

THE PLAN FOR TRANSPORTATION

GOAL: PROVIDE A SAFE AND EFFICIENT NETWORK THAT IS VERY CLOSELY COORDINATED WITH THE PLANS FOR LAND USES.

The region's road system forms the framework for development. The location and types of roads influence the directions and types of development. The intent is to maximize safety and minimize congestion.

Road Classifications

The region should continue to carefully plan road patterns and access from development according to the function each road is intended to serve within the overall road network. Roads in the region are classified by three major types: Arterial Roads, Collector Roads and Local Roads. In addition, outside of this Region, the Northeast Extension of the Turnpike is considered an Expressway.

Arterial Roads - These 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 248 and 209 and Delaware Avenue.

Collector Roads - These roads provide connections between arterial roads, connect together residential neighborhoods and gather traffic from local roads. Collector roads are intended to provide for moderate volumes of traffic at low speeds. Examples include Little Gap Road and Fireline Road.

Local Roads - These roads provide direct access from many adjacent properties, and channel traffic towards collector roads.

The map on the following page shows estimated average daily volumes of traffic on major roads in the area.

Traffic Volume Map

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

Total traffic volumes have greatly increased, and can be expected to continue to increase. The traffic volumes are not only caused by increased development and population, but also by the following factors:

- A dramatic increase in the miles driven by every person on the average, which is part of a national trend. This trend is caused by longer commutes to work and increased percentages of the population holding jobs (particularly including women).
- An increase in the number of vehicles per household on the average, which is part of a national trend, and which results in an increased number of trips with only one person in a vehicle.
- An increase in the geographic area covered by development, with development being much more dispersed. This results in longer trips and decreased ability to take a bus, ride a bike or walk to a destination.

As traffic congestion increases on main roads, more and more drivers seek alternative routes. Many of these alternative routes involve narrow winding rural roads or roads through residential areas, which creates noise and safety problems. Many roads are seeing much more traffic than they were ever designed to handle. Many rural roads are difficult or impossible to improve because of the closeness of homes, historic buildings, steep cliffs, creeks and wetlands.

Very few new through-roads have been built over the last 60 years. Instead, most developments involve cul-de-sacs or looped streets that do not serve through-traffic. Many developments do not include any road inter-connections, 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 this trend does help to reduce volumes and speeds on residential streets, it allows 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 there are alternatives in case of construction or accidents.

- Minimizing Through-Traffic on Residential Streets - Road/street patterns need to be designed so that local residential streets handle lower-speed lower-volume traffic, while through-traffic and truck traffic is directed to more suitable routes. This involves making sure that the through-roads are sufficiently free-flowing - so that motorists are not encouraged to seek alternative routes through residential neighborhoods. Local residential streets should continue to be designed in a fashion that does not allow higher-speed direct through-routes and thereby discourages through-traffic. However, an excessive amount of cul-de-sac streets should be avoided.

In residential areas, new collector roads can be appropriate if the road is designed with that intent from the very beginning. This should include designing the new through-road with sidewalks or pedestrian/bicycle paths so that there are fewer conflicts with traffic. New homes should be designed with their driveways entering local internal roads, as opposed to the new

through-road. The rear or sides of residential lots can then be landscaped along the through-road, preferably with any rear fencing on the inside of the landscaping provided by the developer. Earth berms can also be combined with landscaping along the through-roads to provide a noise barrier.

- Speeding - One of the most common complaints in the region concerns excessive speeding. For those municipalities that have local police protection, it is very difficult to enforce speed limits without the ability to use radar. A bill has been introduced in the State Legislature to allow full-time municipal police officers to use radar to enforce speed limits.
- Signal Timing and Coordination - Along Delaware Avenue, the way to maximize capacity of the current road system is to refine the timing of traffic signals and to make sure the timing of signals is fully coordinated along a corridor.
- Intersection Improvements - 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 or wider shoulders or a less sharp turning radius could increase traffic safety. greatly reduce congestion. Developers should also provide needed turn lanes and traffic signals whenever feasible.

Great care is needed to use “traffic calming” along Delaware Avenue in Palmerton and the center of Bowmanstown, as opposed to allowing high speeds. This could include:

- directing most truck traffic to other routes, such as by opening up a new entrance onto Route 248 to the former West Plant site,
- slow traffic through traffic signal timing (which reduces noise and safety hazards) to make it possible for pedestrians to cross and to allow Delaware Avenue to continue to serve as a desirable residential area, and
- promote Delaware Avenue as a pedestrian-friendly downtown, with moderate traffic speeds that promote the visibility of businesses and that allow persons to safely park and back out along the street.

In some cases, it may be possible to construct a landscaped median in the center of Delaware Avenue, such as approaching the railroad overpass. This median can serve as a point of refuge for bicyclists and pedestrians so that they only need to cross one direction of traffic at a time.

Heavy truck traffic can also be controlled by using a portable truck scale. Overweight trucks would be required to pay large fines. A portable truck scale and trained police officers could be shared amongst many municipalities through an inter-municipal agreement, with shared funding.

Emphasize Key Problem Areas

The following road segments are of particular concern:

1. Access to the former West Plant Site - This land in the west end of Palmerton north of Route

- 248 has great potential for new business redevelopment. However, the main road access is from the Delaware Avenue ramps of Route 248, and then turning north on Mauch Chunk Road. Mauch Chunk Road is not suitable for large amounts of traffic, and trucks would need to pass by many homes. A more direct route is needed, particularly to access the western part of the site. A new at-grade intersection is recommended on Route 248 to provide direct access into the site. This would require an exception from PennDOT to allow a break in the median. The intersection should be signalized and include turn lanes.
2. Forest Inn Road - The length of Forest Inn Road is a series of problems, from an awkward intersection with Little Gap Road to a series of sharp turns and an awkward high volume intersection at Route 209. The road serves as a major short-cut. The road also is icy during Winter conditions. Unfortunately, the topography, the presence of homes close to the road and flood-prone areas and wetlands make it almost impossible to improve the road. Forest Inn Road is the only road in the area that passes through that part of the Stoney Ridge. Over time, as adjacent land is developed, alternatives should be considered to construct a new road link or improve an existing road to provide an alternative route to portions of Forest Inn Road. Hazelwood Road, Fireline Road and Sand Quarry Road are currently being used as alternatives, although they may not be suitable. As traffic increases, a traffic signal may be justified at the intersection of Forest Inn Road and Route 209, which could help to moderate speeds along the road. Also, it may be appropriate to realign this intersection to form more of a “T” and/or to improve sight distances
 3. Trachsville - The intersection of Route 209 and Trachsville Hill Road is a problem because of limited sight distance from the east. The situation is aggravated because of a hill on the north side of the intersection and the presence of vehicles towing boats to and from Beltsville Lake. The topography does not allow any easy solution. As traffic increases, a traffic signal may be justified. An alternative would be a four way stop.
 4. Route 895 and Bank Street - This intersection in Bowmanstown may eventually need to be signalized, near the Lehigh River bridge.
 5. Outdated Bridges - There are several outdated bridges, including a narrow bridge on Lower Smith Gap Road northeast of the Blue Mountain Ski Area that is being replaced. That new bridge will allow most traffic to be diverted around the historic covered bridge and the narrow weight restricted bridge on Covered Bridge Road south of Little Gap Road. A one lane bridge also exists on Koch Road north of Route 209.
 6. Shoulders Along Little Gap Road and Lower Smith Gap Road - These roads need improved shoulders, to improve safety. The new bridge on Lower Smith Gap Road is likely to open up that road to more truck traffic, because there will no longer be weight limits.
 7. Blue Mountain Ski Area Access - The Blue Mountain Ski Area encourages customers from the south to arrive using Blue Mountain Drive. This steep road creates challenges during icy and snowing driving conditions, when skiing is most popular. Therefore, the shoulders should be improved along Blue Mountain Drive.

