FUTURE GROWTH OUTLOOK
and
POLICY GUIDELINES

A Comprehensive Planning Outline
for
NORTH BEAVER TOWNSHIP
Lawrence County
Pennsylvania

SPRING - 1990
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INTRODUCTION

The Township of North Beaver has been a predominantly agricultural oriented community since the earliest days of settlement, and much of the initial residential activity was established in association with farming. In more recent years, particularly during the post World War Two era, limited urbanization has been experienced. However, even today, much of the community is characterized by low density single family housing. Several neighborhood areas have developed throughout the municipality, but the classic rural housing pattern of homes flanking major access roads still prevails. Agriculture and housing remain the predominant land uses and commercial activity is largely locally oriented. This development profile suggests that historically the Township has been largely self contained and immune from areawide impacts.

During the past two decades, the Lawrence County vicinity has experienced a shifting of land use patterns and despite the downturn in the economy, coupled with population losses in older urban areas, some rural areas have recorded significant development. North Beaver Township has been a recipient of this activity due to its orientation to local highway networks, but the scope of growth has remained modest. Within the next few years, the rate of local growth is expected to gain momentum as a direct result of the extension of Route 60 which will traverse the community from its northern to southern boundaries.

The impact of this highway facility has the potential to alter the environmental and social characteristics of North Beaver Township. Regardless of whether or not local citizens welcome changes in the basic fabric of their community, change will come! Local governmental officials have undertaken studies to suggest contemplated growth patterns and to develop strategies to assist in meeting future challenges. The following data outlines and suggests policy guidelines to assist in the implementation of municipal goals and objectives.
CHAPTER ONE

DEVELOPMENT INFLUENCES
BACKGROUND

Lawrence County was formed in 1849 from parts of Beaver and Mercer Counties. The basic development pattern is typical of other western Pennsylvania Counties such as Greene, Washington, Mercer and Crawford, which consist of centrally located urban centers surrounded by predominantly agricultural land and scattered community centers. The City of New Castle, the seat of county government, is the hub of Lawrence County and for many years has been a focal point for commerce, finance, employment, transportation and public services. New Castle remains the primary site of many of these societal components, but economic changes and other factors have fostered new growth and change in the outlying regions which were previously limited to agrarian pursuits. North Beaver Township is a typical rural community which is undergoing such changes.

North Beaver Township is situated due southwest of the City of New Castle. It is the largest municipality in the county with a land area of 44.2 square miles and ranks fourth in population among the other sixteen townships in the county.

Natural Features

Terrain conditions in Lawrence County, except for the southern tier of municipalities that adjoin Beaver County, are generally flat to rolling. Elevations in North Beaver Township range from a high of 1,260 feet to a low of 760 feet, but the majority of the community is relatively flat. Approximately 95% of the total land area (27,036 acres) has slope features of less than eight percent. Less than four percent of the land falls within the eight to sixteen percent category and only slightly over one percent of the land area is sloped in excess of sixteen percent. Significant concentrations of slope which exceed sixteen percent include: areas adjacent to Hickory Run and Edwards Run; a narrow ridge extending for over two miles that runs parallel to Route 18 and Cleland Mill Road; and an area in the northeast sector of the township adjacent to the Mahoning River. All of these slope areas are in the easterly portion of the Township. They are limited in land area and represent only minor
barriers to future development. Additional minor slope conditions are scattered throughout the community, but none are of significance to future growth planning.

For purposes of development planning, the following slope guidelines are normally used as a rule of thumb:

<table>
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<tr>
<th>Slope Percentage</th>
<th>Description</th>
<th>Development Implication</th>
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<tbody>
<tr>
<td>0 - 8%</td>
<td>Flat</td>
<td>Excellent for development</td>
</tr>
<tr>
<td>8 - 16%</td>
<td>Rolling</td>
<td>Excellent for development</td>
</tr>
<tr>
<td>16 - 25%</td>
<td>Steep</td>
<td>Development difficult and expensive</td>
</tr>
<tr>
<td>over 25%</td>
<td>Very Steep</td>
<td>Generally unsuited for development</td>
</tr>
</tbody>
</table>

It is apparent that slope is not a significant arrestor to development throughout most of the municipality. Historically, this profile of gentle rolling land has been an asset to the local agricultural economy and it will also be conducive to the development of a variety of more intensive land uses as urbanizing trends increase.

There are areas of the community that are subject to flooding; however, flood plains are confined primarily to the immediate vicinity of the Mahoning and Beaver Rivers along the eastern boundary and along Honey and Sugar Creeks in the southwest. Only minor land areas are affected by these conditions. There are no other natural conditions indigenous to the Township that will significantly compromise future development.

TRANSPORTATION

Classification

Local traffic circulation systems are a major developmental influence. The following highway classifications are outlined to delineate the function of the various access facilities in the community.

1. Limited and Controlled Access Highways - carry interregional or interstate traffic on a continuous facility that provides uninterrupted flow. Characterized by curvatures, grades, access and entrance ramps designed for high speed movement.

2. Arterials - regional highways that connect the community with limited access routes and neighboring regional areas.
3. Collectors - highways providing principal links for circulation within the community and to adjacent areas.

4. Local - streets providing access from collectors to specific sites within neighborhood areas.

Local Systems

The community's first limited access highway facility is currently under construction. PA Route 60 will traverse the entire eastern edge of the Township from north to south. Known as the Beaver Valley Expressway, this highway will provide a direct link with U. S. Route 422 and Interstate 80 to the north and the Pennsylvania Turnpike and the Greater Pittsburgh Airport to the south. Interchanges at PA Routes 108 and 168, within North Beaver Township, will offer local residents and businesses direct access to major highways that lead to points throughout the nation.

Major arterial routes include PA Routes 18 and 108. Route 18 has for many years been one of the predominant north-south traffic carriers serving the Western Pennsylvania communities. While its intercommunity function has been largely absorbed by the Expressway and Interstate Routes, it will remain an important carrier between adjacent urban areas and as an access to Route 60.

Route 108 serves as an artery for local traffic movements from the New Castle vicinity west into North Beaver. Portions of this route and lands adjacent thereto within the Township, will grow in importance on completion of the Route 60 Expressway. Route 108 will become, in effect, a major portal to the community. A variety of development pressures can be anticipated along Route 108, especially in the easterly portions of North Beaver.

The local collector system includes State Routes 168, 551, 317 and the westerly reaches of 108. Route 168 traverses the southeast corner of the Township. Although it now serves primarily as a local collector to link adjacent areas, it will grow in importance due to the projected interchange with the Expressway. Routes 551, 317 and the western end of 108 will continue to serve future collector functions.

The remainder of the Township circulation system serves local access needs. Continuing development should not appreciably modify the basic local road pattern. Future
additions to this system can be expected to result primarily from road construction by developers of land parcels for residential and business purposes. Most of these extensions will be integrated into the established local road configuration. All such additions to the local circulation system should be established consistent with Township standards and become public roads. Private street systems should be avoided.

Development Considerations

No significant change in district highway configurations has been experienced in recent years to materially influence development patterns in North Beaver Township; however, the completion of the Beaver Valley Expressway (Route 60) is expected to have a profound impact on the community. This facility will traverse the entire eastern sector of the Township and include two full interchanges. It will provide direct routing to the expanded Greater Pittsburgh International Airport and permit access to the Interstate System from sites along and near its corridor. These expanded facilities can be expected to influence the development potential of contiguous land areas, particularly those areas that are at, or in, proximity to interchanges.

A series of independent studies and projections have been prepared in recent years to assess the ramifications of the extension of Route 60 and the expansion of the Pittsburgh Airport on the immediate Tri-State Area. A variety of opinions are offered in these examinations but the majority of them conclude that there will be far reaching implications on development trends, particularly in municipalities that have land contiguous to the Expressway Corridor and in which interchanges are located.

One recent study, prepared to provide an overview of development trends for the twenty mile long Expressway Corridor in Lawrence County, does present a conservative view toward growth potential. It suggests that the largest sources of demand for development in conjunction with the new highway will likely be from within the County, and it specifically discounts airport expansion as a potential generator of nonresidential development within the study area. However, most of the economic projections suggest that new sources of business will be generated.

