

Lycoming
County
Comprehensive
Plan Update
2018

Community Facilities and Infrastructure

(SOMETHING QUICK AND INSIGHTFUL RE: THIS CHAPTER

Community Facilities

Community facilities include a wide range of structures including those owned by municipalities as well as quasi-governmental entities and non-profits. The overarching goal of all community facilities and public infrastructure is to support and enhance the quality of life of county residents and set the stage for continued economic growth and desired community development. Community Facilities covered in this section include:

- Public Safety Facilities
- Municipal Facilities
- Health Care Facilities
- Community Centers
- Educational Facilities
- Community Parks and Recreational Facilities

Public Safety Facilities

In 2014, Lycoming County utilized Act 13 funds to upgrade the County's microwave communication system, operated and maintained by the Department of Public Safety (DPS). The government equipment provides a public safety network for a bi-county region. DPS provides an

umbrella of emergency service operations including the 9-1-1 communications center, the emergency management agency, regional emergency medical services, hazardous materials planning, and homeland security. DPS is also responsible for coordinating all emergency calls for fire, countywide police departments, and emergency medical services in both Lycoming and Sullivan Counties.



In 2014, the Montoursville Volunteer Fire Company (VFC) completed an expansion to their firehouse. This expansion included bunk rooms to allow the VFC to start their Live-In Program where they allow students to live in the firehouse in exchange for EMS and Fire coverage in the evening and nighttime hours

Community Facilities Selected Highlights

Community Parks & Recreation Facilities

Susquehanna Riverwalk Construction White Deer Golf Course Renovation

Pine Creek Rail Trail Connector

River Valley Regional YMCA Completed

Liberty Arena & Village Green Constructed

Historic Bowman Field renovated

Health Care Facilities

UPMC-Susquehanna Health Integration

Williamsport Hospital Expansion/Upgrade

Health Innovation Center

Divine Providence Hospital Expansion/Upgrade

Muncy Valley Hospital Expansion/Upgrade

Community Dental & Health Center Educational Facilities

Penn College Campus Expansion

Lycoming College Housing Addition

WAHS Return to Glory Facilities

Loyalsock Township SD MS/HS Complex Finished Community Centers

River Walk Community Center Constructed Municipal Facilities

Watson Township Municipal Building Finished

Lycoming County Landfill Expanded

Public Safety Facilities

Countywide Microwave Communication System Installed

Municipal Facilities

Municipal facilities have not changed much in the past 10 years. The most notable change was the construction of the Watson Township Municipal Building. Completed in 2014, this building is 4,000 sf with a maintenance garage and a recycling center on the property. A generator was also purchased for the maintenance building to provide power during emergency events. With the generator the Watson Township Municipal Building can function as an Emergency Operations Center.



Health Care Facilities

There are two major healthcare systems located in Lycoming County, UPMC Susquehanna and Geisinger. UPMC Susquehanna covers the majority of the territory with Geisinger covering the west end. UPMC and Susquehanna Health completed a merger in fall 2016. Prior to the merger Susquehanna Health had made several major changes to their healthcare system within the County. Major renovations were made to Divine Providence Hospital which included the construction of a Healing Garden.

The Muncy Valley Hospital Emergency Room (ER) was originally designed for about 6,000 patients per year, however, usage increased from 6,000 patients per year to over 16,500 patients per year between 2011 and 2016. This increase in demand along with other needs necessitated expansions and renovations at this hospital. In November of 2015 work was started on a project involving a 5,400 sf addition to the Muncy Valley Hospital along with renovating 11,000 sf of existing building. The ER department has been upgraded from five curtained bays to eight private rooms with six additional rooms designed for rapid treatment, triage, decontamination, and behavioral health patients. Also involved in the project were access and safety improvements to nearby Route 405.



