques (http://www.inventpa.com). Seven regional centers provide assistance through individual projects or local initiatives and are part of the National Manufacturing Extension Partnership. The contact for Washington County is Catalyst Connection. Catalyst Connection has the goal to strengthen the region's capability to support manufacturing growth and assists small- and medium-sized manufacturers to achieve this goal. This organization is a member of a statewide and national network of centers that support manufacturers. The mission of Catalyst Connection is to take the best practices of manufacturers from all over the country and make them available to the small- and medium-sized manufacturers in the Southwestern Pennsylvania region.

Pennsylvania Department of Transportation (PENNDOT)

Although many would assume PennDOT is strictly concerned with roads, this agency is an important partner that can assist with the revitalization of downtowns and help to make communities safe for pedestrian activity. In addition to the numerous programs that support

roadway and bridge improvements, the following programs focus on urban revitalization efforts across the state. It is recommended that Washington County Officials continue to work closely with PennDOT to implement these programs.

Home Town Streets Program provides funding for a variety of streetscape improvements that are vital to reestablishing downtown and commercial centers. These projects include activities undertaken within a defined "downtown" area that collectively enhance that environment and promote positive interactions with people in the area. Project may include sidewalk improvements, planters, benches, street lighting, pedestrian crossings, transit bus shelters, traffic calming, bicycle amenities, kiosks, signage and other visual elements.

Safe Routes to School Program provides funding for physical improvements that promote safe walking and biking passages to schools. Examples of types of improvements include sidewalks, crosswalks, bike lanes or trails, traffic diversion improvements, curb extensions, traffic circles and raised median islands.

Workforce Development in Pennsylvania is a state-sponsored effort to foster a skilled workforce by encouraging workers to obtain a higher level of skills and knowledge. This program will ensure that workforce education and training programs align with skill needs and job openings. This economic, state-level strategy targets education and training dollars to High Priority Occupations (http://www.paworkforce.state.pa.us). High Priority Occupations are defined as job categories that are in demand by employers, have higher skill needs, and are most likely to provide family sustaining wages.

The Workforce Development effort implemented a three step process to define High Priority Occupations: Step One - Industry Cluster Analysis to identify the industry sectors that have the highest potential for growth and could benefit most from strategic workforce investments; Step Two - Occupational Data Analysis to create a baseline list of high demand, higher wage occupations within each of the targeted industry clusters using the best available labor force data; Step Three – Expert Input and Regional Factors to identify occupations that are likely to emerge based on economic development investment, new labor market trends, or business demand, that are too new or regionally-specific to be captured by the data (http://www.paworkforce.state.pa.us/about/cwp/view.asp?a=471&q=152540).

Step One was completed in 2004 with the publication of Targeted Industry Clusters (http://www.paworkforce.state.pa.us/about/cwp/view.asp?a=471&q=152561). Steps Two and Three of this process are undertaken annually to ensure that public investments keep pace with rapidly changing technology and labor market demand. It should be noted that the Commonwealth has stated that all public workforce investments will be focused on job categories identified as High Priority Occupations. It will be critical that Washington County officials continue to actively provide local input into economic goals and workforce needs for the region. As such, Washington County officials and economic

development agencies should continue their efforts to strengthen the economic development partnership, foster workforce investments, and develop industry clusters that will generate family-sustaining employment for residents.

Step One – Industry Cluster Analysis: Pennsylvania's Workforce Development Task Force defined nine industry clusters and eight sub-clusters and mapped business concentration and the employment of these clusters across the Commonwealth's 67 counties. The Task Force included the Departments of Labor and Industry, Community and Economic Development, and Education, as well as economists, the Center for Workforce Information and Analysis, and regional workforce and economic development practitioners. Each of these clusters consists of a group of industries that are closely linked by common product markets, labor pools, similar technologies, supply chains, and/or other economic ties. The Pennsylvania Department of Labor and Industry (L&I) profiled the state's, in the 2004 publication Pennsylvania's Targeted Industry Clusters. The clusters were chosen based on the potential for growth or their overall importance to the stability of Pennsylvania's economy.

1. Advanced Materials and Diversified Manufacturing
   - Chemicals, Rubber and Plastics
   - Electronics
   - Metals and Metal Fabrication
   - Printing
   - Vehicle and Vehicle Equipment
2. Agriculture and Food Production
   - Food Processing
3. Building and Construction
4. Business and Financial Services
5. Education
6. Information and Communication Services
7. Life Sciences
   - Bio-Medical
   - Health Care
8. Logistics and Transportation
9. Lumber, Wood and Paper

Washington County officials should implement a targeted approach to its economic development investments. The policies and goals of County officials and economic development agencies must align in the way marketing and infrastructure dollars are spent if the county is to realize a return of jobs and capital at a rate higher than that achieved by competing counties. The best way to hedge the County's investments is to identify a portfolio of industry clusters in which to invest – some clusters are higher risk but higher return; others are lower risk but lower return.

Criteria for the types of firms that should be the target of growth and attraction activities in Washington County include:

- Firms concentrated in "regional export activities" where goods and services are sold outside the County, generating net wealth within the County.
- Firms that promote innovation and utilize technology in value-added activities
- Firms in industry clusters that represent growth opportunities for the county and region, based on having key assets and support activities already in place, including:
  - Advanced Materials and Advanced Manufacturing
  - Information Technology and Agribusiness
  - Biotechnology and Environmental Technologies

As agriculture is recognized by the Commonwealth as a High Priority Occupations and is one of Washington County's leading industries, it stands to reason that targeted investment should occur to support this sector of the economy. The Agriculture and Food Production cluster includes the growing of food crops and the distribution of these products. The cluster also includes support industries such as refrigerated warehousing and fertilizer manufacturing as well as public agencies that oversee agricultural programs.

To support wise investment in Washington County's agriculture base, officials should invest in agriculturally oriented markets and related venues. Such strategies should incorporate product-oriented aspects as well as capitalize upon the growing importance of tourism. Agri-tourism can serve as either a primary or secondary farm product and would supplement the need for tourism-related amenities. Many organizations are currently working to support both agriculture and tourism in Washington County and the efforts of these should be supported and coordinated to achieve a holistic approach to economic development. Washington County should work with the PA Farm Vacations Association to conduct an Agri-tourism inventory of Washington County. Such an effort should incorporate efforts of the Washington County Tourism Agency promotions and those of historical organizations so that the county could achieve a viable link between the rich history of the county and agri-tourism. Product oriented efforts include developing local markets for locally produced foods and products. Washington County officials should investigate current state-level efforts that are underway, such as, the Pennsylvania Department of Agriculture's (PDA) "Simply Delicious" promotion program and Pennsylvania Association for Sustainable Agriculture's (PASA) "Buy Fresh Buy Local" campaign as well as the new Main Street Farmers Market in the City of Washington. However, it will be essential to add value to farm products by investing in direct-to-consumer packaging and marketing and encouraging value-added opportunities for livestock producers, especially for wool.

Studies show that 60-80 percent of growth in most mature regions comes from expansion of the existing business base (Entrepreneurship in the 21st Century, Office of Advocacy of the U.S. Small Business Administration July 21, 2004). Yet there often is a general tendency to ignore this important asset. A necessary approach to maintaining and growing local business is to ensure that the business climate helps to make them competitive in their respective marketplaces. The best way to assess the health of the business is by performing direct outreach through a business calling program, compiling the information to identify trends in the business climate,

and then developing strategies around how to fine tune the business climate to ensure the health of the local businesses.

It is critical that life long learning programs and retraining opportunities be tuned to the needs of existing businesses in order to allow them to stay competitive. A workforce that is trained in state of the art skills and processes also makes Washington County attractive for relocation and location of new businesses. Businesses that are technology intensive or that rely heavily on control or management require a workforce that is able to keep pace with the rapid pace of technological change. Just as other forms of capital require constant maintenance to keep a business or industry at peak performance, the knowledge base and training of the workforce must be maintained. Human capital is at least as important to a successful growth strategy as transportation and water and sewer. Without individuals in a community with the appropriate skills, a business cannot grow. Workforce skills and demographics are key elements of any relocation or location analysis.

In December of 2003, the Brookings Institution released a report called "Back to Prosperity." The leadership of Washington County supports the findings and recommendations of the report and has encouraged their inclusion in the economic strategy development. The purpose of the report was to look at the economy and growth patterns of the state and make recommendations about how the various regions can best achieve a high quality of life and success. This report contends that Pennsylvania's economic future depends on revitalizing its demographic mix and curbing sprawl and abandonment of infrastructure. It also claims that Pennsylvania's highly decentralized growth patterns are weakening the state's established communities, potentially impacting our ability to compete in the knowledge economy. The report then calls for the reshaping of the state's economic development strategy to one that links prosperity to the revitalization of older cities and towns.

The report says that in southwestern Pennsylvania, communities are "hollowing out," yet are still developing new land. Where other regions have immigrants moving in to fill the urban communities at their centers, we are leaving them to decay. Aside from the environmental and social impacts, development patterns are also affecting the region's economic competitiveness. State program funding and local tax dollars are being spent in a haphazard, unfocused way and on low-quality growth like outer-ring retail.

The report made a number of recommendations to remedy this situation that have applicability to the economic development strategy of Washington County (outlined below).

! Leadership must come to an agreement around a common vision for economic competitiveness and development that in turn serves as the focus for other county programs such as investment, permitting, land use planning, etc.

! County investments and programs should be targeted at older, already established communities and assets.

! County investment and programs should be focused on developing a competitive, "high-road" economy that exemplifies long-term sustained growth and family-supporting wages.

! The County should promote multi-municipal cooperation, especially in service delivery; land use decision making (planning and zoning) should be coordinated as much as possible at the county level.

These recommendations align well with those made by the community through various surveys and interviews and accordingly with the recommendations put forward in this document.

The broader summaries that apply to the Washington County Comprehensive plan of the Brookings Institute findings for the Commonwealth are as follows:

! PA should improve its capacity to plan so it can better promote sound land use and greater competitiveness on a regional basis.
! Increase the incentives to plan
! Require that state and local infrastructure plans and development conform to land-use plans
! Require that local zoning ordinances conform to county and local comprehensive plans
! Promote Quality in Multi-Municipal Planning
! PA should make the most of its significant infrastructure and economic development spending by targeting its resources on the state's older, already established places
! Make reinvestment the explicit priority
! Require consistency with county, local, or multi-municipal plans
! PA should invest in workers and industries that will help the state produce a more competitive, higher wage future.
! Make investments in education a priority
! Support manufacturing in the older areas
! PA should reform policies and programs to encourage land reclamation and redevelopment in cities, towns, and older suburbs.
! Identify new brownfield uses for old financing tools.
! Apply more tax-code incentives to brownfield projects.
! Reform eminent domain laws.
! Provide incentives for home improvements.
! Create more incentives for governments to collaborate with each other and sweep away existing barriers to collaboration or even consolidation.
! Strengthen the role of counties to carry out activities that transcend municipal boundaries, including land use and zoning.
! Make it easier for municipalities to merge or consolidate.

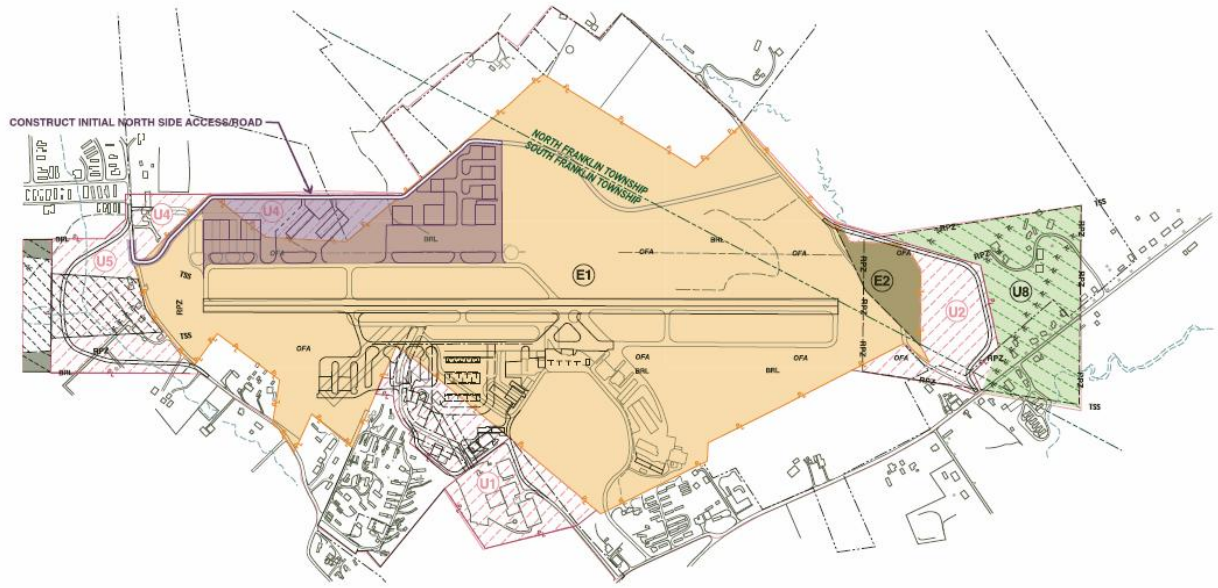
The topography, geology, and past development patterns of southwestern Pennsylvania introduce a particular challenge to those developing sites for industrial applications. Industrial users often require large flat parcels due to the nature of their processes, the need for a large loading dock, etc. Washington County has a long history of industrial development and many of its naturally occurring flat areas were developed early in the County's history and are often now referred to as Brownfields. Although these areas, or Brownfields, are usually located where infrastructure is present, new development on the site often requires some type of remediation effort due to environmental concerns. The remediation of potential environmental contaminants can cause an increase in development costs, which often places Washington County and the Southwestern Pennsylvania region at a disadvantage to other areas less developed.

In order for a site to be competitive in the national marketplace, some form of subsidy is generally required to offset the high cost of site preparation. These subsidies are typically millions of dollars for each site and are typically drawn from state or federal resources. Unfortunately there are only so many dollars available from these sources – so competition is fierce. The region and Washington County must invest these limited resources in places where they believe they are likely to create the greatest economic opportunity. From a regional perspective, the Southwestern Planning Commission carries the responsibility for establishing the list of priorities for investment. Officials for Washington County should work regionally to implement their economic development priority strategies and continue to update their economic development strategy on a regular basis.

The presence of the Washington County airport, combined with the close location of the Pittsburgh International Airport, results in aviation amenities that can serve local, regional, and international markets. According to the US DOT-Bureau of Transportation Statistics (2004), airfreight is the fastest growing segment of the American Cargo industry. Since 1993, the commodity value for airfreight has doubled while the total amount being shipped by air increased by 18 percent. Thus, it would benefit the County to direct future activities at the county-owned facility in a manner that will support business markets relying on high-end and time sensitive shipping practices. As well, it will be important to continue regional partnerships to support the Pittsburgh International Airport to County markets that have access to national and international markets.

With the recently commissioned ILS, the pace of business aircraft operations is expected to increase during the next five years from 40,000 operations (take offs and landings) to at least 50,000. Currently, 76 aircrafts are based at the airport. Within five years this number is expected to reach 100. A comprehensive land acquisition process is underway to allow for the expansion of aviation services (T-hangars and private aviation business hangers) on the north side of the airport to accomplish this goal. Figure 9.3 illustrates the proposed expansion of the airport per the approved Airport Layout Plan. To complement this expansion, the runway will be widened and lighting systems improved in the short term. Longer term goals will be to relocate the terminal building and complete Taxiway B to fully service the hangers and business on the South side of the field as well as acquire additional properties currently operating off the field but accessing the airport under a “through the fence” agreement which provides a right of way to the airport for off base operators.

Figure 9.3 Washington County Airport Future Improvements



Development in this area will be limited by two controlling factors. First, surrounding municipalities have cooperated with Washington County to adopt airport zoning ordinances to control development within the various safety areas of the airport. These measures are critically important to ensure compatible land use around the airport. Second, vehicular access to the airport needs to be addressed. As more development occurs and traffic increases in the area, this issue will be exacerbated. A comprehensive review of traffic patterns in and around the Washington area should be conducted to determine if airport access could be improved as a part of an overall effort to address traffic flow around the city and surrounding area.

It should be noted that there must be a priority for the integration of land use planning and airport planning. While there is enormous potential for the Washington County airport to support economic development efforts, consideration must be given to local impacts in relation to environmental issues and residential communities. Washington County officials will need to be diligent in their efforts to include all affected stakeholders. For instance, surrounding communities may fear new development at the airport dues to noise impacts. Therefore, there must be a clear understanding of what are compatible and incompatible uses near the Washington County airport.

Washington County is home to 67 municipal jurisdictions. These communities bear the responsibility of providing a wide variety of services – from management of sewage to providing community playgrounds. In many cases, the communities acting alone are not able to provide the level of service that is necessary to adequately support the safety or the quality of life for the residents. Cooperation does not come easily to many communities. The residents feel that their

tax dollars should stay within the bounds of the community so that they can be confident in how they are spent. Incentives can help break down this argument and allow officials to work together to provide higher quality or less costly services.

Many older communities have large parcels of land (often with buildings) that were formally used for industrial purposes. Many of these properties are "clean" but require significant investment in infrastructure and buildings in order to be competitive in the marketplace. Others were contaminated by their former occupants. In either case, the cost of returning the sites and buildings to the market can be prohibitive. On the other hand, these sites often occupy key locations with expanses of flat land, ample transportation (barge, rail, roadway, even air), and good utility service. The sites are usually located in the heart of communities that have fallen on difficult times; with new industry in place, the communities would stand a chance of being revitalized. In addition, redevelopment of these sites would prevent further erosion of open space in other areas. Based on recent surveys and community meetings, Washington County residents feel strongly about preserving open space for both quality of life and business and resident attraction reasons.

Communities need to understand how to make use of devices such as impact fees and Keystone Opportunity Zones to make their industrial and brownfield sites more competitive in the marketplace and thereby help to support older communities and minimize sprawl. There is a nationwide movement toward the return to the city. Boston, Minneapolis, Chicago and others are enjoying a housing boom as empty-nesters, new college graduates, and others are seeking the convenience, activities, and social life that living in a town or city has to offer. Policy makers are recognizing that sprawl is expensive – as communities expand, there is greater need for highways, water and sewer systems, and other infrastructure that has to not only be built but also maintained. Overall, it makes for good spending policy and it serves the market demand to reinvest in existing towns and cities.

There are many communities in Washington County with various needs. One approach to prioritizing the competing requests for support received by the County agencies might be to direct resources toward the communities that are associated with major job generating investments, such as active industrial parks. Funds directed toward job generation could thereby be leveraged.

The City of Washington warrants particular note. Surveys conducted by Washington & Jefferson College (W&J) indicated that in many instances the city was not a positive factor in helping attract students to W&J. This was primarily because of the appearance and perceived lack of economic vitality (Source, Annual surveys of high school guidance counselors who visited the College as part of the College's program to increase enrollment). More recent surveys indicate that improvements are being made in this area. Accordingly, in 2002 W&J and the city developed a "Blueprint for Collaboration," which was created to establish a shared vision for future. The Blueprint acknowledges the interdependence between the College and the city and documents strategies and goals associated with creating a financially vibrant city. Four months after the plan was announced, investors – both private and public - pledged millions toward its fulfillment.

E. Implementation Strategies

The following strategies and action items were developed with the support of numerous experts, members of the community, and members of public and private sector leadership.

Expand existing public-private partnerships including elected officials, regional agencies, non-profit groups with Washington County economic development organizations.

Action: Meet with regional partners and stakeholders
Action: Define roles to better leverage resources and improve collaboration
Action: Coordinate periodic countywide meetings to discuss county priorities, marketing efforts, issues, developments, etc.
Action: Ensure that the Commonwealth is involved to provide clarity on program-related sources of funds

Update and further develop the existing Washington County Economic Development Strategy.

Action: Further define the member agencies of the Washington County Development Partnership.
Action: Update the cluster analysis of the county, which identifies major businesses, their suppliers and customers, etc.
Action: Develop a marketing strategy for a regional and local audience with a consistent "Washington County" brand
Action: Develop a resource directory, designed to reinforce the one-stop shop, that provides information on criteria and sources of funding and contact information
Action: Train staff in economic development agencies
Action: Undertake a "re-missioning" of the agencies.
Action: Develop and maintain an inventory of all sites in the county, making note of which sites are brownfields

Strengthen and enhance the business retention program
Action:

Action: Strengthen the existing business calling program of the Washington County Chamber of Commerce and Economic Development Partnership
Action: Take advantage of regional and state workshops for information sharing concerning funding and resource opportunities and industry trends
Action: Enhance communication link regarding economic development to local stakeholders
Action: Develop growth opportunities for Washington County Businesses
Action: Develop strategies that support existing businesses and strengthen their ability to expand and create new jobs

Expand the ability of the County and its constituent communities, agencies, etc., to obtain funds that can be used for development or redevelopment

Action: Continue grant writing support for communities
Action: Educate communities on the use of impact fees
Action: Provide educational resources for municipalities
Action: Provide technical support and education to municipalities willing to consider revenue sharing

Align workforce development, education, and skills training programs with economic development strategies

Action: Continually update a training needs analysis and obtain funding to develop and support identified training needs
Action: Work with technical schools, community colleges, and other educational institutions to develop a workforce that can fulfill the employers needs
Action: Consider complementary board representation between education and workforce development organizations.
Action: Promote workforce-training opportunities to Washington County businesses/employers

Focus investments to ensure the ongoing sustainability of the Washington County Airport and foster its ability to be a economic generator

Action: Further advance the northside development to support the immediate aviation needs
Action: Develop a transportation plan to improve access to the Washington County Airport
Action: Develop an Economic Development and Land Use Study of the Airport to identify the development potential

Provide for suitable and appropriate incentives to encourage multi-municipal planning and development

Action: Identify those municipalities that demonstrate the best opportunity for consolidation and/or shared services & determine interest
Action: Provide the technical assistance needed to support the consolidation or sharing
Action: Provide technical assistance for communities interested in tax base sharing.
Action: Establish advocacy and lobbying efforts to enhance incentives for consolidation/sharing of services

Properly invest in existing communities and downtowns to minimize urban sprawl

Action: Redevelop and improve existing infrastructure to create the greatest impact on community needs.
Action: Encourage quality of life enhancements in brownfield and redevelopment areas
Action: Develop an inventory and engage in focused marketing
Action: Promote tax incentives that encourage the greatest opportunity for brownfield and revitalization efforts

Strengthen and fund local and regional tourism as an important economic development strategy

Action: Educate elected officials and the community as to the importance of tourism to the economy.
Action: Advocate at state and federal level for increased focus and funding for tourism
Action: Emphasize the importance of enhancing the quality of tourism sites
Action: Continue to integrate/coordinate with other county marketing plans
Action: Coordinate familiarization tours with economic development organizations
Action: Further develop the relationship between tourism and the agriculture industry

WASHINGTON COUNTY COMPREHENSIVE PLAN

CHAPTER 10.A. AGRICULTURE

A. Introduction

Counties have been charged to consider agricultural lands when completing a comprehensive plan and prepare a plan for preserving and enhancing that land. The Pennsylvania Municipalities Planning Code (MPC) specifies that when preparing a comprehensive plan a county "shall identify a plan for the preservation and enhancement of prime agricultural land and encourage the compatibility of land use regulation with existing agricultural operations" (p. 13). Act 67 and Act 68 amended the MPC in 2000 to encourage multi-municipal planning and intergovernmental partnerships. Through a coordinated approach, counties and local municipalities have the authority to dedicate public funds in certain areas so that other land areas may be preserved as rural resource areas. Additionally, multi-municipal planning and zoning can provide for agricultural land uses within a reasonable geographic area instead of within each municipality and are protected against exclusionary zoning challenges.