An airport impact study, prepared for a portion of the
corridor further to the south in Beaver County, projects significant light and heavy commercial demands for Expressway oriented development sites. This particular economic analysis envisions a variety of commercial development types being generated by the influence of the airport expansion program and the completion of Route 60. It emphasizes the importance of Route 60 from Allegheny County to Mercer County as a direct access link to multiple interstate routes including I-76, I-79, I-80 and even I-90 to the north and I-70 to the south. The study does not address the demand for sites in Lawrence County but its projections have a degree of efficacy with respect to the entire area traversed by Route 60.

All of these studies project some degree of commercial and residential growth. Even the more conservative report prepared for Lawrence County projects a potential for highway related commerce and residential growth in North Beaver Township because of the interchange locations at Routes 108 and 168. Independent studies prepared for areas in both Allegheny and Beaver Counties relating to the Greater Pittsburgh Airport and Route 60 project a market for new housing units throughout the region. These reports suggest that many housing consumers desire rural settings rather than urban areas and are willing to drive significant distances from home to workplace. Surveys reveal that it is not uncommon for persons working near the Greater Pittsburgh Airport to commute daily into Lawrence and Butler Counties and points even further away.

Projections which relate to types of economic growth are subject to a variety of factors and are thus speculative in nature, but there is little if any doubt that new highway interchanges will exert pressures on adjacent land areas. A realignment of classic land use patterns can be expected by practically every municipality in proximity to the corridor. It is incumbent upon the leadership of each of these political entities to recognize the potential for change and to establish strategies and policies for dealing with future contingencies. While the timing is uncertain, it appears obvious that North Beaver Township will be impacted by many of these areawide economic pressures.

COMMUNITY FACILITIES

A variety of facilities and services are required to support the physical and social needs of a municipality, and the extent of such needs will vary with the density
of development and the types and diversity of land uses that are present. Residential and business developers are cognizant of the need for appropriate levels of utility services, public protection, educational facilities and amenities, such as recreational outlets, as a basis for long term quality growth and maintenance of property values. In addition, environmental concerns and changing life styles are exerting pressures on the governmental sector to provide expanded services and programs. The demand and the need for government provided services has been limited until recent years in North Beaver Township due to the historic rural nature of the community, but increased development activities and growth projections will alter this situation.

Local officials are constantly facing demands for improved and expanded levels of public services by individuals and other public entities. The response to such petitions is subject to both policy and financial considerations, with the latter generally being the key factor. In most instances, officials are backed into a "Catch 22" situation since the financial feasibility for most facilities depends on sufficient densities of development to support costs, while at the same time, the generation of required densities is dependent upon establishment of the services involved. It is because of these challenges that local government officials should contemplate and begin to prepare for the pressures of possible growth.

The following brief outline addresses the basic services that are generally necessary to support municipal development. This material is not meant to cite specific needs or to suggest the ways and means of providing such services. Its purpose is to call attention to the types of municipal services that are most likely to be impacted on by continuing growth. These activities should be closely monitored and specific analysis should be made at appropriate intervals to provide for implementation programs to satisfy emerging needs.

**Utility Services**

Natural gas, communications and related utilities are usually provided by commercial entities that are privately owned and operated. Rates and service areas for the majority of these operations are subject to state or federal supervision and guidelines. With the exception of small isolated development sites, such services are ordinarily available on request to the provider.
Water and sewer facilities are primary determinants of municipal development patterns and land use characteristics. The provision of these services is vital to practically all development. Nearly all water supplies within North Beaver Township are obtained from on-site sources such as wells.

The probability of high density developments, including large scale multi-family housing or concentrated commercial activities, will be minimized in the absence of public water systems. Although local objectives are not focused toward high density activity, the growth trends contemplated for the immediate future could result in the need for alternate sources of water. Feasibility studies should be made to identify methods for meeting future demands.

Sanitary sewers are an immediate and continuing concern of the municipality. Except for a lagoon system and gravity lines, which serve a mobile home court, all sewage disposal in the Township is handled by on-lot systems. The mobile court systems are inadequate and are in violation of State Regulations while much of the soil throughout the community is unsuitable for on-lot disposal. A recent survey (Sewage Facilities Plan Update, Lennon, Smith, Souleret Engineering, Inc. - 1989) of residential areas in the Township found malfunctioning systems at 84% of 400 dwellings surveyed.

Increasingly stringent requirements of State and Federal agencies relating to sewage disposal are adding significantly to the cost of development and, in some cases, have mandated design changes or stopped projects completely. These environmental controls and requirements are forcing local officials to formulate programs to correct existing unacceptable conditions in addition to preparing for new growth. The 1989 Study recommended that sewerage systems be developed for three areas of the Township. These include Hickory View/Laurel Court, Mount Jackson/Jackson Knolls and Sunnyside. All of these districts are also targeted for significant growth during the next decade. Local officials should pursue the engineering recommendations as a means of correcting existing deficiencies and meeting future needs. In addition, the Sewage Facility Plan should be monitored and updated as appropriate for consistency with the development outlook for the Township.
Public Protection

There are currently three part-time police officers providing local security services. Operations are conducted from the municipal building. This arrangement should continue to meet local needs for the immediate future. At some point, the expansion of population and added business activity will require that arrangements be made to provide for either a higher degree of local police activity or an arrangement with adjoining municipalities for a regional level system. Periodic evaluation of the current system should be an ongoing function of the Board of Supervisors.

Fire protection is provided by a volunteer fire organization with approximately fifty personnel. Facilities are located along Route 108 at Mount Jackson in the central portion of the Township and along Route 18 on the eastern perimeter. These sites are ideally situated to serve existing and contemplated growth concentrations. A high level of service has been provided in the past by this organization and it has been continually upgraded. This current system will require official and citizen support as development continues to assist the volunteers in meeting manpower and equipment needs.

Municipal Facilities

The Township Municipal Building is situated along Route 108 east of Mount Jackson. The location is convenient to present and anticipated concentrations of development. It contains municipal offices, meeting facilities and houses municipal equipment. An ample parking area is provided on the site and sufficient space is available for building expansions if required at some future time.

The Township also maintains a recreation area at the site of the municipal building and a Township Recreation Board is provided for to coordinate various activities. This organization will be called upon with increasing frequency as development continues. These components form a nucleus for a growing municipal recreation program. North Beaver Township is a part of the Mohawk School District and the District's High School and associated public use areas are situated in the north central sector of the Township. As development continues, local officials should consider formulating a municipal recreation plan designed to provide for the long range needs generated by growth. Proposals for
municipal recreation facilities and programs should be coordinated with those of the area educational system that are available for the general public.

HOUSING

During the earliest years of development, North Beaver Township was almost exclusively an agricultural area. Most of the housing stock consisted of residential units in conjunction with farming pursuits. This resulted in housing units being widely scattered except for a few neighborhood areas which were established in lineal patterns along highways. As urbanization took place in the county, additional clusters of growth began to form along roadways and in subdivision configurations.

Nearly all of the original dwellings and the majority of recently built housing have been single family detached units. Exceptions to this pattern are limited primarily to the vicinity north of Mount Jackson where a series of town houses and trailer courts are located. The desire for a rural living environment, coupled with land requirements associated with on-lot sewage disposal systems, has resulted in this predominance of single family housing. Marketing experience in other urbanizing areas suggests that there will be a growing potential for town houses and garden apartment units as urbanization continues. Although major changes in the local housing profile are not anticipated, multi-family housing should be contemplated as part of the land use planning process.

The 1980 U. S. Census reported a total of 1,523 year round housing units. The age of units was categorized as shown on Table 1.

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<tr>
<th>Year Built</th>
<th>Units</th>
<th>Percent</th>
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<tr>
<td>1939 or earlier</td>
<td>473</td>
<td>31.1%</td>
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<tr>
<td>1940 to 1969</td>
<td>592</td>
<td>38.8%</td>
</tr>
<tr>
<td>1970 to March 1980</td>
<td>458</td>
<td>30.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,523</td>
<td>100%</td>
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These figures represent existing units as of March 1980. They reflect post World War II growth, and it is significant to note that nearly one-third of the local housing inventory as of 1980 was only ten years old. Current (1990) U. S. Census data is not yet available, but visual observation indicates that a significant
number of additional units have been built during the past ten years, thus increasing the percentage of total homes which are relatively new.