8. Route 209 - Towamensing Township and PennDOT should work together over the years to obtain additional right-of-way to provide for improvements along this highway, such as turn lanes and wider shoulders. If PennDOT is not willing to accept additional right-of-way at the time of subdivision approval, then the Township should require that the approved plans state that the additional right-of-way is set aside for future dedication. Buildings should be required to be setback from the road to provide room for future improvements. When feasible, rear or side access should be provided to lots, to access a common driveway at a location with good sight distance.

Current Transportation Projects Scheduled for State and Federal Funding

PennDOT prepares a 12 Year Transportation Plan that is intended to project the funding for various major transportation projects in various years. PennDOT works with the Northeastern Pennsylvania Alliance to program which projects should be considered to have the highest priorities. Those projects are then proposed to be funded in different budget years, based upon the funding that is expected to be available.

Each municipality can propose projects for funding on the 12 Year Plan. Across Pennsylvania, the projects that are most likely to be funded are those that:

- a) have the most cost-effective improvements in safety and congestion relief,
- b) promote highly visible economic development projects (such as redevelopment of the unused former New Jersey Zinc lands), and/or
- c) involve a municipality taking a leadership role in proposing the project, by hiring a traffic engineer to prepare a detailed study and cost estimate.

Currently, the only project in the four municipalities that is proposed for funding in the 12 Year Plan involves streetscape and pedestrian crossing improvements in Downtown Palmerton. If this situation continues, then the existing road system will have to suffice despite continually increasing traffic - except for improvements funded by developers or municipalities. Funds are also budgeted for some limited improvements to the D and L Trail along the west side of the Lehigh River. Surprisingly, millions of dollars have been anticipated as being available for projects in Carbon County but are listed as “reserve items.” It appears these funds have not yet been committed to any projects.

Take the initiative in municipal funding of engineering of needed road 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 process by the State to purchase right-of-way.

If a portion of the construction costs are provided by a municipality or a developer, that also makes a project more likely to be funded on a timely manner by PennDOT.

As part of new subdivisions, many townships seek that subdividers provide additional right-of-way to provide for 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 such time as PennDOT may realize it 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. It is possible that a person proposing a subdivision with little new traffic may be able to argue that their project does not create any need for additional right-of-way. However, that should not be a problem with subdivisions involving multiple new lots.

If a building older than 50 years old needs to be removed to make the project work, then the municipality or a landowner should take the lead in removing the building before applying for Federal and State funding. That greatly simplifies the process.

However, wherever practical, a road improvement should be completed without using State funds. This is because a project can typically be completed in a fraction of the time and at less total expense if the project is funded by a developer and/or municipality.

Carefully manage access of traffic onto major roads, especially Route 209 and Little Gap Road.

Special attention needs to be paid to controlling the number, design and location of driveways onto major roads. 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. This authority can be used to control traffic access management onto major roads.

For example, rear or side driveway access should be used where practical to reduce the number of turning movements directly onto major roads. This method works best when uses are able to gain access to a traffic signal. Connections between adjacent uses should be completed parallel to main roads to allow traffic to enter the road at carefully designed locations, where feasible.

The municipalities should seek inter-connections between adjacent non-residential uses along major roads, including interconnected parking lots or use of a rear service road. These interconnections allow motorists to visit more than one use without needing to enter and re-enter major roads. These interconnections can be required for a new development. If an existing adjacent use will not allow an inter-connection, then the new development should be required to provide the link as a stub. This stub can then be opened in the future when any development approval is sought on the adjacent lot.

Seek new collector roads through major new developments.

When a tract of land is proposed for a new development, the municipality should consider whether a

new collector road is needed in that area. If a new through-road connection is needed, the municipality should work with the developer (preferably at a sketch plan stage) to seek that the road be constructed as part of the new development. In most cases, the goal of a collector road is to get from point A to point B, with the developer being able to choose the most appropriate route through the developer's property. New collector roads through business development can be especially valuable to provide alternative routes around bottlenecks.

If a new collector road is intended to serve significant new traffic, ideally, residential driveways should not enter directly onto the collector road. Instead, new homes should enter onto a local street, and the rear of homes should be adjacent to the collector road. In this case, substantial landscaping should be used to buffer the new road from the rears of the homes.

Promote public transit use.

Opportunities should be sought to continue to expand bus service, including to connect to the LANTA bus system in the Lehigh Valley. This is not only important to reduce traffic, but also to increase access to jobs. Public transit is particularly important for persons who cannot afford to maintain their own car (including families with more drivers than cars), for persons who are unable to drive (such as persons with disabilities, persons with suspended licenses and some elderly persons), for young people who have not yet learned to drive, and for people who prefer alternatives (such as bicyclists who can attach their bikes on the front of a bus). Public transit is also important to serve residents of the increasing number of nursing homes, assisted living centers and age-restricted housing developments in the region, as well as residents who have "aged in place." Public transit also reduces traffic congestion, energy consumption, parking needs and air pollution.

Public transit services are organized by the Lehigh and Northampton Transportation Authority (LANTA) system. The system is named the Carbon County Community Transit. As of 2007, this included the Lynx bus route. That route extends from Nesquehoning to Jim Thorpe, to Lehighton to the commercial area along Route 443, to Palmerton Hospital, to the K-Mart in Walnutport, and then to the Lehigh Valley Mall. LANTA also operates a fixed bus route from the K-Mart in Walnutport to Downtown Slatington, the Lehigh Carbon Community College in Schnecksville, the Lehigh Valley Hospital and Center City Allentown. In Center City Allentown, transfers are available to many other destinations.

In addition, flexible "para-transit" service is available through Carbon County Community Transit. The service is available to anyone, however, subsidies are only available to older persons, persons on medical assistance and persons with disabilities. Therefore, the costs are too high for most members of the general public. Although there are no restrictions on the purposes of the trips, this 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.

If major new employers locate at the West Plant site, consideration should be given to locating a public transit stop that is easily accessible by buses.

Promote use of carpooling.

Federal funds should be sought for additional park and ride lots. These parking lots are the easiest way to encourage carpooling of persons to work. Park and ride lots are also valuable to promote use of the public bus system. The need for park and ride lots is driven by the high numbers of local residents who work outside of the region. The most appropriate places for park and ride lots are near the Route 209 interchange of the Turnpike and near Route 248.

Zoning incentives could be offered to developers of new commercial projects to provide parking areas that could be used as park and ride lots. This use would be feasible because the peak parking demand for a retail use is on weekends, not during weekday mornings and afternoons when there would be the main demand for a park and ride lot.

Promote safe bicycle and pedestrian travel.

The Community Facilities Plan section (see previously in this document) addresses recreation trails for bicycling and walking. However, 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 new developments along the more heavily traveled roads, sidewalks or asphalt paths should be required. However, where sidewalks or paths are not practical, new development should include cleared flat grass pathways along roads that are suitable for safe walking.

Roads should have sufficient width to provide room for bicyclists. Where curbing is not provided, shoulders should be provided that are wide enough and smooth enough for bicyclists. Cooperative efforts are needed with PennDOT to seek shoulders along the most heavily traveled State roads. 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.

GOAL: Provide high-quality community facilities and services in the most cost-efficient manner, including addressing needs for future growth.

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

Care is needed to avoid pollution of water supplies, including areas around wells of central water systems. Recommendations to protect existing groundwater supplies and creeks are included in the Natural Features Plan section. Extensions of a public water system are particularly valuable for firefighting.

