

**TOWN OF CLARKSTOWN
ACTIVE ADULT RESIDENTIAL ZONING TEXT AMENDMENT
DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT
(DGEIS)**

Proposed Action: Adoption of a Zoning Local Law Amendment to create an
Active Adult Residential Floating Zone

For the
TOWN OF CLARKSTOWN, ROCKLAND COUNTY, NEW YORK

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Written Comments Will be Accepted for 30 Days following the Acceptance Date

February 13, 2007

**Town of Clarkstown Active Adult Zoning Amendment
Draft Generic Environmental Impact Statement**

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1.0 EXECUTIVE SUMMARY

This Draft Generic Environmental Impact Statement (DGEIS) has been prepared to assist the Town of Clarkstown in assessing the potential environmental impacts associated with a zone text amendment to create an Active Adult Residential (AAR) Zone in the unincorporated area of Town of Clarkstown, Rockland County, New York. The AAR zone is a floating zone, unmapped at initial adoption, and created by amendment to the Town's zoning map through exercise of the Town Board of the procedures set forth in the law. The DGEIS has been prepared in accordance with the State Environmental Quality Review Act (SEQRA) and Part 617 of the regulations implementing SEQRA.

The Town of Clarkstown is considering a "Zone Amendment" that would provide housing to accommodate a range of independent living accommodations for active adults and would create housing or provide financial resources to assist income eligible active adults to obtain or retain housing. The Town of Clarkstown recognizes that the senior citizen population is largely comprised of individuals with limited or fixed incomes who, given present market conditions, find it increasingly difficult to acquire and/or maintain a single family home. The Active Adult Residential (AAR) zone is intended to require the provision of affordable housing as a portion of age-restricted housing development in the community, and to implement the affordable housing goals, policies and objectives set forth in the Town's Comprehensive Plan.

The AAR Zone is intended to address a range of housing needs by encouraging a range of housing types, locations and sizes. This zone is intended for areas of the Town where local services necessary to support active adults are immediately available. It is the intent that clustering be considered when designing complexes so as to minimize the impact on the environment. A proposed active adult community must be compatible with the existing scale of development nearby and be consistent with the recommendations of the Housing Advisory Board report and the Town Development Plan as adopted by the Clarkstown Planning Board on August 16, 1966, and the Comprehensive Plan Update as adopted by the Planning Board and Ad-Hoc Committee on June 30, 1999, and adopted by the Town Board on September 28, 1999. This local law is enacted in accordance with the provisions of §261-b and §272-a of the Town Law of the State of New York.

2.1.2 Background - Citizens Advisory Board for Housing - Town of Clarkstown

In order to explore housing conditions in Clarkstown, the Town Board created the Citizens Advisory Board for Housing ("Advisory Board"). Their charge was to evaluate the housing stock and to make recommendations relative to needs, bearing in mind that all of the citizenry was to be considered in the evaluation. The Advisory Board published its Final Report in September 2002, included as Appendix B. The study concluded that Town residents tend to remain longer than national averages suggest. The study also states that Clarkstown, located in the lower Hudson Valley and within reasonable commuting distance to Manhattan, Westchester and Bergen counties, is a very attractive place in which to live. However, it is becoming increasingly difficult for seniors and young people to remain in the community.

In addition to a young adult survey, the Advisory Board conducted a senior survey to compile data that expressed the concerns of Clarkstown residents over age 60. This survey is contained in the final report. The final report lists the following conclusions:

- The overwhelming number of seniors either prefer to retire in their current homes or have already retired in their current homes. Some are concerned that they may be forced to move due to financial constraints, but they would prefer to stay where they are.
- Many seniors feel the best way to satisfy this desire to stay in their home would be to lower property taxes, particularly school taxes.
- A significant number of seniors indicated they would consider accessory housing as a way to remain in their homes.
- A significant number of seniors who are considering a move, indicate they would be willing to pay a maximum of \$100,000 to \$150,000 to purchase a new home. This is well below market rates and would only be possible with significant subsidies requiring income qualifications.

2.1.3 SEQRA

In accordance with New York State Town Law, the Town Board of the Town of Clarkstown is responsible for adopting the proposed "Zone Amendment". The Clarkstown Town Board has assumed the role of Lead Agency. The Lead Agency is primarily responsible for ensuring that the environmental impacts associated with the proposed action are considered.

As per the regulations implementing the State Environmental Quality Review Act (SEQRA), the Town Board has required that a draft generic environmental impact statement (DGEIS) be prepared. Section 617.10 of the regulations implementing SEQRA allows a Lead Agency to prepare a "generic" environmental impact statement (GEIS). GEISs are broader and more general than site-specific EISs. They allow a Lead Agency to evaluate the environmental impacts associated with *"an entire program or plan having wide application or restricting the range of future alternative policies and projects, including new or significant changes to existing land use plans, development plans, zoning regulations..."*

This DGEIS is intended to identify existing conditions, anticipate potential impacts from implementation of the action and propose mitigation measures, if necessary, to reduce or eliminate impacts.

1.1 Brief Description of the Proposed Action

1.1.1 Location

The Town of Clarkstown is located within Rockland County, New York. Rockland County is located on the west side of the Hudson River in the lower Hudson Valley region. This 40 square mile community is located in the central and easterly portion of the County. Clarkstown is bounded by the Hudson River and the Villages of Upper Nyack, Nyack and South Nyack to the East. Clarkstown adjoins the Town of Orangetown to the south, the Town of Haverstraw to the north, the Town of Ramapo and the Village of Spring Valley to the west. The New York State Thruway (I-87/I-287) traverses the southern portion of the Town in an east-west direction. The AAR zone would apply to the unincorporated areas of the Town of Clarkstown.

1.1.2 Proposed Action

Adoption of the Zoning Amendment will provide a floating zone intended to allow the construction of housing for active adults in a manner that is consistent with the Town's Comprehensive Plan Update and the Goals of the Citizens Advisory Board for Housing in the Town of Clarkstown.

The purpose, needs and benefits of the proposed action can be summarized generally by the objectives outlined in the Zone Amendment.