In 2012, Susquehanna Health completed its Patient Tower at the Williamsport Regional Medical Center. This project involved 375,000 sf of new construction (including the 300,000 sf, 6-story Patient Tower), 70,000 sf of renovations, and the construction of a 3-story, 21,000 sf central utility and cogeneration plant. In 2013 the Patient Tower was granted LEED certification. With the expansion and improvements of these facilities city and health system officials recognized a need for a better connection between the hospital and I-180 which resulted in the "Pathway to Health" plan which is a 4 phase project to create improved access to the hospital. Phases 1 & 2 have been completed and Phases 3 & 4 are left to be completed. Completed in 2015 at the Williamsport Regional Medical Center was the Health Innovation Center (HIC). This is an 87,000 sf facility which includes an outpatient pharmacy, heart and vascular testing, general surgery office, and an education and family residency center. These modernizations have allowed UPMC Susquehanna to remain relevant in the region and continue to attract skilled medical professionals.

"The new building enabled a core expansion of space critical to patient care, improved patient safety, and infection control. A new imaging center, a birthplace center, education & conference center, heart and vascular surgical services, and joint center was included. The emergency department was expanded to double its original size, replacing curtained bays with private examination rooms."

- -<u>Structure Tone Organization</u>
<u>Website</u>
(Project Engineer)



Community Centers

STEP Inc. runs the Centers for Healthy Aging where senior citizens are offered a variety of activities to promote healthy lifestyles and to encourage social interaction. The Centers for Healthy Aging provide social/recreational activities such as art classes, holiday parties, picnics, dancing, tai chi, and Zumba. Meals are also provided to senior citizens Monday through Friday. In January 2016, a new senior center (RiverWalk Center) was opened in South Williamsport.

Educational Facilities

A total of 11 different school distrcts provide K-12 classes to residents of the county. Among those districts, only a few had any substaintial changes over the past 10 years. No school districts had major expansions over the past 10 years and several school districts have actually consolidated schools in order to "right size" their facilities to accommodate shrinking enrollment.

Williamsport Area School District (WASD) closed three primary schools (Sheridan, Round Hills, and Woodward) and moved the district offices into an addition to the renovated Williamsport Area Middle School. Renovations were also made to Jackson Primary to accommodate consolidation. The school district also updated and expanded their Career & Technical Education (CTE) facilities in the Williamsport Area High School.

The Jersey Shore Area School District (JSASD) closed the Nippenose Valley Elementary School and finished renovations to the Jersey Shore Elementary School to accommodate consolidation of these two schools.

The Southern Tioga Area School District (which contains areas in Lycoming County) consolidated its North Penn Junior/Senior High School with the two other Junior/Senior High Schools in their district.



Community Parks and Recreational Facilities

Lycoming County boasts a wide array of community parks and recreation facilities. Survey analysis of 1,120 Lycoming County citizens conducted as part of the development of this plan indicated that County residents highly value nature and outdoor recreation facilities. The Outdoor Recreation Participation Topline Report 2016 published by the Outdoor Foundation sumarizes outdoor recreation participation trends over the past 9 years. Participation rates have remained relatively consistent over the years. The report indicates that 48.4% of Americans (142.4 million) participate in at least one outdoor activity and collectively went on 11.7 billion outdoor outings in 2015. The outdoor activities with the most participation are Running/Jogging, Road Bicycling, Fishing, Hiking, and Camping.

Community Parks host many forms of recreational amenities such as tennis courts, soccer fields, swimming pools, baseball & softball fields, golf courses, walking paths, dog parks, community gardens, basketball courts, picnic facilities, comfort stations, and a variety of youth sports. Collectively, Lycoming County parks occupy an area of 4,142 acres or approximately 6.5 square miles. The majority of county parks are clustered in and around the city and the boroughs. In 2014 and 2017, the County Commissioners opened an Act 13 funded Mini-Grant Parks Program to assist community parks in making needed improvements. A total of 33 parks were assisted for a total investment of \$529,620.

There are at least 30 named trails contained within or passing through Lycoming County. The types of trails vary considerably from small interpretative trails to mountainous hiking trails-from biking trails on paved courses to off-road mountain biking adventures. Some trails have engineered paths while others rely solely on the natural footway. Several trail initiatives were completed between 2006 and 2017 including: the Susquehanna Riverwalk, the Conservation Learning Trail, an extension to the Pine Creek Rail Trail, and a feasibility study for the proposed Bald Eagle Mountain Ridge Trail.

