



GREENWOOD TOWNSHIP COMPREHENSIVE PLAN

APRIL 2009

Greenwood Township Comprehensive Plan Update 2008

Greenwood Township Planning Commission

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Letter from the Planning Commission

The Comprehensive Plan is the only public document that describes the community as a whole in terms of its complex and mutually supporting networks. The plan contains policy statements, developed by a community and adopted by its officials, which are used to support community decisions and anticipate future conditions.

The Greenwood Township Comprehensive Plan has been prepared in accordance with the Pennsylvania Municipalities Planning Code. Although the plan is not a legally binding document, it is the official statement for future development in the community.

The Greenwood Township Planning Commission would like to thank the residents of Greenwood Township for their input via the survey and other sources, the Greenwood Township Board of Supervisors, and the Crawford County Planning Commission for their support during this multi-year process.

John McMaster, Chairman
Greenwood Township Planning Commission

GREENWOOD TOWNSHIP PLANNING COMMISSION
Crawford County, Pennsylvania

March 14, 2007

Diane Adsit
Cecil Stevenson
Roland Wood

Township Supervisors, Greenwood Township

Gentleman and Madam:

We are pleased to submit for your review this Revised Comprehensive Plan for our township. It is grounded in many of the facts the earlier plan established, but it provides additional and more current information and has attempted to articulate a more detailed set of objectives, policies and programs which we urge you to consider carefully.

In this plan we have worked diligently to strike a fair balance with the taxpaying property owner's rights and the need to update our township comprehensive plan to the 21st Century. It is the belief of the majority of this board that the taxpayer still owns their property and have the rights and responsibilities that goes with ownership and therefore any implementation of a zoning ordinance or any zoning regulations is not necessary at this time. However, since the adoption of the last comprehensive plan in 1985 there has been the establishment of a Keystone Opportunity Zone (KOZ) in our township. We would like to encourage business growth in this area but not limit it to just the property owned by the KOZ.

We thank you for supporting us in the long and tedious undertaking. We are pleased to have available the more detailed maps of our township which were produced as part of this work program. Many of the statistics in this plan have arrived due to the survey process undertaken in the past two years. As you review the proposals in this report we would like the opportunity to elaborate on any of the issues you feel are controversial. We hope you will be able to schedule a public hearing on this plan at an early date.

God Bless our leaders, our supervisors, and Greenwood Township.

Sincerely,

John McMaster, Chairman

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I. INTRODUCTION AND PURPOSE

Definition of a Comprehensive Plan

The Comprehensive Plan is a statement of what Greenwood Township wants to become. It is a set of goals and policies designed to achieve a community wide “vision” that is based on a series of community defined goal guiding principles.

This plan is based on a series of maps, charts, surveys, and data that is derived from the community itself. The goal of this plan is to guide the decisions that will be made about the future in a “comprehensive” manner. This plan will benefit the entire community and not just a select few.

A Vision for Greenwood

Twenty years into the future, Greenwood will present a picture of a balanced community, that will be experienced not only by its residents and business proprietors, but also by visitors and people who travel through this community.

Greenwood Township 1985 Plan

In 1985, Greenwood completed its first in-depth Comprehensive Plan. This process took place over an 18-month period and the finished product was to serve as a guide for growth and development in the Township.

The 1985 plan reviewed many issues and utilized an equal amount of data and resources. This information was presented in a 120-page document that was supported by maps, charts, and tables.

Purpose of 2008 Comprehensive Plan Update

The purpose of the 2008 update is to reevaluate the 1985 plan and revise the goals and policies of Greenwood in a comprehensive manner. Any good comprehensive plan must be revisited approximately every 5 years and overhauled every 20 years.

Since much of the background information remains the same, many of the maps and historical statements will be used from the 1985 plan. Some of the maps were updated with the new technology of GIS that has become widely available since the last plan. Information such as census data, land-use, the Keystone Opportunity Zone (KOZ) and socioeconomic characteristics have changed and will be reflected in this document.

II. BACKGROUND INFORMATION

2.1 Regional Context / History

Greenwood Township, located in the south central portion of Crawford County, Pennsylvania, has a historical mix of agriculture and industrial uses. This area is located between East Fallowfield to the west, Fairfield Township, from which it was formed in 1829 to the east, Union Township and Vernon Township to the north and Mercer County to the south. Some of this territory was lost when Union Township was formed. The current size of the Township is 36.5 square miles. View **Map 1** to see the regional location of the Township.

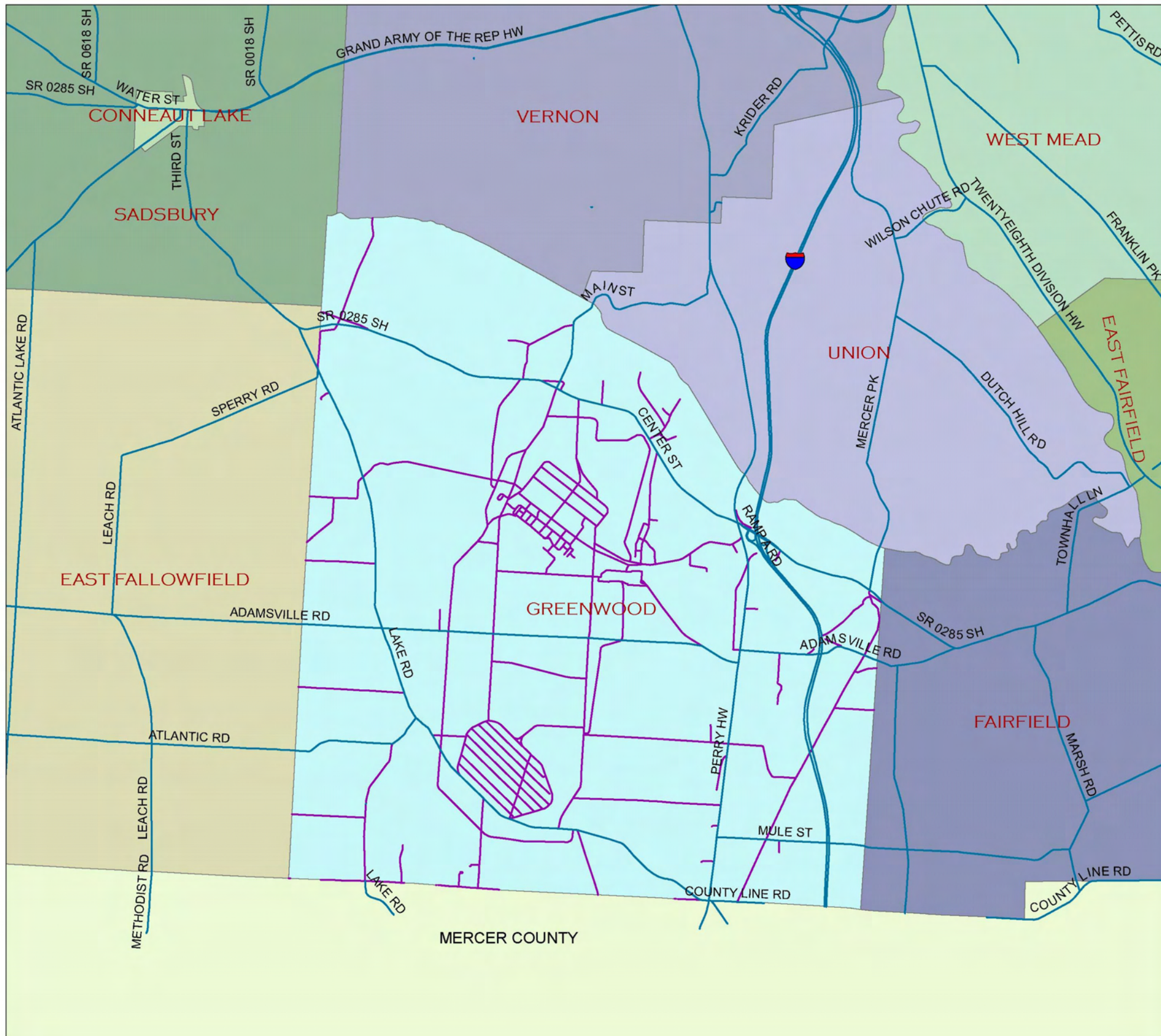
The southern part of the Township is a portion of Field's Claim. Mr. Field was a wealthy Philadelphia Quaker who purchased a large tract of land in this county. He then sold land to many of the first settlers in the area. Many of the settlers were of Scotch-Irish and German ancestry.

The early businesses in the area were saw and gristmills, distilleries, the Black Horse Tavern, blacksmiths, harness shops, and general stores. In the early days of the Township there were two churches, the Greenwood Free-Will Baptist Church and the Greenfield Presbyterian Church, with the former being started in 1832 and the latter in 1854.

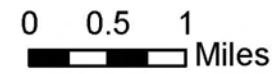
In 1837, the school system existing in the Township consisted of seven schools serving 203 students. In 1896, the number of schools increased to twelve and the number of students to 308. The length of the school year was five to seven months.

The borough of Geneva was incorporated in 1871. The borough has since become part of the Township as a village on November 22, 1939. At this time the majority of the amenities of the Township were fulfilled in Geneva. Located in the Township, after the railroad was constructed in 1863, were six general stores, a drug store, a furniture store, three hotels, a harness shop, two shoe shops, four blacksmith shops, three wagon shops, a stave factory, a planing-mill and manufactory of horse rakes, washing machines, picket fences, etc., two physicians, a grade school, two churches, and two societies.

REGIONAL LOCATION GREENWOOD TOWNSHIP



	Greenwood Local Roads
	State Roads



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2.2 The Land

Existing Land Use

Because of its proximity to Interstate Highway 79 and its Geneva/Cochran interchange, and because it provided a site for a large T.N.T. manufacturing operation during World War II, the Keystone Ordnance Works (KOW) and contains land area suited for large scale industrial use, Greenwood Township has been the subject of periodic, public controversies over issues dealing in how its land should be used and what specific form various development proposals should take. These controversies have not only involved township residents but have swept into the vortex of discussion and debate countywide and regional leadership interested in economic development. These land use conflicts have been severely handicapped because the township had no plan for its growth and development.

This document will end the “no plan” condition of Greenwood Township. Hopefully it will end much of the heated controversy, which has been characteristic of the past ten years in the township’s history. But, because of the locational characteristics of the township, it undoubtedly will continue in the future to be a place of great interest in Crawford County and northwest Pennsylvania — certainly to all persons dealing in economic development activities.

A survey of the existing use of land is basic to community planning. Field survey work to establish use patterns was done in Greenwood Township during the summer of 2003. Extensive use was made of aerial photographs in order to obtain the configurations of wooded areas as they contrast with areas that are in agricultural use, either as tilled land or pasture. The aerial photos used were taken in the spring of 1992. The use of land was recorded in nine main categories and displayed on a map showing all property ownerships in the township: Existing Land Use. This map was reproduced for printing in this report and appears as **Map 2**.

Agricultural. Land used for crop production and pasture; also land which is cleared and with only a modest amount of preparation could be used for crops or pasture.