Central sewage service should generally be avoided in rural areas of the region unless it is necessary to support an Open Space Development that will preserve the majority of the land. Unless there is no logical alternative, new private sewage and water systems in isolated locations should generally be avoided because of concerns that they may not be financially viable and properly operated over the long-term. Where a new private water or sewage system is allowed, it should be designed so that it could be incorporated into a larger public system in the future, where feasible.

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 Delaware River Basin Commission.
2. Lawful activities, such as extraction of minerals, impact water supply sources. Such activities 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.

Extend central sewage service to areas with failing septic systems, particularly along Little Gap Road in Lower Towamensing. Also, extend central sewage service to promote economic development in this area.

The 2001 Lower Towamensing Township Sewage Facilities Plan found widespread malfunctioning of on-lot septic systems in many areas of Aquashicola, Walkton and Little Gap. Many of these lots are served by cesspools that predated modern septic system standards. There were many situations where wastewater was found to be running onto the surface of the ground or into creeks. The most serious contamination of a creek was found along Mill Creek south of Aquashicola. This contamination involved fecal coliform, which typically comes from untreated sewage. Contamination was also found in the Buckwha and Aquashicola Creeks in the area.

Many property-owners reported that their septic tanks had not been pumped in years. Many of the properties do not have room for a modern replacement septic system.

Plans to serve Aquashicola with public sewage have been actively proposed since 1973. However, there have been difficulties obtaining funding that would make the service affordable. The costs of the extension were estimated to be \$8 million in 2001. Most available funding consists of low interest loans, as opposed to grants. However, a limited amount of grants may be available to assist with the costs of low income homeowners.

The Sewage Facilities Plan considered a variety of alternatives. The preferred alternative was for the Township to acquire the existing sewage system at the Blue Mountain Ski Area, expand it, and extend lines from Aquashicola, Walkton and Little Gap to the Ski Area plant. Another alternative would be to extend lines to the Palmerton sewage system, which has lines close to Aquashicola.

In any case, the extension of public sewage service to this area along Little Gap Road should be a priority not only to address public health, but also to promote economic development. Lower Towamensing has large areas zoned for business growth along Little Gap Road. Some of these areas include vacant or underused buildings. A large portion is within a State Keystone Opportunity Zone, which offers major tax benefits to businesses that locate within the Zone. However, without central sewage service, it is unlikely that major employers will be attracted.

The Palmerton sewage system has capacity for significant growth. The treatment plant is permitted to treat 750,000 gallons per day, but the average use is only 400,000 gallons per day. However, the Borough desires to reserve the existing capacity for new growth within the Borough limits, including the West Plant and areas north of Mauch Chunk Road.

Therefore, the Borough has told Lower Towamensing Township that if they want the Palmerton plant to serve Aquashicola, that Lower Towamensing would need to complete a plant expansion. The Borough's position is that they have no preference whether Aquashicola is served by Palmerton or by a new plant run by the Township, provided that the Borough does not experience any increased costs from serving the Township.

The Palmerton treatment plant is along the Aquashicola Creek between 3rd and 4th Streets. The Palmerton plant serves most of Palmerton and the High School.

A new public central sewage system was completed in Bowmanstown in the 1998. The treatment plant is located west of Route 248, one block north of the exit to Route 895, and discharges into the Lehigh River. It has a capacity of 140,000 gallons per day, approximately one-half of which is being used. Lower Towamensing's Sewage Facilities Plan considered whether service should be proposed into adjacent areas of Lower Towamensing. The study concluded that there was no evidence of a need for public sewage service, but there was long-term potential for extensions..

A private sewage treatment plant serves the Blue Mountain Ski Area. That plant was designed to be expanded in phases as development occurred. It discharges to the Buckwha Creek. It originally had a capacity of 25,000 gallons per day, but is proposed to be expanded initially to 50,000 gallons per day.

Land has been set aside for future expansions of the Ski Area plant.

The Chestnut Ridge Mobile Home Park on Lower Smith Gap Road also has a private sewage treatment plant.

Make sure that on-lot septic systems are adequate.

Most properties in the rural areas of the townships rely upon 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 suburban areas where they had public sewers and do not understand their septic systems. Of most importance, property-owners need to understand the need to have their septic systems pumped regularly (typically at least once every three years). If a system is not pumped regularly, the drain field eventually will 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 their well water tested regularly and to report any contamination that has been found to the township. These well water results can be used to identify areas of failing septic systems. In areas where there are a concentration of failing septic systems, the township should consider an ordinance that requires that the owner provide evidence that the system has been pumped and inspected at least once every three years. This is known as a Sewage Management Ordinance, which could apply within a defined district.

Every new lot that will be served by an on-lot septic system should be required by a municipal ordinance to have two separate locations that are tested and approved for a septic drain field. This is important to make sure that a suitable area will be available in case the initial drain field malfunctions. The back-up location should be required to be kept open and undisturbed.

Work to protect water supplies.

The Bowmanstown Water System is supplied with water from an area along Cherry Hill Road, between Club Road and Hemlock Street. There are three private water system in Lower Towamensing: at the Blue Mountain Ski Area, the Stonecrest Development and the Chestnut Ridge Mobile Home Park.

The former Palmer Water Company was purchased by the Palmerton Municipal Authority. The system serves Palmerton and approximately 80 properties in the Aquashicola area, extending to the east approximately to the Buick dealer on Little Gap Road. The system is supplied with water from 5 wells. Four wells are near the East Plant, including 3 that are south of 6th Street. A fifth well is about 200 feet south of Mauch Chunk Road within the grounds of the former West Plant.

The Palmerton Borough Manager reports that the system has plenty of capacity. The system only pumps water for 14 hours a day. If needs would be increased, pumping could occur the remainder of the day. The Borough Manager reports that the Borough is open to considering extensions of the water system. The water currently requires very little treatment, and there has been no evidence of contamination, after continual monitoring. Because most of the Borough's wells are over 300 feet deep, the depth provides some protection from surface contamination.

Great care is needed to provide adequate water services and to protect the water quality of groundwater and creeks. For the vast majority of the region, drinking water supplies come from groundwater within the region. This includes many public water supply wells, as well as individual wells serving homes, farms and businesses.

The underground geology greatly affects the vulnerability of water supplies to contamination. Once contamination occurs, it 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 public and private central water systems should prepare "Wellhead Protection Plans" to protect the quality of water near major water supply wells. A State grant program is available that could help to fund these efforts. A wellhead protection plan identifies the land areas around a well that are most likely to contribute towards contamination of the well, considering the underlying geology. The plan then recommends methods that can be used to avoid contamination in these 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. This type of planning is particularly important for future well sites in areas that have not yet been developed.
 - The primary area of concern is a 400 feet 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 should be considered to combine acquisition of land for public recreation with purchase and/or preservation of public well sites. Where it does not make sense to acquire land, a "conservation easement" could be donated or purchased that would prevent most types of development of the land while it remains privately owned.
- High intensity development should be prohibited in areas that are particularly important as water supplies. Instead, in key locations, types of land uses should be promoted that have a low percentage of the lot being covered by buildings and paving.
- Because of possible drought conditions and the threat of contamination, each water system needs excess water supplies. Ideally, each water system would have wells that are constructed but held in reserve until they are needed and/or have an emergency interconnection with a system with plentiful excess capacity. It is essential that every water system be able to serve its customers if one or more of its water sources would not be available. Well sites should also be

sufficiently scattered so that a contamination problem would 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 problem.

