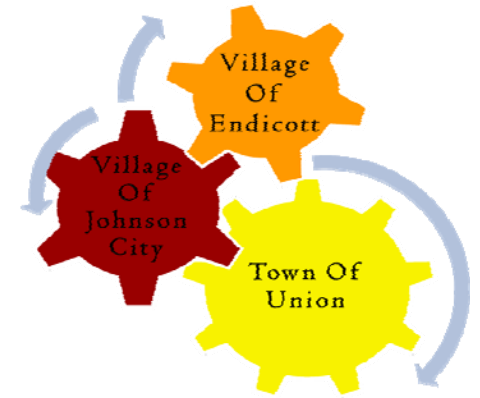


Technical Background Report



Land Use Compatibility

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LAND USE COMPATIBILITY AND APPROPRIATENESS

Introduction

In previous chapters of this report, the historic growth trends involving land use were identified and the existing land use patterns of the town and villages were presented and analyzed. The primary purpose of this chapter is to evaluate the appropriateness of the existing land use arrangements and patterns in the town and villages, as well as to suggest guidelines for ensuring compatible relationships among the various categories of land use.

Upon analysis it becomes apparent that improving the relationship between various land uses and intensities could result in a more efficient utilization of land and financial resources. Obviously, the limited resources of land and financial capital can be maximized by efficient and compact development of the community. By ensuring the appropriate use of land, wasteful and inefficient spatial arrangements can be avoided and public services and facilities can be more easily planned, provided, and maintained.

A widely recognized goal of physical planning activities is the achievement of a high degree of land use compatibility and the assurance of appropriate uses. Land use planning recognizes that the following relationships should be sought:

- A. Appropriateness of existing and proposed land uses with regard to natural features;
- B. Appropriateness of existing and proposed land uses with regard to the existing and planned community facilities and services;
- C. Appropriateness of existing and proposed land uses with regard to existing and planned elements of the transportation system;
- D. Appropriateness of existing and proposed land use in the context of local and regional trends and needs;
- E. Compatibility of existing and proposed land uses with existing or proposed future land uses.

It should be noted that for the purposes of this report, compatibility in land uses will refer to the relationships that exist between one land use and another. Appropriateness of land use refers to the relative benefit to be derived from the choice of land use. In this respect, compatibility may be considered the opposite of land use conflicts, while appropriate land use implies a consideration of broader issues, such as development of land in a manner that does not represent its highest and best use.



In addition to the five relationships previously outlined, land use planning also considers other relationships that may be far less tangible and therefore more difficult to isolate and identify. These relationships involve issues such as community vitality, ecological balance, and the historic social fabric of the community. In the final analysis, these less tangible relationships may be more significant because they strive to maximize the interrelationship between people and the way land is used.

This chapter will attempt to establish guidelines that identify various levels of compatibility in land use forms for the town and villages. These guidelines are designed to avoid replication of existing inappropriate land use arrangements and encourage the development of appropriate relationships.

Guidelines For Land Use Compatibility

Elected officials, planners, and other appointed officials who play a role in developing the community strive to achieve compatibility of land use for two basic reasons. First, land use compatibility should be viewed as a means of attaining the highest and best use of land. By achieving this goal, a community with a sound overall structure and economic vitality will be created and preserved. Secondly, seeking land use compatibility recognizes that conflicting land uses cause economic, physical, and social "drains" on the community where the conflicts occurs. Land use Incompatibility can create barriers to new investment in the town and villages and discourage existing land owners from investing in their properties, thereby creating a drain on the vitality of the community as a whole.

In order to determine the compatibility of existing and proposed land uses, a systematic approach was developed. It places virtually all potential land use relationships into one of three basic categories. The categories are measured on a three level "compatibility scale" including relationships that are deemed:

- (1) Compatible,
- (2) Questionable (Compatible only if impacts are properly mitigated); and
- (3) Incompatible.