The 1980 Census recorded that over 86% of occupied housing units were owner occupied and that the 1980 median value of housing units in North Beaver Township was $45,000. This value level was exceeded by only three other municipalities in Lawrence County (New Wilmington Borough and Township and Neshannock Township.) This data is indicative of a predominantly single family urban community and these percentages are probably near the same levels in 1990.

Although the Census data cited is now ten years old, it still reflects the characteristics of the local housing supply. Visual observation of housing throughout the Township during 1990 confirms that the majority of the units are of post 1960 construction, well maintained and occupied. No significant instances of dilapidation or areas that should be considered for public rehabilitation are in evidence within the municipality. Township officials should initiate a program to develop Housing and Building Codes as a means of conserving existing housing and assuring sound construction practices during periods of new growth.

The regional development outlook and anticipated growth patterns in North Beaver Township indicate that there will be an increasing market for multi-family housing units. Although the housing stock in the community will remain predominantly single-family, some diversification is expected in response to this emerging market. New residents, retired persons and those who are establishing homes for the first time will be the major consumers in this market. Until sewerage restraints on construction are solved, the overall density of multi-family developments should not appreciably exceed those in single family areas. In areas where centralized disposal facilities are feasible, densities may be increased. Land use controls, such as subdivision and zoning codes, should be employed to provide for multi-family districts in areas that are compatible with higher densities. In determining these locations, attention should be focused on adjacent land uses, utility availability, proximity to community facilities and highway access.

EXISTING LAND USE PATTERNS

Initial development activity in North Beaver Township
focused primarily on agricultural pursuits. Farms were served by local access routes used primarily for periodic travel to market centers such as New Castle where farm products were sold and where goods and services could be purchased. The advent of the automobile resulted in the establishment of intercommunity routes which in turn opened sectors of the community to a wider variety of land uses. Most of this nonagricultural use was sited adjacent to the primary traffic carriers, State Routes 18, 108 and 317. Subsequent growth has adhered to these same basic configurations. Existing concentrations of use will be influential in the siting of continuing growth throughout the community. In some instances, current uses will form a nucleus for an expansion of similar pursuits, while other existing activities may be displaced by completely different land use functions. Therefore, it is important that existing land use patterns be reviewed with respect to background, location, viability and related factors as a basis for land use projections.

Agriculture

Agriculture remains a predominant feature of the local land use pattern as it has been since the first days of settlement. North Beaver Township contains large amounts of prime farmland suitable for dairying, animal production, truck gardens, orchards, improved pasture, and production of grains. There is a relatively high distribution of farming activity since the local landscape has only a limited incidence of steep slope, and existing nonagriculture development is generally concentrated in clusters away from the larger farms. However, there are extensive land areas affected by strip mining and industrial activities, and many former farms are idle and used only as rural residences.

National and local trends show that urbanization is continuing to displace agricultural use. At the present time, there is a concerted effort within the farming community throughout Pennsylvania to preserve farmland through the establishment of Agricultural Security Areas. This and related programs should be supported to halt the continuing decline in farm acreage. In addition, new growth should be directed away from the most valuable and productive agricultural land. Farming represents a viable component of the local and area economic picture and should be maintained as such.
Residential

Residential uses are scattered throughout the Township with the most significant concentrations located contiguous to PA Routes 108 and 317. There are also several neighborhood clusters of housing in the vicinity of Bessemer. There are small neighborhood settlements in other areas of the municipality, but the majority of remaining housing units are independently sited on large lots or acreage.

The largest percentage of the local housing inventory consists of single family dwellings. Housing associated with current or past agriculture use accounts for most of the older units built prior to 1939. These houses are found throughout the Township. Much of the housing built during the initial post World War II period is found in lineal patterns contiguous to established highways. The majority of all of this housing has been maintained and is in good repair in spite of age. Newer housing is in evidence throughout the community, but most of it is found in subdivisions located in proximity to Route 108 and 317 in the northwestern sector.

Housing types range from detached single family dwellings to multi-family units and mobile homes. Single family homes predominate in both older and newer development areas. The biggest percentage of multi-family units are town houses. Most of these are located in a subdivision north of Mount Jackson where they are mingled with single detached dwellings. As a result, there are no definable multi-family districts of consequence within the community. Mobile homes are located in both mobile home courts and on single lots. The largest concentrations of mobile homes are north of Mount Jackson near the intersection of Routes 317 and 551.

The existing patterns of housing in the community materialized in response to highway access and proximity to adjacent development in Mount Jackson and the Borough of Bessemer where facilities and services of various types were centered. These same factors still influence continuing activity and will, together with emerging development determinants such as the Expressway construction, have an impact as community expansion takes place.

Commerce and Industry

Most of the commercial establishments in the Township are
of a retail or service character and are oriented to local consumers. Except for a series of convenience commercial outlets in Mount Jackson, and a mixture of businesses east of Bessemer, which includes a pharmacy, bowling alley, auto service, and food service, there are no centers of commerce. Business activities along Route 108 range from health services to automotive repair services, but these are found at random, usually contiguous to homes.

Commerce on Route 18 is very limited, although there is a motel in the south end of the Township near the intersection with Route 168. Scattered throughout the municipality, in otherwise rural settings, are businesses such as a tire service, auto repair garages, a food freezer service and a variety of home occupations.

Heavy commercial and industrial functions are also distributed at random. These range from an automotive sales outlet, a junk yard and a machine shop along the eastern perimeter of the community, to gravel, coal and related trucking operations in the vicinity of Bessemer. Strip mining operations are also being carried on in the interior of the Township. The scope of major business activities of this nature have not been extensive enough to create the demand for heavy commercial or industrial districts. Most of these functions have been limited to sites that have access to regional highways.

The low incidence of business throughout North Beaver Township has helped to avoid many of the difficulties normally associated with the mixing of incompatible land uses. The original zoning ordinance has also helped to contain commerce to appropriate areas. Future land use proposals should consider the viability of current business operations and the potential for future commercial land requirements.

Public and Related Use

The incidence of public and semipublic uses is limited in North Beaver Township because of the overall low density of development throughout much of the municipality. Existing public use areas include the municipal building, fire protection facilities and a school complex. Semipublic uses include several churches and a Grange Hall.

The municipal building is located along State Route 108 approximately one-half mile east of Mount Jackson. Facilities at this site include township offices, meeting
rooms, garage area and a recreation complex consisting of ball fields, play areas and picnic areas. Current office space accommodates administrative, police and maintenance functions. The structure is designed in a manner that is readily adaptable to future expansion and the site is ample enough to permit both structural additions and expanded parking without compromising the recreation area. This site is ideally situated to serve existing and anticipated concentrations of residential and commercial activity in the community.

North Beaver Township is served by a volunteer fire department from two separate facilities. One station is along Route 108 on the eastern edge of Mount Jackson. This location is centrally situated for fast access to concentrations of development to the east via Route 108 and to the northwest from Route 317. The second fire station is along State Route 18 in the southeast corner of the Township at Moravia. Facilities at Moravia are situated near a core of existing housing and are ideally sited to serve pending growth areas. Both of these emergency centers are strategically positioned at major highway routes to facilitate quick service response throughout the area.

The remaining public use of significant community importance is the Mohawk School District facility located one and one-half miles north of Mount Jackson. This site, which includes the District's secondary education complex, is oriented to serve the entire jurisdictional area of the Mohawk District, which includes municipalities in addition to North Beaver Township. This site and land use are compatible with development in the surrounding area and should be protected from adverse development activities through appropriate zoning controls.

Churches represent the predominant local semipublic land use. These activities were originally sited in response to membership preferences as the township grew and are found in residential neighborhoods throughout the community. In all instances, these activities are compatible with the particular locale involved. Future development patterns should not adversely influence any of these sites.

The Borough of SNPJ (Slovenska Narodna Podporna Jednota) is situated within the geographical boundary of North Beaver Township. This 500 acre area, with an official 1980 population of 16, seceded from the Township in 1977 and became an independent municipality. The Borough is primarily a recreation facility operated for the approximately 45,000 members of the Slovene National
Benefit Society, an insurance and benefit organization. The Borough, claimed to be Pennsylvania's smallest municipality, sought and achieved independent jurisdiction because North Beaver Township prohibited alcoholic beverage sales. This represents a unique corporate situation since the Township has no civil jurisdiction in SNPJ, but it provides road services and fire protection. These services are financed through taxes paid to the Township. The Borough has no local tax levy and is self-sufficient except for road maintenance and fire protection. It owns and operates a sewerage and water system. Although a separate municipality, SNPJ and the facilities and activities generated therein must be considered as a part of Township service and support program planning.