The specific objectives of the Active Adult Residential Floating zone are:

- ♦ To provide affordable housing for those senior citizens living on fixed or limited incomes in order to give such residents the opportunity to remain in the community close to family and friends;
- ♦ To provide appropriate sites for the development of such housing in locations convenient to social and medical facilities, retail shops, public transportation and other necessary services;
- ♦ To provide, within the boundary of the development, appropriate social, recreation and other facilities which will contribute to the independence and meaningful activity of senior citizens;
- ♦ To provide for the safety and convenience of residents through site design and housing unit design requirements which consider the special physical constraints of the elderly and the physical characteristics of the design site;
- ♦ To regulate the nature and density of senior citizen housing developments, their site layout and design, and their relationship to adjoining uses, so as to provide ample outdoor living and open space for residents and to minimize detrimental effects on the surrounding neighborhood and environment.

The Zoning Amendment is intended to effectuate these purposes. The full text of the Zoning Amendment is included as Appendix C.

1.2 List of Involved/Interested Agencies and Permits/Approvals

Adoption of the Zoning amendment requires the following reviews and approvals. Copies of the DGEIS have been sent to:

Involved Agencies

- Clarkstown Town Board – Adoption of Zoning Local Law Amendment
- Rockland County Planning Department – 239-GML Review of the proposed Zoning Local Law Amendment

Interested Agencies

In addition to the involved agencies a Notice of Completion of the DGEIS and/or a copy of the DGEIS will be sent to the following interested agencies:

Clarkstown Town Clerk
Clarkstown Town Attorney
Clarkstown Department of Environmental Control
Clarkstown Department of Planning
Clarkstown Building Department
Clarkstown Planning Board
Clarkstown Zoning Board of Appeals
Town of Haverstraw Town Board
Town of Ramapo Town Board
Town of Orangetown Town Board
Village of Upper Nyack Village Board
Village of Nyack Village Board
Village of Spring Valley
Village of South Nyack Village Board - Notice Only
New York State DEC, Region 3 - Notice Only
New York State DOT, Region 8 - Notice Only
New York State Thruway Authority - Notice Only
Palisades Interstate Park Commission - Notice Only
Federal Emergency Management Agency - Notice Only
US Army Corps. of Engineers - Notice Only
Rockland County Drainage Agency
Rockland County Department of Highways - Notice Only
Rockland County Sewer District Number 1
Rockland County Department of Health
Clarkstown Central School District - Notice Only
Nyack Union Free School District - Notice Only
Nanuet Union Free Central School District - Notice Only
East Ramapo Central School District - Notice Only

1.3 Potential Impacts and Proposed Mitigation Measures

A baseline conditions analyses has been prepared and has been used to describe the "existing conditions" in the DGEIS. Based on an evaluation of the implications of adopting the proposed "Zone Amendment" on these the existing conditions, various potential impacts are identified. This section of the Executive Summary describes the potential impacts described in the DGEIS, and any mitigation measures that are required to limit these impacts. Nothing herein is intended to limit any board or agency from conducting a site-specific SEQRA review of any application or activity associated with future development.

No mitigation measures are proposed specific to the Zone Amendment. However, at the time of site-specific zone petitions and development applications are submitted, site-specific mitigation measures may be required.

Parcel Identification

In order to determine which parcels may be eligible for the AAR zone, a review of the Rockland County GIS data for the Town of Clarkstown was conducted. The Zone Amendment specifically excludes land in the following zoning categories from being eligible for AAR designation, R-160, R-80, R-40, MRS, RS, PED, and M. The Zone Amendment also stipulates that eligible parcels

must be larger than 3 acres in net lot area, after deduction of areas with development limitations per Section 290-21 D of the zoning code.

All vacant parcels, three acres or more were included in the eligible inventory. Review of the parcels by the Town Planning department indicated there are pending site plan applications before the Planning Board on several of these parcels. Since these parcels meet the eligibility criteria they have been included to allow the applicant to file an amended site plan if desired.

A review of under utilized parcels larger than three acres identified a number of parcels that are developed in single family residential which would not be likely candidates for the AAR zone since they are either developed to the maximum extent practical or are environmentally constrained. Based upon this review underutilized parcels less than 6 acres in size have not been included in the analysis. Public utility parcels have also not been included in the analysis.

The results of this analysis indicate there are thirty one (31) privately-owned vacant or underutilized parcels in the Town which may be eligible. The location of these parcels have been shown in Figure 2-2, AAR Zone Eligible Parcels.

For purposes of this analysis, 65 percent of the land area of each eligible parcel was assumed to be developable. To account for environmental constraints, 25% of the acreage was deducted, and an additional 10% of the land area was deducted to account for road layout and design inefficiencies. These assumptions are utilized to obtain an "order of magnitude" assessment of the potential build-out resulting from application of the AAR zone to the eligible parcels. This calculation is an obvious generalization and will be refined based upon environmental analyses conducted as part of the submission of a site-specific development application. The results of the analysis for the 31 potentially eligible parcels evaluated is shown in Table 3.4-2.

1.3.1 Geology, Topography and Soils

Geology

The proposed zoning law specifically excludes parcels in the R-160, R-80, R-40 areas. These areas have been excluded based on their environmental sensitivity. Areas with challenging geology, including the Palisades Ridge located along the north and east boundaries of the Town lie within this area and thus, have already been excluded from consideration as eligible parcels.

In the remaining eligible areas, the geology of the Town is generally not restrictive with regard to potential construction. The existing zoning regulations with regard to construction and noise limitations will remain in place. In the event that blasting is required, site specific blasting plans will be developed. These blasting plans will meet all New York State requirements and Chapter 220 of the Code of the Town of Clarkstown which regulates blasting activity. The use of proper blasting techniques in these areas will minimize the potential effects of blasting to nearby properties.

Site specific analysis will be conducted as a requirement for requesting a zone petition necessary to implement the active adult zone.

Topography

The steepest areas of the Town are part of the Hudson Highlands located along the Palisades Ridge. This area is part of the R-160 Conservation Density Residence Zone. These properties

have been excluded as eligible hosts to the AAR zone based upon their environmental sensitivity.

Excluding the Palisades Ridge, the overall topography of the remainder of the Town is relatively flat. However, areas of steep slope may be contained on individual properties. The existing zoning regulations state, "For land containing slopes of 30% to 50%, a reduction of 50% of the buildable land area within the steep slope shall be taken. No portion of the land area of that portion of a lot with slopes in excess of 50% may be counted as part of the buildable land area."