County Development Objectives

- Recognize the significance of the agricultural industry to Washington County's economy
- Celebrate the agricultural and rural character of the County's quality of life
- Provide the resources necessary to preserve and protect agricultural land

Southwestern Pennsylvania is typically associated with the traditional industrial pursuits of mining, steel production, and manufacturing, but Agriculture has long been the leading industry for the region and the state. In fact, the agriculture industry continues to be a leading economic sector for Washington County and remains a strong element of the fiscal health of the county.

B. Background

The fertile lands in Southwestern Pennsylvania have long been associated with farming. The first agricultural pursuits that occurred in the region were by the Monongahela Indians who grew beans, squash, and corn. Many of the settlers moving into Washington County were farmers who brought their knowledge of agriculture practices with them. As the word spread about the productivity of the lands in Washington County, more and more people came to the area to grow crops and raise livestock.

The most successful livestock venture was the breeding of sheep and wool production. During the mid-1800's, Washington County was known for its quality sheep and wool production. Washington County sheep farmers led the nation in the breeding and exporting of sheep (Marotta, 1985). At its highest point, the sheep industry boasted 461,120 sheep in 1880, but by 1910 that number had plummeted to 196,000 (Marotta, p. 9. 1985).

The decline in the number of sheep farms was a result of many factors one of which was the coal, oil, and gas boom that created such an influx of people that land values skyrocketed and farmers sold off many acres to developers. This was perhaps the first example of what is now termed "sprawl" and while land was consumed for people instead of animals, a benefit was the building of roads and railroads that helped move the animals and produce.

As technology advances were made, more efficient methods of agricultural production methods resulted in increased output. In 1842, Washington County resident Andrew Ralston developed and patented a grain threshing machine that helped to increase production. Other advances such as the milking machine led to the rise of the dairy industry in Pennsylvania. The diary industry was another very successful agricultural venture for Washington County farmers and one that benefited from the population growth and new transportation routes. Milk, cheese, and butter were needed as food staples for the growing population and Washington County farmers quickly organized to meet the need. The advent of electricity and refrigeration expanded the capability of dairy farmers to increase milk production. By the early Twentieth Century, Washington County had become nineteenth in the state for the number of dairy cattle (Marotta, p. 11, 1985).

While beef cattle, hogs, and poultry were also raised and sold, only the equine industry rivals the successfulness of the sheep industry. The equine industry in Washington County includes pleasure horses, draft horses, show horses and racing horses. Draft horses were bred for the hard work of farming while it is the Standardbred horse that was bred for racing. By 1948, Harness racing quickly became a popular sport in Washington County with several successful horse-breeders raising champion stock and the construction of the Meadows Race Track in 1963 (Marotta, 1985).

Overall, the agriculture industry was very profitable for residents and it continues to be entrenched into the character and social aspect of Washington County. Unfortunately, it became much more difficult to earn enough money to continue to farm and many family farms have been sold. At the beginning of the twentieth century, Washington County had 539,435 acres of farmland (Marotta, p. 13, 1985). Today, according to The U.S. Department of Agriculture, Washington County has 2,490 farms that comprise a total of 259,500 acres of (USDA, 2004). However, it should be noted that many figures pertaining to agricultural statistics are inconsistent due to the varying definitions and reporting areas that can be classified under the term Agriculture Industry.

C. Existing Conditions

Over the years, the agriculture industry has been affected by shifts in population and loss of traditional farming lands. Land trends across Pennsylvania reflect a shifting in population from traditional urban areas to rural lands. Much of the development that is occurring is land-intensive forms of development such as residential sub-divisions and commercial development that is overly auto–oriented. When new development occurs on farms that have been sold to developers, these traditionally agricultural areas are caught in a conflict between new and old land uses. The patchwork of development that is created juxtaposes farming against high-traffic generating and service oriented uses. When this happens, the new residents, who were attracted to the area because of the rural nature, often become quickly disillusioned by the olfactory and auditory impacts of farming. There are many aspects of farming that can create significant impacts on surrounding land uses. Fertilizing fields in the spring and fall can cause odors that may be offensive to some. Additionally, the working hours of farmers may not mesh well with those who sleep past sunrise, which is often when the farmer is up and out in the field or feeding livestock.

However, many farmers have adapted to the changing nature of agriculture in the recent years by implementing new technological advances and by becoming more educated about agricultural practices as well as community perceptions. Today it is common for a farmer to have earned a college degree or enrolled in a vocational school to become acquainted with the newest farming and livestock methods. Pennsylvania legislators have recognized the challenges faced by the agriculture industry and have taken steps to strengthen and protect this important economic sector.

Enacted in 1982, the Right to Farm Act protects Pennsylvania farmers against public nuisance claims through the practice of agriculture. The Right to Farm Act was enacted in response to nuisance laws from neighboring land owners who claimed that a farmer was creating a private or public nuisance by interfering with the property owners use of their property or by threatening the public safety. The act limits the ability of private landowners to file suit by setting state-wide policy to “Conserve, protect, and encourage the development and improvement of its agricultural land for the production of food and other agricultural product” (DCED, 2003). In addition to limiting nuisance suits, the act prohibits municipalities from identifying farming practices as nuisances or restricting the sales of agricultural goods through zoning ordinances.

Other state initiatives include the Pennsylvania Farmland and Forest Land Assessment Act of 1974, which establishes a level of tax relief for agricultural landowners. The Pennsylvania Farmland and Forest Land Assessment Act, also known as Clean and Green, is a tax program that assesses land based upon its use value not fair market value. The goal of the Clean and Green program is to preserve agricultural lands by reducing the tax burden on property owners. This land conservation program is an enrollment program where the property owner agrees to keep their land dedicated to agricultural use, agricultural reserve use, or forest reserve use for an indefinite period if the land is to be eligible for the lower property tax assessment level. Should a property owner elect to leave the program and convert their land then they may be obligated to pay back taxes along with interest.

There are specific requirements for landowners to enroll in the Clean and Green program. For instance, the owner must dedicate the land for the production of an "agricultural commodity" or "soil conservation" (DCED, p. 27, 2003). If the land is eligible to enroll in the Clean and Green program under the classification of Agricultural Reserve, the land must be noncommercial open space lands used for recreational and outdoor enjoyment…and open to the public for that use" (DCED, p. 27, 2003). The forest reserve classification specifies that the land is ten or more acres that are capable of producing timber or other wood products. Assessment values are determined by the Department of Agriculture and are based upon soil classifications. According to the Washington County Tax Assessment Office, as of January 2005, there were a total number of 377,425 acres enrolled in the Clean and Green program in the county.

The Agricultural Area Security Law was enacted in 1981 to encourage landowners to commit to preserving agricultural lands and to protect these important land classifications from incompatible uses on neighboring lands. The law establishes the authority for municipalities to identify areas of 250 or more acres to be voluntarily enrolled as an Agricultural Security Area (ASA). Land within the district may be owned by more than one person and does not have to be contiguous. The municipality acts as a partner with the land owner to identify and establish ASA's and must follow such criteria as the land having soils compatible with agricultural purposes, applicability of the ASA to the local municipal comprehensive plan, the current agricultural use or improvement, and the anticipated trends for that land area. An ASA application process includes a proposal process, public notification, and a review of the ASA on a seven-year basis. Enrollment in an ASA provides limited protection against municipal regulations, eminent domain, and allows the landowner to participate in Pennsylvania's agricultural conservation easement program. As of April 2005, there were approximately 60,000 acres included in agricultural security areas, which equals roughly 11 percent of the County's total land area.

Another important method to preserve agricultural land is the Pennsylvania Agricultural Conservation Easement Purchase Program, which was established under the Agricultural Area Security Law (1981). The agricultural easement provides the option for a landowner to sell the development rights to land dedicated to agricultural uses. The land remains under the person's ownership, but may not be developed for any non-agricultural use. Every county, with an approval program, has the responsibility of administering the county-level conservation easement program, which is operated under the oversight of the Pennsylvania Department of Agriculture. An agricultural conservation easement program establishes a perpetual restriction on the land securing the agricultural land for future generations. Funding to purchase agricultural conservation easements is provided by state, county, and at times, local municipal allocations and private revenue. Unfortunately, due to reduced funding levels approximately 20 landowners are still waiting to have agricultural conservation easements purchased in Washington County. To date Washington County has spent $4,278,450 of State money and $111,116 of County money to purchase easements on prime agricultural land. As of April 2005, Washington County had 16 farms with 2,455 acres enrolled in the agricultural conservation easement program.

Other legislative acts that provide autonomy to local farmers are the Sewer and Water Line Assessment Exemptions Act (1976) and the Pennsylvania Construction Code Act (1999). The Sewer and Water Line Assessment Exemptions Act sets limits to which local farmers must comply with mandatory tap fees and other fees associated with the installation of water and sewer lines. The construction code act sets limitations on construction standards and does not apply these provisions to agricultural buildings.

The definition of "prime agricultural land" in Pennsylvania, according to Executive Order 2003-2 signed in 2003, is as follows:

a) In active agricultural use (not including growing timber);
b) Lands devoted to active agricultural use the preceding three years; and
c) Fall into at least one of the categories of land – State agencies shall provide protection to "prime agricultural land" under this Executive Order based upon the following levels of priority:
    1) Preserved Farmland (Highest Priority)
    2) Farmland in Agricultural Security Areas (Second Highest Priority)
    3) Farmland enrolled in Act 319 of 1974, As Amended (Clean and Green) or Act 515 of 1996, As Amended (Third Highest Priority)
    4) Farmland Planned for Agriculture Use and Subject to Effective Agricultural Zoning (Fourth Highest Priority)
    5) Land Capability Classes I, II, III, and IV Farmland and Unique Farmland (Fifth Highest Priority)

Just as the agriculture industry has many legislated protections in place to sustain agriculture as a profitable economic sector, it also has responsibilities to protect the environmental integrity of the land. For instance, the Clean Streams Law regulates the discharge of pollutants into Pennsylvania's waterways. Pollutants include industrial and municipal wastes, sewage discharge, and other pollutants including fertilizers and pesticides such as those used in the agriculture industry. The Nutrient Management Act was first enacted in Pennsylvania to place mandatory management controls on farm pollution in an effort to reduce environmental pollutants and improve water quality (DCED, 2003). The Nutrient Management Act regulates manure disposal in order to control non-point source pollution as well as setting standards for defining Concentrated Animal Operations (high animal density agricultural operations).

Nutrient Management Plans are one requirement of the Nutrient Management Act. A nutrient management plan helps to establish best management practices for agricultural operations. Among the topics included in a plan are crop rotation and tillage, and manure testing, storage, and disposal. A nutrient management plan will outline the actions that a farmer will follow to comply with the Nutrient Management Act. Such regulations include identifying application rates for manure and other nutrients, establishing minimum standards for manure storage, and record keeping requirements. The Washington Conservation District is responsible for working with farmers to develop nutrient management plans. It should be recognized that local municipal ordinances do not preempt the Nutrient Management Act, thus, essentially limiting local control over concentrated animal operations.

CHAPTER 10.A. AGRICULTURE

The importance of protecting agriculture, as a viable and profitable industry, cannot be forgotten. Farm income indicators provided by the U.S. Department of Agriculture show that various sectors of the agriculture industry have greater economic generating capacity. In 2003, the total crop production was $1,561,473 with Feed Crops being the most profitable (USDA, NASS 2003). Dairy Products was the most valuable sector, which generated over half of the total $2,875,951 of the Livestock Production (USDA, NASS 2003). Washington County's agricultural base is very strong in the feed crop sector but has fallen behind in terms of dairy production.

Recent numbers provided by the U.S. Department of Agriculture-National Agriculture Statistics Service in 2003 indicate that agriculture remains an important industry for Washington County. Washington County ranks third in the Commonwealth in the total number of farms per county—falling closely behind York County's 2,550 (Lancaster County ranks first with 5,305 farms). In 2003, Washington County ranked second in the number of sheep farms (205), although it had the highest total number of sheep; second highest number of Cattle Farms (1,210); fifth highest number of poultry farms (217); and, was tied with Franklin County for the sixth highest number of hog farms (100). In terms of crop production in 2003 Washington County ranked second in the Commonwealth in the production of alfalfa hay, third in dry hay/other, third in dry hay/all, and fifth in forage/all (USDA, NASS 2003). Washington County ranked eight in the Commonwealth in Field and Forage Crops Harvested by County in 2003 with a total of 89,500 acres being harvested.

Based upon a 2003 study conducted by the Pennsylvania Department Agriculture, the equine industry generates $1.12 billion in jobs, benefits, and value-added activity in the Commonwealth. The industry's value-added activity, or secondary effects, includes increased local spending and related industry spending. In Washington County, the equine industry continues to be a viable economic activity. Washington County is fourth in Pennsylvania for total equine population with 2,250 racing related horses and 6,320 general use horses. The value of these horses is $28,812 808. In addition, there are 38,324 acres utilized by general use horses and 14, 801 acres used by racing horses.

It is important to understand that the benefits of the agriculture industry are inter-related. For instance, the equine industry supports many other aspects of agricultural pursuits in Washington County including feed crop production, fencing, and land preservation. Other industries such as the gaming industry are directly dependent upon the strength of the equine sector in Washington County. According to the Pennsylvania Farm Bureau, agriculture and its related industries provides one out of every five jobs in the state with about two million people across the state who are employed directly in farming.

As illustrated in the preceding paragraphs, agriculture is alive and well in Washington County.

Washington County has many organizations and programs that assist local farmers as displayed in Table 10.1: Agricultural Programs and Organizations in Washington County.

Table 10.1: Agricultural Programs and Organizations in Washington County

Title	Address	Objectives
Washington County Farmland Preservation Program	100 West Beau St. Washington, PA 15301	Protect viable agricultural lands by acquiring agricultural conservation easements Provide financial incentives to farmers for relinquishing their development rights Encourage the formation of Agricultural Security Areas Protect normal farming operations Assure conservation of viable agricultural lands
Washington County Farm Service Agency/ USDA	2800 North Main St. Extension Washington, PA 15301	Delivery of National Farm Programs, mandated by Congress through the 1996 Farm Bill (including the Commodity Loan Program, Farm Loan Program, Conservation Program, Disaster Program, etc)
USDA Natural Resources Conservation Service	2801 North Main St. Extension Washington, PA 15301	To provide quality leadership and service for the stewardship and conservation of Pennsylvania's natural resources.
Penn State Cooperative Extension	100 West Beau St. Suite 601 Washington, PA 15301	Provide educational and research resources including 4-H programs, Nutrition Education, Urban and Community Forestry, Soil Testing and Insect Identification, etc.
Pennsylvania Equine Council	Region 7 South Western 201 Madison St. Monroeville, PA 15146 412-373-4210	The overall goals of the PEC aim to make it easier, more affordable, safer and more enjoyable to own equines and participate in equestrian sports in the Commonwealth of Pennsylvania
Washington County Conservation District	101 West Beau St. Suite 602 Washington, PA 15301	To assist in the conservation of soil, water, and other natural resources of the county To protect important farmland To provide environmental education
Washington County Diary Club	100 West Beau St. Suite 601 Washington, PA 15301	To promote the local diary industry and educate consumers on the health benefits of diary products
Washington County Cattlemen's Association, Inc.	213 Pine Run Rd. Amity, PA 15311	Encourage the production of quality beef cattle To identify solutions of problems with the beef industry To promote the consumption of beef To promote youth interest in the beef industry
Washington County Ag Days	261 Pine Run Rd. Amity, PA 15311	Promote and educate the public by having demonstrations and shows of Washington County Agricultural Products
Washington County Fair	287 Ridge Rd. McDonald, PA 15057	To promote and publicize the agricultural products of Washington County
Washington County Pomona Grange	130 Statement Ave. Washington, PA 15301	Promote agriculture in the county and state by providing extended insurance for home and farm, educational programs and charity promotions.

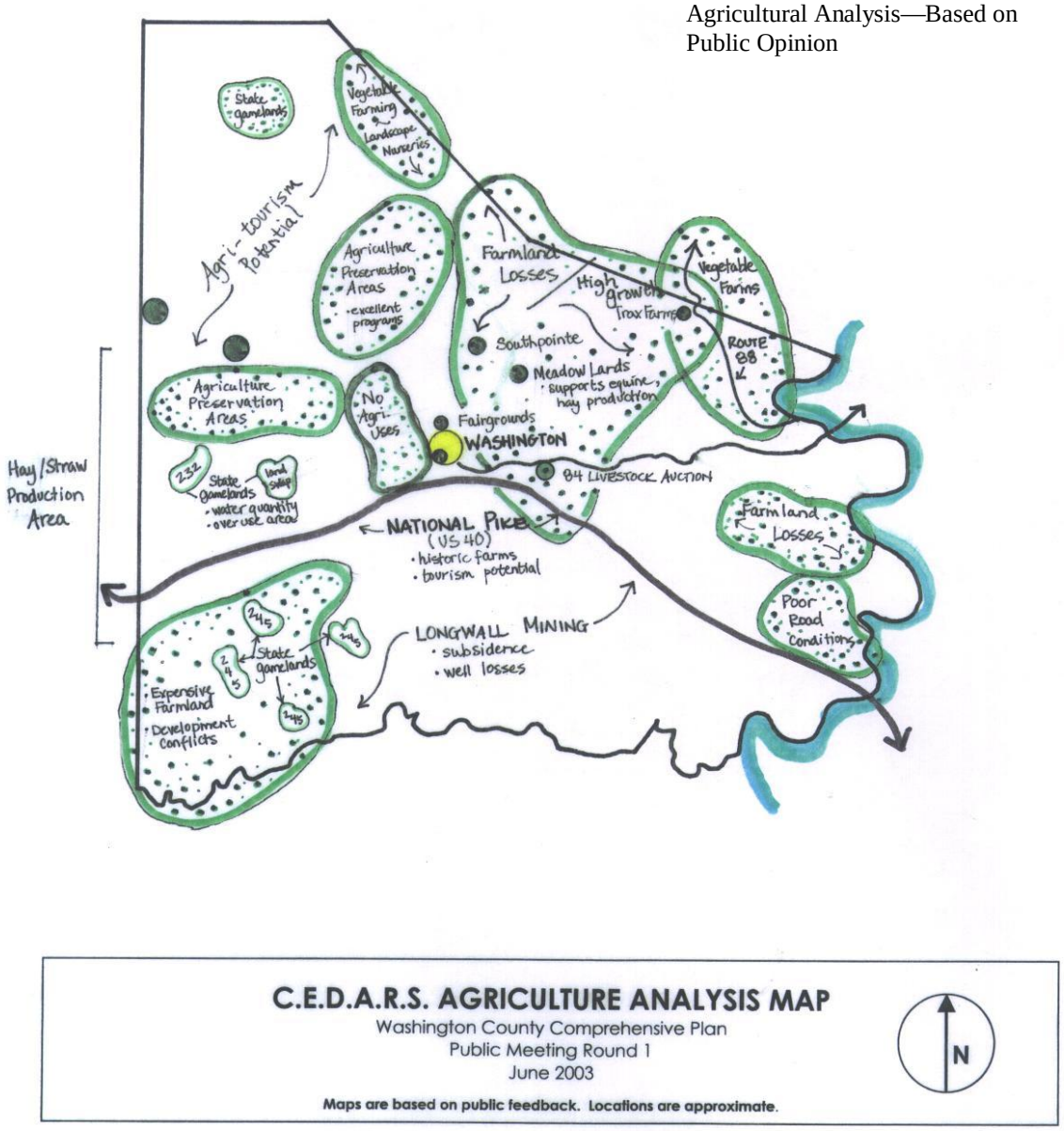
Table 10.1: Agricultural Programs and Organizations in Washington County

Title	Address	Objectives
Washington County Sheep and Wool Growers	297 Rural Valley Rd. Claysville, PA 15323	To promote the sheep industry. To educate the consumer to the healthy choice that lamb represents. Provide for the selling of wool, education programs, training programs, and networking opportunities.
Washington County Farm Bureau	128 Cowden Road Burgettstown, PA 15021	Active participation in the legislative process locally, statewide and nationally Providing services to aid members in group rates and discounts Sponsoring programs to educate and inform members
West Alexander Agricultural Association	255 Route 40 West West Alexander, PA 15376	The aim and objective of the association is to encourage advancement and progress in all things pertaining to agriculture and horticulture and to promote the intelligence and welfare of the community.

