

UNCONVENTIONAL GAS PLAN

The Economic Development Plan addresses ways that local businesses and residents can take advantage of the economic opportunities from the unconventional gas industry activity. Issues involving emergency responses to spills and other hazards are addressed in the Community Facilities and Services Plan section.

The Gas Wells, Pipelines and Wind Turbines Map on the next page shows locations of permitted gas wells and existing major pipelines.



Municipalities should enact reasonable zoning regulations to avoid incompatibility problems with gas facilities.

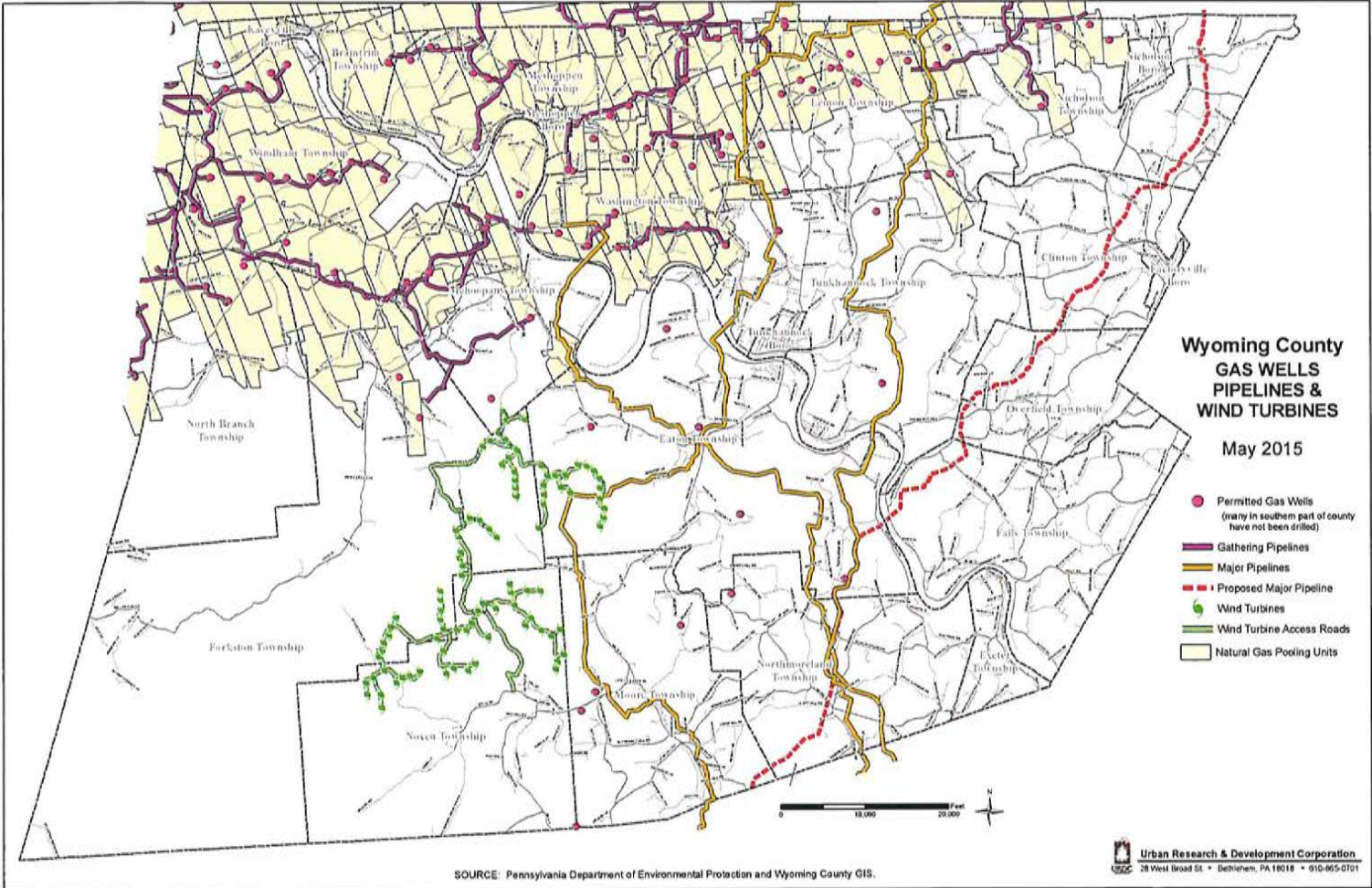
The unconventional gas industry presents a full range of issues that should be addressed to minimize impacts. One wellhead now typically serves fracturing activities that extend horizontally underground in multiple directions. The truck traffic, visual and noise impacts of a wellhead are most evident during the drilling of the wells.

Many staging areas, trucking uses and storage uses can be treated the same as in similar commercial and industrial areas. The routes of pipelines involve various types of reviews, but cannot be regulated by municipalities or the County.

A county or municipality is not permitted to regulate operational matters of the gas industry that are regulated by the State, such as how gas wells are constructed or which chemicals are used. Moreover, municipalities and a county are not permitted by State law to regulate air pollution (except for open burning). A municipality is allowed to regulate traditional lot size and setback matters, as long as the regulations do not effectively exclude gas industry activities within their borders.

Because a portion of State Act 13 was overturned by the courts, municipalities are, once again, allowed to enact reasonable controls on the locations of gas industry facilities, other than pipelines. In general, wellheads can be prohibited in areas that are particularly important for conservation purposes (such as locations close to the Susquehanna River) and areas that are currently or planned to be highly residential in nature. Many communities with zoning regulations require that wellheads be set back substantially from existing homes, and some require that special exception approval be obtained from the Zoning Hearing Board or conditional use approval be obtained from the Board of Supervisors or Borough Council.

The Pennsylvania State Association of Township Supervisors (PSATS) has prepared a model ordinance to guide local regulations of the unconventional gas industry. Lycoming County's provisions have also been suggested as a model. Washington Township has also enacted zoning regulations that can serve as a model.



The following policies should be considered by municipalities:

- Allowing natural gas compressor stations and natural gas processing plants in industrial districts, and selected other districts, but requiring a 1,000-foot setback from a pre-existing principal building on another lot.
- Requiring a gas wellhead to be at least 500 feet away from a pre-existing dwelling and 300 feet from another principal building on another lot. The intent is that a gas well would be permitted by right in some districts (such as industrial) and need special exception or conditional use approval in other districts where they be allowed, such as agricultural districts.

(Note - Act 13 requires that a well be set back a minimum of 300 feet setback from an existing building and 500 feet from a lot line, but Act 13 also gave DEP some authority to grant waivers to the setbacks. Large setbacks were also established from water sources. DEP is also working on revised regulations, which may involve noise controls.

- Not allowing new gas wellheads in highly residential zoning districts or key conservation-oriented districts, such as along the Susquehanna River.
- Horizontal drilling without any surface disturbance would not be regulated by the zoning ordinance.
- Industrial wastewater treatment facilities should be limited to certain districts with large setbacks, and need special exception or conditional use approval.
- Requiring a municipal permit and submission of a site plan and specific information for any gas facilities.
- Requiring a written narrative describing measures that will be used to mitigate impacts.
- Requiring a road maintenance and repair agreement with the municipality before any municipal roads are used for site construction, drilling and operations. An evaluation may also be required of the existing conditions of public roads that will be used, which could be used to assist in crafting a road bonding agreement.
- Requiring that a Preparedness, Prevention and Contingency Plan be provided by the operator to the municipality and emergency responders. The operator should also hold an on-site orientation and training course for emergency responders.
- Proof that minimum clear sight distances will be met at all vehicle access points. (Sight distance is particularly an issue along municipal roads, if municipal ordinances do not already establish a requirement. Some municipalities include PennDOT's sight distance standards by reference.)
- Requiring that all structures except temporary drilling equipment meet the height requirement for the zoning district.
- Requiring that the drilling pad meet building setbacks for the zoning district.

- Requiring that the drilling rig be set back a minimum distance equal to 1.5 times its height from all exterior lot lines and roads.
- Requiring for security fencing, except if there is 24 hour on-site staffing during drilling operations.
- Requiring that emergency responders be given a way to access a gas facility.
- Requiring an exterior sign that must include emergency contact information.
- Lighting shall be directed downward and inward to avoid nuisances for neighbors.
- Allowed increases in noise levels must be limited during various types of activities. A more permissive standard should be allowed during drilling operations.
- Compressor stations and processing plants must include methods to minimize noise, such as being completely enclosed with sound reducing walls.
- Drilling and storage of hazardous substances would not be allowed in the 100-year floodplain.

Municipalities should also use local regulations to limit the locations of new nursing homes, hospitals, hospices, personal care centers, adult and child day care centers, and schools within 1,000 feet of major pipelines or wellheads. The facilities listed above do not allow occupants to evacuate on their own.

Concentrations of population should be avoided within 1,000 feet of pipelines, such as stadiums and dense housing.

New development along a pipeline should be designed so that emergency vehicle access to the pipeline is possible. In other words, roads and driveways should be designed to be used by emergency vehicles for access to the pipeline. Buildings and fences should not block emergency access to a pipeline. Fences should include gates that can be entered by emergency vehicles.

The Wyoming County SALDO addresses some gas industry activities but is not allowed to regulate as many aspects as a zoning ordinance is allowed to address. The SALDO requires the following:

- Gas compressor stations must be set back a minimum of 750 feet from an existing school, place of worship, hospital or occupied building. Many model ordinances recommend 1,000 feet. Compressor stations must also be fenced and enclosed within a noise-reducing structure.
- Information must be submitted on new pipelines.
- A series of standards were enacted to reduce risks from pipelines. Any new residential, business or institutional building must be setback 100 feet from the right-of-way of a pipeline, including gathering lines. Other buildings must be set back 50 feet.
- A “consultation zone” within 200 feet of the right-of-way of a pipeline is established for new development proposals. Within the 200-foot zone, a developer is required to discuss the project with the pipeline operator. If a development will include a substantial density within

500 feet of the right-of-way of a pipeline, then the developer must propose mitigation measures to reduce risks. For example, business parking areas might be placed closer to a pipeline if the building itself is to be placed further away.

Some model ordinances recommend that the “consultation zone” be increased to 660 feet on each side of a major pipeline. The greater setback is particularly important for a large-diameter high-pressure transmission line, which can have wider impacts in the event of an emergency.

Distances from pipelines that have high capacities and high pressures should be higher than the setbacks discussed above. Research conducted by the Gas Research Institute, as illustrated below, found that larger capacity high-pressure transmission pipelines can create risks to persons within 1,000 feet or more on either side of a pipeline.

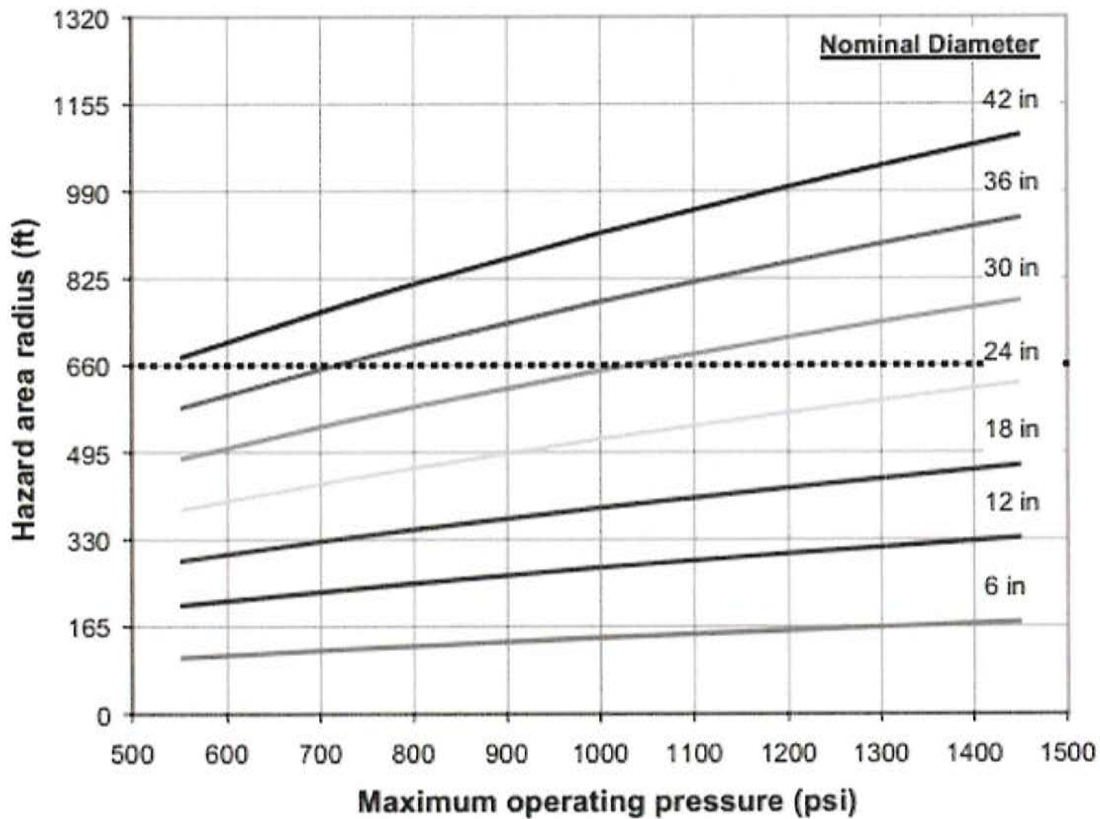


Figure 2.4 Proposed hazard area radius as a function of line diameter and pressure.

THE PLAN FOR TRANSPORTATION

The locations and types of roads influence the directions and types of development. The overall goals are to maximize safety and avoid congestion problems. The large increases in truck traffic that result from gas industry operations must be addressed. In addition, it is essential to meet transportation needs in a way that does not harm the environment and does not harm the livability of residential areas and the pedestrian accessibility and historic character of the downtowns.



Road Classifications

Road patterns and access from development should be planned according to the function each road is intended to serve within the overall network. Roads are classified by three major types: Arterial Roads, Collector Roads and Local Roads.

Arterial Roads – Arterial roads provide access between major commercial developments and different towns. Arterials are designed for high volumes of traffic at moderate speeds. Examples of arterial roads include Routes 6, 29, 309, 11, 92 and 87.

Collector Roads – Collector roads provide connections between arterial roads, connect residential neighborhoods together and gather traffic from local roads. Collector roads are intended to provide for moderate volumes of traffic at low speeds. Examples include Routes 307, 187 and 267.

Local Roads / Streets – Local roads / streets provide direct access from many adjacent properties, and channel traffic towards collector roads.

Traffic Volumes and Commuting Patterns

The following vehicle counts are PennDOT estimates of average daily traffic volumes for major roads in Wyoming County as of 2013. The most heavily traveled road segment was Route 6 north-west of Tunkhannock Borough.

Route 6, in Laceyville - 6,200
Route 6, west of Meshoppen - 6,200
Route 6, east of Meshoppen - 7,900
Route 6, north of Route 87 - 10,000
Route 6, east of Route 87 - 14,000
Route 6, north of Bus. Route 6 - 17,000

Bus. Route 6, Downtown Tunkhannock - 8,600
Route 6 bypass - 11,000
Route 6, east of Tunkhannock - 12,000
Route 6, east of Route 92 - 7,500
Route 6, west of Factoryville - 7,700
Route 87, west of Route 6 - 4,300
Route 29, south of Susquehanna Co. - 3,400
Route 29, north of Tunkhannock Borough - 4,900
Route 29, north of Route 6 bypass - 8,300
Route 29, south of Route 6 bypass - 7,500
Route 29, west of Route 309 - 2,300
Route 309, north of Luzerne Co. - 7,800
Route 92, south of Tunkhannock Borough - 4,900
Route 92, north of Luzerne Co. - 2,900
Route 11, north of Nicholson Borough - 2,200
Route 11, south of Nicholson Borough - 3,200
Route 11, north of Route 6 - 4,200

According to Census data, approximately 52 percent of employed Wyoming County residents work in Wyoming County. Most of the remaining residents commute to Lackawanna or Luzerne Counties. At the same time, thousands of residents commute into Wyoming County for work, primarily at Procter and Gamble or in the gas industry.

Work with PennDOT and adjacent Property owners to address the most crash-prone intersections.

In 2013, 371 vehicle crashes were reported within Wyoming County, an increase of 14.1% from 325 accidents in 2009. The following intersections were the most crash-prone in Wyoming County from 2011 to 2013, as compiled by PennDOT. The list includes only “reportable” crashes (required to be reported to PennDOT), such as those involving a death, an injury or towed vehicle(s). Therefore, there may have been many more accidents at various intersections that were less severe and, therefore, are not shown on the list. It is significant that some of the highest volume intersections do not appear on the list, such as the intersection of Route 29 and Tioga Street and the intersection of Routes 6 and 87.

The most crash-prone intersections are concentrated along Routes 6/11 in the eastern part of the County, and along Route 29 in Eaton Township and Tunkhannock Borough. The eastern portion of Routes 6/11 is currently being resurfaced by PennDOT, including improved shoulders and better pavement markings, which may improve safety. PennDOT is also upgrading traffic signals along Route 6 at Kemmerer Avenue and College Avenue.

Road Intersection	Number of Reportable Crashes 2011 Through 2013
Route 6 Bypass/Route 29/Railroad Crossing (generally signalized, but is unsignalized at Riverside Park entrance nearby)	16
Route 6/11/Route 107 (awkwardly aligned unsignalized intersection)	8
Route 6/Vosburg Rd. (signalized, but is close to another signalized intersection; area of high truck traffic and prone to fog)	8
Route 87/SR 4002/Jaynes Bend Road (west of Susquehanna River)	8
Route 6/Connection to Main Street at west end of Laceyville	7
Route 6/Kemmerer Avenue/SR 1035 Connection to College Avenue in Factoryville (signalized)	5
Route 11/Tunnel Hill Road (T-shaped intersection with turn lanes)	5
Route 29/Sugar Hollow Road (SR 3003)	5
Route 29/Frear Hill Road (north of Walmart)	5
Route 29/Walmart Access Drive (signalized)	5
Route 29/E. Harrison Street (two blocks north of Tioga Street in Tunkhannock Borough, 2 blocks north)	5
Route 29/Meshoppen Creek Road (SR 4008) (SR 1006) (SR 4008 enters from the west at an awkward angle.)	5
Route 29/Route 309 (awkwardly aligned intersection)	4
Route 29/Keelersburg Road (SR 2007)	4
Route 29/Route 292	4
Route 29/Church St. (one block north of Tioga Street in Tunkhannock Borough)	4
Route 6 Ramps Merging With Route 6/11	4
Route 6/Kim Avenue (east of State Police station driveway)	4
Route 11/Station Hill Road (north of Route 92 bridge in Nicholson) (awkward set of intersections and ramps)	4

From 2010 to 2013, PennDOT reported two fatalities and nine major injuries from crashes, in addition to moderate and minor injuries. The main pattern is the number of major crashes along Route 6, including: a) a fatality at SR 1001 northeast of the Tunkhannock Creek bridge and b) a number of major injuries, including near the Routes 6/11 merge, at the Routes 6/92 intersection, and at the Routes 6/107 intersection. The severity of injuries typically increases with higher traffic speeds. The majority of crashes with moderate injuries were along Route 6 and Route 29.

Route 6 is currently being reconstructed through Factoryville and Clinton Township and adjacent parts of northwestern Lackawanna County, which will result in many safety improvements.

One important note is that some intersections become crash-prone simply because of the sheer volume of traffic, which increases the likelihood of driver errors. Other intersections might be made less crash-prone through physical improvements.

Seek cost-effective solutions for problem road segments, in cooperation with PennDOT and adjacent landowners/developers.

Many roads are seeing much more traffic and more truck traffic than the road was ever designed to handle. Many rural curving, narrow and steep roads are difficult or impossible to improve because of the close proximity to homes, historic buildings, steep cliffs, creeks and wetlands. Motorists may also seek quicker routes through local residential streets, which can create noise and safety problems.