The primary consideration with regard to steep slopes is the potential for erosion. As a result of soil and slope disturbance, there is an increased potential for siltation to occur in areas downgradient of the site. Site specific analysis will require the preparation of Storm Water Pollution Prevention Plans to insure there is no increase in stormwater runoff as a result of development. Proper construction, installation and maintenance of soil erosion control measures will minimize potential off-site impacts.

Soils

The Town of Clarkstown is predominately underlain by two soil types: Wethersfield and Wethersfield-Urban land complex. These predominate soils have a severe limitation for percolation rates in septic fields, however all eligible parcels are part of the Rockland County Sewer District, thus soil percolation limitations will not cause a significant environmental impact since no septic fields will need to be constructed.

Soils can be undermined and can erode as a result of improper or lack of stabilization and control during and after construction activities. This occurs especially after rain events, where rainfall can erode wet soils. To address potential soil erosion, the zoning local law regulates land development activities to ensure proper stormwater management including the NYSDEC "zero net increase in stormwater runoff" stipulations. The entire Town is located within the Rockland County Sewer District which further eliminates potential soils impacts.

As a result of the policies and regulations which are in place and in consideration of the fact that all eligible parcels reviewed are located within the Rockland County Sewer District, it is not anticipated that there would be any significant impacts resulting from the adoption of the zoning local law amendment.

1.3.2 Water Resources

In the drafting of the proposed Zone Amendment the Town specifically discourages development in those areas outside of the hamlet centers which lack the necessary infrastructure and services to support Active Adult Residences. Also excluded were zones which were designed to;

- To minimize development near streams and marshes, rock outcrops, upon high places and steep slopes or near parks.
- To minimize erosion and the likelihood of damage due to flooding or runoff, and to preserve or enhance natural stormwater storage.
- To promote the enjoyment of scenic vistas and natural areas by residents and visitors.
- To protect the watershed of the Hackensack River.

- To minimize the loss of forest cover on steep slopes and escarpments.
- To encourage creation, preservation or enhancement of wildlife cover and habitat; and to foster the continuity of natural ecosystems.

In order to minimize the potential environmental impact that could be associated with increased density as a result of an applicant seeking a density bonus, the applicant shall be required to show that the environmental impact of the proposed senior development will not be any greater than that of the as-of-right development under the existing zoning or that the applicant has incorporated appropriate mitigation measures into the project.

Groundwater

All of the eligible parcels are included in the Rockland County Sewer District. Any Active Adult Residential development that were to take place as a result of creation of this zone would not be expected to have any impact on groundwater.

Surface Water

The proposed Zone Amendment is consistent with the zoning regulations which regulate stormwater runoff and management stormwater flow in a manner that protects the water quality of receiving water bodies, thus the development of Active Adult Residential development will be subject to these regulations. The proposed Zone Amendment is not anticipated to have a significant impact on surface water.

Wetlands

Portions of parcel numbers 9 and 14 are located within the NYS DEC mapped wetlands as shown on Figure 3.1-1 Environmental Conditions. The remaining eligible parcels appear to be located outside of NYS DEC wetlands. There may be limited areas of ACOE wetlands on eligible parcels. Wetland analysis will be conducted to determine the presence of wetlands as part of the site specific analysis prior to the granting of a zone petition by the Town Board.

Watercourses

Parcels 17, 19 and 20 are located along the Pascack Creek, within the 100 year floodplain of this watercourse. Parcels 2, 28, 5, 15, and 9 are located along a tributary to the Hackensack River. There are no other eligible parcels adjacent to watercourses within the Town. All parcels will be evaluated for stormwater impacts as part of the site specific analysis prior to the granting of a zone petition by the Town Board.

Floodplains

Parcels 19 and 24 are located almost entirely within the FEMA 100 year flood plain. The high ground portions of Parcel 19 are developed. Although this parcel is eligible as underutilized, there is limited development potential as a result of the floodplain location. All eligible parcels which are located within the 100-year floodplain will need to take this constraint into consideration in developing site specific plans for development.

Water Supply

A projected population increase of up to 1440 persons may result from implementation of the proposed zoning amendment. At 75 gallons per day the projected water usage of all the eligible parcels would be 108,000 gallons per day or 0.108 million gallons per day (MGD), well within United Water New York's projection of 1.2282 million gallons per day water supply available for new development.

1.3.3 Terrestrial and Aquatic Resources

Endangered Species

The New York Natural Heritage Database identifies a list of vegetation and plant Communities which are considered rare or endangered and have been observed in the project vicinity. Specific consideration to these plants and plant communities will need to be addressed during the site specific analysis of any zone petition.

The New York Natural Heritage Database lists the Bog Turtle as a threatened and endangered species which has been observed recently in the Town of Clarkstown. The bog Turtle can move 1 mile or more from documented locations, and thus location of its habitat will be of significant concern is site specific analysis of any eligible parcel seeking AAR designation for development.

Environmentally Sensitive Areas

The most ecologically sensitive areas in the town are located in the Highlands and along the Palisades Ridge. The Town specifically excluded this area based upon the ecological sensitivity of streams and marshes, rock outcrops, steep slopes and parkland thus encouraging the preservation of wildlife cover and habitat and protecting natural ecosystems. In drafting the Zone Amendment, the Town intentionally avoided ecologically sensitive areas by excluding certain zones. The proposed Zone Amendment will continue to be guided by the environmental constraint regulations provided in the overall zoning code which help to limit the impact to vegetation and wildlife.

Parcels 22 and 29 are located at the base of one of the steepest portions of the Palisades Ridge, along the border of the excluded conservation zone. Special attention should be paid to the ecological considerations of developing these parcels.

The language of the active adult residential zone encourages clustering to preserve open space. Clustering would allow larger areas of unfragmented habitat to be preserved. The Planning Board has the ability to request an applicant to cluster an active adult residential development where it determines that a conventional development would be detrimental to the Town's natural resources. The town zoning law limits development on environmentally sensitive lands by deduction of 50% of the wetland areas and 50% of the steep slope areas from the buildable area calculations. The zoning local law includes stormwater management regulations to protect the quality of receiving streams and waterbodies which would limit impacts to aquatic habitats. These recommendations will help to reduce potential impacts to vegetation and wildlife in comparison to development that could proceed under the existing zoning local law. No significant impacts are anticipated from the adoption of the proposed Zone Amendment.

1.3.4 Land Use

Major changes in land use would not occur as a result of the proposed Zone Amendment since the Zone Amendment encourages active adult residential dwellings in, or adjacent to, existing areas of residential development.

