



## CHAPTER 2: FEASIBILITY STUDY

### PURPOSE

As stated in Chapter 1, the purpose of the Lycoming County Municipal Corridor Plans is to 1) conduct a market assessment while concurrently inventorying the parcels and infrastructure in the two Corridors to assess strengths and obstacles; 2) to create a vision for the two Corridors engaging multiple user groups – including the community youth; and 3) to develop an implementation strategy for the recommended concepts. This Chapter summarizes the first phase results and findings as a baseline for initiating the visioning phase.

In order to enhance the usability of this document for potential developers and the general public alike, the two Corridors will be discussed separately. An inventory and assessment of the existing conditions within each Corridor was completed. The following components were analyzed as key factors that will aid or inhibit potential opportunities for development and/or redevelopment.

- **Existing Land Use** – the existing land use was inventoried at the parcel level using tax data through geographical information systems (GIS) provided by Lycoming County.
- **Zoning Regulations** – the current zoning regulations that pertain to each Corridor were reviewed to determine what is currently permitted and how that may or may not affect potential development and/or redevelopment opportunities.
- **Subdivision and Land Development Regulations** – similar to zoning, the current subdivision and land development regulations were reviewed to ascertain what aspects of development are regulated and identify areas which may need to be strengthened in order to achieve the desired vision.
- **Design Guidelines** – the existing design guidelines for Downtown Williamsport were reviewed to determine if any updates were necessary or if an expansion of the area covered by the guidelines was needed to ensure compatible development in the Downtown area.
- **Transportation and Access** – accessibility, whether by vehicle, rail, and/or pedestrian, is a vital component of the marketability of the Corridors and affects the potential for development and/or redevelopment. The overall transportation network was reviewed and assessed for effectiveness and efficiency of moving people and goods to and from the Corridors.



## LYCOMING COUNTY MUNICIPAL CORRIDOR PLANS

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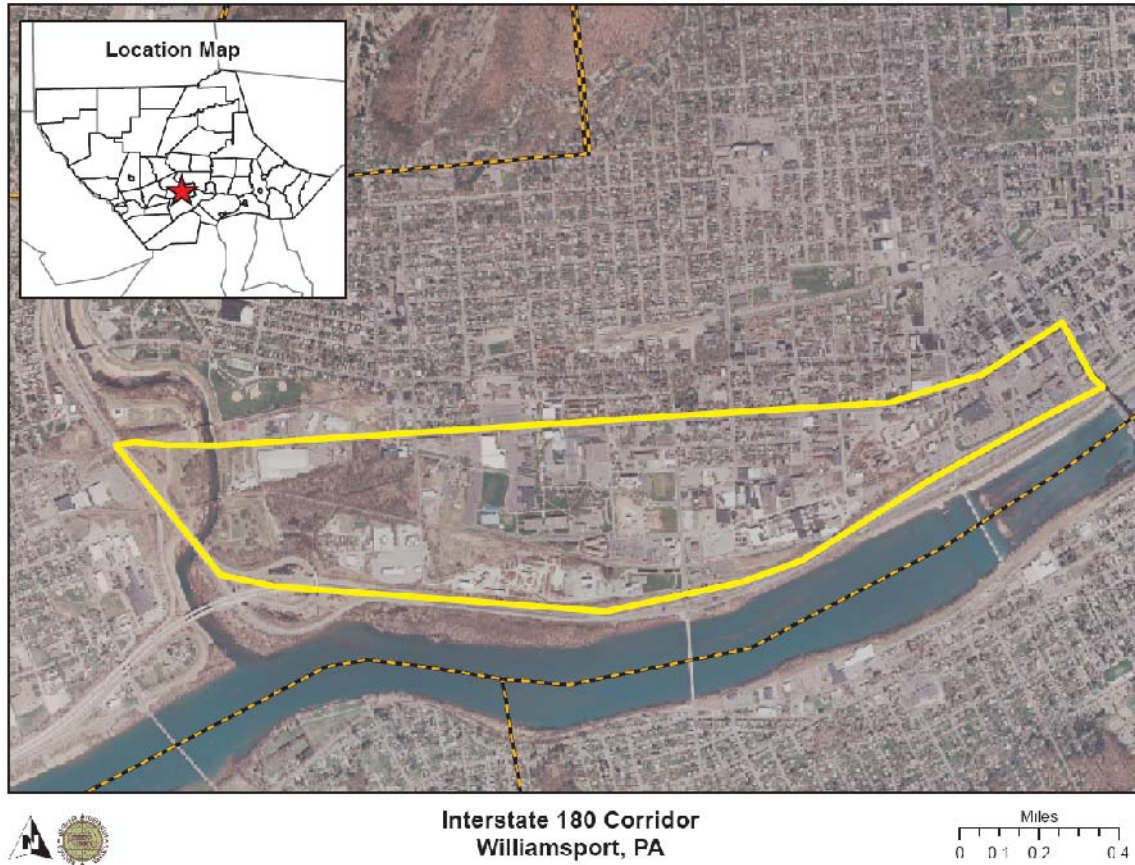
- **Utilities** – a review and analysis of existing utilities was conducted as the availability of infrastructure impacts a site’s potential for development and/or redevelopment.
- **Environmental Constraints** – as the two Corridors contain many brownfields, it is vital to inventory and assess the environmental constraints that may be present within the sites and how that may impact the type and cost of any new development or redevelopment project.
- **Parcel Profiles** – parcel profiles were also assembled for each Corridor, which is basically a culmination of all of the information gathered on the current conditions as well as qualitative information regarding owner interest and the relocation potential. The parcel profiles were conducted using GIS so that the information is linked to the specific parcels and can be shown thematically.
- **Market Assessment** – a Market Assessment was conducted to provide an economic snapshot for the Corridors, which included analyzing economic indicator data and comparing to regional, statewide and national averages and trends; determining the feasibility of economic development concepts; and determining future best uses and economic development opportunities within each Corridor.



## I-180 CORRIDOR: WILLAMSPORT

Located in the south central portion of the City of Williamsport, the I-180 Corridor is bordered by Market Street to the east, US 15 to the west, I-180 to the south, and 3rd Street to the north.

Figure 2.1 A: Project Location



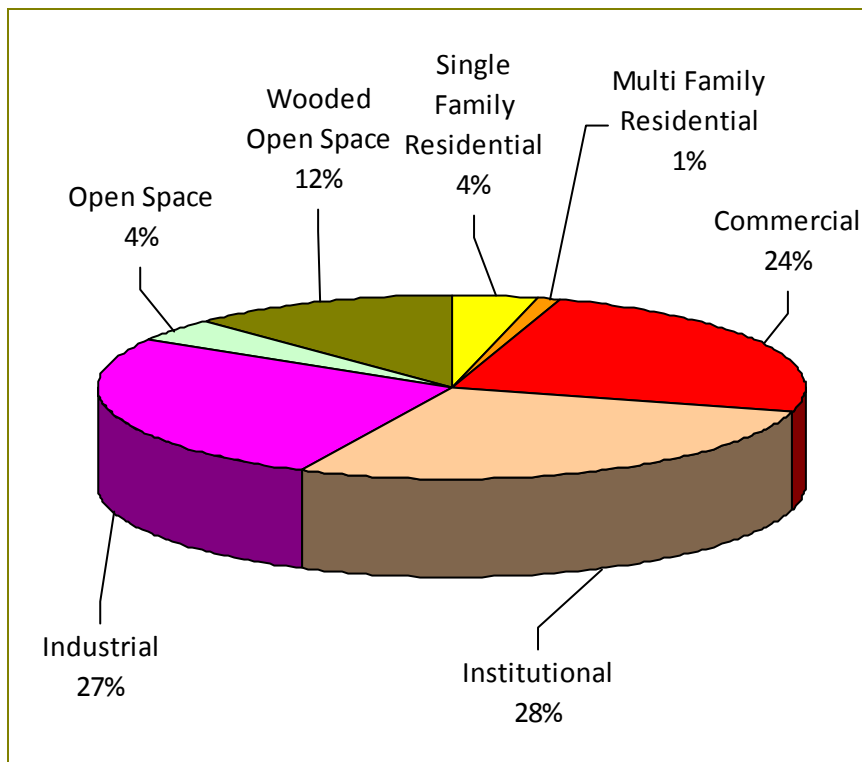


## I-180 Corridor: Williamsport Existing Land Use

Land use planning begins with an examination of the current uses of the land. Existing land use is vital to planning projects not only because it identifies current conditions, but also assists with making recommendations for how land should be used in the future. This is important to keep in mind as future uses should compliment and enhance the uses that already exist in and around the corridors. For example, if a large industrial user currently exists within a project area and has plans to remain active into the future; a community would not want to suggest locating a single family housing development adjacent to this use (unless some sort of buffering could be utilized to decrease conflicts).

The I-180 Corridor consists of approximately 411 acres of a variety of land uses. As shown in [Figure 2.1B: I-180 Corridor Existing Land Use](#), over three-quarters of the Corridor is classified as Institutional (28%), Industrial (27%) or Commercial (24%). The remainder is classified as Single Family Residential, Multi Family Residential, Open Space or Wooded Open Space. [Map 2.1A: I-180 Corridor Existing Land Use](#) depicts the existing land use within the I-180 Corridor.

Figure 2.1B: I-180 Corridor Existing Land Use



### Single Family and Multi Family Residential

Single Family Residential includes housing units that are designed for one family, such as traditional detached single family homes. Multi Family Residential includes housing units designed for more than one family, including duplexes, conversion apartments, and apartment complexes. The residential portion of the Corridor is located between College Avenue, 1<sup>st</sup> Street, Locust Street and West 3<sup>rd</sup> Street. A large number are rental units for students of Pennsylvania College of Technology.



I-180 Residential Neighborhood  
Mackin Photo 2009

### Commercial

Commercial includes general commercial uses, such as retail, offices and “flex” space. The Commercial uses are located throughout the Corridor, with one of the largest concentrations found in the eastern portion with Wegman’s Grocery Store, several hotels and banks, and other retail uses. Another concentration of Commercial can be found surrounding Dix Street and there is a growing concentration along Maynard Street, near the Corridor’s center.



I-180 Commercial Development  
Mackin Photo 2009

### Industrial

Industrial includes light and heavy manufacturing, resource recovery facilities, and similar type uses. Industrial uses are primarily located in the central portion of the Corridor from Maynard to Hepburn Streets and include large properties such as Wire Rope, Inc. and Staimans Recycling Plant.



I-180 Industrial Development  
Mackin Photo 2009



## Institutional

Institutional includes educational uses, churches, and lands owned by other public or nonprofit organizations. The I-180 Corridor is home to the Pennsylvania College of Technology, which comprises the largest concentration of Institutional uses in the Corridor, between Maynard and Rose Street.



I-180 Institutional Development  
Mackin Photo 2009

## Open Space & Wooded Open Space

There are small pieces of open space located throughout the corridor but it is mainly concentrated in the western portion of the corridor from Rose Street to US 15. A portion of the Wooded Open Space near Rose Street is owned by Pennsylvania College of Technology, who has plans to develop recreational fields on site. However, most of the Wooded Open Space area is owned by the Williamsport Municipal Water Authority (WMWA).



I-180 Open Space  
Mackin Photo 2009



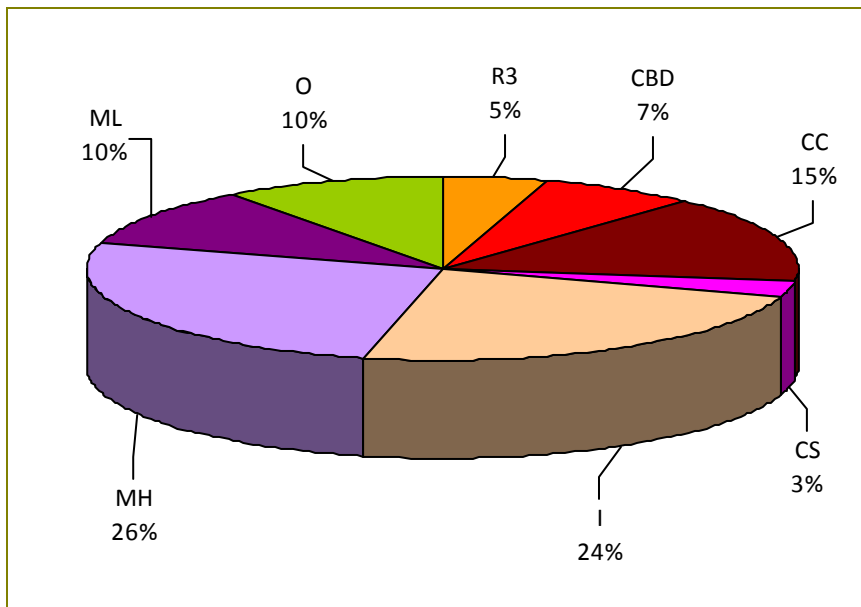
### I-180 Corridor: Williamsport Zoning Regulations

Zoning is the most common way for municipalities and counties to control land use and the physical development of land within their jurisdiction. Specifically a zoning ordinance is the legal document which outlines the types of land uses allowed in a community as well as where the uses are permitted to locate. Thus, it is a very important tool for land use planning. The City of Williamsport administers its own zoning ordinance.

### Zoning Districts Overview

As shown in [Figure 2.1C: I-180 Corridor Zoning Districts](#), half of the Corridor is zoned either MH Heavy Industrial (26%) or I Institutional (24%). The other half is separated into one of the other six zoning districts. [Map 2.1B: I-180 Corridor Zoning Districts](#) depicts the zoning map for the Corridor:

Figure 2.1C: I-180 Corridor Zoning Districts



- **Commercial (CBD)** – primarily for the conduct of retail trade, administrative and professional offices and service to the general public in the Central Business District, with emphasis on large-scale stores and specialized shops serving a regional trading area.
- **Commercial (CC)** – Essentially the same as the Commercial CBD District but with off-street automobile parking required.



- **Commercial (CS)** – Primarily for wholesale, warehouse and service activities which require a central location.
- **Institutional (I)** – Primarily for institutional and office uses and including commercial activities having only limited contact with the general public, not involving the sale of merchandise at retail except incidentally and which may be carried on with no objectionable conditions in structures surrounded with ample open spaces.
- **Light Industrial (ML)** – Primarily for light industrial and warehousing activities which do not require a central location.
- **Heavy Industrial (MH)** – Primarily for manufacturing, assembling and fabrication activities, including large-scale or specialized industrial operations requiring good access by road and/or railroad and perhaps requiring special sites or services.
- **High Density Residential (R3)** – Primarily a multi-family dwelling district with small lot areas per family but including one-family detached, one-family attached and two-family dwellings, certain residential related uses and the customary accessory uses.
- **Open Space (O)** – Primarily for the preservation of open space for recreation and scenic purposes and to protect steep slopes and watercourses through public and quasi-public ownership but including certain compatible private uses.

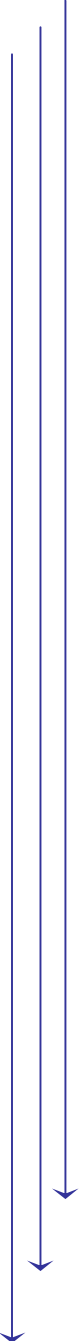
### Zoning Regulations Overview

In addition to the zoning districts, which regulate where uses can locate, the City's zoning ordinance was reviewed to determine what additional regulations are in place that may impact access and aesthetics within the Corridor.

- **Sidewalks** – Required in all new developments and street additions “if such shall be deemed necessary for the welfare and safety of the residents of the City”
- **Lighting** – Outdoor or spot lighting shall be shielded to prevent glare. Light sources, including signs, shall be diffused with a cover to prevent the lighting element from being directly visible. Light sources shall be directed and placed to prevent the creation of nuisance. In, addition, flashing, flickering, or strobe lighting is prohibited, and no more than four bare incandescent light bulbs of 40 watts or greater shall not be hung along a public street or lot line



- **Landscaping and Buffers** - Required when a principal industrial, transportation, utility or automotive use is located outdoors, such as scrap processing, automotive sales lots, truck terminals, electric transformer stations and storage yards; abuts a residential or institutional district or is otherwise specified. It is not to be less than 5 feet in width, and shall include a fence or “dense screen planting of trees, shrubs or other plant materials along the full length of the lot line to serve as a barrier to visibility, airborne particles, glare, and noise.” They are required to mature to a height of 6 feet within 3 years. A fence is permitted as a screen provided it is no higher than 6 feet. Proper maintenance of fences and vegetation is required.