Susquehanna River Walk

The Susquehanna River Walk was completed in late 2009 with the intent of connecting the Loyalsock Bikeway with Maynard Street Bridge and Market Street Bridge. The River Walk features an 8 foot wide path with benches and 12 historic/interpretive signs. Since its completion, considerable work has been completed to expand the River Walk network including the completion of a 1.5 mile connection in 2011 to the South Williamsport Recreation Complex near the Little League Headquarters and plans to create extensions to the Lycoming Creek Bikeway and Susquehanna State Park in the coming years. The eventual goal would be to create connections to Muncy Borough and



Photo by Terry Moore Photography

Jersey Shore
Borough to connect
to the Pine Creek
Rail Trail. In addition
to the 2011
extension,
improvements to the
River Walk parking
area near Commerce
Park Drive were
made including line
painting and fencing.

Susquehanna River access points for the general public can be found in the Borough of Jersey Shore, Susquehanna State Park in Williamsport, Loyalsock Township's Riverfront Park, Montoursville's Mill Street boat ramp, Muncy Borough's access at the Pennsylvania Fish and Boat Commission ramp, and at Montgomery Park. Some of these access points have an intermodal dimension such as Jersey Shore's ramp which connects to the Pine Creek Rail Trail.

Sewer, Water, and Stormwater Infrastructure

Today, the water and sanitary sewer needs of the urbanized areas of Lycoming County are being fulfilled by a number of public entities. Thirteen of the major providers are listed in the table. With billions of dollars in capital assets under their management, these infrastructure providers are constantly challenged to meet and increasingly strict set of environmental compliance requirements while maintaining an affordable rate structure for the residents and businesses being served.

Sanitary Sewer

Major investments have been made by the public sanitary sewer authorities over the past 10 years in order to address environmental compliance issues with EPA. Sanitary sewer systems of tributary communities were required to collect, store, and convey 100% of their flow to the servicing Waste Water Treatment Plant (WWTP). Additionally, sanitary sewer authorities were also mandated to remove increased amounts of nitrogen, phosphorus, and sediment from incoming flows. Over \$188 million in upgrades were completed to four major sewer authorities in the county in order to comply with these mandates.

In July 2010, the West Branch Regional Authority was formed to become the owner and operator of sewer and water systems in Muncy Creek and Clinton Townships and Muncy and Montgomery Boroughs. Construction of a new \$33 million regional WWTP was completed in 2014. In 2017, WBRA assumed operation and maintenance responsibilities for the Brady Township Package Plant on a contract basis. Also in 2017, construction began on a \$6 million water and sewer expansion project in the US-15 corridor. The expansion is meant to serve homes and businesses in the area with failing septic systems.

Since 2006, the Williamsport Sanitary Authority (WSA) completed \$125 million in combined upgrades to both the Central Plant on Basin Street and the West Plant on Arch Street. In addition to providing sanitary sewer overflow holding tanks, these upgrades allowed the WSA to meet their permitting requirements and to provide better water quality.

In order to meet the EPA requirements in the Jersey Shore area, the Tiadaghton Valley Municipal Authority (TVMA) was created and a new \$20 million WWTP was built in Nippenose Township to serve Jersey Shore Borough, Porter Township, and Nippenose Township. The new plant went into operation in 2014 and the old plant was demolished later that year.

The LCWSA owns and operates the Montoursville Regional Sewer System (MRSS). In 2004, a major expansion was initiated into Muncy Township and Muncy Creek Township in the areas south of I-180 to provide sewer service for the growth area. LCWSA also completed a \$10 million upgrade in fall 2012 to comply with EPA requirements. In addition to the main plant, LCWSA has acquired two small package treatment plants since 2006. The Beaver Lake Sewer System in Penn Township was acquired in January 2012. Prior to acquisition, the plant was reconstructed due to poor maintenance. The Mifflin Manor Sanitary System in Mifflin Township was also acquired in January 2017. LCWSA also provides services for a few other smaller systems in the county including: maintainence and operation of over one mile of gravity sewer main in Armstrong Township; billing/invoicing for South Williamsport Borough's collection system; operation, maintenance, and management of the Duboistown Borough collection system.