In considering a compatibility rating system, it should be noted that land use compatibility implies a two-way relationship. In instances where two different types of land use are mutually beneficial and complement each other, they have been classified “compatible”. Where neither of the two land uses is in a beneficial relationship, it has been classified as “incompatible”. In instances where only one form of land use benefits from its proximity with another land use, the interrelationship has been considered “questionable”, since it is only a 'one-way' beneficial relationship. It is noted that the compatibility ratings are based on a number of equally weighted factors. Characteristics considered to indicate land use compatibility include the following:

- Basic land use interdependence;
- Visual compatibility;
- Social identification;
- Traffic generation;
- Other physical requirements.

By placing each of these factors on an approximately equal plane, a compatibility rating system can be developed.

Compatibility Ratings

Figure 1 presents the land use compatibility ratings for thirteen future land use categories. By cross-referencing the forms of land use found on the chart, the relative compatibility can be determined. In order to understand the chart and its use, a number of examples will be cited for each of the three compatibility ratings. It is necessary to stress that compatibility ratings imply a two-way relationship; that is to say, both forms of land use are considered.

Perhaps the best example of a desirable type of land use compatibility is the one that exists between educational and recreational facilities and residential land use forms. From the residential standpoint, it is desirable to have schools and parks located in close proximity to residential areas. Likewise, it is desirable to have the parks and educational facilities in close proximity to their primary users.



Another example of a desirable land use relationship is found between high density residential use and professional office/neighborhood commercial uses. Here the rationale involves both the question of proximity of commercial services to high density residential areas and the realization that apartments and other forms of multi-family residential development frequently form a desirable buffer between traffic generating commercial uses and less intense residential uses. When considering compatible land use relationships, it should be remembered that a given form of land use is categorically assumed to be a “compatible” neighbor of a similar land use form.

Both light and heavy industrial forms are classified as undesirable neighbors of residential land uses, especially single-family development. This rating was derived through the recognition that the various characteristics of industrial development are generally not harmonious with the atmosphere sought in residential areas. Similarly, residential land use forms do not benefit industrial development by their proximity. Undesirable land use relationships are also found between residential land use forms and utility rights-of-way and utility sites. While it is recognized that some very small utility facilities are often an integral part of residential areas, significant utility sites and rights-of-way are generally undesirable in residential areas. Likewise, these facilities do not benefit by their proximity to residential areas.

Commercial activities, as well as recreational and open space uses, are considered to be “questionable” neighbors of industry because proximity benefits one land use category, but not the other. For example, commercial, open space, and recreational lands may represent a desirable buffer around heavy industry, but they do not benefit by their proximity to heavy industry. Most of the land use relationships placed in the “questionable” category are examples of relationships which benefit one of the land use forms but not the other.

Application Of Compatibility Guidelines

The land use compatibility ratings presented in Figure 1 serve as a useful guideline in promoting orderly land use arrangements as well as in identifying areas of the town where land use conflicts already exist. Since the figure summarizes the compatibility ratings,



it is subject to the limitations inherent in any form of generalization. Undoubtedly, there are specific instances that can be cited in the town or villages where the compatibility ratings on the chart appear to be unduly harsh in view of the quality of the development, the sensitivity of design, and other factors peculiar to specific sites. On the other hand, there are no doubt specific instances where the compatibility ratings are too generous. They tend to imply harmonious relationships when in reality conflicts exist. Nevertheless, despite these inherent limitations, it is believed that the material found in Figure 1 will serve as a useful tool for guiding and evaluating future development in the town and villages.

In addition to using the compatibility ratings to identify existing inconsistencies of land use, the ratings can and should be used in developing land use planning and zoning policies as well as in reviewing re-zoning proposals and other changes of land use on the town's landscape. In this respect the chart will be used as a guide for all subsequent town land use planning activities.