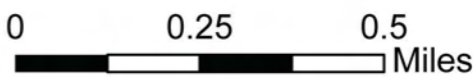
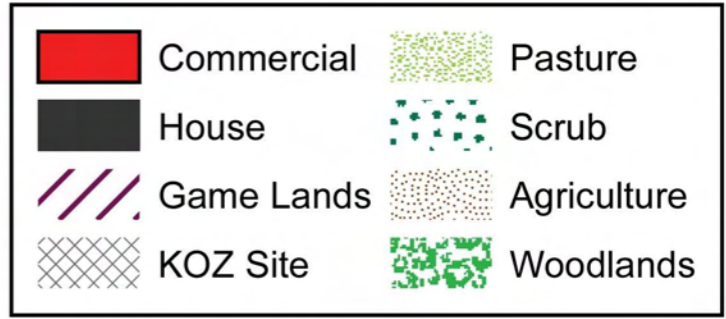
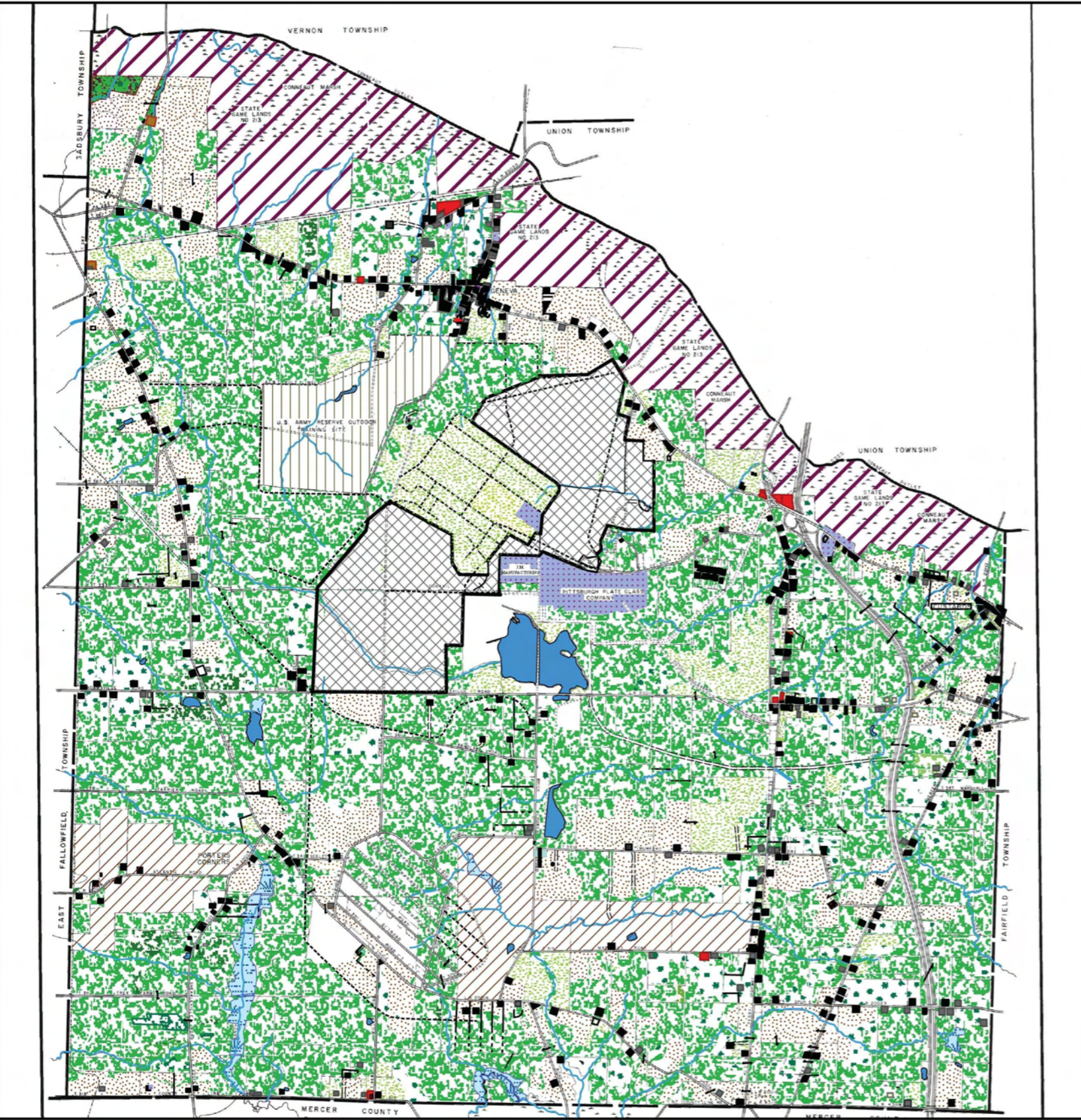
Pasture. Land that could be used for agriculture, grazing, or general crops.

Woodland and Scrub. Forested areas, areas with a heavy growth of brush and land “going to brush” which would not appear to be easily converted to farmland.

Conservation Lands. Significantly large areas of land owned and managed by the Commonwealth of Pennsylvania.

EXISTING LAND USE

GREENWOOD TOWNSHIP



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Commercial. A wide range of wholesale and retail business activities; office activities; but excluding activities where goods are made and which are more appropriately classed as industrial.

Industrial. Goods producing activities including those involving gravel and mineral extraction.

Residential. Housing which accommodates a single-family or multi-family unit. The housing unit may be either of conventional construction, a mobile home or a modular home. The land use map distinguished between single-family housing, and mobile homes, but NOT modular housing.

Public. Uses owned and/or operated by a unit of government, normally local government.

Semi-Public. Uses that are generally open to, and used by, the public but not owned and managed by public officials. Examples of such uses are churches, cemeteries, and volunteer fire companies.

Soils- On Lot Sewage Suitability

A major factor influencing land use patterns throughout the township is the soil. The capabilities of the various types of soil found in Greenwood Township limit site suitability for the location of residences, industry, agriculture, and recreation. In 1978, the *Soil Survey of Crawford County* was published analyzing and mapping soil conditions in the County. Greenwood's soils were examined for their suitability to accommodate on-lot sewage systems. There are 23 basic soil classifications in Crawford County. All of these soils were grouped into four categories that define the utility of these soils for use in the construction of on-lot sewage systems. These categories are given as follows:

- Soils having no limitation for on-lot disposal of sewage. These soils are well drained and are easily adapted to the use of conventionally constructed on-lot systems.
- Soils having slight limitations for on-lot disposal of sewage. These soils are also well drained; in fact they are extremely well drained consisting in large part of gravel deposits. The difficulty associated with installing on-lot systems in these soils is that they allow effluents to reach groundwater too rapidly. This condition may result in contamination of groundwater because the cleaning effects of the trickling process are too abbreviated.
- Soils having moderate limitations for on-lot disposal of sewage. These soils are partially permeable and can be satisfactory for on-lot sewage systems, but there are some constraining factors. For

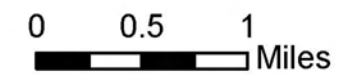
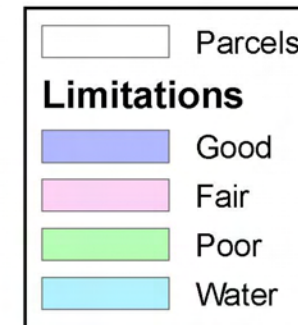
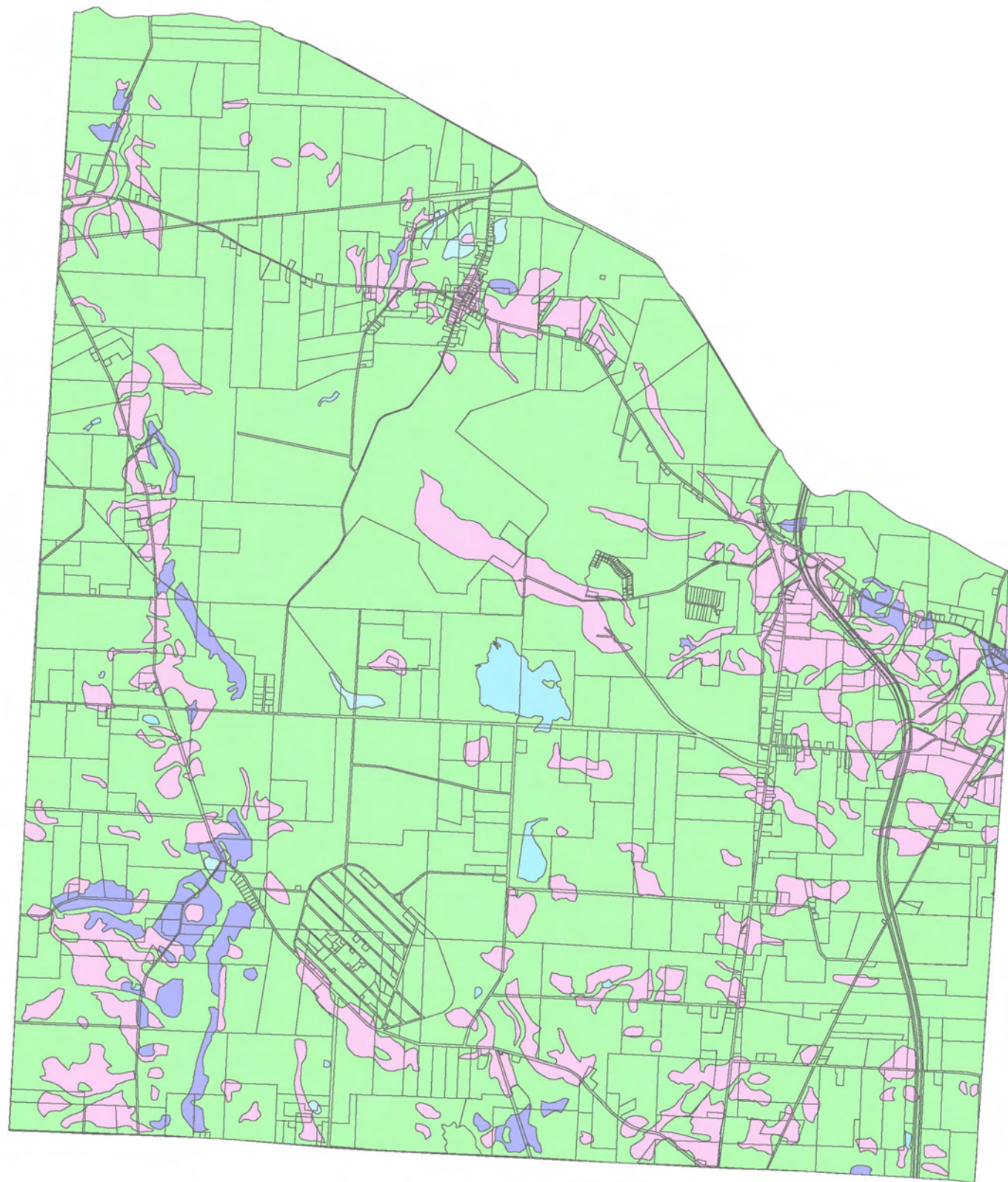
example, Pennsylvania Department of Environmental Protection (DEP) standards indicate that in order for a conventional on-lot sewage system to be designed and constructed on a property, there should be 6 feet between the ground surface and the maximum height of the seasonal groundwater table. The maximum height of the groundwater table is, in fact, the level at which the “hardpan” or impervious soils occur in the soil profile. Soils in this moderate limitations category normally have a distance of between 18 inches and 3 feet from the ground surface to the seasonal groundwater table. This distance is not adequate based on DEP standards. However, where a mounding technique is used at the ground surface, DEP standards can be met by bringing in permeable soil and placing a layer of this on the surface where the on-lot sewage system’s tile field will be placed. The soils in this category make it possible to construct what have been termed sand mound systems in order to satisfy sewage disposal requirements.

- Soils having severe limitations for on-lot disposal of sewage. These soils are characterized by a high seasonal water table; between 6 inches and 18 inches from the ground surface. The sand mound construction technique is not suited to such a shallow permeable soil profile. DEP standards do not permit the construction of on-lot sewage systems in soils with these permeability characteristics.

It is important to note that the soils survey data are generalized and specific tests on a site, be it 20,000 square feet or one acre in area, may reveal that the soil can support an on-lot sewage system. In fact, because public sewer systems are often cost prohibitive, there is a growing emphasis on designing on-lot sewage systems to higher standards so that they can function in less than ideal soils. For example, dosing techniques are used whereby sewage effluent is collected and periodically pumped into a tile drain system, flooding the whole system and using its cleansing action more efficiently. Alternate tile fields are used thus providing rest periods for each system, prolonging the life of the entire tile disposal system.

Also, small flow treatment facilities involving chlorinating the eventual effluent and discharging it to an existing watercourse are permitted for individual users. Manholes are constructed in the tile system areas in order to provide for clean-out opportunities. Although applying these new technologies will require the construction of more elaborate, more expensive on-lot systems, these systems have the ability to function efficiently and may be the only way that future development can take place in many areas of the Township. **Map 3** shows three different levels of soil suitability in terms of on-lot sewage use; poor, fair, and good.

ON LOT SEWAGE CAPABILITY GREENWOOD TOWNSHIP



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Soils- Agricultural Quality

The Soil Conservation Service has classified soils according to eight “capability classifications” for agricultural use. The limitation on the use of a soil becomes progressively greater as the classification numbers increase. The following is a listing of the eight soil classes, and an explanation of the limitations inherent in each.