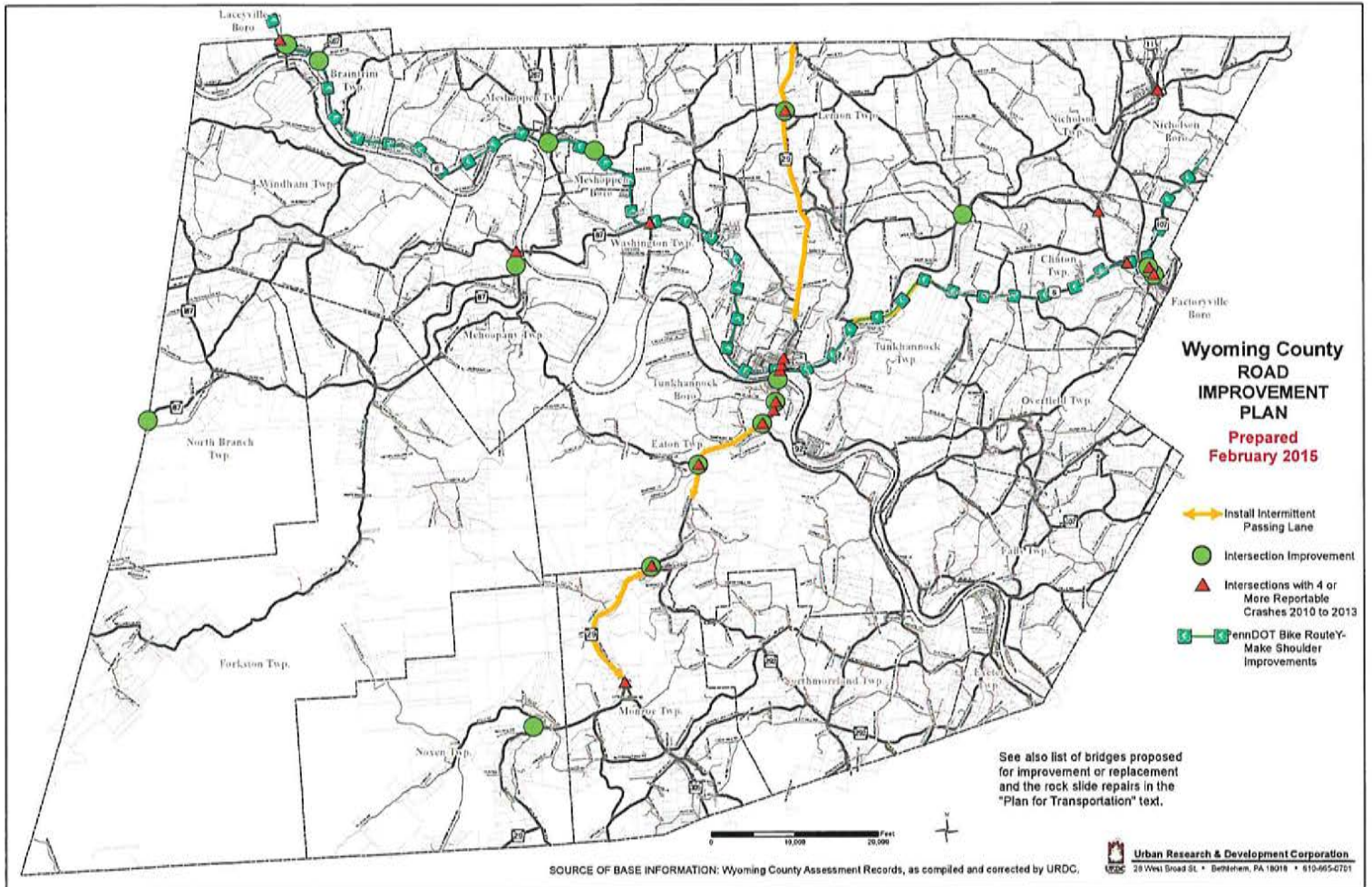
Many developments do not include any road or driveway interconnections, which requires a driver to go back onto a main road to travel from one subdivision to an adjacent subdivision, or from one commercial business to an adjacent commercial business. While such design helps to reduce volumes and speeds on residential streets, it allows for few alternative routes. The road network should provide at least two methods to move between any two areas so that no one route becomes congested, and so that alternatives are available in case of construction or accidents.

The Road Improvement Plan on the next page illustrates the locations of many of the improvements proposed in this chapter. Types of improvements proposed include the following:

- Add Passing Lanes and Left-Turn Lanes – To allow safer and smoother traffic flow at a modest cost, adding a passing lane for limited distances on major roads that currently have only one travel lane in a direction for long distances would be very beneficial. On hills, the additional lane could serve as a truck climbing lane. In addition to placing a second lane to accommodate traffic volume on a hill, trucks often need to travel at very slow speeds on steep downhills, and the second lane would be valuable to allow passing in the area.

A left-turn lane can be valuable to reduce traffic backups. As an alternative, a wide, improved shoulder at an intersection would allow passing on the right, which is now legal in Pennsylvania.

Route 29 in particular needs additional passing lanes, turn lanes and improved shoulders along the northern and southern parts of Wyoming County. Route 29 receives some of the greatest impacts from gas industry truck traffic. As described below, a turn lane would be beneficial on southbound Route 29 at Keelersburg Road. Passing lanes would be beneficial along Route 29 at various locations between Tunhannock Borough and the Susquehanna County line.



Route 6 would benefit from a passing lane along portions of segments where the road is only one lane in each direction, such as near the intersection of Route 6 and Billings Mill Road/SR 1001, which is northeast of the Tunkhannock Creek bridge. The western end of the Route 6 Bypass would benefit from an eastbound passing lane.

Passing lanes would also be beneficial on a few long stretches of straight highway along Route 29. The County might consider asking PennDOT to reinstitute the previously-allowed ability to pass a vehicle by going into the opposing lane.

A “slip lane” can also be useful at very busy intersections. A slip lane involves moving a right turn lane a short distance away from an intersection, with a separation by a median. The slip lane separates right turns from the intersection.

- Seek alternative routes to reduce trunk traffic in Tunkhannock – An excessive number of trucks pass north-south through the center of Tunkhannock Borough. The County and Borough should work with gas companies to complete improvements to a set of east-west roads from Route 29 to Route 6 to allow an increase in the current 10-ton weight limits. The increase would provide an alternative route to avoid downtown Tunkhannock and other residential areas and to reduce truck traffic on the hills of Route 29.
- Improve intersection in Noxen – The intersection in the village of Noxen where Route 29 turns east should be examined for possible widening or realignment.
- Improve Rt. 29 at Meshoppen Creek Road – The intersection of Meshoppen Creek Road (SR 4008 and SR 1006) with Route 29 in Lemon Township needs to be realigned and may eventually need to be signalized.
- Improve Rt. 309 intersections – The intersections of Route 309 with SR 2018 in Beaumont and with SR 2002 in Monroe Township should be realigned with turn lanes and sight distance improvements. The intersections are awkwardly aligned at the five-way intersection of Route 309 and SR 2018 / Plattsburg Road.
- Add left turns on Route 6 – The 2011 “Marcellus Shale Freight Transportation Study” recommended that left turn lanes be added to serve intersections along Route 6 in Wyoming County, including the following locations: a) 2nd St. in Laceyville, b) Route 367 east of Laceyville, c) Route 267 in Meshoppen, and d) Meshoppen Creek Road east of Meshoppen.
- Improve Sight Distances – Knolls along roads can limit sight distances of oncoming traffic, which reduces reaction times. Examples of locations that would benefit from grading to improve sight distance improvement include: a) Route 29 and Meshoppen Creek Road, and b) Route 92 and Avery Station Road. In addition, sight distance at the intersection of Nimble Hill Road and Route 87 should also be improved to increase visibility to the south.

- Improve Rt. 29 south of Rt. 6 Bypass – In 2012, a study was completed entitled “Determination of Safety Needs for the Transportation System of Pennsylvania’s Northern Tier”. Among 23 priority locations for safety improvements, only one was within Wyoming County. The greatest concern in the County (fifth most serious in the region) was the Route 29 corridor from the Route 6 bypass to Keelersburg Road/SR 2007, which includes an area with most of the commercial and residential growth in Eaton Township.

In 2010, Eaton Township worked with PennDOT’s Local Transportation Assistance Program (LTAP) to list a set of priorities for improvements. Some of the concerns resulted from additional truck traffic from water withdrawal sites. The highest priorities were:

- 1) Add traffic signals at the intersection of Route 29 and Eaton Road/SR 3005 (just south of the river) and at the intersection of Route 29 and Frear Hill Road (just north of the Walmart)
- 2) Improve the intersection of Route 29 and Sugar Hollow Road/SR 3003, which is now proposed for State funding.
- 3) Add a left-turn lane on southbound Route 29 at Keelersburg Road/SR 2007.

Mid-level priorities for improvement included the intersections of Route 29 at the Weis Markets and the intersection of Routes 29 and 292. Lower level concerns were at the following intersections: 1) Keelersburg Road and Wyoming Sand Road, where increased sight distances would be desirable, and 2) Keelersburg Road and Thurston Hollow Road, where a possible realignment was discussed to create a 90-degree intersection.

Additional municipalities should seek participation in the LTAP program to identify cost-effective road improvements.

- Improve shoulders in roads – Many roads would also benefit from improved shoulders, to provide a margin of error during icy conditions and to allow room for vehicles to pull off of the road, when necessary. Some shoulders have been damaged by repeated flooding. Wider and smoother shoulders also can benefit bicyclists and pedestrians. Shoulders have been improved on portions of Route 6, but other portions still need improvement. Shoulders along Route 6 are particularly important because of the high traffic volumes, the fact that the road connects many population centers, and because a State-designated bicycle route (Route Y) runs along the highway. The State bicycle route designation may attract riders from outside the area who are not familiar with local hazards, such as poor shoulders. The need for improved shoulders for bicycling is also discussed in the Community Facilities and Services Plan section.
- Reduce Speeding – “Traffic calming” (as opposed to allowing high speeds) is very important along through roads in the downtowns and residential areas. For municipalities that have local police protection, enforcing speed limits without the ability to use radar is difficult. A bill has

been introduced in the State Legislature to allow full-time municipal police officers to use radar to enforce speed limits.

- Improve Signal Timing and Coordination – At signalized intersections, a key way to maximize capacity of the current road system is to refine the timing of traffic signals. Modern electronic controls can vary signal timing based upon actual traffic at various times of the day. Also, modern signals can include devices allowing the signals to turn green when activated by approaching emergency vehicles.
- Require developers to improve intersections – Wherever feasible, developers of new projects should be required to complete improvements to immediately adjacent road segments, or at least to provide the needed right-of-way. In some cases, turn lanes, wider shoulders or a less sharp turning radius could increase traffic safety and greatly reduce congestion. Developers should also provide needed turn lanes and traffic signals whenever feasible.

Take the initiative in municipal funding of the engineering for needed road improvements.

Competitive federal funds are available through the Congestion Mitigation and Air Quality Program (CMAQ) for road improvements of modest cost proposed by municipalities and Wyoming County. Applications are submitted to the Northern Tier Regional Transportation Advisory Committee and are ranked in a competitive manner for benefits compared to costs. In most cases, a municipality is expected to spend funds up-front for engineering and right-of-way acquisition in order to make the project ready for construction. The program may then reimburse the municipality for 80 percent of the total project cost. The program is particularly useful to add traffic signals or turn lanes.

A new State program named “Green Light Go” offers funding to install and upgrade traffic signals along State roads. Funds raised from PennDOT’s Automatic Traffic Signal Enforcement Program are also being made available statewide for a wide range of intersection improvements.

More detailed engineering studies are needed to design specific improvements to the problem intersections and road segments. It is important for municipalities to take the lead in identifying needed improvements on State roads. An improvement to a State road is much more likely to be funded by PennDOT in a timely manner if the municipality or a developer takes the initiative to pay for the initial engineering of improvements. A project is even more likely to receive State funding if the adjacent property owners donate the needed right-of-way. In such case, the value of the engineering and the donated right-of-way count as a “local match” that allows a project to receive priority for State funding. Also, donated right-of-way avoids the time-consuming and cumbersome State process to purchase right-of-way.

A project is also more likely to be funded in a timely manner by PennDOT if a portion of the construction costs are provided by a municipality or a developer.

Wyoming County and municipalities should consider using a portion of the annual impact fees from the gas industry to assist in funding the engineering of needed transportation improvements. Two or more adjacent municipalities that are affected by a road improvement could also share in the up-front engineering costs.

As part of new subdivisions, many townships encourage subdividers to provide additional right-of-way to meet future needs. For example, a 33-foot wide right-of-way for an existing road may be increased to 50 feet (25 feet on each side). However, along State roads, PennDOT often will not accept the additional right-of-way. Therefore, at times, the municipality may need to temporarily accept the additional right-of-way until PennDOT realizes that the added width is needed. The adjacent landowner would still be responsible for mowing and other maintenance. Another option is to require that the additional right-of-way be set aside for future dedication if it is determined to be needed. A person proposing a subdivision with little new traffic may be able to argue that the project does not create any need for additional right-of-way. However, the argument cannot be made for subdivisions involving multiple new lots.

Municipally-owned bridges can also be eligible for funding through PennDOT if the bridges are structurally deficient.

Carefully manage access of traffic onto major roads, especially Routes 6, 11, 29, 309 and 92.

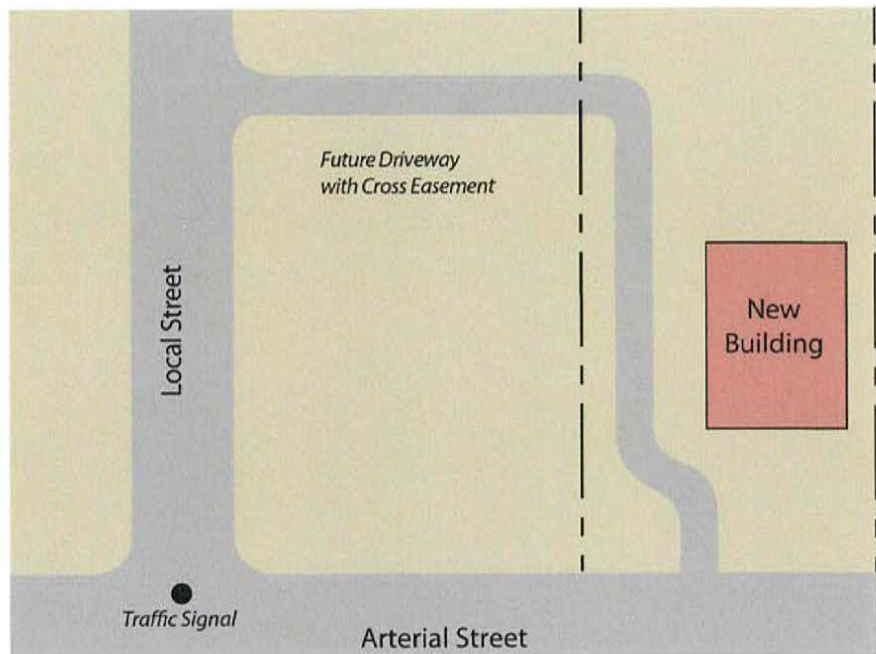
The number, design and location of driveways onto major roads must be carefully controlled. PennDOT controls the actual engineering of a driveway onto a State road after a lot is created or a use is allowed by the municipality. However, the municipality has the primary control over where different uses are allowed and how land is allowed to be subdivided. The authority can be used to control traffic access management onto major roads. Municipalities also have some legal authority beyond PennDOT requirements to control access onto State roads for safety reasons if the municipal decisions do not conflict with PennDOT requirements.

Municipalities should also establish minimum sight distance requirements for driveways that enter onto Township or Borough roads. Many municipalities base those requirements upon PennDOT standards that apply to driveways onto State roads.

Along major roads, driveways should enter onto a less-traveled side road where practical, to reduce the number of turning movements directly onto major roads. The method works best when uses are able to gain access to a traffic signal or an intersection with turn lanes. Where sight distance is a problem, two or more adjacent lots should share a driveway entrance (with an easement and maintenance agreement) so that traffic can enter at a point with good sight distance. Homes along heavily traveled roads should include a turnaround within the lot so that vehicles do not need to back out onto the road.

Municipalities should seek interconnections between adjacent non-residential uses along major roads, including interconnected parking lots or use of a rear service road. Interconnections allow motorists to visit more than one use without needing to enter and reenter major roads. Interconnections can be required for each project that seeks development approval, but actually providing the connections between adjacent lots may require some time. If an existing adjacent use will not allow an interconnection, then the new development should be required to provide the link as a stub and an easement. The stub can then be opened in the future when any development approval is sought on the adjacent lot.

Cross-easements in Commercial Districts



Where cross-easements are provided on adjacent commercial lots, over time they can allow multiple lots to have access to a traffic signal for left-turns.

PennDOT has prepared a set of model access management regulations that can be incorporated into the County and municipal Subdivision and Land Development Ordinances (SALDOs). The provisions are particularly important for municipalities that have not enacted zoning regulations.

Address trucking impacts on roads.

In the past several years, the process of hydrological fracturing to release deep resources of natural gas has created new burdens on the road system. Heavy trucks that are carrying drilling equipment, water, sand, lubricants and other materials have taken a tremendous toll on area roads. The drilling rigs are particularly heavy. A single wellhead can result in hundreds of truck trips. The number of needed truck trips can be greatly reduced when water is reused on-site using an impoundment or tanks or when temporary water pipelines are installed. (Note - In Lycoming County, a private water company is installing water pipelines to reach some of the highest concentrations of well sites.) Heavy truck traffic can also occur from hauling timber and other materials.

The 2011 “Marcellus Shale Freight Transportation Study” reported that many roads with large volumes of heavy trucks related to the shale industry are in need of resurfacing every 7-8 years instead of the customary 15 years. Also, many roads were never constructed with a sufficient

compacted stone base under the pavement to handle heavy truck traffic and/or with proper drainage and shoulders to protect the edges of the pavement.

The gas industry has responded by making major improvements to many roads. The improvements often involve complete reconstruction in order to handle the weights of trucks. However, the improvements often occur within the existing public road right-of-way, which may not resolve problems of curves and poorly aligned intersections.

PennDOT has responded by placing 10-ton limits on many secondary State roads in the region. State regulations do not typically allow the weight limit to be used on the primary traffic routes, such as Route 6, because they are intended to handle tractor-trailers (up to 40 tons) and trucks of similar weights.

PennDOT maintains a website that shows the weight limitations at www.papostedroads.pa.gov. A company that wishes to haul heavier loads needs a PennDOT permit. The permit typically requires that the company sign an agreement and post financial security to make sure that any damage to the road will be repaired. Exceptions are provided for situations when a business or farm can only be reached via a weight limited road. PennDOT also may restrict use by overweight vehicles during the freeze/thaw cycle, when roads are the most vulnerable to damage.

Similar problems exist on township and borough roads. State law requires that municipalities follow procedures similar to PennDOT. Before financial security can be required by haulers, the municipality must first complete an engineering study of the existing conditions and a traffic study. The municipality then establishes a weight limit on a road by ordinance and with posted signs. Operators of heavy trucks then can be required to post a bond, which the municipality can collect upon if damages occur. The companies operating the trucks must enter into “excessive road use agreements” that require that the company pays a proportional share of any damage to the road.

Many municipalities find that the weight limiting process can be expensive, particularly because of the expense of the up-front analysis. In some cases, municipalities and companies voluntarily enter into road use agreements without completing the full PennDOT process. In other cases, gas companies have agreed to reconstruct a State or municipal road in advance, which greatly reduces the threat of road damage from heavy loads and which avoids a need to post financial security.

Seek funding for projects through the regional transportation planning system.

The Northern Tier Regional Planning and Development Commission (NTRPDC) works with PennDOT to complete transportation planning for the region. Wyoming County's representatives participate in these efforts. A Long Range Transportation Plan is currently being completed. Every two years, a Transportation Improvements Program (TIP) is updated to allocate the funds that are expected to be available for various projects. In 2013, the Legislature approved a bill to increase transportation funding throughout the State.

Each municipality can propose projects for funding on the TIP. The projects that are most likely to be funded are those that:

- a) involve a deficient bridge,
- b) have the most cost-effective improvements in safety and congestion relief,
- c) promote the attraction or expansion of a major employer or downtown revitalization project, and/or
- d) involve a municipality taking a leadership role in proposing the project by hiring an engineer to prepare a detailed study and cost estimate and seeking to obtain the needed right-of-way.