### I-180 Corridor: Williamsport Subdivision and Land Development Regulations

Subdivision is how a use relates to the land on which it is located. Specifically it is the division or redivision of a lot, tract or parcel of land into two or more lots, tracts, or parcels. Subdivision includes changes in existing lot lines for the purpose of leasing, distributing property to heirs, transferring property ownership, or developing a property. Subdivision also includes lot additions and lot consolidations.

A land development is the site plan that shows the proposed improvements to one or more contiguous lots or tracts involving two or more residential buildings or a single non-residential building. In conjunction with zoning, subdivision and land development regulations assist communities in implementing comprehensive plans and achieving desired land use patterns.

The City of Williamsport administers its own Subdivision and Land Development Ordinance (SALDO). The Williamsport SALDO recommends sketch plans for minor subdivisions; but, they are required for major subdivisions. Preliminary plans may be waived as a requirement for minor subdivisions if the City Planning Commission deems this step unnecessary (i.e. if the sketch plan is highly detailed); but, just like sketch plans are a requirement for major subdivisions. Final plans are required for both minor and major subdivisions.

The City's SALDO was reviewed to assess the standards that are in place to regulate subdivisions and land development within the Corridor.

- **Streets** – where feasible shall provide for continuation or appropriate projection of existing streets and surrounding neighborhoods; reserve strips controlling access to streets shall be prohibited except where their control is placed within City jurisdiction; street right-of-way (ROW) widths and pavement and sidewalks widths shall be appropriate to the type of street; half streets prohibited; cul-de-sacs shall not be longer than 600 feet.
- **Access driveways** – must conform to state standards; common driveways are permitted for two adjoining lots.
- **Parking lots** – prohibits angle or perpendicular parking along public streets; requires separation of parking lots from public rights-of-way (via curbing), requires 10 feet of open space between curb line of parking area and outside wall of any dwelling unit; a table of parking lot dimensions based on type of parking provided (i.e. 90 degree angle, 60 degree angle, 45 degree angle, etc.) is included in the SALDO; parking areas shall be set back at least 5 feet from street line.
- **Easements** – all easements shall be at least 15 feet wide.

- **Building coverage** – varies by zone.
- **Impervious area** – the percentage allowed varies by zone.
- **Blocks and lots** – block lengths shall not exceed 1800 feet nor be less than 400 feet; double frontage and reverse frontage of lots shall be avoided where possible; residential lots shall not exceed a depth to width ratio of three and a half to one.
- **Multi-family development standards** – proper access and circulation shall be provided; buildings and facilities shall be arranged harmoniously and efficiently.
- **Non-residential development standards** –
  - Comprehensive “design of the land” instead of individual lotting
  - Encourages “harmonious and efficient” organization of buildings and facilities and other elements of the site plan, in related to topography, the size and shape of the plot, the character of the adjoining property, with the end result of a “livable and economical land use pattern.”
  - Additional width of streets in some cases (as deemed necessary by Council)
  - proper access must be provided, dead-end alleys shall be avoided; when adjacent lots proposed for nonresidential front on an arterial or collector, a service road may be required for proper ingress and egress
  - Alleys shall be required in industrial districts except where other adequate provision is made for off-street loading and parking
  - Encourages parking lots to be visibly shielded or secluded from pedestrians, using methods such as grading to depress the parking area, raised berms, landscaping, or fencing
  - When adjacent to residential, including future residential development, there should be extra depth in the parcel (if it backs up to residential) or permanent landscaped evergreen buffer strips.
- **Buffer strips** – Required any time a subdivision abuts or contains an arterial street shown on the Comprehensive Plan. It shall contain screen planting along the rear property line. In addition, the Ordinance specifies that deep lots with rear service ways or such other treatment as may be necessary for adequate protection of residential properties and will afford separation of thru and local traffic.



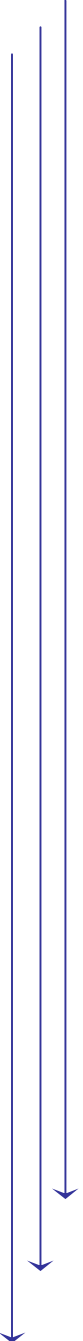
- **Required Screening**

- Required between off-street parking and public rights-of-way. It is required to be at least 4 feet in depth and to include one small or medium tree for each 35 lineal feet or if a large tree, every 45 feet. The trees shall be varied in color, shape, and texture of landscape material. The remainder of the required landscaped areas shall be landscaped with grass, ground cover or other landscape treatment.
- Screening is also required between off-street parking and abutting residential or institutional uses. All buildings or structures or lots providing an off-street parking area of five spaces or more, shall be provided with a wall or hedge or other landscape barrier not greater than 6 feet in height nor less than 4 feet in height and a minimum width of 4 feet, to form a continuous screen between the off-street parking area or vehicular use area and any abutting residential use.



### I-180 Corridor: City of Williamsport Design Guidelines

The mission of the Williamsport Main Street Program is to “promulgate the sense of place, quality of life and economic vitality of Williamsport’s downtown business district.” As part of that mission, the Main Street Design Committee has developed guidelines for downtown merchants to attract customers, preserve historic buildings and encourage tourism. While only a small portion of the I-180 Corridor lies within the designated Main Street Downtown District (all properties between Center Street, 2<sup>nd</sup> Street, 3<sup>rd</sup> Street and Market Street fall within the Main Street Downtown District), the Design Guidelines can and should be provided to the businesses within the I-180 Corridor to assist in rehabilitation/redevelopment projects to maintain the overall theme of the downtown.





### I-180 Corridor: Williamsport Transportation and Access

Accessibility in all of its forms— vehicular, rail, and pedestrian—is a vital component of the future of the I-180 Corridor. Access to and among residential areas, recreation facilities, commercial centers, and industrial hubs directly affects the quality of life for residents and workers and is often a factor for employers in choosing new business locations. 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 and land use planning. [Map 2.1C: I-180 Corridor Transportation and Access](#) depicts the transportation network within and surrounding the I-180 Corridor, including roads, rail, and pedestrian trails and connections. In addition, locations identified as areas of concern regarding transportation and access to and within the corridor are also depicted on the map.

#### Vehicular Access

The main concern is the lack of east-west movements from US 15 to Hepburn Street within the corridor. Long range road improvements should be considered in order to more fully develop all of the Corridor lands.

Access for larger trucks is limited west of Maynard Street and south of Penn College due to the low clearance of the railroad bridge over Rose Street. The low height of the railroad bridge restricts large trucks from accessing properties along Dix Street and adjacent to I-180. The only other access to these properties, primarily the 38 acres known as the Old City Dump, is from Maynard Street.



Railroad Bridge over Rose Street  
Larson Photo 2009

However, the Maynard Street access is at a difficult location due to the close proximity to other points of egress and the on ramp to I-180. As a result of these difficulties, this area of Maynard Street is very congested. For future development to occur, further considerations for accessibility would be necessary such as additional turning lanes, and limiting points of entry into various developments along Maynard, etc. On the contrary, there is easy access to I-180 from Maynard Street. There is also access to US Route 15 North nearby.

For the most part, the properties east of Maynard Street to Hepburn Street have adequate access. In addition to the access via Maynard and Hepburn, there is limited access from West 3<sup>rd</sup> Street. There are few transportation limitations for further development in this area. This section has direct and easy access to I-180 and Route 15 South. From Hepburn to Market, there is an excellent network of



north-south and east-west roads including traffic circles. But this may change if the William Street development is realized.

### Rail Access

The I-180 Corridor is served by the Lycoming Valley Railroad (LVRR), which is one of six short line railroads operated by the North Shore Railroad Company. The LVRR operates on tracks owned by the SEDA-CoG Joint Rail Authority. The LVRR connects to Norfolk Southern in Newberry, Pennsylvania (<http://www.nshr.com>).



LVRR in the I-180 Corridor  
Mackin Photo 2009

### Pedestrian Access

Sidewalks are located in certain sections of the corridor making pedestrian access to and through the Corridor possible. However, this access is limited and uninviting in some areas due to large traffic volumes and wide streets. The industrial areas to the east of Maynard Street as well as the areas that are located near the on-ramps to I-180 (at Maynard Street) are also unsafe for pedestrians due to traffic volumes and the type of vehicles accessing the industrial businesses.



Sidewalks in the I-180 Corridor  
Mackin Photo 2009

The Susquehanna River Walk borders the I-180 Corridor to the south, east of Maynard Street. The Corridor provides both parking and access to this recreational amenity, which is a defining element. The River Walk is a four-mile paved bikeway/walkway that loops along the levee system along the Susquehanna River. In addition, the Timber Trail along the River Walk provides amenities funded through the Lumber Heritage Region and other local organizations. The Timber Trail features benches, interpretive signage, and a life-size woodhick sculpture. The River Walk is an important part of the County and City's efforts to connect the community to the river. It takes advantage of the City's natural beauty and enhances the region's quality-of-life as a whole, thus making it attractive for companies seeking new locations.

Lycoming County conducted a feasibility study for a bikeway that would connect to the River Walk at Maynard Street and extend through the Corridor to the west to Susquehanna State Park. There are six potential alignments that are under consideration, as shown on [Map 2.1C: I-180 Corridor Transportation and Access](#).



## I-180 Corridor: Williamsport Utilities

Utilities are an important factor when considering development and redevelopment especially in terms of commercial and industrial development. Due to the high cost of adding or extending utilities, the types and capacity of available utilities often influence companies in their location decisions. With the increased use of higher technology, such as internet and cell phones, the availability of these types of utilities makes a development site more attractive as well.

### Water and Sanitary Sewer

- **Williamsport Municipal Water Authority** - 253 W. Fourth Street, Williamsport, PA 17701
- **Williamsport Sanitary Authority** – 253 W. Fourth Street, Williamsport, PA 17701

The I-180 Williamsport Corridor is served by public water and sanitary sewer facilities through the Williamsport Municipal Water Authority (WMWA) and the Williamsport Sanitary Authority (WSA). [Map 2.1D: I-180 Corridor Water and Sewer](#) depicts the locations of water and sewer lines within the Corridor.

The water and sanitary sewer infrastructure should be generally adequate for residential or light commercial/industrial development. There are segments of the Corridor that are not yet served specifically the area south of the rail road and west of Rose Street. The area north of I-180/RT 220 between Rose Street and Maynard Street is served however, not by a main and may require an extension of the water main to loop the system. In addition, the existing infrastructure includes some elements that are older or constructed with materials or methods not commonly used in construction today, thus may require rehabilitation or upgrades.

The WMWA does not maintain general water capacity or fire flow figures for the corridor. Additional information regarding the water system capacity may be provided or developed as needed for specific development proposals. The public water system in the study area generally consists of looped water mains of large size that are considered adequate for the development density anticipated. The general age, material, and condition of the water system as reported suggests that further investigation would be warranted for any potential development that includes substantial water demands or high fire flow needs.

The sanitary sewer system within the corridor is served by two drainage areas; the majority of the corridor is served by a gravity collection system that flows directly to WSA's Central Treatment Plant. The area of Rose Street south of West Third Street drains to the Rose Street Pump Station. The gravity collection system should be adequate for residential or light commercial/industrial development; however, the





WSA indicated that the Rose Street Pump Station is approaching its design capacity. Significant development or development including substantial sewage discharges could result in the need for an upgrade to the pump station. This could affect areas including the Old City Dump and lands west of Rose Street.

The purple hatched areas as shown on [Map 2.1D: I-180 Corridor Water and Sewer](#) note areas where water main extensions are needed. While these properties are currently served by smaller laterals, if future development of this area should occur extension should be put into place to handle the additional volumes.

### Stormwater System

- **City of Williamsport** – 245 W. Fourth Street, Williamsport, PA 17701

The City of Williamsport operates a separate stormwater system. Attention will need to be paid to the City-operated system that underlies the Corridor, as expanded impervious surface must be mitigated. The City levee system and stormwater pump stations have limited capacity.

### Natural Gas Service

- **UGI Penn Natural Gas** – 1 PEI Center, Wilkes Barre, PA 18711
- **Pennsylvania Power and Light (PPL) Natural Gas** – 4810 Lycoming Mall Drive, Montoursville, PA 17754

There were no concerns reported regarding the provision of natural gas service within the Corridor.

### Overhead Utilities

[Map 2.1E: I-180 Corridor Overhead Utilities](#) depicts the locations of overhead utility lines, by type, within the Corridor. Regarding overhead utilities, the following applies:

- Elec = electricity lines
- 1 Phase Elec/1 wire lines typically can support light commercial, retail and residential uses
- 1 Phase Elec/2 wire lines support medium and light industrial and medium and light commercial or retail uses
- 3 Phase lines are for heavy industrial or large commercial or retail uses
- Tele = telephone lines
- CATV = cable television lines



Overhead Utilities in the  
I-180 Corridor  
Larson Photo 2009



Electric:

- **Pennsylvania Power Light (PPL) Electric** – 4810 Lycoming Mall Drive, Montoursville, PA 17754

Telephone:

- **Frontier** – 100 CTE Drive, Dallas, PA 18612
- **Level 3 Communications** – 1025 Eldorado Blvd Bldg., Broomfield, CO 80021
- **Verizon** – 901 Tatnall Street 2<sup>nd</sup> Floor, Wilmington, DE 19801
- **Comcast** – 1020 Commerce Park Drive #10a, Williamsport, PA 17701

Cable:

- **Frontier** – 100 CTE Drive, Dallas, PA 18612
- **Comcast** – 1020 Commerce Park Drive #10a, Williamsport, PA 17701

Internet/Data:

- **Frontier** – 100 CTE Drive, Dallas, PA 18612
- **Level 3 Communications** – 1025 Eldorado Blvd Bldg., Broomfield, CO 80021
- **Verizon** – 901 Tatnall Street 2<sup>nd</sup> Floor, Wilmington, DE 19801
- **Comcast** – 1020 Commerce Park Drive #10a, Williamsport, PA 17701
- **Zayo Bandwidth** – c/o RCC INC. 600 2<sup>nd</sup> Ave Ste B, Royersford, PA 19468

The I-180 corridor is well served with electric, telephone and cable lines. However, the heavier lines for more industrial type uses are concentrated around Maynard and 1<sup>st</sup> Street (where existing industrial uses are today). If this area were to be redeveloped for high intensity uses such as a hotel or student housing, there may need to be some upgrades to accommodate the high number of users. There is also a significant sized PPL facility located at the foot of the Hepburn Street on-ramp that would be very expensive to relocate.

Both Comcast and Verizon have fiber optic cable in the Williamsport area, however their exact location is unknown. At this time, there are no known planned expansions of utilities in this corridor; however, they could be expanded in the future based on the need of a potential development.



### I-180 Corridor: Williamsport Environmental Constraints

The I-180 Corridor is located in the Deep Valleys Section of the Appalachian Plateaus physiographic province within the alluvial plane of the West Branch Susquehanna River. The corridor is situated due east of the confluence of Lycoming Creek and north of the West Branch Susquehanna River, which is located approximately 200 feet south of the corridor boundary. The general topography of the corridor is relatively flat to gently sloping to the south towards the river with elevation ranging from approximately 530 feet above mean sea level (msl) along the northwestern boundary to approximately 510 feet-msl along the southeastern boundary.

Information gathered from Pennsylvania Department of Environmental Protection (PADEP) file reviews and other sources revealed the following general characteristics of the corridor:

- Unconsolidated alluvium (clay, silt, sand and gravel) to depths of approximately 60 feet. The alluvium reportedly overlays Devonian age limestone and carbonaceous shale bedrock.
- The surface of most of the area has been extensively reworked over the years. Therefore, the presence of fill material of varying thickness and character is likely present throughout.
- The first continuous water bearing zone (i.e. aquifer) occurs in the unconsolidated alluvium at depths of between approximately 15 and 30 feet below ground surface. Groundwater flow direction is generally to the southeast towards the West Branch Susquehanna River.
- The Corridor is rendered a 500-year floodplain, as shown on [Map 2.1F: I-180 Corridor Environmental Constraints](#) by virtue of the United States Army Corps of Engineers- (US ACE) constructed levee and sections of Interstate 180.