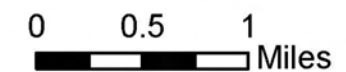
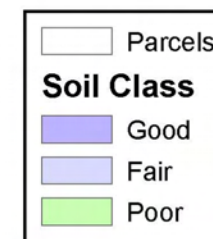
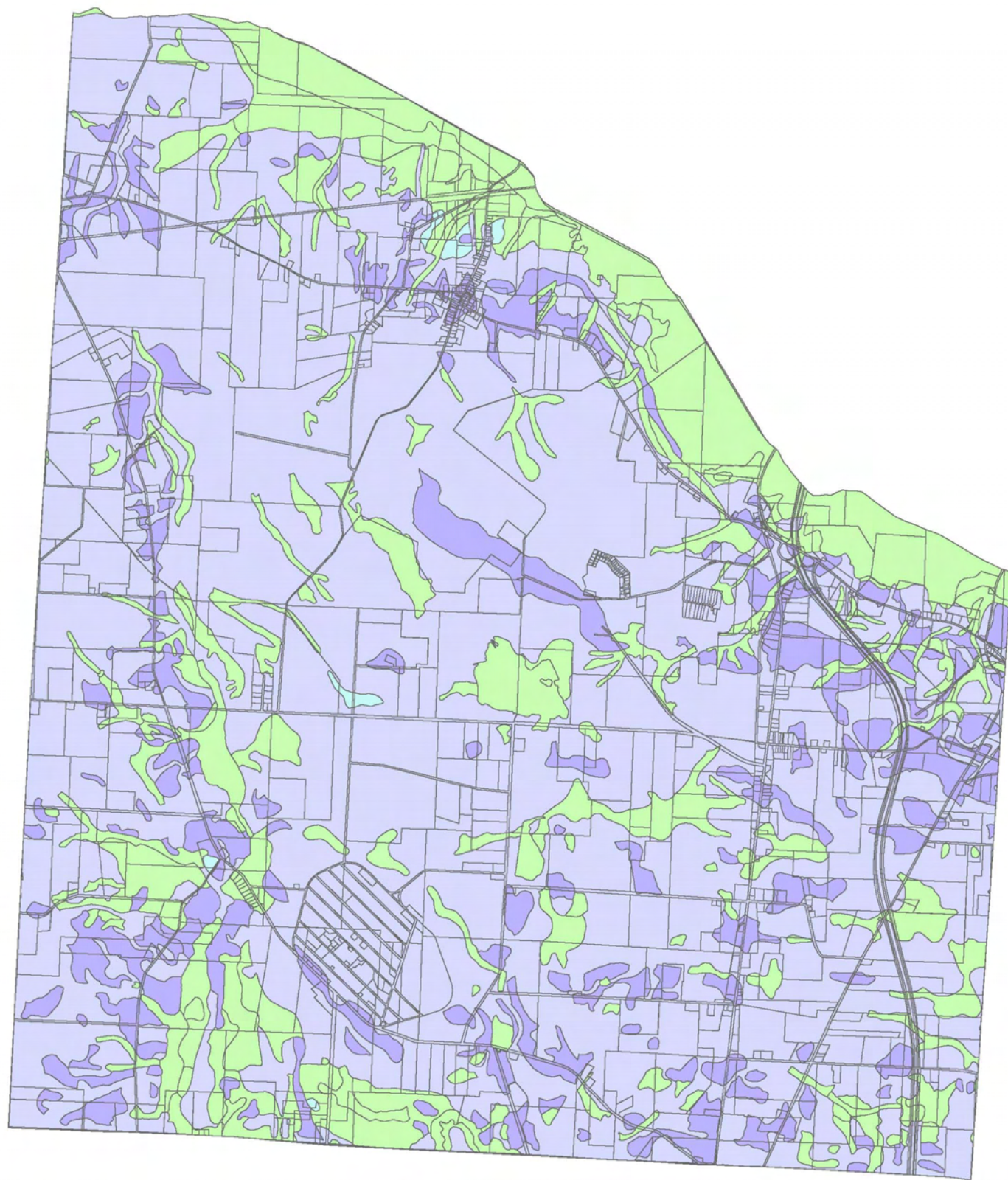
- Class I Soils that have few limitations which restrict their use.
- Class II Soils that have some limitations which reduce the choice of plants or require moderate conservation practices.
- Class III Soils that have severe limitations which reduce the choice of plants, require special conservation practices, or both.
- Class IV Soils that have very severe limitations which restrict the choice of plants, require careful management, or both.
- Class V Soils that have little or no erosion hazard but have other limitations which are impractical to remove and limit their use largely to pasture, woodland, or wildlife food and cover.
- Class VI Soils that have severe limitations which make them generally unsuited for cultivation and limit their use largely to pasture, woodland, or wildlife food and cover.
- Class VII Soils that have very severe limitations which make them unsuited for cultivation and restrict their use largely to grazing, woodland or wildlife.
- Class VIII Soils and land forms that have limitations which prevent their use for commercial plant production and restrict their use for recreation, wildlife, water supply and aesthetic purposes.

For the purposes of the Plan, the soil classes were grouped into three major categories; good (Classes I and II), fair (Class III), and poor (Classes IV through VIII). The vast majority of soils in the Township are categorized as being fair for agricultural production, with the major limiting factors in most soils being slow permeability and a high water table. These groupings of classifications can be seen on **Map 4, Agricultural Quality**.

Flood Prone Areas

Since the 1970's, both federal and state governments have taken strong actions to deal with the perils of flooding. At that time, the federal government worked with

AGRICULTURAL QUALITY GREENWOOD TOWNSHIP



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local governments requesting that they regulate new development in areas identified as subject to the hazards of flooding.

Under the direction of federal officials, areas subject to flooding have been mapped municipality by municipality. This has been done in Greenwood Township. The result of this effort is a map that delineates the flood hazard areas for the Township in order to establish a rate structure for the purchase of flood insurance. The most recent *Flood Insurance Study* was published on September 10, 1984 by the Federal Emergency Management Agency. According to the Flood Insurance Rate Map issued as part of this study, the majority of the township is not located in a flood prone area. The exception is the region adjacent to the State Game lands. **Map 5** graphically depicts this information.

2.3 The People

Examining and understanding a community's population is an essential part in developing and updating a Comprehensive Plan. Insight into the current demographic makeup of a township and projecting future trends is vital to developing a successful Plan. Every issue that a Township faces is interconnected to its citizens, therefore it is important to understand key characteristics of the population. This section provides a description of historic trends in population within Greenwood Township, along with a comparison of future population estimates.

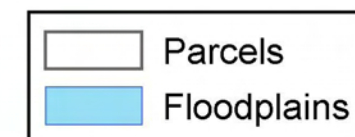
Population Trends

Population in Greenwood has been varied since 1930, but there has been a steady increase since 1950. There was a large spike in population to 1,417 people in 1940, which is very comparable to the 2000 population of 1,487. The following Figure 1 shows this historic population trend.



FLOODPLAINS

GREENWOOD TOWNSHIP

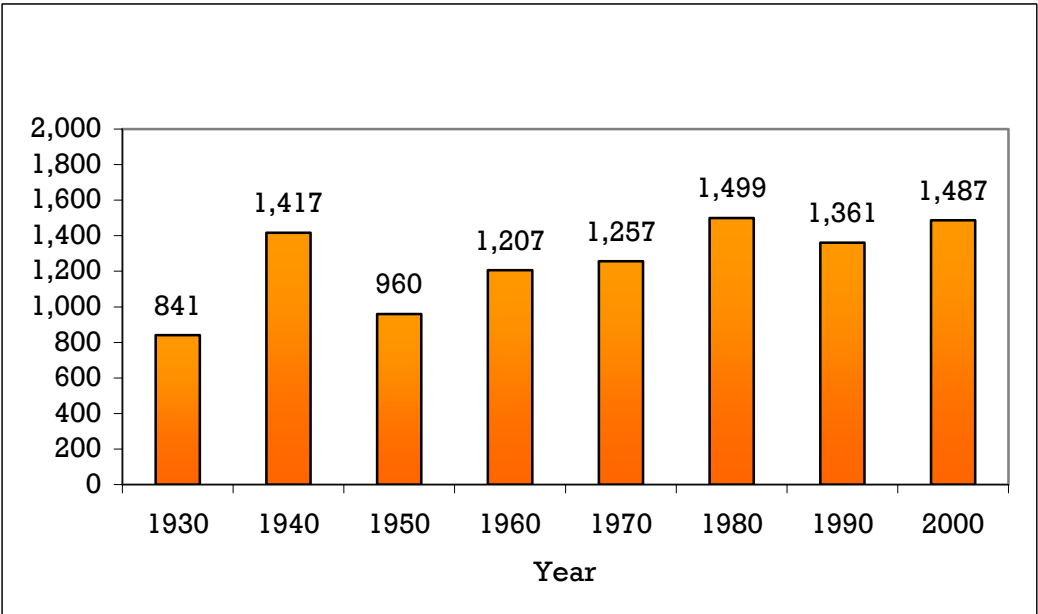


0 0.35 0.7
Miles



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Figure 1 Population in Greenwood, 1930-2000

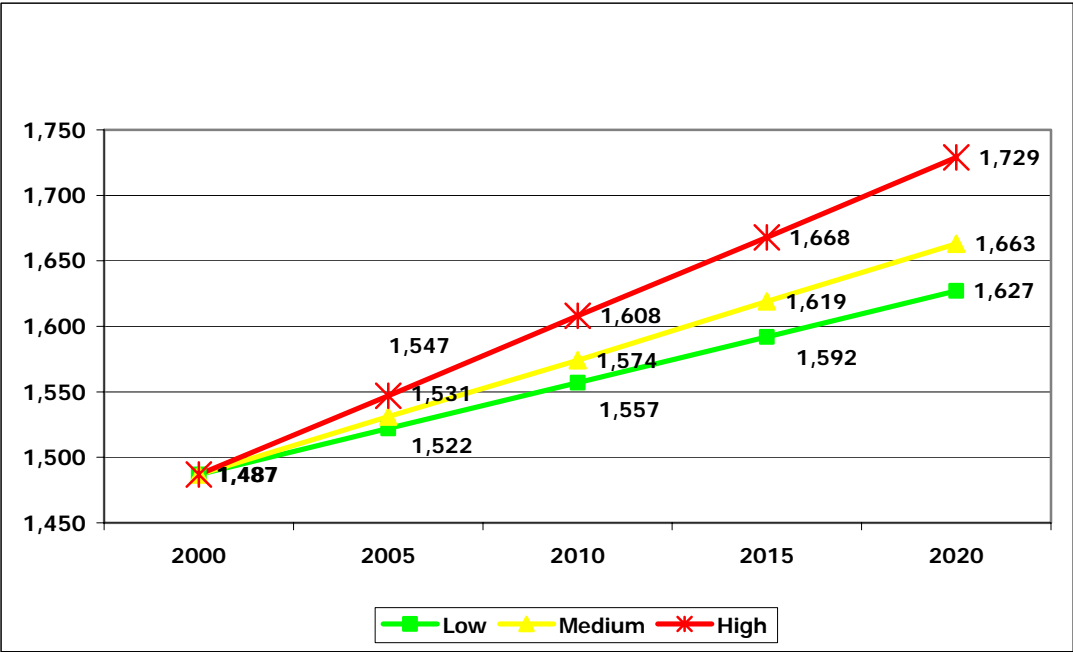


Population Projections

It is always difficult to forecast future population. However, since community planning is concerned with future growth and development, it is important to estimate it as accurately as possible. Population projections are difficult because of the many variables and unforeseen factors involved. The estimates used here are based on our knowledge of past trends and our understanding of future constraints. As such forecasts discussed here are intended to reflect alternative sets of assumptions regarding the future of Greenwood, and should not be interpreted as something more exact.

Three forecasting techniques have been used which provide a range of population projections. Future population size is expected to fall within this range. In all cases, the 2000 U.S. Census count is used as the base year population size for the Township. The Population Projections in Figure 2 summarize the results of these projections. These projections consider trends over the past 20-30 years to establish patterns and take into consideration cycles in the building industry through the use of new housing permits.

Figure 2 Greenwood Population Projections



It is important to keep in mind that the population of Greenwood has varied in the past and that the population may go up and down over the next 15-20 years. These numbers are estimated averages and the population should reach in between the low and high projections.

2.4 Transportation

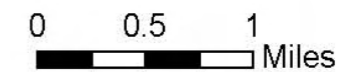
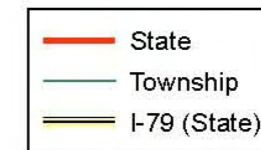
Road Network

The most significant public facility system from the viewpoint of the Greenwood Township Supervisors is the road network. The supervisors are responsible for maintaining all township roads which comprise approximately 40% of the total public road network. Roads are basic to the use of the land. The road network constitutes the development framework for any municipality as road locations and patterns shape a community.

There are three types of roads in Greenwood Township: (1) those that are maintained by the state; (2) those that are township maintained; and (3) those that are privately maintained. **Map 6** shows the extent of each of these systems by name.

Transportation By Road Maintenance

Greenwood Township



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Private roads are not the “normal situation” in Greenwood Township or any Crawford County Township, but do exist. These roads are not maintained through township or state revenues. The township supervisors do not maintain a road that is constructed privately unless they accept the road through legislative action. The following listing gives the extent in miles of the three road systems in Greenwood Township:

State Roads (Including I-79)	47.1 miles
Township Roads	40.9 miles
Private Roads	<u>15.4 miles</u>
Total	103.4 miles

Road Classification

Key to understanding the planning for roads is the recognition that they form a network. The relationship of the roads in the network is important because all roads do not serve the same function. The network concept is based on a hierarchy of roads that takes into account the transportation needs that individual roads serve. Some roads serve interstate and inter-county needs. Others serve inter-township travel requirements, while still others function only to provide access to abutting properties. In reality, however, often the same road serves too many functions in which case problems can arise.

The Federal Functional Classification System defines a “hierarchy” for roads. The Pennsylvania Department of Transportation (PennDOT) accepts the federal system as the classification system to use in describing and categorizing roads. This plan, therefore, follows the nomenclature in the Federal Functional System. In some instances in this system, roads can fall into more than one category. The road classifications in this system are as follows:

- **Interstate:** A road designated as a route of the Interstate System. Interstate-79 is the only Interstate System road in Crawford County.
- **Minor Arterial:** A road that serves interstate and inter-county travel, and where trips are normally of long duration. In the Greenwood Township, only PA Route 285 is in this category. It serves to connect Conneaut Lake and Cochranon to the I-79 Interchange.
- **Major Collector:** A road serving inter-county travel that connects development centers within a county. In Greenwood Township, PA Route 285 from the I-79 Interchange to Cochranon and Conneaut Lake is an example of this category of road, as is U.S. Route 19.
- **Minor Collector:** A road which collects traffic from the local road system and funnels it to the major collector and minor arterial systems; and which connects smaller centers of development within a county. In Greenwood Township, Adamsville Road and Lake Road are examples of this category.