- Wherever feasible, each private and public central water system should have an emergency interconnection with another water system. These 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 their emergency response and emergency operations plans, and complete related training. This is particularly important to know how to respond in case of a spill of a hazardous substance 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 is described in the Land Use and Housing Plan section. This 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. This approach can be beneficial to provide a natural recharge and protective area near proposed well sites.
- When a new development proposes to connect into a central water system, attention should be focused upon 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.
- Whenever a new water or sewage system is approved, it should be required to be designed so that it could be efficiently incorporated into a larger system in the future. For example, easements should be provided to allow future connections from neighboring properties.
- Where a development will involve a substantial use of groundwater, a hydrogeological study can be required. This may include a test well that is constructed prior to subdivision approval. The goal is to show that sufficient water will be available for the development and that adjacent existing wells will not be adversely affected.
- It is desirable to use types of wastewater treatment that recharge water into the ground, after the water is treated. This particularly includes spray irrigation or drip irrigation (which involves underground hoses to distribute the treated water). These methods keep the water in the same watershed. This method also helps to preserve large areas of land, and works particularly well with a golf course. In comparison, most central sewage systems result in water being transported out of the watershed. For example, most water is pulled out of the ground by wells, used by homes and businesses, and then transported to the Lehigh River. This effectively

transports millions of gallons of water a day from groundwater out of the watershed - without recharging the groundwater.

- Stormwater runoff should be considered a resource, instead of something to be disposed of. This includes maximizing recharge of stormwater runoff into the groundwater. However, many infiltration methods require regular maintenance in order to properly function over time.
- Each township should adopt a well construction ordinance. This is important to make sure that new wells are properly constructed, including proper grouting to prevent contaminants from entering the well. As of 2007, there are no State regulations on the construction of a well. This Ordinance should also require that proper measures be used to seal a well that is no longer used - to prevent pollutants from entering the groundwater.
- For large private water withdrawals (such as water bottling companies), the municipalities should consider requiring municipal approval. For a larger development, this should include a "draw down" test using a test well, and comparing changes in water levels in neighboring wells.
 - If a water study shows some negative impacts, consideration should be given to measures to reduce the impacts. For example, a use could commit in advance to reduce water use during drought conditions (Note - The State normally does not apply this restriction to a water bottler, which may continue to use millions of gallons of water a day during a drought.) Or a use could commit to provide an improved water supply if a neighbor's well goes dry (which typically involves drilling a deeper well). Or, a use could be required to permanently preserve a large area of land with a conservation easement so that there will be sufficient land area for recharge of the groundwater.
 - Large water bottling operations for off-site use should be controlled to the maximum extent allowed by the law. It is generally understood that they cannot be completely prohibited because of pre-emption by the Delaware River Basin Commission. Some communities treat these uses as industrial uses and limit some activities to an industrial district, because they involve large amounts of tractor-trailer trucks and loading and unloading operations. Other communities allow these uses with special exception approval, but require water studies and very large minimum lot size requirements. These lot size requirements are intended to make sure that land will be preserved to allow recharge.
- The County should take the lead, with State grant funds, to collect hazardous materials from households, so they can be sent for properly disposal. The municipalities can play important roles in publicizing this program.
- Educational programs are needed to make homeowners aware of actions they can take to avoid water contamination. These 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 should continue to work with farmers to institute proper conservation measures to avoid water pollution, particularly from pesticides and manure.
- The County Conservation District and municipalities should continue to inspect land developments to make sure that proper soil erosion control measures are carried out.
- Contamination of water by high levels nitrates is also a public health concern. The health risks are particularly high for pregnant women and children. Nitrates are most commonly generated by spreading of manure upon fields or from runoff from livestock and poultry operations. In certain cases, where there are high existing nitrate levels in groundwater, 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.
- The municipalities should investigate alternatives to road salt that could be used for de-icing of roads. Road salt washes into creeks and affects fish habitats.

Support high-quality library service.

The Palmerton Area Library is located in Downtown Palmerton on Delaware Avenue. Because the local library meets certain minimum State standards, residents of the municipality are allowed to check out books from other public libraries throughout the State. While the library receives some State funds, it is dependent upon municipal contributions, fundraisers, fines and volunteer labor in order to balance its budget.

Work to Coordinate With the School District in Planning for Residential Growth and in Providing Recreation

The School District operates the following buildings:

- S.S. Palmer Elementary School at 298 Lafayette St. in Downtown Palmerton, which had a 2006 enrollment of 712 students in grades K to 6.
- Towamensing Elementary School on Route 209, which had a 2006 enrollment of 400 students in grades K to 6 in 2006, and which was recently expanded with additional classrooms and a gym.
- Palmerton Area Junior High School, south of Fireline Road, which had a 2006 enrollment of 330 students in grades 7 to 8.
- Palmerton Area High School, south of Fireline Road, which had a 2006 enrollment of 555 students in grades 9 to 12.

The total 2006 School District enrollment was 1,997 students. Some students also attend Carbon County Vocational-Technical School during part of the day, and some area students attend the St. John Neuman Regional School or other private schools.

The School District had proposed building a new middle school in its main campus near the High School in 2005. However, those plans were cancelled. Instead, the District is currently renovating a

historic building that was used by New Jersey Zinc east of the Palmerton Park in Downtown Palmerton. This will become the Palmer-Franklin Education Center, which will include classrooms for Kindergarten and 1st Grade, as well as administrative offices and meeting facilities for the School District. This building is intended to reduce the enrollment of the Palmer Elementary School to a more manageable level.

The total enrollment for the School District has been very stable. It increased slightly from 1,986 students in 2001-2002 to 1,997 in 2006. The State Department of Education projects that the School District's enrollments will be very stable for the next several years.

During the 2006-7 fiscal year, the School District has a budget of \$22.2 million. Of this total, \$13.4 million are provided by local taxes (mainly annual real estate taxes, transfer taxes when property is sold, and earned income taxes), \$8 million was provided by the State, and \$0.5 million was provided by the Federal Government.

Improve parks and playgrounds to meet a wide variety of recreational needs.

The locations of existing recreation areas are shown on the Existing Land Uses Map. The largest parks are operated by Palmerton west of Third Street (which includes the pool) and in the downtown. There are recreation facilities around each school. Bowmanstown has a public playground. Lower Towamensing Township is completing a new multi-purpose park on the north side of Fireline Road west of Golf Road. The School District also owns an athletic field on the north side of Delaware Avenue in the eastern part of the Borough.

A variety of recreation areas are valuable, with proper distribution to serve concentrations of residents. This variety should include playgrounds in denser areas, athletic fields, passive natural areas along creeks and other facilities.

It generally is most efficient and most convenient to concentrate most new athletic facilities for organized sports in a few centralized parks, preferably adjacent to a public school. Therefore, there are plans to expand athletic facilities next to the High School complex.

Complete a system of bicycle and pedestrian trails.

A trail and greenway system should be developed over time, especially along both sides of the Lehigh River. This greenway and trail should interconnect the existing parks, and where practical should ideally include "loops."

Rails to Trails - A railroad line was converted to a recreation trail from Kunkletown west to Little Gap. The expectation is that the half of the trail in Lower Towamensing Township will eventually become the property of Lower Towamensing. The trail currently ends near the covered bridge on Covered Bridge Road, and runs along the Buckwha Creek. The trail passes through very scenic land areas. It would be desirable to provide a parking lot at the western end of the trail.

D and L Trail - The D and L Trail is being converted from a railroad right-of-way to a recreation trail

along the west side of the Lehigh River. It will eventually extend along the Lehigh River from Easton through Bethlehem and Allentown and then north to the Lehigh Gap, Lehighon and Jim Thorpe. It links to a trail stretching southward along the Delaware Canal State Park from Easton. At Jim Thorpe, the trail links to the trails along the river within the Lehigh Gorge State Park, which is an extremely popular mountain biking destination. Further north, it will link to another trail to reach the Wilkes-Barre area. The development of the trail is being led by the Delaware and Lehigh Rivers Corridor Commission, with assistance by Carbon County and Lehigh County.