Land use in the corridor has been industrial, commercial and urban for well over 100 years; therefore, the “environmental condition” of each specific site should be assessed as redevelopment opportunities arise. [Map 2.1F: I-180 Corridor Environmental Constraints](#) depicts locations with known environmental issues that could affect land use, as described below:



**Phase I Environmental Site Assessments** – Between 2007 and 2009, the County developed and implemented a Brownfield Assessment Program which was funded by a US EPA Community-wide Assessment Grant for “hazardous sites”. During that period, the County conducted Phase I Environmental Site Assessments in accordance with ASTM E 1527-05. Note that the Phase I ESA’s specifically excluded assessment/sampling of asbestos and other hazardous building materials. However, if information



regarding these items were identified, that information was noted in the reports. The Phase I ESA reports are maintained by the County Planning and Community Development Department. Findings from these Phase I ESA's are summarized below.

○ Old City Dump – Danneker Parcel

This approximately 10 acre parcel is located on the east side of Rose Street. The site is currently vacant (no structures) and covered with vegetation (unmaintained grass and mature trees). The site is accessible by foot or 4 wheel drive vehicle and the site is not currently served by public utilities, although they are available in the area. Although the site is zoned commercial, surrounding land use is primarily industrial and institutional. MACTEC reviewed several documents obtained from the PADEP files or provided by Mr. Ertel that relate to environmental conditions at the site. The key findings from that document are:

- i. Various types of solid waste exist from near surface to as much as 38 feet below ground surface (ft-bgs). The landfill has not been “closed” in accordance with state and federal regulations. Limited site characterization activities have occurred but no remedial activities have been initiated.
- ii. Underlying the waste is unconsolidated sand and gravel that extends to bedrock at approximately 60 ft-bgs. Groundwater occurs at depths of approximately 20 to 30 ft-bgs and flows to the southeast towards the Susquehanna River which is less than ¼ mile south of the site.
- iii. Limited soil and groundwater data collected from the site over the past 20 years indicate that some organic and inorganic constituents in groundwater exceed current PADEP Act 2 Medium Specific Concentrations (MSCs).
- iv. Limited field screening of vapor indicated that potentially explosive concentrations of vapor (e.g., methane) could exist. While some may exist, there is not likely sufficient methane being generated to use a fuel due to the age of the landfill and the fact that there is permeable soil cover over the waste that allows methane being generated to dissipate into the air. The extent to which methane would have to be evaluated and mitigated depends on the size and type of construction.

US EPA conducted a limited site inspection in 1988 to assess general site history and potential environmental impact. That report concluded that there “does not appear to be a hazard to human health, although the status of groundwater beneath the site can not be ascertained.” Based on the database review and information obtained from Mr. Ertle and Mr. Mike Welch of PADEP, there does not appear to be any on-

going regulatory involvement or enforcement action at the site. Mr. Welch indicated that additional site characterization and remediation would be necessary prior to redevelopment of the site.

MACTEC noted the following Recognized Environmental Conditions (REC's) as defined by ASTM:

- i. The site was operated as an un-permitted landfill from approximately 1972 to 1978 and some disposal of tree and roadway waste was reported into the 1980's. There is no indication that the landfill was closed in accordance with existing state and federal regulations.
- ii. Organic and inorganic constituents have been detected in site soils and groundwater that exceed various PADEP MSCs. The potential risk and hazard to human health and the environment on-site and off-site have not been assessed in accordance with existing state and federal regulations.
- iii. Existing data indicates that potentially explosive concentrations of landfill gas (e.g., methane) may be emitted from the landfill wastes, however, further characterization is needed to assess the extent to which the waste may be generating explosive vapors.

o Pennsylvania College of Technology

The County conducted this Phase I ESA during the summer of 2008 at the request of the former owner (Fagnano's) in support of the sale of the property to the Pennsylvania College of Technology. That sale was finalized later in 2008 and the College now owns the 6.9 acre site at 1335 West 3rd Street. At the time of the Phase I ESA, the site consisted of two parcels, with Parcel 1 (approximately 1.7 acres) adjoining West 3rd Street) and Parcel 2 (approximately 5.2 acres) being just south of Parcel 1.

Parcel 1 had been used for auto salvage operations from the 1940's until through approximately 2004. Parcel 2 was acquired by the Fagnano's during the 1960's and was reportedly used to store scrap metal and other materials.

The site is zoned industrial; however, the City of Williamsport Flood Project Documents indicates that Parcel 2 is identified as a Flood Ponding Area. The southwestern portion of the site appears to be located in the Zone 2 Well Head Protection area for the City's well field approximately 1500 ft west of the site. Both the "ponding area" designation and the proximity to the City's well field may restrict future development at the site and should be evaluated as plans are considered.



The RECs identified during this Phase I ESA were:

- i. General historical use of the site as an auto salvage yard which likely included the handling and storage of various associated hazardous and petroleum substances and Parcel 1 had been used for industrial purposes since the late 1800's.
- ii. A 1994 fire with destroyed the main building and various cars on Parcel 1.
- iii. A 2006 Consent Order and Agreement with PADEP related to the presence of waste tires, construction debris and drums with unknown contents.
- iv. Proximity of the site to a known area of groundwater impacted by TCE which is being remediated by the AVCO Lycoming facility approximately ½ mile north of the site.

o William Street

The original work for the Phase I ESA's began in 2008 in support of the proposed William Street Development. The parcels assessed, clockwise from west to east, include:

- i. Williamsport Parking Authority site (public parking lot along West 3rd Street)
- ii. The "China AA" restaurant site
- iii. The Williamsport Area School District building
- iv. The Olive Tree Restaurant site
- v. The "Career Link" parking lot site (bordering William Street)
- vi. The Blue Cross Blue Shield parking lot site (bordering William Street)

The parcels within this area have been used for industrial/urban puposes since at least the late 1800's. The REC's identified include:

- i. A 300 gallon underground storage tank at the School District Building which was used for heating oil.
- ii. An automobile service station reportedly existed in the southwest corner of the Career Links parking lot.
- iii. The current Wegman's site, which adjoins the parcels to the south was formerly the Tampella Power site. Soil and groundwater at shat site has been characterized and remediated in accordance with PADEP Act 2 regulations.
- iv. Finally, given the highly urban/industrial nature of this area over the past 100 years, it is possible that soils may exist that would require appropriate management if excavated.

During the last half of 2010 the City took control of the parcels mentioned above (except the Career Link and Blue Cross Blue Shield parking lot sites) and demolished the Olive Tree and China AA

restaurant buildings. In addition, the City took ownership of the Sovereign Bank site and is in the process of preparing a new location for them in the southwest corner of the Wegmans parking lot. Asbestos abatement and demolition activities started at the Williamsport School District Building in early 2011 and is expected to be complete by mid February 2011. It is currently expected that the City will provide Kohl's Department Store with a pad ready site by mid march and that Kohl's expects to open their store during fall of 2011."



**Known PADEP Involvement** – This area extends from approximately Maynard Street to Hepburn and includes Williamsport Wire Rope, Pickelner Fuel and Staimans Recycling, among other industries. Another site with known PADEP involvement is the Susquehanna Supply parcel, part of the Old City Dump. Interviews with PADEP have indicated that various site characterization activities have been completed throughout this area – primarily under the PADEP Act 2 program or Storage Tank Program. While certain environmental issues exist, as expected in any area of heavy industry, no significant, area wide enforcement actions are currently being pursued. However, should land use in this area change, additional site characterization, and possibly remediation, could become necessary.

Of particular note at the time of publication is the former Sunoco Station at the corner of 3<sup>rd</sup> and Maynard. That 0.5 acre parcel had been the subject of various environmental site characterization and remediation activities between approximately 2000 and 2008. Those activities culminated in January 2009 with the PADEP's letter affording the site the liability protections provided under the Pennsylvania Land Recycling Act (Act 2). Ownership of that site has recently been transferred and the intended land use is as a restaurant to serve the Penn Technical College staff and students and the community at large.



**Well Head Protection Zone 2** – Williamsport Municipal authority operates a public water supply well field in the western part of the Corridor. They have recently completed a Source Water Protection Plan that identifies certain areas as Zone II Well Head Protection Zones. No development would be recommended in this area.



### **Land Use Restriction**

- Flood Ponding Area



## LYCOMING COUNTY MUNICIPAL CORRIDOR PLANS

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The area immediately west of Rose Street, north of the rail road tracks, is identified as a “flood ponding area”. Any changes to land use that affect surface water hydrology of this area must be reviewed, and approved by appropriate regulatory agencies, prior to implementation. The City of Williamsport must also be contacted since they are responsible for the functioning of this ponding area.

- Old City Dump

Between the early 1960’s and mid 1970’s the area east of Rose Street and south of the railroad tracks was used as a City Dump (approximately 40 acres). Some environmental site characterization has been completed by others and reported to PADEP. Results of that work indicate that up to approximately 30 feet of municipal waste was disposed there. Prior to reuse of this area, additional characterization would be needed to assess environmental and geotechnical conditions.

- Capped RCRA Disposal Unit (Bethlehem Steel)

The area immediately east of the existing Burger King on Maynard Street is reportedly the location of a pond that had been operated and closed by Bethlehem Steel in accordance with US Environmental Protection Agency (EPA) regulations.

- ***Pennsylvania Natural Diversity Index (PNDI)*** – A PNDI Search was conducted for the I-180 Corridor and the Pennsylvania Game Commission reported that Peregrine Falcons may be present in the corridor. The Game Commission should be contacted prior to any significant change in land use.





### I-180 Corridor: Williamsport Parcel Profiles

Parcel profiles for all of the tax parcels within the I-180 Corridor were assembled as part of the Feasibility Study. The profiles contain information on each of the parcels within the I-180 Corridor. The information contained in the profiles can be used by the County, City of Williamsport or other entities such as the Chamber of Commerce in marketing sites to potential developers. The profiles also provide an overall picture of conditions in the corridors and were utilized when compiling most of the information contained within this report. This information is linked through GIS mapping so it can be shown thematically as well. The following information is contained in all of the profile tables:

- Parcel Size (in acres)
- County Tax ID number
- Owner Name
- Location (address)
- Terrain
- Water
- Sewer
- Date of Last Sale
- Amount of Last Sale
- Value of Land
- Value of Structure
- Total Property Value
- Zoning

[Table 2.1A: Known Owner Interest](#) found in Appendix A provides information for the parcels where discussions were held with the landowner during this project. All existing property owners of commercial, industrial or institutional land uses were invited via a mailing to discuss the Municipal Corridor Plans in relation to their property with the project team. Of those that participated, most were interested in working with the County and the City in any future development opportunities that may arise. This included relocating their business (mainly the industrial owners such as Wire Rope and Staimens), but the owners also discussed that relocation would not be easy due to specific needs in terms of property and expense.

[Table 2.1B: Known Environmental Constraints](#) found in Appendix A provides information for the parcels where there are known environmental constraints, as detailed on pages 2-19 through 2-24.

[Table 2.1C: Known Structural Data](#) found in Appendix A provides information for the parcels where the following structural information was available, as provided by Lycoming County:

- Number of Stories (if one building on parcel)



## LYCOMING COUNTY MUNICIPAL CORRIDOR PLANS

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- Year Built (if one building on parcel)
- Year Last Renovated (if one building on parcel)
- Grade of Structure (if one building on parcel)

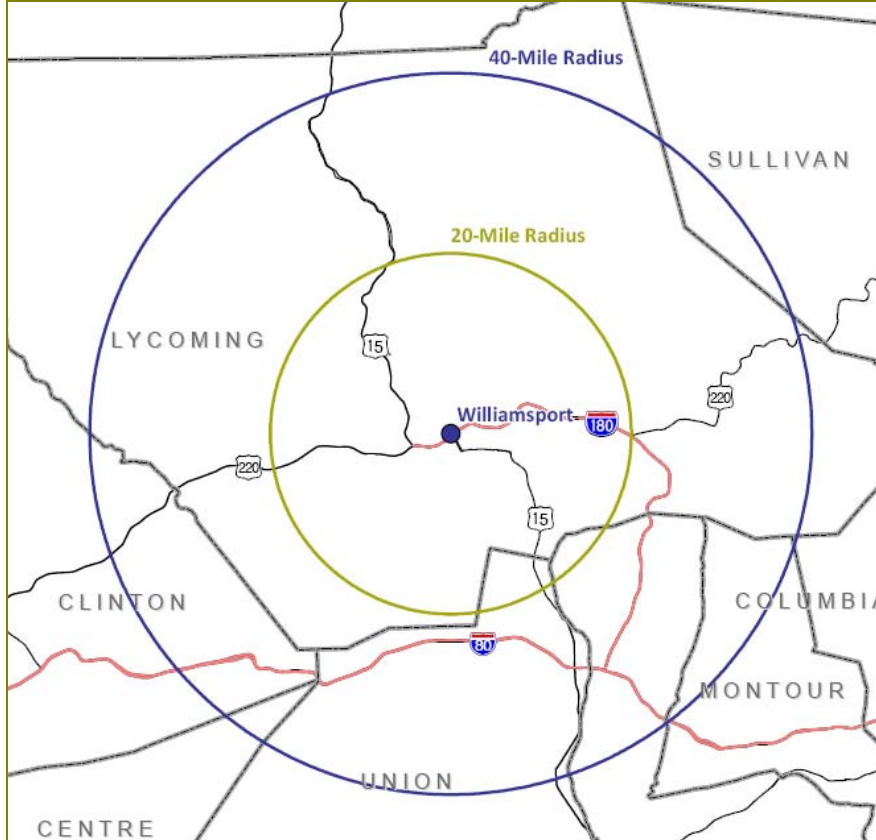
Table 2.1D: [Remaining Parcels](#) found in Appendix A contains the remaining parcels within the I-180 Corridor for which there is no known Owner Interest, Environmental Constraints, or Structural Conditions.

### I-180 Corridor: Williamsport Market Assessment

The Market Assessment provides a comprehensive understanding of the future use and redevelopment potential for the I-180 Corridor in the City of Williamsport. The purpose of the Market Assessment is to provide an overview of the current economic landscape for the City of Williamsport and identifies market niches where the City should focus their efforts. The Assessments contain statistics and analysis that reveal a current economic snapshot. The Market Assessment also compares the economic landscapes of Williamsport to economic landscapes within a 40 and 20-mile radii of Williamsport, Lycoming County, neighboring counties (the 8 other counties that are included in the Central Pennsylvania Workforce Investment Area), the Commonwealth of Pennsylvania and the United States. The regional, statewide and national comparisons will allow the City of Williamsport, community members, elected officials, employers, economic development leaders and other key stakeholders to understand how their economic landscapes compare with economic landscapes at the local, state and national levels.

Due to its length, a full copy of the Market Assessment can be found in Appendix C. Following is a summary of the highlights of the 40-mile radius Market Assessment that was completed for the City of Williamsport.

Figure 2.1D: Market Assessment Region for I-180 Corridor: Williamsport





## Demographic Summary

The importance of analyzing population change is to assist business organizations in determining the best prospective location in an area for a branch store or service outlet; predicting the demand for a new product; and analyzing certain dynamics of a community's workforce. Examples of why demographic analysis is important can include choosing a new location for a branch of a bank or choosing the area in which to start a new supermarket. Other examples include consulting a bank loan officer or economic development leader on the feasibility of whether or not a particular location would be a beneficial site to start a small business, and determining specific sites in a community for economic development.