The four categories described above include roads that have reasonable continuity. The following two categories demonstrate a difference in the continuity characteristics, especially the local access road:

- **Local (Collector):** This category of road is named local in the Federal System and it includes all Township maintained roads.
- **Local Access:** This is the true local road that would never, even with full development surrounding it, carry appreciable through traffic. It primarily serves as access for abutting property owners. In the township Staff Road and Second Street in Geneva are examples of this category.

Road Right-Of-Way

The term road right-of-way refers to the entire dedicated area of land within which the travelway or cartway and any other associated roadway improvements are located. It is important that right-of-way widths should be designated and related to relative road importance, i.e. the relative position of the road in the classified hierarchy.

In Greenwood Township, the designated widths of the road rights-of-way differ from road to road throughout the Township. Some of the roads have variable rights-of-way. In all too many instances there are no designated right-of-way widths in the Clerk of Court's records.

Right-of-way widths as established over the years through Crawford County Court proceedings are indicated below. PennDOT also maintains a listing of township road rights-of-way. This list differs from the records of the court. It is believed the court records are the most accurate. But it must be acknowledged that, at best, records of road rights-of-way are poor, except perhaps for recently built state roads where construction drawings have been made. Since land subdivision ordinances began in the mid to late 1900's, and have never existed at the level of county government, accurate records on location and right-of-way often have not been filed of record. For example, the following is a description of the location of a township road established in the 19th century in Greenwood Township:

"... a road beginning at a post at the roots of a red oak stump at the corner of Newholds and Peterson's land to a beech on or near a road running north and south past John Williams' land."

The following standards are given for road right-of-way widths:

<u>Category</u>	<u>Right-Of-Way Width</u>
Local Access & Collector	50 - 60 feet
Minor Collector, Major Collector & Minor Arterial	60 - 80 feet

One can note that these standards are given in the way of ranges. Specific right-of-way standards are designated in Article IV of the Greenwood Subdivision and Land Development Ordinance.

Right-Of-Way Widths, Greenwood Township's Road System

Township Road Number	Township Road Name	Crawford County Court Records In Feet	PennDOT Records Width In Feet
301	H	33	33
302	A	33	33
303	G	33	33
304	I	33	33
305	F	33	33
306	-	33	33
309	Armour	50	33
311	Thomas	50	33
312	Pine	-	-
313	County Line	50	33
315	Mattocks	50	33
335	Seely	-	33
337	Kane	-	33
339	Laird	-	33
341	Mumford	50	33
343	Marshall	50	33
347	Rock Creek Spur	-	33
351	Williams	-	40
353	East Gelvin	50	33
354	Circle	-	33
355	Rock Creek	50	40
357	Carlskin	33	33
359	Custard	-	33
361	Bradley	50	33
365	Victory	-	-
367	Delano	-	-
369	Cole	-	33
387	McMichael, North	50	33
387	McMichael, South	-	33
400	Autumnwood	-	-
401	Fieldmiller	-	-
462	Hall	50	33

468 Miller 50 33

Right-Of-Way Widths, Greenwood Township's Road System

Township Road Number	Township Road Name	Crawford County Court Records In Feet	PennDOT Records Width In Feet
470	Scott	40	33
472	Mill	30	-
486	Brick Church	50	50
488	Hafer	-	33
500	Smock	-	60/80
503	Peterson	-	40
504	Captain Williams	33/50	-
506	Wood	50	33
508	Staff	50	50
510	Marsh	-	-
528	Mercer Pike	33	50
600	Mike Wood	-	40
955	Church	-	-
984	Second	-	-
999	Powder	-	-

Average Daily Traffic

Average daily traffic (ADT) is a term used to express the number of vehicles that use roads. As the term implies it measures the number of vehicles that use a particular portion of road in a 24-hour period averaged over the time span of one year. The Pennsylvania Department of Transportation conducts counts at selected points on certain roads. **Map 7** indicates the ADT counts available for Greenwood Township. The counts are based on data from PennDOT's RMS Report dated 2005.

In examining the traffic counts one should keep in mind that a two lane highway in a rural area has a carrying capacity of approximately 7,500 average daily trips; this refers to reasonably well maintained road with a minimum travel way of 20 or 21 feet. An inspection of **Map 7** indicates that no roads in Greenwood Township are being used anywhere near to their capacity.

Paved Versus Gravel Roads

The Township, as we have seen, maintains 40.9 miles of road. Of this amount, 25.7 miles or 68% are paved and the remaining are gravel. Of the 47.1 miles of state maintained roads in Greenwood Township only 4.71 miles of them (10%) are in gravel. Except for Vernon and West Mead Townships, adjacent to the City of Meadville, there is no township in Crawford County that has such a high percentage of paved roads as Greenwood. This phenomenon is very likely a heritage from the KOW era when many people traveled through the Township. For most of the county's townships, their rural character is very soon evident as one travels their many gravel roads. The gravel road is more economical to

AVERAGE DAILY TRAFFIC VALUES (ADT)

GREENWOOD TOWNSHIP

- Interstate 79
- State and US Roads
- ▭ Parcels

0 0.45 0.9 Miles



March 2009

maintain. But among its difficulties is the characteristic mud in the spring of the year and the unending dust in the dryer summer months.

Two of the paved roads in the state system which have considerable continuity and which are important to its residents and to persons who work in Greenwood Township are Adamsville Road and Lake Road, which is the longest state road in the township. Both of these roads have narrow paved cartways (16 to 18 feet), particularly Lake Road. These two roads along with U.S. Route 19 and State Route 285 constitute the basic framework of Greenwood Township's highway network.

2.5 Community Facilities & Services

Municipal Government

Greenwood Township is a second-class township under Pennsylvania law, and, as such, all governmental powers except those in the area of education lie with a Board of Supervisors who are elected "at large" by township residents for staggered six-year terms. There are three supervisors on the board, one of whom is elected chairman by his/her peers. Currently, the supervisors employ one full-time person as road master and one full-time employee to handle roadwork and equipment maintenance. A part-time secretary also serves the board. A solicitor, engineer and a sewage enforcement officer are utilized on an as needed basis. The citizenry also elects a real estate tax collector and three auditors. The township supervisors have appointed a permit officer to issue building permits and a wage tax collector to collect the 1% earned income tax for the Township.

The township supervisors enacted an ordinance creating the Greenwood Township Planning Commission in December of 1982. The commission, which was restarted in 1999, is comprised of seven members and has been instrumental in organizing this comprehensive planning process. In addition the commission is concerned about the proliferation of illegal dumps and junk areas in the Township and is handling a program to blunt the edge of this problem.

Other ordinances enacted by the Greenwood Township Supervisors that relate to community development issues are as follows:

- A Solid Waste Management Ordinance. Solid waste as defined in this ordinance is any waste, including municipal (garbage) and hazardous wastes in solid, liquid and gaseous forms. The ordinance is comprehensive — providing administrative and enforcement procedures for the location, design, construction and operation of processing and disposal facilities. An important provision in this ordinance is the requirement that any processing and disposal facility

be municipally owned and operated. This ordinance was passed in 1981.

- An ordinance amending the Solid Waste Management Ordinance was enacted in 1982. This amendment pertains only to hazardous waste facilities and sets forth a series of additional requirements for a hazardous waste treatment facility, i.e. an emergency control plan, hours of plant operation, insurance and liability concerns, site standards, etc.
- Junk Yard Ordinance. This regulates the accumulation of junk and regulates junk dealers who are required to obtain an annual license and fixes minimum lot area and other regulations for junk yard operation.
- A Building Permit Ordinance requiring that a permit be issued by the township for all new structures. This ordinance was amended in 1984 in order to enable the township to be in compliance with the Pennsylvania Floodplain Management Act. This ordinance was amended again in 2004 to conform to the statewide Uniform Construction Code.
- Sluice and Driveway Permit: A permit is required for the installation of a sluice or driveway pipe, by calling the township secretary. Cost is \$20.00 residential and \$50.00 commercial.
- A sewage permitting and enforcement ordinance. This enactment conforms to current DEP standards requiring sewage permits for all new residences. Also covered is the very narrow exception that permits certain owners of property which they have owned since 1987 to subdivide one tract in excess of 10 contiguous acres and convey this tract to a specific class of family members who may proceed without the issuance of an on-lot sewage permit by the township if an exception is approved by the Sewage Enforcement Officer and subject to state law.
- An ordinance calling for the vacation, removal, repair, or demolition of any structures dangerous to the community was passed in 1982. Buildings covered by this ordinance are ones that have been damaged by natural causes, ones that have become very dilapidated, and buildings that are constructed in a way that makes them dangerous to the community.
- The Greenwood Township Storm Water Management Ordinance was adopted in 1995. The purpose of this ordinance is to control runoff and erosion problems. It also involves flood control issues and maintenance of any structures relating to storm water.

Township Property and Equipment

The Board of Supervisors own four properties on "F" Road and "G" Road in the "Igloo Area" of the township. On each property there is a one-story building (a structure where three of the sides are built into the ground) constructed for T.N.T. storage and built during the KOW era by the federal government. Each building is approximately 28 feet by 60 feet (1,680 square feet). These buildings are used to store equipment and as an office for township maintenance. The township has: a tractor equipped with a boom brush mower and attachments for a flail mower, a rotary ditcher, and a broom; a high-lift that is four wheel-drive with a yard and a half bucket; a backhoe; one road grader; two big dump trucks; two small dump truck; one 3/4 ton, four wheel drive vehicle; and an assortment of equipment needed principally for the supervisors' road maintenance operations.

In 2006 the Township purchased a modular double-wide building to be used as a new Township building. The modular building was installed in 2008 at 14794 F Road. All of the township functions, except for those relating to road maintenance, have been consolidated into the new building.

Sewage and Water System

A common sewerage and a common water system exist in the Township. These systems were first constructed by the U. S. Army to service the KOW in 1942. Today, the sewage system is privately owned by MAIC and leased to Keystone Utilities Group Inc. which is regulated by the Pennsylvania Public Utilities Commission(PUC) and it serves a very limited number of users. The sewage treatment plant is sited on an unnamed tributary of the Conneaut Outlet. It utilizes a biofiltration process to provide an 80-90% reduction in suspended solids. The capacity of the plant is 450,000 gallons per day with a peak flow of 1,350,000 gallons per day. Currently the plant is used to about 10% of its capacity. The plant complex includes two settling tanks one for primary and one for secondary separation; a biofilter; a Parshall flume; a chlorination chamber; a sludge digester; two sludge drying pits; and a laboratory and office building. Today the sewage system serves three industries: PPG Industries, J-M Manufacturing and Arro Forge; twenty-two residences in the Autumnwood Subdivision and the US Army facility.

The water system as built by the U. S. Army was vast. Seventeen wells were established along the Conneaut Outlet lowlands extending from near the Village of Geneva to a point about 1¼ miles west of Cochranon on the south side of French Creek. The extent of this well field covers approximately 104 miles. The system includes, in addition to the 17 well sites, two pumping station sites, an existing pattern of easements for the transmission mains, the largest of which utilizes 30-inch pipe, and two booster stations. Once water reaches the site of the former KOW buildings, there are two ground reservoir sites each of which has a pumping station. Also in the area of the former KOW installations, there are three

water towers and a large concrete standpipe. The standpipe was designed, it appears, to hold water for emergency use, for example in the event of a fire. The water system when completed in 1942 was guaranteed to produce 25 million gallons (17,500 gallons per minute) of water per day. When the contract was signed for the U.S. Army to build the system in 1941, the stipulation was that the work should guarantee 10 million gallons per day; the actual accomplishment was 2½ times this requirement due to the very productive well field.

Up until about 1984, a portion of the water system was operated by Kebert Enterprises. The wells used to supply water were Wells #4 and #5 near the Village of Custards. It is estimated that these two wells can safely provide 1,200,000 gallons of water per day. Currently the system is not operating. Each of the users on the water system has developed their own source of water supply by drilling wells on their own property. Today, efforts are underway to reactivate the water system by MAIC.

Public Schools

The township is part of the Conneaut Lake Region of the Conneaut School District, the other regions being Lineville and Conneaut Valley. An elected school board, three members from each region, has the responsibility to manage the public school system. The attendance area for the Conneaut Lake Region involves the Borough of Conneaut Lake and the Townships of Greenwood, East and West Fallowfield, and Sadsbury. Other municipalities involved in the Conneaut School District are the Boroughs of Linesville, Conneautville and Springboro and the Townships of Summit, Pine, Spring, North Shenango, Summerhill, Conneaut and Beaver. The school aged students from Greenwood Township attend school at the Conneaut Lake High School and the Conneaut Lake Elementary school in Conneaut Lake. The school district shares the use of the Crawford County Area Vocational Technical High School with the two other major school districts in the county. The vocational technical high school is located in Meadville. All applicants desiring to go to this facility cannot be accepted because of space limitations. By July 2006, there were a total of 2,725 students in the entire Conneaut School District.