Source: Washington County Planning Commission

During the comprehensive planning process, the public was questioned as to their perceptions regarding the most important issues facing Washington County. Agriculture was repeatedly mentioned as one of the most important economic and quality of life aspects of Washington County. As depicted by The C.E.D.A.R.S. Agriculture Public Input Map (Figure 10.1), there are many agriculture issues and areas across the county that are affected by all aspects of development. Other important items identified were the potential for tourism oriented to farming and agricultural operations. Many people noted their concern regarding conflicts that have occurred from development and population growth on the rural nature of Washington County.

Figure 10.1: C.E.D.A.R.S. Agricultural Analysis—Based on Public Opinion



D. Analysis & Recommendations:

Although there are many programs and organizations that currently provide support and assistance to Washington County farmers, these programs are not centrally located. This fact was mentioned often during the public participation process and it was noted that many in the agricultural industry desire to have a visible and organized role in promoting agricultural interests in Washington County. As well, many local farmers and persons associated with livestock or the equine industry expressed their frustration with the lack of a central location where they can go to when in need of assistance. Although the existing organizations do a remarkable job at dispensing information, representatives from several entities noted that they could do more to strengthen the agricultural industry in Washington County if a facility (one-stop shop) was established to house all agricultural organizations in one location. A feasibility study should be conducted to determine if this "one stop shop" is a viable option.

The Pennsylvania Municipalities Planning Code expressly states that municipalities must enact zoning regulations that encourage the development and viability of agricultural operations (2003). Municipalities can comply with this charge by establishing zoning districts that protect farmland from uses that would negatively effect the existing agricultural operation. Such zoning is termed Agricultural Zoning and can be a powerful tool to protect and preserve agricultural operations. Agricultural zoning must include land that is classified as having prime agricultural soils so that these locations, which are most conducive to agricultural operations, are not developed in another manner. Agricultural zoning restricts other land uses that could possibly disrupt farming or the raising of livestock thereby reducing interference into the agricultural operations. Agricultural zoning can achieve the protection of prime agricultural land through "non-exclusive agricultural zoning" (DCED, 2003). This zoning classification allows other land uses in agricultural areas but strictly limits the density and uses. For example, other uses that might be considered compatible with agricultural uses are single-family residential dwellings of limited overall density, farm-worker residential dwellings, greenhouses, churches, schools, kennels, and cemeteries. However, the zoning regulations typically establish a scale of development by establishing larger minimum lot sizes for structures or through the application of area-based allocation. Lot size requirements dictate how large a land parcel must be before a structure can be built upon the parcel. Area-based allocations use the original parcel size to determine the total number of parcels that can be sub-divided. Washington County should encourage agricultural zoning in traditional agricultural areas to protect existing agricultural operations. In addition, Washington County should continue to work with local municipalities to educate them on the benefit of agricultural zoning.

As development encroaches upon agricultural areas land use conflicts may arise. One way to minimize these conflicts is to notify residents moving into agricultural areas of the conditions associated with agricultural activities (noise, odor, working hours, etc.). One way to achieve this is working with the municipalities to include an agricultural deed attachment to the new residents' deeds notifying them of these possible conditions. Washington County should continue to work with local municipalities to minimize land use conflicts and explore the possibility of agricultural deed attachments.

As previously mentioned numerous laws exist to protect agricultural operations. The Agricultural Area Security Law and Right to Farm Law are just two existing laws that achieve this objective. By continuing to support the formation of Agricultural Security Areas, and educating municipalities and the public on the Right to Farm Law, agriculture can be afforded the protection it needs in the changing landscape of Washington County.

The Pennsylvania Agricultural Conservation Easement Purchase Program (PACEPP) is another way to perpetually protect Washington County's top agricultural land. In the past couple of years, the County has dedicated roughly $111,000 to this program. The Commonwealth in a typical year matches this amount dollar for dollar. As more interest is expressed in PACEPP, the financial contribution made by the County should be maximized to the fullest extent possible to capitalize on Commonwealth match money. A County Bond Issue is one such avenue that warrants further investigation. Ensuring that prime agricultural land is available for future generations must continue to be a top priority in Washington County.

The presence of agriculture is also important to the ongoing efforts to protect the environment. More and more farmers are enrolling in conservation programs and applying best management practices that preserve the rural integrity of the land. The application of such practices as stream bank fencing and protection of riparian buffers serves to improve the soil, air and water quality. The availability of agricultural, forest, and open space lands are crucial to protect the environment and provide habitat for wildlife. Washington County will continue to promote good land stewardship on all agricultural land.

Another avenue to support and benefit from the Agricultural Industry in Washington County is the development of Agricultural Tourism—agritourism. The Pennsylvania Farm Vacation Association helps to promote the benefits related to "farm vacations." As tourism is a growing and profitable economic force for Washington County it should include aspects of this industry. Many people value the rural atmosphere in Washington County and would be interested in visiting a working farm. Farm vacations provide an outlet for people who live in urban areas to experience life on a farm. The Pennsylvania Farm Vacation Association reports that family farms across the state are inviting visitors to stay with them and participate in the daily life of farm living. Such a venture provides benefits for all with increased awareness of the quality of life provided by rural activities along with a source of revenue for local farmers.

During the planning process, the Washington County Cooperative Extension Service and members of the Agriculture Community noted their concern regarding the threat to the agricultural water supply in Washington County. Rural springs and small streams are being lost because of subsidence damage due to longwall mining. To ensure the ongoing sustainability of the agricultural industry, a responsible approach to the extraction of coal should be considered to ensure a minimum amount of water loss. Agriculture cannot be alive and well without the springs and small streams that have been an integral part of production farming in Washington County.

Agriculture and agriculture related industries are constantly evolving to meet the needs of the County and Region. As economic conditions changed throughout the years, agriculture and agriculture related industries have remained a constant fixture in the economy of Washington

County adjusting to increasing costs and demands solidifying their place as one of the most economically viable sectors now and in the future.

The agricultural industry will continue to play a role in the economic stability of Washington County as well as its character and quality of life. As such, the county should continue to support and protect this industry by implementing the recommendations contained in this comprehensive plan.

E. Implementation Strategies

To fulfill the County Development Objectives, the County should work with appropriate agencies to meet the following goals. For each goal statement, one or more action steps are provided. The actions outline specific strategies complete with measurable outcomes.

Support and enhance farmland preservation efforts.

Action: Develop a strategy to educate people who are moving into agricultural areas regarding farming practices (such as working with municipalities to provide deed notices for properties adjacent or near farms prior to issuing deeds)

Action: Washington County should support education efforts to the public and municipalities on how to maintain farmland

Action: Continue to support the Washington County Agricultural Land Preservation Board by facilitating their review of proposed water and sewer extensions

Action: Continue to support existing efforts to preserve agricultural areas through such programs as purchasing easements

Action: Increase the County's contribution to capitalize on the Agricultural Conservation Easement Purchase program (County Bond, County/Private Contribution)

Action: Integrate an agricultural marketing strategy with overall economic development strategies for the County

Action: Work with the County Cooperative Extension to research new ideas and programs that support agricultural opportunities (transfer of development rights, sources of funding, County entity owns easement rights, tax credits/bonds)

Identify ways to enhance and protect water resources that are essential to support agricultural activities.

Action: Continue to promote Conservation Plans and the use of Best Management Practices to protect water supplies (utilize stream buffers and fencing)

Action: Obtain grants for conservation practices

Minimize potential conflicts between agriculture and development by educating the public and municipal officials about the agricultural industry.

Action: Enhance the review of zoning ordinances (identify potential conflicts)

Action: Educate municipalities about existing farming regulations (Agricultural Area Security Law, Right to Farm Law, etc.)

Action: Research model ordinances to protect right to farms laws and circulate to municipalities

Action: Provide education to the public on farm laws and safety

Action: Approach the Bar Association to promote a Farmers Defense Fund

Develop an economic strategy to promote locally grown produce and farm products.

Action: Complete a study to assess the economic condition of agriculture in Washington County, how to strengthen this industry and determine how to integrate into the County's overall economic strategy

Action: The County Cooperative Extension should be able to assist in the promotion and development of Farmer's Markets (marketing for the organizers, suppliers, buyers)

Develop a wildlife management policy that will protect the agricultural industry.

Action: Develop and maintain a wildlife management policy to address county-owned property

Action: Partner with state agencies (i.e. game commission) to develop best management practices regarding wildlife

Continue to provide leadership and support to promote the use of best management practices.

Action: Maintain offices in the County to ensure Best Management Practices are implemented

Action: The County Conservation District will continue to provide education and promotion of conservation practices

Action: Investigate the feasibility of developing a facility to house all organizations association with agriculture (i.e. USDA, Conservation District, FSA, NRCS Farmland Preservation, Cooperative Extension)

Action: Support/Encourage voluntary organizations and provide leadership of these organizations

Recognize the equine industry as an important contributor to the agricultural industry and to the economic structure of Washington County.

Action: Investigate ways to designate the equine industry as a component of the agricultural industry

Action: Identify opportunities to develop an equine co-op so that horse owners in Washington County have more buying power

Action: Promote tourism (as an economic generator) for equine activities (facilities, trails, etc.)

Action: Provide equine designated trails in county parks

Develop a strategic plan to encourage new agricultural efforts and reduce the sale of viable agricultural lands.

Action: Incorporate state funded programs and low-interest loans (guaranteed to replacement farmers) into county planning commission activities

Action: Develop a farmers network &/or farmer partnership to identity opportunities/resources

Action: Consider issuing a County bond to promote agricultural preservation and provide funding opportunities to farmers

Action: Develop a tourism strategy that incorporates the agricultural nature of the county and encourages "farm vacations" and other agric-tourism opportunities

CHAPTER 10.B. NATURAL RESOURCES

A. Introduction

Determining which environmental characteristics that should be preserved is an important step in the development of a municipal or regional comprehensive plan. Due to the large geographic area of this countywide project (Washington County has a land area of approximately 857 square miles), it is essential to identify these natural resources and develop recommendations for their protection and conservation. In addition, the developmental limitations that exist because of the presence of natural features (i.e., streams, floodplains, etc.) or anthropogenic sources (i.e., point source pollution, non-point source pollution, etc.) are essential in the planning for future smart growth of this county.

To guide future natural resource protection and conservation efforts in Washington County, the following objectives serve as overarching policies.

County Development Objectives

- Protect natural resources to create a desirable ecological balance that supports diverse life systems
- Encourage the wise and efficient utilization of natural resources to promote a sustainable economy
- Preserve farmland/open space and maintain land use diversity throughout the county
- Establish the county as a leader in sustaining its natural systems
- Strategically direct infrastructure investments to protect the environment

B. Background

The PA Department of Environmental Protection (PADEP) classifies the Commonwealth's rivers, streams, and tributaries according to Chapter 93 Water Quality Standards. The county has four high-quality warm water fisheries, three trout stocked fisheries, and numerous warm water and cold water fisheries within its boundary. The high-quality warm water fisheries include Little Chartiers Creek, Buffalo Creek, Cross Creek, and Mingo Creek. The trout stocked fisheries include Tenmile Creek, Peters Creek, and Mingo Creek. In addition, the Pennsylvania Fish and Boat Commission (PFBC) has classified the following streams as Approved Trout Waters: Aunt Clara Fork, Canonsburg Lake, Dutch Fork Creek, Dutch Fork Lake, Enlow Fork, Kings Creek, Little Chartiers Creek, Millers Run, Mingo Creek, Pike Run, Templeton Fork, Tenmile Creek (from SR 0018 downstream to SR 0019).

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CHAPTER 10.B. NATURAL RESOURCES

According to the US Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI), there are approximately 2,300 wetlands within the county boundary; however, they make up less than two percent of the total area. While there are potentially many other viable wetland areas, this plan will only address NWI recognized areas.

Numerous important ecological habitats and environmentally sensitive areas are located within the county's boundary. The following were identified: three Important Bird Areas, five state game lands, twenty-three biological diversity areas, five land conservation areas, eleven areas of Managed Land, four Geologic Features/Fossil Localities, several blue heron rookeries.

Approximately 40 percent of the soils in the county are classified as hydric soils and 9 percent are classified as prime agricultural soils. Over 60,000 acres of land, or approximately 11 percent of the total land area in the county, has been established as Agricultural Security Areas. Four underground mining operations are active within the county: 84 Mine, Maple Creek Mine, Shoemaker Mine, and High Quality Mine. Two municipal waste landfills are located in Chartiers Township and Union Township.

Map 10-B-1 illustrates the develop constraints as a result of the natural resources located in Washington County.

The Land Use and Natural Resources section of this comprehensive plan will be consistent with and may not exceed those requirements imposed under the following:

i) Act of June 22, 1937 (P.L. 1987, No. 394), known as "The Clean Streams Law".

ii) Act of May 31, 1945 (P.L.1198, No. 418), known as the "Surface Mining Conservation and Reclamation Act".

iii) Act of April 27, 1966 (1st SP.SESS., P.L. 31, No.1), known as "The Bituminous Mine Subsidence and Land Conservation Act".

iv) Act of September 24, 1968 (P.L. 1040, No. 318), known as the "Coal Refuse Disposal Control Act".

v) Act of December 19, 1984 (P.L. 1140, No. 223), known as the "Oil and Gas Act".

vi) Act of December 19, 1984 (P.L. 1093, No. 219), known as the "Non-coal Surface Mining Conservation and Reclamation Act".

vii) Act of June 30, 1981 (P.L. 128, No. 43), known as the "Agricultural Area Security Law".

viii) Act of June 10, 1982 (P.L. 12, No. 6), known as the "Nutrient Management Act," regardless of whether any agricultural operation within the area to be affected by the plan in a concentrated animal operation as defined under the act.

C. Existing Conditions

CLIMATE

Climatological information can be a useful tool for long-range planning in all areas of the County's economic development such as agriculture, industry, water resources management, communications, transportation and recreation. Specifically, the application of climatological techniques and data can be most helpful in answering such questions as these: What crops can be profitably grown? How large of a heating or cooling plant is needed and how much insulation will be needed for a building? Will there be adequate rainfall to keep reservoirs supplied? The following discussion is a general overview of the climate of Washington County.

The mean temperature for Washington County is 53 degrees Fahrenheit (°F) with a maximum mean monthly temperature of 74°F in July and a mean monthly low of 30°F in January.

Precipitation averages about 38 inches per year and is fairly evenly distributed throughout the year. May, July, and August are the wettest months with an average of 3.9 inches per year and February is the driest month with 2.2 inches per year. Snowfall averages 21.2 inches per year with most of it falling between December and March (USDA, 1983).

TOPOGRAPHY / STEEP SLOPES

Numerous, narrow, relatively shallow valleys characterize the project area. Northern Washington County has smooth, rolling hills, while the southern portion has higher, sharper ridges, and more steeply chiseled stream valleys.

Slopes play a significant role when determining the extent and type of development that is being planned. Land with slopes in excess of 25 percent begins to cause serious problems for development. The slope and soils present on steep slopes are in balance with vegetation, underlying geology, and precipitation levels. If these steep slopes are actively used or the vegetation is removed, the soils become prone to erosion. In addition, Washington County's soils have high clay content and with the amount of rainfall in the area, regardless of the slope, the soils are very slip prone.

Slopes greater than 25 percent are located throughout the study area. Figure 10-B-1 illustrates the locations of slopes greater than 25 percent within the County.

GEOLOGY

Pennsylvania is divided into numerous physiographic provinces. A province is defined as a region in which all parts are similar in geologic structure, climate, relief, and have a unified geomorphic history. The northern portion of Washington County is located in the Pittsburgh Low Plateau section and the southern portion is located in the Waynesburg Hills Section of the Appalachian Plateaus Province. This province covers much of western and southwestern Pennsylvania including all of Greene, Armstrong, and most of the other counties within the region.

Because no area of Washington County has ever been glaciated, the geologic strata and soils appear to be well stratified and predictable, meaning that the bedding of the rock strata tend to be nearly horizontal. With most of the strata remaining horizontal, the landscape tends to weather uniformly and reduces erosion between rock strata.

Several geological periods underlie the study area province. The "periods" are further broken down into formations or groups within these periods. These groups represent different time periods during the Earth's geologic history. The specific geological classifications and descriptions are depicted in Table 10.B.1.

The geologic makeup of the area is important in planning for development because the bedrock of an area, along with the hydrologic cycle (water cycle), is responsible for the changes in elevation, topographic slopes, and waterway locations. The orientation of bedrock is influential in determining an area's soils, vegetative communities, and availability of sunlight. The project study area's bedrock geology is illustrated on Map 10-B-2.

TABLE 10.B.1 PROJECT AREA BEDROCK GEOLOGY

Era	Period	Formation/Group	Description	General Location
MESOZOIC ***(248-65 million years ago)***	CRETACEOUS	*Patapsco (?)*	Intensely colored, variegated, ferruginous clay and, in places, beds of sand; occurs in isolated patches.	Isolated pocket northeast of Canonsburg; several isolated pockets along rdb of Monongahela River
PALEOZOIC ***(570-225 million years ago)***	PERMIAN	*Greene*	Cyclic sequences of sandstone, shale, red beds, thick limestone, and thick, impure coal; base is at top of Upper Washington limestone.	Southwestern quadrant of County
		Washington	Cyclic sequences of sandstone, shale, limestone, and coal; includes some red shale; base is at bottom of Washington coal.	Scattered throughout the mid to southern portions of the County
	PERMIAN AND PENNSYLVANIAN	*Waynesburg*	Cyclic sequences of sandstone, shale, limestone, and coal; commercial coals present; base is at bottom of Waynesburg coal.	Scattered throughout the mid to southern portions of the County
	PENNSYLVANIAN	*Monongahela*	Cyclic sequences of limestone, shale, sandstone, and coal; commercial coals present; base is at bottom of Pittsburgh coal.	Concentrated in the northern portion of the County; along the Monongahela River in the eastern portion of the County
		Casselman	Cyclic sequences of shale, siltstone, sandstone, red beds, thick impure limestone, and thin, nonpersistent coal; base is at top of Ames limestone.	Adjacent to and within the Monongahela River floodplains
		Glenshaw	Cyclic sequences of shale, sandstone, red beds, and thin limestone and coal; includes four marine limestone or shale horizons; base is at top of Upper Freeport coal.	A few scattered pockets in the northern portion of the County

SOILS

General

Soil is produced through the interaction of five natural forces: climate, plant and animal life, parent material, topographic relief, and time. The degree and influence of each of these factors differ from place to place and influence characteristics of the soil.

General knowledge of the soil associations within an area is useful for planning. These associations can provide background information for determining suitable land uses for land tracts. In addition, this information is useful for watershed management, forestland management, and community development.

The Washington County Soil Survey identifies 46 different soil types within the County. These soil types fall within one of the following four associations: Dormont-Culleoka, Guernsey-Dormont-Culleoka, Dormont-Culleoka-Newark, and Udorthents-Culleoka-Dormont. A description and the locations of these soil associations within the County can be found in Table 10.B.2.

TABLE 10.B.2 PROJECT STUDY AREA SOILS

Soil Association	Description	General Location
Dormont-Culleoka	Moderately well drained and well drained, deep and moderately deep, gently sloping to very steep soils; on hilltops, ridges, benches, and hillsides	Most abundant soil association in County
Guernsey-Dormont-Culleoka	Moderately well drained and well drained, deep and moderately deep, gently sloping to moderately steep soils; on hilltops, ridges, benches, and hillsides	Three relatively small areas located in southern Smith Township, western Mount Pleasant, and northeastern Cross Creek; eastern Chartiers and western North Strabane; and northern Hopewell, Blaine, southwestern Buffalo, and northwestern South Franklin
Dormont-Culleoka-Newark	Well drained to somewhat poorly drained, deep and moderately deep, nearly level to very steep soils; on hilltops, ridges, benches, hillsides, and floodplains	Located along watercourses, namely Little Raccoon Creek, Cross Creek, Buffalo Creek, Brush Run, Tenmile Creek, Little Tenmile Creek, and three other swaths in the northwestern and western areas of the County

Hydric

As defined by the Natural Resources Conservation Service, the definition of a hydric soil is a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part (USDA, 2004). Hydric soils support the growth and regeneration of hydrophytic (water-loving) vegetation. In addition, soils that are sufficiently wet because of artificial measures are classified as hydric soils. Also, soils in which the hydrology has been artificially modified are hydric if the soil, in an unaltered state, was hydric.

The analysis of hydric soils has recently become an important consideration when performing any type of physical analysis of the community. These soils are important to identify and locate due to the fact that they provide the approximate location where wet areas may be found. Thus, the location of hydric soils is one indication of the potential existence of a wetland area.

Hydric soil imposes restrictions for development of land. These soils have severe surface and subsurface drainage problems, resulting in significant development limitations, including restricting the placement of septic systems within a hydric soil area.

There is one true hydric soil in the project area – Purdy Silt Loam. However, 21 other soils in the project area could support wetlands if the proper hydrology exists.

Prime Agricultural

These soils are described in the **PRIME AGRICULTURAL SOILS** section under the Agricultural Resources discussion.

SURFACE WATERS

The major landscape feature for water resource studies is the watershed boundary. A watershed is defined by the US Environmental Protection Agency as the area of land that catches rain and snow and drains or seeps into a marsh, stream, river, lake, or groundwater (USEPA, 2004). Because watersheds are defined by natural hydrology, they represent the most logical basis for managing water resources. The resource becomes the focal point, and managers are able to gain a more complete understanding of overall conditions in an area and the stressors, which affect those conditions. This entails a strategy that crosses municipal boundaries and requires a great deal of coordination, cooperation, and communication within and between municipalities sharing the same watershed.