Municipal growth in rural communities generally evolves in the absence of formal development control with little concern for land use compatibility or long range goals. This haphazard approach toward development often results in land use conflicts, a lack of essential services, eroding property values and related problems. Fortunately, North Beaver Township has been spared many of these difficulties because of the historic lack of demand for high density growth in outlying areas of much of Lawrence County. Local growth has taken place in an orderly fashion and most of the current development is ideally sited with respect to the overall municipal structure.

The land use patterns that have evolved provide a sound basis for continuing development except for limited sectors of the community where emerging growth impacts are being introduced which will influence the complexion of future activities. These contemplated changes can be limited to defined areas to protect the viability of established neighborhoods as overall growth continues. The basic land use characteristics now found in North Beaver Township should prevail into the foreseeable future.
CHAPTER TWO
DEVELOPMENT OUTLOOK
CHAPTER TWO

DEVELOPMENT OUTLOOK

POPULATION

Population fluctuations have a direct bearing on the level of services required to support development within a municipality. Unfortunately, the projection of population is far from an exact science since the number of influences that can affect the outlook for any given area are extensive. Complex computer programs that introduce a vast number of factors have been devised for predicting population, but even these are often unreliable because the input data are subject to a myriad of uncertainties and fluid situations. The future of even a small geographic area may be swayed by a variety of diverse elements ranging from an international crisis to a local tax policy. In spite of the problems inherent in the projection process, it is important to at least determine the direction of future population trends even though more specific population projections may be elusive.

The growth or decline of small political subdivisions will ordinarily follow regional patterns, although the introduction of a specific growth catalyst may result in localized variations to otherwise normal trends. An example of this latter circumstance is the accelerated growth in the Cranberry area of Butler County which has resulted from the confluence of major traffic arteries. Local officials should continually monitor population trends, public works projects and economic factors throughout the regional area as a means of identifying possible emerging demographic aberrations.

Although there are no studies dealing directly with the implications of the Route 60 highway extension through North Beaver Township, there is other information from a variety of sources that can serve as a basis for anticipating future population levels. The basic source of population statistical data used herein is the U. S. Census Bureau. In addition, material has been drawn from publications of The Lawrence County Economic Development Corporation, a study by Hammer, Siler, George Associates relating to the Route 60 Corridor, the Sewage Facilities Plan Update for North Beaver Township prepared by Lennon, Smith, Souleret Engineering, Inc., and data provided by the Lawrence County Planning Office.

A review of previous county population trends throughout the vicinity provides a pattern from which to judge
future trends. Table 1 illustrates that all of the counties in the vicinity recorded population gains through 1960, a pattern that had been consistent since 1940. By the year 1970, Lawrence County had lost population and Mercer County had remained basically unchanged. Beaver County posted a gain during this same period, but the rate of growth had slowed, while conversely, Butler County recorded a significant gain. As shown on Table 2, these trends continued during the next census period. Lawrence and Mercer Counties were generally stable during this interval while losses accelerated in Beaver. Butler County recorded even larger gains than previously.

Table 2
COUNTY POPULATION TRENDS
(Source: U.S. Census)

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>1960 to 1970</th>
<th>1970 to 1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAWRENCE</td>
<td>- 4.9</td>
<td>- 0.2</td>
</tr>
<tr>
<td>Beaver</td>
<td>+ 0.7</td>
<td>- 1.9</td>
</tr>
<tr>
<td>Butler</td>
<td>+11.6</td>
<td>+15.6</td>
</tr>
<tr>
<td>Mercer</td>
<td>- 0.2</td>
<td>+ 0.8</td>
</tr>
</tbody>
</table>

Population losses in Beaver and Lawrence Counties are attributable in large measure to the erosion of the heavy industrial base which gained momentum during the late 1970's and the early 1980's. Employment losses not only halted overall growth, but resulted in an out-migration of population. Butler County industry has also suffered to some extent, but the primary difference in population profiles is the result of growth in the Cranberry area where population totals went from 4,873 in 1970 to 11,056 by 1980. This one township accounted for over 30% of the total growth in Butler County during that decade.

Preliminary and unofficial 1990 U.S. Census data indicates that the general population decline in Western Pennsylvania continued through the 1980's. All of the material discussed herein tends to discount the potential
for significant population change within the geographic area, but this should not cloud the possibility of pockets of growth in some communities in response to localized situations.

Table 3
URBAN-RURAL POPULATION COMPARISONS
(Source: U.S. Census)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawrence</td>
<td>51,378</td>
<td>-9.3</td>
<td>55,772</td>
<td>+9.9</td>
</tr>
<tr>
<td>Beaver</td>
<td>155,141</td>
<td>-2.8</td>
<td>49,300</td>
<td>+1.1</td>
</tr>
<tr>
<td>Butler</td>
<td>41,584</td>
<td>+7.6</td>
<td>106,328</td>
<td>+19.1</td>
</tr>
<tr>
<td>Mercer</td>
<td>64,149</td>
<td>+1.2</td>
<td>64,150</td>
<td>+0.5</td>
</tr>
</tbody>
</table>

An important factor that should be considered in estimating the growth potential of North Beaver Township involves the shift of people from urban to rural areas (Table 3). Throughout this regional area there has been a consistent shift to rural communities. This pattern has been recorded in both Lawrence and Beaver Counties where significant overall population losses have occurred, as well as in Butler County where meaningful increases have taken place. In the absence of more definitive information, these figures suggest that current county residents, as well as incoming residents, have targeted rural municipalities for establishing homes and businesses.

An analysis of municipal population trends within Lawrence County reveals significant growth in several areas in spite of overall county population decline since 1960. Sixteen municipalities gained population between 1970-1980. Nine of those, which grew in excess of twenty percent between 1970 and 1980, have been listed in Table 4. Neshanock Township, which grew to a lesser degree, has

Table 4
POPULATION GROWTH-SELECTED MUNICIPALITIES

<table>
<thead>
<tr>
<th>MUNICIPALITY</th>
<th>TOTAL POPULATION</th>
<th>PERCENT CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH BEAVER TWP.</td>
<td>3,248 3,475 4,367</td>
<td>+ 6.9 +25.7</td>
</tr>
<tr>
<td>Little Beaver Twp.</td>
<td>808 784 1,060</td>
<td>- 2.9 +35.2</td>
</tr>
<tr>
<td>New Beaver Boro</td>
<td>- 1,426 1,885</td>
<td>- +32.2</td>
</tr>
<tr>
<td>Taylor Twp.</td>
<td>1,402 1,152 1,519</td>
<td>-17.8 +31.86</td>
</tr>
<tr>
<td>Pulaski Twp.</td>
<td>3,066 3,187 4,189</td>
<td>+ 3.9 +31.44</td>
</tr>
<tr>
<td>Slippery Rock Twp.</td>
<td>2,198 2,541 3,234</td>
<td>+15.6 +27.3</td>
</tr>
<tr>
<td>Scott Twp.</td>
<td>1,311 1,410 1,821</td>
<td>+ 7.6 +29.2</td>
</tr>
<tr>
<td>Washington Twp.</td>
<td>576 547 750</td>
<td>- 5.3 +37.11</td>
</tr>
<tr>
<td>Wilmington Twp.</td>
<td>1,771 2,060 2,561</td>
<td>+16.3 +24.3</td>
</tr>
<tr>
<td>Neshanock Twp.</td>
<td>7,421 7,982 8,662</td>
<td>+ 7.6 + 8.5</td>
</tr>
</tbody>
</table>
also been included since it has the highest population of any township in the county and has been a major expansion area for new homes and businesses in recent years. All of these municipalities recorded significantly higher growth between 1970 and 1980 than during the preceding decade. Seven of the ten communities are oriented to the western half of the county and are within or in proximity to the path of the Beaver Valley Expressway Corridor. Even though the highway is not completed to the south of New Castle, there is an apparent relationship between this corridor and the distribution of population experienced within Lawrence County during the past ten years.