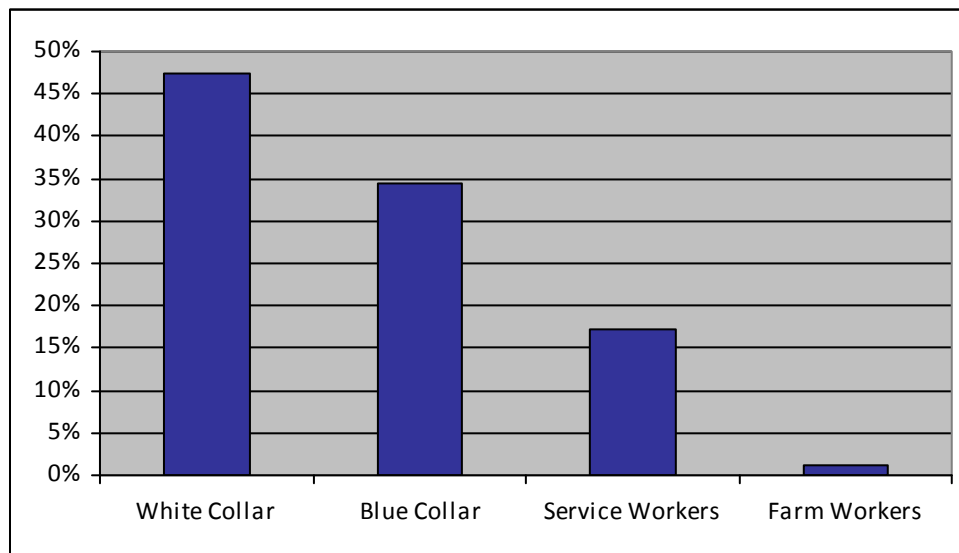
Note: sources include 2000 US Census and 2009 Nielsen Claritas Demographic Update.

- **Population** – The population of the Williamsport 40-mile radius was 463,112 in 2009 and is expected to decrease by 0.24% over the next five years. With the recent influx of people working in the Oil and Gas industry, however, this population trend is likely to reverse. Both Pennsylvania (12,448,279) and the United States (306,624,699) are projected to grow by 1.2% and 5.1%, respectively, during the same time frame. The population for residents living within the 40-mile radius of Williamsport study area has decreased by slightly over 3,000 people since 2000. This trend indicates that the total number of deaths and number of people that have out-migrated of this study area has only been slightly higher than the total number of births and number of people that have in-migrated into the study area.
- **Median Age** – The median age in the Williamsport region is between 38.91 and 39.5, similar to that in Pennsylvania (38.0) but higher than the United States (36.7).
- **Average Household Income** – the average household income was estimated to be \$52,977 in 2009, which is comparable to that of Pennsylvania (\$52,681) and slightly lower than the United States (\$56,643).



- **Employment Characteristics** - In 2009, 56.6% of residents in the Williamsport region were employed in the workforce, which is generally in line with the state and national averages.
  - The percentage of blue collar workers is higher than the state and national averages. Conversely, percentages of white collar workers that are employed in the study area are lower than state and national averages. The higher saturation of blue collar workers in the study area can be attributed to the fact that several of the largest employers in Lycoming County and counties located within the Central Pennsylvania Workforce Investment Area are manufacturing companies. A significant number of employed civilians residing in one in the study area are employed within the nine counties that are within the Central Pennsylvania WIA.
  - Percentages of service workers and farm workers are very close to state and national averages.

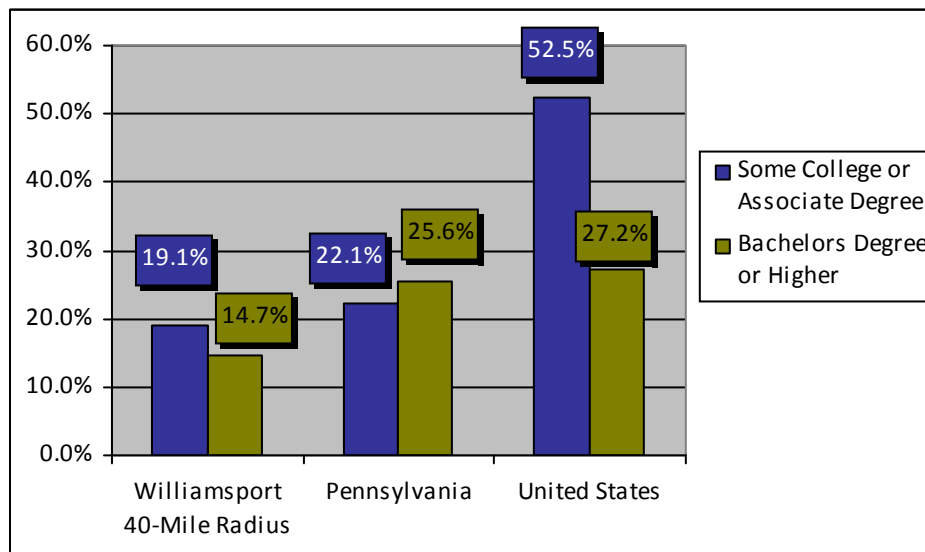
Figure 2.1E: Employment Breakdown for Williamsport 40-Mile Radius





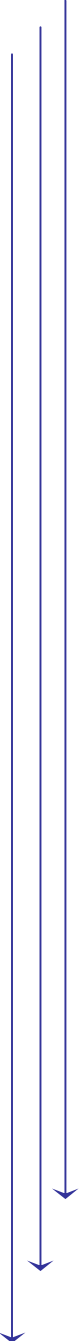
- **Educational Attainment** – the percentage of the population 25 years and over that have some college training or an Associate Degree is in Pennsylvania is 30.4% less than the national average. Even though the Pennsylvania and national average of citizens with a Bachelors degree or higher is very close, Pennsylvania has an alarmingly lower percentage of the population that has some college training or has obtained an Associate Degree. Despite the significant post-secondary 30% disparity when comparing the Pennsylvania and U.S. averages, the percentages of the state and national population that did not graduate high school were only different by 2%.
- The attainment levels within the Williamsport 40-Mile Radius are even lower than Pennsylvania averages. The percentage of the population that obtained a Bachelors Degree or higher was significantly below the state and national averages.

Figure 2.1F: Educational Attainment Comparison



- Even though educational attainment levels are lower in the study area when compared to Pennsylvania and U.S. averages, there are new employment opportunities for residents. The current Marcellus Shale Natural Gas exploration occurring in Lycoming and surrounding counties has led to a demand in the need for both skilled and unskilled labor. In fact, according to the Marcellus Shale Education and Training Center described below, approximately 75% of the natural gas industry's direct workforce is comprised of occupations that require little post-secondary education and relatively few trade certifications. Many of the forecasted job opportunities are short-term occupations that require specific training that can be obtained without prior formal educational training.

- Pennsylvania College of Technology and Penn State Cooperative Extension collaborated to form the Marcellus Shale Education & Training Center (MSETC) in 2008 to provide a wide variety of resources to the community and the oil-and-gas industry. The Marcellus Shale Education & Training Center is a partnership established to provide both the regional community and the natural gas industry with a central resource for workforce development and community education needs related to Marcellus Shale gas. In June of 2009, the MSETC completed an in-depth Marcellus Shale Workforce Needs Assessment. The research examined the expanding workforce of the natural gas industry currently engaged in Marcellus Shale drilling throughout this region and determined the education and training needs required to support this expanding workforce.
- The results of the needs assessment reveal that in order to ensure that vocational, career and technical education programs effectively support the growing need for workers in the gas industry; existing education programs will need to be re-oriented towards the specific knowledge, skills, and work ethics required by the natural gas industry.





## Psychographic Summary

Psychographic data was collected in order to look at the different social segment clusters that are found in the Williamsport 40-Mile Radius. Psychographic data is also provided for Pennsylvania and the United States for comparison purposes. Psychographics identify personality characteristics and attitudes that affect a person's lifestyle and purchasing behavior. Psychographic analyses are used like geographic (place of residence or work) and demographic (age, income, occupation) criteria to describe and identify customers and prospective customers and to aid in developing promotion strategies designed to appeal to specific psychographic segments of the market for a product.

If retail or service related businesses are considering developments the I-180 Corridor, potential businesses are able to review psychographic data in order to evaluate the social segments of potential customers within target market geographical regions.

### Psychographic Life Stage Social Segments

Life Stage	Williamsport (40-Mile)	PA	US
Striving Singles	18.68%	14.78%	10.66%
Cautious Couples	17.28%	14.23%	10.37%
Sustaining Seniors	16.48%	14.62%	10.01%
Mainstream Families	11.68%	13.85%	11.83%
Conservative Class	11.85%	11.78%	9.23%
Midlife Success	5.80%	10.83%	12.73%
Sustaining Families	6.38%	5.62%	6.07%
Affluent Empty Nests	3.45%	4.21%	7.02%
Young Achievers	4.75%	5.24%	10.02%
Young Accumulators	2.83%	3.65%	8.14%
Accumulated Wealth	0.82%	1.19%	3.91%

Source: 2009 Nielsen Claritas Demographic Update

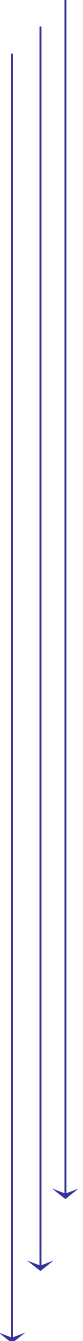
The following is a summary of the social segments with the largest disparity between the Williamsport region and Pennsylvania and the US.

- **Striving Singles** – Centered in exurban towns and satellite cities, these twenty something singles typically have low incomes—often under \$30,000 a year—from service jobs or part-time work they take on while going to college. Housing for this group consists of a mix of cheap apartment complexes, dormitories and mobile homes. The Williamsport region has a significantly higher percentage of this category of residents than both Pennsylvania and the United States.
- **Cautious Couples** – over-55-year-old mix of singles, couples, and widows.



Widely scattered throughout the nation, the residents in this category typically are working-class and white, with some college education and a high rate of homeownership. Given their blue-collar roots, Cautious Couples today pursue conservative and routine lifestyles. The Williamsport region has a significantly higher percentage of this category of residents than both Pennsylvania and the United States.

- **Midlife Success** – typically are filled with childless singles and couples in their thirties and forties. This group is home to many white, college-educated residents who make six-figure incomes at executive and professional jobs but also extends to more middle class segments. The Williamsport 40-Mile Radius also falls well below both the state and national averages.
- **Young Achievers** – group of twenty some-things who've recently settled in metro neighborhoods. Their incomes range from working-class to well-to-do, but most residents are still renting apartments in cities or close-in suburbs. Representation falls slightly below the Pennsylvania average and well below the national average.
- **Young Accumulators** – ethnically diverse, these households include an above-average number of Hispanic and Asian Americans. Adults typically have college educations and work a mix of white-collar managerial and professional jobs. Found mostly in suburban and exurban areas, the large families in Young Accumulators have fashioned comfortable, upscale lifestyles in their mid-sized homes. Representation falls slightly below the Pennsylvania average and well below the national average.





## Retail Gap

The retail gap analysis compares consumer expenditures with retail sales for a given year for a variety of retail sectors within a geographical region. If consumer expenditures (market demand) exceed retail sales (market supply) for a retail segment then an opportunity gap exists for that retail segment in the region. If consumer expenditures (market demand) are below retail sales (market supply) for a retail segment then a surplus exists in the regional market. The reason that the retail gap analysis is provided in this Market Assessment is to provide an additional tool to Lycoming County officials, the Lycoming County Corridor Plans Study team, and potential service or retail related businesses seeking to potentially locate in I-180 Corridor. Potential retail or service related businesses that review this data will have an understanding of retail consumer demand and existing supply for the City of Williamsport region.

In 2009 the total annual retail consumer demand was \$7,642,166,697 while total annual retail store supply in 2009 was \$6,776,047,105. Since demand exceeded supply, a total annual retail opportunity gap existed in the amount of \$866,119,592. The table below includes a breakdown of the retail gap analysis.

### Retail GAP Analysis for the Williamsport 40-Mile Radius

Retail Stores	(Consumer Expenditures)	(Retail Sales)	Gap/Surplus
<b>Total Retail Sales</b>	<b>7,642,166,697</b>	<b>6,776,047,105</b>	<b>866,119,592</b>
General merchandise, Apparel, Furniture and Other	1,614,637,831	1,167,553,935	447,083,896
Clothing and Clothing Accessories Stores	284,278,462	132,581,011	151,697,451
Foodservice and Drinking Places	651,328,998	505,696,944	145,632,054
General Merchandise Stores	870,439,815	780,445,567	89,994,248
Furniture and Home Furnishings Stores	127,877,429	60,273,900	67,603,529
Electronics and Appliance Stores	148,315,292	81,446,771	66,868,521
Building Material and Garden Equip Stores	714,306,215	658,989,895	55,316,320
Motor Vehicle and Parts Dealers	992,897,938	943,157,991	49,739,947
Sporting Goods, Hobby, Book, Music Stores	116,980,307	70,952,496	46,027,811
Health and Personal Care Stores	353,793,456	369,765,408	-15,971,952
Food and Beverage Stores	928,515,651	1,001,201,166	-72,685,515
Gasoline Stations	838,795,303	1,003,982,021	-165,186,718

Source: 2009 Nielsen Claritas Demographic Update

Opportunity gaps for a particular retail market segment represent that the residents within the community are demanding more products and services than are offered in the community. This means that consumers are spending money on goods and services outside of the community or region in which they live. These gaps for a particular retail market segment represent opportunities for a community or region to attract more businesses to locate or expand to meet market demand. This analysis is important as communities wish to have the expenditures in the community stay local and for these expenditures to be recycled among community members and entrepreneurs throughout the community. The area's greatest opportunities for potential retail development for the study area within the following retail segment categories:

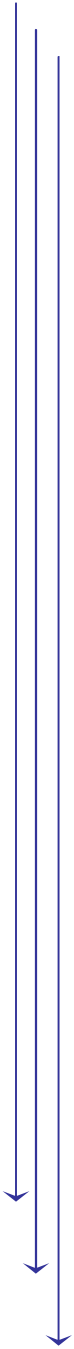
- General Merchandise, Apparel, Furniture and Other
- Clothing and Clothing Accessories
- Foodservice and Drinking Places
- General Merchandise Stores
- Furniture and Home Furnishing Stores

If retail sales exceed consumer expenditures for a given year in a community, this information reveals that a surplus exists and that the market is saturated. For example, if a community spends \$1 million on furniture and home furnishings in a given year and retail sales for furniture and home furnishings are \$3 million; this means that retailers within the community must rely on consumers from outside in order to meet sales projections and quotas. When a retail surplus exists for a particular retail segment in a community, this is an indication that there are an abundance of retailers competing for a relatively small available market share, creating a very competitive environment. In this case, it would not be a wise idea for a new retailer or service provided to attempt to enter the market in such a competitive market unless the retailer or service provider is able to find a unique niche in the competitive retail segment. Some retail segments to avoid in the region are:

- Health and Personal Care Stores
- Food and Beverage Stores
- Gasoline Stations



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## OLD MILL CORRIDOR: MONTGOMERY

The Old Mill Corridor is located in the eastern portion of Montgomery Borough and is bounded by Montgomery and Miller Streets to the north and the Norfolk Southern Rail Line to the south.