Watersheds are delineated based on topography and ridgelines. Every river, stream, and tributary has an individual watershed. However, larger watersheds are often subdivided into smaller ones. All of Washington County is within the Ohio River watershed, which has a drainage of 23,487 square miles in Pennsylvania (USGS, 1989). Rivers, streams, and tributaries in the northern and western portions of the County drain directly into the Ohio River; however, watercourses in the eastern and southern sections of Washington County drain into the Monongahela River, which empties into the Ohio River in Pittsburgh. The Monongahela River watershed, which drains 7,386 square miles, is within the Ohio River watershed (USGS, 1989). Therefore, any watercourse that drains into the Monongahela River is not only part of the Monongahela River watershed, but it also part of the larger Ohio River watershed.

Project Area Watersheds

The Ohio River watershed is the largest watershed in the project area and the second largest watershed in Pennsylvania. Historically, the quality of the river has been compromised due to extensive development of the area. In the early to mid-1900's, pollution from abandoned mine drainage, raw sewage, gas well brine, oil pollution, and industrial effluents degraded the water quality of the river. However, due to increased wastewater treatment plants and limits placed on discharges, the water quality of the Ohio River has improved over the past 50 years. The number of fish and the diversity of the species are returning to its previous ranges (PADEP, 2004). More than 13 million citizens (within the entire watershed) are dependent upon the Ohio River for their drinking water and the river system receives treated wastewater from millions more. There are numerous rivers, streams, and tributaries within the political boundary of Washington County. However, only the streams with larger watersheds or special significance will be discussed in this comprehensive plan. The following table lists general characteristics of the larger/significant streams in the study area—each of these will have a more detailed discussion following the table (Figure 10-B-3 illustrates these watersheds):

The **Monongahela River** watershed, the largest of the sub-watersheds with a drainage area of 7,386 square miles, originates in Fairmont, WV and joins Allegheny River in Pittsburgh to form the Ohio River. The Pennsylvania Department of Environmental Protection (PADEP) has classified this river as a Warm Water Fishery (WWF), meaning that this type of stream maintains and propagates fish species and additional flora and fauna that are indigenous to a warm water habitat. It also is protected under the Navigation (N) use, meaning that this type of stream is used for the commercial transfer and transport of persons, animals, and goods.

TABLE 10.B.3 PROJECT AREA WATERSHEDS

Stream Name	River Mile	Municipality	Drainage Area within PA (mi^2)	DEP Classification*
Monongahela River	981	19 townships, cities, and boroughs in the project area	7,386	WWF, N
Ten mile Creek	65.62	Amwell, West Bethlehem, Marianna, Deemston, East Bethlehem, North Bethlehem, Morris, Centerville	338	TSF, WWF
Chartiers Creek	978.6	Cecil, Peters, Canonsburg, Houston, North Strabane, Chartiers, South Strabane, Canton, Washington, North Franklin	277	WWF
Little Chartiers Creek	27.11	South Strabane, North Strabane	46.7	HQ-WWF, WWF
Raccoon Creek		Hanover, Robinson, Smith, Mount Pleasant	184	WWF
Buffalo Creek		Independence, Donegal, Blaine, Buffalo, Hopewell	114	HQ-WWF
Cross Creek		Jefferson, Cross Creek, Mount Pleasant, Hopewell, Independence	63	HQ-WWF, WWF
Pigeon Creek	32.34	Monongahela, Carroll, Fallowfield, Bentleyville, Ellsworth, Somerset, Cokeburg, North Bethlehem	59.2	WWF
Peters Creek	19.67	Nottingham, Union, Peters	51.5	TSF
Harmon Creek		Hanover, Jefferson, Smith	21.5	WWF
Catfish Run	2.35	Canton, North Franklin, Washington	4.0	WWF
Mingo Creek	29.8	New Eagle, Nottingham, Carroll	22.2	HQ-TSF, TSF
Maple Creek	42.6	Fallowfield, Twilight, Charleroi, Speers	10.2	WWF
Pike Run	51.36	Somerset, West Pike Run, California, Centerville	28.6	TSF
Huston Run	28.5	Union	0.83	WWF

TABLE 10.B.3 PROJECT AREA WATERSHEDS

Stream Name	River Mile	Municipality	Drainage Area within PA (mi^2)	DEP Classification*
Two-mile Run	58.22	Centerville	4.86	
Robinson Run		East Finley, West Finley, Midway, McDonald, Robinson		WWF
Millers Run		Mount Pleasant, Cecil		WWF-TSF
Wheeling Creek		West Finley, East Finley		WWF
Kings Creek/Aunt Clara's Fork		Hanover		CWF

* - as designated by Pennsylvania Department of Environmental Protection Chapter 93 Water Quality Standards; WWF = Warm Water Fishery; CWF = Cold Water Fishery; TSF = Trout Stocked Fishery; HQ = High Quality; N = Navigation

Under Section 303(d) of the Clean Water Act, states, territories, and authorized tribes are required to develop lists of impaired waters (USEPA 2004). This section requires that these jurisdictions establish priority rankings for waters on the lists and develop Total Maximum Daily Loads (TMDLs) for these waters. A TMDL specifies the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and allocates pollutant loadings among point and nonpoint pollutant sources. The Monongahela River has TMDLs for two pollutants—Chlordane and PCBs. Chlordane was used from 1948 until 1988 in the United States as a pesticide; it bioaccumulates and is a persistent chemical (>20 years). PCBs are manmade chemicals that were used in transformers, paints, adhesives, caulking compounds, some filters, and carbonless copy paper. PCBs enter the environment in air, water, and soil during through the manufacturing process.

The *Monongahela River Conservation Plan* (RCP) was completed in 1998. This plan addresses the stretch of river from the Mason-Dixon to where the river confluences with the Allegheny River to form the Ohio River. This comprehensive plan's recommendations are consistent with the management options identified in the RCP.

Ten Mile Creek watershed has a drainage area of 338 square miles. Ten Mile Creek begins in South Franklin Township and drains east miles where it empties into the Monongahela River at Millsboro. The PADEP has classified this stream as a Trout Stocked Fishery (TSF), meaning that this stream provides for the maintenance of stocked trout from February 15 to July 31 and maintenance and propagation of fish species and additional flora and fauna, which are indigenous

to a warm waters habitat. No TMDLs have been identified for Ten Mile Creek. The Pennsylvania Fish and Boat Commission (PFBC) has officially approved this stream (from S.R.18 downstream to S.R. 19) for "approved trout waters", indicating that they meet criteria qualifying them to be stocked with trout by the PFBC. These waters are closed for all fishing from March 1 to 8:00 a.m. on opening day of trout season.

A DCNR grant has been awarded to the Washington and Greene Counties Conservation Districts for the development of a River Conservation Plan for the following five watersheds: Ten Mile Creek, Pumpkin Run, Muddy Creek, Little Whiteley Creek and Whiteley Creek. Dates are not yet known as to when the development of this plan will commence.

Chartiers Creek watershed is the largest sub-watershed in the project area with a drainage area of 296 square miles. It originates in Washington County near the city of Washington in South Franklin Township and flows north/northeast for approximately 30 miles until it empties into the Ohio River in Allegheny County near McKeesRocks at river mile 978.6. Chartiers Creek is classified by the PADEP as a WWF. According to PADEP's Internet website, TMDLs have been approved for Chartiers Creek and the watershed for metals, PCBs, and Chlordane.

The Chartiers Creek Watershed Association (CCWA) and the Washington County Watershed Alliance (WCWA) together developed an Upper Chartiers Creek River Conservation Plan with the following identified goals:

- Improve water quality,
- Promote sustainable land development,
- Enhance existing recreational opportunities,
- Protect the natural, historic, and scenic beauty,
- Prepare for future growth,
- Encourage compatible economic development,
- Foster communication among stakeholders, and
- Advocate for environmental education programs.

Its upper reaches flow through agricultural lands and rural areas that rely on septic systems south of Washington Pa. Upon entering Washington Pa, the stream is

degraded by industrial pollution, treated sewage, and city effects, including urban runoff. North of Washington, the stream passes through suburban commercial and residential areas of Pittsburgh, PA as well as through several old and current industrial sites. Acid mine drainage (AMD) first becomes a major problem around Canonsburg Pa, which is located between Washington and Pittsburgh. The lower portion, as one approaches Pittsburgh, is lined with woodland.

Chartiers Creek is one of the most complicated watersheds in Pennsylvania that experiences old and new pollution issues alike. Sources include AMD, combined sewer systems, landfills, agriculture, stormwater runoff, old and new industrial sites, nuclear waste sites, PCBs, urban runoff, flooding, and junk yard areas. Several municipalities within the Chartiers Creek watershed have adopted the RCP as a guidance document.

A *Recreational Master Plan for Canonsburg Lake* is in the process of being developed through a grant from DCNR. The recommendations in this master plan, as well as the recommendations identified in the Upper Chartiers RCP, are consistent with the recommendations in the comprehensive plan.

The main tributary draining into Chartiers Creek is **Little Chartiers Creek**, which empties into Chartiers just north of Donaldson's Crossroads where Cecil, Peters, and North Strabane Townships meet. Little Chartiers has a drainage area of 46.7 square miles and is classified as a High Quality WWF (HQ-WWF) by the PADEP for a portion of its length, meaning that the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water. The remaining length is classified as a WWF. The PFBC has identified this stream as "approved trout water" and has also designated it as having "Miscellaneous Special Regulations" from Canonsburg Lake Dam approximately 0.25 mile downstream to the mouth. This regulation indicates that no fishing is allowed from March 1 until 8:00 a.m. opening day of trout season. In addition, two TMDLs are established for Little Chartiers—Chlordane and PCBs.

Raccoon Creek watershed, one of the larger watersheds in the County, has a drainage area of 184 square miles. It originates in Washington County and flows north before emptying into the Ohio River. The PADEP has classified this stream as a WWF.

A *Watershed Restoration Plan* was completed in 2000 for the Raccoon Creek watershed. The major source of pollution within this watershed is AMD. TMDLs have been proposed in a Draft Raccoon Creek Watershed TMDL report released in December 2004.

The Washington County Conservation District (WCCD) and the Independence Marsh Foundation work closely with the Raccoon Creek Watershed Association and since this partnership was established, three passive abandoned mine treatment facilities have been installed, including the Langeloth Borehole, Hamilton discharge site in Findlay Township (outside of the project area), and the JB#2 treatment facility in Smith Township. In addition, the WCCD has sponsored several programs, including working with farmers to install Best Management Practices (BMPs) to control nutrient runoff and restore riparian corridors.

Buffalo Creek is the only completely high-quality watershed in the project area with a drainage area of 114 square miles. It originates in Buffalo Township and flows west through portions of West Virginia and then empties into the Ohio River south of Wellsboro, West Virginia. The PADEP has classified this stream as a HQ-WWF. No TMDLs have been established for Buffalo Creek.

The Washington County Conservation District, United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS), and California University of Pennsylvania Partners for Wildlife Program have worked together and installed agricultural Best Management Practices (BMPs) to improve water quality, aquatic and terrestrial habitat, and hydrologic control in the Buffalo Creek watershed.

In February 2003, the Buffalo Creek Watershed Association, in conjunction with the Washington County Watershed Alliance, received a Growing Greener Grant from the Pennsylvania Department of Environmental Protection and The Western Pennsylvania Conservancy was contracted to develop the *Buffalo Creek Watershed Assessment and Protection Plan*. The plan was completed in May 2005. Two main contributors to water pollution within the watershed were identified as nutrient loading and sedimentation. The plan will put forth recommendations to address these two identified pollutants as well as other sources of pollution. In addition, this plan will include a comprehensive source of past and present natural resource and water quality data, important natural and historic sites, and potential restoration/protection project and future funding sources within the watershed. The *Washington County Comprehensive Plan* is consistent with the goals and recommendations of the *Buffalo Creek Watershed Assessment and Protection Plan*.

Cross Creek, one of the smaller watersheds in the County, has a drainage area of 63 square miles. It originates in Mount Pleasant Township and flows west through West Virginia until it empties into the Ohio River north of Wellsburg, WV. The PADEP has classified a portion of the stream as HQ-WWF from the source to the Avella Water Intake. The remaining length is classified as WWF. No TMDLs have been established for Cross Creek.

A *Watershed Assessment, Restoration, and Protection Plan* was completed in 2003 for the Cross Creek watershed. The plan identified several major concerns within this watershed; including sedimentation from dirt and gravel roads, livestock stream access, and lack of riparian buffer protection; lack of sewage service in urbanized areas; and AMD. The Washington County Conservation District has sponsored several programs within the Cross Creek Watershed. Grants were provided to farmers to install Best Management Practices (BMPs) to control nutrient runoff and restore riparian corridors.

Pigeon Creek has a drainage area of 59.2 square miles. It originates in Somerset Township and flows northeast for approximately 15 miles where it empties into the Monongahela River near the city of Monongahela. The PADEP has classified this stream as a WWF. No TMDLs have been established for Pigeon Creek.

A watershed association was formed for Pigeon Creek, Pike Run, and Maple Creek in 1998. Although no formal watershed assessment plans have been completed, numerous studies addressing the AMD discharges in the Pike Run headwaters have been conducted.

Wheeling Creek, the smallest watershed discussed in this report, has a drainage area of 14.7 square miles. The PADEP has classified this stream as a WWF. No TMDLs have been established for Wheeling Creek. A watershed organization was formed in 2000. A watershed assessment has not been completed for this watershed.

Ponds/Lakes

Ponds and lakes not only provide wildlife habitat and other environmental benefits, but they also are an important aspect of the aesthetic value to a community. For example, lakes and ponds can be used to manage urban runoff. Instead of using the typical stormwater retention areas, lakes and ponds can be designed so that they function to retain stormwater and contribute to the visual aspect of the community.

Washington County contains over 200 ponds, lakes, and reservoirs within its boundary. Several of these areas are classified by PADEP as HQ-WWF. These ponds, lakes, and reservoirs vary greatly in size, from the smallest unnamed pond in the Burgetts Fork Watershed with an area of less than 0.1 acre to the largest lake, Cross Creek Lake, in the Cross Creek Watershed with an area of approximately 265 acres. Map 10-B-1 illustrates the ponds, lakes, and reservoirs within the county boundary.

Wetlands

Wetlands can be defined as transitional layers between terrestrial and aquatic environments where the water table often exists at or near the surface, or the land is inundated by water (Cowardin, Carter, Golet, LaRoe, 1979). As such, wetlands frequently exhibit a combination of physical and biological characteristics of each system. Three factors are recognized as criteria for wetland classification: the presence of hydric soils; inundation or saturated conditions during part of the growing season; and a dominance of water-loving vegetation (Environmental Laboratory, 1987).

Wetlands serve many functions, including the passive treatment of acid mine drainage, sediment trapping, nutrient filtering, providing wildlife and aquatic habitat, and controlling floodflows.

The US Fish and Wildlife Service (USFWS) has developed a National Wetland Inventory (NWI) as directed by the Emergency Wetland Resources Act of 1986. According to the NWI mapping, there are approximately 2,300 wetlands (including riverine [all wetlands and deep-water habitats within a channel], lacustrine [wetlands and deep-water habitat, which are depressional or damned water bodies that are greater than 20 acres in size], and palustrine [nontidal wetlands dominated by trees, shrubs, persistent emergent plants, mosses, or lichens] wetland types) in Washington County, totaling approximately 7,000 acres, or less than two percent of the total area. Map 10-B-1 illustrates the NWI wetlands within the project study area. The NWI is not a complete record of all existing wetland it only documents the largest wetlands that can be documented by aerial photo.

Floodplains/Floodways

According to 25 Pa. Code § 106, the definition of a floodplain is “the 100-year floodway and that maximum area of land that is likely to be flooded by a 100-year flood as shown on the floodplain maps approved or promulgated by Federal Emergency Management Agency (FEMA).” A floodway is defined as “the channel of the watercourse and those portions of the adjoining floodplains, which are reasonably required to carry and discharge the 100-year flood. Floodplains are important to a community and its environment because they hold back storm flows and reduce destructive flooding downstream. In addition, they are very fertile habitat, providing for good cropland for agriculture as well as providing important shading for stream habitat. Also, floodplains provide an important linkage between aquatic and upland habitat.

Flood management and insurance rates are coordinated through the National Flood Insurance Program. This program, which was established by the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973, was an effort to reduce the damage and hazards associated with flood events. To accomplish these goals, the FEMA conducts routine flood insurance studies, which investigate the severity and existence of flood hazards throughout the country. The results of these studies are then

used to develop risk data that can be applied during land use planning and floodplain development.

In addition to the flood hazard data provided by FEMA, the National Weather Service (NWS) operates river forecast points at several locations along the River. River stage information is available through recorded messages, the NWS Internet site (www.nws.noaa.gov\er\pitt), and the National Oceanic and Atmospheric Administration (NOAA) weather radio. Army Corps of Engineers (ACOE) also maintains copies of FEMA studies and related flood hazard investigations. This information as well as other flood hazard assistance is available through the ACOE, Pittsburgh District Office.

Twelve flood control dams are present in Washington County located within the following watersheds: Ward Run, Paris Run, Harmon Creek, South Fork Cross Creek, Cross Creek, Enlow Fork, and Robinson Fork. The locations of these structures are illustrated on Map 10.B.1.

GROUNDWATER

Groundwater is defined as water under the surface of the earth in the saturated zone (PADEP, 2004). It is found underground in the cracks and pores in soil, sand, and rocks and makes up the base flow of rivers and streams. Groundwater is used everyday for household, agricultural, and industrial needs. Over 50% of the United States uses groundwater for their source of drinking water (The Groundwater Foundation, 2004).

Many water quality issues are associated with groundwater, including natural and anthropogenic sources. The Washington County Watershed Alliance identified anthropogenic sources, such as abandoned wells, hazardous chemical wastes, malfunctioning septic systems and underground storage tanks, and excess sediment deposits. However, Washington County is making steps toward cleaning up and protecting its groundwater supply as it was recently (as of October 2004) designated as a Groundwater Guardian Community by the Groundwater Foundation for its efforts to protect local groundwater supplies (Washington Observer-Reporter, 2004). Studies are currently underway in several watersheds to identify any new and update information on previously identified pollution sources.

Non-point source pollution, such as AMD and pollution from abandoned oil and gas wells, is addressed under the **WATER QUALITY** section can be found later in this plan.

WATER QUALITY

The quality of water in streams, rivers, lakes, ponds, and groundwater is important because it impacts the biological, physical, and chemical processes that take place in these waters directly. Because all water within a watershed and across watershed boundaries is directly or indirectly related, any impacts to one form bear an influence on

all of the other forms. Human impacts are typically in one of two forms of pollution—point source and non-point source.

Point source, or end of pipe, pollutants are easily identified and can be directly traced to their source (e.g., industrial discharges, municipal discharges, stormwater discharges, combined sewer overflow discharges, and concentrated animal feeding operations [CAFO]). Non-point sources (NPS) include all other forms of pollution (e.g., abandoned mine drainage, agriculture, urban runoff, atmospheric deposition, construction activities, on-lot sewage systems, leachate from landfills, and silviculture). Regarding point-source pollution, all point source discharges require a National Pollutant Discharge Elimination System (NPDES) permit, established by Section 402 of the 1972 Clean Water Act. According to the EPA's Envirofacts Internet website (EPA, 2004), 212 facilities have been issued NPDES permits in Washington County.

Abandoned mine drainage (AMD) is a source of NPS from a complex interaction involving sulfides and oxygen during the mining process. After mines are abandoned, drainage flowing from these sites often decreases the pH of streams and rivers affected by the drainage. Additionally, it can elevate concentrations of heavy metals and suspended solids within impacted waterways (Frey, 1996).

AMD remains the one of the most significant sources of surface water impairment in the state of Pennsylvania. Many serious problems arise from AMD, including contaminated drinking water, plant and animal growth and reproductive problems, and corrosion of infrastructure. AMD is both a severe ecological and economical problem. As mentioned in the **SURFACE WATERS** – *Streams/Rivers* section, sources of AMD are scattered throughout the county as a result of past mining. Raccoon Creek and Chartiers Creek are just two examples of streams impacted by AMD.

Sediment and thermal loading are two serious concerns regarding water quality. Load or loading is the amount of matter or thermal energy that is released into a body of water. Loading can be a result of man-made causes such as development or as a result of natural causes, when this occurs, the temperature of the water increases. Practices that have removed the natural filtration of meadows, forests, or riparian buffers increase the temperature of the existing body of water and the incoming water running off of impervious sources.

Increased urban development results in an increased pollution load that reaches area water bodies, and therefore, is considered a form of non-point source pollution. Natural landscapes, such as forests, fields, and wetlands, are porous and act as natural filtering systems that help to carry rainwater and snowmelt runoff gradually flow toward receiving waters. Urban areas, on the other hand, are nonporous and, as a result, storm drains are installed to quickly channel runoff from roads and other impervious surfaces into receiving streams and/or treatment areas (in cases of Combined Sewer Overflow systems). This runoff contains sediment from development and new construction; oil,

grease and toxic chemicals from automobiles; nutrients and pesticides from turf management and gardening; viruses and bacteria from failing septic systems; road salts; and heavy metals and reaches receiving waters quickly, traveling at a high velocity. This large volume of quickly flowing runoff has the potential to erode stream banks, damage streamside vegetation, widen stream channels, and carry pollutants such as directly to the stream (USEPA, 2004.

The Total Maximum Daily Load (TMDL) identifies the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and allocates pollutant loadings among point and nonpoint pollutant sources. TMDLs address sediments to meet water quality standards and control quality problems. High concentrations of sediment will negatively impact aquatic life and fisheries, cause taste and odor problems for human consumption, and reduce the effectiveness of water treatment systems. Best management practices (BMPs) on agricultural lands and at development sites can reduce the TMDL and sediment concerns that affect many areas of Washington County. The Washington County Conservation District is an excellent resource to engage in order to ensure that communities and developers understand their responsibility to protect water quality.

Because 47 percent of the land area in Washington County is classified as agriculture, pollution from unmanaged agricultural practices contributes to the degradation of the waterways and groundwater in the County. Fertilizers, manure, pesticides, and silt from agricultural lands can contribute to heavy siltation, nutrient accumulation, and suspended solids within stream and groundwater systems. In addition, unrestricted access of livestock into streams also creates harmful effects, such as harm to livestock, streambank erosion, sedimentation and excessive nutrient enrichment. This form of pollution impacts numerous streams and tributaries in the County.