As part of a long-term trend, almost all available State and Federal transportation funds that are available in Wyoming County are allocated for reconstruction and replacement of bridges. Many bridges are in marginal structural condition (which may require weight limits) or are too narrow. Also, several projects are proposed for State funding to address slopes along major roads to avoid rock slides.

Most major bridges are controlled by PennDOT. PennDOT reports that 26 bridges of over 20 feet length in Wyoming County are controlled by the County or municipalities. Of the 26 bridges, as of December 2014, 3 were closed, 6 were posted with weight limits, and 12 were classified as structurally deficient.

The following three County-owned bridges are of concern, based upon the latest engineering inspection reports as of 2015:

- T-373/Brides Drive bridge over Buttermilk Creek in Falls Township - has moderate cracks and advanced scour in areas. Complete replacement is recommended.
- T-362/Creek Flats Drive bridge over Falls Creek in Falls Township - deck is in poor condition and replacement of the deck is recommended.
- T-475/Bunnell Road bridge over Riley Creek in Meshoppen Township - While parts of the bridge were improved, the steel superstructure is in poor condition and is recommended for replacement.

Projects Currently Proposed for Funding

As of 2014, the “Northern Tier Transportation Improvement Program 2015-2018” listed the following projects:

<u>Location</u>	<u>Type</u>
E. Lemon Rd./T-116 bridge (Lemon and Tunkhannock Twps.)	Bridge Removal and construction of a turnaround
U.S. 6, PA 292, SR 2012, SR 2010	Resurface Portions
U.S. 6 over College Av./SR 1017 (Clinton Twp. and Factoryville)	Bridge Replacement
SR 6 slide repair (Braintrim and Washington Twps.—slope repair)	Restoration
SR 11 over SR 92 (Nicholson)	Bridge Rehabilitation
SR 29/SR 3003 Sugar Hollow Rd. (Eaton Twp.)	Safety Improvement
SR 29 slide repair (Noxen Twp.)	Restoration
SR 29 slide repair (Eaton Twp.)	Restoration
SR 87 over Miller Brook (North Branch Twp.)	Replace/Rehab
SR 87 slide repair (North Branch Twp.)	Restoration
SR 87 slide repair (Mehoopany Twp.)	Restoration
Avery Station Rd. bridge over Oxbow Creek (Lemon Twp.)	Replace/Rehab
Avery Station Rd./SR 1009 over Meshoppen Creek	Replace/Rehab
SR 1014 bridge over Lake Sheridan outlet (Nicholson Twp.)	Bridge Replacement
College Av./SR 1017 bridge over Tunkhannock Creek (Factoryville)	Replace/Rehab
SR 1029 bridge over Tunkhannock Creek (Nicholson Twp.)	Bridge Replacement
SR 3001 over Little Mehoopany Creek (Windham Twp.)	Replace/Rehab
Main St./SR 3002 over Bowman’s Creek (Noxen Twp.)	Bridge Rehabilitation

<u>Location</u>	<u>Type</u>
Wilson Rd./SR 3002 over Stone Run (Noxen Twp.)	Bridge Rehabilitation
Vosburg Rd./SR 3007 bridge over Reading, Blue Mountain, & Northern Railroad (Washington Twp.)	Bridge Rehabilitation
SR 4001 slope repairs (Windham Twp.)	Restoration
Church Rd., T-113 bridge over Bowman's Creek (Eaton Twp.)	Bridge Rehabilitation

Together, the projects in the draft NTRPDC TIP and 12-Year Program require total federal, state, and local funding of almost \$35 million, as follows:

• FY 2015:	\$ 9,923,000
• FY 2016:	\$ 5,033,000
• FY 2017:	\$ 6,315,000
• FY 2018:	\$ 4,212,000
• 2 nd 4 years (FY 2019–22):	\$ 6,425,000
• 3 rd 4 years (FY 2023–2026):	\$ 3,000,000
TOTAL	\$ 34,908,000

The Northern Tier Long-Range Transportation Plan proposes the similar projects on the following bridges in Wyoming County in later years. Almost every project listed in the Long-Range Transportation Plan is a bridge project.

- Route 11 bridge over Tunkhannock Creek
- Route 29 bridge over edge of Lake Carey
- Route 87 bridge over Little Mehoopany Creek
- Route 92 bridge over Monroe Creek
- Route 92 bridge over Fitch Creek
- Route 292 bridge over Whitelock Creek
- Fieldbrook Creek bridge in Nicholson Township
- SR 1025 bridge over D&H Railroad
- SR 2001 bridge over South Run Creek
- Mill Creek bridge
- SR 2007 bridge over tributary to Susquehanna River
- SR 2012 bridge over Tunkhannock Creek
- SR 2021 bridge over Beaver Creek
- SR 2031 bridge over outlet to Lake Winola
- SR 3001 bridge over Roaring Run
- SR 3001 bridge over Kasson Brook
- SR 3003 bridge over Sugar Hollow Creek

- SR 4002 bridge over Little Mehoopany Creek
- SR 4006 bridge over Little Tuscarora Creek
- SR 92 bridge over Martins Creek
- SR 1009 bridge over Meshoppen Creek
- SR 2033 bridge over South Branch of Tunkhannock Creek
- SR 3007 bridge over railroad
- Fox Road bridge over South Branch of Tunkhannock Creek
- E. Main St. bridge over Tuscarora Creek

Work to address flooding damage to roads.

Many roads and bridges suffered severe damage from flooding in recent years. The following examples are roads that are typically affected by severe flooding: Route 29 in Noxen, Route 29 south of the Susquehanna River, Route 187, Route 267, Keelersburg Road, Sand Plant Road, SR 3001 in Forkston, SR 3002 in Noxen, and Eaton Road.

The Wyoming County Hazard Mitigation Plan lists many improvements to roads that were suggested by municipalities to address flooding and erosion problems. Improvements are typically smaller in scale than the projects listed in the regional Transportation Plan and Improvement Programs.

Promote Route 6 as a Scenic Byway.

The PA. Route 6 State Heritage Area is managed by the Route 6 Alliance. Efforts are underway to pursue National Scenic Byway designation. A Corridor Management Plan is being prepared, as of 2015, to seek the federal designation. The Plan will recommend measures to preserve the special scenic, natural, recreational and historical resources along the corridor. A Scenic Byway designation is intended to be based upon grass-roots support, including letters of support from municipalities.



There are no federally-mandated land use regulations tied to a Scenic Byway designation, except that new billboards would have to be prohibited along the portions of Route 6 that are within the designation. Standardized blue “tourist oriented directional signs” are allowed, provided the signs are not prohibited by local ordinances. The signs are used to direct visitors to local attractions, such as campgrounds.

A scenic byway designation is intended to promote tourism and economic development, and can open opportunities for grant funding, such as to construct a visitors center.

The Management Action Plan for the Route 6 corridor is also being updated, and a Historic Preservation Strategy is being prepared.

Maintain air transportation services.

Sky Haven is a privately-owned airport located in Eaton Township, east of Route 29. Sky Haven has a runway 3,100 feet long, fuel service and hangars for private aircraft. The owner has expressed a desire to install instrument approach capabilities, to allow operations in inclement weather. The owner has also expressed an intent to install additional hangers and to pave the taxiway.

Commercial scheduled air service is available at the Wilkes-Barre / Scranton International Airport in Avoca. Seamans Field is an airport with a runway 2,500 feet long that is northeast of Factoryville in Lackawanna County. Some residents also use the Greater Binghamton (NY) Airport.

Promote carpooling.

One park and ride lot is located in Tunkhannock Borough, northwest of the Route 29/Route 6 bypass intersection. The lot needs better signage to indicate that the lot is free public parking.

Federal or State funds should be sought for a second park and ride lot. Park and ride lots are the easiest way to encourage carpooling to work. Nearby park and ride lots in Lackawanna and Luzerne Counties should also be promoted as locations with public bus service. The need for park and ride lots is driven by the high numbers of local residents who work outside of the region. A second park and ride lot could be valuable in the Factoryville or Dalton areas, along Route 309 in the southern part of Wyoming County or in the Dallas area. Most other existing park and ride lots in Northeastern Pennsylvania are located along interstates and the Route 6 expressway and are not close to Wyoming County.

Zoning incentives could be offered to developers of commercial projects to provide parking areas that could be used as park and ride lots, or to allow use of excess portions of proposed parking lots for carpoolers. Allowing public parking would be feasible because the peak parking demand for a retail use is on weekends, not during weekday mornings and afternoons, which is the main demand for a park and ride lot. One incentive for developers to allow public parking is that persons parking in the lot may also shop at the stores and visit restaurants before and after parking for the day.

Promote public transit use.

Many persons need public transit because they are physically unable to drive. Also, the Census reported that in 2010, five percent of Wyoming County households did not have access to a car, and many households only have a single car available to serve multiple persons.

Flexible "paratransit" service is available through Susquehanna-Wyoming Transportation, which is administered by the Trehab Agency. The service is available to anyone and should be further publicized. However, subsidies are mainly available to older persons, persons on medical assistance, persons with disabilities, and clients of certain human service organizations. Therefore, the costs are high for most members of the general public. Although the purposes of the trips are not restricted, the system is particularly valuable to help persons reach medical offices, human services and other necessary services. Door-to-door services are provided, although advance reservations are required.

A similar system is operated in adjacent counties by other agencies.

Wyoming County has no fixed route public transit services. The COLTS bus system extends to Dalton and Clarks Summit and connects to the urbanized areas around Scranton. If COLTS would extend a bus line to Keystone College, the service could provide a valuable link for Wyoming County residents, and the paratransit service could feed into COLTS for persons able to ride regular buses.

The Luzerne County transit system extends to Dallas and connects to the Wilkes-Barre area.

Regularly scheduled commercial intercity bus service is not available within Wyoming County. Residents must travel to Wilkes-Barre, Scranton or Binghamton (NY) to access long-distance bus service.

Make full use of rail service.

Rail service is particularly valuable to reduce the amount of tractor-trailer traffic. Rail services are particularly valuable to bring fracking sand and pipeline supplies into the area supplies. A “trans-load” facility to transfer sand from the railroad to trucks is proposed in Tunkhannock Township.

The main rail line is owned by Norfolk-Southern and runs parallel to the Susquehanna River from upstate New York to the Scranton/Wilkes-Barre area. Portions from Athens south to Mehoopany are operated by the Lehigh Valley line, and portions south of Mehoopany are operated by the Reading, Blue Mountain and Northern Railroad. The Canadian Pacific Railroad operates a north-south rail line that runs from Binghamton to Nicholson to Scranton. The line is being acquired by Norfolk-Southern.

Promote safe bicycle and pedestrian travel.

The Community Facilities and Services Plan chapter addresses recreation trails for bicycling and walking. In addition, bicycling and walking can also be important methods of transportation.

Efforts are needed to improve opportunities throughout the region for safe bicycle and pedestrian travel. In major new developments along the more heavily traveled roads, sidewalks, asphalt paths or improved shoulders could be required. However, where sidewalks or paths are not practical, new development should include flat, cleared grass pathways along roads that are suitable for safe walking.

Wide and smooth shoulders are needed along major roads to serve bicyclists. Shoulders should be separated from the travel lanes by white lines to avoid conflicts between vehicles and bicyclists and to discourage speeding by motorists.

COMMUNITY FACILITIES AND SERVICES PLAN

Community facilities include parks, fire stations, municipal buildings, public schools and similar facilities. Community services include police and fire protection, sewage and water services, and municipal government.



Make sure that emergency service providers have all needed resources.

Volunteer fire and emergency medical providers have difficulty maintaining sufficient trained volunteers available when needed. Typically, the most severe shortages occur during weekday mornings and afternoons, when many volunteers are busy with full-time jobs, which may take them far from the area they serve.

The County, municipalities and other employers should provide incentives for employees to serve as emergency volunteers. For example, a municipality could encourage employees to serve as volunteers, and allow the volunteers to leave work when needed to respond to an emergency. In some cases, the employee could be allowed to respond in a municipal vehicle when working at a location away from their own vehicle. Employers could also provide employees with some paid time off to complete needed training. The employer can also benefit from knowing that highly trained persons are available nearby with necessary gear to deal with an emergency in the employer's own facility.

State law allows municipalities to assess a special real estate tax rate on property that is directly used for fire protection. This type of tax spreads the property tax burden more uniformly, as opposed to the companies needing to seek donations. Also, the special tax rate can free volunteers from having to commit many hours in constant fund-raising activities and, instead, spend more time with their families or more time in needed training.

In parts of Pennsylvania, some fire companies have hired a paid firefighter to work in the station during the weekday daytime shift. The arrangement allows the initial fire engine and some of the volunteers to respond more quickly to the scene of the incident, without first having to travel to the fire station. A paid firefighter can also provide quick assistance in medical emergencies and may arrive before an ambulance arrives. The paid firefighter can also complete paperwork, equipment testing and maintenance work during the day, which reduces the burden on volunteers.

Most of the land in Wyoming County does not have central water service with hydrants that have sufficient pressure for firefighting. Therefore, convoys of water tanker trucks can be needed for a

major fire. Consideration should be given to installing additional dry hydrants at various locations in the County, which can allow a tanker truck to quickly connect to a hydrant and pump water from an adjacent water source, such as a pond.

Work with gas companies, municipalities, developers and other entities to minimize risk from gas industry activities.

The growth of the unconventional gas industry and other industries and the extensions of pipelines have created substantial new burdens on fire companies and emergency medical services. The risks can include fires, explosions, release of hazardous gases into the air, spills of polluted wastewater or hazardous materials onto the ground or into the water, and accidents involving trucks or trains carrying hazardous materials. Hazardous situations can occur at well sites, compressor stations, dehydration stations, pipelines, storage tanks, impoundment ponds, loading areas, and other facilities. Natural gas fueled vehicles also present new hazards. After one explosion in Pennsylvania, no one from the well drilling company was available at the incident site to direct firefighters because the workers had all left to seek medical treatment. Without a quick and well-informed response, incidents can threaten lives and the environment. For example, containment measures often need to be used quickly to prevent contaminants from reaching waterways or to contain a pollutant in one part of a waterway.

Many companies involved in gas operations have provided funding for training and equipment to address emergencies. Many of the companies offer on-site training programs so that firefighters can become familiar with company facilities before an emergency occurs. The Wyoming County Emergency Management Agency and the State Fire Training Academy have jointly offered specialized training to addressing emergencies. An elaborate training center for gas industry emergencies has been developed in Lycoming County, in association with Penn College of Technology.

The most frequent cause of pipeline incidents is from unauthorized excavation, which highlights the need for multiple warning signs and for strict compliance with the Pennsylvania One-Call “Call Before You Dig” program. In addition, under federal regulations, gas gathering pipelines in mostly rural areas are not required to add an odorant. Therefore, leaks are hard to detect. Local governments should request that companies add odorants whenever practical, even when not required.

State law now requires that an emergency contact number must be provided outside of gas industry facilities, and that an emergency response plan must be prepared by the operator for various facilities. A higher degree of transparency would be helpful within the industry so that emergency services have a better understanding of the risks.

The availability of firefighting foam is particularly valuable when dealing with fires that cannot be suppressed with water. For example, Lycoming County maintains a “foam bank” at fire stations in three different regions of the County.

While there are specialized services to respond to natural gas emergencies in Pennsylvania, the services and equipment may not be located close to the scene of an incident. Storage of hazardous materials in areas subject to floodwaters must be avoided. As of 2015, Pennsylvania law requires a new gas well to be setback 300 feet from a stream or a body of water.

Emergency evacuations need to be completed in a timely manner when a hazardous substance incident occurs. For instance, school buses or public transit buses should be available to quickly provide shelter and to transport persons and pets who are evacuated. Wyoming County is currently testing an emergency notification system. Residents can also be encouraged to provide their home and cell phone numbers and addresses to the 911 Center for emergency notification. Ideally, a system of "Reverse 911" should be available to allow the County's 911 Emergency Center to call the phone numbers of persons living within a certain area to provide a recorded notice of a hazard. The system is particularly important in Wyoming County because of the long distances between many houses, which would make notifying each resident very time-consuming. Also, providing notice to cell phone numbers would allow persons who are not at home to travel home to help evacuate children, persons with disabilities or other persons who cannot drive away.

Pipeline emergencies involve more than natural gas. Emergencies may also involve pipelines carrying gasoline and other hazardous liquids.

Zoning regulations are allowed to place reasonable restrictions on gas industry facilities other than pipelines. However, municipalities are not allowed to regulate operational matters that are controlled by the State. The Unconventional Gas Plan section of the plan document discusses ways that municipalities and the County could provide reasonable regulations of gas industry facilities.

Provide central water and sewage services in the most cost-efficient manner, with particular attention on providing central sewage service to areas with malfunctioning systems.

Central sewage service should generally be avoided in rural areas of the County unless needed to address a concentration of malfunctioning septic systems. New private sewage and water systems in isolated locations should generally be avoided because of concerns that small systems may not be financially viable and/or properly operated over the long-term. Where allowed, a new private water or sewage system should be designed to be incorporated into a larger public system in the future, where feasible. For example, easements should be provided to allow future connections from neighboring properties.

Lemon and Tunkhannock Townships are proposing to provide public sewage services to the homes around Lake Carey. The capacity of the system should be limited to avoid excessive amounts of development that could overload the many narrow roads around Lake Carey. Most area roads cannot be easily improved because of topography.

In some rural areas, lots with malfunctioning septic systems may actually be cesspools that predated modern septic system standards.

Most available state funding for sewage and water systems consists of low interest loans, as opposed to grants. However, a limited amount of grants may be available to assist low-income homeowners.

In some cases, no reasonable alternative is available to provide central sewage service to an area with failing septic systems. In such cases, providing central water service would be a partial solution. Central water would reduce the public health threat to the local residents while also providing additional room for residents to upgrade septic systems because they no longer would need to maintain an isolation distance from wells. Extensions of a public water system are also valuable for firefighting.

The following statements are required to be included in the Comprehensive Plan under State law:

1. This Plan is generally consistent with the State Water Plan and water resources planning of the Susquehanna River Basin Commission.
2. Certain lawful activities, such as extraction of minerals, are likely to impact water supply sources and are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities.
3. Commercial agriculture production and livestock operations may impact water supply sources.

Promote proper operation and maintenance of on-lot septic systems.

Most properties in the rural areas of the townships use on-lot septic systems. Public education is important to make sure that residents know how to properly take care of on-lot septic systems. Many residents have moved from areas with public sewers and do not understand septic systems. Property owners absolutely must understand the need to have a septic system pumped regularly (typically at least once every three years). If a system is not pumped regularly, the drain field will eventually need to be replaced.

In addition to education, enforcement is needed to make sure that inadequate or failing on-lot septic systems are repaired or replaced. Residents should be encouraged to have well water tested regularly and to report any contamination that has been found to the township. Well water results can be used to identify areas of failing septic systems.

In areas with a concentration of failing septic systems, a municipality should consider an ordinance that requires each property-owner to provide a receipt showing that their system has been pumped and inspected at least once every three years. The regulations are known as a Sewage Management Ordinance, which could apply within a defined district.

A municipal ordinance should require that every new lot to be served by an on-lot septic system must have two separate locations that are tested and approved for a septic drain field in case the first drain field used malfunctions. The back-up location should be required to be kept open and undisturbed, particularly to avoid compaction of the soil.

Work to protect water supplies.

Adequate water services must be provided and the quality of groundwater and creeks must be protected. For the vast majority of the County, drinking water supplies come from groundwater within the region, using public water supply wells or individual wells.