Appalachian Trail - The Appalachian Trail is one of the most popular hiking trails in the country. It stretches from Maine to Georgia, including the segment along the top of the Blue Mountain in Carbon and Monroe Counties. One of the most difficult portions of the trail is at the Lehigh Gap. The National Park Service purchased portions of the trail that were not already in public ownership.

Lehigh Gap Nature Center - This land is open to the public on the west/south side of the Lehigh River, north of the Appalachian Trail and east of the PA. Turnpike. It is owned by the Wildlife Information Center, a local non-profit. Although the land is not located in the four municipalities, it serves recreation and environmental education purposes for many Palmerton area residents. Trails pass through the property to connect the D & L Trail with the Appalachian Trail, including a trail along a second former rail line. The property can be accessed from Mountain Road at the Lehigh River Bridge or from Riverview Road on the west side of the River south of Route 895. An existing nature center exists off of Mountain Road near the Lehigh River bridge. A new nature center is proposed.

Wherever practical, new developments should be required to include pedestrian and bicycle connections with nearby parks, residential developments and existing trails. These trail easements are particularly valuable to connect the end of one cul-de-sac street with another cul-de-sac street. This allows bicyclists and pedestrians to travel on wider low-traffic roads within newer developments, as opposed to being forced to walk and bicycle along older heavily traveled through-roads.

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.

Work to provide safer bicycling and walking opportunities throughout the Region.

- Most roads in the Region have narrow or no shoulders for safe cycling. Many roads lack white edge lines, which serve as visual barriers that help motorists and cyclists maintain their own domain.
- The municipalities should seek that PennDOT or adjacent developers construct shoulders along key roads (that do not have curbs) where there is bicycle or pedestrian traffic. The municipalities should construct shoulders on township or borough roads in similar situations. The shoulders should be clearly separated from the travel lanes by white lines, to try to keep vehicles off of the shoulders. The shoulders are not only valuable for pedestrians and bicyclists, but also provide a margin of error for motorists. In addition, the shoulders provide some room for persons picking up their 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 motorist's ability to see bicyclists, pedestrians, mail trucks and garbage trucks.

- Road and trail improvements for cyclists should consider different groups:
 - Higher speed cyclists who always use existing paved roads,
 - Lower speed and less experienced leisure riders, who may use roads or bike paths,
 - Children, who would be best directed onto separate bike paths within parks and school sites with few road crossings, and
 - Mountain bikers that seek unpaved trails.
- Bicycle trails can be an assortment of dirt, gravel, and paved trails, and could exist in floodplains, utility right-of-ways, and other where it is easier to obtain permission for the trails because the areas cannot be developed. The Blue Mountain could include mountain bike trails, with a range of difficulties.
- The townships could require developers to include paved paths along collector and arterial streets in their subdivision plans. These paths are very attractive to other bicyclists, joggers and walkers. It may be necessary for a township to eventually expend municipal funds to complete key missing links that are unlikely to be the subject of a subdivision. Developers can also be required to provide paths from one development to another, particularly to connect together cul-de-sac streets or to provide a connection from a residential to a commercial or recreational area.

The goal is to improve paths to connect upon key destinations (such as residential areas, parks, schools and shopping areas). Then, the appropriate pedestrian and bicycle links should be sought between these destinations, taking in consideration both physical limitations. Some improvements, such as trails within municipal park land, could be initiated immediately, while others would be a collaboration with PennDOT, private owners, and other entities. PennDOT may be more willing to "fill in the gaps" if they are presented with a formal plan for a workable and useful path network. The end result would be an interconnected network of trails, paths and bike lanes that would serve both recreational and alternate transportation needs.

Most trails prohibit all terrain vehicles. It would be desirable to have some all terrain vehicle trails on less sensitive State-owned lands in the surrounding area in order to provide a lawful location for them. The goal is to reduce trespassing by designating an allowed area. State grants are available to develop these trails.

Propose a modification of the route of the State-designated Bike Route.

The State Department of Transportation has advertised a set of bicycle routes that travel across the State. One of those routes, Route L, passes from the western suburbs of Philadelphia, north through Carbon County, and then to the New York State Line. The current route travels across the Blue Mountain on Blue Mountain Drive, then west on Little Gap Road, north on Forest Inn Road, west on Fireline Road, and then north on Cherry Lane Road.

The municipalities should consider proposing an alternative route that would not use curving and narrow roads such as Forest Inn Road. Instead, the route could be proposed to pass on wider and more scenic roads, such as Pohopoco Road and/or connect into Downtown Palmerton to support those businesses.

GOAL: Emphasize full coordination of municipal and emergency services across municipal borders.

Continued efforts are needed to make sure that fire, police and emergency medical services are fully coordinated across municipal borders. This includes joint training, and coordinating the provision of expensive specialized equipment and apparatus. The Putting this Plan into Action section describes several alternatives to increase inter-municipal cooperation in providing emergency services. As described in the "Putting this Plan Into Action" section, shared police services make it much more cost-efficient to provide 24 hour coverage than if each municipality having its own police department.

The only local police protection is provided by Palmerton. The other municipalities are protected by the State Police, who operate a barracks on Route 209 in Towamensing Township. The Police Department includes 8 full-time officers (including the chief), 5 part-time officers and a secretary. The Department moved into its present building in 2002, and the Chief reports that the current facilities are adequate for the foreseeable future.

The Palmerton Police Chief reports that Delaware Avenue is the major concern for traffic and pedestrian safety, as traffic has increased. However, no one particular intersection has been particularly accident-prone. The Borough seeks to make sure that crosswalks are highly visible. Signs were installed in the past to tell motorists to stop for pedestrians in crosswalks. However, the signs were damaged or stolen.

The following are the five volunteer fire companies in the region, with a summary of their apparatus:

<u>Name</u>	<u>Location</u>	<u>Apparatus</u>
Palmerton Fire Co. No. 1	414 3 rd St., Palmerton	2 pumper trucks
West End Fire Co. No. 2	855 W. Princeton Av., Palmerton	100' aerial tower, pumper, brush truck and attack truck
Bowmanstown Vol. Fire Co.	259 Lime St., Bowmanstown	Rescue pumper, rescue truck, 1500 gallon tanker
Towamensing Twp. Vol. Fire Co.	Rt. 209, Trachsville	2 pumper trucks, attack truck, 1000 gallon tanker, brush truck, brush truck, rescue pumper, utility truck
Aquashicola Vol. Fire Co./ Lower Towamensing	Little Gap Rd., Aquashicola	Heavy rescue truck, pumper truck, 2000 gallon tanker, 1800 gallon tanker, brush truck

Most fire companies are having difficulties attracting sufficient numbers of trained volunteer

firefighters. The greatest shortage is during weekday mornings and afternoons, when many volunteers work outside of the immediate area. It may become necessary in the future consider hiring a limited number of paid firefighters, particularly to drive fire apparatus to the scene of the incident on weekdays mornings and afternoons. This can reduce response times.

The municipalities should investigate ways to attract and retain additional numbers of volunteer emergency workers. This includes encouraging municipal employees to serve as volunteer firefighters and ambulance workers, and allowing them to leave work with a municipal vehicle when practical for emergency calls. Also, financial incentives should be considered, such as a pension program for long-time volunteers.

Most of the local ambulance/emergency medical services are staffed with a mix of paid personnel and volunteers. Advanced life support units with paramedics are also available for the more serious calls, from the Lehighon Ambulance Association's station in Lehighon. The Palmerton Community Ambulance Association serves most of the Palmerton area. It is based at 601 Delaware Avenue and operates 3 basic life support ambulances and 2 wheelchair transport/ambulettes.