Sewage discharge is another form of non-point source pollution. Because approximately 75 percent of the county does not have municipal sewerage available, on-lot sewage treatment systems and wildcat sewers probably account for most of the residences in the county. Raw sewage discharge often results in elevated levels of fecal coliform bacteria, which can lead to potential health risks. In addition, untreated sewage discharge leads to an increase in nutrients in a stream system leading to an increase in Biological Oxygen Demand (BOD) making it more difficult for macroinverterbrates and fish to survive.

An additional source of water pollution in the County may arise from oil and gas extraction. Brine, waste pit sludge, erosion and sedimentation, and improper disposal of wastewater are all negative impacts from the extraction of oil and gas. As illustrated on Map 10-B-5, shallow gas and oil fields and gas storage areas are located throughout the county. In addition, on the same figure, many gas and oil wells are also located throughout the county.

In addition, dust and sediment from local roadways contributes to the pollution of local streams in the area. In 1997, Pennsylvania instituted their "Dirt and Gravel Road Pollution Prevention Program [Section 9106 of the PA Vehicle Code (§9106)]." This program was initiated to help communities fund "environmentally sound" methods of maintaining unpaved roadways that have been identified as sources of dust and sediment pollution.

ECOLOGICAL HABITATS / ENVIRONMENTALLY SENSITIVE AREAS

Important Bird Areas

An Important Bird Area (IBA) is a site of special significance to breeding or non-breeding birds, which, on some basis, can be distinguished from surrounding areas (PA Audubon Society, 2004). It is also a site that is recognized globally for its bird conservation value. The National Audubon Society administers this program in the United States and these areas are monitored by volunteer efforts. IBAs were established to promote habitat conservation by focusing attention on ways to avoid habitat fragmentation, suburban sprawl, and over browsing by deer.

Three IBAs extend into Washington County. Enlow Fork (located within State Game Land #302), also known as Enlow Fork Natural Area, is an approximately 1,000-acre publically owned IBA. Special representations by the IBA include a Pennsylvania Species of Special Concern—Summer Tanager (*Piranga Rubra*) and the habitat type is considered to be rare, threatened, or unusual within the state or region. In addition, this habitat is found to be an exceptional representative of a characteristic natural or near-natural habitat within its physiographic province (PA Audubon Society, 2004).

The Raccoon Creek Valley and State Park IBA is approximately 100 square miles and expands into Beaver, Allegheny, and Washington Counties. This site maintains a combination of ownership—public (Department of Conservation and Natural Resources [DCNR]) and private. This IBA is recognized as having an exceptional concentration and/or diversity of birdlife—33 species of warblers have been sited at this site. In addition, this habitat is found to be an exceptional representative of a characteristic natural or near-natural habitat within its physiographic province (PA Audubon Society, 2004).

The Lower Buffalo Creek Watershed was recently named as an IBA and is approximately 22,000 acres, located in the western area of the county along Township Road 611. PA State Game Land 232 is located within this site. Because of the riparian forest component of this watershed and the high quality of its waters, this IBA is an ideal environment for neo-tropical migrants, including Acadian flycatchers, Cerulean warblers, Louisiana waterthrushes, and Yellow-throated warblers. In addition, two blue heron rookeries are located within the IBA and contain 51 active nests.

State Game Lands

The State Game Lands (SGL) system was established in 1920 by the Pennsylvania Game Commission (PGC) to ensure wild animals always have food and shelter. This system currently contains about 300 separate tracts comprising a total of about 1.4 million acres (PGC, 2003). Each SGL has an individual management plan designed to improve wildlife habitat and provide recreational opportunities. Hunters, anglers, hikers, birdwatchers and other wildlife enthusiasts are welcome on State Game Lands.

The PGC acquired approximately 3,500 acres in Blaine and Donegal Townships in 2003 via a property trade with the Washington County Council on Economic Development for PGC SGL property in Smith and Hanover Townships for the development of a new industrial park, Starpointe Industrial Park. In addition, the PGC is currently (as of October 2004) in coordination with Allegheny Power and the WCCED to acquire an additional 400 acres of forestland. Table 10.B.4 presents the SGLs located within the county and Map 10.C-1 illustrates their locations.

Table 10.B.4: State Game Lands in Washington County

	SGL	Acres	Location
1	117	2972	The eastern section of Hanover Twp The northwestern section of Smith Twp
2	232	5266	The southern portion of Independence Twp The northern portion of Donegal Twp
3	245	3653	The northwestern, eastern, and southern portion of East Finley Twp The eastern portion of West Finley Twp The southwestern portion of South Franklin Twp.
4	297	631	The southern portion of North Bethlehem Twp.
5	302	587	The southern section of West Finley that borders Greene County
6	303	222	The southeastern portion of Jefferson Twp.
7	432	3651	???
	Total	16982	

Source: PA State Game Lands: Southwest Region, SGL (2005)

Natural Heritage Inventory Areas

The Washington County Natural Heritage Inventory is a record of the native biological diversity within the political boundaries of Washington County. The major purpose of this inventory is to provide county and local governments and community groups with a valuable tool to assist them in their planning efforts. Not only can this inventory guide local development, it can also give suggestions for protecting significant natural heritage resources in Washington County.

The Natural Heritage Inventory has not only located areas of significance, it has also ranked them according to amount, degree, and rate of protection (Exceptional, High, and Notable). This Inventory utilizes five classifications of Natural Heritage Areas and suggested development restraints:

- *Natural Areas* (NA)

  - Pristine Natural Area – A site that has essentially the same ecological conditions that are believed to have existed prior to European settlement, and is large enough, and buffered enough, to support and permanently protect the natural community.

  - Recovering Natural Area – An area that is relatively undisturbed, or past disturbances are essentially minor, and the landscape has largely recovered to a pristine condition.

  The Inventory suggests that disturbances associated with all land uses be eliminated from the site and its buffer.

- *Biological Diversity Areas* (BDA)

  - Special Species Habitat – An area that includes natural or human influenced habitat that harbors one or more occurrences of plants or animals recognized as state or national species of special concern.

  - High Diversity Area – An area found to possess a high diversity of species of plants and animals native to the county.

  - Community/Ecosystem Conservation Area – An area that supports a rare or exemplary natural community (assemblage of plants and animals), including the highest quality and least disturbed examples of relatively common community types.

The Inventory suggests that disturbances, except for special cases, associated with all land uses be eliminated from the site and its buffer. If a disturbance is necessary, the Inventory suggests contacting the appropriate resource agency.

E *Dedicated Areas* (DA) – A property, possible disturbed in the past, where the owner's stated objectives are to protect and maintain the ecological integrity and biological diversity of the property largely through a hands-off management approach, with the intervention only when there are demonstrable threats to the ecology of the area.

The Inventory suggests that disturbances, except for special cases, associated with all land uses be eliminated from the site and its buffer.

E *Landscape Conservation Areas* (LCA) – A large contiguous area that is important because of its size, open space, and habitats and although including a variety of land uses, has not been heavily disturbed and thus retains much of its natural character.

The Inventory suggests that certain land-uses, including construction of new roads and utility corridors, non-conservation timber harvesting, clearing or disruption of large pieces of land, and other activities that divide and alter the character of the landscape, should be avoided.

E *Other Heritage Areas* (OHA)

- Scientific Area – An area that is consistently utilized for scientific monitoring of the environment, or other natural science studies

- Educational Area – Land regularly used by educational institutions, local environmental organizations, or general public for nature study or instruction.

The Inventory suggests that resources emphasized for study be protected from disturbances that are not within the context of the study.

Two other types of classifications are used in this Inventory:

E *Managed Lands* – There are two types of managed lands, including Public and Private. Neither of these necessarily include, nor are included within, identified natural heritage areas. These properties are typically large in size and are ecologically important in a general sense.

E *Geologic Features and Fossil Localities* – These areas are included because of historical reference, not necessarily because of biological diversity.

No Natural Areas have been identified within Washington County.

Eleven "Exceptional", **four** "High", and **eight** "Notable" BDAs have been recognized within the County.

Three "Exceptional", **two** "High", and **no** "Notable" LCAs have been identified within the County.

Eleven areas considered "Managed Lands" (six are identified as state game lands) have been recognized within the County.

Four Geologic Features/Fossil Localities have been identified within the County.

This NHI names several areas that have the greatest potential to be successfully managed as Dedicated Areas, including Mingo Creek County Park in Nottingham Township, Cross Creek County Park in Hopewell Township, Meadowcraft Village in Independence Township, portions of the six state game lands.

The locations of the BDAs and LCAs are identified on Map 10-B-1.

Blue Heron Rookeries

Great blue herons (*Ardea herodias*) are noted as a "species of special concern" by the Pennsylvania Game Commission. Numerous blue heron rookeries, areas where this species nests, exist within the County. The herons are colonial nesters, or group nesters; therefore, any human intervention that would potentially disturb their nesting habitat could have a major impact on their population in Washington County.

The locations of these rookeries will not be discussed or mapped in this plan to protect the animals and their habitat.

Agricultural Resources

PRIME AGRICULTURAL SOILS

There are seven types of soils that are classified as Pennsylvania Prime Farmland soils and 16 types of soils classified as Additional Farmland of Pennsylvania Statewide Importance within the project area. Approximately 36 percent of land in Washington County is classified as a prime agricultural soil. The soil is scattered around the county with denser deposits adjacent to Raccoon Creek, Chartiers Creek, Little Chartiers Creek, Tenmile Creek, Canonsburg Lake, and Cross Creek.

Non-renewable Resources

COAL

Washington County is located within the Main Bituminous Coal Field of Pennsylvania (DCNR, 2004). Extensive areas of operating surface and deep mines, old stripping areas, and reclaimed areas are dispersed throughout the landscape. Coal that is or has been mined within the County is primarily high volatile bituminous coal.

Currently, five underground mining operations are active in the County. The 84 Mine (Eighty Four Mining Company), Shoemaker Mine (Consolidation Coal Company), Enlow Fork (Consolidation Coal Company), Bailey (Consolidation Coal Company), and High Quality Mine (UMCO Energy, Incorporated) are all longwall mining operations. Coordination with PADEP indicated that mapping of these active mines can be obtained from the California District Office; GIS mapping is unavailable at the time of publication of this plan.

Reserves from the Upper Freeport Coal Seam and the Pittsburgh Coal Seam exist within Washington County. These areas are identified on Map 10-B-4.

GRAVEL / SAND DEPOSITS

No gravel and sand deposits are located within Washington County (SPC, 2005).

OIL / GAS WELLS

Oil and gas wells, as well as oil and gas fields are identified on Map 10-B-5.

LIMESTONE / CLAY DEPOSITS

The bedrock geology of Washington County indicates that limestone is present in much of the southern portion of the County. Limestone recovered from the earth through mining or quarrying. These areas are identified on Map 10-B-2.

Hazardous/Nuisance areas

MINED AREAS

The Pennsylvania Department of Environmental Protection (PADEP) defines mine subsidence as the movements of the ground surface as a result of the collapse or failure of underground mine workings. In active underground mining methods, subsidence can occur concurrently with the mining operation in a predictable manner; however, in abandoned mines, it is virtually impossible to predict if and when subsidence would

occur. Refer to Map 10-B-34 for areas within the County that have been previously undermined.

The PADEP provides funding for projects that to control subsidence as well as for reclamation projects. A contract was awarded to reduce the risk of mine subsidence to residents in Chartiers Township as a result of the abandoned Allison Mine.

HAZARDOUS WASTE SITES

An inventory of hazardous and toxic waste sites was conducted for Washington County using the US Environmental Protection Agency's (USEPA) Right-to-Know Network database (USEPA, 2004). This query system identifies waste management facilities listed within the following regulatory databases:

- Resource Conservation and Recovery Information System (RCRIS)
- Comprehensive Environmental Response, Cleanup, and Liability Information System (CERCLIS)

RCRIS Sites

The Right-to-Know Network database was used to identify any Large Quantity Generators (LQG) located within the County. LQGs are operations that produce >2,200 lbs. of hazardous waste in any given month of the year. Results of this search indicated that there are 27 LQGs in the County; only two were noted as having any current violations as of June 2004.

A review of RCRIS was also used to identify the number of Small Quantity Generators (SQG) located within the watershed. There were 216 SQGs identified in the County. Three were found to have current violations as of June 2004. Eighteen waste transporters (WT) were located within the County and one is identified as having current violations as of June 2004.

No Treatment, Storage, and Disposal (TSD) facilities were located within the County.

CERCLIS Sites

The CERCLIS database provides listings of regulated hazardous waste sites along with the federal environmental legislation related to these sites. Using a CERCLIS query, no Pennsylvania Superfund Sites (NPL) or active CERCLIS sites were identified within Washington County.

LANDFILLS

Two municipal waste landfills are located within Washington County. Arden Landfill is located in Chartiers Township and USA South Hills Landfill has a facility in Union Township. According to the Washington County Municipal Waste Management Plan (Washington County Planning Commission, April 1999), the expected landfill life on the 10 year permit issued for the Arden Landfill is 46 months where the USA South Hills Landfill is 146 months. However, both landfills control additional acreage in the event that additional space is necessary.

ILLEGAL DUMPING / LITTERING

Littering has significant environmental, economical, and aesthetic impacts to an area. Both the aquatic and terrestrial environment are affected by both physical and chemical littering. Water pollution results from the improper or illegal disposal of chemicals. Littering impacts a community economically by increasing the cost to the taxpayer. Cleaning up litter is approximately nine times more expensive than collecting trash from trash receptacles (PA DEP, 2004). Trash could also potentially reduce property value in a community. The presence of litter has a negative impact on the aesthetic value of a community and can reduce the quality of life for some individuals.

Littering and unregulated dumping of refuse at non-permitted sites has been identified as a county-wide issue for Washington County. However, because illegal dumping often occurs along hillsides and hidden areas, it may not be readily recognized as an environmental hazard.

AREAS OF UNSTABLE GEOLOGY

Sinkholes

Sinkholes are a feature of subsidence, which is when the earth's surface moves downward as a result of chemical and physical weathering of carbonate bedrock in Pennsylvania (DCNR, 2004). Or subsidence can occur as a result of underground mining, excessive pumping of groundwater, and subsurface erosion due to the failure of existing utility lines.

An on-line review of the sinkhole inventory (DCNR, 2004) indicates that no sinkholes have been reported within the County. In addition, a review of the DCNR Bureau of Topographic and Geologic Survey Limestone and Dolomite Distribution in Pennsylvania map indicates that the majority of the county is underlain by flat-lying, generally thin, but locally thick, limestone beds, which are discontinuous in places and are commonly interbedded with shale. However, the central and southeastern Pennsylvania is in an area that is most susceptible to sinkhole development in Pennsylvania.

Landslides

Landslides are defined as the movement of an unstable mass of rock, unconsolidated earth, or debris down a slope. Both natural and human factors can affect the stability of slopes within the county. These include slope steepness, water sources, old landslides, support removal, and alternative of surface and subsurface drainage. Earthquakes can be a landslide trigger in many areas of the world, but are not known to cause landslides in Pennsylvania. The cause of a landslide is nearly always a combination of effects working together.

According to the DCNR Bureau of Topographic and Geologic Survey Areas of Pennsylvania that are susceptible to landslides mapping, the majority of Washington County falls within the highest susceptibility to landslides in the Commonwealth. Only the most northern portion of the county falls within the high to moderate category.

D. Analysis of Existing Conditions

Regulations to control development on steep slopes within a municipality can be implemented using tools such as overlay districts within municipality zoning ordinances that can prevent injury or financial loss while maintaining adequate foliage cover on hillsides and preserving open space. This plan recognizes that some of the municipalities within the study area have existing zoning that applies to steep slopes within their municipal boundaries. However, municipalities that do not have such regulations in their municipal code are encouraged to adopt regulations regarding steep slopes and development.

The type of the soils and geology of a region have a large impact on the suitability of a site or area for development. Soils usually vary throughout a given profile and are rarely uniform throughout a site. Soils determine the ability of a site to absorb and filter the effluent from septic systems, the suitability for the construction of foundations or other types of structures, the cost of building roads, and the appropriate type of landscaping. And, because of high clay content in the soils in Washington County, on-lot septic systems are difficult to place and may not function properly. This constraint should be recognized when considering areas of future development. Soil surveys should be consulted for suitability with every development project, whether residential, commercial, or industrial in nature. The Soil Survey of Greene and Washington Counties is available from the Washington County Conservation District.

The geology of an area is considered for several reasons, perhaps most importantly because geologic characteristics influence the efficiency with which septic tanks can be utilized as a sewage disposal technique. This can be critical in areas where residential development is occurring in the unincorporated and unsewered areas of a county such as in some areas of Washington County. Bedrock type and depth can affect the construction costs of providing sewage collection, transmission, and disposal facilities. Shallow depth to bedrock will escalate the construction costs of sewerage facilities. Geologic characteristics also influence the quantity and quality of groundwater resources. The greater the permeability of the rock type, the greater its capacity for storing water. In addition, the groundwater levels must be determined in order to prevent contamination from sewerage systems. Prior to development of an area, a qualified geologist should be consulted.

Because of the rural character of this county, agricultural land surrounds segments or entire lengths of streams and tributaries, leading to pollution in the streams from agricultural practices. Stream bank fencing is a simple way for landowners, including farmers, to improve water quality in the streams on their property and in other areas downstream in their watershed. It provides many benefits to both the landowner and the environment. These benefits include:

- Stabilizes stream banks and reduces soil erosion

- Improves water quality
- Improves fish and wildlife habitat
- Protects any herds by reducing livestock's contact with water-borne bacteria and reducing the risk of foot and leg injuries that may occur as the livestock go in and out of the stream

According to the Partners In Wildlife Program at California University of Pennsylvania, approximately 108 miles of streambank fencing (79 miles adjacent to streams and 29 miles along upland communities) have been installed in agricultural areas within the County (A. Taracido, personal communication, March 23, 2005).

Maintaining riparian buffers and encouraging the creation of new buffers where they do not exist currently is another way to maintain and/or improve water quality of existing streams and tributaries. Although there is no official standard requirement regarding the width of a buffer, several methods are currently being utilized in ordinances across the United States. Stream order, percent slope, width of the 100-year floodplain, and the presence of wetlands or critical areas are key items when determining the width of a buffer.

A joint water obstruction and encroachment permit should be sought from the PADEP for any and all stream crossings to minimize stream bank erosion, excess sediment deposition, and degradation of in stream habitat. The PADEP, US Army Corps of Engineers, PA Fish and Boat Commission, and the Washington County Conservation District will review this permit. By following the proper permitting procedures, minimal impacts to water quality and aquatic habitat would occur. Mitigation requirements for developments along waterways should include riparian buffers as a basic course of action. In addition, trails or small openings in these corridors can be made to permit river access without reducing the buffers' function.

Most of the streams in the project area are impacted by AMD because of the extensive underground mining that occurred in the past. Treatment for AMD pollution is a growing research area. Methods currently exist to treat AMD-impacted waters, including active and passive treatment systems. For a more detailed explanation of treatment systems, refer to http://www.dep.state.pa.us/dep/deputate/minres/bamr/amd.html. Because the project area has many streams, spring seeps, and rivers affected by AMD pollution, it is possible to incorporate development limitations or open space conservation surrounding these impacted areas for future AMD treatment. However, because of the numerous sites affected, it is recommended that an inventory of AMD sites be developed, following with a prioritization of these sites with the most significant impacts to the project area. Once this is completed, land development constraints could be implemented surrounding the highest priority areas to preserve land for the installation of future AMD treatment

systems. In addition to treatment for AMD, funding regarding subsidence controls should be sought to reduce the risk of subsidence in this mostly undermined project study area.

Some of the rivers have invasive species crowding the stream banks. Implementation of strategies to eliminate or reduce the populations of these species should be considered.

To further control the non-point pollution of the county's streams and tributaries, the Stormwater Management Act of 1978 (Act 167) mandates that the authority for municipalities to prepare a storm water management plans that provide for the management of storm water based on the physical and hydrologic characteristics of the watershed. However, an Act 167 Plan only addresses future impacts to a watershed. For instance, Washington County would prepare an Act 167 Stormwater Plans, in conjunction with municipalities, for each watershed in the county. However, each municipality would then be responsible to adopt and manage the plan(s) on a watershed basis within their own political boundary. Act 167 plans are designed to limit the negative effects of rain events on streams, groundwater, floodplains, and storm sewers by controlling increased volumes and rates of stormwater runoff. Additionally, the Act 167 plan attempts to reduce the negative effects that stormwater runoff can have on water quality. Act 167 requires that counties develop and adopt stormwater plans and update those plans every five years. However, the cost to prepare these plans can be a concern, especially when the local municipality within the watershed is not held responsible for non- compliance. For instance, attainment of Act 167 recommendations can occur only through enactment of local ordinances, if any one municipality refuses to enact or amend local ordinances the county's planning is essentially useless. It should be noted that addressing flooding, stormwater, and current conditions (issues that are not included in an Act 167 plan) requires a different level of effort to study watersheds and recommend corrective measures. An integrated stormwater/flood assessment and watershed restoration plan can address the 5/10 year issues, etc., as through DEP, growing greener and Corps of Engineers.

Whenever development occurs in close proximity of a stream, the developer must be aware of the designated floodplain. Buildings and other structures proposed within the floodplain should be either elevated or flood-proofed to or above the elevation of the floodplain, following municipal ordinances if available. FEMA floodplain mapping should always be consulted prior to approving any development within the region. The communities should also adhere to any floodplain or stormwater management plans or reports completed for their municipality. It should be noted that FEMA is currently updating all floodplain maps due to the recent flooding that occurred as a result of Hurricane Ivan in September 2004.