The underground geology greatly affects whether water supplies are vulnerable to contamination. Contamination can be extremely expensive to clean up and may require that a well be abandoned. The following recommendations should be carried out to protect water supplies:

- The central water systems should prepare, update and carry out Source Water Protection Plans to protect the quality of water near major water supply wells. A Source Water Protection Plan identifies the land areas around a well that are most likely to contribute to contamination of a water supply well or intake. The plan then recommends methods to avoid contamination in the identified areas, such as purchasing a conservation easement around the water supply to keep the land in open space or to limit the types or intensities of development. Water supply protection planning is particularly important for well sites in areas that are likely to see future development.
 - The primary area of concern is a 400-foot radius around a well. The secondary area of concern around a well is typically determined by a hydro-geological study.
 - The goal is to avoid uses near wells that are most likely to cause contamination. If a source of contamination cannot be avoided, then the goal is to make sure that structures and procedures are in place to contain and address any spills. Generally, industrial uses and uses of hazardous substances should be avoided within proximity to major wells. The uses with the greatest hazards include underground injection wells, pesticide dealers and distributors, land application of sewage sludge, mining and chemical manufacturers.
- Opportunities to combine acquisition of land for public recreation with purchase and/or preservation of public well sites should be considered. Where acquiring the land is not feasible, a "conservation easement" could be donated or purchased that would prevent most types of development while the land remains privately owned.
- High-intensity development should be prohibited in areas that are particularly important as water supplies. Instead, in key locations, land uses that have a low percentage of the lot being covered by buildings and paving should be promoted.
- Each water system needs excess water supplies to deal with possible drought conditions and the threat of contamination. Ideally, each water system would have wells that are constructed but held in reserve until needed and/or have an emergency connection to a system that has plentiful excess capacity. Every water system must be able to serve its customers if one or

more water sources becomes unavailable. Well sites should also be sufficiently scattered so that a contamination problem does not threaten more than one well. The amount of storage is also critical to avoid shortages in case a short-term problem arises, such as a mechanical breakdown.

- Wherever feasible, each private and public central water system should have an emergency interconnection with another water system. Emergency interconnections are essential to make sure that another water source is available in case a primary water source is limited because of drought or contamination.
- Water systems and fire companies should update all emergency response and emergency operations plans and complete related training. Maintaining current plans and training are particularly important to know how to respond in the case of a hazardous substance spill that could contaminate groundwater or a creek, especially near a public water source.
- The most likely sources of potential water contamination should be identified so that proper measures can be instituted with the business owner to avoid problems.
- Open Space Development (OSD) is described in the Land Use and Housing Plan section. OSD involves providing incentives so that homes are clustered on a portion of a tract of land, with large percentages of the tract being permanently preserved in some form of open space. The OSD approach can be beneficial to provide a natural recharge and protective area near proposed well sites.
- When a new development proposes to connect to a central water system, careful attention should be focused on whether the system will have enough capacity and pressure. If not, the developer should be required to fund improvements to the system. For example, a developer might be required to provide a new well that provides sufficient capacity (particularly during droughts) to serve the additional development, or to fund improvements to increase the pressure of the existing system.
- Wastewater treatment should recharge water into the ground after the water is treated. Methods include spray irrigation or drip irrigation (which involves underground hoses to distribute the treated water). Both methods keep the water in the same watershed, help to preserve large areas of land, and work particularly well with a golf course. In comparison, most central sewage systems with a stream discharge result in water being transported out of the watershed.
- Stormwater runoff should be considered a resource, instead of something to be disposed of. Therefore, stormwater runoff into the groundwater should be maximized. However, many infiltration methods require regular maintenance in order to properly function over time.

- Each township should adopt a well construction ordinance. The regulations are important to make sure that new wells are properly constructed, including proper grouting to prevent contaminants from entering the well. As of 2015, there are no State regulations on the construction of a well. A well construction ordinance should also require that proper measures be used to seal a well that is no longer used, in order to prevent pollutants from entering the groundwater.
- The gas industry makes substantial water withdrawals, many of which involve withdrawals directly from creeks or the Susquehanna River. In addition, private water bottling companies have the potential to withdraw large amounts of water from springs or wells. The withdrawals are controlled by the Susquehanna River Basin Commission, and municipalities have little or no ability to control them. One of the problems with large water withdrawals by bottling companies is that they typically are allowed to continue during periods of drought, when neighboring wells and minor creeks may be running dry. Ideally, any large groundwater withdrawal would require completing a hydrogeological study that is presented to the municipality for review along with a commitment to provide an improved water supply if a neighbor's well goes dry (which typically involves drilling a deeper well). In addition, a large groundwater withdrawal should include the permanent preservation of a large area of surrounding land with a conservation easement so that sufficient land area is available to recharge the groundwater.
- The County should take the lead, with State grant funds, to collect hazardous materials and outdated prescription medicine from households, so they can be sent for proper disposal. The municipalities can play important roles in publicizing such a program.
- Educational programs are needed to make homeowners aware of possible actions to avoid water contamination. Actions include minimizing the use of lawn chemicals and household chemical products, recycling used motor oil, keeping animals away from stream banks, and planting thick vegetation along creeks.
- The County Conservation District has an important role in working with farmers and other landowners to institute proper conservation measures to avoid water pollution, particularly from pesticides and manure, and to reduce erosion.
- Contamination of water by high levels nitrates is also a public health concern. The health risks are particularly high for children and pregnant women. Nitrates are most commonly generated by spreading of manure on fields or through runoff from livestock and poultry operations. In certain cases, where existing nitrate levels in groundwater are high, State environmental regulations have required large lot sizes when new on-lot septic systems are proposed. The intent is to avoid increasing the nitrate levels by having a high concentration of septic systems.

Support high-quality library service.

After years of funding cuts, State funding to public libraries has generally stabilized. However, libraries are more dependent on municipal contributions, fundraisers, fines and volunteer labor in order to balance budgets.

Libraries serve a very important role in providing internet access to persons who do not have reliable internet access at home. Most job openings are only posted online and many jobs now expect persons to apply online. Libraries and public schools should also offer computer literacy classes for adults.

Coordinate With the School Districts to Plan for Residential Growth and Provide Recreation.

Each municipality should regularly communicate with the staff of the local school district about the timing and amounts of proposed residential development.

The most cost-effective way of providing public recreation services is often through cooperation between local government and the public school system. For example, recreation groups and municipalities can jointly fund the construction of recreation improvements on school district lands or immediately adjacent sites. The facilities can then be used by school students during certain hours and other groups during non-school hours.

Work to improve public recreation opportunities in Wyoming County.

The locations of existing recreation areas are shown on the Recreation Facilities Map. As described in the Background section, many municipalities and athletic associations operate local parks. Wyoming County does not currently operate any parks, but the County plays an important role in providing technical assistance to the municipalities, particularly in seeking grants. County agencies organized the construction of the Iroquois Trail, and the County is taking the lead in developing a countywide trail feasibility plan.

Municipal and Potential County Parks – In general, concentrating most new athletic facilities for organized sports in a few centralized parks, preferably adjacent to a public school where parking can be shared, is most efficient and most convenient. Placing recreation areas next to a school can also allow use of the facilities by students during gym classes and for after-school athletics.

Public comments were received that questioned whether the County should develop a new County Park. One concern is that a single County park may not be able to effectively serve all County residents. Three county parks might be needed to equitably serve the entire County, which would be a much more expensive proposition.

An alternative would be for the County to provide technical assistance (such as grant preparation assistance) and to financially support the efforts of local governments to acquire and improve parks. Most state grants to acquire or develop recreation facilities or trails require a 50 percent local match. The County can use funds it otherwise would spend on acquiring, improving and maintaining a County Park (such as some of the Act 13 impact fee funds) to assist the municipalities with

providing the needed matching funds. Preference in County funds could be given to projects that are cooperative ventures between two or more municipalities or between a municipality and a school district.

Continued cooperative efforts should be emphasized by adjacent municipalities to jointly provide recreation.

A few parks are already shared by two or more municipalities, which reduces costs and provides for more efficient use of a park. Larger and more centralized parks allow maintenance and recreation equipment to be kept at one centralized location. Also, larger parks allow an entire family to enjoy recreation at the same time. For example, while an older child is practicing a sport, a younger sibling can enjoy a playground and a parent can use a walking trail. With a larger centralized park, residents have to spend less time traveling between parks to find an open court or other facility. Joint parks also provide a more fair distribution of costs among municipalities. State parks and recreation grants also give preference to applications involving two or more municipalities.

Help carry out the Northern Tier Open Space, Greenway and Outdoor Recreation Plan.

The 2010 Northern Tier Open Space, Greenway and Outdoor Recreation Plan establishes regional priorities for outdoor recreation, including the establishment of a system of greenways throughout the region. Greenways can involve recreation corridors that are open for public recreation or can simply involve preservation of important natural features along a corridor without public access. Most greenway corridors are along rivers and creeks, but they can also be along a trail, a mountain ridgeline or another feature.

The Natural Features and Agricultural Conservation Plan section discusses methods that can be used to preserve open spaces, including purchasing “conservation easements” to preserve important natural areas in private ownership.

The Northern Tier Open Space Plan included the following recommendations:

- It would be valuable to provide additional public recreation lands, particularly in the eastern half of the County. One option is the 2,000-acre scenic area surrounding Miller Mountain, south of the Susquehanna River.
- An emphasis should be placed on tourism to revitalize downtowns.
- Municipalities and counties should partner with local colleges and school districts to promote environmental education and stewardship programs.
- The following projects should be completed:

<u>Priority</u>	<u>Category</u>	<u>Recommendation</u>	<u>2010 Cost Estimate</u>
High	Connections	Connect a greenway to the Back Mountain in Luzerne County.	\$70,000 / mi.
High	Connections	Connect Eatonville to Evans Falls by redeveloping the Eatonville Bridge for pedestrian traffic as part of the Seneca Trail in Eaton Township.	to be determined
High	Connections	Ensure completion of the Iroquois Trail east of Tunkhannock.	to be determined
High	Rec. Fac./ Program Improvement / Development	Improve existing bike routes and provide shoulder improvements on PA 29 & 92.	\$110,000 to \$145,000/mile shoulders — final cost to be determined by project
High	Rec. Facilities / Program Improvement / Development	Further develop and promote the Tunkhannock Creek water trail.	\$10,000/new access plus marketing campaign
High	Rec. Fac./ Program Improvement / Development	Little Rocky Glen: Add signage to provide better wayfinding to the preserve as well as warn motorists driving on the road of potential cars and pedestrians.	\$50/SF, total to be based on type/size of sign
High	Rec. Fac./ Program Improvement / Development	Endless Mountains Nature Center (EMNC): Add signage and wayfinding to the EMNC from the Highway and to delineate the EMNC versus Camp Lackawanna and clarify which facilities are for public versus private use.	\$50/SF, total to be based on type/size of sign
High	Funding/Regulatory Resources	Explore regional funding opportunities to expand trail and recreation offerings, specifically including the Endless Mountains Visitors Bureau Room Tax Grant Program	Staff Time
Medium	Rec. Facilities / Program Improvement / Development	Add additional water trails along Bowman's Creek and Mehoopany Creek.	\$10,000/new access
High	Connections	Develop additional access points to the Susquehanna River between Bradford County and Tunkhannock.	\$10,000/new access

<u>Priority</u>	<u>Category</u>	<u>Recommendation</u>	<u>2010 Cost Estimate</u>
High	Connections	Develop additional access points to the Susquehanna River in the Bowman's Creek area.	\$10,000/new access
High	Connections	Further develop the Tunkhannock Creek water trail.	\$10,000/new access; \$10,000/kiosk with maps; Staff Time
High	Rec. Facilities / Program Improvement / Development	Improve and promote usage of existing trails within State Game Lands.	\$2,000/mile; staff time
High	Rec. Facilities/ Program Improvement / Development	Add public amenities, such as picnic tables, trash receptacles, etc. to river access points.	\$1,500/bench, table; \$500/trash receptacle
Medium	Connections	Develop a water trail with signage on Bowman's Creek.	\$10,000/new access; \$10,000/new kiosk w/maps
High	Rec. Facilities / Program Improvement / Development	Provide additional public access to land, particularly in the eastern portion of the county, through purchase of additional public land, access easements, and public access to private lands, such as those owned by conservancies.	Easement/ Purchase Costs
High	Rec. Facilities / Program Improvement / Development	Improve trails and add facilities—such as parking, seating, and portable restrooms—in State Game Lands to increase recreational use.	\$2,000/mile; \$10,000/ port-o-let; \$1,500/bench; \$500/trash receptacle
Medium	Rec. Facilities / Program Improvement / Development	Add additional trails. Consider trail connections from Ricketts Glen State Park to the Susquehanna River.	\$20,000– \$70,000/mile
Medium	Rec. Facilities / Program Improvement / Development	Add additional trails. Consider trail connections between Nicholson and Factoryville.	\$20,000– \$70,000/mile

<u>Priority</u>	<u>Category</u>	<u>Recommendation</u>	<u>2010 Cost Estimate</u>
Medium	Rec. Facilities / Program Improvement / Development	Investigate right-of-way ownership of the Northern Electric Railway to be developed as the "Trolley Trail" from Factoryville to Lake Winola. (Note: The Countryside Conservancy is completing the trail from Clarks Summit to Factoryville.)	Staff Time.
Low	Connections	Complete the Countryside Conservancy's Trolley Trail from Factoryville to Lake Winola.	\$70,000/mile, if unpaved, plus costs of any bridges or road crossings.

Expand the trail system and improve opportunities for safer bicycling and walking.

A proposed new County Trails Feasibility Study will examine opportunities for new trail links.

Wide and smooth shoulders along main roads are important to increase safety for bicyclists and pedestrians. White lines are also valuable to keep vehicles off of the shoulder, preferably with rumble strips. If white lines are not used, wider shoulders can simply encourage speeding. The white lines are also valuable for motorists who are driving in fog or heavy rain, so they more clearly see the edge of the road, particularly along curves. Shoulders also provide a margin of error for motorists, particularly when driving in snow and ice.

In addition, shoulders provide some room for persons picking up mail, for mail delivery vehicles and for trash collection. Particularly on hilly and curvy roads with limited visibility of the approaching road segment, roads without shoulders are hazardous to many people. The curves and hills limit a motorist's ability to see bicyclists, pedestrians, mail trucks and garbage trucks.

The Iroquois Trail is an important 1.8-mile recreation trail which runs parallel to Sunnyside Road and the Tunkhannock Creek from east of Tunkhannock Borough at the Massaker Little League Fields, behind the Emergency Operations Center, and continuing to the northeast. The goal is to eventually extend the trail east to Lazy Brook Park and/or north to Lake Carey, if easements can be obtained in cooperation with Property owners and if funding is available.

The Seneca Trail is a proposed north-south trail in Eaton Township that runs generally parallel to Route 29. The trail would use a mix of on-road and off-road segments, including portions of Jenks Road, Route 29 and Church Road, as well as a new pedestrian/bicycle bridge that is being installed in Eatonville across Bowmans Creek. Portions of the trail would need improved road shoulders.

The Countryside Conservancy is completing the Trolley Trail from Clarks Summit to Factoryville, which will run through the Keystone College campus. Keystone College offers looping trails on its campus that are open to the public, including the 1.5-mile Nokemis Trail and the 2.5-mile Tunkhan-

nock Trail. Stakeholders should consider eventually extending the Trolley Trail to Lake Winola, if it is possible to obtain rights to the former trolley right-of-way along the entire segment.

The State has designated “Bike Route Y” along Route 6 and Route 107 north of Factoryville. The route is marked with periodic signs and has been promoted by a statewide bicycling website. Most of Route 6 in Wyoming County has shoulders that vary in width, with most being six to eight feet. The Northern Tier Open Space Plan recommends a minimum shoulder width of eight feet. The eastern segment of Route 6 is being reconstructed by PennDOT with improved shoulders. A larger transportation study of the length of Route 6 is planned by PennDOT.

Most of Route 11 has shoulders of 6 to 8 feet. The Northern Tier Open Space Plan recommends a minimum shoulder width of 6 feet.

Most of Route 29 has shoulder widths of four to six feet south of Tunkhannock and one to four feet north of Tunkhannock. The Northern Tier Open Space Plan recommends a width of six feet.

Most of Route 92 has no shoulders south of Osterhout, shoulder widths of zero to six feet between Osterhout and Tunkhannock, and shoulder widths of one to two feet north of Dixon. The Northern Tier Open Space Plan recommends a width of six feet.

Another road that is identified by the Northern Tier Plan as needing improved shoulders is Sugar Hollow Road in Eaton Township.

Wherever practical, new developments should be required to include improved shoulders, recreation paths or sidewalks that connect with nearby parks, schools, residential developments and existing trails. Trails and trail easements are particularly valuable to connect the end of one street (such as a cul-de-sac) with nearby destinations. The goal is to provide opportunities for bicyclists and pedestrians to travel on interconnected, low-traffic roads, as opposed to walking and bicycling along heavily traveled through-roads. The Pennsylvania Municipalities Planning Code allows municipalities or the County to add provisions in Subdivision and Land Development Ordinances requiring pedestrian access as part of new development proposals.

In addition to serving local residents, trails can be valuable in attracting tourists to the region, particularly considering the dramatic increase in the popularity of mountain biking and kayaking.

When a larger set of trails are improved in the County, a corps of volunteers should be recruited to help maintain various segments. Potential partners include hiking or mountain biking organizations, including groups that are not based in Wyoming County but who regularly use the trails.

Some very scenic lands are in private ownership. Ideally, portions of trails through private lands might be opened up for public hiking access by seeking pedestrian access easements or by public purchase of certain lands. Property owners should be made fully aware of the State Trails Act, which provides legal protections for property owners who allow access to private land for hiking trails. If access can be obtained, then some public dollars would need to be committed to provide parking, signage and occasional trash cleanup. Some potential sites include:

- Miller Mountain east of Route 29 in Eaton Township (which includes a major lookout),
- Avery Mountain east of Route 92 and south and west of Lane Hill Road in Tunkhannock Township (which includes a major lookout),
- waterfalls and scenic cliffs in Falls Township along Falls Road (including Buttermilk Falls),
- scenic areas of the Sugar Hollow Valley in Eaton Township, and
- waterfalls and ponds along the Meshoppen Creek, and
- waterfalls and rapids along the Mehoopany Creek.

Improve and better identify trails within the State Game Lands.

The State Game Lands includes several trails, such as the 5.5-mile Windfall Trail, the 3-mile Stack Trail, the 8.2-mile Joe Gmitter Trail, and the 6-mile High Knob Trail.

State Game Lands are funded entirely by hunting permits. Debate with the State Game Commission continues about how much accommodation should be made for hikers, mountain bikers, horseback riders, snowmobilers, and other recreation users. If additional uses of the Game Lands would be allowed (such as an additional snowmobile trail or additional trails allowing horses, with permit and fee processes), tourism in the County would increase, and the economy in Noxen and other areas would be strengthened. If the Game Commission could generate additional income with fees for additional types of uses, the Commission may be motivated to encourage multiple uses of the land.

Much of the trail system has rugged terrain and is not recommended for use during snowy, icy or rainy conditions. The SGL trail system, which includes many scenic vistas, rock outcrops, and waterfalls, should have better markings and signage, including better directional signs to the lands, which would provide a stronger linkage to Noxen and Forkston.

Improve public access to the Susquehanna River and provide better signs to the existing access points.

The Susquehanna River is a major recreational resource, but the public can gain direct access to the river at only a few improved locations. Some of the access points are not well-marked. Funding should be sought through the State Fish and Boat Commission and other entities to improve existing access points. Ideally, improved locations would be near Laceyville and Meshoppen to promote revitalization of the boroughs.

Properties that were acquired through federal flood buyouts can be used to improve public access to rivers and creeks.

Coordinate efforts with the Conservation District and the Conservancies.

The Wyoming County Conservation District is an important partner in seeking proper management of private land holdings. Activities include working with farmers to minimize erosion and water pollution, seeking funding to add plantings along creeks and to restore streambanks, and other management practices that result in better water quality. The conservation district is also the primary link for landowners interested in enrolling in federal conservation programs.

The North Branch Land Trust and the Countryside Conservancy play important roles in preserving land. In addition to roles in actually buying, managing and/or preserving land and developing trails, conservancy activities include:

- Advocating conservation on private land;
- Raising funds;
- Writing grant applications;
- Increasing public awareness of conservation through events and publications;
- Providing volunteer resources for trail and other conservation projects; and
- Coordinating efforts of governmental and private entities.

Consider developing a Wyoming County Department of Health.

At public meetings, some residents asked whether the County should establish a department of health. Throughout Pennsylvania, county health departments are involved in many activities related to public health, including:

- Septic permits and percolation tests (with fees covering all costs),
- Water well construction,
- Rat and vermin control, and
- Preventative health services, which can receive funding from the State.

PUTTING THIS PLAN INTO ACTION

The Wyoming County community should work continually to implement the recommendations of the Plan through a program of updated planning activities, including many short-term actions with a long-range perspective. The following section describes methods that should be considered to implement the Plan. The County Planning Commission and staff have the primary role to promote Plan implementation. The Plan will need to be reviewed periodically and, if necessary, updated to reflect changing trends.