Figure 1 ~ Land Use Compatibility Matrix

Future Land Use Compatibility Matrix	Low Density Residential	Medium Density Residential	High Density Residential	Professional Office	Neighborhood Commercial	Corridor Commercial	Mixed Use Residential/Office	Mixed Use Office/Commercial	Mixed Use Office/Research/Industrial	Government/Educational/Institutional	Recreational	Utilities	Rural Density Residential
Low Density Residential	✓												
Medium Density Residential	✋	✓											
High Density Residential	✗	✋	✓										
Professional Office	✋	✋	✓	✓									
Neighborhood Commercial	✋	✋	✓	✓	✓								
Corridor Commercial	✗	✗	✓	✓	✓	✓							
Mixed Use Residential/Office*	✋	✋	✋	✓	✓	✓	✓						
Mixed Use Office/Commercial*	✗	✗	✋	✓	✓	✓	✓	✓					
Mixed Use Office/Research/Industrial*	✗	✗	✋	✋	✋	✓	✓	✓	✓				
Government/Educational/Institutional	✋	✋	✓	✓	✓	✓	✓	✓	✋	✓			
Recreational	✓	✓	✓	✓	✋	✋	✋	✋	✋	✓	✓		
Utilities	✗	✗	✗	✓	✓	✓	✓	✓	✓	✋	✋	✓	
Rural Density Residential	✓	✓	✋	✗	✗	✗	✗	✗	✋	✋	✋	✓	✓

Legend

Compatible
 Questionable (Compatible Only If Impacts Can Be Properly Mitigated)
 Incompatible

* Note: Compatibility of Mixed Use development is dependent on the proposed mixture of uses.



It is recommended that the chart be utilized by the town/village boards and the town/village planning boards to guide decisions concerning land use. In doing so, land use problems associated with conflicts and compatibility can be avoided and beneficial relationships created. Over the long term, the avoidance of land use conflicts will become a desirable objective designed to achieve harmonious land use arrangements within the town and villages.

Inappropriate Land Uses

There is, however, far more to land use planning than merely ensuring compatibility and/or avoiding conflicts between two or more types of land use. The validity of this observation can best be evidenced by recognizing that two or more land uses can be compatible with each other yet inappropriate when viewed in town-wide, topographic, or other terms. Inappropriate land uses should rightfully be viewed as a poor choice or a misuse of the town's land surface. Inappropriate land uses represent, by and large, opportunities that have been lost. This means that opportunities or potential for beneficial relationships may not materialize because the full potential was not recognized and/or not established as an attainable goal before development occurred.

There are various types of inappropriate land uses. Examples of inappropriate land use can be cited to add dimension to the understanding of the problems reflected by each type or category. The identification of various types of inappropriate land uses in a systematic way has been done for a specific purpose and is not necessarily intended to be a criticism of past decisions. By identifying various inappropriate land uses and citing examples, repetition of the poor choices can be avoided in the future. By citing examples of remediation of inappropriate land uses, appropriate action to mitigate the inappropriate land use is illustrated. The inappropriate land uses are not listed in order of priority, but rather so the more obvious types of misuse are cited first and the least apparent follow in descending order. Areas where natural feature characteristics have been violated by existing land use were discussed previously in the Natural Features chapter of this report.

Areas Where A Wide Variety Of Land Uses Are Indiscriminately Intermixed

When a wide variety of land uses have been allowed to develop in a random fashion, conflicts detrimental to virtually all land uses in the area frequently arise. Such cases are clearly a misuse of land, since beneficial relationships have not been fostered. Problems are compounded as the density or intensity of land use increases and/or as the land areas in a given type of land use are reduced. In situations where the densities are high, the potential conflicts are maximized merely because of the intensity of land usage involved.



By indiscriminately intermixing potentially conflicting land uses, the entire land area lacks the cohesion needed to provide for the type of support for each of the uses required and a misuse of land or poor choice of land use results. Typical examples of problem areas resulting from the intermixing of land uses would exhibit industrial, commercial, and residential uses arrayed in an area in such a way as to obscure the essential character of the area. In fact, this is the central problem inherent with mixed land use areas. They do not have a unifying land use character. They represent a hodgepodge of land uses that are often incompatible.