Floodplain overlay districts are a land development method that restricts development within areas that are designated as flood prone areas. A floodplain is defined as any land

adjoining a river or stream that has or may be expected to be inundated by floodwaters in a 100-year frequency flood. Regional multi municipal planning approaches are encouraged when addressing watershed flood plain planning as watershed boundaries cross municipal boundaries. Sections 604, 605 and 609 of the MPC address floodplain management and zoning. Flood plains should be classified as a separate zoning district. This classification regulates, restricts, or prohibits certain uses within the flood plain.

Wetlands perform many valuable functions for a community, such as water retention, sediment trapping, toxic material retention, flood flow alteration, and wildlife and aquatic habitat. Because of the difficulty in replacing these rare and valuable areas, development should be restricted if at all possible from wetland areas. Prior to development on a parcel of property, developers should conduct a wetland identification and delineation. A Joint Permit—US Army Corps of Engineers Section 404 Water Quality Permit and PADEP Chapter 105 Water Obstruction and Encroachment Permit—is necessary if any disturbance to a wetland area is planned.

Because approximately one-half of the residents in Pennsylvania (the exact data for the project area is unknown) rely on groundwater for their source of drinking water, it is extremely important that the groundwater supply be protected and continually replenished. Programs through the PADEP exist to properly manage the sources within the Commonwealth. Wellhead Protection Programs and Source Water Protection Plans exist and grants to implement and adopt these plans are available.

An inventory of the prime aquifer recharge areas can be conducted and measures be implemented to protect these areas. Protection measures include using zoning ordinances (overlay districts) and/or innovative development techniques.

Federal regulations enacted December 1999 require municipalities in urbanized areas to implement a stormwater management program by March 2003. The National Pollutant Discharge Elimination System (NPDES) for stormwater discharges from municipal separate storm sewer systems (MS4) outline the following requirements:

1. Prohibit non-stormwater discharges (some allowances**)
2. Requirement for erosion and sediment control
3. Requirement to address post-construciton runoff from new development and redevelopment including operations and maintenance of stormwater Best Management Practices (BMP)
4. Sanctions to ensure compliance with the above provisions

Active MS4 programs in Washington County include the following municipalities:

1. Bentleyville Borough
2. Canonsburg Borough
3. Canton Township
4. Carroll Township

5. Cecil Township
6. Charleroi Borough
7. Chartiers Township
8. East Washington Borough
9. Ellsworth Borough
10. Fallowfield Township
11. Houston Borough
12. Monongahela City
13. New Eagle Borough
14. North Charleroi Borough
15. North Franklin Township
16. North Strabane Township
17. Nottingham Township
18. Peters Township
19. Robinson Township
20. South Strabane Township
21. Speers Borough
22. Union Township
23. Washington City
24. West Pike Run Township

Numerous areas, including both public and private lands, could be forged into dedicated areas through a variety of landowner agreements, easements, special programs (like the PGC Public access and safety zone programs) or a combination of methods. Ultimately, areas set aside now will be the exemplary natural areas of the future, and if planned well and of sufficient size, will become premier areas for biodiversity protection within the region. Forest lands, stream valleys, and other natural areas will continue to be lost to development if no steps are taken to preserve them. Preserving and enhancing the ecological integrity of the region lies within the ability and commitment of the local governments, public and private agencies, citizens groups, and landowners to agree on specific conservation goals and work together to see them accomplished.

Riparian buffers, areas of vegetation that are maintained along the shore of a water body to protect stream water quality and stabilize stream channels and banks, are essential to good water quality and aquatic habitats. These areas of tree buffers surrounding bodies of water should be preserved or replanted where feasible. Riparian buffers provide additional benefits to landowners and the larger community by:

- Safeguarding water supplies by protecting groundwater recharge areas

- Providing flood control

- Providing stormwater management potential – natural vegetation provides a basis for innovative stormwater management systems. Stormwater flows from

retention basins can be directed to, and allowed to flow through forested buffers to reduce nutrient and sediment loads.

- Improving the health of cities, boroughs, and townships by improving water and air quality.

- Stimulating economic opportunities such as by providing valuable open space, which may increase land values and, therefore, the tax base.

- Providing some federal tax incentives to landowners (depending on a landowner's financial situation) willing and able to place some of their lands under conservation easements.

- Cost savings by reducing grounds maintenance.

- Providing recreation opportunities, and associated economic benefits for recreation-related businesses.

- Providing educational and research opportunities for local schools and colleges.

- Providing windbreak, shade, and visual buffer.

Agricultural Resources

Efforts should be made to preserve area containing prime agricultural soils and plan for development with these locations in mind. Maintaining the current agricultural security areas and encouraging landowners to engage in new and/or additional areas will contribute to the preservation of agricultural land when developmental pressures are increasing in the County. Mineral resource extraction can present an additional threat to the agricultural water supply in Washington County. Rural springs and small streams can be lost as a result of longwall mining. To ensure the ongoing sustainability of the agricultural industry, a responsible approach to the extraction of coal must be employed so as to ensure a minimum amount of water loss.

Hazardous/Nuisance Areas

The Pennsylvania Department of Environmental Protection: Land Recycling Program. The enactment of the Land Recycling and Environmental Remediation Standards Act (Act 2 of 1995) provides for the cleanup of commercial or industrial property that is currently abandoned, idle, or underutilized. These properties may be contaminated by environmental hazards making clean up of the site potentially expensive and unattractive to developers. However, these sites often are in prime locations for development and

have infrastructure in place and would provide attractive reuse and revitalization opportunities for Washington County.

The Department of Environmental Protection (DEP) Land Recycling Program has four fundamental strategies to facilitate the remediation process - Uniform Cleanup Standards, Standardized Review Procedures, Relieved Liability, and, Financial Assistance. The end result is to achieve a flexible and timely approach to remediation, while providing limited liability to the site owner and developer along with funding incentives. The Land Recycling Program was recently given another boost when Governor Rendell announced his funding initiative in April 2004 that includes an economic stimulus package that provides additional funding and tax benefits to spawn the development of the type of commercial and industrial properties identified by the Land Recycling Program. Keystone Innovation Zones (Act 12 of 2004) amends the Pennsylvania Consolidated Statues to create a Keystone Innovation Zone program to provide funding (grants and loans) to targeted industries located near institutions of higher education for the purpose of improving and encouraging research and development efforts and technology commercialization.

According to the PADEP, if a site or area has been undermined, there is always potential for mine subsidence. Currently, no methods exist to accurately predict the probability of an area to subside. More general information regarding mine subsidence, including information on mine subsidence insurance, is available on the PADEP Mine Subsidence Internet site (www.pamsi.org).

Currently, no ordinances to prevent littering exist at a county level for Washington County. However, within the County, at a municipality level, ordinances have been in place to prevent littering. The remaining municipalities should seek to adopt an ordinance to address littering. .

Pennsylvania CleanWays is a non-profit organization that assists communities with identifying and cleaning illegal dumpsites along with maintaining sites that have been part of past clean-up efforts. PA CleanWays is similar to the Adopt-A-Highway program, but focuses on debris sites along non-state roads and adjacent areas. Around 20 local chapters (most county-wide) exist within the Commonwealth; however, Washington County does not have its own chapter. The County has pursued the idea of initiating a Washington County chapter; however, at the release of this plan, PA CleanWays does not have funding available for providing assistance for the startup of a new chapter. This will be reinvestigated should funding become available.

E. Recommendations

To fulfill the county development objectives, Washington County officials should work with appropriate agencies to meet the following goals.

Address the impacts from junkyards and illegal dumping.

Action: Implement a public education campaign to educate on economic impacts from damage to environment as well as to the image/aesthetics of Washington County. The campaign would include sub components to address other issues such as effects to livestock and the health effects on people.

Action: The county will enlist the assistance from watershed organizations, local college level and high school level environmental clubs, and other interested members of the public to develop a program.

Identify and mitigate issues that affect water quality and quantity.

Action: Prioritize issues according to point and non-point source

Action: Support Watershed organizations by sponsoring meetings, coordinate with networking, sponsor newsletter, etc.

Action: Adopt a county watershed plan that will integrate all available watershed studies and address areas lacking a plan

Action: Implement a public education campaign on watershed issues

Action: Apply for funding to mitigate problems with quality and quantity

Establish a strategy to direct remediation efforts to areas within the county experiencing development pressures.

Action: Identify high growth/construction areas

Action: Identify areas experiencing negative environmental impacts from residential, commercial and industrial development

Action: Support the Conservation Districts efforts to strengthen their enforcement of sediment control

Action: Support education efforts to municipalities regarding traffic impacts

Action: Identify preservation areas/rural resource areas

Action: Educate local officials and communities on the cost of development

Become more proactive to incorporate environmental protection concepts into county planning and development.

Action: Become active members in the Pennsylvania Planning Association (including the local chapter, the Southwestern Pennsylvania Chapter)

Action: Increase knowledge of planning commission staff by sending them to training opportunities and conferences

Action: Ensure that all plans reviewed by the planning commission are checked for compliance to MPC requirements, county plans, and local ordinances and comprehensive plans

Action: Provide staff to meet with municipal governments and planning commissions to review plan submissions and compliance with the County Comprehensive Plan
Action: Adopt a County Greenways and Open Space Plan
Action: Implement the recommendations from the Monongahela River Conservation Plan and the Upper Chartiers Creek Watershed River Conservation Plan
Action: Foster public/private partnerships to educate on multi-municipal planning benefits (i.e. builders association)

Increase public awareness regarding the benefits of sound land use practices.
Action: Initiate a public education campaign
Action: Implement an educational program directed at local municipalities
Action: Enhance the County website to include elements of sound land use practices and development objectives of the County Comprehensive Plan

Mitigate negative impacts from resource extraction
Action: Identify locations where resource extraction activities are occurring
Action: Identify locations where resource extraction activities are expected to occur
Action: Support new development in locations not targeted for resource extraction activities
Action: Develop education and support materials for residents and business regarding resource extraction in Washington County

Increase the availability and effectiveness of recycling efforts.
Action: Support efforts to develop recycling events throughout the county
Action: Establish a permanent recycling site with convenient weekend and evening hours
Action: Develop a partnership with stores or sites in the county where recycling containers can be placed in locations that are easily accessible to the public (i.e. shopping areas)
Action: Encourage municipalities to include recycling costs in garbage fees and implement mandatory recycling
Action: Revise the County Web Page to include highly visible and attractive sites that can provide information on recycling and waste removal

Improve cooperation and coordination between environmental and conservation groups that will increase public support and involvement.
Action: Encourage the establishment of Environmental Advisory Councils

Develop tourism strategy that celebrates natural resources and rural character of Washington County.
Action: Work with Washington County Tourism Agency to develop tourism

strategy targeting environmental, agricultural, or cultural trips

Action: Washington County TPA should develop bus trips that are partnered with local watershed and grassroots organizations to showcase local attractions

Action: Market bus trips to senior groups and families

Action: Partner with surrounding counties to develop more extensive tours

Identify and protect ecologically-sensitive areas

Action: Work with the Western Pennsylvania Conservancy to update Natural Heritage Inventory

Action: Institute a lobbing effort to identify areas and protect them

Action: Include identified areas in the Comprehensive Plan as resource and preservation areas.

Action: Promote the reuse of vacant, underutilized and/or abandoned industrial sites and brownfields.

Action: Ensure that planning commission staff or other county agency has the knowledge to educate site owners and host municipalities about reuse opportunities (i.e. funding sources, partners, remediation efforts)

Action: Develop literature that can be distributed to the general public and municipal officials on reuse of industrial sites

Action: Create a GIS database of all potential sites for reuse which would include acreage, ownership, utilities, infrastructure available, taxes, etc.

Action: Ensure that economic strategies incorporates environmental issues and actions

Action: Establish incentives to develop or reuse sites (model zoning incentives, financial. Etc)

WASHINGTON COUNTY COMPREHENSIVE PLAN

CHAPTER 10.C LAND USE

A. Introduction

The Pennsylvania Municipalities Planning Code, Act of 1968, P.L. 805, No. 247, as reenacted and amended, defines a County Comprehensive Plan as "a land use and growth management plan prepared by the county planning commission and adopted by the county commissioners which establishes broad goals and criteria for municipalities to use in the preparation of their comprehensive plan and land use regulation" (MPC, 2005). The Washington County Comprehensive Plan was prepared to meet and exceed this definition and ensure that the County will be equipped to provide the proper guidance to its municipalities who are preparing or will be preparing their own comprehensive land use plans and supporting land use ordinances.

The County has assumed "a fix it first philosophy" whereby they are identifying existing, or pending infrastructure and transportation deficiencies and finding solutions to remedy these items prior to constructing new facilities. Such a position reduces the likelihood of endorsing the expenditure of funds for Greenfield developments and extensions of infrastructure to areas not identified as a high priority. The extensive built environment present in Washington County supports this philosophy as does the corresponding analysis of land use and the recommendations contained within this plan. The Comprehensive Plan for Washington County integrates the separate plan elements into a cohesive understanding of the social and economic characteristics as well as the built and green infrastructure. Examples of this coordination include the prioritization of transportation improvements according to the populations and industry clusters they serve and the protection of important natural / cultural resources such as high quality watersheds from new developments.

With the Comprehensive Plan as its guide, the County will have the essential data and strategies needed to determine where future growth and development should be directed. The active and ongoing utilization of this plan will preserve scarce resources by enacting County-level policies for local elected officials to follow to encourage development that aligns with the smart growth principles and initiatives presently being supported by the Commonwealth. Such policies are justified by the County Comprehensive Plan's analysis of development trends and identified concerns, based on public input and quantifiable data. The Washington County Comprehensive Plan recommendations contained herein will counteract the identified deficiencies within the county. The recommendations were developed to be inclusive of all the plan elements and their corresponding impacts for the future growth and development of the County.

B. Background

The Washington County landscape is diverse and can be characterized by a variety of land uses, which can be attributed to its early development patterns. Early transportation networks, natural resources, and industrial capabilities all directed the location of population centers and the built environment. The historical development of Washington County still exists today and continues to influence the location and type of development.

Washington County is the second largest county in terms of land area in the Southwestern Pennsylvania ten-county region and includes 67 municipalities within its 857 square miles. The County ranks as the third most populated county with a total population of 202,897 people (United States Census Bureau, 2000). Population fluctuations occur on a yearly basis. For instance, in any given year, Washington County's population level will increase or decrease depending on birth rates, death rates or natural migration. Over the last 40 years, the county has experienced slight population fluctuations but its overall population loss of 14,374 from 1960 to 2000 is minimal compared to other counties. As discussed under Chapter 3: Social Characteristics, the long-range analysis of population numbers show that Washington County has experienced such fluctuations, but has remained at a consistent level since the late 1980s.

Washington County is classified by the U.S. Census as having a population that is 63 percent urban. The relevance of the urban category relates to the concentration of the population in particular geographic locations. As noted in Chapter 3: Social Characteristics, two primary population centers can be identified within the County. One population cluster can be identified within or near the major transportation routes of I-79 and US 19. The second population cluster can be identified near the Monongahela River.

Many of these communities within the identified population clusters were established during the early development of the County and initiated the construction of public infrastructure systems to accommodate the growing population. Public water systems and sewer lines were installed to remove waste from populated areas and support industrial development crucial to the county's economy. Much of this public infrastructure has aged or is now unable to meet increased demand. Additionally, many areas of wildcat sewers have been discovered where sewer lines discharge waste into nearby waterways rather than to treatment facilities. The County will need to address municipal needs regarding over-capacity sewerage systems or failing infrastructure. Chapter 5: Public Infrastructure provides many recommendations to address deficiencies in the existing infrastructure network and locations where new infrastructure will be necessary to meet increased demand or address environmental concerns.

The residential development of Washington County shows the diversity inherent to its dichotomy of agriculture and heavy industry. The County residential nature includes traditional small lot housing around small commercial areas, urban centers, suburban-style residential subdivisions, and farming homesteads. While trends in Washington County show a growing interest in the rehabilitation of boroughs, there remains a more significant trend towards the conversion of traditional agricultural areas to new housing subdivisions within many of the townships – especially those near the I-79 and US 19 corridor.

CHAPTER 10.C. LAND USE

Washington County has been fortunate to have plentiful natural resources that literally fed its agricultural economic base and fueled its industrial dominance. While the County's history was based on farming and resource extraction it became a leader in glass production, steel production, and metal fabrication. Recent trends have shown that coal-mining continues to play a major role in the county's economy while a dramatic increase has occurred in service-related industries. In 1999, the *Washington County Economic Development Strategy* was developed to direct the County's economic development policies. The information gathered for the strategy identified the need to decrease the disparity between the less affluent municipalities located in the southwest, southeast and northwest and the more affluent communities located near the I-79 and US 19 corridor. Since the 1990s, Washington County has been redefining its economic base and is now seeing resurgence in the manufacturing sectors and technology-based businesses. As the County heads into the 21st Century it is returning to the employment levels of the early 1980s.

Perhaps more than many other counties, Washington County had and continues to have its development patterns influenced by its existing transportation routes. The Monongahela River, the railroads, and National Pike (US Route 40) were significant forms of transportation and established historic settlement patterns. The construction of the interstate highway system accessed new lands within the County attracting development along Interstate 70 and Interstate 79. The recent completion of the Mon Fayette Expressway from Allegheny County to Washington County is expected to create new development patterns. Once the expressway is joined with the Southern Beltway it will connect US 22 in Allegheny County to Interstate 79 thereby opening up even more locations in Washington County for redevelopment.

Section 8: Parks and Recreation of the Washington County Comprehensive Plan acknowledges the contribution of the county's well developed parks and recreation system makes to its quality of life. The County offers a wealth of recreational opportunities for residents and visitors alike and has committed to providing quality recreational services for residents. During the plan's development, residents and municipal officials expressed their belief that the County should develop new trails, connecting developed areas to greenways and recreation facilities.

Washington County has completed many studies and plans over the years. Two of these plans address economic development and recreation respectively – the Washington County Economic Development Strategy (URD, 1999), and the Washington County Comprehensive Recreation, Park and Open Space Plan (Pashek, 2000). As the documents were discussed under previous chapters they will not be addressed here. However, the Washington County Natural Heritage Inventory (Western Pennsylvania Conservancy, 1994) and the Washington County Solid Waste Plan (Washington County Planning Commission, 1999) address two important elements to the sustainable use of land and corresponding land development in the county. These elements are the biological and ecological resources of the county as well as its plan for the disposal of solid waste.

Washington County Natural Heritage Inventory (Western Pennsylvania Conservancy, 1994)

The Washington County Natural Heritage is a document that focuses on cataloguing information related to biological and ecological resources that can be considered important to the County and Commonwealth. Although the County has not formally identified specific locations to be protected or set aside for conservation, the Natural Heritage Inventory does outline potential target areas for future preservation and conservation efforts. The inventory identifies the following locations as those having the greatest potential to protect the ecological system and biological diversity of the county (WPC, 1994, p. 13):

1. Mingo Creek County Park
2. Cross Creek County Park
3. Meadowcroft Village
4. Portions of six (6) State Game Lands

The Washington County Natural Heritage Inventory notes that the county remains rural in atmosphere but warns that it is rapidly loosing that character through the expansion of development from the Pittsburgh metropolitan area (WPC, 1994, p 17). One such negative aspect resulting from this urbanization is the negative effect on agricultural pursuits in Washington County and degradation of open space. However, the inventory focuses primarily on ecological values such as habitats for plants and animals as well as the identification of areas that allow linkages for flora and fauna to access the landscape.

The Washington County Natural Heritage Inventory notes that the county has a landscape character consisting of "alternating fields and woodlots…(that) makes potential implementation of management recommendations complex…" (p 18).

Considering the implications of such existing land use almost a full decade ago, it stands to reason that such conditions have increased due to additional development and growth that have occurred since 1994.

Washington County Solid Waste Plan (1999)

In 1999, the Washington County Planning Commission revised its Municipal Waste Management Plan, as mandated by Act 101 of 1988: The Municipal Waste Planning, Recycling and Waste Reduction Act. This comprehensive update and revision presents a thorough examination and analysis of the solid waste needs at both the county level and at the municipal level. In short, the plan specifies that the current system regarding collection and recycling contracts is sufficient and should be continued.

The plan offers several policy recommendations for local municipal officials to follow in order to reduce cost and improve services to residents. In addition the plan strongly encourages a more aggressive and proactive approach to recycling programs. The plan also outlines the county's policy of providing technical expertise and coordinating

activities to facilitate improvements to local solid waste plans. There are no new waste facilities planned for Washington County.

To ensure a general consistency with Washington County municipalities and planning efforts, a review of available municipal planning documents and studies was completed. Such plans and studies included efforts such as river conservation and watershed studies, and municipal and multi-municipal comprehensive plans. The following plans and/or studies were reviewed during the county comprehensive planning process:

1. Amwell Township General Development Plan (1975)
2. Bentleyville Borough Comprehensive Plan Update (2001)
3. California Borough Comprehensive Plan (2003)
4. Outline for Growth Canton Township (2000)
5. Canton Township Comprehensive Plan, Special Development District Amendment (2002)
6. Township of Cecil Comprehensive Plan Update (1997)
7. Chartiers Township Comprehensive Plan (1999)
8. Upper Chartiers Creek River Conservation Plan (2003)
9. Deemston Borough Comprehensive Plan (2004)
10. Donegal Township Comprehensive Plan Update (2001)
11. Fallowfield Township Comprehensive Plan (1998)
12. Mid Mon Valley Regional Comprehensive Plan (2003)
13. North Strabane Township Comprehensive Plan (2003)
14. Peters Township Comprehensive Land Use Plan (2001)
15. Raccoon Valley Comprehensive Plan (2002)
16. South Strabane Township Comprehensive Development Plan (1994) Review and Update (1994)
17. Robinson Township Comprehensive Development Plan (1999)
18. City of Washington Comprehensive Plan (1990)

Comprehensive planning is the process of making decisions to guide the future development of land. Land use studies are designed to describe land characteristics and the various activities in the area. Soil studies, coal mapping, geologic structures mapping, oil and gas field mapping, and floodplain management studies are some of the ways in which planners gain information for land use studies. Other aspects can contribute to the development of Comprehensive Plans including studies regarding community facilities, public infrastructure, recreation, transportation networks, and housing. Each Comprehensive Plan element ultimately contributes to the fundamental principles contained in the Future Land Use Plan. The following summaries have been provided regarding future land use for municipal and multi-municipal Comprehensive Plan that have been adopted in Washington County within the last ten years.