Wyoming County cannot implement this Comprehensive Plan alone. Involvement is needed by municipal officials, residents, organizations, businesses, institutions, Property owners and many

The volunteer efforts of local and civic organizations and individuals are essential to further improve the County and to carry out the Plan.

Volunteer efforts are essential to keep citizens informed, provide opportunities for meaningful citizen input, and make use of new technologies for

The County and municipalities should maximize use of the web and social media to regularly provide residents with information to help spur public interest, enthusiasm and involvement. Opportunities for citizen involvement should also be highlighted through the newspaper, newsletters, posters and other media.

Maximize communications, coordination and cooperative efforts between the County, municipalities, the school districts, adjacent counties, PennDOT and other agencies and organizations.

Use a Full Set of Tools to Implement the Plan

While the Plan is intended to set policies for development, the Plan is not a regulation. The following major tools are available to help implement the Plan:

- the municipal Zoning Ordinances,
- the County and municipal Subdivision and Land Development Ordinances (SALDOs),
- an Official Map,

- computerized mapping,
- Capital Improvements Planning,
- seeking Federal, State and County grant funds to accomplish important projects, and
- cooperation between municipalities and/or the County in providing services.

Update or Enact Zoning Ordinances.

For the municipalities that have adopted zoning, the Zoning Ordinances are the primary legal tool to regulate the uses of land and buildings. Each Zoning Ordinance includes a Zoning Map that divides the municipality into different zoning districts. Each district permits a set of activities and establishes a maximum density of development.

Each Zoning Ordinance and Map should be updated as needed to be generally consistent with the Com

prehensive Plan, to modernize standards and to address local concerns. In particular, zoning ordinances should be reviewed to make sure they are not allowing an excessive amount of intensive business uses in rural areas that do not have good road access or where there are large numbers of homes. Many of the current zoning ordinances in Wyoming County do allow a wide range of many business uses in rural zoning districts. While farm-based accessory businesses should be allowed in general, many large businesses on relatively small lots in rural and residential areas may not be appropriate.

Zoning ordinances also should be reviewed to address gas industry facilities, including setbacks for gas wellheads, compressor stations and similar facilities. Setbacks from transmission pipelines carrying natural gas and other hazardous materials should also be considered, similar to those in the County's SALDO. Washington Township has adopted a comprehensive set of zoning provisions for gas facilities that may serve as a model for other municipalities in the County. A municipality may decide to prohibit gas wells and compressor stations in the most residential portions of the municipality or near the Susquehanna River.

A municipality may also decide to require that certain uses (such as a compressor station) need special review at a public hearing, in which case the zoning ordinance can require that the use be allowed by "special exception", which requires approval of the municipal Zoning Hearing Board, or as a "conditional use", approved by the governing body. The special exception and conditional approval processes also allow reasonable conditions to be placed upon an approval, such as noise control measures.

Of particular note in Wyoming County, mineral extraction uses and other uses that may generate large amounts of heavy truck traffic and substantial noise must be located with great care to minimize negative impacts on residences and businesses.

In addition to regulating land uses and densities, zoning also controls the following:

- heights of buildings,
- percentage of a lot that may be covered by buildings and paving,
- minimum distances that buildings may be placed from streets and property lines,
- minimum size of lots,
- maximum sizes and heights of signs, and
- protection of important natural features, such as setbacks from creeks.

The municipalities that do not have zoning should be encouraged to adopt a zoning ordinance. Zoning does not need to be overly restrictive, but, instead, can be tailored to local policies.

In municipalities without zoning, the Wyoming County Commissioners have the authority under State law to adopt zoning. County zoning has been used in several counties, such as Adams and Somerset. In those cases, the County adopted zoning to address issues in selected areas of the County that had the most development pressure. Under State law, when a municipality adopts local zoning, any County zoning is no longer in effect.

Update Subdivision and Land Development Ordinances (SALDOs).

While some municipalities have local SALDOs, most municipalities are under the County's SALDO. The ordinances primarily regulate the creation of new lots, the construction of new streets by developers, and the site engineering of new commercial, industrial and institutional buildings.

For municipalities without zoning, some land use controls can be placed in the SALDO, such as maximum densities and minimum lot sizes.

The County SALDO has provisions regarding setbacks from natural gas transmission pipelines and compressor stations. Similar provisions should be adopted by the municipalities that are not under the County SALDO. Additional recommendations are included in the Unconventional Gas Plan chapter.

Consider Adopting a Municipal Property Maintenance Code, and utilize Codes Appeal Boards.

A municipal Property Maintenance Code is a valuable tool to make sure that buildings are maintained to a basic minimum level and to avoid blight. A municipality can adopt the complete national model code, can adopt portions of the model code, or can write a separate code. Maintenance codes are not part of the mandatory Statewide codes but are optional to municipalities.

State law requires enforcement of construction codes in each municipality. To promote historic preservation and reuse, a Codes Appeal Board should be willing to consider alternative ways to comply with construction codes in older buildings. A multi-municipal or Countywide Construction Codes Board of Appeals often works well to attract well-informed members.

Consider Adopting an Official Map.

The State Municipalities Planning Code grants the County and/or municipalities the authority to adopt an “Official Map.” An Official Map can designate proposed locations of new streets, street widenings, intersection improvements, municipal uses and parks. The map may cover an entire County or municipality, or only certain areas. The Official Map process may be particularly useful, for example, to reserve right-of-way for a future road widening, road connection or trail connection.

When an Official Map is officially adopted by the governing body, the County or municipality is provided with a limited amount of authority to reserve land for the projects on the map. If the land affected by the proposed project is proposed for development, the County or municipality would have one year to either purchase the land for its fair market value or decide not to go forward with the project. The one-year period is intended to provide time to raise funds to acquire the land and avoid lost opportunities. If the one-year period is not in effect, a person could obtain a building permit almost immediately in many cases and construct a building that could obstruct an important project. An Official Map also serves to provide notice to property owners about the County’s or municipality’s future plans.

Make Greater Use of Computerized Mapping.

The County operates a modern computerized mapping/Geographic Information System (GIS). Several new or updated layers (maps) were created as part of the Comprehensive Plan. The County should work toward fully integrating the GIS system with operations of the municipalities. For example, regular mapping of traffic accident locations can be helpful to identify hazardous conditions that need to be resolved, such as sight distance problems.

Plan for Major Capital Improvements.

The County and the more populated municipalities should have a system in place to continually plan and budget for major capital expenditures. “Capital” improvements are projects involving a substantial expense for the construction or improvement of major public facilities that have a long life span and that are not annual operating expenses. Examples of capital projects include major road improvements, acquisition of parkland, and construction or expansion of buildings.

A Capital Improvements Program (CIP) can help identify projects that will be needed, establish priorities for the projects, identify possible funding sources and budget for project completion. A

typical CIP looks five years in the future. A CIP should identify major road reconstruction projects that will be needed over the next few years, which can help coordinate the reconstruction with underground construction projects by various utilities. The coordination avoids the need to cut into a road after it has been recently repaved. Through a CIP, many different projects can be combined into a single bond issue, which avoids the high administrative costs of multiple bond issues. A CIP also can allow the County or a municipality to carefully time any bond issues to take advantage of the lowest interest rates.

Seek Additional Grants to Meet Community Needs.

Wyoming County should continue to assist municipalities in identifying Federal and State grant opportunities to address community needs. The County should highlight grant deadlines for major programs a few months in advance to allow time to complete a strong grant application. The Appendix of the Comprehensive Plan lists a large number of federal and state grant programs for community and economic development. Additional information is available on the website of each agency that sponsors a program.

Increase Intergovernmental Cooperation Efforts.

The Plan helps to establish a framework for further cooperative ventures among the municipalities in the County, and between municipalities and the County. Intergovernmental cooperation can decrease the costs of many services, while also improving the quality of services.

The Pennsylvania Intergovernmental Cooperation Act provides broad and flexible authority to organize joint efforts as municipalities deem appropriate. In general, the Act allows two or more municipalities to jointly accomplish anything that an individual municipality is allowed to do. In most cases, the Act is carried out through the adoption of an ordinance that is adopted by each municipality to formalize an agreement. One option involves one municipality providing a service to a second municipality through a contract.

The same concepts of cooperation can also apply between a municipality and a school district. For example, a municipality may agree to plow snow from school parking lots and driveways in return for free municipal use of some school facilities.

In order to obtain additional protections under State law against challenges to local zoning ordinances, an Intergovernmental Agreement should be adopted by each municipality that participated in a Joint Comprehensive Plan. The agreement should state an intent to carry out the land use recommendations in the Plan.

The toughest issue in joint municipal services is determining a fair allocation of costs. The State Department of Community and Economic Development (DCED) has several publications that provide relevant information to assist municipalities in fair cost allocation.

The following types of intergovernmental cooperation efforts should be considered:

- **Shared Services and Shared Staff** – Sharing staff can be particularly beneficial for specialized staff, such as different types of construction inspectors or zoning officers. Two or more municipalities could hire the same person to do the same job, with certain hours assigned to each municipality. Sharing the staff allows each municipality to hire a highly qualified person who is working full-time, as opposed to each trying to find a part-time person. Sharing staff often decrease turnover, which reduces training costs and diminishes the potential for mistakes being made by inexperienced staff. In addition, sharing staff makes employees available during more hours of the day, which is beneficial to residents and businesspersons. Shared staff also provide greater coverage during periods of illness or vacation. Some municipalities also have a joint application and testing program for police officer applicants, which reduces costs and results in a larger pool of applicants.
- **Shared Consulting Staff** – Large efficiencies can also occur when adjacent municipalities choose the same consultants, such as municipal engineers, sewage engineers or solicitors. Some municipalities contract with a company to provide zoning officer services, which could be shared among municipalities. Sharing professional staff promotes good communication between municipal governments. Furthermore, sharing also reduces the costs of having different professionals become educated about complex issues and having to spend time meeting with consultants of other municipalities and State agencies to share information.
- **Shared Recreation Programs** – Shared or coordinated municipal recreation programs greatly increase the types of programs that can be offered. For example, one municipality may offer a gymnastics program, while another municipality offers basketball programs. Residents of each municipality could be allowed to participate in each of the programs at the same cost per person as a municipal resident. Multi-municipal recreation programs have been very successful in parts of Pennsylvania, with each municipality contributing funds towards one set of programs. Shared programs are often organized in partnership with a school district.
- **Joint Yard Waste Collection and Composting** – Sharing is a very cost-effective way of handling the disposal of yard waste, which requires a significant amount of land and expensive equipment.
- **Snowplowing** – In some cases, two municipalities must each send out a snowplow to clear different segments of the same road. Sharing may be beneficial to trade responsibility for different road segments, so that a single snowplow can be used to clear the entire length of a road.

- **Joint Purchasing** – Joint purchasing allows participating municipalities to reduce the costs of preparing bid documents and legal ads. Joint purchasing also can result in lower costs because larger volumes are being purchased. The process is particularly useful for annual purchases of standardized materials, such as road salt. The State also has arrangements that allow municipalities to "piggyback" on State purchases. State law allows a similar process of "piggyback" bids between municipalities and a County. The State Intergovernmental Cooperation Act includes rules for joint municipal purchasing. Under State law, one municipality can be the lead municipality in purchases, without requiring multiple municipalities to seek bids. Municipalities can also jointly purchase insurance, hire traffic signal maintenance services, or contract for solid waste collection. Joint auctions can also be used to sell surplus vehicles and equipment.
- **Sharing of Equipment** – Sharing is most beneficial for expensive equipment that is needed by each municipality for only portions of the year, such as paving, rolling or grading equipment. The equipment could be jointly owned, or be owned by one municipality and leased to other municipalities. Alternatively, an arrangement could allow trading of equipment.
- **Joint Tax Collection** – The Local Tax Enabling Act allows municipalities and school districts to contract with each other to have one office jointly collect local taxes. A single tax office typically lowers costs and offers more convenient hours for residents and businesses.
- **Councils of Governments (COGs)** – Wyoming County includes two COGs:
 - Wyoming County COG (includes the Boroughs of Factoryville, Meshoppen, Nicholson, Laceyville and Tunkhannock and the Townships of Braintrim, Clinton, Eaton, Exeter, Falls, Forkston, Lemon, Mehoopany, Meshoppen, Monroe, Nicholson, North Branch, Northmoreland, Noxen, Overfield, Tunkhannock, Washington and Windham.
 - Southeastern Wyoming County COG (includes Townships of Eaton, Northmoreland, and Monroe)

COGs bring officials of local governments together to promote good communications between municipal officials, provide educational programs, and lobby for State or Federal funding for projects. A COG can also provide municipal services, if authorized by municipalities. For example, some COGs in Pennsylvania take care of code enforcement. A State law also provides that State agencies must treat a Council of Governments in the same manner as a municipality in any funding program.
- **Joint Authorities** – Municipalities can create formal joint municipal authorities to address many types of matters.
- **Joint Planning Commissions** – Municipalities can appoint joint planning commissions, which could serve in place of or in addition to municipal planning commissions.
- **Cooperation Between or Merger of Fire Companies** – Consideration should be given to

promoting additional cooperation between or merger of fire companies. Merger or cooperation are particularly beneficial to make the best use of extremely expensive fire apparatus, such as rescue trucks, hazardous materials equipment, tanker trucks and aerial ladder trucks. Merger or cooperation are also important to make the best use of the limited number of volunteers and to avoid having to spend limited funds on maintaining an excessive number of buildings.

- **Joint Police Forces** – A joint police force involves two or more municipalities establishing one police force that is directed by commission members appointed by each municipality. Another option is to have one municipality contract for police services from a second municipality. A joint police force makes it easier to provide 24-hour service and specialized services, such as investigative and youth services. A joint police force can result in increased training and professionalism, which can reduce liability costs. A joint force also makes it easier to investigate crime that crosses municipal borders.
- **Incentives for Intergovernmental Cooperation in Grants** – Many competitive State grant programs provide preference to projects that involve cooperation between two or more municipalities. Therefore, if two similar projects are in competition for a grant, and one involves cooperation between two municipalities, the two-municipality project is more likely to be funded.

Role of the Planning Commissions

Some of the greatest responsibilities of the County and each municipal Planning Commission are to oversee the preparation and implementation of the County and local Comprehensive Plan and the preparation of Zoning and Subdivision Ordinance revisions. On a monthly basis, the Planning Commissions also review proposed developments. The Planning Commissions also have a role in reviewing proposals of other government agencies.

The County Planning Commission's main role is to provide reviews of proposed subdivisions and land developments. The County Planning Commission also reviews draft municipal comprehensive plans and development regulations.

Role of the Boards of Supervisors and Borough Councils

The final decision on nearly all matters affecting the growth and preservation of each municipality rests with the governing body, usually a Borough Council or Township Board of Supervisors. The work of government staff and planning commissions informs the governing bodies. Therefore, continuing to improve the quality of life in Wyoming County will require close communications and cooperation between the County and municipal Planning Commissions, staff, and the elected officials.

ACTION PROGRAM

The following table summarizes the major recommendations of the Wyoming County Comprehensive Plan. Certain items are recommended as high priorities. The Action Program includes the timing of each recommendation as well the agency(ies) with primary responsibility for implementing each recommendation.

Abbreviations for the Prime Responsibilities for each recommended action are

Abbreviations of Responsible Agencies/Groups:

Adj. Mun.	=	Adjacent Municipalities
Co. PC	=	Wyoming County Planning Commission and staff
Co. Com.	=	Wyoming County Commissioners
Con. Dis.	=	Wyoming County Conservation District
EMVB	=	Endless Mountains Vacation Bureau
Governing Bodies	=	Borough Councils and Township Boards of Supervisors
HC	=	Hiking Clubs, Mountainbiking Clubs, and Other Outdoor Sportsmans Clubs
NTRPDC	=	Northern Tier Regional Planning & Development Council
PC	=	Municipal Planning Commissions
PennDOT	=	Pennsylvania Department of Transportation
PFBC	=	Pennsylvania Fish and Boat Commission
PGC	=	Pennsylvania Game Commission
PHFA	=	Pennsylvania Housing Finance Agency
PHMC	=	Pennsylvania Historical and Museum Commission
Property owners	=	Private Property owners, particularly of larger tracts
SG	=	Susquehanna Greenway
WCCC	=	Wyoming County Chamber of Commerce
WCHRA	=	Wyoming County Housing and Redevelopment Authority
ZHB	=	Zoning Hearing Boards

NATURAL AND AGRICULTURAL CONSERVATION PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities (See abbreviations above.)
Promote proper management of forests, including controlling destructive pests, using sustainable practices and controlling erosion during forestry activities.		Contin-uous	SGC, PA. Bureau of Forestry, Property owners
Conserve unique natural areas identified in the Natural Areas Inventory.		Contin-uous	SGC, Property owners, Con. Dis., DEP
<p>Promote strong zoning, subdivision and stormwater regulations regarding important natural features, particularly to:</p> <ul style="list-style-type: none"> • Limit the intensity of development of steeply sloped lands. • Require building and paving setbacks from streams to protect water quality and fishing habitats. A smaller width is appropriate in boroughs, while a larger width should be required in the townships. • Carry out the Best Management Practices in stormwater management, including to protect water quality and encourage recharge into the groundwater. • Establish a minimum setback from wetlands and require wetland studies whenever a development site is suspected of including wetlands. 	✓	Contin-uous	Governing Bodies, PCs, Co. PC.
Encourage landowners to plant and maintain thick vegetation and trees along creeks.		Contin-uous	Supervisors, PCs, Con. Dis., SGC, Property owners
To protect water quality and fish habitats, carefully enforce State regulations on erosion control through on-site inspections.		Short-range	Municipal Staff, Con. Dis.
Minimize unnecessary removal of trees during construction, and make sure temporary fencing is used to avoid damage to tree trunks and compaction over root systems.		Short-range	Governing Bodies, PC, Co. PC., Con. Dis.

Recommended Action	High Priority?	Timing	Prime Responsibilities (See abbreviations above.)
The townships should consider prohibiting new buildings in the entire 100-year floodplain and requiring studies by developers of land with any suspicion of unmapped floodplain. (Boroughs are also required to regulate building in the floodplain, attempting to prohibit all buildings in the floodplain may be an undue burden on the borough.) A higher freeboard (building elevation above the expected 100-year flood level) should be considered for new construction because of the increasing frequency and severity of flooding.		On-going	Governing Bodies, PCs, Property owners, Co. PC.
In compliance with DEP regulations, remove debris and downed trees from creeks and flood-prone areas to avoid obstructions to floodwaters. Enforce floodplain regulations against hazardous material storage in flood-prone areas. Discourage storing items in the floodplain that could be carried by floodwaters and, thereby, create obstructions.	✓	Continuous	Governing Bodies, DEP, Property owners
Seek Federal Floodplain Mitigation funds to buy and remove the most flood-prone buildings and turn the land into permanent open space.		Mid-range	Governing Bodies, PCs, Property owners, Co. PC
Enact mandatory dedication provisions in subdivision and land development ordinances (SALDOs) to require dedication of open space or payment of recreation fees as part of major new residential developments.		Short-range	Governing Bodies, PC, Property owners, Co. PC.
In agricultural areas, encourage municipalities that have zoning to include provisions to permit a range of accessory activities (known as “farm-based businesses”) that allow opportunities for supplemental income for farmers on larger tracts of land. Promote retail sales of products by farmers.	✓	Continuous	Supervisors, PCs, Co. PC, Property owners
Promote reasonable controls on very intense concentrated animal feeding operations, such as large setbacks from major water supplies and concentrations of existing homes. (Recognize that State law limits the ability of townships to overregulate agricultural activities.)		Continuous	Supervisors, PCs, Co. PC.