Figure 2.2A: Old Mill Corridor: Montgomery Location Map



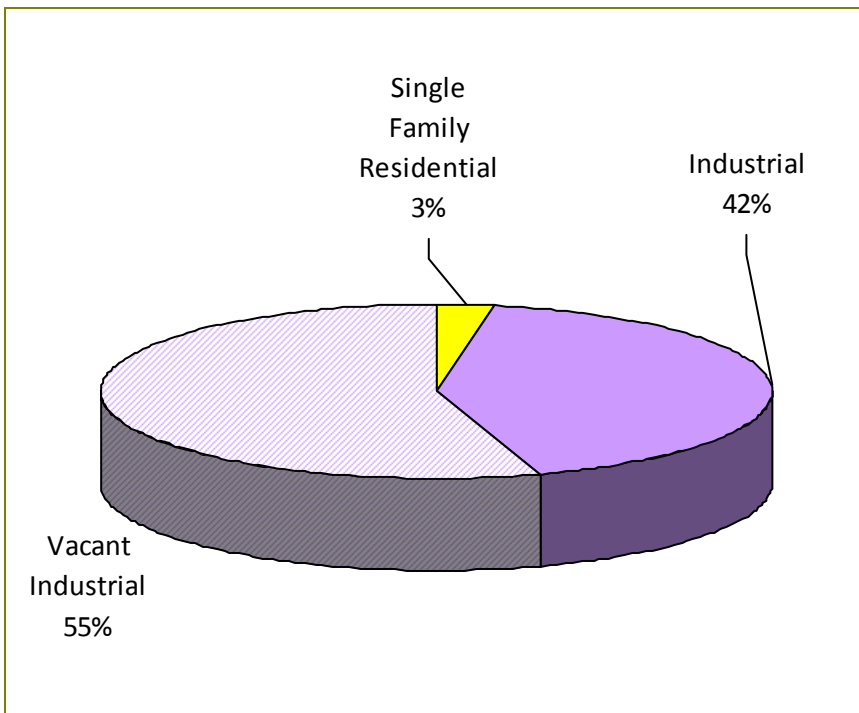


## Old Mill Corridor: Montgomery Existing Land Use

Land use planning begins with an examination of the current uses of the land. Existing land use is vital to planning projects not only because it identifies current conditions, but also assists with making recommendations for how land should be used in the future. This is important to keep in mind as future uses should compliment and enhance the uses that already exist in and around the corridors. For example, if a large industrial user currently exists within a project area and has plans to remain active into the future; a community would not want to suggest locating a single family housing development adjacent to this use (unless some sort of buffering could be utilized to decrease conflicts).

The Old Mill Corridor consists of approximately 21 acres. As shown in [Figure 2.2B: Old Mill Corridor Existing Land Use](#), over half of the Corridor is classified as Vacant Industrial while just over 42% is classified as Industrial. Just 3% is classified as Single Family Residential. [Map 2.2A: Old Mill Corridor Existing Land Use](#) depicts the existing land use within the Old Mill Corridor. Lycoming County owns the 2.19 acre industrial parcel east of Thomas Avenue within the Corridor.

Figure 2.2B: Old Mill Corridor Existing Land Use



### Single Family Residential

Single Family Residential includes housing units that are designed for one family, such as traditional detached single family homes. There are four parcels that are classified as residential, two fronting Montgomery Street and the other two fronting Thomas Avenue.

### Industrial

Industrial includes light and heavy manufacturing, resource recovery facilities, and similar type uses. The active Industrial uses are located in the eastern portion of the Corridor along Thomas Avenue.

### Vacant Industrial

Vacant Industrial includes land that was formerly used in an industrial capacity but is currently not actively used. The western portion of the Corridor is classified as Vacant Industrial; approximately 10.5 acres that was formerly used by a textile manufacturer.

Note: Near the end of this process, the land classified as vacant industrial was purchased and is currently being developed into an oil and gas support service center.



Old Mill Residential  
Mackin Photo 2009



Old Mill Active Industrial  
Mackin Photo 2009



Old Mill Vacant Industrial  
Mackin Photo 2009



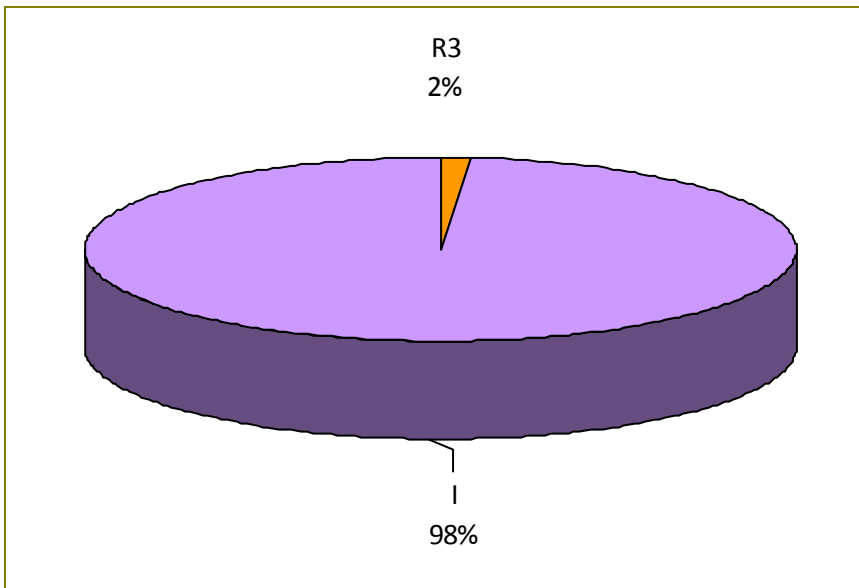
## Old Mill Corridor: Montgomery Zoning Regulations

Zoning is the most common way for municipalities and counties to control land use and the physical development of land within their jurisdiction. Specifically a zoning ordinance is the legal document which outlines the types of land uses allowed in a community as well as where the uses are permitted to locate. Thus, it is a very important tool for land use planning. The Borough of Montgomery administers its own zoning ordinance.

### Zoning Districts Overview

As shown in [Figure 2.2C: Old Mill Corridor Zoning Districts](#), the Old Mill Corridor is entirely in the Industrial District with the exception of one parcel located along Montgomery Street, which is zoned High Density Residential. [Map 2.2B: Old Mill Corridor Zoning Districts](#) depicts the zoning map for the Corridor:

Figure 2.2C: Old Mill Corridor Zoning Districts



- **Industrial (I)** – The purpose of the Industrial District is to encourage the continued use of the land for industrial purposes as well as to permit the adaptive re-use of older industrial buildings which are no longer suitable for industrial uses to residential and commercial and to establish reasonable standards for buildings and other structures, and the areas and dimensions of yards and other open spaces.
- **High Density Residential (R3)** – density development where it already exists or where it could be located in the future without negatively



affecting surrounding areas. Townhomes and other multi-family units are encouraged within this district.

If the future vision for the redevelopment of the Old Mill Corridor is for something other than industrial, the Borough will need to update their zoning ordinance accordingly.

### Zoning Regulations Overview

In addition to the zoning districts, which regulate where uses can locate, the Borough's zoning ordinance was reviewed to determine what additional regulations are in place that may impact access and aesthetics within the Corridor.

- **Buffers** – Landscaped buffer along any residential area not less than 25 feet in width. In addition, some of the supplemental uses have larger setback requirements and require additional screening and landscaping. Screening is required “as deemed necessary.”

The Borough's Zoning Ordinance is from 1993. While on the surface it might not appear necessary for a small community that is mainly built out to update land use codes, they can actually be extremely helpful in assisting traditional communities such as Montgomery in achieving a cohesive and appropriate look for redevelopment. Hence, a zoning update would provide the Borough with the ability to add additional regulations for landscaping, buffers, screening, etc.



### Old Mill Corridor: Montgomery Subdivision and Land Development Regulations

Subdivision is how a use relates to the land on which it is located. Specifically it is the division or redivision of a lot, tract or parcel of land into two or more lots, tracts, or parcels. Subdivision includes changes in existing lot lines for the purpose of leasing, distributing property to heirs, transferring property ownership, or developing a property. Subdivision also includes lot additions and lot consolidations.

A land development is the site plan that shows the proposed improvements to one or more contiguous lots or tracts involving two or more residential buildings or a single non-residential building. In conjunction with zoning, subdivision and land development regulations assist communities in implementing comprehensive plans and achieving desired land use patterns.

The Borough of Montgomery administers its own Subdivision and Land Development Ordinance (SALDO). The Planning Commission reviews sketch plans for consistency with the Comprehensive Plan. If the sketch plan is approved, the applicant has forty days to submit a preliminary plan. Approval of the preliminary plan is a conditional approval of the subdivision, and binds the applicant to the general scheme depicted.

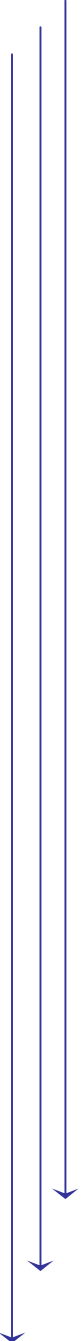
The Borough's SALDO was last updated in 1971. The Ordinance was reviewed to assess the standards that are in place to regulate subdivisions and land development within the Corridor.

- **Street systems** – must be standards application to their classification (as indicated in the Comprehensive Plan). Local streets must have a minimum ROW of 50 feet with a cartway of 26 feet; arterial or collector streets must have a ROW of 60 feet with a cartway of 36 feet, and alleys or service drives must have a ROW and a cartway of 22 feet. Blocks shall be 500 to 1,600 feet in length and two lots depth in width. No lots are permitted to have more than one access drive unless it is multi-lot and has more than 200 feet of frontage. Grades of streets are to be no greater than between 7 to 12 percent, dependent on street classification.
- **Intersections** – specifies location and design and sets forth basic parameters regarding clear sight triangles.
- **Drainage easements, stormwater management, etc.** – where a subdivision is traversed by a watercourse, there shall be a “drainage easement” of “such width as will be adequate to preserve natural drainage.”
- **Community facilities** – the Planning Commission may request a reservation/dedication of land for community facilities.



- **Recreational space** – any development of 50 or more lots may be required to set aside an easement of five percent (5%) of total area of all lots or 10,000 square feet whichever is greater; in addition, any multi-family development that contains an equal number of units (to the 50 lots) must meet this requirement.
- **Sewer and Water** – requires adequate facilities for the disposal of sewage and water.
- **Banks and slopes** – Specifies that slope of embankments of lots abutting a newly constructed street or existing Borough road may not exceed 30 percent.

Montgomery's SALDO does not currently address items such as lighting, site design, building orientation, parking, landscaping, etc. The Borough should consider updating the SALDO to address these items to ensure that new development and redevelopment are constructed in a manner that is consistent with their overall vision for the Corridor.





## Old Mill Corridor: Montgomery Transportation and Access

Accessibility in all of its forms— vehicular, rail, and pedestrian—is a vital component of the future of the Old Mill Corridor. Access to and among residential areas, recreation facilities, commercial centers, and industrial hubs directly affects the quality of life for residents and workers and is often a factor for employers in choosing new business locations. 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 and land use planning. [Map 2.2C: Old Mill Corridor Transportation and Access](#) depicts the transportation network within and surrounding the Old Mill Corridor, including roads and rail.

### Vehicular Access

Even though the corridor is primarily surrounded by single family residential neighborhoods, there is good access to the site. Major transportation routes throughout the county can easily be accessed within a short driving distance of Montgomery. Route 405 is located north of the site, and vehicles traveling west can connect to Route 54, which directly connects with Route 15. Vehicles traveling east on Route 405 can connect to I-180 South, which eventually connects I-80 in North and South. Traveling south on Route 54 also connects to I-180 south, and subsequently to I-80 in either direction.



Road in the Old Mill Corridor  
Larson Photo 2009

While access to the Corridor is adequate, any future plans for the Corridor should include road improvements as the roads leading into and through the site have not been adequately maintained. There are also issues with the steep grade and turning radius of the roads that are used to access the site.

### Rail Access

The Norfolk Southern Railroad lies in the southern edge of the Corridor. Within the Old Mill Corridor was a rail spur, the right of way still exists. The follow on use of the property may prompt improving the rail spur for ease of transport into and out of the Old Mill site as well as a way to keep truck traffic through the borough at a minimum.



### Pedestrian Access

As mentioned earlier, the Old Mill Corridor is primarily surrounded by a residential neighborhood. The neighborhood offers a comprehensive sidewalk network that allows for the easy movement of pedestrians. However, pedestrian access to the Corridor is limited, due to the terrain and street grid. The Corridor is significantly lower in elevation than the residential area to the north and Route 405, as shown on [Map 2.2C: Old Mill Corridor Transportation and Access](#).



Sidewalks near the Old Mill Corridor  
Larson Photo 2009

Within the Corridor itself, there are no sidewalks or pedestrian connections. Due to the fact that residents (especially students) currently walk through the site on a daily basis, any redevelopment plans for the Corridor should include a pedestrian network. The network should include sidewalks, trails, and/or pathways in addition to additional amenities such as landscaping, lighting and street furniture.



### Old Mill Corridor: Montgomery Utilities

Utilities are an important factor when considering development and redevelopment especially in terms of commercial and industrial development. Due to the high cost of adding or extending utilities, the types and capacity of available utilities often influence companies in their location decisions. With the increased use of higher technology, such as internet and cell phones, the availability of these types of utilities makes a development site more attractive as well.

#### Water and Sanitary Sewer

- **West Branch Regional Authority** - 35 S. Main Street, Montgomery, PA 17752

The Montgomery Water and Sewer Authority (Authority) provided sanitary sewer and water services in the Old Mill Corridor up until early 2010, when the Authority partnered with neighboring communities to develop a regional authority. The West Branch Regional Authority formed through the partnership of Clinton Township, Muncy Borough, Muncy Creek Township and Montgomery Borough. [Map 2.2D: Old Mill Corridor Water and Sewer](#) depicts locations of water and sewer lines within the Corridor.

The sanitary sewer system includes an interceptor which extends from the western edge of the study area to the wastewater treatment plant. The interceptor has a nominal design capacity of approximately 1.6 million MGD and can handle peak flows in excess of 3.5 MGD. The current waste water treatment plant (WWTP) employs a conventional activated sludge process that is rated for 0.85 MGD and can process peak flows in excess of 2.5 MGD. Current average flows are 0.57 MGD, or approximately 67% of the nominal design capacity. The WBRA is in the process of working on the design and construction of a new regional WWTP, which is necessary to meet the Pennsylvania Department of Environmental Protection's Chesapeake Bay Tributaries Strategy. This current plan involves the conversion of the existing WWTP to a pump station that would convey sewage to a new regional plant.

#### Natural Gas Service

- **UGI Penn Natural Gas** - 1 PEI Center, Wilkes Barre, PA 18711
- **Pennsylvania Power and Light (PPL) Natural Gas** - 4810 Lycoming Mall Drive, Montoursville, PA 17754
- **Lycoming County Resource Management Services** - PO Box 187, Montgomery, PA 17752

There were no reported concerns regarding the provision of natural gas service.



### Overhead Utilities

Map 2.2E: I-180 Corridor Overhead Utilities depicts the locations of overhead utility lines, by type, within the Corridor. Regarding overhead utilities, the following applies:

- 1 Phase lines typically can support light commercial, retail and residential uses
- 1 Phase 2 wire lines support medium and light industrial and medium and light commercial or retail uses
- 3 Phase lines are for heavy industrial or large commercial or retail uses
- Tele = telephone lines
- CATV = cable television lines

Electric:

- **Pennsylvania Power Light (PPL) Electric** – 4810 Lycoming Mall Drive, Montoursville, PA 17754

Telephone:

- **Verizon** – 901 Tatnall Street 2<sup>nd</sup> Floor, Wilmington, DE 19801
- **Comcast** – 1020 Commerce Park Drive #10a, Williamsport, PA 17701
- **Windstream** – 50 Executive Parkway, Hudson, OH 43216

Cable:

- **Comcast** – 1020 Commerce Park Drive #10a, Williamsport, PA 17701
- **Windstream** – 50 Executive Parkway, Hudson, OH 43216

Internet/Data:

- **Comcast** – 1020 Commerce Park Drive #10a, Williamsport, PA 17701
- **Windstream** – 50 Executive Parkway, Hudson, OH 43216
- **Verizon** – 901 Tatnall Street 2<sup>nd</sup> Floor, Wilmington, DE 19801

The Old Mill Corridor is well served with electric, and telephone lines but the area is lacking in terms of cable television lines. Both Comcast and Verizon have fiber optic cable in the area, though their exact location is unknown. At this time, there are no known planned expansions of utilities in this corridor. Future expansion is possible based on the need of any potential development.