Population figures for North Beaver Township (Table 5) reveal uninterrupted growth from 1950 to 1980. The largest growth was from 1970 to 1980, even though during that same period Lawrence County posted a population decline. These figures are probably attributable to shifts of population within Lawrence County, the pending completion of the Expressway, and other related factors. It is important to note that recently published 1990 U.S. Census data indicates that between 1980 and 1990 North Beaver Township recorded a population loss of 8.9%. During this same period, the Census has also reported a loss of over 10% in Lawrence County and losses in all but two of the political jurisdictions listed in Table 4. Exceptions were Little Beaver and Scott Townships where gains were experienced. The accuracy of the 1990 Census has been widely criticized nationwide and throughout Southwestern Pennsylvania as being too low, but even if these changes are true, the consistent pattern of population loss reported throughout Lawrence County indicates that growth trends recorded between 1970 and 1980 stalled during the last decade.

Table 5
POPULATION-NORTH BEAVER TOWNSHIP

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL POPULATION</th>
<th>PERCENT CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>2,653</td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>3,248</td>
<td>+22.4</td>
</tr>
<tr>
<td>1970</td>
<td>3,475</td>
<td>+6.9</td>
</tr>
<tr>
<td>1980</td>
<td>4,367</td>
<td>+25.7</td>
</tr>
<tr>
<td>1990</td>
<td>3,982</td>
<td>-8.9</td>
</tr>
<tr>
<td>1990</td>
<td>4,552</td>
<td>+4.2</td>
</tr>
<tr>
<td>2000</td>
<td>4,651</td>
<td>+2.2</td>
</tr>
<tr>
<td>2010</td>
<td>4,742</td>
<td>+1.9</td>
</tr>
</tbody>
</table>

U.S. Census
Actual Counts
1950-1990
PA Dept. of Environmental Resources-Projections 1990-2010
The most recent projections developed for North Beaver Township were prepared by the PA DER. These projections, cited in Table 5, were included in the 1989 Sewage Facilities Plan Update and were based on residential saturation within study areas being considered for public sewage disposal facilities. The study included land contiguous to Route 108, but it did not specifically consider the impact of the Expressway Corridor on the Route 108 vicinity or on other portions of the Township. The DER study projected population increases through the year 2010 even without the impact potential of the Expressway. This projection, together with a series of other factors, suggests that North Beaver Township may not have lost population from 1980 to 1990 and that it will continue to record population gains in the coming decade. Foremost among factors that suggest growth are the impact of the Expressway, the shift of population from urban to rural areas pending proposals for public utility systems, and anticipation that the regional economy will stabilize and begin a gradual improvement.

Projections, at best, are only tentative, but a review of past population trends and emerging economic changes suggest that growth will continue in North Beaver Township. A population increase during the current decade in the range of ten percent or more is foreseeable. Factors that influence population levels can be dynamic and unpredictable, and any degree of certainty in projecting specific numbers is limited; however, it is useful to have growth estimates available to use in developing policies that respond to the need for services and facilities.

PLANNING RELATIONSHIPS

The process of developing guidelines for municipal growth must include an awareness of the interrelationships between a variety of planning study components. This is important since there are usually mitigating factors present which allow for a variety of possible growth scenarios. Environmental conditions, the economy, land use trends, public works and a host of other factors can exert influences that dictate patterns of community development. Local officials do not need to automatically defer to all of these factors during the planning process, but they should not ignore obvious pressures over which there is little if any local control. Realistic growth guidelines must evolve from a process that tempers desired development with pragmatism. The objective evaluation of planning relationships is therefore an integral part of the local planning process.
Basic Planning Considerations

All of the planning components evaluated as part of this study are interrelated and will influence future growth in North Beaver Township. For example, environmental features such as topography and soil types have been instrumental in the establishment of growth patterns and will be major factors in determining future development in the Township and throughout the region. The preservation of the environment is a basic objective of the local planning program and sensitivity to these two natural features as growth takes place can be directly related to the environmental quality of this community. In order to achieve this particular planning objective, a variety of related factors such as land use configurations, utility feasibility, road locations and housing types must be evaluated in relation to the influence of soil types and topographic features.

Relationships of this type apply to all planning components. Although the influence of some aspects of the planning process will be obvious, others will be subtle. No single element of the program stands as an individual entity and all proposals should be formulated only after consideration is given to the probable extent of impacts from intervening factors.

External Impacts

Within every community will be found divergent views on the desired types and scope of future development. The conservative view, typical in predominantly rural areas, is usually directed toward limiting new development and maintaining the status quo. Conversely, other opinions may lean toward a variety of new land use forms and accelerated growth. The chosen course will vary depending on the circumstances of each situation, not the least of which will be external conditions which transcend local municipal control and manipulation.

A series of external factors capable of influencing growth in North Beaver Township are discussed in Chapter One of this study. Foremost among these are impacts that are anticipated to accrue from the completion of the Beaver Valley Expressway and the siting of two interchanges within the community. Other significant factors of an external nature include repercussions from population shifts throughout the region, aberrations in housing preferences, the regional economic climate and the possibility of intermunicipal utility systems.
Local officials must recognize and provide for the implications that will be exerted on the community by a variety of both internal and external planning factors. The analysis of the various relationships considered as part of this study suggests that a moderate level of growth should be anticipated in North Beaver Township. This outlook forms the basis for the following Land Use Plan recommendations.

**LAND USE PLAN**

A proposal for the allocation of future land uses is the keystone of a comprehensive planning program. The purpose of the land use plan is to delineate the most appropriate locations for a variety of development activities as determined by background studies, local input and the outlook for growth. The characteristics and the scope of land uses anticipated and proposed for North Beaver Township are consistent with local philosophies that indicate a preference for modest growth and the maintenance of the prevailing rural atmosphere. Land use proposals have been tailored for consistency with established patterns of activity while giving credence to anticipated external impacts.

**Agriculture**

Agriculture has been a predominant land use in North Beaver Township since modern settlement first began. Farming has been nurtured throughout the community by large tracts of level to rolling terrain which prevails over 98% of the total land area and by a preponderance of Canfield and Venango soil types which provide moderate natural fertility suited to general farm crops and pasture. Although there are increasing numbers of part time farm operations, and many former farms are idle, large portions of the municipality are still actively used or available for agrarian pursuits.

Urban growth patterns have been continually displacing farmland in Pennsylvania for several decades. While this trend has eroded the amount of farm acreage throughout Lawrence County, the results have been mitigated to a degree in North Beaver Township due to the lack of an extensive system of roadways. The limited road system has channeled urban growth into lineal configurations which has spared much of the prime agricultural land from active development. The influence of highways will
continue to play a major role in the structuring of expanding commerce and housing throughout the Township. Because of this, the majority of contemplated urbanization should be focused toward the eastern perimeter, the northeastern quadrant, and the northerly portions of the community. This will assist in keeping the heartland of North Beaver Township, where major tracts of farmland remain, relatively free of growth pressures. Official development policy should be directed toward the preservation of these areas for agricultural use by the application of zoning controls, agricultural preservation areas and related programs. These policies should encourage clusters of active development in the eastern portions of the Township to preserve farmland and environmental resources.

Residential

Existing dwellings are spaced randomly throughout the community, but the largest residential concentrations are in proximity to Route 108 in the northeastern corner and Route 317 in the vicinity of Mount Jackson. These more concentrated housing areas have materialized in response to subdivision developments such as Jackson Knolls, Hickory View Terrace, Mohawk Heights and other nearby neighborhoods. Small clusters of housing are also found near the Borough of Bessemer and along Route 18 in the southeast corner of the Township. These general locations are expected to be the nucleus of additional residential growth.

Developable vacant land is available throughout the municipality, but the extent to which residential expansion takes place will depend primarily on the regional housing market, highway access and the availability of utility systems, particularly sanitary sewers. The first of these factors, the housing market, involves both the regional demand for new housing units and the types of units that are readily marketable. During the past thirty years, counties throughout this regional area have experienced a shift of residential growth from urban to rural locales.

Development in Lawrence County has been consistent with this pattern. This is documented by the fact that growth occurred in sixteen local townships between 1970 and 1980 in spite of an overall decline in total County population. Projections and trends suggest that the regional economy should stabilize and improve during the current decade. Thus, it is logical to assume that an expanding residential market will be focused to some
extent on North Beaver Township where there is developable land, proximity to the major urban core of the County and direct access to a major regional highway.