Recommended Action	High Priority?	Timing	Prime Responsibilities (See abbreviations above.)
Encourage landowners to join Agricultural Security Areas to make more land eligible for easement purchase and to protect farmers against nuisance challenges.		Short-range	Governing Bodies, PC, Property owners, Con. Dis.
Encourage landowners to apply to the County to purchase the right to develop their farmland.	✓	Continuous	Governing Bodies, PC, Property owners, Con. Dist.
To promote voluntary land preservation, utilize State Act 4 of 2006 to have the townships, school district and the County freeze the real estate taxes on land that has been permanently preserved.	✓	Short-term	Governing Bodies, School Board, Co. Com.
Seek additional sources of funding that can be matched to obtain larger amounts of State land preservation dollars in order to permanently preserve additional prime farmland and natural areas.		Continuous	Co. Com., Co. PC

LAND USE AND HOUSING PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities
Encourage each municipality to update development regulations to implement: a) the County Comprehensive Plan and b) any municipal or intermunicipal Comprehensive Plan. Municipalities without zoning should consider, at a minimum, adopting zoning provisions to regulate the most controversial and intensive land uses.	✓	Short-term	PCs, Co. PC, Governing Bodies
Promote the use of zoning regulations that use both incentives and disincentives to direct most housing away from areas planned for agricultural preservation and important natural areas. Provide moderate densities on areas that can be served by existing public water and sewage services to minimize the total amount of land that is consumed by development.	✓	Continuous	Governing Bodies, PCs., Co. PC

Recommended Action	High Priority?	Timing	Prime Responsibilities
<p>Encourage municipalities to adopt zoning provisions that provide strong incentives to preserve farmland and important natural areas, particularly through “Open Space Development” (also known as Conservation Development or Clustering).</p> <ul style="list-style-type: none"> • Near active farms, if the resulting preserved open space is not suitable for agriculture, use the land as a buffer between new homes and farms. The open space can also buffer highways, gas facilities or industries. • Make sure that any preserved open space is designed to serve a valuable public purpose, as opposed to being leftover land of little value. 	✓	Continuous	Supervisors, PCs, Co.PC, Property owners.
<p>Use access management methods to manage new strip commercial areas along major roads. Concentrate most commercial uses:</p> <ul style="list-style-type: none"> • near existing commercial areas, or • near existing or proposed access to a traffic signal, or • near existing or proposed access to a well-located shared driveway with good sight distances. 		Continuous	Twp. Supervisors, PCs, Co. PC.
<p>Select a site, acquire land, and seek State grants to develop a new business park to offer shovel-ready sites for light industries and other businesses.</p>	✓	Continuous	Co. Com., Co. P.C., WCCC, DCED
<p>Increase the supply of affordable housing in the County using Act 13 housing grants and other grants and tax incentives to provide for new multifamily housing and townhouses in suitable areas.</p>		Continuous	Governing Bodies, PCs, Co. Com., Co., PHMC
<p>Promote the further development of motels, campgrounds, golf courses and other commercial recreation areas to increase tourism. Maintain the scenic attractiveness and water quality of Wyoming County to promote tourism and outdoor recreation.</p>		Continuous	Supervisors, PCs, Property owners, EMVB
<p>Make sure that local regulations and permit processes are as streamlined as is reasonable to avoid unnecessary delays, to avoid increasing housing costs, and to welcome new and expanding employers. Hold requirements for special zoning approvals to a reasonable minimum, minimize business lot sizes, and minimize setbacks between adjacent businesses.</p>		Continuous	Governing Bodies, PCs, ZHBs, Municipal Staffs, Co. PC.

Recommended Action	High Priority?	Timing	Prime Responsibilities
Adopt or update zoning ordinances to carefully control the types and locations of intense business uses near neighborhoods, particularly gas stations, 24-hour stores, adult uses and similar uses that may cause nuisances for neighboring homes. Update the types and intensities of uses allowed in rural, agricultural and residential districts.	✓	Short-range	Governing Bodies, PCs
Limit the locations of new mining activities, such as to areas near where they currently exist, with reasonable room for expansion. Use zoning to limit the locations of landfills and other high-impact land uses. Emphasize setbacks from residential areas.		Short-term	Twp. Supervisors, PCs.
Work with adjacent municipalities to ensure that compatible land uses and road patterns are in place across municipal borders. Provide adjacent municipalities with an opportunity to comment on proposed zoning amendments and major development plans that may have impacts across municipal borders.		Short-range	Governing Bodies, Co. PC., PCs.
Add landscaping requirements to zoning and SALDOs to improve the appearance of development and to provide landscaped buffers between intensive new businesses and homes.		Short-range	Co. PC, PCs, Governing Bodies
Emphasize code enforcement to avoid blight and unsafe building conditions. Municipalities should consider adopting part or all of the International Property Maintenance Code.		Continuous	Governing Bodies
Help to link residents that are in need of assistance with available resources, including housing rehabilitation programs and home energy conservation programs. Increase home ownership by such tasks as linking prospective homebuyers with home-buying counseling programs and programs to help persons afford closing costs of home purchases.		Continuous	Municipal staffs, non-profit orgs., PHFA, financial institutions.

Recommended Action	High Priority?	Timing	Prime Responsibilities
<p>Strengthen the downtowns of the boroughs as the business, entertainment, cultural and civic centers for the region.</p> <ul style="list-style-type: none"> • Maintain the character of the downtowns and older villages. New development should include setbacks, site layouts and uses similar to existing, older development. Seek State funding to subsidize building facade rehabilitation projects in downtowns. • Provide advice to building owners on low-cost improvements, such as changing a sign, adding an awning, or choosing different paint colors. Add additional street trees. • Promote a balanced mix of uses in older commercial areas in the downtowns, including street level retail/restaurant/service businesses. Promote additional market-rate apartments and offices in upper stories. • Attract persons attending special events or outdoor recreation activities in the region to the downtowns and older villages. For example, Nolen and Mehoopany could be promoted as centers for persons visiting the State Game Lands. 		Contin- uous	WCCC, local merchant associations, Bor. Councils
<ul style="list-style-type: none"> • Use additional special events to attract additional numbers of visitors, customers and businesses to the downtowns. • Encourage downtown businesses to better coordinate business hours. Encourage weekend hours and longer evening business hours (at least until 6 p.m.). • Use joint advertising and joint promotions among businesses that are close to each other. Joint promotions are more cost-effective than each business buying separate advertising. 		Contin- uous	WCCC, local merchant associations, Bor. Councils
<ul style="list-style-type: none"> • Improve pedestrian safety of main streets in the downtowns, including highly visible crosswalks with “stop for pedestrians” signs, and updated traffic signals with “Walk” phases. “Bulb-out” curb extensions can also reduce the width of street that pedestrians must cross. 		Contin- uous	Borough Councils, Police

Recommended Action	High Priority?	Timing	Prime Responsibilities
<ul style="list-style-type: none"> Consider financial incentive programs to attract private investment into the downtowns, such low-interest funding for facade rehabilitation and fire safety improvements. Through the code options for historic buildings and through the building code of appeals process, allow reasonable flexibility in applying requirements, to recognize the problems of reusing older buildings. 		Continuous	WCCC, Borough Councils, Co. PC, PA. DCED, area banks.
<ul style="list-style-type: none"> In addition to business offices, promote the location of many government and non-profit offices as possible in the downtowns, to help generate foot-traffic and employment that will provide customers for private businesses. 		Continuous	County, State and Federal agencies.
<ul style="list-style-type: none"> Properly manage parking to serve different needs, with an emphasis on making sure the most convenient spaces on key commercial blocks of downtowns are available for high turnover by customers parking for less than two hours. In Downtown Tunkhannock, direct business employees and other persons who need to park for longer than two hours to use the park-and-ride lot and other spots that are not prime for customers. 		Continuous	Borough Councils

ECONOMIC DEVELOPMENT PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities
<p>Promote economic activity involving outdoor recreation and tourism. Maintain the physical attractiveness and scenic beauty of Wyoming County.</p>	✓	Continuous	Co. PC, PCs, Governing Bodies
<p>Help employers find job training programs and other resources to allow business expansion. Expand vocational training opportunities within the County (such as through a new Career and Technology School or by contracting with an adjacent Career and Technology School) in one or more locations that are easily accessible for area students and residents.</p>	✓	Continuous	WCCC, School Districts

Recommended Action	High Priority?	Timing	Prime Responsibilities
Help to link local residents with potential employers, such as through local Jobs Fairs and promotion of the State Jobs website.	✓	Continuous	WCCC
Jointly promote attractions to lengthen visitor stays. Add additional tourism-oriented signage to direct visitors to downtowns, trails and attractions.		Continuous	EMVB, WCCC, SG, Co. Commissioners
Municipalities and the County should review current approval and permit processes to determine ways to streamline the processes or reduce delays in order to promote economic development.		Continuous	Co. PC, PCs, Governing Bodies, WCCC
Work to extend natural gas service lines to provide affordable energy for local businesses and residents. Encourage new larger businesses to develop their own gas wells, similar to that accomplished by Procter and Gamble.		Continuous	PA. Public Utility Commission, gas companies, WCCC
Consider use of Tax Increment Financing to use new tax revenues from new development to pay the up-front infrastructure costs needed to support new development. For example, a road or bridge could be built or improved that could support a new employer, with the employer's new tax revenues being committed to pay off the bond for the improvement.		Continuous	Co. Commissioners, Governing Bodies, School Boards
Water and sewage districts can also be created to allow an entity to recapture the up-front costs of a water or sewage extension without burdening existing utility users with the new costs.		Continuous	Water and sewage service providers
Extend quality high-speed internet service to larger areas of the County. Municipalities can also have a role by 1) cooperating in the use of local public land and rights-of-ways for towers, antenna and telecommunications lines, and 2) ensuring sufficient opportunities on private lands for communications towers.		Continuous	Telecommunications companies, Governing Bodies

Recommended Action	High Priority?	Timing	Prime Responsibilities
Establish a new business park. With limited level, buildable ground along major roads in the county, construction of a new access road or an upgrade to existing local road may be required to reach a major road. A business park site should have broadband service and central water and sewage services. State funds should be sought to subsidize the infrastructure costs.		Continuous	WCCC, Co. Commissioners, Co. PC, TCRPDC, DCED.
Reactivate the County Industrial Development Authority to provide low-cost financing and assistance to area businesses.		Continuous	WCCC, Co. Commissioners
Expand the educational/workforce partnership programs of the Chamber of Commerce. Provide additional programs geared towards workforce readiness in public schools. Seek additional online educational programs and college credit programs that can be offered to students who are still in high school.		Continuous	WCCC, School Districts, Area employers

HISTORIC PRESERVATION PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
Identify the most important historic buildings in each municipality that are worthy of preservation. Enact zoning provisions to require special zoning approval by the governing body or zoning hearing board before demolition is allowed. The proposed zoning provisions would <i>not</i> regulate architecture or routine changes to buildings.		Continuous	Governing Bodies, PCs County Historical Society, local historic organizations, Co. PC.

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
Provide information to owners of older buildings in order to promote sensitive rehabilitation and to increase awareness of the significance of the buildings. Promote greater interest in the region's history and historic buildings.		Continuous	Municipal Staff, County Historical Society, local historic organizations.
For municipalities with zoning, add zoning incentives to promote the preservation of historic buildings. Provisions might include allowing certain uses within restored historic buildings that otherwise would not be allowed in the zoning district. For example, a restored historic building in a residential district might be allowed to be used as an office or bed and breakfast inn.		Short-range	Governing Bodies, PCs, Co. PC.

UNCONVENTIONAL GAS PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities
Encourage municipalities to adopt updated development regulations to address natural gas facilities, including 1) setbacks for gas wellheads and compressor stations and 2) setbacks from major gas transmission pipelines, particularly for uses with occupants that cannot easily "self-evacuate."	✓	Continuous	Governing Bodies, PCs, Co. PC.
Make sure that emergency service providers have the equipment and training needed to be prepared for a wide range of hazardous conditions, including pipeline explosions, gas well explosions and leaks of hazardous materials.	✓	Continuous	Governing Bodies, Gas companies, Emergency Management, Co. Com.

Recommended Action	High Priority?	Timing	Prime Responsibilities
Participate in the federally-mandated process for the location of new interstate transmission pipelines to make sure that the planning fully considers impacts on schools, existing and future residential areas, and important natural features.	✓	Continuous	Governing Bodies, Co. PC, PCs

TRANSPORTATION PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities
Work with PennDOT and adjacent property owners to widen intersections to provide turn lanes and add traffic signals where warranted. Seek the construction of a passing lane or turn lanes along portions of hilly two-lane roads with heavy truck traffic (such as Route 29) to allow vehicles to pass. Improve sight distances. Apply for funding through the regional Transportation Improvement Program to resolve traffic problems.	✓	Continuous	PennDOT, Co. PC., NTRPDC, Governing Bodies.
Encourage municipalities to adopt an Official Map to designate locations where additional land will be needed to improve existing road intersections or to build new road connections or trails. An Official Map allows a municipality to reserve land for potential improvements for a limited period of time.		On-going	Governing Bodies, PCs, Co. PC.
In SALDOs, require developers to improve immediately adjacent segments of roads, such as providing shoulders. Emphasize well-marked shoulder improvements along heavily traveled roads to: 1) provide a safety factor (particularly in snowy and icy conditions), 2) provide for mail deliveries, 3) allow room for bicyclists and pedestrians, and 4) allow room for farm equipment.		Continuous	PennDOT, Supervisors, PCs, Co. PC, NTRPDC.
Encourage greater use of paratransit. Seek an extension of County of Lackawanna Transit (COLT) service to Factoryville, with connections via paratransit. Seek federal funds for construction of an additional park and ride lot in the eastern and southern parts of the County to promote carpooling. ???????		Continuous	PennDOT, Co. Com., NTRPDC

COMMUNITY FACILITIES AND SERVICES PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
<p>Improve existing parks to meet a wide variety of recreational needs. Make the best use of school district facilities, and investigate opportunities for municipal recreation areas next to schools, with shared parking and that can be used by both school students and the general public during non-school hours. Concentrate most active recreation facilities at a few sites.</p>		Continuous	Governing Bodies, Any Parks & Recreation Commissions, School Districts
<p>Complete the Seneca Trail in Eaton Township and extend the Trolley Trail in eastern Wyoming County. Provide trail links that will connect to existing trails. Provide additional recreation access points to the Susquehanna River with improved boat ramps. Provide clear signage to:</p> <ol style="list-style-type: none"> 1) assist trail users in locating trails and river access points and 2) encourage trail users to visit nearby downtowns. 		Continuous	Governing Bodies, PCs, PFBC, Any Parks & Recreation Commissions, PGC, HC
<p>Emphasize high-quality police, emergency medical and fire protection services, with joint training and cooperation between providers, including those in adjacent areas of neighboring counties. Make sure that emergency services have proper training and equipment to address hazards from the gas industry, trucking and railroad accidents, and other dangers. Provide incentives and recognition to recruit and retain volunteers.</p>	✓	Continuous	Emergency providers, Governing Bodies, Co. Emergency Management Agency.
<p>Continually explore ways to minimize local government expenses, particularly through sharing of services or staff among municipalities. Aggressively seek Federal and State grants to address local needs.</p>		Continuous	Governing Bodies.
<p>Work toward providing central sewage service to areas with concentrations of failing septic systems.</p>		Continuous	Township Supervisors

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
Protect water supplies from contamination, and make sure that alternative supplies are available in case a source is no longer suitable.		Continuous	Governing Bodies, Water Authorities & Companies
Provide information to the school districts regarding proposed new housing so that the districts can plan for growth.		Continuous	PCs, School Districts

Appendix A Population and Housing

The appendix of the Wyoming County Comprehensive Plan analyzes characteristics of the population and housing of Wyoming County, such as changes in number of residents, housing trends, household incomes, and educational levels. Additional economic data has been compiled in the full County Economic Development Plan report. Unless otherwise stated, all data is from the U.S. Census.

POPULATION

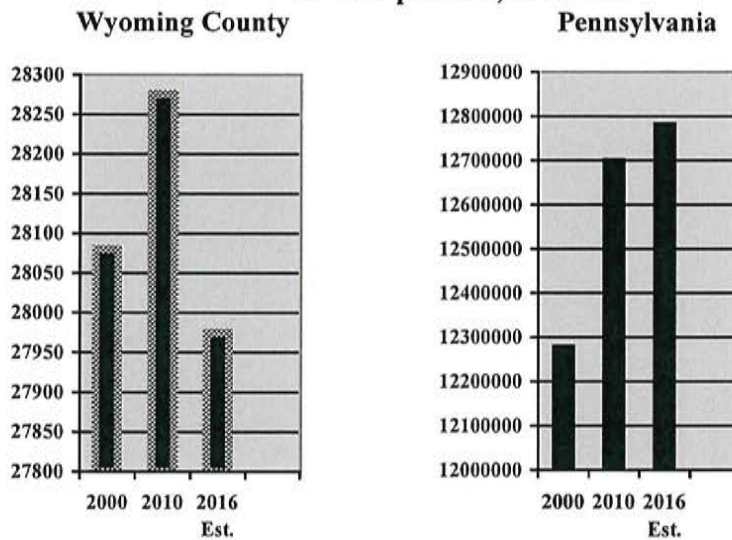
The population of Wyoming County is estimated by the Census to have decreased by 77 persons (0.4%) from 2000 census to 2016 (Table A-1, Chart A-1). During the same period, population in Pennsylvania increased by 4.0 percent. Slight increases in population in Wyoming County were reported from 1990 to 2000 and from 2000 to 2010.

While employment has increased in Wyoming County in recent years, many of those jobs are held by persons who are temporary residents of Wyoming County (and, therefore, not counted by the Census) or who commute from other areas.

Table A-1
Total Population, 2000–2013

	Population			Change, 2000–2013	
	2016 Est.	2010	2000	Number	Percent
Wyoming County	27,975	28,276	28,080	(77)	(0.4)%
Pennsylvania	12,783,977	12,702,379	12,281,054	492,747	4.0%

Chart A-1
Total Population, 2000-2016



Population in the all of the counties surrounding Wyoming has declined since 2000 (Table A-2). Prior to 2000, population had risen in all surrounding counties except Lackawanna and Luzerne, reflecting both a distaste for the urban lifestyle of Scranton and Wilkes-Barre and a desire for a rural lifestyle offered in the other surrounding counties.

Table A-2
Total Population, 1990-2016

County	Total Population				Percent Change	
	2016 Est.	2010	2000	1990	2000 -2016	1990 - 2000
Wyoming County	27,975	28,276	28,080	28,076	(0.4)%	0.0%
Bradford County	61,808	62,622	62,761	60,967	(1.5)%	2.9%
Lackawanna County	213,006	214,437	213,295	219,097	(0.1)%	(2.6)%
Luzerne County	318,917	320,918	319,250	328,149	(0.1)%	(2.7)%
Sullivan County	6,302	6,428	6,556	6,104	(3.9)%	7.4%
Susquehanna County	41,832	43,356	42,238	40,380	(1.0)%	4.6%
Pennsylvania	12,783,977	12,702,379	12,281,054	11,882,842	4.1%	3.4%

In 2016, the six boroughs accounted for 20.1 percent of Wyoming County’s total population, while the 17 townships accounted for the remaining 79.9 percent. The average borough population in 2013 was 936, while the average township population was 1,316. From 2000 to 2013, three of Wyoming County’s six boroughs and seven of the County’s 17 townships lost population.

Tunkhannock Township, just outside of Tunkhannock Borough, has the largest population of all Wyoming County municipalities (4,273 in 2010), despite a gradually declining population in recent decades. Washington Township experienced the largest percentage population increase from 2000 to 2016 (16.8%)

In 2010, 13 of the County’s 23 municipalities had a population of more than 1,000. North Branch Township had the smallest municipal population in 2010 with 206 residents, even though the township population has increased in each census since 1990. The largest percentage increase of any Wyoming County populations in the past 20 years occurred in Meshoppen Borough from 2000 to 2010 (22.7%).