Bentleyville Borough, Adopted 2001

- Create new zoning district to accommodate the current land uses and desired future land uses in the interchange area
- Reduce the impact of commercial traffic on residential properties on Gibson Road

- Discourage land uses that are not harmonious with neighboring land uses and accommodate land uses that do not currently comply with zoning regulations
- Manage future growth of borough

California Borough, Adopted 2003

- To enable California Borough to control future land uses by providing guidelines that reflect the recommendations of the adopted California Borough Comprehensive Plan and that will establish local control over the location of unwanted businesses (adult uses, those that pollute the air or water, etc.) and minimize any associated negative impacts upon the region while promoting economic development and protecting the integrity of residential, commercial and industrial uses
- To utilize the Monongahela River to its fullest capacity for development and recreation efforts.
- Recognize the complex and unique issues associated with the Monongahela River and capitalize upon this resource for the betterment of the region
- Ensure that future development along the Monongahela Riverbanks reflects the recommendations of the adopted Comprehensive Plan
- To promote a sustainable community by ensuring that future development meets the economic and social needs of the residents in a manner that does not detract from ~~destroy~~ the productivity or health of its natural systems
- Ensure that the enforcement of the adopted plans / ordinances are in accordance with the goals and recommendations established by California Borough Comprehensive Plan
- To preserve and improve the natural areas of the region
- Recognize and protect environmentally sensitive areas.
- Restrict building in floodplains / wetlands, and steep slopes.
- To improve the quality of the various watersheds within the project area
- Develop a comprehensive water quality database

Canton Township, Adopted 2002

- Revitalize the area surrounding Interstate 70, Exit 5 – Jessop, by seeking to declare this region a LERTA zone

Cecil Township, Adopted 1997

- Maintain the primarily rural atmosphere of the Township
- Preserve and protect the established villages in the Township
- Protect existing single family neighborhoods and guide future suburban residential development to areas which can be served by public sewers
- Guide future multifamily development to areas which can be served by public sewers and which are close to transportation, shopping and services
- Promote the growth of businesses in Township

- Protect residential areas from intrusion and negative impacts from nonresidential development

Chartiers Township, Adopted 1999

- Maintain a compatible and balanced utilization of land between residential, commercial, industrial and public uses
- Create incentives for developers to redevelop older, run-down properties
- Maintain minimum lots sizes in agricultural areas in order to preserve open space and maintain the rural setting of much of the Township
- Maintain the environmental integrity of the Township through open space preservation and more compact development
- Expand designation of commercial zones in the Township in order to attract more economic development that is compatible with surrounding land uses
- Encourage the provision of safe and attractive residential areas for citizens
- Encourage future develop in proximity to existing development and compatible land uses
- Participate in coordination and cooperation for land use planning with adjacent municipalities and Washington County

Deemston Borough, Adopted 2004

- Balance land development and smart growth policies
- Develop land use policies to encourage new development that generates tax revenue to support municipal services
- Provide recreational opportunities that will contribute to the quality of life for residents and create an inviting atmosphere for visitors
- Provide appropriate opportunities to support new residential development and enhance existing residential services
- Provide a multi-modal transportation network that is efficient, safe and enhances access to, and within, the borough while complimenting the regional system
- Establish a water and sewerage network for the borough
- Enhance the quality of life for residents by improving municipal services
- Plan regionally to strengthen the economic structure including workforce, industry, and business pursuits

Donegal Township, Adopted 2001

- Encourage non-residential development in the immediate vicinity of the interchanges
- Identify properties in the immediate vicinity of the interchanges where sewers and access are available and topography is conducive to development and designate these properties as an economic development district
- Develop information about the sites and make it available to prospective developers
- Establish a listing of available loans, grants and other incentives to provide to developers

- Adopt an economic development plan which sets goals and design criteria for development in the Route 40 Corridor
- Actively recruit developers that fit the criteria for development established by the community
- Continue to cooperate with the West Alexander and Claysville Sewer Authorities to achieve increased capacity for development of the Route 40 corridor
- Develop in harmony with environment
- Recruit development that has little or no impact on the environment
- Work in cooperation with the Buffalo Creek Watershed Association and other environmental protection agencies and organizations
- Consider amendments to the subdivision ordinance designed to protect the environment
- Revisit the issue of zoning at least annually
- Continue the discussions on the advantages and disadvantages of a zoning ordinance
- Monitor the development patterns and development pressures to determine when and if zoning is appropriate
- Adopt one Planning Commission meeting per year as a zoning discussion meeting and invite the public to participate in educational programs on zoning

Fallowfield Township, Adopted 1998

- Protect and preserve the rural character of the Township
- Protect and preserve existing and future residential areas from impacts of incompatible land uses
- Guide more intensive residential and nonresidential growth to areas where future sanitary sewer service is proposed
- Accommodate the land use impact of the Mon Fayette Expressway Coyle-Curtin Interchange
- Provide additional opportunities for commercial and industrial growth
- Keep the text of the Zoning Ordinance up to date with changes in legislation, Pennsylvania case land good planning practice

Mid Mon Valley Regional Comprehensive Plan "Planning Together for the Future", Adopted 2003 by Allenport Borough, Coal Center Borough, Dunlevy Borough, Elco Borough, Roscoe Borough, and Stockdale Borough

- Provide local control over residential, commercial, and industrial development
- Establish local control over the location of unwanted businesses (adult uses, those that pollute the air or water, etc.)
- Recognize the complex and unique issues associated with the Monongahela River and capitalize upon this resource
- Complete a Riverfront Development Plan
- Complete and enforce a regional zoning ordinance
- Adopt a riverfront development ordinance

- Ensure that the enforcement of the adopted plans / ordinances are in accordance with the goals and recommendations established by the Mid Mon Valley Regional Planning and Zoning Commission
- Recognize and protect environmentally sensitive areas
- Restrict building in floodplains / wetlands, and steep slopes
- Implement an air quality action plan
- Develop a comprehensive water quality database

North Strabane Township, Adopted 2003

- Improve the community's attractiveness and quality of life by creating a distinct Township identify
- Protect and utilize the community's natural, cultural and historic resources for the benefit of current and future generations while accommodating planned growth
- Accommodate the existing and future development needs by strategically expanding and financing sewer improvements through public-private cooperative partnerships
- Optimize the physical and economic benefits of the proposed Southern Beltway and other potential transportation improvements
- Provide a range of housing choices in targeted areas while encouraging single-family ownership
- Continue to provide diverse employment opportunities by responding to market demands
- Maintain high quality public services, civic programs and educational opportunities by optimizing available resources
- Exercise fiscal responsibility by continuing to maintain a balance between land use, development, tax revenues, school district services and costs
- Provide a framework for strategic decision-making regarding the evaluation and implementation of proposed development and construction within targeted growth areas
- Establish zoning and land development regulations that balance development densities with infrastructure capacities

Peters Township, Adopted 2001

- Complete a comprehensive update of the existing zoning and subdivision ordinances
- Seek builder/developer and agricultural/residential community input into the formation of specific zoning subdivision ordinance amendments
- Develop a design overlay district along Route 19, which identifies design guidelines for new developments, reuse project, and building expansions
- Develop a Low Density Residential/Agricultural District which promotes the use of conservation subdivision design to preserve open space and the rural qualities of the township while maintaining the minimum half-acre lots
- Create McMurray Town Center District

- Consider rezoning the East Valley Brook Road Mixed use Corridor as a mixed use zone, between Route 19 and Nottingham Township, which would permit offices, limited light industrial and multi-family residential
- Rezone portion of land located on the southside of West Valley Brook Road to rural residential with PRD option being supported to encourage creative design and natural features of the area
- Develop a Venetia Road Neighborhood Commercial Corridor that encourages a mix of residential and convenience retail uses
- Develop specific lighting standards in the zoning ordinance which address levels of illumination and light trespass from buildings or lots
- Develop provisions for off street parking areas, which are oriented to the rear or side of structures in order to manage access points and reduce the negative effect of vast pavements areas in front of structure.
- Require clearly defined walkways within parking lots which are landscaped and separate from traffic lanes and vehicle overhangs
- Re-evaluate the height standards for multi-family structures

Raccoon Valley, Adopted 2002 by Burgettstown Borough, Hanover Township, Jefferson Township, and Smith Township

- Focus future development to the parts of the region that can support development
- Preserve the rural character of the region
- Protect and enhance recreation and historic sites in the region
- Participate in a multi-municipal planning and zoning program

Robinson Township, Adopted 1999

- Ensure that growth areas provide opportunities for a variety of uses
- Base future land uses on location, need and desired intensity
- Target growth into the appropriately identified “growth areas”
- Permit higher density residential growth only where utility extensions are not required or are already planned
- Develop corridor design guidelines for the key transportation roadways
- Review and revise as necessary, all existing land use regulations in order to remain consistent with the recommendations of this plan
- Promote preservation of existing farmland and/or agri-businesses
- Create preservation program for active farms
- Determine needs of township farmers for improvements
- Educate residents about Agricultural Security Area program
- Encourage creation of agricultural security areas and farm owner participation
- Encourage conservation easement agreements between property-owners and a conservation organization
- Protect the natural environment and those areas with developmental constraints

- Create an Environmental Advisory Council
- Promote protection of the environment in land use ordinances
- Create development regulations which enhance and protect areas with developmental constraints
- Encourage reclamation of existing disturbed land areas
- Provide adequate services to township residents
- Create a Capital Improvements Program in order to prioritize future improvements and expansions of existing facilities
- Continue support of the volunteer fire department
- Develop an inventory of municipal structures, furnishings and equipment
- Develop a program for the inclusion of additional capital improvements to be provided by Township residents
- Consider a cooperative agreement with the school district and adjacent municipalities to provide effective use of existing facilities and avoid duplication of services
- Review park and recreation needs to determine adequacy, or lack thereof, of existing facilities and coordinate future development with other agencies/boards (e.g., school board)
- Prioritize projects on an annual basis for inclusion in the C.I.P.
- Determine appropriate action for provision of sanitary sewage and water distribution service to the residents at the most reasonable cost

South Strabane Township "Comprehensive Development Plan", Adopted 1995

- Creation and maintenance of orderly development patterns, and the coordination of the interrelationships between residential and business areas to provide for functionally distinguishable but complimentary districts
- Maintenance and improvement of the aesthetic qualities of the community
- Protection of the natural environmental quality and significant open space features throughout the Township
- Protection of the residential character of the community consistent with the need for a variety of housing types and densities and the ability of the community to expand in an orderly manner
- Preservation of property values and encouragement of the highest and best use of the developable land areas
- Maintenance and expansion of the municipal economic base
- Development of the access-ways, utility systems, municipal services and community facilities consistent with local needs
- Coordination and cooperation with area and regional development programs and trends that are consistent with the type and quality of growth necessary to achieve the community development objectives of the Township

Adjacent Counties in Pennsylvania

A review of Comprehensive Plans of the counties surrounding Washington County was completed to ensure that the recommendations and policies of the Washington County Comprehensive Plan are consistent with neighboring counties. In the event that officials determine future uses would be in conflict, it is recommended that appropriate measures be implemented that would establish buffers between conflicting land uses. Such efforts should be undertaken in concert with the officials of the adjacent county and affected municipal leaders.

Allegheny County—In 2005, Allegheny County began to develop their first countywide comprehensive land use plan, a process expected to take 2-3 years. In 1992, the county prepared the Allegheny County 2001 report, which identified the need to preserve open space within the county and encourage new development in areas already served by existing infrastructure. The entire southwest border of Allegheny County borders Washington County and will continue to affect development patterns in Washington County.

Beaver County—Beaver County adopted their county comprehensive plan, "Horizons: Planning for the 21st Century" in December of 1999. The plan identifies a general land use plan for the county that is to be used as a framework for future development and investment. The southern portion of the county that borders Washington has been designated for rural development. The objective of the rural development areas is to "preserve the open, rural character of Beaver County, supporting agriculture as the primary land use while enhancing villages to accommodate future development." Recommended land uses include single family housing, agriculture, agricultural supporting businesses, recreation / open space, and mining / quarries / sanitary landfills / power plants and other similar types of industries that require a rural location.

Westmoreland County—Westmoreland County adopted their comprehensive plan in 2005. The portion of the county that borders Washington is separated by the Monongahela River. One of the areas that may impact Washington County is the City of Monessen - an urban area that once was a major employer in the region due to the steel industry. Because the city has been losing population over the past 10+ years, the focus of future land use will be rehabilitation and reinvestment. Another area within Westmoreland County that may impact the Monongahela River Valley communities in Washington County is Rostraver Township. The township has been experiencing significant population, housing and business growth over the past few decades.

Fayette County—Fayette County most recently adopted their county comprehensive land use plan in 2000, "Land Usage in Fayette County: Building a Better Future." The plan includes a general future land use map for the county. While the Monongahela River acts as the border between Washington and Fayette counties, it is important to note the land uses alongside the river in Fayette. The land uses along the river in Fayette are varied but tend to favor recreation, rural and agricultural uses in the south. In the north, the land uses tend to be slightly more urban, with Brownsville Borough, Newell Borough and Belle Vernon Borough listed as "existing built areas" and because of the proposed construction of the Mon Fayette Expressway, Luzerne Township has been designated as a future growth area.

Greene County—Greene County began developing their comprehensive plan update (with the latest plan adopted in 1977) in 2005 and is expected to adopt the plan by 2007. As Greene County is predominantly rural, the bordering land uses are comprised mainly of agricultural lands, open space, and forested lands. The areas that may have a future impact on development in Washington County would be along the Interstate 79 and PA Route 88 corridors and along the Monongahela River.

Adjacent Counties in West Virginia

Washington County is bordered to the west by four counties in West Virginia – Brooke County, Hancock County, Marshall County, and Ohio County. The governing structure in West Virginia differs from the Commonwealth of Pennsylvania in that the County governing body controls land unincorporated. Incorporated areas have governing structures into themselves and follow the West Virginia State Code as does the County. The State of West Virginia signed into law Senate Bill 454, which modernized the state's planning enabling legislation. Senate Bill 454 repeals Chapter 8, Article 24 of the West Virginia State Code. The new chapter in the state code, Chapter 8A Land Use Planning maintains the permissive status of planning in West Virginia but does clarify the connection between a comprehensive plan and a zoning ordinance. Chapter 8A requires that governing bodies may enact zoning ordinances and subdivision and land development ordinances only after a comprehensive plan has been adopted.

The planning for Brooke and Hancock Counties is accomplished at a regional level. The Brooke, Hancock and Jefferson Metropolitan Planning Office performs the transportation, water and sewer planning for Brooke and Hancock counties in WV and Jefferson County in Ohio. They also are responsible for redevelopment and brownfield projects and have not completed any comprehensive or land use plans for these counties.

Marshall County - Marshall County does not have a comprehensive land use plan or a planning department / commission. The area that borders Washington County is almost entirely unincorporated and mainly rural. There are presently no land use policies in place.

Ohio County – Ohio is the most urbanized of the bordering counties, as it contains the City of Wheeling. There is no county planning commission or department.

Given the geographic proximity of Washington County to neighboring West Virginia, it is recommended that the County continue efforts to learn of new development plans, transportation improvements, or redevelopment efforts. Development in either can have regional impacts that could affect migration patterns, transportation needs, etc. For instance, the Starpointe Industrial Park located in Washington County is accessible to West Virginia via SR 22/30. Such a development will increase employment opportunities in surrounding Pennsylvania counties and those in West Virginia.

C. Existing Conditions

As evidenced by the existing land use analysis for Washington County, the nature of the county is characterized as a largely rural area with a strong agricultural flavor. Table 10.C.1: Existing Land Use shows that the largest single land use is Open Space (64.7%) with Agriculture being the second highest land use (25.7%).

Table 10.C.1: Exisiting Land Use

Land Classification	% of Total Land Use
Agriculture	25.7
Community Facilities (Cemetery, College, Hospital	0.2
Recreation (Golf Course, Parks)	1.8
Open Space (includes Game lands, Open Space, Wooded)	64.7
Commercial (includes Shopping Center)	0.1
Industrial (includes Industrial Park & Major Employers)	0.8
Mixed Use	1.6
Residential	4.9
Totals	100.0

Source: SPC, Mackin Engineering, Washington County Planning Commission

The following categories were used for classifying land within Washington County. As the County did not have parcel level mapping the percent of land uses are approximate in nature.

Agriculture:

Land being used predominantly for agricultural purposes—the commercial production and preparation for market crops, livestock and livestock products and the production, harvesting and preparation for market or use of agricultural and similar crops and commodities. According to information provided by Washington County, there were a total number of 377,425 acres enrolled in the Clean and Green program in the county as of January 2005, and as of April 2005, approximately 60,000 acres were included in agricultural security areas and 16 farms with 2,455 acres were enrolled in the agricultural conservation easement program. Table 10.C.1 identifies only land parcels that have been classified as an active farm, and does not reflect the parcels enrolled in Clean and Green or Agricultural Security Areas.

Community Facilities:

Sites containing any building or structure owned or operated by a governmental agency or nonprofit community service provider open for public uses with or without a fee that provides a service to the public. Included in this category are municipal offices, fire departments, ambulance providers, police departments, post offices, schools, and churches.

Recreation:

Land currently used for passive or active recreation purposes. These activities include trails, parks, tot lots, ball fields, and playgrounds. The Washington County Department of Parks and Recreation is responsible for 4,900 acres of park land in Washington County offering picnic shelters, nature trails, bicycle and bridle trails, and hunting and fishing areas. Washington County has over 70 miles of trails available for recreational and alternative transportation purposes. Approximately 1,600 acres of municipal recreational lands were identified during the planning process.

Open Space:

Open space is defined as land that has not been built upon or substantially altered and can be publicly or privately owned. These areas may have important ecological functions, natural resources, or cultural resources that are worthy of conservation and protection. There are seven State Game Lands in Washington County and, with almost 17,000 acres of public land; this is an important asset for residents and visitors alike.

Commercial:

Areas used by private individuals or by organizations for capital gain, which may include retail shopping, automotive, financial, professional, governmental and miscellaneous recreational and service activities to which the public requires direct and frequent access. Commercial lands are scattered throughout the County, though much of it is concentrated in established cities and boroughs. With the growing development of the I-79 and US 19 corridor, the County has experienced an increase of linear commercial development from the City of Washington to the Allegheny County border.

Industrial:

Sites involved in such activities as construction, excavation, processing, distribution and storage, and manufacturing. Included are uses such as factories, mills, and earth moving or excavation and transportation companies. Industrial uses are found primarily along the major transportation roadways in the County and along the Monongahela River. The Washington County Planning Commission has identified future economic development projects that will target investment at several of the existing industrial sites/business parks located within the County. Of the identified projects, there is a total of 1427 acres with 375 acres being pad ready for development.

Mixed Use:

The Mixed Use land classification includes land that is densely developed with both commercial and residential uses. This land classification can be found throughout the county but is primarily located in older communities such as the City of Washington, along primary roadways in some of townships, and in many of the older boroughs along the Monongahela River. Mixed Use developments often surround commercial areas and serve as a buffer between more intense retail development and traditional residential uses.

Residential:

This category includes all dwellings used for residential purposes. Residential uses can include single family dwellings and multi-family dwellings. These types of structures can range in density and type of construction.

These land classifications have created land use patterns that are constantly evolving and shifting the landscape of the County but have been captured in an approximation of the land characteristics as of the date of this plan, see Map 10-C-1: Existing Land Use.

During the development of the conceptual land use map, factors other than the existing land uses within the county were used. In the previous sections (Agriculture, Environmental Constraints, Transportation and Infrastructure) there were discussions regarding the limitations to future growth and development. These factors are somewhat unique to Washington County and will provide the basis for the areas that could best support residential, commercial and industrial growth.

In growing areas, farmers are being faced with pressures from developers to sell their property which creates a conflict between new and old land uses. This pattern of development that is created juxtaposes farming against high-traffic generating and service oriented uses. It also leads to a loss of valuable green space within the county and places additional burdens on the infrastructure that is in place.

As identified in the plan, Washington County is presently taking advantage of preservation tools such as the Agricultural Area Security Law which encourages landowners to commit to preserving agricultural lands and to protect these important land classifications from incompatible uses on neighboring lands. This is a voluntary program and areas of 250 or more acres can be established as an Agricultural Security Area. Another important method to preserve agricultural land is the Pennsylvania Agricultural Conservation Easement Purchase Program which provides the option for a landowner to sell the development rights to land dedicated to agricultural uses thus establishing a perpetual restriction on the land securing the agricultural land for future generations.

Identified as one of the most important issues facing Washington County, Agriculture has impacts on the economic and quality of life aspects in the region. It is important for the county to help protect the farming and agricultural operations across the county as they are affected by all aspects of development.

The future development patterns within Washington County are also impacted by its unique environmental and natural features. The northern portion of the county is characterized by smooth, rolling hills, while the southern portion has higher, sharper ridges, and more steeply chiseled stream valleys.

Slopes play a significant role when determining the extent and type of development that is being planned. Slopes in excess of 25 percent can be difficult to develop and if they are actively used

or the vegetation is removed, the soils can become prone to erosion or slips. According to the DCNR Bureau of Topographic and Geologic Survey Areas of Pennsylvania that are susceptible to landslides mapping, the majority of Washington County falls within the highest susceptibility to landslides in the Commonwealth. Only the most northern portion of the county falls within the high to moderate category. Map 10-B-1 illustrates the locations of slopes greater than 25 percent within the County.

The geologic makeup of the area is important in planning for development because the bedrock of an area, along with the hydrologic cycle, is responsible for the changes in elevation, topographic slopes, and waterway locations. The orientation of bedrock is influential in determining an area's soils, vegetative communities, and availability of sunlight. The bedrock geology of the county is illustrated on Map 10-B-2.