### Old Mill Corridor: Montgomery Environmental Constraints

The Old Mill corridor is located in the Deep Valleys Section of the Appalachian Plateaus physiographic province within the alluvial plane of the West Branch Susquehanna River. The corridor is situated approximately 1,000 feet north of Black Hole Creek and 2,000 feet north of the West Branch Susquehanna River. Consuming at least three-quarters of the corridor, the southern area is relatively flat to gently sloping to the west. However, the northern boundary along Montgomery Street is on a steep slope. The elevation along Montgomery Street is approximately 500 feet above mean sea level (msl) whereas it is approximately 480 feet-msl in the southern portion of the corridor.

Information gathered from Pennsylvania Department of Environmental Protection (PADEP) file reviews and other sources revealed the following general characteristics of the corridor:

- Unconsolidated alluvium (clay, silt, sand and gravel) to depths of at least approximately 30 feet in the southern portion of the corridor, but probably considerably shallower on the “hill side” that forms the northern portion of the Corridor.
- The surface of most of the area has been extensively reworked over the years. Therefore, the presence of fill material of varying thickness and character is likely present throughout.
- The first continuous water bearing zone (i.e., aquifer) occurs in the unconsolidated alluvium at depths of between approximately 12 and 15 feet below ground surface. Groundwater flow direction is generally to the southwest towards the Black Hole Creek (which ultimately discharges to the River Southwest of the corridor).
- The majority of the Corridor is situated in the flood fringe segment of the 100-year floodplain, as shown on [Map 2.2F: Old Mill Corridor Environmental Constraints](#). Therefore, appropriate regulatory approvals must be obtained prior to initiating development activities that could affect the hydrology of the area.

Similar to the I-180 corridor, land use has been primarily industrial for well over 100 years; therefore, the “environmental condition” of each specific site should be assessed as redevelopment opportunities arise. [Map 2.2F: Old Mill Corridor Environmental Constraints](#) depicts locations with known environmental issues that could affect land use, as described below:



**Phase I Environmental Site Assessments** – The County conducted a Phase I ESA of the Radar Complex the County’s Brownfield Assessment Program. This site is approximately 10 acres and represents the largest parcel in the





corridor. Various site characterization and remedial activities have been completed at the site to address issues associated with underground storage tanks and soils impacted with lead. This work has been conducted pursuant to rules associated with the PADEP Act 2 program. Soils impacted with lead were reportedly stabilized and disposed of on-site with PADEP approval. PADEP Act 2 approval is currently pending, and will include some land use restrictions that could affect future land use. This area is also located in the floodplain.

The REC's identified during the Phase I ESA are:

- Lead impacted soil in the Lead Sash and Casting Area: This area has been remediated by stabilizing the lead in soil and burying beneath an asphalt "cap". The remedy has been approved by PADEP, however, the asphalt cap must be maintained into the future.
- Two 10,000 gallon heating oil USTs: These tanks were reportedly closed with PADEP approval in 2005.
- ACM and lead based paint was reportedly mitigated in portions of structures that were demolished several years ago. However, it is possible that ACM and lead based paint may remain in the remaining structures.
- Former benzene tank. This tank appears to have existed historically under the central portion of the southern building. Its ultimate disposition is not currently known.
- 2006 Arson fire.
- General Industrial history and the Hamm property immediately east of the site which reportedly contained a leaking underground storage tank that was mitigated with PADEP approval.



**Known PADEP Involvement** – PADEP file reviews indicated that there may have been a leaking underground storage tank issue at the Hamm Property in the past. Documentation relating to resolution of that issue was not available. Therefore, this issue should be considered further as redevelopment opportunities arise.

The Old Mill Corridor project area is located, almost entirely, within the 100 year floodplain. The Hazard Mitigation Planner and GIS Technician from the County of Lycoming's Planning and Community Development Department have developed an inundation map to show the flood depths within the project area in order to demonstrate what kind of flooding to expect during a 100 year flood event, as shown on [Map 2.2G: Old Mill Corridor Inundation Depths](#). The map was created by taking the base flood elevation (BFE), which is 494 feet above sea level (NGVD 29) as documented in the Flood Insurance Study and comparing it to the 2ft. contour mapping to develop 3 depth categories ranging from 0-2 feet, 2-6 feet, and 6 or more feet of expected flood water inundation.



Montgomery Borough's Floodplain management regulations, which is located in their zoning ordinance, requires any new or substantially improved non-residential buildings in the corridor to be designed with the some of the following requirements in mind:

- All construction will have to be certified and designed by a professional engineer to be able to withstand the forces of a 100 year flood
- The first floor must be elevated 1.5 feet or more above the BFE – or – be designed so that the space enclosed by such structure shall remain completely or essentially dry during a flood
- Basements or Crawl spaces cannot be excavated below the lowest adjacent grade of the building
- Fully enclosed space below the lowest floor are prohibited
- Utilities such as furnaces and water heaters must be elevated above the BFE
- There are restrictions on the amount and location of certain chemicals that can be stored
- Electric distribution panels must be elevated 3 feet above BFE

Please reference the Borough's Zoning Ordinance for a complete listing of the floodplain management regulations.

### Old Mill Corridor: Montgomery Parcel Profiles

Parcel profiles for all of the tax parcels within the Old Mill Corridor were assembled as part of the Feasibility Study. The information contained in the profiles can be used by the County, Montgomery Borough or other entities such as the Chamber of Commerce in marketing sites to potential developers. The profiles also provide an overall picture of conditions in the corridors and were utilized when compiling most of the information contained within this report. This information is linked through GIS mapping so it can be shown thematically as well. The following information is contained in all of the profile tables:

- Parcel Size (in acres)
- County Tax ID number
- Owner Name
- Location (address)
- Terrain
- Water
- Sewer
- Date of Last Sale
- Amount of Last Sale
- Value of Land
- Value of Structure
- Total Property Value
- Zoning

[Table 2.2A: Known Owner Interest and Environmental Constraints](#) found in Appendix B provides information for the parcels where discussions were held with the landowner during this project. All existing property owners of commercial, industrial or institutional land uses were invited via a mailing to discuss the Municipal Corridor Plans in relation to their property with the project team. The owners of the Radar Complex expressed interest in working with the process in terms of selling their property (Note: Near the end of this process, the Radar Complex was sold to Moran Industries who are developing the land into an oil and gas support service center). In addition, this table provides information for the parcels where there are known environmental constraints, as detailed on pages 2-48 through 2-50.

[Table 2.2B: Known Structural Data](#) found in Appendix B provides information for the parcels where the following structural information was available, as provided by Lycoming County:

- Number of Stories (if one building on parcel)
- Year Built (if one building on parcel)
- Year Last Renovated (if one building on parcel)
- Grade of Structure (if one building on parcel)



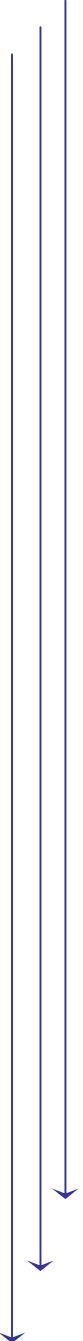
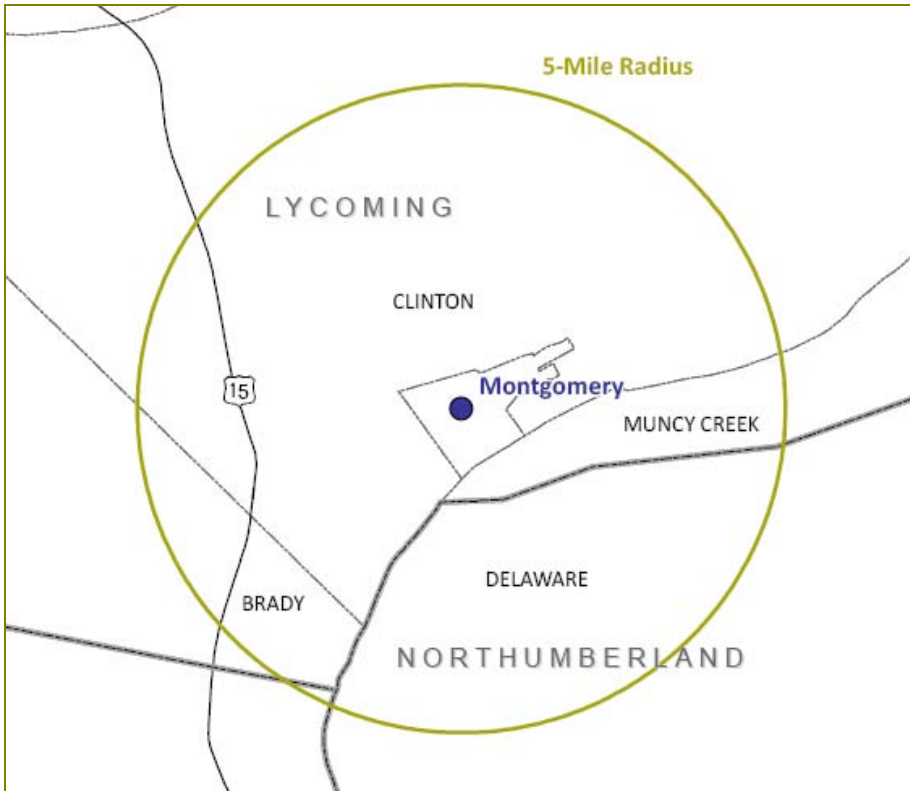
Table 2.2C: *Remaining Parcels* found in Appendix B contains the remaining parcels within the Old Mill Corridor for which there is no known Owner Interest, Environmental Constraints, or Structural Conditions.

## Old Mill Corridor: Montgomery Market Assessment

The Market Assessment provides a comprehensive understanding of the future use and redevelopment potential for the Old Mill Corridor in Montgomery Borough. The purpose of the Market Assessment is to provide an overview of the current economic landscape for Montgomery Borough and identifies market niches where the Borough should focus their efforts. The Assessment contains statistics and analysis that reveal a current economic snapshot. The Market Assessment also compares the economic landscapes of Montgomery to economic landscapes within a 5-mile radius of Montgomery Borough, Lycoming County, neighboring counties (the 8 other counties that are included in the Central Pennsylvania Workforce Investment Area), the Commonwealth of Pennsylvania and the United States. The regional, statewide and national comparisons will allow Montgomery Borough, community members, elected officials, employers, economic development leaders and other key stakeholders to understand how their economic landscapes compare with economic landscapes at the local, state and national levels.

Due to its length, a full copy of the Market Assessment is included in the Appendices of this report. Following is a summary of the highlights of the 5-Mile Radius Market Assessment that was completed for Montgomery Borough.

Figure 2.2D: 5-Mile Radius Market Assessment for Old Mill Corridor: Montgomery





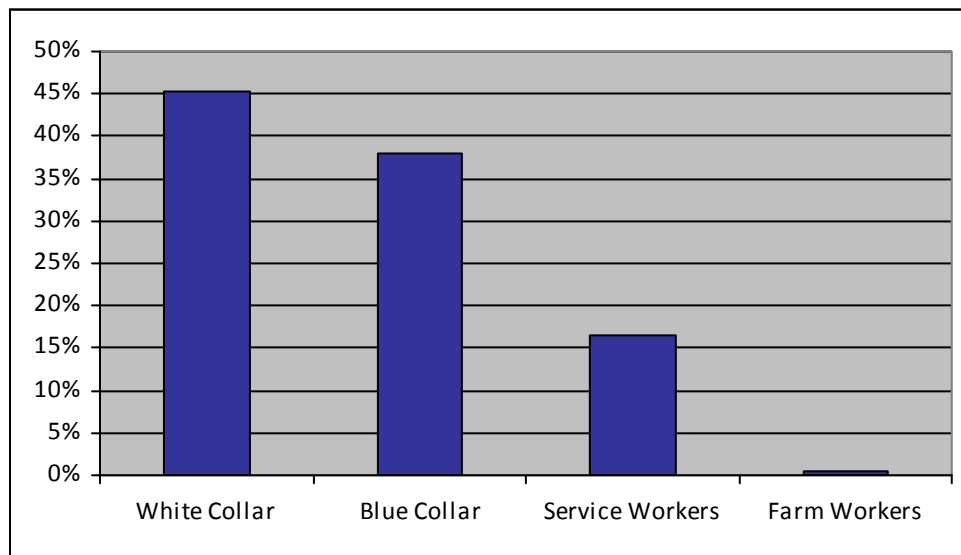
### Demographic Summary

The importance of analyzing population change is to assist business organizations in determining the best prospective location in an area for a branch store or service outlet, predicting the demand for a new product, and to analyze certain dynamics of a community's workforce. Choosing a new location for a branch of a bank, choosing the area in which to start a new supermarket, consulting a bank loan officer or economic development leader on the feasibility of whether or not a particular location would be a beneficial site to start a small business, and determining specific sites in a community for economic development area are examples for why community population change and demographic analysis is important.

- **Population** – The population of the Montgomery 5-mile radius was 29,721 in 2009 and is expected to increase by 0.76% over the next five years. Both Pennsylvania (12,448,279) and the United States (306,624,699) are projected to grow by 1.2% and 5.1%, respectively, during the same time frame. Population has remained right around 29,700 for the past decade. Projected growth for this study area is expected to continue to remain constant from 2009 to 2014. In discussions with Montgomery Borough residents, explanations for the 5.3% decline over the past decade is attributed to an aging population in the community and younger residents who were born and raised in the Montgomery Borough study area, but have since grown into adulthood and moved out of Montgomery Borough to pursue employment and career opportunities elsewhere.
- **Median Age** – The median age in the Montgomery region is 39.0, slightly higher than Pennsylvania (38.0) and the United States (36.7).
- **Average Household Income** – the average household income for the 5-mile radius was estimated by Claritas to be \$52,876 in 2009, which is comparable to that of Pennsylvania (\$52,681) and slightly lower than the United States (\$56,643). However, the estimated 2009 average household income for Montgomery Borough was \$37,255 while the 2000 Census shows that the average household income for the Borough was just \$33,846. It should be noted that Montgomery Borough is one of the only municipalities in Lycoming County that has a low to moderate income (LMI) of over 51% for the whole community.

- **Employment Characteristics** - in 2009, 47.8% of residents in the Montgomery region were employed in the workforce, which is generally in line with the state and national averages.
  - The percentage of blue collar workers is higher than the state and national averages. Conversely, percentages of white collar workers that are employed in the study area are lower than state and national averages. The higher saturation of blue collar workers in the study area can be attributed to the fact that several of the largest employers in Lycoming County and counties located within the Central Pennsylvania Workforce Investment Area are manufacturing companies. A significant number of employed civilians residing the study area are employed within the nine counties that are within the Central Pennsylvania WIA.
  - Percentages of service workers and farm workers are very close to state and national averages.

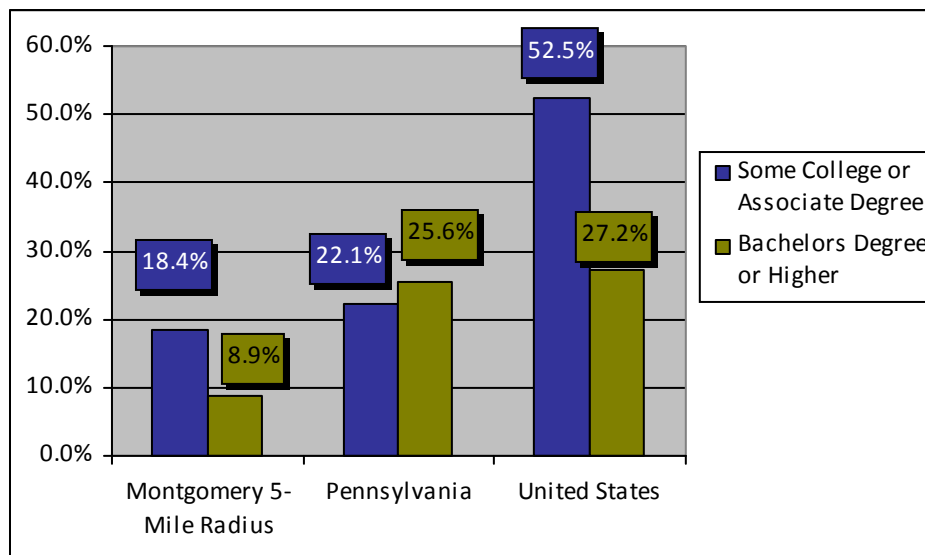
Figure 2.2E: Employment Breakdown for Montgomery 5-Mile Radius





- **Educational Attainment** – the percentage of the population 25 years and over that have some college training or an Associate Degree is in Pennsylvania is 30.4% less than the national average. Even though the Pennsylvania and national average of citizens with a Bachelors degree or higher is very close, Pennsylvania has an alarmingly lower percentage of the population that has some college training or has obtained an Associate Degree. Despite the significant post-secondary 30% disparity when comparing the Pennsylvania and U.S. averages, the percentages of the state and national population that did not graduate high school were only different by 2%.
  - The attainment levels within the Montgomery 5-Mile Radius are even lower than Pennsylvania averages. The percentage of the population that obtained a Bachelors Degree or higher was significantly below the state and national averages. Just 8.9% of residents had a Bachelor’s Degree or higher.