Table A-3
Total Population, 2000-2016 - Wyoming County Municipalities

Municipality	Total Population			Percent Change, 2000-2016
	2016 Est.	2010	2000	
Braintrim Township	465	502	508	(1.2)%
Clinton Township	1,421	1,367	1,343	5.8%
Eaton Township	1,610	1,519	1,644	(2.1)%
Exeter Township	647	690	748	(13.5)%
Factoryville Borough	1,114	1,158	1,144	(2.6)%
Falls Township	2,112	1,995	1,997	5.8%
Forkston Township	268	397	386	(30.6)%
Laceyville Borough	468	379	396	18.2%
Lemon Township	1,192	1,243	1,189	0.2%
Mehoopany Borough	863	892	993	(13.1)%
Meshoppen Borough	459	563	459	0.0%

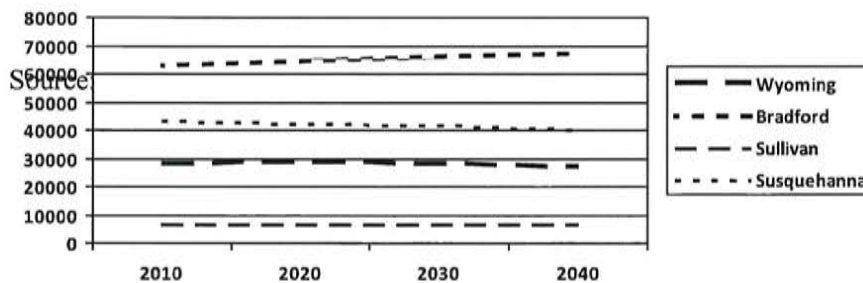
Municipality	Total Population			Percent Change, 2000-2016
	2016 Est.	2010	2000	
Meshoppen Township	783	1,073	877	(10.7)%
Monroe Township	1,600	1,652	1,836	(12.8)%
Nicholson Borough	786	767	713	10.2%
Nicholson Township	1,461	1,385	1,361	7.4%
North Branch Township	221	206	197	12.2%
Northmoreland Township	1,489	1,558	1,463	(4.7)%
Noxen Township	932	902	951	(2.0)%
Overfield Township	1,667	1,666	1,532	8.8%
Tunkhannock Borough	1,783	1,836	1,911	(6.7)%
Tunkhannock Township	4,314	4,273	4,298	(0.4)%
Washington Township	1,526	1,412	1,306	16.8%
Windham Township	794	841	828	(4.1)%
Wyoming County	27,975	28,276	28,080	0.4%
Boroughs	5,473	5,595	5,616	(2.6)%
Townships	22,502	22,681	22,464	1.7%

Projections of future population are also important in comprehensive planning. Anticipation of future growth or decline helps to identify the amount of future land uses and public services that will be required to serve the future population. The Center for Rural Pennsylvania (CRP) has projected population for all counties in the state from 2010 to 2040. projects that Wyoming County will to lose approximately 1,000 residents by 2040 (Table A-4, Chart A-2)).

Table A-4
Population Projections, 2010-2040

County	Total Population				Change, 2010-2040	
	2010	2020	2030	2040	Numeric	Percent
Wyoming County	28,276	28,460	28,146	27,269	(1,007)	(3.6)%
Bradford County	62,609	64,106	65,812	67,051	4,442	7.1%
Sullivan County	6,416	6,608	6,531	6,482	66	1.0%
Susquehanna County	43,348	42,335	41,525	40,133	(3,215)	(7.4)%

Chart A-2
Population Projections, 2010-2040



HOUSING

In many areas of Wyoming County, forested areas and large lot sizes create a very rural community character. In 2010, the Census found that Wyoming County included 13,254 housing units (Table A-5). The number of housing units grew faster than the population because of the number of seasonal dwellings (dwellings occupied by part-time residents).

Table A-5
Total Housing Units 2000-2010

	Total Housing Units		Change, 2000-2010	
	2010	2000	Number	Percent
Wyoming County	13,254	12,713	541	4.1%
Bradford County	29,979	28,664	1,315	4.4%
Lackawanna County	96,832	95,362	1,470	1.5%
Luzerne County	148,748	144,686	4,062	2.7%
Sullivan County	6,304	6,017	287	4.6%
Susquehanna County	22,968	21,829	1,139	5.0%

As with population, the housing stock in Wyoming County grew between 2000 and 2010 at a slower rate than for Pennsylvania (Table A-6). One of the significant characteristics of Wyoming County’s housing stock is the high proportion of seasonal housing units, which are vacant for much of the year. Units for seasonal, recreational, or occasional use (SRO) in Wyoming County increased by 4.0 percent from 2000 to 2010, to a total of 1,368. At the same time, SRO housing in Pennsylvania as a whole increased by 9.0 percent -- more than twice the Wyoming County rate.

Table A-6
Units for Seasonal, Recreational, or Occasional Use—2000–2010

	Units for seasonal, recreational, or occasional use		Change, 2000–2010	
	2010	2000	Number	Percent
Wyoming County	1,368	1,316	52	4.0%
Pennsylvania	161,582	148,230	13,352	9.0%

SRO housing comprised 10.3 percent of the total housing stock in Wyoming County in 2010, a slight decrease from 10.4 percent in 2000 (Table A-7). During the same decade, the share of SRO housing in Pennsylvania grew slightly, from 2.8 to 2.9 percent. Over time, the share of SRO housing can change significantly. For example, many Pennsylvania counties that are closer to New York City and New Jersey, such as Pike and Monroe, have seen substantial conversions of seasonal housing units into permanent housing units.

Tunkhannock Township has, by far, the largest number of housing units of any municipality in Wyoming County (Table A-8). In addition, Tunkhannock Township is the only municipality in Wyoming County that has more than 1,000 housing units. Only four municipalities (Eaton, Forkston, and Monroe Townships and Tunkhannock Borough) lost housing units from 2000 to 2010.

Table A-7
**Share of Housing Devoted to Seasonal,
 Recreational, or Occasional (SRO) Use—2000–2010**

	2010			2000		
	Total Housing Units	SRO Units	Percent SRO	Total Housing Units	SRO Units	Percent SRO
Wyoming County	13,254	1,368	10.3%	12,713	1,316	10.4%
Pennsylvania	5,567,315	161,582	2.9%	5,249,750	148,230	2.8%

Table A-8
Total Housing Units, 2000-2010

Municipality	Total Population		Change 2000–2010	
	2010	2000	Number	Percent
Braintrim Township	313	274	39	14.2%
Clinton Township	571	496	75	15.1%
Eaton Township	774	842	(68)	(8.1)%
Exeter Township	403	403	0	0.0%
Factoryville Borough	365	363	2	0.6%
Falls Township	824	763	61	8.0%
Forkston Township	294	336	(42)	(12.5)%
Laceyville Borough	185	179	6	3.4%
Lemon Township	660	621	39	6.3%
Mehoopany Borough	406	406	0	0.0%
Meshoppen Borough	217	209	8	3.8%
Meshoppen Township	554	455	99	21.8%
Monroe Township	732	785	(53)	(6.8)%
Nicholson Borough	343	308	35	11.4%
Nicholson Township	695	644	51	7.9%
North Branch Township	129	118	11	9.3%
Northmoreland Township	645	600	45	7.5%
Noxen Township	427	419	8	1.9%
Overfield Township	970	852	118	13.9%
Tunkhannock Borough	871	888	(17)	(1.9)%
Tunkhannock Township	1,899	1,822	77	4.2%
Washington Township	569	525	44	8.4%
Windham Township	408	405	3	0.7%
Wyoming County	13,254	12,713	541	4.3%

In 2010, the number of owner-occupied housing units in Wyoming County (8,612) was more than three times the number of renter-occupied units (2,625 – see Table A-9). From 2000 to 2010, the increase in the number of renter-occupied units (355 units) was greater than the increase in the number of owner-occupied units (120 units)

Table A-9
Housing Ownership - 2000-2010

	2010		2000		Change, 2000–2010	
	Number	Percent	Number	Percent	Number	Percent
Occupied Housing Units	11,237	84.8%	10,762	84.7%	475	4.4%
Owner-Occupied Units	8,612	76.6%	8,492	78.9%	120	1.4%
Renter-Occupied Units	2,625	23.4%	2,270	21.1%	355	15.6%
Vacant Housing Units	2,017	15.2%	1,951	15.3%	66	3.4%

Average household size—the average number of persons in each occupied housing unit—decreased in Wyoming County between 2000 and 2016 (Table A-10). From 2000 to 2010, average household size continued a decades-long decline in the county, state, and nation. From 2010 to 2016, household size increased in the county, state, and nation, perhaps reflecting the fact that more adult children are living with parents.

Table A-10
Average Household Size

	Persons Per Household			Change	
	2016	2010	2000	Number	Percent
Wyoming County	2.52	2.46	2.55	(0.03)	(1.2%)
Pennsylvania	2.49	2.45	2.48	0.01	0.0%
United States	2.64	2.58	2.59	0.05	1.9%

EDUCATION

Compared to Pennsylvania as a whole, Wyoming County has a higher percent of high school graduates and a lower percent of residents that go on to receive college degrees. Among county residents age 18–24, 35.7 percent are high school graduates compared to 32.4 percent of the state. For the same population, 51.9 percent of county residents and 55.3 percent of state residents had at least some college education (Table A-10).

Among the population age 25 and older, the profiles are similar to the younger age bracket. A total of 47.9 percent of county residents and 36.0 percent of state residents graduated from high school, including equivalency diplomas. For the same population, 42.8 percent of county residents and 53.5 percent of state residents had at least some college training. Fewer Wyoming County residents received a college degree than in the state as a whole, which is a common trend in mostly rural counties.

Table A-10
Percent of Population by Educational Attainment, 2012–2016

	Wyoming County	Pennsylvania
Population, age 18–24	2,571	1,229,863
Less than high school graduate	15.4%	12.3%
High school graduate (incl. equivalency)	32.7%	32.4%
Some college or associate’s degree	44.7%	43.5%
Bachelor’s degree or higher	7.2%	11.8%
Population, 25 years and older	19,704	8,849,846
Less than 9 th grade	2.0%	3.4%
9 th to 12 th grade, no diploma	6.4%	7.0%
High school graduate (incl. equivalency)	47.9%	36.0%
Some college, no degree	16.7%	16.2%
Associate’s degree	8.5%	8.0%
Bachelor’s degree	12.0%	17.8%
Graduate or professional degree	6.5%	11.5%

Source: U. S. Census, American Community Survey (ACS), 5-year estimates, 2012–2016

INCOME

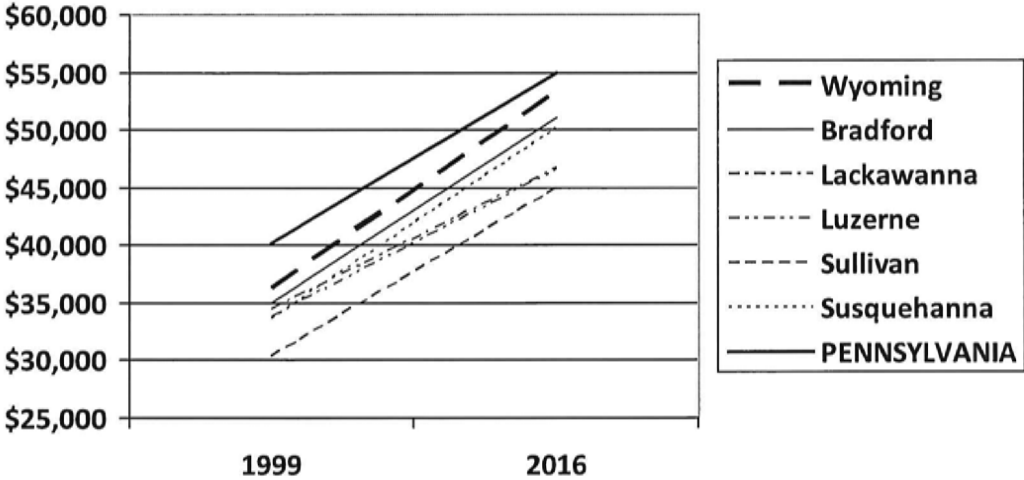
Median household income is one of the most common measurements of income. Half of the incomes are above the median, and half are below. In 2016,¹ median household income in Wyoming County was the highest of any of the surrounding counties (Table A-11). Income in Wyoming County also grew at a higher rate from 1999 to 2016 than in any other area county except Susquehanna and Sullivan. Income levels in all area counties in both 1999 and 2016 were lower than in Pennsylvania as a whole.

Table A-11
Median Annual Household Income, 1999–2016

	Median Annual Household Income		Change, 1999-2016	
	2016	1999	Dollars	Percent
Wyoming County	\$53,397	\$36,365	\$17,032	46.8%
Bradford County	\$51,035	\$35,038	\$15,997	45.7%
Lackawanna County	\$46,673	\$34,438	\$12,235	35.5%
Luzerne County	\$46,577	\$33,771	\$12,806	37.9%
Sullivan County	\$44,926	\$30,279	\$14,647	48.4%
Susquehanna County	\$50,160	\$33,622	\$16,538	49.2%
Pennsylvania	\$54,895	\$40,106	\$14,789	36.9%

¹The Census Bureau no longer asks questions regarding income in the decennial census, beginning in 2010. Data on income must be taken from the annual, sample-driven American Community Survey.

Chart A-3
Median Annual Household Income, 1999–2016



Appendix B Agricultural Background Information

The U. S. Census of Agriculture is completed every five years. The latest available data is from 2012. Key points from the 2012 Census of Agriculture regarding Wyoming County include:

- In general, the number of farms in the County decreased significantly from 2007 to 2012, but the productivity of each farm increased significantly during the same period --- part of a national trend going on for many years: mid-sized farms are disappearing. Larger farms are getting larger, while many smaller farms are part-time “hobby farms” that are operated or leased by persons with other sources of income. In Wyoming County, in 2012, 54 percent of farm operators said farming was not their primary job.
- The County had 508 farms in 2012, a decrease of 141 farms (21.7 percent) from 649 farms in 2007.
- The total amount of farmland in Wyoming County in 2012 was 68,749 acres, or 27.0 percent of the County’s land area.
- The mean (average) size of each farm increased from 120 acres in 2007 to 135 acres in 2012, an increase of 15 acres, or 12.5 percent. The median size of farm was 94 acres in 2012, meaning that half of farms were larger and half were smaller than 94 acres.
- The number of farms in Wyoming County in 2012, by size, was:

— 1 to 9 acres:	29
— 10 to 49 acres:	128
— 50 to 179 acres:	234
— 180 to 499 acres:	101
— 500 to 999 acres:	13
— 1,000 acres or more:	<u>3</u>
	508
- The average estimated value of a farm in Wyoming County was \$542,845 in 2012. The average self-reported estimated value per acre of farmland in Wyoming County was \$4,011 in 2012.
- Despite the reduced number of farms, the market value of products sold from Wyoming County farms increased from \$13,496,000 in 2007 to \$14,616,000 in 2012, an increase of \$1,120,000 (8.3 percent). Wyoming County ranked 53rd out of Pennsylvania’s 67 counties in total market value of agricultural products. Crops accounted for 57 percent of 2012 sales, while livestock accounted for the remaining 43 percent.
- The average market value of products per farm increased from \$20,796 in 2007 to \$28,772 in 2012, an increase of \$7,976, or 38.5 percent.
- The number of farms by value of product sales in 2012 in Wyoming County was:

— Less than \$2,500:	233
— \$2,500 to \$4,999:	48
— \$5,000 to \$9,999:	61
— \$10,000 to \$24,999:	57
— \$25,000 to \$49,999:	41

— \$50,000 to \$99,999:	29
— \$100,000 or more:	<u>39</u>
	508

- Government payments to farmers were relatively small on Wyoming farms, averaging \$3,929 (\$327 per month) per farm in 2012.
- Average production expenses per farm were \$28,143 per year in 2012. The net cash income of operation per farm in 2012 was \$13,724.

- In terms of market value, the most valuable items in Wyoming County for 2012 were:

- 1) Commodity group sales: milk from cows — \$4,223,000 in sales (51st out of 67 counties)
- 2) Crop item: corn for grain — 4,063 acres (48th out of 67 counties)
- 3) Livestock inventory item: cattle and calves — 6,430 head (49th out of 67 counties)

- The number of livestock and number of farms with livestock in 2012 in Wyoming County was:

— Cattle and calves inventory:	154	farms	6,430	head
— Beef cows	83	farms	1,156	head
— Milk cows	34	farms	1,559	head
— Cattle and calves sold:	112	farms	2,046	head
— Hogs and pigs inventory:	25	farms	141	head
— Hogs and pigs sold:	18	farms	277	head
— Sheep and lambs inventory:	13	farms	878	head
— Layers (chickens) inventory:	80	farms	1,858	number
— Broilers and other meat-type chickens sold:	2	farms	*	number (withheld to avoid disclosing data for individual farms)

- Crops harvested in 2012 in Wyoming County included:

— Corn for grain:	64	farms	4,063	acres
	460,674	bushels		
— Corn for silage or greenchop:	42	farms	1,176	acres
	18,889	bushels		
— Winter wheat for grain, all:	2	farms	*	(acres and bushels withheld to avoid disclosing numbers for individual farms)
— Oats for grain:	8	farms	125	acres
	6,170	bushels		
— Sorghum for silage or greenchop	3	farms	13	acres
	110	bushels		
— Soybeans for beans	5	farms	277	acres
	9,650	bushels		
— Forage ²	288	farms	18,470	acres
	38,409	bushels		
— Vegetables harvested for sale	29	farms	303	acres
— Land in orchards	16	farms	75	acres

² Land used for all hay and all haylage, grass silage, and greenchop.

- The principal occupation of primary farm operators was:
 - Farming (234, or 46.1 percent)
 - Other (274, or 53.9 percent)
- In 2012, 430 (84.6 percent) of the primary farm operators in Wyoming County were male, and 78 (15.4 percent) of primary farm operators in Wyoming County were female.
- The average age of primary farm operators in Wyoming County in 2012 was 59.3 years. The increasing age of full-time farmers is a concern across the entire nation. In addition, younger persons may not be attracted to the profession and/or may not be able to afford buying a farm.

Appendix C Adjacent County Comprehensive Plans

The comprehensive plans for the counties surrounding Wyoming all anticipate very low intensity land uses surrounding Wyoming County, with an emphasis on supporting conservation of land and resource. The one exception is in the LaPlume area near Keystone College. Specifically, the plan categories for land along the Wyoming County border in each surrounding county is identified below:

- Bradford — Resource Protection and Rural Resource Production
- Susquehanna — Rural Resource Areas
- Lackawanna — The entire border is planned for conservation uses except for a “low density infill area” near LaPlume, Route 6 and Keystone College.
- Luzerne — The entire border is planned for conservation uses, including some State Game Lands and Ricketts Glen State Park along the Wyoming border.
- Sullivan — Resource Protection

Appendix D
Summary of Potential Community Development Funding Sources

The following table summarizes major state and federal governmental funding sources that offer opportunities for funding assistance. Funding sources are always changing. New programs are added and older programs are revised, renamed or deleted. Also, some programs still exist in name only and are not currently funded. Some of the unfunded programs could see funding restored in the future. Programs also vary in the level of competitiveness, depending on the amount of funding and the typical number of applications. Therefore, Wyoming County and other interested parties should constantly check with funding agencies to determine the latest and most promising funding opportunities.

Potential applicants should always contact the regional or central office of the funding source to discuss a project and identify all potential funding sources and the requirements for each. The primary online sources for funding program information include:

PA Dept. of Community & Economic Development (DCED):

<http://www.newpa.com/find-and-apply-for-funding/>

PA. Dept. of Conservation and Natural Resources (DCNR):

<http://www.dcnr.state.pa.us/brc/elibrary/resourcesta/funding/index.htm>

The State Commonwealth Financing Authority (CFA) administers certain programs, including ones funded by gas industry impact fees.