The other market factor that will have an influence on land use trends involves housing types. The majority of existing dwelling units are single family detached structures except for several townhouses in Hickory View Terrace. Single family housing has always been predominant in the less developed areas of the region; however, changing life styles influenced by a more nomadic population, ease of mobility, the expansion of leisure time, smaller family size, a growing number of retirees and associated factors are altering housing preferences. This has resulted in a growing market for apartments, townhouses and a variety of other multi-family dwelling types. Municipalities can accommodate these housing market needs by enacting regulatory provisions that permit a mix of housing types and design schemes such as planned residential developments. These procedures allow for a variety of housing types while maintaining desired density levels to preserve the rural character of the community.

Highway access, as previously noted, has to a large degree dictated local housing locations. Since no major additions are anticipated in the local road system, it follows that future housing patterns will naturally gravitate to these same general areas where the best road access is available to serve neighborhood needs. Although the configuration of the local road system will not change appreciably, a new limited access highway corridor does traverse the Township. While the influence of the new Beaver Valley Expressway will be disruptive to a limited number of existing neighborhoods, it is expected to accelerate growth and improve the overall market for residential units in some sections of North Beaver Township.

The introduction of this type of regional highway into rural communities usually attracts new growth, particularly when interchanges tie into the local road system as is the case in North Beaver Township. Recent experience along completed portions of this road to the south of Lawrence County illustrates the nature of land use impacts that are attributable to this Expressway. Without exception, the townships with prime access to the highway corridor have experienced residential and commercial expansion. The residential growth includes a mix of multi-family housing in communities where single family homes have always been predominant. Similar trends should be anticipated in North Beaver Township as a result of regional highway access and close proximity to the urban core of the county.
Market factors and highway access support the outlook for residential growth, but the extent and timing of expansion will be directly dependent on the availability of utility systems. Sewers will be the most critical factor since central systems rather than on-lot provisions will be required to support new development. The 1989 Sewage Facilities Plan Update by Lennon, Smith, Souleret, Inc. has recommended systems to serve existing residential concentrations which, as previously noted, are expected to be the focal points for expansion. Any significant influx of residential activity could enhance the financial feasibility for establishing these sewerage systems since developers of new housing will be required to assist in funding sewerage projects. Once a system is established, it will act as a magnet and draw additional activity to that particular district of the community. Officials should be alert to the increased potential for growth in such areas.

The prime areas for residential growth are north and south of the Route 108 corridor between the Expressway Interchange and the Mount Jackson vicinity. This outlook is based on excellent highway access, the potential for utility systems, and available land that is conducive to a variety of housing types. The primary access for these new neighborhoods will be via Route 108, but there will be a greater depth of development beyond the highway similar to the Jackson Knolls and Sunnyside areas. This will replace the current lineal housing pattern.

Establishment of sewerage facilities in the vicinity of Route 108 will provide the potential for multi-family units along with more typical single family housing. Multi-family housing areas should be restricted to sites that have direct access to Route 108 or to established local roads such as Cleland Mill or Brewster Roads. Structuring development in this manner will channel heavier volumes of traffic generated by the more concentrated housing directly to collector routes rather than through existing and future single family neighborhoods.

The Sunnyside and Moravia sectors of the Township can also be expected to attract clusters of residential expansion. The Sunnyside area offers choice home sites directly south of Route 108 and immediately east of the Expressway Corridor. This high ground offers excellent scenic views to the east and, although the area borders the Expressway, it is naturally buffered by a topographic barrier. In addition, direct proximity to the Expressway Interchange and a secondary access to Route 18 provide amenities conducive to the multi-family housing market.
The Moravia area has a significant amount of established housing which extends in a lineal fashion along Route 18 from the Route 168 vicinity south into New Beaver Borough. Proximity to the Expressway Interchange at Route 168 should generate additional residential growth in conjunction with existing neighborhoods and eventually extend westward along the Moravia-Petersburg Road as well. Since the limited density of housing in this area will probably not support the cost of public sewers in the foreseeable future, most of this development will be limited to single family detached dwellings. Subdivision activity will also continue in conjunction with other established neighborhoods such as in the northern part of the Township and around the vicinity of Bessemer. No large scale development is anticipated in any of these areas because of the absence of public utility systems. Housing patterns throughout the more remote areas of the Township will continue to be dominated by single family dwellings situated on large lots. Most of these homes will border on existing local roads.

Commerce

Nonagricultural related commerce has not developed to any significant degree in North Beaver Township. There are small groupings of retail and service business activities at Mount Jackson and immediately east of Bessemer Borough, but these are limited in scope and consist of a mix of both light and heavy commerce. Other commercial uses are scattered independently throughout the community. These activities range from professional services to heavy industry with a preponderance of automotive services. Most of these enterprises are isolated from other business sites and are conducted as home occupations in conjunction with residential use.

Local conditions have not been particularly supportive of commercial activities because of the rural nature of the Township and the resulting lack of concentrated development. However, the outlook for new growth suggests two factors that will encourage an increase in local business activity. These include an expansion of residential densities and the impacts on the community that will result from the Beaver Valley Expressway Interchanges sited within North Beaver Township. Local philosophies are oriented toward maintaining the rural atmosphere of the community, but growth pressures such as these are largely external planning determinants which cannot be ignored. Local officials have no control over regional housing trends nor can they nullify the commercial potential generated by the construction of
regional transportation facilities, but judicious land use planning and implementation through zoning can provide for the accommodation of anticipated growth within the framework of local goals and objectives.

The land use recommendations contained in this study address these issues. Recommendations for expanding housing have been formulated to maintain the quality of existing neighborhoods while providing for increased densities to respond to market demands. Proposals for commercial uses are related to the opportunities which new business has to offer the Township. Attention is focused on the business potential of specific areas that are most likely to be impacted by business related pressures. Consideration has been given to the capability of prime sites to support commercial activities, and attention has been directed toward "acceptable growth", meaning the scope and nature of commerce that is compatible with the overall development philosophy of the community.

Three levels of commerce are suggested to accommodate long term community and regional business needs and pressures. The first of these is general commerce which involves retail and service business activities directed primarily to patrons within the community and contiguous areas. Groceries, convenience goods and personal services are typically found in these types of businesses. Local commerce should be located for direct access to primary market areas via collector or arterial roads. The core of a general commercial area has been established for many years at Mount Jackson in the central part of the Township. This location is ideally oriented for existing and projected residential concentrations along the most frequently traveled internal highways. While the variety of local commercial outlets is currently limited, the advantages of this locale for future business expansion is excellent. As residential growth is experienced, it is anticipated that local business expansion will follow. A cohesive general commercial core should be encouraged by zoning for expansion of this district parallel to the north side of Route 108 from Route 317 east to Brewster Road. This vicinity should be adequate for the general commercial needs of the community into the foreseeable future.

Another category of commerce expected to figure prominently in the future development of North Beaver Township is highway related business. This involves economic activities that are dependent on major highway access either as part of their operations or to generate patrons from a broad geographic service area. A wide
range of land uses can be involved under this general category, but for purposes of local application it is suggested that it be limited to consumer level retail and service activities rather than major business operations.

A modest amount of this type of business is currently present throughout the community. It consists of a motel, a frozen food business, several personal and professional establishments, and automotive services, all of which are dispersed at random over the landscape. The demand for local sites to accommodate highway business has been limited until now because of the absence of a major regional highway, but this condition will change dramatically with completion of the Expressway and the siting of interchanges at State Routes 108 and 168. The Expressway and related economic impacts will create a demand for sites adjacent to the interchanges. Many communities have been late in realizing that economic pressures will in time transcend local efforts to bar commercial development from agricultural and housing areas. Failure to respond to such possibilities can result in haphazard development which spawns incompatible land uses, traffic congestion, and related inefficiencies that are detrimental to the health, safety and general well being of the municipality. Future land use recommendations must accommodate the potential for new forms of economic growth while at the same time protecting the long term stability of the area.