In 2006 the Hughesville-Wolf Authority constructed a new digester for their WWTP almost doubling their capacity. This upgrade was completed prior to the EPA mandate leaving the Hughesville-Wolf Authority to figure out how to meet their phosphorus discharge requirements (their improvements allowed them to meet nitrogen discharge requirements). In order to address this issue the Hughesville-Wolf Authority purchases nutrient credits through the County's Nutrient Credit Trading Program which is 89% less costly than upgrading the WWTP again.

Major Water & Sanitary Sewer Providers

Williamsport Sanitary Authority

Williamsport Municipal Water Authority

Jersey Shore Area Joint Water Authority

Lycoming County Water & Sewer Authority

Hughesville-Wolf Authority

Hughesville Borough Water Authority

Muncy Borough Municipal Authority

Montgomery Water and Sewer Authority

Tiadaghton Valley Municipal Authority

Old Lycoming Area Authority

West Branch Regional Authority

Montoursville Borough Water Works



WSA's Central Wastewater Treatment Plant was a multimillion dollar expansion and technological upgrade to satisfy federal environmental regulations

Public Water

The largest water infrastructure project completed in the last 10 years was the construction of the Muncy/Montoursville Regional Water System which is owned and operated by the Lycoming County Water and Sewer Authority (LCWSA). This \$7.8 million project was designated to provide up to 1,500,000 gallons per day to a 900 acre growth area between Montoursville Borough and Muncy Borough. The project was completed in four phases and included the improvements listed to the right. The LCWSA also assumed the responsibilities for ownership, operation, and maintenance of the Limestone Township Municipal Water Authority which operates near Collomsville and Oval in Limestone Township.

The West Branch Regional Authority (WBRA) was established in July 2010 to answer the problems of increasing sewage treatment requirements and fragmented sewer and water systems in the Montgomery/Muncy area. In January 2013 WBRA assumed responsibility of the operation and maintenance of the Muncy Borough Municipal Authority water system and the Montgomery water system. In 2017 the WBRA began work to expand water service into the US-15 corridor in Clinton Township.

Also, the Jersey Shore Area Joint Water Authority completed a \$1,089,000 rehabilitation projects for the Larry's Creek Filtration Plant.

Montoursville/Muncy Regional Water System

- A well house completed in early 2017
- 300,000 gallon storage tank located in Muncy Township
- Grey Fox Plaza elevated 200,000 gallon water storage tank was completed in summer 2011
 - 25,000 ft. of 12-inch waterline
- An interconnection with the Muncy Borough Municipal Authority water system including:
 - A booster system
 - o 11,300 ft. of waterline.

LCWSA's new water storage tank in Grey Fox Plaza, Fairfield Township



Stormwater

When the Clean Water Act Phase II went into effect in March 2003, municipalities within the census defined urbanized area surrounding Williamsport partnered with the County to form the Lycoming County MS4 Coalition. The MS4 Program is a federal regulatory requirement that is administered by the PA DEP. MS4 permittees are designated following U.S. Census Bureau guidelines for urbanized areas. The MS4 Coalition works together to incorporate 6 requirements (called Minimum Control Measures or MCMs) into their stormwater management programs.

Within Lycoming County, there are currently ten MS4 permittees; however, it is likely the MS4 program will be expanded to involve more municipalities. In order to meet sediment removal requirements it is very likely that MS4 members will be required to fund streambank stabilization/restoration projects and Best Management Practices (BMP) projects to compensate for the sediment loading attributed to their stormwater outfall points. The need to better control and eventually treat stormwater will pose a significant challenge to all MS4 municipalities, however, these challenges are unavoidable and must be addressed thoughtfully, cost-effectively, and with the highest degree of efficiency possible.