Proposed Zoning Text Amendment

The proposed Zone Amendment specifies the following criteria for parcels to be considered for Active Adult Residential Zoning;

- Any parcel that may be designated as AAR must be proximate to public transportation, shopping, community and commercial services.
- Properties that are developed for multi-family use at the time of adoption of this amendment are not eligible for redevelopment in the AAR zone.
- All zones shall be eligible hosts for the floating zone except: R-160, R-80, R-40, MRS, RS, M and PED, where the uses provided herein are prohibited. Joint applications for a zone change and AAR designation are prohibited.
- Only non-residential parcels which abut residential districts that are eligible hosts for the floating zone are eligible for floating zone designation.
-
- The total aggregate number of units allowable in AAR zones established pursuant to this section shall be no more than 800. The Town Board may, by resolution, increase the total aggregate number of units allowable in AAR zones.
- Only parcels which are three (3) acres or larger in net lot area, after deduction of areas with development limitations as per Section 290-21 D, shall be eligible for AAR zone designation.
- Assemblage of properties or parcels not in the same ownership at the time of adoption of this Local Law so as to meet minimum acreage requirements is prohibited.

Change in Development

The approximate development potential was examined for the vacant and underutilized parcels eligible to host the proposed active adult zone within the Town, to determine the potential development build-out upon implementation. Thirty one (31) privately-owned vacant or underutilized parcels in the Town which may be eligible were examined. The location of these parcels have been , shown in Figure 3.4-2, AAR Zone Eligible Parcels.

All vacant parcels, three acres or more were included in the eligible inventory. Review of the parcels by the Town Planning department indicated there are pending site plan applications before the Planning Board on several of these parcels. Since these parcels meet the eligibility criteria they have been included to allow the applicant to file an amended site plan if desired.

A review of under utilized parcels larger than three acres identified a number of parcels that are developed in single family residential which would not be likely candidates for the AAR zone since they are either developed to the maximum extent practical or are environmentally constrained. Based upon this review underutilized parcels less than 6 acres in size have not been included in the analysis. Public utility parcels have also not been included in the analysis.

The results of this analysis indicate there are thirty one (31) privately-owned vacant or underutilized parcels in the Town which may be eligible. The location of these parcels have been shown in Figure 2-2, AAR Zone Eligible Parcels.

For purposes of this analysis, 65 percent of the land area of each eligible parcel was assumed to be developable. To account for environmental constraints, 25% of the acreage was deducted, and an additional 10% of the land area was deducted to account for road layout and design inefficiencies.. These assumptions are utilized to obtain an "order of magnitude" assessment of the potential buildup resulting from application of the AAR zone to the eligible parcels. This calculation is an obvious generalization and will be refined based upon environmental analyses conducted as part of the submission of a site-specific development application. The results of the analysis for the 31 potentially eligible parcels evaluated is shown in Table 3.4-2.

It is important to note that, due to the number of assumptions utilized in the analysis, it is likely that (1) there are eligible parcels which have not been identified and/or (2) additional parcels may become eligible prior to adoption of the proposed law. For example, since the study excludes parcels with improved structures, it does not take into account the possibility that structures may be demolished thus rendering the parcel vacant and therefore eligible. Parcels could theoretically be assembled prior to the adoption of the law. Limitations with respect to the underlying GIS data may have led to inadvertent exclusion of eligible parcels. However, because the methodology utilized identified land available to develop far in excess of the 800 units maximum provided for in the law, it was not necessary to further refine the basic assumptions.

The results of this analysis indicate there are 21 residentially zoned parcels and an additional 10 parcels which about residential zones which meet the eligibility criteria. This would allow construction of 1687 units, however, the text of the law limits the active adult unit count to a maximum of 800 units. This analysis was conducted to assess the impact of 800 units, which represents a maximum impact scenario.

There is no way to determine which of these properties will make application, be granted a zone petition and developed as active adult residential development. Site specific analysis will be required for each applicant prior to the granting of a zone petition by the Town Board.

A demographic multiplier of 1.8 was utilized to project the population of senior residential units. This multiplier is approximately half of 3.63, the multiplier used to project the population for a single family four bedroom home. Based upon the Maximum Density Bonus of 100% to properties zoned for single family residential the population impact is the same. Half of the population at twice the density produces no net gain. As discussed in Section 3.7, to assess traffic impacts the trip generation rates were compared for single family and active adult developments. Trip generation for active adult residences, during the p.m. peak hour are 0.275 trips per unit, trip generation for single family, during the p.m. peak hour are 0.9 trips per unit. Thus, the traffic impacts would be reduced for properties changed from single family to active adult, even when the maximum density bonus is applied to the AAR properties.

Properties which are zoned non-residential but abut eligible residentially zoned properties are considered eligible. In this instance, the population impact from development of these properties in Active Adult Residential represents a 100% increase in population. However, there is a significant decrease in the traffic impacts of these properties. For example a 30 acre parcel zoned LIO would generate more than 500 p.m. peak hour trips, but if zoned active adult, including the maximum density bonus would generate only 32 p.m. peak hour trips .

Eligible non-residential parcels, if granted a zone petition for Active Adult Residential use, would no longer be available for Commercial, Light Industrial or Laboratory Office development. This change should be evaluated carefully at the time the zone petition is made.

The Town of Clarkstown recognizes that the senior citizen population is largely comprised of individuals with limited or fixed incomes who, given present market conditions, find it increasingly difficult to acquire and/or maintain a single family home. The proposed Zone Amendment balances the creation of high-density residential areas, with the goal of meeting the need for construction of moderate income senior citizen dwellings. The proposed Zone Amendment calls for cluster development to mitigate environmental impacts and encourages the implementation of the AAR zone in the higher density hamlet centers, where services to support this type of development are already present.

1.3.5 Socioeconomic Conditions

The proposed zoning local law recommends the introduction of a floating zone to accommodate active adult residences (age 55 and over). Implementation of this zone would require a zone change of the Town Board. The floating zone may only land on lots of 3 acres or more in the designated zones.

Parcels of land in the Town which meet the eligibility criteria were reviewed. Using the development assumptions detailed in section 3.4, and based upon the number of eligible parcels, the AAR floating zone, including density bonuses, could result in a total build out of 1,687 age-restricted dwelling units. However, the proposed AAR Zone Amendment limits development to a maximum of 800 dwelling units of age-restricted housing. This analysis has been conducted based upon the maximum impact of 800 AAR units.