Many examples of such intermixed land uses can be found throughout the town and villages; most predate the advent of formal planning. The Endwell area of the town, especially the area between Main and North Streets on the south and Watson Boulevard on the north represents a patch-work quilt of land uses including single-family residential, commercial, and industrial, to the detriment of all uses. Similar patterns are also evident along the Rt. 26 corridor.

On a broad scale the inappropriate land use patterns can best be resolved by simply avoiding their creation. Once established, they are difficult to eliminate. It should be noted that there is a national trend towards the judicious mixing of land uses which have heretofore been separated by strict, and sometimes outdated, land use planning tools and zoning practices. The concept commonly known as Planned Unit Development (PUD) promotes a mixture of land uses and densities and permits the incorporation of non-residential service facilities into otherwise residential developments for convenience and variety. Despite the growing popularity of the planned unit approach to land development, the misuse of land represented by introducing conflicting land uses such as industrial and low-density residential into too small an area should be avoided.

Areas Where Non-Residentially Oriented Land Uses Intrude Upon The Cohesiveness Of Residential Areas

This type of inappropriate land use is closely related to the one discussed previously. In the previous case, areas were so intermixed with various other forms of land use that they could not be considered as any single form. The type of inconsistency now being discussed is an area that would be described as primarily residential in character, but adversely affected by the intrusion of non-residential uses.

In considering the inappropriate land uses in this category, it must be recognized that residential areas strive to establish a basic environment or character which is quite different from the one sought by commercial, industrial, utility, or even agricultural uses. The neighborhood concept with its cohesive physical and social fabric is difficult to achieve when inappropriate uses intrude upon it.



The disruption to a neighborhood brought by commercially and industrially induced traffic, the appearance and function of most utility land uses, and the various conflicts between agricultural activities and residential development all serve to disrupt the desired character of residential areas.

There are certain non-residential land uses which support the atmosphere and unity of residential areas and should therefore not be included in a listing of generally incompatible land activities. Many institutional activities such as churches and educational facilities are focal points of residential neighborhoods. Recreational and open space facilities are almost always a positive rather than a negative land use in residential areas, as long as the scale of such facilities and the intensity of use by non-residents does not destroy the close knit social cohesiveness that is characteristics of many neighborhoods.

In most cases where non-residential oriented uses have intruded on residential land uses, the areas have developed over the years without conscious forethought. Non-residential uses are often located along a major artery and may, therefore, represent a reasonable land use from one standpoint but not from a broad view. The residential areas north and south of 17C are being encroached upon by the commercial development on 17C.

There are many examples of industrial, commercial, utility, and even agricultural intrusions into residential areas of the town. In many of these areas, the basic patterns of land use were intermixed prior to formal planning practices and zoning regulations. Unfortunately they have merely been continued by current practices. The older urbanized areas of the town, such as south Endwell, Westover, West Corners, and North Endicott have suffered the intrusion of industrial and, to a greater degree, commercial uses into their predominately residential areas.

Because one of the basic goals in land use planning and zoning regulations is to foster cohesive residential communities, comparatively few examples can be cited in the town where non-residential uses are intruding upon newly constructed or emerging residential areas. The only examples are the growth of commercial activities from Watson Boulevard north into the residential areas and the placement of Park Manor Plaza, with the rear of the building facing the residential development on Pheasant Lane.



Areas Where A Distinct Variety Of Density Or Intensity Of Land Uses Are Indiscriminately Intermixed

Areas in which high and low intensity land uses exist together in an unplanned fashion are considered inappropriate when the higher intensity uses create pressures on the lower intensity uses which they cannot withstand. Moreover, an inefficient patchwork pattern of services and facilities required by the more intensely used lands will result if services are not provided commensurate with the needs of the land use intensities.