MS4 Minimum Control Measures (MCMs)

- Public outreach and education
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site runoff control
- Post-construction stormwater management in new development and redevelopment
- Pollution prevention and good housekeeping for municipal operations and maintenance

Lycoming County Nutrient Credit Trading Program

Implementation of this program began in 2009 with the goals of reducing nutrient and sediment pollution flowing into the West Branch Susquehanna River, enhancing local environmental quality, and promoting home-grown conservation practices. Credit trading allows regulated point sources, including sewer plants, large industrial dischargers, and private developers to purchase credits in lieu of making costly upgrades to their on-site wastewater treatment facilities. In many cases, purchasing credits can dramatically reduce the cost of complying with nutrient reduction mandates, saving ratepayer dollars, and increasing economic competitiveness. Farmers earned credits by going above and beyond the minimum legal requirements to do more than what is considered the farm's fair share of pollution reduction. Multiple agricultural BMPs were implemented on the participating farms including: riparian buffers, no-till and cover cropping, off-stream watering, rotational grazing, and manure hauling.

Flood Protection Systems

Lycoming County's developed areas are mostly concentrated along the West Branch of the Susquehanna River which flows across the southern section of the County. The Greater Williamsport Area is protected by a levee. The Levee was authorized by the Army Corps of Engineers (USACE) following the 1936 flood and was completed in the mid 1950's. There are four Levee systems. North West Williamsport and South East Williamsport, Non-Federal Sponsor is the City of Williamsport; South Williamsport Levee, Non-Federal Sponsor South Williamsport; and the Bull Run System-Completed after Tropical Storm Agnes in 1972, Non-Federal Sponsor Loyalsock Township. These protected areas are exempt from the mandatory purchase of Flood Insurance and are not required to follow the municipality's floodplain ordinances.

Natural Gas Infrastructure

Lycoming County is located in the center of one of the nation's largest shale gas formations. The Marcellus Shale formation spans from South-West West Virginia through West and North Pennsylvania to Southern New York. Traditional vertical wells are not effective for releasing gas from Marcellus Shale because the gas is released through vertical joints in the rock. A horizontal well combined with hydraulic fracturing allows drillers to cost-effectively drill into the vertical joints of this formation to release the gas. In 2003 the first horizontal Marcellus Shale well was drilled in Washington County, Pennsylvania by Range Resources. Improvements in technology have allowed natural gas from Marcellus Shale to be cost-effectively gathered. Lycoming County experienced a boom in Marcellus Gas extraction between 2010 to 2014 with 782 wells being drilled in that time period (851 wells were drilled between 2007 and 2017).

To take advantage of natural gas availability, River Valley Transit (RVT) developed a Compressed Natural Gas (CNG) fueling station. RVT currently has a fleet of 29 buses with six being fueled with CNG. Through 2017, they replaced eight additional buses with CNG vehicles and then four more in 2018. By the end of 2018, the majority of RVT's buses will be CNG fueled. CNG offers a 25% reduction in carbon emissions versus gasoline and also has the possibility to have much lower fuel costs than gasoline.

In 2016 a Compressed Natural Gas facility was constructed in Fairfield Township that provided an opportunity to distribute natural gas to customers without the need for a pipeline to be built to reach customers. This virtual pipeline system provides affordable natural gas from the Marcellus region to those without direct access to a local gas line. Natural gas is accessible by truck delivery from the facility to waste hauling fleets, municipal fleets, utility backfill, institutional and commercial facilities, industrial plants, and commercial fleets.



Electric

Two electric generation plants were constructed in Lycoming County over the past 10 years. The Panda Patriot Power Project, owned and operated by Panda Power Funds, was constructed in Clinton Township. This 829 megawatt (MW) power plant runs exclusively on natural gas and can generate enough electricity to power one million homes. The Panda Patriot Plant began operation in 2016.

The Laurel Hill Wind Energy facility, which is owned and operated by Duke Energy, is a 69 megawatt (MW) wind powered electric generating, transmitting, and interconnecting facility. There are thirty individual 2.3MW Siemens Wind Turbines within a seven mile long lease corridor located along the Laurel Hill Ridge between Jackson and McIntyre Townships in Lycoming County. This facility began operation in October of 2012 and can provide enough electricity to power 20,000 homes. The Laurel Hill Wind Energy facility supplies electricity to Delaware Municipal Electric Corporation under the terms of a 25-year agreement.





Laurel Hill Wind Energy Facility Substation with turbines on the ridge in the background