A typical age-restricted dwelling unit will have two bedrooms. It is anticipated that the average household size of an age-restricted dwelling unit would be 1.8 persons per household. It is projected that up to 1,440 persons would inhabit age-restricted developments created by implementation of the AAR zone.

In comparison, estimates of the residential development potential of all eligible parcels indicates that 614 units of single family detached residences could be built. This would result in a population of approximately 2,068 persons based upon a multiplier of 3.63 for a typical four-bedroom single family residential unit in the northeast region as published in the Urban Land Institutes Development Assessment Handbook (1994). Implementation of this floating zone would likely result in a reduction in the total population that would otherwise be introduced as a result of new non-age restricted, single-family detached housing. In addition, as mentioned previously, this development would not introduce any school age children to the community. Without the AAR zone, more than 500 school age children could be introduced.

As detailed in the text of the zoning local law amendment (Appendix C) preference is given to existing Clarkstown residents, encouraging their relocation from single family residences into active adult residential accommodations. This would create housing turnover whereby the single family residence is occupied by a new household, potentially including households with schoolchildren. It should be noted that active adults who sell their single family residences would likely do so because they desire to make a lifestyle and economic change - this would happen regardless of whether or not active adult housing is located in Clarkstown. However, the AAR zone allows these active adult households to continue to reside in the community where they have established social and family ties.

Adoption of the zoning local law amendment would result in a change to the demography of the Town's population. Implementation of the AAR zone will result in a population increase of persons 55 and older, resulting in an increase in this segment of the population. However to the extent AAR zone meets the need of active adults already living in Clarkstown, the resulting population increase would be more balanced.

Affordable Housing Impacts

The purpose and intent of the AAR zone is to provide housing to accommodate a range of independent living accommodations for active adults, i.e., persons age 55 years and older, and to create housing or provide financial resources to assist income eligible active adults to obtain or retain housing. The Town of Clarkstown recognizes that the senior citizen segment of the active adult population, i.e., senior citizens or persons 65 years of age and older, is largely comprised of individuals with limited or fixed incomes who, given present market conditions, find it increasingly difficult to acquire and/or maintain a single family home. The AAR zone requires the provision of affordable housing be integrated into age-restricted housing developments to be constructed in the community, in order to implement the affordable housing goals, policies and objectives set forth in the Town's Comprehensive Plan.

Income eligible, active adults applying for affordable units shall be selected on a first-come, first-served system utilizing the following categories of priority, in order of preference. Within each category, priority shall be based on longevity of residence:

- Clarkstown Residents;
- Parents and Children of Clarkstown Residents;
- Former Clarkstown Residents;

- Income Eligible Rockland County Residents;
- All others.

For the purpose of the AAR zoning district, the term income eligible shall mean those individuals and households with an income that does not exceed 80% of the Rockland County Median Income for a family of a certain size as determined annually by the United States Department of Housing and Urban Development.

Active adult residential developments would result in the conversion of vacant or underutilized land into residential uses. The increased market value of the project site, with these improvements, would result in an increase in the assessed value of the property. The potential to generate net property tax revenues depends on the burden placed on local community service providers. However, it is noted that these developments would place minimal to no demand on the school districts, the cost of which comprises the largest segment of a Town resident's tax bill. The project would likely place demand on such services as police and fire protection, ambulance service, and senior citizen facilities and centers.

According to the Town Tax Assessor, the affordable units would be assessed at the affordable market price, thus preserving the affordability with regard to taxes. This would result in reduced tax revenue to the various taxing districts when compared to the sales price of a market rate unit. However, since the provision of affordable housing is concurrent with the provision of density bonuses, the increased tax revenue from the higher unit count will compensate for the lower taxes generated by the affordable units.

While the Town's demography may change, this is not considered an adverse demographic impact, as there is a demonstrated need for active adult housing in the Town of Clarkstown. Thus, no adverse impacts are anticipated from adoption of the AAR Zone Amendment.

1.3.6 Community Facilities

A typical age-restricted dwelling unit design would consist of either single-family detached patio home, single-family attached town homes, or multifamily dwellings. Although the Zone Amendment allows for units with up to three bedrooms, typical units for this market have two bedrooms. Based upon the active adult nature of this population, including the restrictions with regard to children, a demographic multiplier of 1.8 persons per unit was used for this analysis. It is anticipated that implementation of the AAR Zone Amendment would result in a projected population increase of 1,440 persons occupying these age-restricted dwellings.

In comparison, in accordance with the existing zoning, the development potential of 614 single family detached residences would result in a potential population of 2,068 persons, based upon a multiplier of 3.63 for a four bedroom single family residential unit in the northeast region, as published in the Development Assessment Handbook, Urban Land Institute. (1994). Accordingly, under the AAR Zone scenario, a reduction of 628 persons is anticipated.

Police Protection

The Police Department 2005 Annual Report indicates that the Town of Clarkstown was ranked as the fifth safest community in the nation and the second safest community of its size. The Police Department, the Police Commission, and the Town government officials are committed to providing the citizens of the Town of Clarkstown with professional service.

Based on planning standards in the Development Impact Assessment Handbook published by the Urban Land Institute (1994), standard factors for police protection recommend two (2) police personnel per 1,000 persons which further breaks down to 1.5 police personnel per 1,000 persons for residential uses and 0.5 police personnel per 1,000 persons for non-residential uses. Based on this standard, 1,440 persons would increase police staffing needs by about 2 police officers. By comparison, build out of all eligible parcels under the existing zoning would result in an estimated increase in population of 2,068 persons. This would result in increased police staffing needs by more than 3 officers. This does not include the demand created by any non-residential uses introduced in the non-residential zones that could result under the existing zoning law. The additional tax revenue generated by the active adult residential development would help to support this increase. The Clarkstown Police Department will review site/subdivision plans at the time of site specific request for a zone petition.

Fire Protection

Based on planning standards published in the Development Impact Assessment Handbook, approximately 1.65 fire department personnel per 1,000 population is recommended to provide adequate fire protection service. Up to 1,440 new residents would generate demand for an additional 2.4 fire department personnel. By comparison, The projected population of 2,068 persons under existing zoning would result in increased fire protection needs by 3.4 officers. This also does not include the demand created by any non-residential uses introduced in the non-residential zones that could result under the existing zoning law. Development of the active adult residential properties will generate annual property tax revenues to the fire district to offset the additional demand. Since the various parcels are located throughout the Town, and since the Town is divided among seven (7) fire districts, it is not anticipated the burden will fall on any one fire district. Site specific analysis will include detailed fiscal analysis to confirm these projections. The Fire Department will review site/subdivision plans at the time of site specific request for a zone petition for fire code compliance and adequate accessibility for fire emergency vehicles.