	Program Type	Overview of Program	Administering Agency(ies)
Abandoned Mine Drainage Abatement and Treatment Program (AMDATP)	Grants Loans	Allocates funds for abandoned mine drainage, abatement, and treatment.	CFA
Alternative and Clean Energy Program (ACE) (match required)	Grants Loans Loan Guarantees	Provides financial assistance to utilize, develop, and construct alternative and clean energy projects in the state.	DCED and PA Dept. of Environ. Protection (DEP)
Alternative Fuel Vehicle Rebate Program (AFVRP)	Grants	Provides rebates to consumers for the purchase of new, non-leased, plug-in hybrid, plug-in electric, natural gas, propane and hydrogen fuel cell vehicles.	DEP
Appalachian Regional Commission (ARC)	Grants Loans	Projects are intended to create new jobs, improve local water and sewer systems, increase school readiness, expand access to health care, assist local communities with strategic planning, and provide technical and managerial assistance to emerging businesses.	ARC
Automated Red Light Enforcement Grant Program	Grants	Offers grants to improve traffic signals and related electronic systems, to update signal timing, to add turn lanes at intersections to increase capacity, to improve traffic signs and pavement markers (including around school zones), to make pedestrian safety improvements along a road, to install guiderails, and to make drainage improvements that are directly related to a road improvement.	PennDOT
Baseline Water Quality Data Program (BWQDP)	Grants	Funded by the gas industry impact fees, to test water quality.	CFA
Ben Franklin Technology Development Authority (BFTDA) –University Research Commercialization Grant Funding	Grants	Grants are designed to promote stronger synergy between university-based research and development and the transfer of technology as it relates to economic and work force development.	DCED
Building PA	Loans	Provides mezzanine capital for developers for real estate assets in small to mid-sized Pennsylvania communities.	DCED
Business in Our Sites (BOS)	Loans & Grants	Funds community efforts to provide an inventory of ready to build sites. Can be used for land acquisition, environmental assessments, demolition, infrastructure and transportation improvements.	DCED

	Program Type	Overview of Program	Administering Agency(ies)
Business Opportunities Fund (BOF)	Loans	Installment loans, lines of credit and technical assistance for minority business enterprises, women-owned business enterprises and small businesses.	DCED
Circuit Rider Program (Part of C2P2)	Grants (match required)	Grants are awarded to initiate new programs and services for a county, Council of Government, and/or multi-municipal entity that individually does not have the financial resources to hire a professional full-time staff person. The Circuit Rider's purpose is to initiate new programs and services. The intended result of the project is to increase the ability of the grantee to more efficiently and effectively meet recreation, park, or open space needs. The grantee will be responsible for funding the continuation of the position.	DCNR
Community Development Block Grant (CDBG)	Grants	Federal grants administered by the State and County to serve community development needs of low and moderate income areas, to eliminate blight, and to make physical improvements to serve persons with disabilities. Certain larger communities receive an annual entitlement grant from HUD. Most municipalities annually can apply for funding that is allocated through the County. Typical projects involve housing rehab, infrastructure repair (such as storm sewers), demolition to remove blight, or installation of sidewalk ramps to improve access for persons with disabilities.	DCED and County Redevelopment Authority
Community Recreation and Conservation Program (Part of C2P2)	Grants (match required)	Grants are awarded to municipalities and authorized nonprofit organizations for projects, such as: <ul style="list-style-type: none"> • Planning for feasibility studies, trail studies, conservation plans, • Master site development plans, • Comprehensive recreation, park, open space, and greenway plans, • Land acquisition for active or passive parks, trails, and conservation purposes, and • New development and rehabilitation of parks, trails and recreation facilities. 	DCNR
Community Economic Development Loan Program	Loans	Low-interest loans for projects in distressed communities.	DCED
Discovered and Developed in PA Program (D2PA)	Grants	Funds to build capacity to better support Pennsylvania businesses and to spur creativity and innovation in the provision of economic development services.	DCED

	Program Type	Overview of Program	Administering Agency(ies)
Export Financing Program	Loans	Working capital to acquire inventory, pay direct and indirect costs used for the manufacture or purchase of goods or for the provision of services; support standby letters of credit used as bid bonds, performance bonds or payment guarantees.	DCED
Film Tax Credit Program	Tax Credit	State tax credits to expand the activity of film, television, and other media production in Pennsylvania.	DCED
First Industries Fund (FIF)	Loans Grants Guarantees	Funding to strengthen agriculture and tourism industries.	DCED
Flood Mitigation Program (FMP)	Grant (match required)	The Marcellus impact fees provide funds to the CFA to help fund flood mitigation projects statewide.	DCED and DEP
Global Access Program (GAP)	Expense Reimbursement	Enhances the capability of small and mid-sized PA companies to increase export sales.	PA Office of International Business Devel.
Greenways, Trails and Recreation Program (GTRP)	Grant (match required)	Allocates funds from the Marcellus Legacy Fund to plan, acquire, develop, rehabilitate, and repair greenways, recreational trails, open space, parks and beautification projects.	DCED
H2O PA Flood Control Projects	Grants	Provides single-year or multi-year grants to the State, independent agencies, municipalities, or municipal authorities for flood control projects.	DCED
H2O PA - High Hazard Unsafe Dam Projects	Grants	Provides single-year or multi-year grants to the state, independent agencies, municipalities or authorities for High Hazard Unsafe Dams.	DCED
H2O PA - Water Supply, Sanitary Sewer and Storm Water Projects	Grants	Provides grants to municipalities or municipal authorities to assist with the construction of drinking water, sanitary sewer and storm sewer projects.	DCED
Hazard Mitigation Grants	Grants	Provides grants to reduce hazards from natural disasters, such as flooding.	PA. Emergency Management Agency
High Performance Building Program (HPB)	Grants Loans Guarantees	Underwrites the cost premiums associated with the design and construction or major renovation of high performance buildings in the state.	DCED and DEP

	Program Type	Overview of Program	Administering Agency(ies)
Historic Preservation Tax Credit (HPTC)	Tax Credits	Provides tax credits to qualified taxpayers who restore a qualified historic structure into an income-producing property. All projects must include a qualified rehabilitation plan approved by the Pennsylvania Historical and Museum Commission (PHMC).	DCED
HOME	Grants Loans Tech. Asst.	Provides federal grant, loan, and technical assistance to municipalities to expand the supply of quality affordable housing for low-income Pennsylvanians.	DCED
Industrial Sites Reuse Program (ISRP)	Grants Loans (match required)	Supports performing environmental site assessment and remediation work at former industrial sites.	DCED
Job Creation Tax Credits (JCTC)	Tax Credits	A \$1,000-per-job tax credit to approved businesses that create new jobs in the state within 3 years.	DCED
Joint Opportunity Business Partnership Fund (JOB Partnership Fund)	Loans	Provides loans to private equity partnerships for investment in companies. The nature of the investments by the private equity partnerships shall be equity or convertible debt.	DCED
Keystone Communities Program (KCP) (Note: This Program consolidates the former New Communities, Housing and Redevelopment Assistance, and Accessible Housing programs).	Grants	Assists communities in achieving revitalization. The program designates and funds communities that are implementing Main Street, Elm Street, Enterprise Zone efforts or other community development efforts by supporting physical improvements to designated and/or other communities that are undertaking revitalization activities. For example, funding is often provided for facade improvements of downtown buildings. Also, provides accessible modifications for the homes of persons with physical disabilities. Components include: <ul style="list-style-type: none"> • Keystone Main Streets • Keystone Elm Streets (inactive) • Keystone Enterprise Zones • Keystone Communities • Keystone Communities Development Projects • Accessible Housing 	DCED
Keystone Historic Preservation Grant Program	Grants	Funding for historic preservation projects.	PHMC

	Program Type	Overview of Program	Administering Agency(ies)
Keystone Innovation Network (KIN)	Grants	Provides matching funds to create an integrated approach to local and regional innovation based economic development strategies. Leverages investments in the Keystone Innovation Zones (KIZ) and Innovation Grant (IG) programs. Participating companies, universities, researchers, students and entrepreneurs will realize an improved level of access to technology and resources to grow firms. The KIN is a competitive grant program supported by the State Technology Development Authority. The program emphasizes partnerships, improved performance, and competition, while creating closer collaboration and support for eligible companies and universities.	DCED
Keystone Innovation Zone (KIZ) Tax Credit	Tax credits	An incentive program that provides tax credits to for-profit companies less than eight years old operating within specific targeted industries within the boundaries of a KIZ. Provides a pool of millions in tax credits to KIZ companies annually.	DCED
Keystone Opportunity Zones (KOZs)	Tax Incentives & Priority consideration for many programs	Provides certain state and local tax abatement to businesses and residents locating in designated zones.	DCED
Keystone Special Development Zone (KSDZ)	Tax credits	Provides incentives to for-profit businesses that locate and operate in designated geographic zones. Pennsylvania continues to have a surplus of abandoned, deteriorated commercial and industrial sites in need of revitalization. Provides incentives to foster redevelopment of the former industrial and commercial sites.	DCED
Land Trust Program (Part of C2P2)	Grants (match required)	Awarded to pre-qualified land trusts and conservancies to fund projects for open space and natural areas planning and acquisition. Priority is given to protecting critical habitats.	DCNR
Local Government Capital Project Loan Program (LGCPLP)	Loans	Low-interest loans to local government for equipment and facility needs.	DCED
Machinery and Equipment Loan Fund (MELF)	Loans	Low-interest loans to businesses to acquire and install new or used machinery and equipment or to upgrade existing machinery and equipment	DCED

	Program Type	Overview of Program	Administering Agency(ies)
Market Access Grant (MAG)	Grants (match required)	Enhances the capability of small and mid-sized PA companies to increase export sales.	DCED
Marketing to Attract Business (MAB)	Grants	Supports the promotion of business retention, expansion, and attraction. Provides funding for projects that demonstrate the importance of marketing the state as a destination of choice for investment and promoting the attributes and assets of individual regions.	DCED
Marketing to Attract Tourists	Grants	Funds projects to attract a consistent flow of visitors year-round, and to increase their length of stays. This includes funding to support and development heritage assets, enhance outdoor recreation, and support the growth or development of various events.	DCED
Multi-modal Transportation Fund (MTF)	Grants (match required)	Provides grants to encourage economic development and ensure that a safe and reliable system of transportation is available to the residents of the commonwealth.	DCED and PennDOT
Municipal Assistance Program (MAP)	Grants (match required)	Provides funding to assist local governments to plan for and efficiently implement a variety of services and improvements, and soundly manage development with an emphasis on intergovernmental approaches. Funding is available for three groups of activities: shared services, community planning and floodplain management.	DCED
Municipal Recycling Program (MRP)	Grants	Assist municipalities and counties in developing and implementing recycling programs, such as funding recycling receptacles and equipment.	DEP
Municipal Signal Partnership Program (also known as the "Green Light-Go" Program)	Grants (50% match required)	The program is designed to improve safety and mobility by reducing congestion and improving efficiency of existing traffic signals on state highways. Comprised of the Local Grant Element (Designated only Corridors) and the PennDOT Project Element (Critical Corridors).	PennDOT
Neighborhood Assistance Program (NAP)	Tax credits	Encourages businesses to invest in projects which improve distressed areas, in return for business tax credits. Must be based upon a neighborhood plan.	DCED
Neighborhood Assistance/Enterprise Zone Tax Credit (NAP/EZP)	Tax credits	Incentive program for private companies investing in rehabilitating, expanding, or improving buildings or land located within designated enterprise zones.	DCED

	Program Type	Overview of Program	Administering Agency(ies)
Neighborhood Stabilization Program (NSP2)	Grants	Helps communities address the housing foreclosure crisis created by subprime and other problematic mortgage lending. Part of the CDBG Program.	DCED
New American Development Fund	Loans	Low-cost loans to enterprises with job-creating projects that involve a federally-designated EB5 project. The EB5 investor program grants eligible foreign investors the opportunity to obtain a visa if they commit to invest funds in job-producing development projects. Funds may be used to finance new construction, the acquisition of plant, property, and equipment, building rehabilitation, tenant improvements, and working capital.	DCED
New Market Tax Credits	Tax Credits	Offers federal tax credits through a competitive process, for investments in revitalization projects.	PHFA
New PA Venture Capital Investment Program	Loans	Loans to venture capital partnerships to invest in growth-stage PA companies.	DCED
New PA Venture Guarantee Program	Loan Guarantees	Guarantees to top-tier venture capital partnerships for investments in growth stage PA companies	DCED
Next Generation Farmer Loan Program	Loans	Program uses federal tax-exempt mortgage financing to reduce a farmer's interest rate for capital purchases, such as the purchase of farm land or agricultural machinery and equipment.	Local Industrial Development Authorities
Orphan or Abandoned Well Plugging Program (OAWP)	Grants	Marcellus Legacy Fund money can fund orphan or abandoned well plugging projects using the OAWP. Pennsylvania has hundreds of thousands of oil and gas wells drilled since 1859. Provides a mechanism to plug abandoned and orphaned wells that have the potential to cause health, safety, or environmental concerns.	DCED
PA Small Water and Sewer Program	Grants	For smaller water and sewer infrastructure projects.	DCED through CFA
Partnerships for Regional Economic Performance (PREP)	Grants to consortia of eligible service providers	Integrates services by: Industrial Resource Centers, Industrial Development Organizations, Local Development Districts, and Small Business Development Centers	DCED
Partnerships Program (Part of C2P2)	Grants (match required)	Grants are awarded to statewide and regional partners who advance DCNR's Strategic Plan, PA's Greenway Plan, PA's Statewide Outdoor Recreation Plan, PA's Heritage Areas Program and the Conservation Landscape Program.	DCNR

	Program Type	Overview of Program	Administering Agency(ies)
Peer-to-Peer Program (Part of C2P2)	Grants (match required)	Grants awarded to help municipalities improve park, recreation and conservation services through a collaborative process. Projects are accomplished through contracts with experienced park, recreation, and conservation professionals from nearby communities who will work closely with local leaders. Examples include: <ul style="list-style-type: none"> • Projects that form new intergovernmental recreation and park agencies (which is a high priority for DCNR) • Improving management of a specific facility such as a community center, trail or pool • Conducting an overall management assessment of an agency's park and recreation services • Park and recreation board training/development 	DCNR
Pennsylvania Capital Access Program (PennCAP)	Loan guarantees	Through participating banks to be used to support a wide variety of business purposes.	DCED
PA Community Development Bank Loan Program (PCD Bank)	Loans	Debt financing for Community Development Financial Institutions (CDFIs)	DCED
PA Economic Development Financing Authority (PEDFA) Tax- Exempt Bond Program	Bonds	Tax-exempt bonds, both in pooled transactions and stand-alone transactions, to be used to finance land, building, equipment, working capital and refinancings.	
PEDFA Taxable Bond Program	Bonds	Taxable bonds to be used to finance land, building, equipment, working capital and refinancings.	DCED
Pennsylvania First (PA First)	Grants Loans Loan Guarantees	Funding to facilitate increased business investment and job creation.	DCED
PA Housing Finance Agency	Grants, Loans & Tax Credits	Programs promote home ownership, offer emergency mortgage assistance, and provide funding to replace homeowner septic systems.	PHFA
PA Industrial Development Authority (PIDA)	Loans	Financing through Industrial Development Corporations for land and building acquisition, construction, and renovation resulting in the creation or retention of jobs.	DCED
Pennsylvania Infrastructure Bank (PIB)	Loans	For the design, engineering, right-of-way and repair, reconstruction and construction of public highways, bridges, public and private airports and railroads and public transportation systems.	PennDOT

	Program Type	Overview of Program	Administering Agency(ies)
PA Infrastructure Investment Auth. (PennVEST)	Low-interest loans and limited grants	For design, engineering and construction of publicly- and privately-owned drinking water distribution and treatment facilities, storm water conveyance, and wastewater treatment and collection systems. PennVEST has also funded some tree planting programs to reduce stormwater runoff.	PennVEST
PA Minority Business Devel. Auth. (PMBDA)	Loans	Loans to businesses owned and operated by ethnic minorities	DCED
PA Natural Gas Energy Development Program	Grants	Funding for the purchase or conversion of heavy-duty natural gas vehicles.	DEP
PA Recreational Trails Program (Part of C2P2)	Grants (match required)	Grants are awarded to federal & state agencies, local governments, non-profit and for-profit organizations to assist with the construction, renovation, and maintenance of trails and trail-related facilities for both motorized and non-motorized recreational trail use, and the purchase or lease of equipment for trail maintenance.	DCNR
PA Small Business Credit Initiative (SSBCI)	Loans	Increases access to credit for small businesses, through existing DCED programs to partner organizations and the Machinery and Equipment Loan Fund (MELF).	DCED
Pollution Prevention Assistance Account Program (PPAA)	Loans	Assistance for small businesses to implement pollution prevention and energy-efficiency projects, enabling the businesses to adopt or install equipment or processes that reduce pollution, energy use or raw materials.	DCED
Rail Freight Assistance (RFA)	Grants (match required)	Grants to build or repair rail lines or spurs, to promote economic development	PennDOT
Rails-to-Trails Program (Part of C2P2)	Grant (match required)	Awarded to county and municipal governments, pre-qualified land trusts, educational institutions, and non-profit organizations established to preserve and protect abandoned railroad corridors as trails. Projects can include: <ul style="list-style-type: none"> • feasibility, master site development, and special purpose studies, • land acquisition, and • development of abandoned railroad rights-of-way for trail purposes under rail banking. Development includes construction of trails and associated support facilities, such as trail heads, access roads, parking areas, interpretive facilities, comfort facilities, lighting, and signage.	DCNR

	Program Type	Overview of Program	Administering Agency(ies)
Regional Investment Marketing (RIM)	Grant (match required)	Supports the marketing initiatives of regional alliances that adopt DCED's industry-focused economic development model.	DCED
Regional Police Assistance Grant Program	Grants	Grants for two or more municipalities that regionalize police operations	DCED
Renewable Energy Program (REP)	Grants Loans	Provides financial assistance in the forms of grant and loan funds to promote the use of alternative energy, such as geothermal and wind.	DCED and DEP under CFA direction
Research and Development Tax Credit	Tax credits	Allows companies holding qualifying Research and Development Tax Credits to apply for approval to sell those tax credits and assign them to the buyer(s).	PA Dept. of Revenue
Rivers Conservation Program (Part of C2P2)	Grants (match required)	Funding is available to municipalities and nonprofit organizations, to develop or implement watershed/ river-corridor conservation plans. Priority is given to projects that implement plan recommendations in watersheds that are recorded on the PA Rivers Registry. DCNR will consider early implementation development projects for funding in watersheds not linked to a Rivers Conservation Plan if the project can stand on its own merits and presents a significant and/or unique opportunity.	DCNR
Second Stage Loan Program	Loan guarantees	For working capital for 2–7 year old manufacturing, biotech, and technology-oriented companies	DCED through CFA
Section 108 Program under the Community Development Block Grant (CDBG)	Loan guarantees	Enables local governments participating in the CDBG program to obtain federally guaranteed loans to fund large economic development projects and undertake revitalization activities. Under Section 108, the loans are guaranteed by the commonwealth, committing the use of future CDBG funds to pay off the loan in case of default.	DCED
Sewage Facilities Program (SFP)	Grants	Funds initiatives for complying with the Pennsylvania Sewage Facilities Act.	CFA
Small Business First (SBF)	Loans	Funding for small businesses, including: <ul style="list-style-type: none"> • low-interest loan financing for land & building acquisition and construction, • machinery and equipment purchases, and • working capital. 	Local Area Loan Organizations (ALOs)

	Program Type	Overview of Program	Administering Agency(ies)
Snowmobile/All-Terrain Vehicle Program (Part of C2P2)	Grants (match required)	Grants are awarded to assist with the planning, acquisition of land, construction, renovation, and maintenance of areas and facilities for snowmobile and all-terrain vehicle (ATV) use, the purchase or lease of equipment for trail construction and maintenance, and the development of educational materials and programs.	DCNR
Solar Energy Program (SEP)	Grants Loans	Provides financial assistance to promote the use of alternative solar energy in PA.	DCED and DEP under CFA direction
Tax Increment Financing (TIF) Guarantee Program	Loan guarantees	Promotes the development, redevelopment and revitalization of Brownfield and Greenfield sites in accordance with the TIF Act. The program provides credit enhancement for TIF projects to improve market access and lower capital costs through the use of guarantees to issuers of bonds or other indebtedness.	DCED
Technical Evaluation of HSCA Remedial Response	Grants	A Hazardous Sites Cleanup Act (HSCA) host municipality can receive a grant to conduct an independent technical evaluation of a proposed remedial response at a HSCA site. The grant money is locally administered by and available through the County.	DEP and the County
Transportation Alternatives Program (TAP)	Grants (match required)	Provides federal grants to enhance pedestrian and bicycle facilities, improve access to public transportation, create safe routes to schools, preserve historic transportation structures, provide environmental mitigation, create trails that serve a transportation purpose, and promote safety and mobility.	PennDOT
Water Supply and Wastewater Infrastructure Program (PennWorks)	Grants and Loans	Provides funds to ensure safe water supply and proper wastewater infrastructure. Mainly funds water and sewer projects that are not solely for residential purposes.	DCED
Watershed Restoration and Protection Program (WRPP) (Part of the Marcellus Legacy Fund.)	Grants (match required)	Provides funds for watershed restoration and protection projects. The overall goal of the WRPP is to restore and maintain restored stream reaches impaired by the uncontrolled discharge of nonpoint source polluted runoff, and ultimately to remove these streams from DEP's Impaired Waters list.	DCED through CFA
Weatherization Assistance Program (WAP)	Grants	Increases energy efficiency for low-income homeowners by reducing energy costs, such as through installation of insulation.	DCED