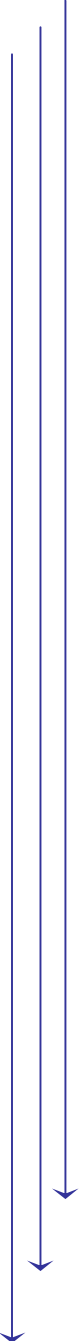
Figure 2.2F: Educational Attainment Comparison



- Even though educational attainment levels are lower in the study area when compared to Pennsylvania and U.S. averages, there are new current employment opportunities for residents. The current Marcellus Shale Natural Gas exploration occurring in Lycoming and surrounding counties has led to a demand in the need for both skilled and unskilled labor. In fact, according to the Marcellus Shale Education and Training Center described below, approximately 75% of the natural gas industry’s direct workforce is comprised of occupations that require little post-secondary education and relatively few trade certifications. Many of the forecasted job opportunities are short-term occupations that require specific training that can be obtained without prior formal educational training.



- Pennsylvania College of Technology and Penn State Cooperative Extension collaborated to form the Marcellus Shale Education & Training Center (MSETC) in 2008 to provide a wide variety of resources to the community and the oil-and-gas industry. The Marcellus Shale Education & Training Center is a partnership established to provide both the regional community and the natural gas industry with a central resource for workforce development and community education needs related to Marcellus Shale gas. In June of 2009, the MSETC completed an in-depth Marcellus Shale Workforce Needs Assessment. The research examined the expanding workforce of the natural gas industry currently engaged in developed the Marcellus Shale throughout this region and determined the education and training needs required to support this expanding workforce.
- The results of the needs assessment reveal that in order to ensure that vocational, career and technical education programs effectively support the growing need for workers in the gas industry, existing education programs will need to be re-oriented towards the specific knowledge, skills, and work ethics required by the natural gas industry.





## Psychographic Summary

Psychographic data was collected in order to look at the different social segment clusters that are found in the Montgomery 5-Mile Radius. Psychographic data is also provided for Pennsylvania and the United States for comparison purposes. Psychographics identify personality characteristics and attitudes that affect a person's lifestyle and purchasing behavior. Psychographic analyses are used like geographic (place of residence or work) and demographic (age, income, occupation) criteria to describe and identify customers and prospective customers and to aid in developing promotion strategies designed to appeal to specific psychographic segments of the market for a product.

If retail or service related businesses are considering developments in the Old Mill Corridor, potential businesses are able to review psychographic data in order to evaluate the social segments of potential customers within target market geographical regions.

### Psychographic Life Stage Social Segments

Life Stage	Montgomery Borough 5-Mile Radius	PA	US
Striving Singles	15.65%	14.78%	10.66%
Cautious Couples	18.73%	14.23%	10.37%
Sustaining Seniors	21.84%	14.62%	10.01%
Mainstream Families	11.05%	13.85%	11.83%
Conservative Class	14.26%	11.78%	9.23%
Midlife Success	6.15%	10.83%	12.73%
Sustaining Families	5.68%	5.62%	6.07%
Affluent Empty Nests	2.88%	4.21%	7.02%
Young Achievers	2.08%	5.24%	10.02%
Young Accumulators	1.56%	3.65%	8.14%
Accumulated Wealth	0.12%	1.19%	3.91%

Source: 2009 Nielsen Claritas Demographic Update

The following is a summary of the social segments with the largest disparity between the Montgomery region and Pennsylvania and the US.

- Cautious Couples** – over-55-year-old mix of singles, couples, and widows. Widely scattered throughout the nation, the residents in this category typically are working-class and white, with some college education and a high rate of homeownership. Given their blue-collar roots, Cautious Couples today pursue conservative and routine lifestyles. The Montgomery region has a significantly higher percentage of this category of residents than both Pennsylvania and the United States.
- Sustaining Seniors** – ethnically diverse and dispersed throughout the country, individuals in this category include residents who are over 65 years

old and have household incomes under \$30,000. Many are single or widowed, have modest educational achievement, and live in older apartments or small homes. Due to their fixed incomes, they usually lead low-key, home-centered lifestyles. The Montgomery region has 7% residents that fall into this category than either Pennsylvania or the US.

- **Midlife Success** – typically are filled with childless singles and couples in their thirties and forties. This group is home to many white, college-educated residents who make six-figure incomes at executive and professional jobs but also extends to more middle class segments. The Williamsport 40-Mile Radius also falls well below both the state and national averages.
- **Young Achievers** – group of twenty some-things who've recently settled in metro neighborhoods. Their incomes range from working-class to well-to-do, but most residents are still renting apartments in cities or close-in suburbs. Representation falls slightly below the Pennsylvania average and well below the national average.
- **Young Accumulators** – ethnically diverse, these households include an above-average number of Hispanic and Asian Americans. Adults typically have college educations and work a mix of white-collar managerial and professional jobs. Found mostly in suburban and exurban areas, the large families in Young Accumulators have fashioned comfortable, upscale lifestyles in their mid-sized homes. Representation falls slightly below the Pennsylvania average and well below the national average.



## Retail Gap

The retail gap analysis compares consumer expenditures with retail sales for a given year for a variety of retail sectors within a geographical region. If Consumer expenditures (market demand) exceed retail sales (market supply) for a retail segment then an opportunity gap exists for that retail segment in the region. If consumer expenditures (market demand) are below retail sales (market supply) for a retail segment then a surplus exists in the regional market. The reason that the retail gap analysis is provided in this Market Assessment is to provide an additional tool to Lycoming County officials, the Lycoming County Corridor Plans Study team, and potential service or retail related businesses seeking to potentially locate in the Old Mill Corridor. Potential retail or service related businesses that review this data will have an understanding of retail consumer demand and existing supply for Montgomery Borough region.

In 2009 the total annual retail consumer demand was \$65,406,487 while total annual retail store supply in 2009 was \$28,817,357. Since demand exceeded supply, a total annual retail opportunity gap existed in the amount of \$36,589,130. The table below includes a breakdown of the retail gap analysis.

### Retail GAP Analysis for the Montgomery 5-Mile Radius

Retail Stores	(Consumer Expenditures)	(Retail Sales)	Gap/Surplus
<b>Total Retail Sales</b>	<b>65,406,487</b>	<b>28,817,357</b>	<b>36,589,130</b>
General merchandise, Apparel, Furniture and Other	15,644,319	668,798	14,975,521
General Merchandise Stores	8,454,377	0	8,454,377
Foodservice and Drinking Places	5,735,406	2,438,211	3,297,195
Clothing and Clothing Accessories Stores	2,796,251	31,789	2,764,462
Health and Personal Care Stores	3,374,973	713,989	2,660,984
Motor Vehicle and Parts Dealers	9,830,731	7,390,893	2,439,838
Electronics and Appliance Stores	1,407,890	0	1,407,890
Furniture and Home Furnishings Stores	1,227,274	0	1,227,274
Building Material, Garden Equip Stores	6,975,053	5,981,685	993,368
Sporting Goods, Hobby, Book, Music Stores	1,121,237	542,473	578,764
Food and Beverage Stores	8,838,976	11,049,519	-2,210,543

Source: 2009 Nielsen Claritas Demographic Update

Opportunity gaps for a particular retail market segment represent that the residents within the community are demanding more products and services than are offered in the community. This means that consumers are spending money on goods and services outside of the community or region in which they live. These gaps for a

particular retail market segment represent opportunities for a community or region to attract more businesses to locate or expand to meet market demand. This analysis is important as communities wish to have the expenditures in the community stay local and for these expenditures to be recycled among community members and entrepreneurs throughout the community. The area's greatest opportunities for potential retail development for the study area within the following retail segment categories:

- General Merchandise, Apparel, Furniture and Other
- General Merchandise Stores

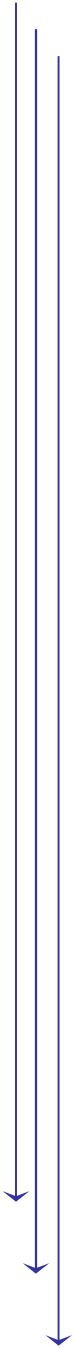
If retail sales exceed consumer expenditures for a given year in a community, this information reveals that a surplus exists and that the market is saturated. For example, if a community spends \$1 million on furniture and home furnishings in a given year and retail sales for furniture and home furnishings are \$3 million; this means that retailers within the community must rely on consumers from outside in order to meet sales projections and quotas. When a retail surplus exists for a particular retail segment in a community, this is an indication that there are an abundance of retailers competing for a relatively small available market share, creating a very competitive environment. In this case, it would not be a wise idea for a new retailer or service provided to attempt to enter the market in such a competitive market unless the retailer or service provider is able to find a unique niche in the competitive retail segment. A retail segment to avoid in the study area is:

- Food and Beverage Stores\*

\* Note – The empirical data may show this as a segment to avoid, but this should be coupled with data gathered through public input, which has shown there is only one grocery store in the area, and others may be warranted.



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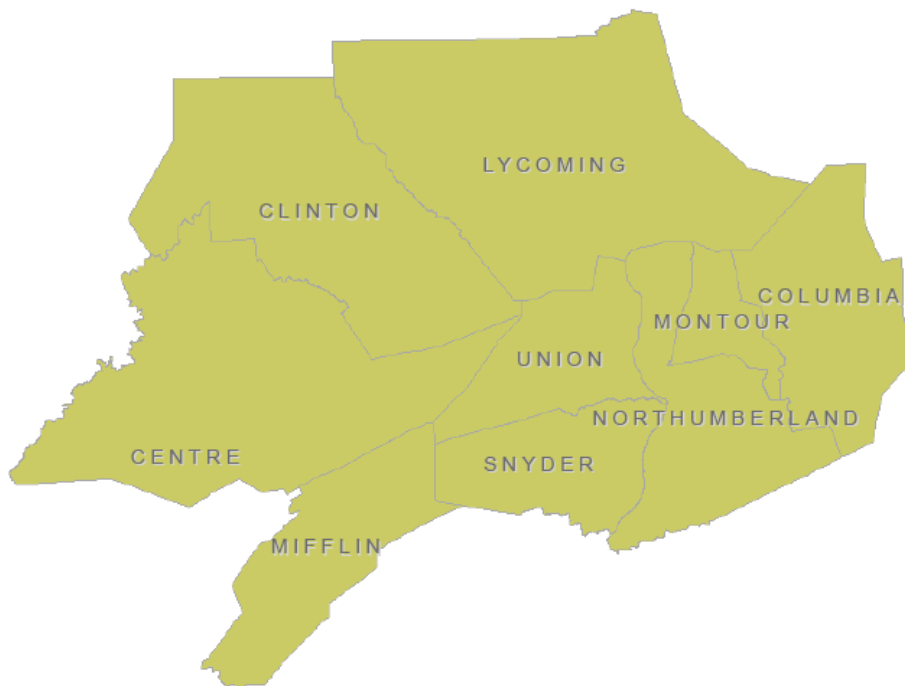


## LYCOMING COUNTY TOURISM

The tourism industry is an integral component of the regional economy within the City of Williamsport and Montgomery Borough. In fact, Lycoming County offers a multitude of cultural, sports, recreational and historical related activities and events that draw visitors into the county from all over the world. An overview of some of the major attractions for Lycoming County visitors and tourists is provided and the analysis is meant to provide insight on future ideas for tourism related developments within the I-180 Corridor: Williamsport and the Old Mill Corridor: Montgomery that may enhance and contribute to the ongoing success of the tourism industry in the region.

Tourism information was gathered for Lycoming County and eight contiguous counties (Centre, Clinton, Columbia, Mifflin, Montour, Northumberland, Snyder and Union), which comprise the Central Workforce Investment Area (WIA). Workforce, labor and industry data is gathered and reported by state and federal agencies at the workforce investment area (WIA), county and national levels. As Lycoming County is located with the Central Workforce Investment Area, this was the most feasible method in comparing the labor and workforce conditions of Lycoming County to neighboring counties in the region.

Central Workforce Investment Area (WIA) Map





The tourism industry data was compiled to provide information on where and how monies originating outside of Lycoming County were injected into the county. The data is also used to analyze the associated impact that the tourism industry has on the Lycoming economy and employment as a result of tourism spending. All information regarding tourism spending was provided by the Pennsylvania Tourism Office via the 2005 and 2007 Pennsylvania Tourism Annual Reports. The most recent annual report made publicly available by the Pennsylvania Visitors Bureau is from 2008; however, it does not provide county by county data as did the previous 2005-2007 reports. Without more recent quantitative data, a combination of primary and secondary resources were utilized to compile a qualitative snapshot of the recent positive developments in the regional tourism industry that have been taking place in Lycoming County.

The World Tourism Organization defines tourists as people who travel to and stay in places outside their usual environment for more than twenty-four (24) hours and not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity reimbursed or compensated from within the place visited. For the data that has been collected, the state of Pennsylvania accounts spending dollars from tourists that do not consider the county that they visit as their “usual environment” in which they reside. Tourism spending from visitors to Lycoming County could be from pleasure, vacation, business, leisure or a combination of these activities. Visitors could be from outside of Lycoming County, outside of the Pennsylvania, and/or outside of the United States.

- ***Direct, Indirect and Induced Spending***
  - “Direct” refers to the impact that happens straight from the visitor/tourist to the particular county. Examples include the purchase of a souvenir pennant by a visitor to a Little League World Series baseball game in the Williamsport area or the rental of bicycle in Muncy by a visitor who is biking along Pine Creek Rail Trail. Direct spending was \$457,620,000 in 2007, a decline of 3.2% since 2005.
  - “Indirect” refers to the impact on the suppliers that reside in the particular county. An example would be for a small business in Montgomery Borough that supplies bait and tackle to the Riverside Campground. As the number of fisherman staying at the Riverside Campground that purchase bait and tackle increase, the higher the volume of bait and tackle that the Riverside Campground will have to purchase from the local supplier. Indirect spending was \$206,850,000 in 2007, a decline of 4.8% since 2005.
  - “Induced” refers to the impact of wages and employment that are directly associated with visitors and tourists to a region. An example would be that as hotel occupancy increases for a hotel in Williamsport, more staff will be hired or retained. Induced spending was \$271,870,000 in 2007, a decline of 4.5% since 2005.



- **Employment** – in terms of regional employment within the tourism industry Lycoming County employed 4,988 workers in 2007. Despite a 10.2% decrease in tourism employment from 2005 to 2007, Lycoming County employs the largest number of workers in the industry compared to the nine other counties in the Central WIA region. Total tourism industry employment for the Central WIA region in 2007 was 19,940. This is an 8.3% decrease compared to 2005.

Despite quantitative data published by the Commonwealth of Pennsylvania Tourism Office revealing declines in total visitor spending and hotel occupancy rates within the tourism industry in recent years, the industry outlook from 2009-2010 is projected to improve significantly. The reason for tourism industry growth predictions in the near future can be attributed to five contributing factors specific to Lycoming County.