The vicinity around the Expressway Interchange at Route 108 is expected to become a focal point for highway commerce during the next five to ten years. Visual access from Route 60 and proximity to the urban core of Lawrence County will generate the potential for retail and service activities catering to both areawide and locally oriented consumers. This area is ideally suited for automotive sales and service, motels, restaurants and related business. Regional economic conditions and the timing of adequate utility systems will dictate the scheduling of this development. Highway commerce should be planned for sites adjacent to the interchange. It should be contained by Cleland Mill Road to the west and not permitted to proliferate throughout the community along Route 108. This will preserve sites for housing as previously discussed and maintain the rural-residential quality of the majority of the Township.

Highway commercial potential will also be generated in the southeast corner of the Township near the Expressway access via Route 168. The amount of business activity in this vicinity is expected to be more modest than at Route 108 because of the more remote location, reduced
feasibility for the establishment of public facilities, and less suitable terrain features. The outlook for use here favors auto related activities to serve both highway related and regional markets.

A third area adaptable to highway commerce is along the western perimeter of State Route 18 from the Moravia vicinity to north of Gilmore Road. Regional outlets of a heavy commercial nature such as building supplies, automotive sales, garden centers and marine and RV sales are suited to this corridor which offers large level sites and excellent access from a large regional market area. The potential for this development will rely on the status of economic conditions throughout the regional area.

The vicinity immediately east of the Borough of Bessemer now accommodates a variety of highway related businesses similar to those proposed in conjunction with the Expressway oriented sites. This is not considered a primary growth area, but it should be zoned to accommodate existing land uses and provide for normal business expansion. Reservation of this area for business purposes should foster a more intensive use of the neighborhood as development continues throughout the Township.

Industry

There are several industrial and related uses operating throughout the municipality, but there are no concentrated cores of such activity. Current activities include contracting and trucking, small industrial shops, junk yards and open pit mining of coal and gravel. The majority of these operations are limited to areas along the northern and eastern perimeters of the Township. All of these sites encompass sufficient acreage to accommodate industrial operations and are now or have previously been served by railroad facilities. Although significant future industrial activity is not anticipated, it is recommended that the most extensive existing industrial use areas be designated for possible future industrial expansion.

Summary - Land Use Relationships

The land use proposals for North Beaver Township have been designed to assist in coordinating local growth
philosophies with pending development impacts. A primary goal of this program has been to maintain the rural character of the community while responding to the need for accommodating new growth. The Land Use Plan envisions new forms of housing and commerce in the community but provides for the assimilation of this activity within a framework similar to existing patterns of activity.

North Beaver Township is expected to continue to serve as a "dormitory" area which provides housing for area residents who work in nearby localities. The outlook for future housing markets for the area points toward higher housing densities and a larger variety of housing types. The Plan provides for the siting of these future neighborhoods as extensions of current residential patterns. This strategy will result in concentrating utility service districts to achieve cost efficiencies beneficial to both present and future inhabitants. In addition, the areas projected for significant residential expansion are oriented to transportation facilities that are capable of channeling increased traffic flow directly to major destinations. Under these housing proposals, the existing undeveloped rural areas throughout the south and central portions of the Township will be shielded from growth impacts and retain their present characteristics.

The two most significant anticipated changes in the commercial profile of North Beaver Township will be an expansion of general commerce to serve local growth and the introduction of highway commerce in conjunction with the opportunities provided by the Beaver Valley Expressway. The first of these, the expansion of existing commercial resources, will be an extension of the existing land use pattern and will not materially change the land use profile of the Township. The second, highway commerce, is required to accommodate regional development pressures that will accrue because of new highway construction. These new land uses will be concentrated along the eastern perimeter and will not alter the basic rural complexion of the majority of the community, but they will provide opportunities to enhance the local economic base by expanding job opportunities and increasing assessed valuation of property.

Except for housing and commerce, there are no significant changes projected for local land use patterns. Proposals for these two categories of activity should provide for accommodating a large extent of the development that materializes due to regional pressures. Significant change is not anticipated with respect to other land use
categories. Agricultural activity can be expected to continue to decline as an industry, but this will not change the open character of the land throughout much of the Township. Likewise, no major change is foreseen with respect to industrial activity, and no additional industrial land areas have been proposed. Public uses, such as the municipal building and fire stations, are adequately located to serve the present and projected land use patterns and although additional site area may be necessary in the future, no additional public sites have been included in the Plan. The Land Use Plan recommendations have been formulated to provide for future growth in a manner that will retain the basic rural character of North Beaver Township.

TRANSPORTATION

The completion of the Beaver Valley Expressway will have a significant impact on the growth, economy and circulation system of the Township. Although it will not alter the basic configuration of present roads or their function as arterial, collector and local streets, travel volumes on existing roads will multiply dramatically. This increased use can be expected to create a host of safety hazards and maintenance problems not previously experienced. Although many of the roads in the Township are the responsibility of PennDot, it will be necessary for local officials to anticipate and monitor highway conditions on a continuing basis in order to identify problems and initiate corrective actions.

State Routes 108, 18 and 168 are currently arterial traffic carriers which serve intercommunity destinations throughout the vicinity. These roads will now have the added functions of feeding traffic to and from the new Expressway and providing access to new development sites. Route 108 will be particularly burdened because of its proximity to an Expressway interchange and its routing through the prime development areas of the community. Routes 18 and 168 will be impacted also but to a lesser degree and at a later interval of time.

Township Supervisors and Planners should monitor conditions along these routes through traffic counts, recording of traffic mishaps, visual inspection of physical deterioration and awareness of points of congestion. Continuing maintenance plus upgrading to accommodate higher traffic volumes by road widening, the construction of turning lanes and signalization will
require the cooperation of PennDot. Local jurisdiction of development densities, parking provisions and site design to provide for safe ingress and egress must be implemented through zoning and subdivision ordinances. The planning and execution of these activities should be of an anticipatory nature rather than remedial. This process should be a priority of local government.

The collector and local highway systems, outlined on page seven, involve both state and local jurisdictions. Most of these roads will be adequate for future traffic needs provided they are brought up to standards and maintained on a continuing basis. Many miles of this system traverse the Township and are the primary responsibility of PennDot.

Three local roads are within the primary development areas as delineated in the Land Use Plan. These roads include Cleland Mill, Brewster and Sunnyside. Plans for upgrading these roads on a phased schedule should be formulated in contemplation of new development. Emphasis should be directed toward adequate surfacing to serve higher traffic volumes and safety provisions for intersections.

The establishment of new road systems within the Township will result primarily from growth activity and will be the initial responsibility of developers. Three basic stipulations should guide officials with respect to additions to the local road system. First, all new roads should be coordinated with the existing street system and designed to minimize the routing of collector traffic movements through residential neighborhoods. Multiple intersections with existing carriers should be held to a minimum. Second, all new facilities should meet established design and construction standards. Third, private streets should not be permitted. Said streets are not a maintenance responsibility of the municipality and although guarantees for upkeep may be offered by a developer, defaults are common.
CHAPTER THREE

IMPLEMENTATION STRATEGIES
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IMPLEMENTATION STRATEGIES

GOALS AND OBJECTIVES

The Land Use Plan provides an outline for the orderly growth of the community. It is based on specific goals and objectives that reflect local philosophies for growth, as well as a variety of planning relationships that will influence development in the Township and its environs. Following are the primary goals and objectives on which the planning recommendations for North Beaver Township have been based. This criteria provides a foundation for municipal policy decisions involving land use proposals, the extension of utility systems, establishment of community facilities, zoning issues and many related issues.

1. Creation and maintenance of orderly development patterns, and the coordination of interrelationships between residential and business areas of the community to provide for functionally distinguishable but complimentary districts.

Previous development throughout the Township has been limited. The demand for development sites has been modest in scope and has involved only a few basic land use activities. This scenario is expected to be altered by regional influences that will transcend past growth patterns and land use characteristics. Anticipated development impacts should be channeled into orderly use patterns that are designed to benefit both the long term interests of the community and the viability of new uses. This can be achieved through the Land Use Plan which is a key implementation mechanism for use in accomplishing long range community objectives.