The former Greenwood Township Elementary School in Geneva has six classrooms and is located on an 8.58-acre site. The school utilities included commercial electric power, an off-site water well and line and an on-site septic system. The school was built in 1956 and it is in good condition, however, due to declining enrollment the school was closed at the end of the 2002-2003 school year. The school was sold to a private individual in 2008.

Library Service

The Township has no library but the residents may use any one of the libraries in the Crawford County Federated Library System, the nearest of which is the Shontz Memorial Library in the Conneaut Lake Borough. Many Greenwood Township residents also use both the Cochranon Public Library and the Meadville Public Library. The Board of County Commissioners has created a County Library Board and provides funding to the county's participating libraries through this Board. County residents can use the services of any library participating in the Federated System free of charge.

The Shontz Memorial Library is open 35 hours a week. The Library has a summer reading program for grade school children and a story hour program during the school year. The library also has some historical material of local interest. Through the interlibrary loan program of the Erie District Library System, which cooperates with libraries in the County Federated Library System, it is possible for a resident to obtain virtually any book that is available for distribution.

The Meadville Public Library is open 65 hours a week and has approximately 86,000 books. Users may also borrow films on VHS and DVD, video projectors, books on CD and cassette, children's toys, puzzles, magazines and prints. There are computers available for public use. These computers provide Internet access and are joined by the library's wireless access for laptops. The Meadville Library is the headquarters for the Crawford County Federated Library system and is also a member of the Erie District Library System through which it receives interlibrary loan services.

Recreation

The Township owns a 20-acre site, which The Greenwood Athletic Association uses for its recreational program at no charge. The site improvements, which have been made by the Association, include two ball fields, a picnic shelter and a recently completed combined rest room, concession stand and equipment storage building. The site is maintained, for the most part, by volunteers.

The recreation program runs from April until the middle of July and it includes the baseball and softball teams at all levels from ages 5 to 18. The Athletic Association Board meets monthly and currently has 7 members. The Association receives \$500 annually from the Township Supervisors. The remainder of the Association's funding comes from fund-raisers and some donations from local businesses. Plans for the future expansion of the Association's recreation site include another ball field, walking trails and the provision of play apparatus.

Fire Protection

The Greenwood Township Volunteer Fire and Rescue Department has approximately 27 volunteer firemen. The Township Supervisors provide the department with the revenue from the EMS tax for the use of the fire department and for the upkeep and maintenance of the fire hall which is also used for township meetings. Additionally, funding for the department is derived from fundraisers such as dinners and a membership drive. Memberships are \$10.00 with a \$5.00 renewal.

The major pieces of fire equipment that are kept at the fire hall in Geneva include: a 1993 GMC tanker with a 3500 gallon water tank and 500 gallon per minute pump, a 1983 GMC Brigadier Engine with a 1000 gallon water tank and a 1500 gallon per minute pump, a 1981 American LaFrance Engine with a 750 gallon water tank and a 1250 gallon per minute pump, a 1993 Western Star, and a 1991 Ford Rescue. Another important piece of equipment is a hand held thermal imaging camera used to navigate in a fire. The volunteer firemen take care of the maintenance work on the equipment.

The response time for a call in Greenwood Township is three to four minutes. The fire department will respond to fires and other types of rescue situations with both the fire department and a rescue squad. A Greenwood Township resident contacts the fire department by calling Crawford County 911. The fire department has mutual aid agreements with the East Fallowfield, Sheakleyville, Cochranon, Vernon Central, Conneaut Lake, Conneaut Lake Park, and West Mead 1 & 2 fire departments. The fire department will respond to all calls they receive from other areas within reason; generally they respond to calls within the county. Greenwood Township also has an agreement with the County's Fireman's Scuba Team and the County's HAZMAT Response Team for emergencies that would require their assistance and special skills.

The Township's public road network does not include a direct access from Geneva to the industries (J-M Manufacturing and Arro Forge) and residences served by Delano Road. Delano Road dead-ends at an undeveloped portion of the Kebert Industrial and KOZ Area. Because of this a fire truck must travel Route 285 to U.S. Route 19, South on Route 19 to Delano Road, then ascend Delano Road to the industries and residences at the termination of this road. If Delano Road interconnected with Mike Wood Boulevard (T-600), as it once did, this routing would be unnecessary, and fire access would be far more efficient. This same situation is partially applicable to PPG Industries, although access to this firm's site is possible via Mike Wood Boulevard and Adamsville Road which are normally free from heavy traffic volumes. The local number for non-emergencies is 814-382-2755.

Police Protection

Greenwood Township depends upon the Pennsylvania State Police for protective services. The state police are based at the Meadville Barracks in Vernon Township. The township is in what is called Patrol Zone 35 which includes all of Greenwood, Union, Fairfield, and East Fallowfield Townships. The state police constantly maintain one or two patrol cars in the western area of their jurisdiction; that is the area west of PA Route 98 and U.S. Route 19. Generally, the Patrol Zone in which Greenwood Township is located (Zone 35) is combined with another zone for patrol assignments. Zone 35 is usually combined with Zone 41 (Vernon Township) or Zone 34 (East Mead, Randolph, East Fairfield and Wayne Townships). The amount of patrol that an area receives is based upon the population and the number of incidents, and it also varies from day to day with need, seasons and scheduled events. While there is no one patrol car constantly scheduled for the Patrol Zone 35, Greenwood Township receives frequent patrols along the main roads, i.e.- U.S. Route 19 and PA Route 285, due to the fact that these are main routes that many of the patrol cars use in the conduct of their service. The state police can be reached at 336-6911. Their average maximum response time varies from 15 to 20 minutes; but, as one can imagine, this varies depending upon the situation and it is not always possible to maintain this standard.

In their experience with traffic violations, the state police indicate that there are more traffic incidents on U.S. Route 19 than the remainder of the roads in the township. The state police attribute this to the fact that there is more traffic on U.S. Route 19. The state police may enforce traffic violations only on public roads (state and township) and on traffic ways (entrances to shopping malls, etc.) and not on private roads.

Emergency Services

Ambulance service is provided to the township by two ambulance services: Cochranon Ambulance Service, and Conneaut Lake Area Ambulance Service, Inc. Meadville Area Ambulance Service, Inc provides backup relief to both of these services. Where there are emergencies in the township, the emergency personnel will call either the Cochranon or the Conneaut Lake ambulance service. There are, however, residents of the township who are members of the Meadville Area Ambulance Service and who call that service to arrange for their own ambulance trips.

The Cochranon Ambulance Service is a volunteer organization that provides 24 hour a day ambulance service with an entirely volunteer staff of 32 advanced first-responders and emergency medical technicians. The service operates two ambulances and one rescue vehicle. Both ambulances are equipped with two radios, one of which has the fire frequency and the other the medical frequency giving them radio communication with County Control and the hospitals.

Residents of Greenwood Township may purchase memberships for the service. Each membership is entitled to receive an unlimited number of calls per year. A family membership is \$40, a senior membership (persons 62 and older) is \$35. Non-members are charged \$330 a trip. Additionally, there is \$3.30 charge per load mile for non-members. The hospitals in Greenville, Seneca, Grove City, and Meadville are considered to be within the service area.

The Conneaut Lake Ambulance Service also provides 24 hour a day and is comprised of approximately 43 paid and 15 volunteer staff including paramedics and emergency medical technicians. The service operates 3 advanced life support (ALS) ambulances and 1 wheelchair van rescue vehicles. Ambulances and other vehicles are equipped with radios both for radio communication with County Control and hospitals. Residents of Greenwood Township may purchase memberships for the service which results in reduced charges for services. Yearly membership types include family for \$45, senior for \$35 and household for \$50 (covers visitors to your home.) Rates for services vary depending on the service used; for example transport that requires emergency medical technicians would be less expensive than if a paramedic were required. Normal charges per mile of transport is \$10.00. In emergency situations, the Conneaut Lake Ambulance Service transports to the closest command facility which could be either Meadville Medical Center or UPMC Horizon in Greenville.

The Greenwood Rescue Squad is a volunteer group with 19 trained emergency medical technicians and 6 advanced first alerts. This group may be dispatched through the Crawford County Control and may be specifically requested by an ambulance service or a citizen. The group handles medical needs and will assist at all types of rescue situations. They have a working relationship with the Cochranon, Sheakleyville, and Conneaut Lake Ambulance Services and with the Vernon Central Fire Department and will respond to emergency situations until the ambulance service arrives. The response time of the Greenwood Rescue Squad is approximately two to three minutes. The rescue squad has a quick response service unit that has been certified by the county; it is a 1993 Ford F450 type B ambulance body. The Greenwood Township Volunteer Fire Department supports the rescue squad. The Cochranon Ambulance Service is considered light rescue that carries only light hand tools, crimping and blocks coordinating with Vernon Central and Cochranon.

Health Care and Other Human Services

Medical and dental services are available in the City of Meadville, Crawford County, and in Greenville, Mercer County. A number of physicians are also available in Conneaut Lake Borough. Most residents of Greenwood travel to one of the various medical centers within a fifteen mile radius, which includes Crawford and Mercer County. The City of Meadville has one hospital, the Meadville Medical Center with 277 beds. UPMC Horizon Hospital is in Mercer

County and has part-time practices in Conneaut Lake Borough, as does the Meadville Medical Center.

Community Health Services of Crawford County, Inc. (CHS), located in Meadville, provides those that are home-bound with an array of medical and social services. CHS is a nonprofit organization, providing services in the home at cost or on an ability to pay basis. The services provided include skilled nursing care; home making service; physical, speech, and occupational therapy; family planning; medical and Community Services Block Grant transportation; and a nutritional and educational service for expectant mothers and infants (Women's, Infants & Children Program, WIC).

Many other human services are available, nearly all of them from offices and clinics in Meadville and frequently funded in part by county government. Some of them are listed and described briefly below:

- Child Welfare Services: adoptions, a foster care program, handling child abuse cases.
- Office of the Aging: programs for the elderly enabling them to continue living in their own residences, provision of meals, opportunities for socialization.
- Mental Health/Mental Retardation Office: insuring the operation of a mental health clinic, providing for community living arrangements, providing jobs for the retarded and handicapped.
- Northwestern Legal Services: making available legal help on an ability to pay basis.

Postal Services

Greenwood Township is served by four post offices, none of which are located in the township. The northwestern portion of the township, including Route 285, and Main Street, and the area surrounding Geneva, is served by the Conneaut Lake Post Office; the postal ZIP code for this area is 16316. The southwestern area of the township, including the western portion of Route 285, Adamsville Road, Atlantic Road, Lake Road, and the "igloo" area, are served by the Atlantic Post Office; this postal territory ZIP code is 16111. Generally, the eastern portion of the township, including U.S. Route 19, is served by the Cochran Post Office for which the postal ZIP code is 16314. The southwestern corner of the Township, at the intersection of County Line Road and Miller Road, is served by the Greenville Post Office for which the ZIP code is 16125.

Public Transportation

As described earlier under the Health Care and Other Human Services section the Crawford County Area Transportation Authority (funded by the Board of County

Commissioners, through state and federal subsidies and through funds from certain human service agencies in the county) provides transportation to the clients of human service agencies and serves all residence of the county. The County Area Transportation Authority, more commonly referred to as CATA, provides a Shared Ride Program Monday thru Friday from the Cochranon Conneaut Lake area to Meadville and Meadville Senior Center. However to use the service reservations must be made one working day in advance. To place reservation, call either 814-336-5600 or 1-800-782-2282. If a reservation is needed for Monday the reservation must be placed on the prior Friday. The costs for the Shared Ride Program are:

- Senior Citizens- one way from Geneva area is \$1.75. From Conneaut Lake and Cochranon it is \$2.25. Senior I.D. cards are required and available from the CATA office. Persons with Disabilities share the same rates.
- Adults- one-way from Geneva is \$11.65. From Conneaut Lake and Cochranon it is \$14.85. Children ages 6 thru 18 pay half of this price and children 5 and under ride free.

An alternative service to the Shared Ride is the Designated Stops option. The Designated Stop for Cochranon is the County Fair at 110 West Adams Street. The Designated Stop for Conneaut Lake is Al's Melons at 7071 Water Street. There is currently no designated stop in Geneva. The reservations must be made 24 hours in advance just like the Shared Ride Program. Both Designated Stops end strictly at the Downtown Mall in Meadville. The costs for the Designated Stops are:

- Senior Citizens, with a senior citizens I.D. from CATA, and Disabled persons ride free.
- Adults and Children age 6 thru 18 pay \$3.35 per one-way trip. Children ages 5 and under ride free.

Refuse Collection

Greenwood Township is served by three refuse collection services: (1) Waste Management, (2) Tri-County Industries, and (2) Northland Refuse Corporation. The township supervisors play no role in refuse collection services.

Tri-County Industries currently serves the township with two routes, which it collects on once a week. The cost of their service is either \$66 every three months with a limit of 95 gallons total or \$51 every three months with a limit of one bag per week. The waste is hauled to a landfill in Seneca, Pennsylvania.