PUTTING THIS PLAN INTO ACTION

This section describes methods that should be considered to implement this Plan.

GOAL: **Promote substantial citizen input, including making sure residents are well-informed about community issues and encouraging volunteer efforts to improve the community.**

The volunteer efforts of neighborhood and civic organizations and individuals are essential to further improve the region and to carry out this Plan. The objective is to strengthen community pride and emphasize volunteer efforts for residents and property-owners to improve their surroundings.

It is essential to keep citizens informed and provide opportunities for meaningful citizen input, while making use of new technologies for communication.

Each municipality should have an internet site that is regularly updated with information that will help spur public interest, enthusiasm and involvement. This should include information on recreation programs and agendas for upcoming municipal meetings. Opportunities for citizen involvement should also be highlighted through the newspaper and other media.

GOAL: **Continually work to put this Plan into action - through a program of updated planning and many short-term actions within a long-range perspective.**

Planning is an on-going process. The Comprehensive Plan should be implemented through a continuous process of follow-up planning and action. The most immediate action will be updating as needed of each municipality's development regulations.

Maximize communications, coordination and cooperative efforts between the municipalities, the School District, adjacent municipalities, the County, PennDOT and other agencies and organizations.

To be effective, community development efforts need wide participation. A close working relationship is needed with Federal, State and County agencies and adjacent municipalities.

The municipalities cannot implement this Comprehensive Plan alone. Involvement is needed by residents, neighborhood organizations, civic groups, businesses, institutions, property-owners and many other groups.

This Comprehensive Plan should be consistently used as an overall guide for land use and transportation decisions. In addition, the Plan needs to be reviewed periodically and, if necessary, updated to reflect changing trends.

Use a Full Set of Tools to Implement this Plan

This Comprehensive Plan establishes overall policies for guiding the future development and conservation of the region. However, this Plan is not a regulation. The following major tools are available to help implement this Plan:

- the municipal Zoning Ordinances,
- the municipal Subdivision and Land Development Ordinances,
- an Official Map,
- computerized mapping,
- Capital Improvements Planning,
- the municipality's annual spending, and
- seeking Federal, State and County grant funds to accomplish important projects.

Construction Codes

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 alternatives in older buildings.

A municipal Property Maintenance Code is an essential part of controlling blight. That code needs to be adopted separately, because it is not part of the mandatory Statewide codes.

Official Map

The State Municipalities Planning Code grants 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 municipality, or only certain areas. This process may be particularly useful, for example, to reserve right-of-way for a future street widening.

Once an Official Map is officially adopted by the governing body, then the 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, then the municipality would have one year to either purchase the land for its fair market value or decide not to go forward with the project. This one year

period is intended to provide time to raise funds to acquire the land, and avoid lost opportunities. If this 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 municipality's future plans.

Computerized Mapping

The County operates a modern computerized mapping/ "Geographic Information System ("GIS"). This system has been used for the maps in the Plan. Increased efforts are needed to fully integrate this system with operations of municipal agencies. 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.

Capital Improvements Planning

Each municipality 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 street improvements, acquisition of parkland, major storm sewer construction projects and new bridges.

A municipal Capital Improvements Program (CIP) can help identify projects that will be needed, prioritize the projects, identify possible funding sources and then budget for their completion. A typical CIP looks five years in the future. A CIP should identify major street reconstruction projects that will be needed over the next few years, which can help coordinate the reconstruction with underground construction projects by various utilities. This avoids the need to cut into a street 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 a municipality to carefully time any bond issues to take advantage of the lowest interest rates.

Other Implementation Tools

Many other tools are available to carry out the Comprehensive Plan, including the following:

- priorities decided as part of each municipality's annual budget, and the the annual setting of tax rates, which affect decisions of businesses and residents on whether to remain or move into a municipality, and
- aggressively seeking Federal, State and County grants to reduce the burden upon local taxpayers.

GOAL: Update municipal development regulations to carry out this Plan, and periodically update the Plan and regulations as needed.

Zoning Ordinance

The municipalities' 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 this Comprehensive Plan, to modernize standards and to address local concerns.

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

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

Subdivision and Land Development Ordinance

Each municipality is regulated by its own Subdivision and Land Development Ordinance. These Ordinances mainly regulate the creation of new lots, the construction of new streets by developers, and the site engineering of new commercial, industrial and institutional buildings.

GOAL: Maximize communications, coordination and cooperative efforts between the municipalities, the school district, adjacent municipalities, the County, PennDOT and other agencies and organizations.

This Plan helps to establish a framework for further cooperative ventures among the municipalities in the region, and between municipalities and the County. Intergovernmental cooperation can not only decrease the costs of many services, it can also improve 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 promotes the use of ordinances that are adopted by each municipality to formalize an agreement. One option involves one municipality providing a service to a second municipality through a contract.

These same concepts 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.

An Intergovernmental Agreement is proposed to be adopted by each municipality to assist in carrying out this Plan.

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.

The following types of alternatives should be considered to promote inter-governmental cooperation:

- Shared Services and Shared Staff-persons - Shared staff-persons 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 so many hours assigned to each municipality. This 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. This can reduce turnover, which reduces training costs and reduces the potential for mistakes being made by inexperienced staff. In addition, sharing staff makes staff-persons available during more hours of the day, which is beneficial to residents and business-persons. It also provides 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 - There are also great efficiencies when adjacent municipalities choose the same consultants, such as municipal engineers, sewage engineers or solicitors. This promotes good communications between municipal governments. It also reduces the costs of having different professionals having to become educated about complex issues and having to spend time meeting with consultants of other municipalities to share information.
- Shared Recreation Programs - When municipalities share and coordinate recreation programs, it greatly increases the types of programs that can be offered. For example, one municipality may offer a gymnastics program, while another municipality offers basketball programs, with residents of each municipality being allowed to participate in each at the same cost per person. There has been great success in parts of Pennsylvania with multi-municipal recreation programs, where each municipality contributes funds towards one set of programs. These programs are often organized in partnership with a school district.
- Joint Yard Waste Collection and Composting - This is a very cost-effective way of handling the disposal of yard waste, which requires significant land and expensive equipment.
- The toughest issue in joint municipal services is determining a fair allocation of costs. The State Department of Community and Economic Development has several publications that can assist in these issues.
- Snowplowing - There may be cases where two municipalities must each send out a snowplow to clear different segments of the same street. It may be beneficial to trade responsibility for different street segments, so that a single snowplow can be used to clear the entire length of a street.
- Joint Purchasing - Joint purchasing can reduce the costs to each municipality of preparing bid documents and legal ads. It also can result in lower costs because larger volumes are being purchased. This process is particularly useful for annual purchases of standardized materials, such as road salt. The State also has arrangements that allow municipalities to "piggyback" upon 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 join together to jointly purchase insurance, to hire traffic signal maintenance services, or to jointly contract for solid waste collection. Joint auctions can also be used to sell surplus vehicles and equipment.

- Sharing of Equipment - This 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. Or an arrangement could allow trading of equipment.
- Joint Tax Collection - The Local Tax Enabling Act allows municipalities and to school districts to contract with each other to have one office jointly collect local taxes.
- Councils of Governments (COGs) - A COG can provide municipal services if authorized by municipalities. For example, some COGs take care of code enforcement. Other COGs primarily serve to promote good communications between municipal officials, to study issues, and to lobby for State or Federal funding for projects.
- Joint Authorities - Municipalities can create formal joint municipal authorities to address many types of matters.
- Joint Planning Commissions - Municipalities can appoint joint planning commissions. These joint commissions could serve in place of municipal planning commissions, or in addition to them.
- 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.
- 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, which then manages the force. A joint police force makes it easier to provide 24 hour service and specialized services, such as for investigations and youth. 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 more than one municipality. Therefore, if two similar projects are in competition for a grant, and one involves cooperation between two municipalities, the two municipality project is most likely to be funded.