Ambulance & Health Services

Based on planning standards published in the Development Impact Assessment Handbook, approximately 36.5 calls per 1,000 population are made annually. Based on this standard, the additional 1,440 residents would increase EMS calls by approximately 50 calls annually, on average. Distributed among the five ambulance providers, this represents an average of 10 additional calls annually to any one ambulance provider. By comparison, the projected population of 2068 persons under existing zoning could be expected to increase the number of EMS calls by more than 75 calls.

Based on planning standards contained in the Development Impact Assessment Handbook, four (4.0) hospital beds should be provided per 1,000 persons. Based on this standard, the projected population increase associated with proposed zoning amendment has the potential to increase the need for beds in hospitals serving the Town of Clarkstown area by approximately 0.57 beds. It is not anticipated this will be a significant impact.

The eligible parcels are distributed throughout the Town, thus reducing the potential impact to any one EMS provider. The impact to Emergency Service Workers will be fully evaluated as part of site specific analysis.

Schools

Based upon the intent of the zone amendment, (i.e., to limit development to households with persons ages 55 years and older), it is anticipated that minimal to no school age children would be introduced by an AAR development. Property tax revenues generated to the school districts as a result of construction would likely be "net" revenue.

There are four school districts in the Town of Clarkstown. The following list shows the distribution of eligible parcels among the four school districts:

- Clarkstown Central School District -
Parcel Numbers 1,2,3,5,7,8,12,13,14,15,18,21,22,26,27,28,29,31
- Nanuet Union Free School District -
Parcel Numbers 9,11,19,20,25,30
- Nyack Union Free School District -
Parcel Numbers 6,10,16,23,24
- East Ramapo Central School District -
Parcel Numbers 4,17

The greatest number of eligible parcels are located within the Clarkstown Central School District, however these parcels have a wide distribution based upon the large area the district covers. The largest acreage of eligible property is located within the Nanuet Union Free School District, located in the southwest portion of the Town. The impact to any one school district will be evaluated at the time of site specific application and zone petition.

1.3.7 Transportation

A site specific traffic study should accompany any substantial zone petition for the AAR Zone. At the time a site-specific traffic study is prepared, such study would take into account traffic to be generated as well as traffic anticipated from other area developments as part of any analysis.

The Comprehensive Plan Update makes numerous recommendations for improvements to the Town's road system. Specifically, the plan calls for reducing the road right of way width to coincide with the 30 foot of pavement width. Where additional rights of way have been acquired, it may, in some cases be appropriate to utilize this right of way for sidewalk or bikeway connections, particularly leading to hamlet centers, schools, parks, places of worship and community services.

The Comprehensive Plan Update also identifies intersections which should be monitored for capacity or safety improvements - these intersections are listed below: Any development in the vicinity of the listed intersections should conduct a complete traffic capacity analysis.

- PIP Exit 10 at Middletown/Germonds/W. Clarkstown Road New City
- Germonds Road at Route 304, New City
- North Main Street - Congers Lake Road, New City
- Lake Road and Route 303, Valley Cottage
- Lake Ridge Shopping Center, Valley Cottage
- Middletown Road - Route 59 to Church Street, Nanuet
- Middletown Road and Church Street, Nanuet
- Smith Street between Route 59 and Route 304 Southbound Ramps, Nanuet
- College Avenue and Church Street, Nanuet.

Trip Generation and Distribution

The proposed AAR Zone Amendment could introduce up to 800 units of new dwellings. These units are likely to be a combination of multifamily dwellings, townhouse and small single family patio homes. Potential trip generation has been calculated for both active adult senior units, traditional single family units, and General Office Space to provide a comparison of the potential trip generation. Tables 3.7-7 and 3.7-8 show the projected trip generation rates and total trips generated using the Institute of Transportation Engineers (ITE)'s Trip Generation. Since the location of the potential sites is distributed throughout the Town, distribution of this potential traffic would be dispersed town wide. Trip generation for eligible AAR parcels was calculated using the ITE Land use code 251 Senior Adult Housing, since these rates are specific to senior citizen housing.

It should be noted that the peak hour for Senior Adult Housing generally does not coincide with the peak hour of adjacent street traffic. The a.m. peak hour occurs between 10 a.m. and 12 noon. The p.m. peak hour occurs between 1 p.m. and 6 p.m. This would minimize the impacts of Active Adult trip generated traffic on local area roads during the peak hours.

An assessment of traffic impacts compared the trip generation rates for single family, Senior Adult Housing, and General Office. Trip generation for Senior Adult residences, during the p.m. peak hour are 0.275 trips per unit, trip generation for single family, during the p.m. peak hour are 0.9 trips per unit and trip generation for Office is 1.49 trips per 1,000 square feet of space. Thus, implementation of the proposed Active Adult residential zone will result in a reduction of p.m. peak hour trips when compared with the 614 units of single family development and the 1,698,500 square feet of office under the existing development potential.

Properties which are zoned non-residential but abut eligible residentially zoned properties are considered eligible for Active Adult residential use. There is a significant decrease in the traffic impacts of non-residentially zoned properties that are developed for an age-restricted development. For example a 30 acre parcel zoned LIO, would generate more than 500 p.m. peak hour trips if developed for office use, but only generate 32 p.m. peak hour trips if developed as senior adult housing.

Public Transit

Public transit is provided by the Transport of Rockland (TOR) and available throughout the town. A review of the current bus routes indicates that service is available in each of the hamlet centers. Transit service is provided where a current ridership need exists.

Where there is no public transportation available in the vicinity of an eligible parcel, the applicant would be required to show that accommodations would be made to address this need at the time a zone petition was requested. This is typical of transit planning where routes are adjusted based upon the location of new ridership. The following list shows the type of public transit currently available to the eligible properties.

- Transport of Rockland Service is available to parcels; 3,17,21,23,26, 27,28 and 31.
- Rockland Coaches Transit Service is available to parcels; 2,5,6,7,8,13 and 16.
- Clarkstown Mini Trans Service is available to parcels; 1,4,10,15,18 and 24.
- No Service Currently Available; 6,9,11,12,14,19,20,22,25, 29 and 30.