Northland Refuse Corporation currently collects only on U.S. Route 19 and only once a week. The cost of their service is \$55 every three months (quarterly

billing) with a limit of 9 bags per week. The waste is hauled to the BFI landfill in Poland, Ohio.

Waste Management also supplies the township with residential service, but the details are not available. The average cost from 1 bag a week for \$14.75 per month to 10 bags a week for \$20 per month.

Once a year, Greenwood Township has a clean-up day for all residents. The first pickup load (load that fills up the bed of a pickup truck) is free of charge to all township residents and additional pickup loads have a cost of \$5. The date for the clean-up is announced in the Spring and is generally during the month of May.

Utilities

There are no public sewerage or water systems in the township. However, Keystone Utilities Group, Inc. operates a sewer system that serves three industries, 22 houses in the Autumnwood Subdivision, and the U.S. Army Base known as AMSA/ECS and Keystone Training Area.

The Northwestern Rural Electric Cooperative Association, (often referred to simply as REC) serves most of the township with electric power. The Pennsylvania Electric Co., (Penelec), however, does cover certain sectors that include the Geneva area and the industries in the Keystone Regional Industrial Park (KRIP).

Regarding other utilities, the entire township is served by Windstream Communications telephone company. National Fuel Gas serves the industries located at the Keystone Regional Industrial Park and the homes in the Autumnwood Subdivision. National Fuel Gas indicates that PPG Industries has begun to buy some of its natural gas directly from one of the energy exploration companies, Mitchell Energy. National Fuel Gas has more service available than is currently being used in this area. Cable television service is provided in the township on a limited basis by Armstrong Cable services.

Keystone Training Area

The only land still owned by the federal government in Greenwood Township today is a 500 acre site in the possession of the U.S. Army. This is the Keystone Training Area (KTA) and AMSA/ECS. Considering the fact that the U.S. Army owned 14,130 acres in the township in 1945, this is a rather small holding amounting to about 4% of its ownership through the World War II period.

Access to the KTA and AMSA/ECS is Mike Woods Boulevard, also known as T-600, which extends to the site from Geneva and continues to Adamsville Road. AMSA/ECS also has a back gate for access to Scott Road. Scott Road is narrow and provides access for 15 households over approximately a ½ mile stretch. The

township supervisors, responding to citizen requests, opened T-600, a road capable of handling larger volumes of truck traffic with less adverse impact on adjoining development. Army officials have agreed to use the T-600 access as the primary access to their facility and utilize Adamsville Road to access T-600 as opposed to going through Geneva whenever possible.

The Keystone Ordnance Works

Federal Government activity at the Keystone Ordnance Works (KOW) in Greenwood Township began late in 1941. It was in April 1942 that the War Department gave this facility its official name. The name was soon abbreviated to KOW. On November 12, 1941, even before the “day of infamy” — December 7, 1941, officials of quartermaster’s real estate branch announced the tentative boundaries of the land to be acquired for the ordnance works. This included a large area of land in Greenwood Township. Late in 1942, it was announced that most of the tracts of land had been purchased for the project site. The cost to purchase the 234 tracts of land was approximately \$560,000. Approximately 14,130 acres or 22 square miles were involved as shown on a War Department Project Ownership Map of October 16, 1945.

Construction began at the site December 9, 1941. Fraser-Brace Engineering Company built the facility and they were also responsible for operating the ordnance works for the production of TNT. Trinitrotoluene is the correct chemical name for TNT. Construction was completed in June 1943. Initial operations at the plant began in September 1942. The oleum plant for the manufacture of concentrated sulphuric acid in the acid area of the complex was designed and built under a separate contract by the General Chemical Company. Operations in the oleum plant were underway in October 1943. The U.S. Army Engineers supervised all construction at the KOW., and the U.S. Army Ordnance Department supervised production at the KOW.

After the war’s end, many of the land areas were sold to private individuals. Some parcels were picked up by their original owners. A residual 4,163 acres, where the primary TNT production operations were conducted, were eventually disposed of by the federal General Services Administration to the Meadville Area Industrial Commission (MAIC), through a quitclaim deed, on March 24, 1965. The purchase price was \$462,000. The property was subsequently sold to Kebert Developers Inc. in September, 1967 and then 1,300 of the 3,000 acres were sold back to Meadville Area Industrial Commission on June 17, 1999.

At its peak of operation the Keystone Ordnance Works (KOW) was producing 600,000 pounds of TNT a day. Government reports indicate the facility was designed to produce 780,000 pounds per day. The plant was in operation only 15 months when it was ordered to shut down on March 17, 1944. After being closed for six months the KOW resumed operations in September 1944. Less than one year later, on August 16, 1945, the KOW plant was ordered to cease operations

immediately. By November 23, 1945 the shutdown of the plant was nearly complete. Clean-up experts had steamed the equipment clean. Some equipment was boiled for 60 hours. A flamethrower was used to heat metal pipes and sulphuric acid was distilled down and reconverted for peacetime uses.

The facility was put into what was called “idle standby for reuse” status. On October 8, 1946 the War Department, acting through the Commanding Officer of the Keystone Ordnance Works, turned over the property to the War Assets Administration. Approximately 14,444 acres were covered in this transfer. The WAA was charged with disposing of its holdings.

In October 1947 the General Chemical Company purchased the oleum plant in its entirety which was dismantled and moved elsewhere. Over the next few years the Army found that it was difficult to dispose of the KOW and except for several studies which the WAA contracted out to consultants, there was little activity. These studies included the Industrial Research Corporation (IRC) inventory and survey report and a June 12, 1950 report titled *Utilities, Transportation Facilities and Special Features*.

2.6 Township Survey Results

Public Input

One of the most important considerations when formulating a comprehensive plan is public input. In the process of studying community development issues, one of the most effective tools in getting to the root of resident concerns is to obtain their opinions through a survey. Due to the fact that surveys are received through the mail, filled out in the privacy of a home, and returned anonymously to the Crawford County Planning Commission, the integrity of the replies to the Crawford County Planning Commission can be assured.

The State of Pennsylvania requires that a “statement of community development objectives” be included in any comprehensive plan. In devising this statement we shall consider the location, character and timing of future development. It is also intended that such a statement lay out any goals concerning subdivision / zoning ordinances, setting forth desired land use, population density, housing, business, industry, streets, community facilities, agricultural land, and natural resources. Greenwood Township decided that the residents are the best source for opinions on these subjects and should be consulted before any official statement of goals and objectives are formulated.

Community Survey

The Greenwood Township Community Survey was mailed and administered by the Planning Commission during spring 2002. The questions contained in the survey were designed to help the Planning Commission gather information about public sentiment on a variety of issues affecting the future of Greenwood Township. The questions asked for basic demographic, community facility,

housing, and economic information. Participants were welcome to comment about issues concerning the Township.

Community Surveys were mailed to those listed on the per capita and property tax roles of Greenwood Township. Each household was asked to complete the attached survey and return it in the postage paid envelope within two weeks. All survey responses were confidential and were sent directly to the Crawford County Planning Commission for tabulation. The unabridged results are available at the Township Municipal Building and the Crawford County Planning Commission for public review.

Results of the Survey

The response rate of this survey is typical to other similar endeavors within the County. Collected throughout summer of 2002, 247 of 595 were returned for a response rate of 41%. As previously mentioned, the complete results and comments are available at the Township and County offices. The following is a summary of the results:

Demographics

- The vast majority of reporting households had no children under the age of 18. Of the total households, 31% had family members who were minors.
- Roughly 56% of respondents have resided in the Township over 20 years with only 14% living the Township for less than five years.
- Of the total Township population, the results indicated that 27% are retired.
- The majority of commuters drive between 10 and 25 miles to work each way.
- Household gross incomes indicated that 23% generate incomes in excess of \$50,000 per year.

Community Facilities

- Levels of satisfaction ranked very high for Fire Service and Township Roads while Water and Sewer Quality ranked low.

Housing

- 95% of survey respondents own their home.
- The majority of Township residents feel the appearance (58%) and price (66%) of housing is *average*.
- Small numbers of residents felt that public housing is needed in the Township (around 6%), while more people felt that affordable housing and high-income housing are desired.

Economics

- The majority of Township residents go to Meadville and Vernon Township for their services (groceries, banking, medical, entertainment, etc.)

- The bulk of respondents would like to see more economic development within the Township.
- Streets, medical facilities, and sewerage are the top 3 services that residents would support an increased mil levy.
- When examining future population, roughly 46% felt that the Township population should increase somewhat, while 28% felt it should remain the same, and only 3% stated that the Township population should become smaller over the next 25 years.
- Approximately 15% of respondents felt that retail growth and development should occur in the KOZ area of the Township. Over 55% desired growth and development throughout the Township.

III. REVISED TOWNSHIP PLAN

3.1 Community Development Objectives

The goal of the Greenwood Comprehensive Plan is to chart the course for sound development in the Township. The delineation of the Comprehensive Plan has taken into consideration all of the information received, surveyed, and analyzed in the preceding Background Information sections of this report. Together with this data and the following community development objectives, this plan was prepared to best serve the Township now and in the future. The Comprehensive Plan is the blueprint for reasonable and controlled development. The Plan must rely on the public officials to give it life and meaning, although it should not be viewed as purely a public document.

- To encourage growth and development in the township and to manage this growth through the guidance established in this plan.
- Conflicting non-farm land uses shall be discouraged in areas where productive agriculture exists by discouraging paved roads and public utilities in agricultural areas.
- To encourage existing agricultural activities to remain functioning and to promote their expansion where possible, but not to consider residential activities incompatible with agricultural activity.
- To encourage the development of the Keystone Regional Industrial Park (KRIP) advocating the aggressive management and marketing of the land in this park for compatible industrial activities.
- To exercise reasonable regulatory authority in the general area of the Geneva Interchange on Interstate 79 in order that land development in this significant area does not compromise the efficiency of this highway facility.

- To devise a priority system for the upgrading and maintenance of Township roads based on such factors as the number of residences served by a particular road, and the overall use of a particular road.
- Building lot sizes should be regulated so that they are adequate enough to handle on-lot sewage systems.
- The Township shall encourage the dedication of open space, parkland, or common areas in all new major subdivisions.
- Subdivision activity within the township shall be regulated to ensure that acceptable standards are adhered to in all new residential development and to protect the natural quality of the area from unwise exploitation.

3.2 Land Use Plan

Of all the elements that constitute a comprehensive plan, no other is more important than the land use plan. The goal of this land use plan is to provide a framework for future growth by recognizing that Greenwood Township is a rural township but it also contains a large portion of land suited for industrial uses. Because future residential growth is anticipated to continue, the primary goal of this land use plan is to preserve existing agricultural activity and direct moderate or heavy non-agricultural land uses into the area of the Keystone Regional Industrial Park (KRIP).

The land use plan and accompanying maps are the result of a Township-wide inventory of existing land uses provided in the background portion of this comprehensive plan. In addition, the other analyses such as the studies of population, transportation, physical features, economics, etc. were used to make future land use determinations. The general land use categories in this section are mapped out on the accompanying Land Use Map. It is important to note that this plan and accompanying maps are recommendations and do not constitute a zoning ordinance.

GENERAL OBJECTIVES

- **Objective 1:** To strive to locate future development in harmony with the land use areas as indicated on the Greenwood Township Land Use Plan, which is incorporated into this plan. A separation of some land uses from others normally serves to protect property values and to promote more efficient, attractive settlements.
- **Objective 2:** To encourage existing agricultural activities to remain functioning and to promote their expansion where possible, but not to consider residential activities incompatible with agricultural activity.

LAND USE CLASSIFICATIONS

The following land uses correspond to **Map 8** and provide a framework for future land use for approximately the next 15 years.

Agriculture and Rural Use

The Agricultural District includes areas where active agricultural activities exist or where cleared fields exist that could, with relative ease, be put into productive use. The purpose of this District is to promote the expansion of agricultural activities wherever possible and to strongly discourage the location of uses that would be harmful to its continuation. Public facilities such as sewer and water systems should not be located in this area. Public roads should be maintained in a rural character; bituminous pavement is not considered a requirement. New public roads serving residential developments should not be located in this area. Non-agricultural uses, particularly rural residential developments, locating in this area should be prepared to accept the primacy of agricultural activity.

Forested

Forested areas are those that are meant to support forestry and passive recreation activities. These areas can also accommodate varied building and land use activities. These activities should all be developed with a distinctly rural character and at reasonably large distances from each other. No large commercial, industrial or residential uses should be sited in this land use area. All activities should be in the scale with the rural environment of the Township. These kinds of uses would include: active farmland, vacant woodlands, scattered small businesses and low-density residential.

Rural Development

Rural Development areas are situated in proximity to Geneva, Custards, and areas where development currently exists, and would be expected to increase. Settlement in rural development areas should be mainly residential in nature, but given the slow pace of development and the low density and variety of development in these areas, a range of uses is desirable. Activities in these areas should also be in scale with the rural environment without penalizing or hindering existing agricultural lands.