### 1) *Regional marketing campaigns of Pennsylvania Wilds and Lumber Heritage Region*

The Pennsylvania Wilds Tourism Marketing Corporation was established to build a strong coalition of public and private partners within 12 counties located in north central Pennsylvania with the goal of branding the Pennsylvania Wilds as the premier destination for outdoor experiences in the eastern United States. A key partner to Pennsylvania Wilds is the Lumber Heritage Region of Pennsylvania, one of the 12 Heritage Areas in Pennsylvania. The mission of the Lumber Heritage region is to preserve, relate, and enhance the history and heritage of residents and their relationship with Pennsylvania Forests. As part of its mission, the Lumber Heritage Region has funded and created some exciting projects throughout the region. These projects have aided the region in connecting communities, telling stories, creating opportunities, and sustaining economic development. There have been several completed projects in recent years in which the Lumber Heritage Region has been involved with and represent more than \$3 million dollars in public and private investments in Lycoming County and more than \$13 million dollars in the entire PA Wilds region.

### 2) *Pine Creek Rail Trail*

Specific to Lycoming County, the Pine Creek Valley is a popular attraction among tourists and visitors. The valley is a 68-mile section of land that extends from Ansonia in Tioga County to Jersey Shore in Lycoming County. The valley is home to the “Pennsylvania Grand Canyon” and the Pine Creek Rail-Trail and offers a variety of recreational experiences, such as canoeing and kayaking, bicycling, hiking, backpacking, trout fishing, camping and horseback riding.



A 2006 economic impact study of the users of the Pine Creek Rail-Trail study estimated that the number of unique visitors to the Pine Creek Rail Trail in 2006 was approximately 125,000. Lycoming County and Tioga County officials have indicated that they estimated that the number of visitors has exceeded the 125,000 estimate in each year from 2006-2009. The study revealed that although 86% of survey respondents were Pennsylvania residents, a large portion of the users were from outside of Lycoming County. The study results also found that the trail is having a dramatic positive impact on the local and state economy. The average trail user has an expenditure of \$354 per year of purchased “hard goods” (bikes, bike accessories, clothing, equipment, etc.) in conjunction with their use of the trail. Additionally the survey respondents spent an average of 3.34 nights in overnight accommodations spending about \$69 per night.

### **3) *Continued Growth of the Little League World Series***

The Little League World Series is a baseball tournament for children ages 11 to 13 that has been held in August of every year since 1947 right outside of Williamsport, Pennsylvania. The Little League World Series brings thousands of visitors into Lycoming County every year and provides a venue for Little League players, fans and volunteers worldwide.

The Lycoming County Visitors Bureau conducted an economic impact study of the Little League World Series in 2005. The study indicated that there were a total of 326,000 in attendance at the tournament. The combined direct spending of all visitors to the tournament totaled \$16,660,863 in the Williamsport area.

### **4) *Increased hotel occupancy due to Marcellus Shale developments***

The natural gas well drilling boom within the past 18 months in the Central WIA region has brought many visitors to Lycoming County. A large portion of these visitors are actually oil and gas company contracted workers that are temporarily employed to work as drillers, engineers, production laborers and foremen in drilling natural gas wells in the Marcellus Shale region. Many of the out-of-state contracted workers reside in local hotels or at local campgrounds during their stay.

Recent trends over the past 12 months have revealed that contracted workers will come from out of state to work on the well drilling sites and reside in the Williamsport area for approximately 3-4 weeks. During their contracted employment tenure, the natural gas workers will work long shifts of approximately 14 hours (or more) per day for all 7 days of the week. Following their 3-4 week “shifts”, the workers then return to their

permanent residence outside of Pennsylvania and a new batch of workers will replace them.

Although concrete data has not been made publically available yet by hotel and campground owners, the business owners of local hotels, motels and camping sites have reported to local Lycoming County officials that their establishments have been booked 7 days per week consistently throughout 2009. This is evidence that the hotel occupancy rates for 2009 should significantly increase compared to the slight declines experienced by hotel/motel owners in the market area in 2008.

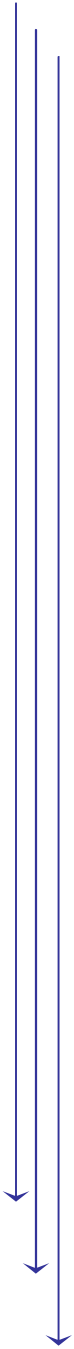
Additionally, both direct and indirect visitor spending is expected to increase from 2009 through 2010 as the Marcellus Shale workforce has been spending its disposable income in the market area during their long-term visitations in the region. Local businesses within the retail industry sector are expected to benefit greatly once fiscal year 2009 realized sales data is compiled and reported.

### **5) *Susquehanna River Walk***

The recent opening of the Susquehanna River Walk and Timber Trail in the City of Williamsport will enhance tourism to the area. The trail already connects in the east to the Loyalsock Township Bikeway will eventually connect to the west to the Pine Creek Rail Trail in Jersey Shore Borough (see Map 1C). The first segment of this connection currently being worked on is from Maynard Street to Susquehanna State Park. In addition, the proposed plans are to extend the trail to the South Williamsport Recreation Park, which will increase the use of the trail and subsequent spending habits of trail users.



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### LYCOMING COUNTY LABOR MARKET

Employment information was collected and compiled for Lycoming County and compared to the counties within the Central Pennsylvania WIA. The Pennsylvania Department of Labor & Industry and the U.S. Department of Labor compile labor analysis data in terms of Workforce Investment Areas. Employment rates and occupational data for the WIA that has been compiled in this section was derived via secondary research from sources including the Center for Workforce Information and Analysis agency within the Pennsylvania Department of Labor & Industry, the U.S. Census Bureau, the U.S. Department of Labor, and the Central Pennsylvania Workforce Development Corporation. The purpose of the research was to identify and compare employment trends and opportunities from within the market area.

In planning economic development within the Corridors, it is important to review industry and workforce trends. The data will aid Lycoming County economic development leaders, municipal officials, business leaders, and community stakeholders in planning efforts evaluating the feasibility of recommendations within the I-180 Corridor: Williamsport and the Old Mill Corridor: Montgomery. The information is also important to potential employers that seek to locate within the Corridors as the potential employers are able to compare employment and industry trends within Lycoming County.

- **Total Employment in Central WIA** – as of December 2009, there were 310,100 individuals in the civilian workforce. Out of the total civilian workforce in the market area:
  - 277,900 people were employed.
  - 27,400 people were unemployed.
  - 9.0% of the Central WIA civilian workforce population was unemployed, which is very close to the Pennsylvania average unemployment rate of 8.8% as of December 2009 (source PA Department of Labor & Industry).
  - The national unemployment rate according to the U.S. Bureau of Labor Statistics was 10.2% as of December 2009.
  - In Lycoming County, there were 5,900 unemployed individuals and the unemployment rate was 9.9%. The unemployment rate in Lycoming County was 1.1% higher than the state average as of December 2009.
- **Central WIA Unemployment Trends** – According to the U.S. Department of Labor and Industry, the average national unemployment rate was 9.4% as of July 2009.
  - All of the counties in the Central WIA had unemployment rates above the state's rate, with the exceptions of Centre County and Montour County.
  - The unemployment rate in Lycoming County increased by 69% from



2005 to 2009, increasing from 5.2% to 9.9% in the four year span. The unemployment trends in Lycoming County are comparable to state and national trends. The national recession in the U.S. has resulted in an increase in the unemployment rate in many states across the country.

- The challenge of the increase in unemployment in Lycoming County is a challenge that Counties in states across the country have been facing in recent years due to the national recession. A primary focus for development within the I-180 Corridor: Williamsport and the Old Mill Corridor: Montgomery is to create diversified economic development initiatives that will provide employment opportunities for Lycoming County residents. Economic development initiatives within Corridors will aid in combating the recent rise in unemployment in Lycoming County.
- **Job Market** – the four primary industry clusters that are identified within the Central WIA include:
  - Diversified Manufacturing – 31,396 jobs in 2006 (net change of -19.4% since 2002); average annual wage of \$38,917.
  - Education – 41,249 jobs in 2006 (net change of 2.9% since 2002); average annual wage of \$40,474.
  - Health Care – 34,714 jobs in 2006 (net change of 6.3% since 2002); average annual wage of \$39,274.
  - Lumber and Wood Products – 13,196 jobs in 2002 (net change of 1.5% since 2002); average annual wage of \$32,220.
- **Highest Paying Occupations** – the top 5 highest paying occupations in the market area are:
  - Family and General Practitioners (annual average wage of \$125,470)
  - Computer Science Teachers – Postsecondary (annual average wage of \$87,480)
  - Pharmacists (annual average wage of \$82,000)
  - Psychology Teachers – Postsecondary (annual average wage of \$80,300)
  - Lawyers (annual average wage of \$80,180). For 14 of the top 15 highest paying occupations in the market area, a positive net growth in the number of available job openings has been projected from 2006 to 2016. The lone exception is the Scientific and Technical Sales Representative occupation category, which is projected to remain stagnant through 2016.

- **Lowest Paying Occupations** – the top 5 lowest paying occupations in the market area are:
  - Child Care Workers (annual average wage of \$14,400)
  - Personal & Home Care Aides (annual average wage of \$17,040)
  - Home Health Aides (annual average wage of \$17,840)
  - Loan Interviewers & Clerks (annual average wage of \$20,900)
  - Many of the lowest paying occupations are part of the regional Health Care cluster. Occupations in the Health Care cluster, despite modest yearly salaries, are expected to increase in terms of job openings from 2006-2016. The demand for Health Care cluster occupational positions is projected to grow due to the aging population of the market area. Many of the lowest paying occupations in the market are yield annual average salaries which are very close to the average per capita income for the region, which is \$21,241, according to the Central Pennsylvania Workforce Development Corporation.

### Industry and Location Quotient Analysis

Industry and Location Quotient information for Lycoming County was compiled to identify and compare industry clusters to the national aggregate clusters.

- A number greater than one reveals a higher concentration of a particular industry, while a number less than one yields less activity than normally found when compared to national averages. If the number is greater than one, this indicates that the base industry is able to meet local demand and is able to export its products or services to regions, states and/or countries outside Lycoming County.
- If the number is exactly one, this indicates that production within a base industry is able to meet local demand exactly, without a surplus or shortage of goods or services occurring within that particular base industry.
- If the number is below one, this indicates that local production is inadequate and unable to meet local demand. In this case, the base industry must import goods and services into Lycoming County in order to meet local demand otherwise Lycoming County residents must consume goods or services outside of the County in order to satisfy their demand.



## Location Quotients for Lycoming County

Base Industries	1.00
Production Occupations	1.78
Community and Social Services Occupations	1.42
Healthcare Support Occupations	1.35
Healthcare Practitioner and Technical Occupations	1.10
Installation, Maintenance, and Repair Occupations	1.08
Transportation and Material Moving Occupations	1.08
Sales and Related Occupations	1.07
Education, Training, and Library Occupations	1.01
Office and Administrative Support Occupations	0.99
Food Preparation and Serving Related Occupations	0.97
Personal Care and Service Occupations	0.92
Building and Grounds Cleaning and Maintenance Occupations	0.91
Construction and Extraction Occupations	0.87
Architecture and Engineering Occupations	0.73
Protective Service Occupations	0.71
Management Occupations	0.67
Farming, Fishing, and Forestry Occupations	0.55
Business and Financial Operations Occupations	0.55
Legal Occupations	0.50
Life, Physical, and Social Science Occupations	0.47
Arts, Design, Entertainment, Sports, and Media Occupations	0.44
Computer and Mathematical Science Occupations	0.42

- **Export Industries** – the workforce within each of these three occupational categories produces a level of goods and services that is in excess of Lycoming County demand. This indicates that goods and services produced by the workforce within these three occupational categories are exported to consumers outside of Lycoming County. The excess supply of goods and services may be sold to consumers in other regions of the state, consumers in other states across the United States or to consumers in foreign countries.
  - Production occupations
  - Community and social service occupations,
  - Healthcare support occupations



- **Industries that Meet Local Demand** – these occupation categories have a location quotient close to “1” and produce a supply level of goods and services that exactly meet the goods and services demand of the occupational category within Lycoming County.
  - Education related occupations
  - Office and administrative support occupations
  - Foodservice
- **Import Industries** – these occupation categories have a location quotient less than “1” and are unable to fulfill the demand of Lycoming County consumers and do not have an excess supply of goods and services to export to consumers outside of Lycoming County.
  - Computer and mathematical science occupations
  - Arts, design, entertainment, sports and media occupations
  - Life, physical and social sciences occupations
  - Legal; business and financial operations occupations
  - Farming, fishing and forestry occupations

The location quotient data and the workforce trends data do not reveal the recent employment opportunity trends that exist within Lycoming County for the natural gas industry as a result of the Marcellus Shale Activity. While extraction of natural gas in the Marcellus Shale region is still in the initial stages of development, energy companies have already invested hundreds of millions of dollars in exploration and development programs throughout Pennsylvania to drill gas wells to tap into the gas reserve and to build the necessary infrastructure to make the wells operational. Employment opportunities are forecasted to be available in Central WIA counties (Lycoming, Clinton, Centre, and northern Columbia).

According to the Marcellus Shale Education and Training Center (MSETC), the majority of the oil and gas companies that have been operating in the region in 2009 have publically stated their intention to expand operations in 2009 and beyond. The reasons for this expansion are due to a number of factors, including the relative infancy of the gas play and the close proximity of large transmission lines and large consumer markets. The close proximity of the Marcellus Shale gas play to consumer markets ensures that a positive return on investment is possible at a lower commodity price when compared with the return on investment on other natural gas fields located throughout the country. Some of the principal energy companies operating within the Northern Tier WIA region include Cabot Oil and Gas, Chesapeake Energy, Fortuna Energy, Ultra Petroleum, Chief Oil and Gas, East Resources, Seneca Resources, EOG Resources and Epsilon Energy. Principal energy companies operating in the Central WIA region include Anadarko Petroleum, Exco North Coast Energy, Chief Oil and Gas, Chesapeake Energy, Rex Energy and Range Resources.



According to an analysis of publicly made statements gathered in the MSETC Marcellus Shale Workforce Needs Assessment report, energy companies with current operations in the Northern Tier WIA region estimate that total wells drilled per year could increase from 140 wells in 2009 to 221 wells in 2010. Energy companies with current operations in the Central WIA region estimate the number of wells drilled in the region could increase from 26 wells drilled in 2009 to 48 wells drilled in 2010. The Needs Assessment report also projected through various forecasting models that the workforce needed to drill a single well in the Marcellus Shale region requires 11.53 full-time direct jobs per well over the course of a year. The oil and gas industry definition of a full-time equivalent is based on working 260 days (or 2,080 hours) per year. However, the vast majority of these “drilling phase” jobs do not compound each year. Therefore the total workforce may increase or decrease depending on how many wells are drilled each year. Since the workplace location and residency of these workers will depend on a multitude of factors and will likely change over time, it is difficult to predict the impact of workforce needs for any one specific county or municipality.

The Marcellus Shale Workforce Needs Assessment report also forecasts that 0.17 long-term, full-time “permanent” jobs associated with the production phase are created for each well drilled in a given field. These long-term jobs do compound each year as more wells are drilled, and these jobs are viewed as white-collar in nature. In tying the workforce projections in the region together, if 100 wells were drilled each year for ten years, 17 production jobs would be created each year resulting in 170 long-term, full-time production jobs over 10 years.

The MSETC team estimated that the Northern Tier WIA region would require between 1,292 and 2,153 direct full time jobs in 2009, depending on development intensity. These jobs include both drilling phase and production phase jobs. The direct, full-time equivalent workforce is expected to increase between 2,107 and 3,511 jobs by 2011; direct, full-time equivalent workforce by 2013 will be between 3,281 and 5,468, depending on levels of development intensity.

The MSETC team estimated that direct, full-time equivalent jobs within the Central WIA are projected to be between 325 and 542 in 2009. From 2011-2013, workforce requirements are expected to increase between 1,347 and 2,245 full-time equivalent positions, depending on levels of development intensity.

The Pennsylvania Economy League has recently estimated that each direct job in the Pennsylvania oil and gas industry creates an additional 1.52 indirect and induced jobs throughout the economy. Based on the Pennsylvania Economy League’s multiplier tool, the projected job increased by 2014 for the Northern Tier WIA region would be between 8,268 and 13,779. For the Central WIA region it would be between 3,394 and 5,657.