The availability of public transit is important, especially for an aging population. Increased public transit usage would result in positive impacts to the roadway network by decreasing reliance on automobile use. The availability of increased public transit for active adults could encourage increased ridership for the general population town wide.

1.4 Alternatives

This DGEIS considers two alternatives: the No Action alternative, and development of the eligible parcels As-of-Right under the Existing Zoning.

1.4.1 No Action Alternative

The No Action Alternative is the scenario that would occur if no action were taken, if none of the eligible parcels were to be developed. Under this scenario vacant land would remain vacant and underutilized properties would remain as is. Under the No-action alternative, none of the impacts identified in this report, whether adverse or beneficial, would occur.

1.4.2 Existing Zoning - Development As-of-Right

Under the Existing Zoning Alternative, land use and development would continue to be influenced by the existing zoning local law. The existing zoning does not provide a specific zone for active adult communities. The present zoning does not reflect the recommendations of the Town of Clarkstown Comprehensive Plan, nor the recommendations of the Final Report of the Citizens Advisory Board for Housing in the Town of Clarkstown.

Without adoption and implementation of the proposed zoning amendment, many of the public needs and purposes identified in Chapter I of this DGEIS will remain unserved and the public benefits will not be realized.

As shown in Table 3.4-2, development under the existing zoning would allow 614 residential units to be built including no senior citizen housing and providing no affordable housing. Population projections for these 614 units are estimated at with a population projection of 2068 persons compared to the 1440 persons projected from the AAR zone implementation. In addition, without the AAR zone, more than 500 schoolage children could be introduced. Traffic generation

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projections indicate p.m. peak hour traffic generation under existing zoning to be 3066 trips. Trip generation rates for active adult housing are less than one third the rates for single family housing.

Development of the eligible parcels as active adult senior residential will result in a reduced population and a significant reduction in traffic impacts. Additionally, the effect of clustering the AAR development will further reduce environmental impacts.

Adoption of an unmapped floating zone amendment, which stipulates specific conditions, available as a discretionary zone petition to be issued by the Town Board, after a comprehensive site specific review, allows for implementation of this zone in various areas throughout the Town on a case by case basis. This method of implementation allows for the greatest degree of local control over implementation of the Zone Amendment disbursing the potential for impacts town wide while meeting the goals and objectives of the Town of Clarkstown Comprehensive Plan, and the recommendations of the Final Report of the Citizens Advisory Board for Housing in the Town of Clarkstown with regard to senior citizen housing.

2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 Introduction and Project History

2.1.1 Background - Active Adult Residential Floating Zone

The Town of Clarkstown is considering a "Zoning Amendment" that would provide housing to accommodate a range of independent living accommodations for active adults and would create housing or provide financial resources to assist income eligible active adults to obtain or retain housing. The Town of Clarkstown recognizes that the senior citizen population is largely comprised of individuals with limited or fixed incomes who, given present market conditions, find it increasingly difficult to acquire and/or maintain a single family home. The Active Adult Residential (AAR) zone is intended to require the provision of affordable housing as a portion of age-restricted housing development in the community, and to implement the affordable housing goals, policies and objectives set forth in the Town's Comprehensive Plan.

The AAR Zone is intended to address a range of housing needs by encouraging a range of housing types, locations and sizes. This zone is intended for areas of the Town where local services necessary to support active adults are immediately available. It is the intent that complexes within the zone be clustered so as to minimize the impact on the environment. A proposed active adult community must be compatible with the existing scale of development nearby and be consistent with the recommendations of the Housing Advisory Board report and the Town Development Plan as adopted by the Clarkstown Planning Board on August 16, 1966, and the Comprehensive Plan Update as adopted by the Planning Board and Ad-Hoc Committee on June 30, 1999, and adopted by the Town Board on September 28, 1999. This local law is enacted in accordance with the provisions of §261-b and § 272-a of the Town Law of the State of New York.

2.1.2 Background - Citizens Advisory Board for Housing - Town of Clarkstown

In order to explore housing conditions in Clarkstown, the Town Board created the Citizens Advisory Board for Housing ("Advisory Board"). The charge was to evaluate the housing stock and to make recommendations relative to needs, bearing in mind that all of the citizenry was to be considered in the evaluation. The Advisory Board published its Final Report in September 2002, included as Appendix B. The study concluded that Town residents tend to remain longer than national averages suggest. The study also states that Clarkstown, located in the lower Hudson Valley and within reasonable commuting distance to Manhattan, Westchester and Bergen counties, is a very attractive place in which to live. However, it is becoming increasingly difficult for seniors and young people to remain in the community.

The Advisory Board conducted a senior survey to compile data that expressed the concerns of Clarkstown residents over age 60. This survey is contained in the final report. The final report lists the following conclusions:

- The overwhelming number of seniors either prefer to retire in their current homes or have already retired in their current homes. Some are concerned that they may be forced to move due to financial constraints, but they would prefer to stay where they are.

- Many seniors feel the best way to satisfy this desire to stay in their home would be to lower property taxes, particularly school taxes.
- A significant number of seniors indicated they would consider accessory housing as a way to remain in their homes.
- A significant number of seniors who are considering a move, indicate they would be willing to pay a maximum of \$100,000 to \$150,000 to purchase a new home. This is well below market rates and would only be possible with significant subsidies requiring income qualifications.

2.1.3 SEQRA

In accordance with New York State Town Law, the Town Board of the Town of Clarkstown is responsible for adopting the proposed "Zoning Amendment". The Clarkstown Town Board has assumed the role of Lead Agency. The Lead Agency is primarily responsible for ensuring that the environmental impacts associated with the proposed action are considered.

As per the regulations implementing the State Environmental Quality Review Act (SEQRA), the Town Board has required that a draft generic environmental impact statement (DGEIS) be prepared. Section 617.10 of the regulations implementing SEQRA allows a Lead Agency to prepare a "generic" environmental impact statement (GEIS). GEISs are broader and more general than site-specific EISs. They allow a Lead Agency to evaluate the environmental impacts associated with *"an entire program or plan having wide application or restricting the range of future alternative policies and projects, including new or significant changes to existing land use plans, development plans, zoning regulations..."*

This DGEIS is intended to identify existing conditions, anticipate potential impacts from implementation of the action and propose mitigation measures, if necessary, to reduce or eliminate impacts.