Role of the Planning Commissions

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

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 its Borough Council or Board of Supervisors. Therefore, close communications and cooperation between the Planning Commissions, the municipal staff, and the elected officials will be essential in continuing to improve quality of life in the Palmerton Area.

ACTION PROGRAM

The following table summarizes the major recommendations of this Plan. Certain items are recommended as high priorities. The timing of each recommendation is listed, as well which agencies should have the primary responsibility to carry out the recommendation.

NATURAL AND AGRICULTURAL CONSERVATION PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations at end of this table)
Encourage landowners to join Agricultural Security Areas to make more land eligible for easement purchase and to protect farmers against nuisance challenges.		Short-range	Supervisors, PC, property-owners, Conservation District.
Encourage additional landowners to apply for the County for purchase of the right to develop their farmland.	✓	Continuous	Supervisors, PC, property-owners.
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 of land that has been permanently preserved.	✓	Short-term	Supervisors, School Board, County Commissioners
Seek additional sources of funding to supplement the existing State-County agricultural preservation program, including to preserve land that is less likely to be funded under the existing program. This could include asking voters in the townships to approve an 0.25% increase in the real estate transfer or earned income tax, with all of the proceeds used for land preservation.	✓	Continuous	Supervisors and PC

Palmerton Area Comprehensive Plan - Draft March 2008

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations at end of this table)
<p>Adopt zoning provisions that provide strong incentives to preserve farmland and natural areas, particularly through “Open Space Development” (clustering) and promoting the optional transfer of development rights to more suitable portions of a township.</p> <ul style="list-style-type: none"> - Near active farms, if the resulting preserved open space is not suitable for agriculture, use it as a buffer between new homes and farms. - 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, PC, property-owners.
<p>In agricultural areas, adopt zoning provisions to permit a range of accessory activities that allow opportunities for supplemental income for farmers on larger tracts of land. These are known as “Farm-Based Businesses.” Promote retail sales of products by farmers.</p>	✓	Continuous	Supervisors, & PC, Property-owners
<p>Adopt reasonable controls on very intense Concentrated Animal Feeding Operations, particularly to include large setbacks from major water supplies and concentrations of existing homes. Recognize that State law limits the ability of townships to over-regulate agricultural activities.</p>	✓	Continuous	Supervisors and PC
<p>Strengthen zoning regulations on 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. 	✓	Continuous	Supervisors and PC
<p>Encourage landowners to plant and maintain thick vegetation and trees along creeks.</p>		Continuous	Supervisors, PCs, Conservation District

Palmerton Area Comprehensive Plan - Draft March 2008

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations at end of this table)
To protect water quality and fish habitats, carefully enforce State regulations on erosion control through on-site inspections.	✓	Short-range	Governing Bodies, PCs, Conservation Districts
Minimize unnecessary removal of trees during construction, and make sure temporary fencing is used to avoid damage to tree trunks and root systems.	✓	Short-range	Twp. Supervisors, PC
The townships should consider prohibit new buildings in the entire 100 year floodplain, and to require studies by developers where there is any question that an unmapped floodplain may exist. The boroughs should continue to carefully regulate but allow building in the floodplain in conformance with State and Federal regulations.		On-going	Governing Bodies, PCs, property-owners
Seek Federal Floodplain Mitigation funds to offer to buy and remove the most flood-prone buildings and turn the land into permanent open space. In some cases, this may open up opportunities to reduce sharp curves in roads and reduce the costs of public sewage extensions. This type of action may also help implement a set of greenways throughout the County.		Mid-range	Governing Bodies, PCs, property-owners, business owners, Carbon County Planning
Use mandatory dedication provisions in subdivision ordinances 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

LAND USE AND HOUSING PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations at end of this table)
Update each municipality's development regulations to carry out the Land Use Plan. The most significant changes are proposed within Lower Towamensing Township, particularly to reduce the sizes of areas that allow medium density or higher density housing.	✓	Short-term	PCs, Governing Bodies
Emphasize redevelopment of the former West Plant site for new business uses, and seek PennDOT approval for a new median break with a traffic signal along Route 248 to improve access to the tract.	✓	Short-term	Palmerton Borough Council, Co. Commissioners, PennDOT, Chamber of Commerce
Seek the permanent preservation of the bulk of the Blue Mountain (other than the ski area), preferably in public ownership, such as by the State Game Commission. Carry out the natural feature and agricultural preservation initiatives described on the previous pages.	✓	Continuous	L. Towamensing Supervisors, PC, Conservancies, property-owners
Work to maintain the character of older villages, such as Aquashicola and Little Gap. Seek that new development includes similar setbacks, site layouts and uses to what exists today.		Continuous	Twp. Supervisors, PCs, property-owners.
Use zoning regulations to provide disincentives and incentives that 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 consumed by development.	✓	Continuous	Governing Bodies, PCs.

Palmerton Area Comprehensive Plan - Draft March 2008

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations at end of this table)
Update zoning ordinances to make sure that excessive setbacks are not required for routine additions to homes and for decks and pools. These types of improvements should not be over-regulated, in order to encourage residents to invest in older homes, instead of moving to new homes in outlying areas. This policy is particularly important in areas where many homes are relatively small. Also, excessive setback requirements cause an administrative burden upon property-owners and the municipalities.		Short-term	Governing Bodies, PCs
Avoid the creation of new strip commercial areas along major roads (such as undeveloped or residential portions of Route 209). Concentrate most commercial uses within existing commercial areas.		Continuous	Twp. Supervisors, PCs,
Further publicize the availability of tax incentives in the Keystone Opportunity Zone, such as industrial sites along Little Gap Road and the West Plant site. Reduce the minimum lot size for industrial development in Lower Towamensing. Seek to provide central sewage and water services to business development sites along Little Gap Road.	✓	Short-term	Lower Towamensing Supervisors, Co. Economic Development
Promote the further development of the Blue Mountain Ski Area as a year-round resort with lodging facilities and additional recreational attractions. Promote the use of time-share units as opposed to year round housing, through density incentives.		Continuous	L. Towamensing Supervisors and PC, property-owner.
Update zoning ordinances to make sure that all desirable types of businesses are allowed in appropriate business zoning districts. Hold requirements for special zoning approvals to a reasonable minimum, minimize business lot sizes, and minimize setbacks between adjacent businesses. These steps are important to promote economic development, increase tax revenues to the school district and widen choices for close-to-home employment.		Short-range	Governing Bodies, PCs
Update zoning ordinances to carefully control the types and locations of intense business uses near neighborhoods. This particularly includes gas stations, 24 hour stores, adult uses and similar uses that may cause nuisances for neighboring homes.	✓	Short-range	Governing Bodies, PCs