It should be stated that some poor choices of land use are represented by intensity of land use rather than by type of use. In the predominately rural environment of the northern portion of the town, it would be a poor choice of land use to introduce high density development since public sewer and water are not available. Roads are relatively narrow and fire protection capacity is impacted by a lack of access to sufficient water pressure. However, the intrusion of an apartment development, for example, into such an area may mean the beginning of an undesirable practice of providing public facilities and services into an area where the overall density cannot financially support such services.

Areas Where Strips Of Developed Land Are Oriented To Major Arterials

Conflicts are also created by strip development along major arterials. Conflicts are not only created between adjacent land uses, but between land uses and traffic circulation as well. This poor choice of land use is most commonly evidenced by strip highway oriented commercial development.

This type of development creates conflicts between land use and transportation. Major arterial roads are designed to move large volumes of traffic in as efficient a manner as possible. Strip development attempts to capitalize on the accessibility of lands adjacent to such roads due to their high traffic volumes. In doing so, it compromises the efficiency of the arterials, especially when provisions for shared driveways are not made.

Unfortunately the current town and village zoning ordinances tend to reflect and even encourage such undesirable characteristics into the future, such as along Main Street (in all three communities) and Union Center-Maine Highway. The town and villages are now beginning the process of adopting a uniform zoning ordinance.



The part-town area has two primary areas of strip development, 17C (Main Street) and the Union Center-Maine Highway. Watson Boulevard, Hooper Road, North Street, and to a lesser extent, Taft Avenue have also been impacted by the introduction of strip commercial development. Since the commercial activities are not well buffered from the adjacent residential development, a conflict of uses has become readily apparent. In the case of Hooper Road, a traffic congestion problem has developed, especially during peak hours.

Areas Where Land Use Does Not Adequately Buffer Its Own Undesirable Characteristics From Adversely Affecting Adjacent Land Use

Various forms of development create conditions that can affect land uses in their vicinity. Such objectionable characteristics should be minimized. In instances where areas have not been protected from the undesirable characteristics of certain developments, a conflict has been created and a misuse of land is apparent. The undesirable characteristics that adversely affect neighbors most frequently take the form of increased traffic, air pollution, odors, excessive noise, water pollution, excessive lighting, vibrations, increased storm runoff, and unattractive building appearances. Many of these objectionable characteristics can be mitigated during the site plan and environmental review process. For example, air and water pollution in most cases can be reduced, if not eliminated, by requiring that new construction utilize best available control technologies. The adverse effect of other objectionable characteristics can be greatly reduced by other modern techniques such as the use of acoustical equipment to lower noise levels from machinery and the use of lighting standards for parking lots that do not create glare on adjacent properties.

In a fairly urbanized area like the Town of Union, there is no valid reason for developers to not buffer undesirable characteristics from adjacent land uses. Adequate screening in the form of landscaping and earth sculpturing improves the quality of the development and encourages equally attractive new development.

Areas Where Land Development Does Not Adequately Preserve And/Or Enhance The Intrinsic Environmental Qualities

This issue concerns the overall quality of development in the town and villages. It is imperative that the overall appearance of the community and the quality of its development be considered an integral part of all land use considerations.



New development should reflect the characteristics of the area in which it is located and should enhance, rather than detract from, these qualities. When considering intrinsic quality of life issues, natural features such as wetlands, floodplains, and steep slopes as well as the cultural or man-made elements of the landscape must be considered.

When considering problems and challenges that arise from preserving and enhancing aesthetic qualities in the town and villages, the emphasis should be on the future; so that as land is converted from rural to more urban uses or as older properties are redeveloped a concerted effort can be made to improve the quality of the built environment.

In this respect, inappropriate land use or misuse of land should be considered to exist where woodlands have been clear cut to permit development, and/or where sterile and rigid street designs have been forced on the existing topography without regard to the slope and grading. In all such examples, the land development has destroyed the aesthetic qualities inherent in the area.