2. Maintenance and improvement of the aesthetic qualities of the community.

The rural character of North Beaver Township, coupled with low densities of development, has resulted in an
aesthetically pleasing community. This has occurred more by good fortune than by design since only limited development controls were available during initial periods of growth. Potential business and residential activities can produce a variety of divergent land uses and associated conditions capable of compromising the visual qualities of any particular vicinity. As new land uses are introduced into the Township, control measures should be applied to limit or mitigate negative impacts that have the potential to abuse existing aesthetic qualities. This can be accomplished through the application of zoning and related ordinances that contain provisions for siting, density limits, buffering, site preparation, restraints on accessory functions and general maintenance requirements.

3. Protection of the natural environmental quality and significant open space features throughout the Township.

Large tracts of open land are found throughout the Township. Some of this land is actively farmed; some is abandoned farmland; and some remains in a relatively undisturbed natural state. These open land resources provide the community with an environmental quality that should be zealously protected from despoliation. This is a critical concern since once they are lost, these attributes will be largely irretrievable. Development areas shown on the Land Use Plan have been structured to retain open space resources and protect environmental quality.

Several unique areas are found throughout the Township where the protection of significant open space features should be encouraged. Portions of the Sugar Creek Valley, and a unique scenic area about one mile south of Route 108 on Cleland Mill Road are prime examples of this type of natural feature. There are practical limits on controlling the rights of property owners to the use of their land, but adherence to the recommendations of the Land Use Plan, and enforcement of zoning and subdivision ordinance provisions can protect the overall environmental quality of North Beaver Township as growth takes place.

4. Preservation of viable agricultural pursuits and areas devoted to such purposes.
Agriculture has been steadily declining throughout Pennsylvania for several decades. Large tracts of farmland remain in North Beaver Township in spite of open pit mining and ongoing development, but the economic significance of farming continues to be eroded by a series of influences. A major portion of the Township has been zoned to permit agriculture as a means of encouraging the continuation of this vital and desirable activity. Proposals for development of prime farm areas should be carefully evaluated by local officials. Land should not be indiscriminately surrendered to urban growth where a viable potential for agricultural pursuits continues to exist.

5. Protection of the residential character of the community consistent with the need for a variety of housing types and densities and the ability of the community to expand in an orderly manner.

Residential uses are expected to continue to be the most prominent growth activity throughout the community. Land use proposals delineate locations for a variety of housing types to allow for anticipated housing market demands. The criteria considered in locating sites for an expanding housing inventory included compatibility with existing neighborhoods, highway access, utility feasibility and the availability of community facilities and services. Consideration has been focused on the maintenance of the existing character of low density rural housing throughout much of the Township.

6. Preservation of property values and encouragement of the highest and best use of developable land areas.

Property value is important to both property owners and to governmental entities. Owners desire economic stability and property holdings that appreciate in value to garner profit and financial security. Government, in turn, depends upon revenues that are based on property value to underwrite a variety of required municipal services. Uncontrolled and haphazard use of land commonly results in the generation of incompatible land uses and real estate of a marginal nature. These uses
seldom reach their potential and are often of a transitory nature. Accordingly, Land Use Plan proposals are designed to encourage the most appropriate use of land as a means of generating prime development activities that have long term stability.

7. Maintenance and expansion of the municipal economic base.

Prevailing attitudes throughout the Township are oriented to maintaining the rural-residential character of the community. However, local siting of Beaver Valley Expressway interchanges will generate an enhanced climate for economic activity, particularly at the intersection with State Route 108 and along State Route 18. Highway related circumstances, coupled with a projected need for additional commerce to accommodate expanding residential uses, suggest an expanded economic base. This growth has been provided for in the land use proposals as an extension of commerce at Mount Jackson and as new highway commercial activity along Routes 108 and 18.

8. Development of accessways, utility systems, municipal services and community facilities consistent with local needs.

Planning elements have been coordinated to provide existing and projected land uses with the required supporting infrastructure. The recommended locations for anticipated activity areas have been coordinated with existing support facilities and the most logical outlook for expansion as warranted by ongoing activities.

9. Coordination and cooperation with area and regional development programs and trends that are consistent with the type and quality of growth necessary to achieve the community development objectives of the Township.

The future development profile of North Beaver Township will be influenced by the impact of regional events and conditions. One of the primary purposes of this planning
endeavor has been to accommodate external growth impacts within a framework that is consistent with local growth strategies. Pressures for the introduction of increasing amounts of multi-family housing and highway commercial uses are considered inevitable. Accordingly, such activities are designated in the Land Use Plan, but they are geographically situated and scaled to maintain the objectives of the Township.

CONCLUSIONS AND RECOMMENDATIONS

The following summary of conclusions and recommendations highlights the salient elements of the foregoing report. This material will provide a reference for officials as they monitor development trends and direct new growth within the framework of the community goals and objectives.

Growth Factors

North Beaver Township is a prime target for development activity because of both regional and intercommunity considerations. Some of the most significant of these influences on local growth at this time include:

1. Regional development patterns that have documented a preference for rural areas over older urban communities for residential expansion.

2. Completion of the Beaver Valley Expressway, including two interchanges within the Township, which will create improved access and increased potential for residential expansion and highway related commerce.

3. A stabilizing and modified regional economic base that is oriented to commercial service activities.

Population Trends

Continuing population expansion in the range of ten percent or more per decade is anticipated in the Township because of the following considerations.

1. A stabilizing regional economic base.
2. The shifting of housing site preferences from urban to rural settings.

3. Improved access created by the Expressway completion.

4. Significant population increases in many rural Lawrence County municipalities between 1970 and 1980, prior to the effects of regional economic reversals, which saw a 25% increase in North Beaver Township.

Land Use Patterns

The Land Use Plan recommendations have been designed to achieve the following goals and objectives:

1. Maintain the existing low density-rural characteristics of the Township.

2. Prepare for a variety of land use impacts.

3. Limit specific land uses to suitable areas as determined by compatibility with neighboring activities and the availability of supporting infrastructure.

4. Recommendations for the type, scope and locations of specific land uses are based on the following criteria:

Agriculture

a. Support of farming as a viable economic activity within the community.

b. Protection of farm resources from encroachment by incompatible land uses.

c. Conservation of natural areas, particularly heavily sloped lands and wooded areas not conducive to intensive use.

Residential

a. Maintenance of existing neighborhood qualities and amenities.
b. Recognition of changing market conditions that will influence housing size, type and siting characteristics.

c. Adequacy of highways to provide safe and efficient routing.

d. Availability and/or feasibility for providing public water and sewerage systems.

e. Upgrading of deteriorating housing stock.

Commerce

a. Consideration of the need for local commercial services.

b. Recognition of the increased potential for new types of business activities in conjunction with the Expressway and assignment of the best and highest uses to affected land areas.

c. Adequacy and/or feasibility for required supporting infrastructure.

d. The need for cohesive business districts to deter indiscriminant proliferation of commerce.

e. The need for site design and performance standards to mitigate land use conflicts and environmental abuse.

f. Expansion of the local economic base in a manner that is consistent with the goal of preserving the existing pastoral character of the community.

Industry

a. Maintenance of existing industrial operations.

b. Improvement of aesthetic and environmental conditions in association with industrial sites.

Transportation

No major extensions to the existing highway system are contemplated; however, new development will place additional pressure on existing streets. Even though a
significant percentage of the local road system is under PennDot jurisdiction, it will be necessary for the local government to monitor needs and coordinate required action.

1. Road system inadequacies should be determined by continuing review at the township level.

2. Particular attention should be directed toward existing physical deterioration, safety factors and the need for upgrading facilities to meet projected use.

3. New development should be coordinated with existing street systems.

4. All new circulation facilities should be constructed in accordance with designated specifications.

5. Private road systems should be eliminated.

Community Facilities

Community facilities and services should be based on projected needs rather than on existing demand, even though the financial feasibility to support required infrastructure must be coordinated with growth activities.

1. The planning and design for establishment and/or expansion of community facilities must be based on foreseeable needs.

2. Approval of new developments must be contingent upon the availability of adequate long term water resources, provisions for sewage disposal, access provisions and municipal services.

3. Municipal services, such as fire, police and recreation programs, require continuing evaluation and study to establish levels of service required and the financial means of meeting those requirements.
ADOPTION

Adopted by Resolution of the Board of Supervisors of North Beaver Township, Lawrence County, PA this 12th day of August, 1991.

ATTEST:

[Signatures]

Chairman, Board of Supervisors

[Signatures]

Supervisor

[Signatures]

Supervisor

[Signatures]