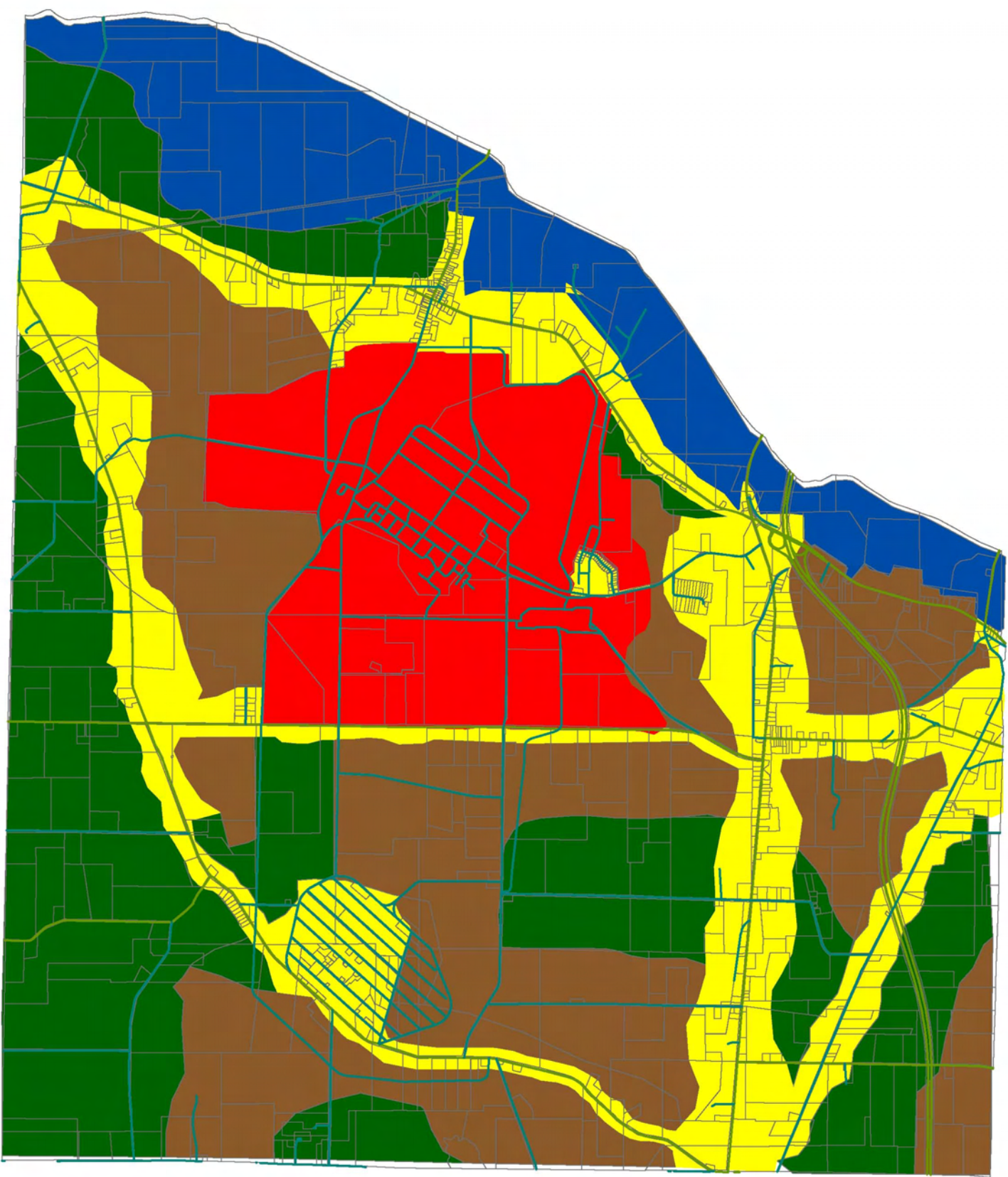
Industrial

Industrial areas have been designated in locations where the terrain is favorable for industrial plant construction, it is feasible to provide sewerage and water and public road access is good.






FUTURE LAND USE

GREENWOOD TOWNSHIP

VERSION 7



Land Use

-  Agriculture and Rural Use
-  Forested
-  Rural Development
-  Industrial
-  Conservation



March 2009

The Township has a sizeable portion of land that could be classified as industrial; this is land that was once used by the United States Keystone Ordinance Works. Various structures and site improvements are still visible although they are not used in any current industrial activity. Areas of this nature are commonly known as “Brownfields”, thus require special care in finding a suitable use for these lands. This also includes areas where it is feasible to provide sewerage and water extensions from the Keystone Regional Industrial Park (KRIP) and where public road and rail access are good.

Conservation

Conservation areas include those situated in floodplains and wetlands where development is greatly restricted. Also included in these areas is State Gameland #213.

3.3 Housing Needs Plan

As part of the housing needs plan for Greenwood Township, many important factors have shaped the direction of this plan. Population projections, housing unit projections, current condition of housing stock, and new building code regulations, were influential elements of this section. In conjunction with the County Comprehensive Plan, this plan also seeks to provide an opportunity for every resident, to have a clean, safe and affordable residence.

Housing Unit Projections

Housing unit projections are an important element to understand potential land demands. This information, combined with the land-use map and current subdivision regulations can help to further guide the future of housing in the Township.

The projections in Figure 3 are based on the number of year-round housing units, both vacant and occupied, according to the 2000 Census for Greenwood Township.

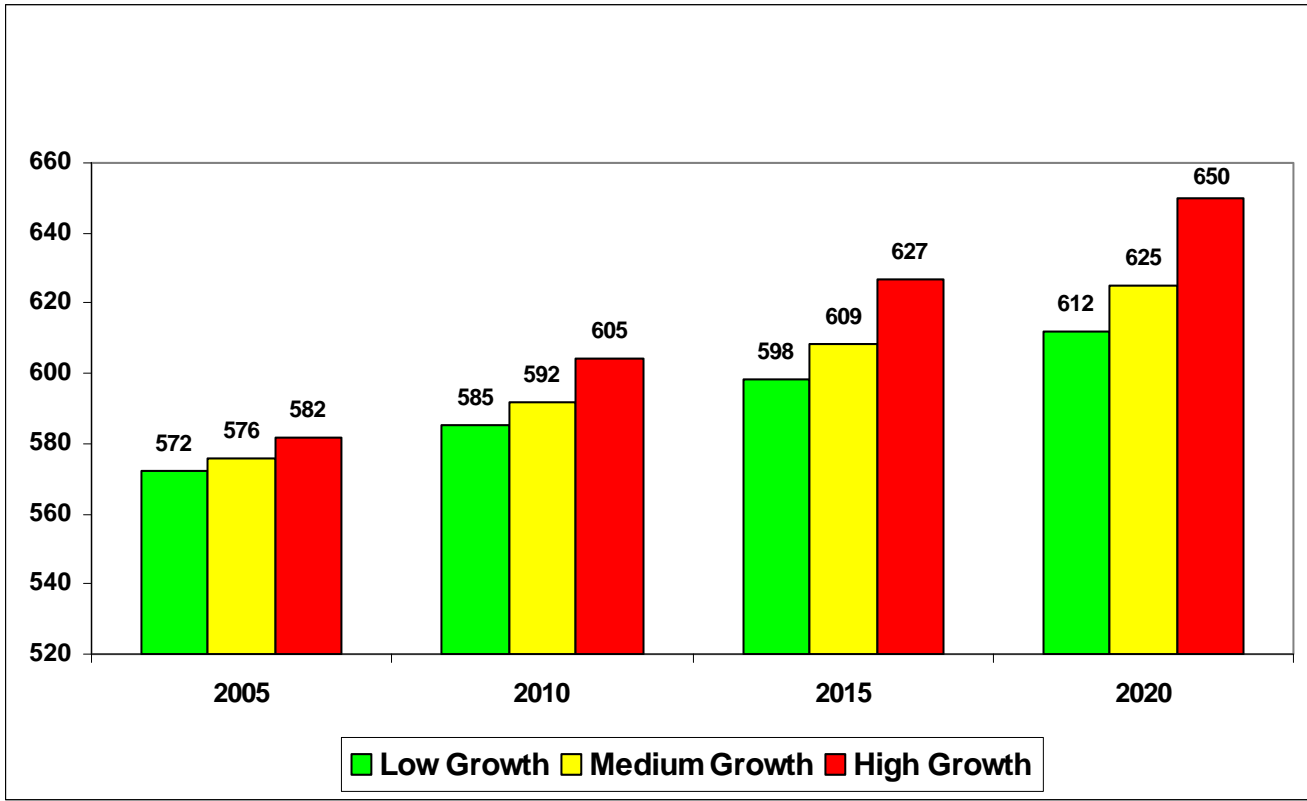


Figure 3 Total Housing Units Projections

This chart shows three different scenarios of growth, broken down into five-year periods.

- *Low Growth*- This scenario looks at the low-growth population projections for the Township, and multiplies it by a factor of 2.66 (the average household size of the Township). By these estimates, in the year 2020 the Township would contain 612 housing units representing an increase of 52 units from the base year 2000.
- *Medium Growth*- This is based on the medium-growth population estimates. This method takes rate-of-change from each 10-year census, dating back to 1960. Under this scenario, the Township would contain 625 housing units by the year 2020.
- *High Growth*- This method is based on the high-growth population estimates. A differentiating factor that influences these results is the fact that permit data from 1990-2000 are used. These numbers reflect not only census data, but also the actual building activity that has occurred in the Township during a ten-year period. This method resulted in the highest gain, a net increase of 90 houses, bringing the total housing units to 650 by the year 2020.

With this information at hand, the Township can presume that at least 50, and potentially 90 new housing units, will be added over the next 20 years. With this increase comes increased traffic, the need for more services, and all of the other requirements that accompany increased population.

Currently, the housing stock in the township, overall, is in very good condition. The results of the housing condition survey, conducted in the summer 2003, ranked 89% of the housing in the Township as excellent or good. The results can be seen in **Map 9**. This information shows an improvement when compared to the results of the 1985 Comprehensive Plan.

With this information at hand, the Township can move forward with its goals for the next 20 years.

Goals/Objectives

- Greenwood Township should continue to support its subdivision ordinance to ensure that housing in the Township is clean, safe and affordable for residents.
- At this time, Greenwood Township should support the mandated uniform building codes for new construction, as set forth by the state, in order to maintain the quality of housing stock in the Township.

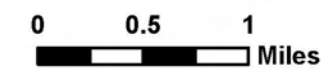
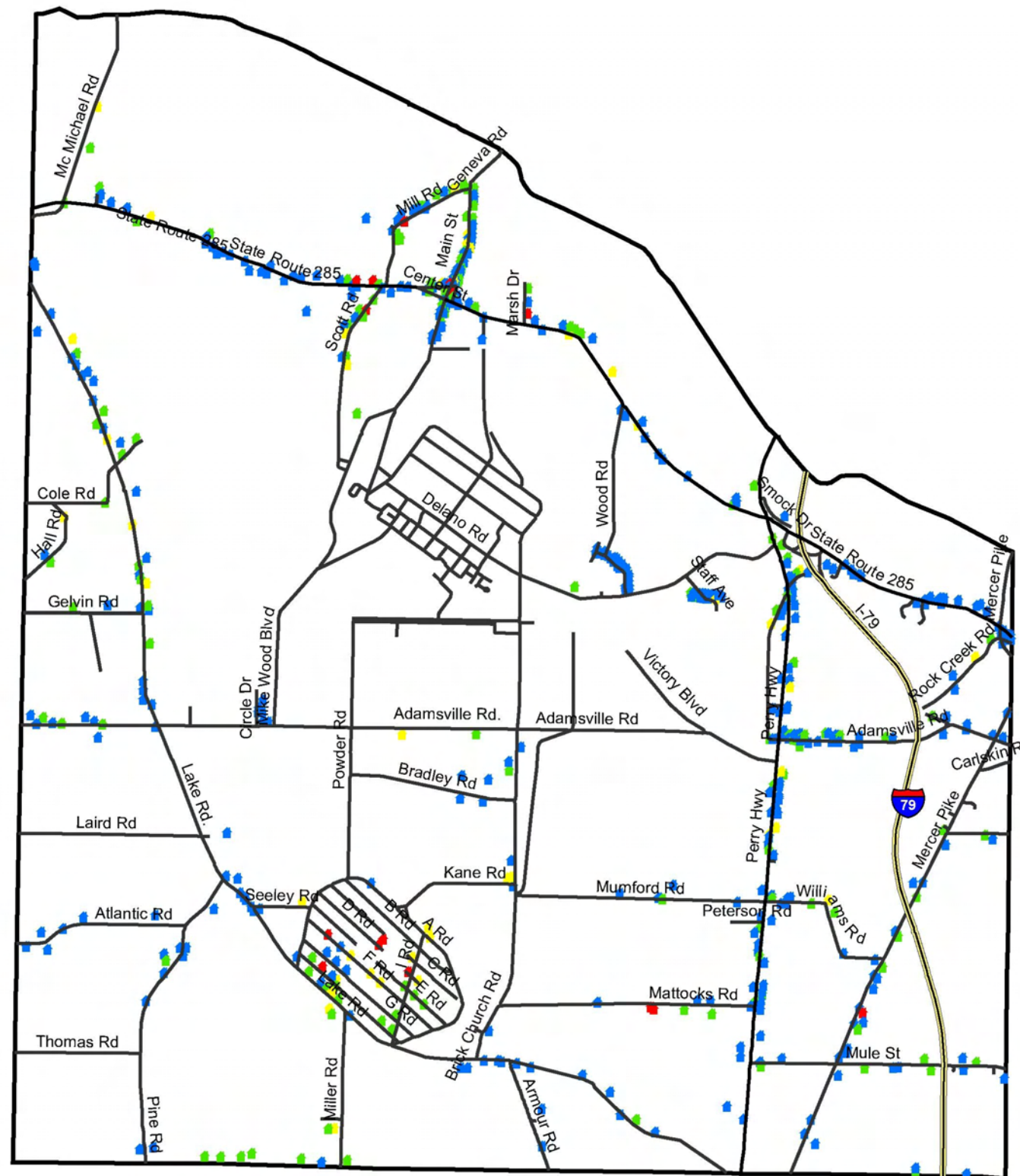
3.4 Transportation Plan

One of the key goals of any planning agenda is to guide future growth and development for a given area. Planning for development *and* transportation needs is directly related because development generates traffic, and transportation routes serve and encourage economic development. The location and quality of transportation routes can help determine the general direction of growth within a community and are often deciding factors in the location of residential, commercial, and industrial facilities.