The Washington County Soil Survey identifies 46 different soil types within the County. Each of these soil associations can provide background information for determining suitable land uses for land tracts. In addition, this information is useful for watershed management, forestland management, and community development.

The major landscape feature for water resource studies is the watershed boundary. A watershed is defined by the US Environmental Protection Agency as the area of land that catches rain and snow and drains or seeps into a marsh, stream, river, lake, or groundwater (USEPA, 2004). Because watersheds are defined by natural hydrology, they represent the most logical basis for managing water resources. The resource becomes the focal point, and managers are able to gain a more complete understanding of overall conditions in an area and the stressors, which affect those conditions. This entails a strategy that crosses municipal boundaries and requires a great deal of coordination, cooperation, and communication within and between municipalities sharing the same watershed.

All of Washington County is within the Ohio River watershed, which has a drainage area of 23,487 square miles in Pennsylvania (USGS, 1989). Rivers, streams, and tributaries in the northern and western portions of the County drain directly into the Ohio River; however, watercourses in the eastern and southern sections of Washington County drain into the Monongahela River, which empties into the Ohio River in Pittsburgh. The Monongahela River watershed, which drains 7,386 square miles, is within the Ohio River watershed (USGS, 1989). Therefore, any watercourse that drains into the Monongahela River is not only part of the Monongahela River watershed, but it also part of the larger Ohio River watershed.

Many water quality issues are associated with groundwater, including natural and anthropogenic sources. The Washington County Watershed Alliance identified anthropogenic sources, such as abandoned wells, hazardous chemical wastes, malfunctioning septic systems and underground storage tanks, and excess sediment deposits.

According to the US Census, 47 percent of the land area in Washington County is classified as agriculture. Pollution from unmanaged agricultural practices can contribute to the degradation of

the waterways and groundwater in the County. Fertilizers, manure, pesticides, and silt from agricultural lands can contribute to heavy siltation, nutrient accumulation, and suspended solids within stream and groundwater systems. In addition, unrestricted access of livestock into streams also creates harmful effects, such as harm to livestock, streambank erosion, sedimentation and excessive nutrient enrichment. This form of pollution impacts numerous streams and tributaries in the County.

Sewage discharge is another form of non-point source pollution. Because approximately 75 percent of the county does not have municipal sewerage available (refer to Figure 5-1), on-lot sewage treatment systems and wildcat sewers probably account for most of the residences in the county.

The Washington County Natural Heritage Inventory (NHI) is a record of the native biological diversity within the political boundaries of Washington County. The major purpose of this inventory is to provide county and local governments and community groups with a valuable tool to assist them in their planning efforts. Not only can this inventory guide local development, it can also give suggestions for protecting significant natural heritage resources in Washington County. This NHI names several areas that have the greatest potential to be successfully managed as Dedicated Areas, including Mingo Creek County Park in Nottingham Township, Cross Creek County Park in Hopewell Township, Meadowcroft Village in Independence Township, portions of the six state game lands.

Washington County is located within the Main Bituminous Coal Field of Pennsylvania (DCNR, 2004). Extensive areas of operating surface and deep mines, old stripping areas, and reclaimed areas are dispersed throughout the landscape. Coal that is or has been mined within the County is primarily high volatile bituminous coal. Currently, five underground mining operations are active in the County. The 84 Mine (Consolidation Coal Company), Shoemaker Mine (Consolidation Coal Company), Enlow Fork (Consolidation Coal Company), Bailey (Consolidation Coal Company), and High Quality Mine (UMCO Energy, Incorporated) are all longwall mining operations. Reserves from the Upper Freeport Coal Seam and the Pittsburgh Coal Seam exist within Washington County and are identified on Figure 10-B-4.

The Pennsylvania Department of Environmental Protection (PADEP) defines mine subsidence as the movements of the ground surface as a result of the collapse or failure of underground mine workings. In active underground mining methods, subsidence can occur concurrently with the mining operation in a predictable manner; however, in abandoned mines, it is virtually impossible to predict if and when subsidence would occur. Areas within the County that have been previously undermined are shown on Figure 10-B-3

Solid waste disposal is managed at the municipal level with the County providing oversight and coordination at the regional level. The transportation and disposal of solid waste remains under the auspices of the private sector, which according to the 1999 Solid Waste Management Plan, is the most effective and cost efficient system. The Solid Waste Management Plan indicates that the two municipal waste landfills located within Washington County and those located regionally

in Southwestern Pennsylvania are sufficient to meet existing and projected future needs. The County has signed agreements with permitted landfills that will guarantee disposal of solid waste. The Arden Landfill in Chartiers Township and the USA South Hills Landfill in Union Township can provide adequate capacity to fulfill the needs for management of solid waste. However, the County will continue to pursue agreements with the permitted landfills as needed. As there are eight permitted landfills located within a fifteen mile radius of Washington County and an additional eight located within the Southwestern Regional Office of the Pennsylvania Department of Environmental Protection, there is sufficient capacity to absorb increased demands should they occur.

D. Analysis & Recommendations

The Washington County Comprehensive Plan specifies locations within the county boundaries where officials should direct investment to encourage the sound and logical allocation of resources. Resource allocation will be reserved to such areas where it has been determined that intervention is needed to correct deficiencies, encourage appropriate development, or provide new infrastructure to meet an existing need. Other investments will occur to preserve resources, encourage community revitalization, and foster an overall collective growth strategy that benefits the County as a whole.

Future Development Strategy

The future growth and development of Washington County should occur in a logical fashion. To provide County Officials with a framework to direct investment and establish policies, the Comprehensive Plan includes a future development strategy. The Washington County Comprehensive Plan's development strategy includes policies for municipal officials to follow as they embark upon their own planning and development efforts. The Future Development Strategy identifies the following categories: Targeted Areas for Investment, Transitional Reserve Lands, Village Development Areas and Rural Resource Areas.

Targeted Areas for Investment were identified within Washington County to align with the Commonwealth's classification of Designated Growth Areas as specified under the Pennsylvania Municipalities Planning Code, Act of 1968, P.L. 805, No. 247, as reenacted and amended (p. 2). A Designated Growth Area is "a region within a county that preferably includes and surrounds a city, borough or village, and within which residential and mixed use development is permitted or planned for at densities of one unit to the acre or more, commercial, industrial and institutional uses are permitted or planned for and public infrastructure services are provided or planned" (p. 2).

The County has the authority to designate such areas under the auspices of MPC Article III Section 301 (d) where it states that "the …county plan may identify those areas where growth and development will occur so that a full range of public infrastructure services, including sewer, water, highways, police and fire protection, public schools, parks, open space and other services can be adequately planned and provided as needed to accommodate growth" (p. 13).

Designated Growth Areas—These lands are identified as the Targeted Areas for Investment (TAI) as shown on the Future Land Use Map (Map 10-C-2). Lands under this category are defined as noted above. The County has the authority under the MPC Article XI, Section 1103 (1) to designate growth areas where (p. 90):

i. Orderly and efficient development to accommodate the projected growth of the area within the next 20 years is planned for and residential and mixed use densities should be one unit or more per acre.
ii. Commercial, industrial, and institutional uses to provide for the economic and employment needs of the area to insure that the area has an adequate tax base are planned for.
iii. Services to serve such development area provided and planned for.

Targeted Areas for Investment (TAI) should adhere to the following underlying policies as determined by Washington County:

- The TAI will be used to control development away from agricultural and forest lands as well as important open spaces.
- Development inside the TAI will provide a mix of uses and adequate, accessible government services
- The TAI will include roads, water and sewer systems, parks, schools and fire / police protection that create a quality of life that in turn attracts residents and businesses
- Incentives will be identified to help develop / re-develop land and buildings in the TAI and encourage infill development where current infrastructure exists before expanding to areas outside of the designated TAI
- Resources can be targeted to make existing roads, transit service and other services more efficient to facilitate the mobility of people and goods throughout the region
- Encourage efficient land use by directing development along major transportation corridors (within a TAI and in a manner that is consistent with the capacity levels of existing infrastructure)
- Promotes a balanced multi-modal transportation system within the region that includes options such as bicycling, walking, driving and public transportation
- Supports the region's goal of developing sustainable communities by providing jobs and shopping in close proximity to where people live
- Provide a variety of housing options and densities to accommodate all income levels, races, and family composition

Priority lands for inclusion into the TAI are shown on the Future Land Use Map (Map 10.C.2). Washington County shall have the authority to conduct periodic reviews and studies to validate that the identified areas are consistent with the goals and objectives of the Washington County Comprehensive Plan. Future inclusion into the TAI should be in response to a change in conditions and incorporate the geographic area necessary to meet the anticipated needs. The criteria for selecting lands that can be included into an existing TAI include, but may not be limited to:

- Population centers (city, town, village)
- Areas that are anticipated to experience population increases
- The availability / capacity of public water and public sewage systems
- Presence of adequate road network that can handle increased traffic
- Existing land uses within the proposed expansion that takes into account environmental/historical/cultural issues
- A proximity to similar types of development (dwellings, businesses, employment opportunities)
- The feasibility of extending infrastructure efficiently such as water, sewer and roads
- The feasibility of providing community services such as fire, ambulance, police, and parks / recreation

Transitional Reserve Land—includes lands located outside of the TAI that should be reviewed periodically to determine their inclusion into a TAI or reclassification as a TAI. Such lands should be considered necessary to accommodate future growth. Such classification will identify the potential, but not guarantee, to land owners, developers and governments that future development of the land may become a priority for Washington County. While some of these areas could include farm or forest land or other quality environmental areas, it is acknowledged that the County does not support unnecessary development of these areas that are considered "high value" lands. Municipalities will be encouraged to utilize zoning to direct development in a desired fashion to allow for appropriate economic development but in a balanced manner.

Village Development Area—these areas include locations within Washington County that are consistent with traditional pedestrian-friendly of an established town center area. It is the intent of the Village Development Area to encourage existing and new commercial uses, residential dwellings, civic and downtown entertainment and social uses, which are compatible with the existing development.

Rural Resource Areas—the MPC defines Rural Resources Areas as “an area described in a municipal or multi-municipal plan within which rural resource uses including, but not limited to, agriculture, timbering, mining, quarrying, and other extractive industries, forest and game lands, and recreation and tourism are encouraged and enhance, development is compatible or supportive of such uses is permitted, and public infrastructure services are not provided except in villages” (p. 6). The County has the authority under the MPC Chapter 11, Section 1103 (1) to designate rural resource areas where “development at densities that area compatible with rural resource uses are or may be permitted…infrastructure extensions or improvements are not intended to be publicly financed by municipalities except in villages, unless the participating or affected municipalities agree that such services should be provided to an area for health or safety reasons or to accomplish one or more of the purposes set forth in section 1101” of the MPC (p. 91). Rural resources areas identified for Washington County include State Game Lands, County Parks, Active Farms, and other farm or forest land, and high quality watersheds. Also to be considered within these categories are soil classes or areas of forest productivity where productive farms or forest lands will be the last land to be considered for inclusion in the TAI.

Developments of Regional Significance and Impact

The MPC defines Developments of Regional Significance and Impact (DRI) as “any land development that, because of its character, magnitude, or location will have substantial effect upon the health, safety, or welfare of citizens in one or more than one municipality” (p. 3). Article 3, Section 301 (a).7.(ii) of the MPC specifies that a County Comprehensive Plan shall “identify current and proposed land uses which have a regional impact and significance, such as large shopping centers, major industrial parks, mines and related activities, office parks, storage facilities, large residential developments, regional entertainment and recreational complexes, hospitals, airports, and port facilities” (p. 13). As such required by the MPC, Act of 1968, P.L. 805, No. 247, as reenacted and amended, the Washington County Comprehensive Plan acknowledges that future development plans of private individuals and those planned by state and county agencies will have substantial effect upon residents. As such, it is acknowledged that the Planning Commission will continue to fulfill its role as assigned by the Commonwealth to

review proposed developments and will make recommendation based upon the prescribed definition of a DRI as stated herein.

Implementation of the Future Development Strategy

It is the findings of the Washington County Comprehensive Plan that development pressures will continue thereby necessitating that a targeted investment policy be adhered to for future development and preservation efforts. True economic sustainability will not be realized if sound land use practices are not in place to direct how and where growth will occur. Transportation and infrastructure improvements must be in concert with, not driven by, economic development strategies. Such coordination must also occur in a true cooperative manner with local municipal officials, school districts, and community service providers. The impacts of development and growth must not come at the expense of the County's quality of life or its valued rural characteristics.

Washington County must assume a leadership role to encourage local elected officials to follow the county's predetermined land use policies. Many of the County's municipalities simply do not have the local capacity to implement sound land use planning practices. The County, its government and agencies, must be prepared to offer guidance and technical expertise on such issues as the delivery of services, watershed planning, sewerage facilities planning, etc. Among these lofty responsibilities will be for the County to coordinate efforts to regionalize services and foster intergovernmental partnerships. As Washington County has one of the highest rates of new housing starts, as compared to the Southwestern Pennsylvania region, it is strongly recommended that the County remain proactive in reviewing subdivision plans and zoning regulations to ensure the consistency of local regulations to the goals contained within the County Comprehensive Plan. Additionally, the County should employ a policy of educating local governing bodies and developers regarding the County's desire to retain its rural character and ensuring a high quality of life while promoting economic revitalization and sustainability.

Generally, rural preservation should be a priority for the western and southwestern section of the county. These locations have minimal public water and sewerage infrastructure to support large-scale development. Additionally, most of this area is removed from transportation networks that would support efficient access to commercial and employment centers. However, some aspect of rural preservation can be readily applied to many developing areas of the County. For instance, those townships and larger boroughs that are facing development pressures should understand how traditional residential sub-divisions could encourage sprawl and overtax municipal resources and infrastructure.

Counties have been charged to consider agricultural lands when completing a comprehensive plan and prepare a plan for preserving and enhancing that land. The Washington County Comprehensive Plan acknowledges the importance of its agricultural industry to both the economic structure of the county and its character. This Plan provides a solid foundation from which to direct development efforts. The agricultural land will continue to contribute to the quality of life in Washington County. As such, the County should continue to support and protect this industry by implementing the recommendations contained Chapter 10.A: Agriculture.

The Future Development Strategy for Washington County also acknowledges the sensitive nature of the many environmental resources within the County, as well as its wealth of natural resources. The natural characteristics of Washington County in a particular area dictate the suitability of the site or area for development or preservation. Chapter 10.B: Natural Resources discusses the many attributes of the natural environment of the County including its geological, climatological, and topographical characteristics as well as it water resources. The location of these resources directed the identification of the Rural Resource areas for the Future Development Strategy.

As discussed in Chapter 7: Movement of People and Goods, Washington County has one of the highest percent of interstate roadway miles as compared to the SPC region. With such a high percent of interstate roadways, it is essential that the County ensures that transportation planning efforts address interstate roads as they serve the same role assumed by non-interstate expressways and principal arterials in other counties. Officials must understand that state level policy on interstate maintenance will have more of an impact on Washington County than other counties in terms of public travel, safety, and the overall performance of the transportation system. With its high percent of Interstate and Collector roadways, the County will need to actively plan for future improvements that address access, road maintenance, and safety. Washington County Officials will need to ensure that planning for future transportation systems and economic development are intertwined. The interrelationship between the movement of people and goods with economic development is critical for long lasting economic sustainability. Land use and transportation are inherently tied together – each being, in some manner, influenced by the other. Washington County must remain diligent in the effort to act as a regional leader for transportation, land use, and economic development partnerships.

Other transportation modes will be fundamental to the future land development of Washington County. Freight centers will remain a primary economic and transportation component, but many roadways were not built to accommodate freight demands of a strong industrial base. The need for an interconnected, intermodal transportation network is essential. The benefits of the existing rail, water and air freight infrastructure must not be permitted to deteriorate. Ongoing commercial use of the regional and shortline rail roads, County airport, and Monongahela River are essential to the efficient and safe movement of people and goods as well as the economic sustainability of the County. These elements provide a supporting role to local, national and even international shipping of goods and lessen the negative impacts of freight shipments via heavy trucks on roadways. Therefore, it will be important for Washington County to actively participate in the ongoing efforts to update the lock and dam system on the Monongahela River, improve services at the County Airport, and support connectivity of all transportation modes.

The County has a sound plan in place to address its recreational facilities and its county parks. However, one asset exists that can be better utilized as a recreational resource, the Monongahela River. The County can achieve this goal by identifying areas to offer river-related recreational amenities and development opportunities. But, it must be understood that County officials should partner with local municipalities to secure funding and develop river-oriented recreation plans prior to such actions. Additionally, the County should work to establish natural linkages to preserve its green infrastructure as well as developing its trail network. Locations such as the State Game Lands are wonderful opportunities to build upon for extending an open space

network. As the County has numerous resources related to its heritage, efforts should be made to develop new social and cultural outlets that celebrate the natural, cultural, historic resources in the county and region.

Washington County has begun to deliver economic development services more efficiently, but there remains more to be done to centralize certain activities. The 1999 Washington County Economic Development Strategy called for consolidation of economic development organizations and, in response, the County leadership formed the Washington County Economic Development Partnership. The Partnership is in charge of executing the County's economic development goals. Washington County officials and the Partnership should ensure that it has a targeted approach to its economic development investments. The policies and goals of County officials and economic development agencies need to demand that economic development coincides and supports improvements for transportation and infrastructure.

Many communities within Washington County are home to former industrial sites. Many of these properties are "clean" but require significant investment in the infrastructure and buildings if the sites are to be competitive in today's marketplace. Other sites present the challenging issue of contamination and the cost of returning the sites and buildings to the market can be prohibitive. However, as these sites are situated in key geographic locations and have ample transportation (barge, rail, roadway, even air), and existing public utility services, it is the County's position to invest in these locations to foster their revitalization.

Following the adoption of the Washington County Comprehensive Plan by the County Commissioners, the County will have to conduct a review and update of its Comprehensive Plan every ten years as required by the Pennsylvania MPC Article III, Section 302 (d). Compliance with the requirements of the MPC specifies that the County Planning Commission "shall publish advisory guidelines to promote general consistency with the adopted county comprehensive plan" (p. 14). The guidelines are to be such that they provide a uniform standard for municipal leaders to follow as they develop local land use regulations. This Comprehensive Plan is hereby submitted with the intent that such guidelines may be developed based upon the County Development Objectives and implementation strategies contained herein.

E. Implementation Strategies

To fulfill the County Development Objectives, the County should work with appropriate agencies to meet the following goals. For each goal statement, one or more action steps are provided.

Manage future growth in an efficient and orderly manner

Action: Encourage local municipalities that have not completed comprehensive plans or that have plans over ten years old to complete / update plans for their community

Action: Encourage municipalities to develop multi-municipal comprehensive plans and ordinances that implement sound land use policies

Action: Assist local municipalities in developing plans and ordinances that are consistent with the County Comprehensive Plan

Action: Promote the Village District Development Concepts to local elected officials in established boroughs and unincorporated towns and villages

Action: Encourage future growth and development in Targeted Investment Areas that have adequate infrastructure in place

Action: Establish an annual (educational) meeting between the County Planning Commission and local municipal planning commissions to ensure that future development plans are consistent with county policies

Action: Review and update the Washington County Comprehensive Plan every ten years

Action: Develop, adopt and publish advisory guidelines for land development and land use regulations

Maintain the rural character in the county

Action: Prioritize the funding of infrastructure in rural areas located outside of the Targeted Investment Areas that do not promote uncontrolled growth

Action: Assist interested municipalities in the implementation of zoning regulations that preserve prime agricultural lands

Action: Encourage municipalities that complete multi-municipal plans to examine the benefits of Transfer of Development Rights (TDR)

Action: Support the development of an interconnected greenway and open space system within the county

Action: Provide model ordinances to the local municipalities that include requirements for conservation subdivisions

Action: Support the planning efforts and implementation of projects being completed by watershed groups, conservancies, and other similar associations

Upgrade and / or expand public services and infrastructure in locations that have aging facilities in place

Action: Develop a cost – benefit analysis for determining where future infrastructure improvements should be made within the county
Action: Provide priority funding for infrastructure and transportation projects within Targeted Investment Areas and Villages
Action: Encourage municipalities to guide development to areas with excess capacities prior to constructing new facilities – utilizing the philosophy "Fix it First, Keep it From Getting Worse"
Action: Provide priority funding for safety and infrastructure rehabilitation projects outside of the Targeted Investment Areas and Villages

Protect natural, cultural, and historical features in rural resource areas from future uncontrolled developments

Action: Direct high-density land uses to corridors served by adequate infrastructure and mass transit through Traditional Neighborhood Development and Transit Oriented Development techniques
Action: Continue to support / implement the recommendations from the "Washington County Economic Development Strategy: 2000 to 2010"
Action: Identify the areas of the county that contain accessible mineral resources
Action: Encourage local municipalities to implement sustainable development practices that include performance zoning, transfer of development rights, impact fees and the sharing of future development revenues
Action: Assist local municipalities with the development of requirements to establish buffers around significant natural, cultural, and historical features
Action: Create model ordinances that local municipalities can adopt to protect environmental resources

Utilize existing brownfield sites and already developed industrial parks to locate future commercial and industrial employers

Action: Inventory the existing sites within the county to determine the availability and amount of land that can be used
Action: Identify and promote the incentives available to developers who locate at these sites
Action: Develop a "ready sites" list and provide to interested developers that contains acreages, utility information, zoning, incentives, etc.

Coordinate future transportation, infrastructure, housing, and economic development improvements with county land use policies

Action: Encourage municipalities to update or develop zoning regulations that provide for a full range and mix of land uses within Targeted Investment Areas and Villages

Action: Encourage land use patterns that reduce travel distances to employment opportunities, essential services, and retail establishments

Action: Advocate that local land use decisions and policies promote the efficient use and conservation of energy

Action: Prioritize future transportation improvements by their ability to link cities, boroughs and populated areas within the county to larger cities / existing regional employment and retail centers within the region and direct funding accordingly