Palmerton Area Comprehensive Plan - Draft March 2008

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations at end of this table)
Carefully control heavier industrial uses through zoning ordinance requirements. Require "special exception" approval by the municipal zoning hearing board for industrial uses that may generate significant hazards or nuisances. Limit the most intensive industrial uses to a General Industrial District where heavy industry already exists near the East Plant and along parts of Little Gap Road. Promote redevelopment of older industrial sites for new development.	✓	Continuous	Governing Bodies, PCs, ZHBs
Limit new mining activities to areas where they currently exist, with reasonable room for expansion. 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 upon proposed zoning amendments and major development plans that may have impacts across municipal borders.		Short-range	Governing Bodies, PCs, Adj. Mun.
Emphasize code enforcement to avoid blight in neighborhoods. Consider a systematic housing inspection program for older rental units in the boroughs.		Continuous	Governing Bodies
Help to link residents that are in need of assistance with the resources that are available, including housing rehabilitation programs and home energy conservation programs.		Short-range	Municipal staffs and non-profit organizations.
Work to increase home ownership, including linking prospective homebuyers with homebuying counseling programs and programs to help persons afford closing costs of home purchases.	✓	Continuous	Co. agencies, financial institutions, PHFA.
Make sure that local regulations and permit processes are as streamlined as is reasonable, to avoid unnecessary delays and higher housing costs. This is particularly important to be welcoming of new and expanding employers.		Short-range	Governing Bodies, PCs, ZHBs, Municipal Staffs

DOWNTOWN

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
<p>Strengthen Downtown Palmerton as the business, entertainment, cultural and civic centers for the region.</p> <ul style="list-style-type: none"> - Stress key markets for Downtown businesses, including persons who work or live nearby, and persons skiing and attending special events in the area. - Work to recruit new businesses. 	✓	Continuous	Local merchants, property-owners, Borough Council, Chamber of Commerce
<ul style="list-style-type: none"> - Stress greater coordination among hours of businesses in the Downtown. Encourage weekend hours and longer evening business hours - especially to at least 6 p.m. Aggressively market Downtown businesses to customers, particularly through joint promotions among nearby businesses. These joint promotions are more cost-effective than each business buying its own advertising. - Use special events to attract additional numbers of visitors, customers and businesses to the Downtown. 		Continuous	Merchants, Chamber of Commerce, Visitors Bureau
<ul style="list-style-type: none"> - Complete streetscape and pedestrian safety improvements in Downtown Palmerton. 		Continuous	Palmerton Borough Council and Staff, downtown property-owners
<ul style="list-style-type: none"> - Promote a balanced mix of uses in older commercial areas, including street level retail/restaurant/service businesses along Delaware Av. Promote additional market-rate apartments and offices in upper stories. 	✓	Continuous	Chamber of Commerce, Borough Council, PC.
<ul style="list-style-type: none"> - Improve the appearance of the fronts of buildings that have not yet been restored. Add additional landscaping in rear parking areas and street trees in the front. Work to improve pedestrian safety at crossings of Delaware Av., including highly visible crosswalks with “stop for pedestrians” signs. 		Continuous	Borough Council, Borough Police, PC, Property-owners, Chamber of Commerce

Palmerton Area Comprehensive Plan - Draft March 2008

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
- Promote the location of many government and non-profit offices as possible in the Downtown, to help generate foot-traffic and employment that will provide customers for private businesses.		Continuous	County, State and Federal agencies.
- Properly manage parking to serve different needs, with an emphasis upon making sure the most convenient spaces on key commercial blocks of Delaware Av. are available for high turnover by customers parking for less than 2 hours.		Continuous	Borough Staff
- Consider financial incentive programs to attract private investment into the Downtown, such low-interest funding for facade rehabilitation and fire safety improvements. Through the building code of appeals process, consider reasonable modification of requirements to recognize the problems of reusing older buildings.		Continuous	Borough Council, Co. Community Dev. Staff, PA. DCED, area banks.
- Emphasize a feeling of security in the Downtown, including a highly visible police presence and controls on disruptive behavior.		Continuous	Borough Council, Police

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. This alternative would not regulate architecture or routine changes to buildings.	✓	Continuous	Governing Bodies, PCs Historic organizations
Provide information to owners to older buildings to promote sensitive rehabilitation and to increase their awareness of the significance of their buildings. Promote greater interest in the region's history and historic buildings.		Continuous	Municipal Staff, Historic organizations

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
Add zoning incentives to promote the preservation of historic buildings. This could 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, PC

TRANSPORTATION PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
Work with PennDOT to resolve traffic congestion bottlenecks and traffic safety problems (as described in plan text). Seek funding through the 12 Year Plan to resolve traffic problems in the region.	✓	Continuous	PennDOT, Co. Planning, Governing Bodies.
Design residential streets to discourage use by through-traffic, limit truck traffic on residential streets where feasible, and improve major roads to relieve congestion so traffic will not be diverted to residential streets.		Continuous	PennDOT, Co. Planning, PCs, Governing Bodies, Adj. Mun.
Adopt an "Official Map" to design locations where additional land will be needed to improve existing roads or to build new road connections. This type of Official Map allows a municipality to reserve land for improvements for a limited period of time.		On-going	Governing Bodies, PC

Palmerton Area Comprehensive Plan - Draft March 2008

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
Require developers to improve immediately adjacent segments of roads, such as providing shoulders. Emphasize well-marked shoulders improvements along heavily traveled roads to: provide a safety factor (particularly in snowy and icy conditions), provide for mail deliveries, allow room for bicyclists and pedestrians, and allow room for farm equipment.		Continuous	PennDOT, Supervisors, PCs
Improve pedestrian and bicycle access and encourage greater use of public transit (with links to the Lehigh Valley LANTA system), and construction of park and ride lots to promote carpooling.		Continuous	PennDOT, Carbon Co. Transit, Co. Planning, Governing Bodies, Adj. Mun.

COMMUNITY FACILITIES AND SERVICES PLAN

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
Improve existing parks and playgrounds to meet a wide variety of recreational needs, such as the new Lower Towamensing Park, the proposed new fields at the High School and the Franklin playground in Palmerton. Seek to make best use of school district facilities, and investigate opportunities for municipal recreation area next to schools that can be used by school students and by the public during non-school hours, with shared parking. Concentrate most active recreation at a few sites.		Continuous	Governing Bodies, Any Parks and Recreation Commissions, School District

Palmerton Area Comprehensive Plan - Draft March 2008

Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations)
Provide trail links that will connect to regional trails along the Lehigh River, within Beltzville State Park and the Appalachian Trail (which is along the top of the Blue Mountain).		Continuous	Governing Bodies, PCs, Any Parks and Recreation Commissions
Emphasize high-quality police, emergency medical and fire protection services, with joint training and cooperation between providers, including those in adjacent municipalities. Provide incentives and recognition to recruit and retain volunteers.	✓	Continuous	Emergency providers, Governing Bodies, Adj. Mun.
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.		Continuous	Governing Bodies, Borough Staff
Place an emphasis on providing central sewage service to Aquashicola, business areas on Little Gap Rd., and if practical eventually to Little Gap village. Determine the most cost-effective method of treatment of the sewage (Palmerton, Little Gap or a new plant) and obtain funding and easements to complete the project.	✓	Continuous	Lower Townemensing Township, Palmerton
Protect water supplies from contamination and make sure that alternative supplies are available in case a source is no longer suitable. Place particular attention on avoiding uses with a risk of water pollution near the public water supplies of Bowmanstown and Palmerton.		Continuous	Palmerton and Bowmanstown
Work with the School District to provide information on proposed new housing to plan for growth and to meet recreational needs.		Continuous	PCs, School District

Abbreviations of Responsible Agencies/Groups:

- Governing Bodies = Borough Councils and Township Boards of Supervisors
- PC = Municipal Planning Commissions
- ZHB = Zoning Hearing Boards
- Adj. Mun. = Adjacent Municipalities
- Co. PC = Carbon County Planning Commission and Staff

Palmerton Area Comprehensive Plan - Draft March 2008

PennDOT = Pennsylvania Department of Transportation

PHFA = Pennsylvania Housing Finance Agency

PHMC = Pennsylvania Historical and Museum Commission