The roadway network in Greenwood Township was generally designed to handle rural traffic with the addition of other roadways due to the KOW. However, future development in the KOZ/Industrial portions of the Township may result in a flow of traffic that is heavier than what the road network can currently handle. The result of this may pose an increased safety risk for those traveling and residing along these roadways. The purpose of the Transportation Plan is to recommend a basic outline for potential road improvements that will accommodate future demands and needs.

HOUSING CONDITION

GREENWOOD TOWNSHIP



March 2009

Based on 2005 data from Pennsylvania Department of Transportation (Penn DOT), Greenwood Township has 103 miles of roads. The Township road system consists of 40.9 miles and the State road system consists of 47.1 miles. Therefore, approximately 40% of the roads within the planning area are Township roads and the remaining 60% are State and privately maintained roads. Based on Previous trends, the percentage of Township roads will continue to increase, and should be considered as part of this plan.

Goals/Objectives

- To efficiently prioritize and expend Township funds for transportation improvements and projects.
 - ~ This can be achieved through the prioritization and scheduling of road improvements based on criteria determined by the Township. Such criteria would take into consideration number of residences in a given area, existing surface conditions, or the frequency of road flooding.
 - ~ Coordination with contiguous municipalities can lead to more efficient road maintenance costs.
- To be involved and to stay informed of projects related to Greenwood Township in PennDOT's Twelve Year Plan.
- To identify and correct problem areas and road deficiencies.
 - ~ Utilize mapping provided by the County and PennDOT to identify troublesome intersections or roads that are improperly aligned.
 - ~ Areas that are identified as troublesome should be given top priority by the Township, and should be corrected.
- Prioritize the paving of Township roads according to their public density of residential development and traffic flow.
 - ~ A *Residential Density Index* was devised based on the number of residential structures per 1000 feet of road.
 - ~ If an area of the Township has a high Residential Density Index, and is not already paved, it should be considered for paving or tar and chipping as an effort to reduce loss of gravel, road wear and yearly maintenance costs.

DENSITY INDEX FOR SELECT ROADS

TOWNSHIP ROAD	DENSITY INDEX # of homes per 1,000 ft.
Atlantic Road	.88
Autumnwood Drive	8.7
Staff Avenue	11.8

3.5 Community Facilities Plan

There are many facilities and services that are necessary to provide a good life for township residents. The delivery of some of these services may be regulated by the township supervisors. However, most of these services are not direct obligations of the supervisors; it is optional as to whether the township provides aid for them. Participation in these services may increase the attractiveness of Greenwood Township as a place of residence in Crawford County.

(1) Policy: Township Headquarters. To continue to meet in the Greenwood Township Municipal Building at 14794 F Road.

(2) Policy: Recreation. To continue to provide annual financial support to the Greenwood Athletic Association.

(3) Policy: Fire Protection. To continue to assist in the funding of the Greenwood Volunteer Fire and Rescue Department, located in Geneva. The Emergency Municipal Services tax is used to fund the fire department. This fire company is entirely comprised of volunteers and is the only such company in the township. As is the case for most rural townships, Greenwood does not maintain any paid firefighters.

(5) Policy: Police Protection. To continue to rely on the Pennsylvania State Police for protective services.

(6) Policy: Refuse Collection. To continue in a position of noninvolvement in the matter of garbage and refuse collection and disposal; and to provide cooperation

to the County Solid Waste Authority which updated their management plan in 2000 and will update it again in 2010. The Authority consists of a 7 member volunteer board appointed by the Commissioners, and is staffed by two people.

(7) Policy: Sewerage In Greenwood Township. To revise the Sewage Facilities Plan for the township, if required, and thereby develop a general plan showing how development of sewerage will progress with a preference for on lot sewerage systems in residential areas not currently served by the existing sewer plant. DEP has funded the Crawford County Planning Commission to begin preparing revisions for all of the county's 51 municipalities' Sewage Facilities Plans. Also, to maintain the water and sewer lines that are in current use without extending the boundaries of the existing lines.

(8) Policy: Water Supply In Greenwood Township. To work to place the vast water system constructed by the U.S. Army in 1942 in public ownership and to do what is necessary to rehabilitate this system so that, of the very least, it can serve existing and new industrial development in the township in an efficient manner. New industrial development is unlikely to occur in the KOW area of the township unless a plentiful supply of water is available through a management group, which reflects the public interest (either through state Public Utility Commission regulations or through outright ownership by a public body). The old KOW water system is no longer operational because it was closed down by its owner, Kebert Enterprises. A certificate of public convenience was never obtained from the Public Utility Commission for the operation to its full capacity (25 million gallons of water per day) or partially represents a major asset for regional industrial development.

(9) Policy: Blighting and Unsafe Remnants of the KOW. To cause the removal of the many remnants of construction by the U.S. Army for the Keystone Ordnance Works in the 1940's inasmuch as these remnants have a blighting effect on the development of certain areas of the township because these elements must be removed at considerable cost before new development can take place.

Remnants exist in the core of the KOW manufacturing area and in the magazine storage area in the south portion of the township, a location called the "Igloo Area". The Igloo Area currently is mainly used for housing although much of this area is vacant. KOW remnants are prominent in the area which is central to the industrial area proposed in this plan; brick and metal buildings, foundation slabs, concrete pilings, underground pipelines and surface connections to these pipelines, settling basins, obsolete storage tanks, elaborate plumbing systems, random piles of brick and tile, gravel mounds and collapsed conveyor systems predominate among the remnants covering the old TNT manufacturing site.

Project: The Greenwood Township Supervisors should contact responsible U.S. Department of Defense officials and through

personal meetings and through carefully documented letters insist that the federal government assist the township in removing the blighting remnants which still remain strewn about the landscape from the KOW era in the township some 60 years ago; and further, that the issue of the possibility of environmental damage be cleared up.

(10) Policy: Housing. While recognizing that housing for township residents has traditionally been a matter for the private sector, to assume responsibility for initiating programs that promise to improve housing conditions in Greenwood Township if warranted.

Project: The township should initiate a meeting with the Crawford County Commissioners requesting that they assist borough and township governments in improving their housing stock by activating the Crawford County Housing Authority, and/or some other appropriate means which only county government has the financial strength to implement.

Project: Assuming that the dilapidated igloo structure will be removed through federal assistance the Greenwood Township Planning Commission should evaluate the housing redevelopment plan for implementation through a combination of township, county, private and state and federal resources. The redevelopment could only happen if the township experiences considerable growth – more than forecasted in this plan.

3.6 KRIP/KOZ

The vast 3,600 acre site in Greenwood Township, Keystone Regional Industrial Park (KRIP), has the potential to attract major development. The KRIP was once part of the Keystone Ordnance Works (KOW), and was used during World War II to manufacture TNT. The KRIP has been under final consideration as a location for such prestigious companies as Cummings Diesel and Saturn.

The huge KRIP is being developed with Crawford, Mercer and Venango Counties through a formal cooperation agreement executed in 1999. The site is also the Commonwealth's largest contiguous Keystone Opportunity Zone (KOZ) and has the Pennsylvania Select Site designation. The Meadville Area Industrial Commission (MAIC) is the owner of 1,300 acres of the 3,600 acres and has an option to purchase the surrounding acreage. Although, to date, no new companies have selected the KOZ for installation of a new facility, one existing business has constructed a new facility on land within the KOZ which has subsequently increased jobs in the Township. Further, in excess of \$17.5 million has been invested in acquisition cost and site preparation that includes road construction and improvements, investment in upgrading utilities including

electric and sewage, installation of water tower for fire protection, along with studies and surveys for wetland delineation and a water system construction project. Approximately half of the park, 650 to 700 acres, has been determined to be wetlands and this acreage is unable to be developed. A water system serving the rest of the KOZ is anticipated to begin construction in the summer of 2008.

3.7 Implementation Strategies

It is hoped that the information organized and printed in this plan will be useful to many persons and organizations. More importantly, it is hoped that the courses of action set forth will guide both private and public sector actions in the years ahead. The Greenwood Township Comprehensive plan is a study, which designates a recommended course for future development for this municipality. It should be viewed primarily as a framework for action, a flexible guide rather than a rigid document. It consists of a series of general concepts and specific recommendations in the fields of land use, housing, transportation, and community facilities. This implementation strategy section of the Plan will take those concepts and recommendations and establish short and long-range implementation goals.

In the first section of this document, a variety of background studies described the natural, and man-made resources of the Township. Many of these resources are locally unique and irreplaceable, and each resource requires appropriate management based on sound land use planning. The task of the comprehensive plan is to integrate the individual resource planning needs into larger plans, which address land use, housing, transportation and community facilities in the township. These major plans must be practical, feasible, economical, and legally sound and must translate into specific actions and regulations to guide and manage growth and development activities in the Township.

Crawford County Comprehensive Plan

The Pennsylvania Municipalities Planning Code requires local comprehensive plans to be “generally consistent” with the County Comprehensive Plan, although not in strict adherence. The 2000 Crawford County Comprehensive Plan’s Future Land Use Map shows recommended uses for Greenwood as well as other municipalities. (Note that the County Plan is only a guide, not a legal document)

According to the County Future Land Use Map, Greenwood is designated as “agriculture/rural” in a large amount of the Township. The areas along the water are designated as “village” and “urban fringe” and the remaining areas of State Lands are designated as “conservation/recreation”

Greenwood Township Comprehensive Plan

The Greenwood Township Board of Supervisors should formally adopt the 2008 Greenwood Township Comprehensive Plan Update. The adoption process must follow the requirements of the Pennsylvania Municipalities Planning Code (Act 247 of 1968 as amended). The adoption process includes proper advertisement, public hearings by the Township Planning Commission and Supervisors, and the submittal for review and comment by surrounding governments (East Fallowfield Township, Sadsbury Township, Vernon Township, Union Township, Fairfield Township, Crawford County, and Conneaut School District).

Subdivision and Land Development Ordinance

The Township adopted a Subdivision and Land Development Ordinance in 1974. This Ordinance should be used to forward the objectives of the land use plan and the transportation plan by insuring more orderly residential development, better planned commercial establishments and new roads that are designed adequately. During the adoption of this plan, the Greenwood Township Planning Commission should begin the work of creating an update to their subdivision and land development ordinance to replace their existing ordinance. To be effective, the Greenwood Township Board of Supervisors must formally adopt any revised Subdivision and Land Development Ordinance. The adoption process must be in compliance with the Pennsylvania Municipalities Planning Code (Act 247).

Act 537 Sewage Facilities Plan

This action will help to accomplish the fulfillment of the State mandate.

Funding Strategies

Most of the recommendations outlined within this Comprehensive Plan cost money. The following list provides potential funding sources that may be applicable to various plan components.

- **Community Development Block Grant (CDBG):** Crawford County receives an entitlement of CDBG funds each year. This translates to roughly \$350,000 to be spent countywide on various projects. This program also has a competitive component. This competitive program is generally used for bridge and road projects or for larger projects that serve an urgent or compelling need, such as water line replacement or extensions.

What Qualifies: To qualify for this program, a potential project must meet one of three National Objectives – 51% of those served by the project must be of Low or Moderate Income, the project must relieve slum and blight, or the project must serve an urgent need.

Potential Projects: Water and Sewer Systems, roadway/bridge repair and expansion.

Who to Contact: Crawford County Planning Commission (814) 333-7341, or Crawford County Development Corporation (814) 337-8200.

- **Community Revitalization Assistance Program:** This program provides Grant funds to support local initiatives designed to promote the stability of communities and to assist communities in achieving and maintaining social and economic diversity, ensuring a productive tax base and good quality of life. This program has very broad guidelines and is best suited for large-scale projects that are not fundable through the other programs mentioned above. This program could also be used as a local match for programs that require such.

Who to Contact: PA Department of Community and Economic Development (717) 787-7120.