2.2 Reviews and Approvals

Adoption of the Zoning amendment requires the following reviews and approvals: Copies of the DGEIS have been sent to:

Involved Agencies

- Clarkstown Town Board – Adoption of Zoning Local Law Amendment
- Rockland County Planning Department – 239-GML Review of the proposed Zoning Local Law Amendment.

Interested Agencies

In addition to the involved agencies a Notice of Completion of the DGEIS and/or a copy of the DGEIS will be sent to the following interested agencies:

Clarkstown Town Clerk
Clarkstown Town Attorney

Clarkstown Department of Environmental Control
Clarkstown Department of Planning
Clarkstown Building Department
Clarkstown Planning Board
Clarkstown Zoning Board of Appeals
Town of Haverstraw Town Board
Town of Ramapo Town Board
Town of Orangetown Town Board
Village of Upper Nyack Village Board
Village of Nyack Village Board
Village of Spring Valley
Village of South Nyack Village Board - Notice Only
New York State DEC, Region 3 - Notice Only
New York State DOT, Region 8 - Notice Only
New York State Thruway Authority - Notice Only
Palisades Interstate Park Commission - Notice Only
Federal Emergency Management Agency - Notice Only
US Army Corps. of Engineers - Notice Only
Rockland County Drainage Agency
Rockland County Department of Highways - Notice Only
Rockland County Sewer District Number 1
Rockland County Department of Health
Clarkstown Central School District - Notice Only
Nyack Union Free School District - Notice Only
Nanuet Union Free Central School District - Notice Only
East Ramapo Central School District - Notice Only

2.3 Proposed Action

Adoption of the Zoning Amendment will provide a floating zone intended to allow the construction of housing for active adults in a manner that is consistent with the Town's Comprehensive Plan Update and the Goals of the Citizens Advisory Board for Housing in the Town of Clarkstown.

The purpose, needs and benefits of the proposed action can be summarized generally by the objectives outlined in the Zoning Amendment.

The specific objectives of the Active Adult Residential Floating zone are:

- ♦To provide affordable housing for those senior citizens living on fixed or limited incomes in order to give such residents the opportunity to remain in the community close to family and friends;
- ♦To provide appropriate sites for the development of such housing in locations convenient to social and medical facilities, retail shops, public transportation and other necessary services;
- ♦To provide, within the boundary of the development, appropriate social, recreation and other facilities which will contribute to the independence and meaningful activity of senior citizens;

- ◆To provide for the safety and convenience of residents through site design and housing unit design requirements which consider the special physical constraints of the elderly and the physical characteristics of the design site;
- ◆To regulate the nature and density of senior citizen housing developments, their site layout and design, and their relationship to adjoining uses, so as to provide ample outdoor living and open space for residents and to minimize detrimental effects on the surrounding neighborhood and environment.

- ◆In approving a zone petition for rezoning to an Active Adult Residence Zone, the Town Board may, in its discretion, grant up to the following maximum Density Bonuses:

- ◆In R-22, R-15 and R-10 zones, the Maximum Density Bonus is equal to 100% of the Maximum Residential Density, provided that 20% of the additional units permitted as a result of the Density Bonus shall constitute Affordable Units.

- ◆In MF-1, MF-2 and MF-3 zones, the Maximum Density Bonus is equal to 20% of the Maximum Residential Density, provided that 50% of the additional units permitted as a result of the Density Bonus shall constitute Affordable Units.

- ◆For non-residential zones, the Maximum Residential Density shall be calculated by applying the zoning district of abutting residential parcels, and calculating a theoretical unit count based upon a standard subdivision map. For non-residential parcels that abut more than one residentially zoned parcel, the Maximum Residential Density shall be calculated by applying the zoning district of the residential parcel with the greatest percentage of property abutting the subject property. For non-residential zones abutting R-22, R-15 and R-10 zones, the maximum Density Bonus is equal to 100% of the Maximum Residential Density, provided that 20% of the additional units permitted as a result of the Density Bonus shall constitute Affordable Units. For non-residential zones abutting MF-1, MF-2 and MF-3 zones, the maximum Density Bonus is equal to 20% of the Maximum Residential Density, provided that 50% of the additional units permitted as a result of the Density Bonus shall constitute Affordable Units.

- ◆The Town Board may, in its discretion, grant less than the maximum Density Bonus with a corresponding pro-rata reduction in the number of required Affordable Units.

The Zoning Amendment is intended to effectuate these purposes. The full text of the Zoning Amendment is included as Appendix C.

The purpose of granting the Maximum Density Bonus is to require the provision of affordable housing as a component of development. Based upon the recommendations of the Housing Action Council (Appendix E), the buyout amounts were established with the goal of encouraging affordable units to be actually constructed.

2.4 Project Location

The Town of Clarkstown is located within Rockland County, New York. Rockland County is located on the west side of the Hudson River in the lower Hudson Valley region. This 40 square mile community is located in the central and easterly portion of the County. Clarkstown is bounded by the Hudson River and the Villages of Upper Nyack, Nyack and South Nyack to the East. Clarkstown adjoins the Town of Orangetown to the south, the Town of Haverstraw to the north, the Town of Ramapo and the Village of Spring Valley to the west. The New York State Thruway (I-87/I-287) traverses the southern portion of the Town in an east-west direction. Figure 2-1 illustrates the regional location of the Town of Clarkstown. The AAR zone would apply to the unincorporated areas of the Town of Clarkstown.

2.5 Land Use

The most fundamental effect of the zoning text amendment is the change in existing land use and intensity of development that would result from implementation of the active adult residential zone.

2.5.1 Existing Land Use

The Town encompasses approximately 40 square miles, of which more than 80 percent is already developed. The Town of Clarkstown has a concentration of lakes, most notably Lake DeForest which provides 30 percent of the water supply for Rockland County. The Town has recently initiated Hamlet Center initiatives to promote activity in the existing hamlet centers. Table 2-1 categorizes land uses by lot count within Clarkstown. Existing Land Use is shown in Figure 3.4-1 (see also large scale Map 1).

Table 2-1 Existing Land Use	
General Land Use Category	Number of Parcels
Agricultural Properties	16
Residential Properties	24,994
Vacant land	743
Commercial Properties	1093
Recreation and Entertainment	98
Community Service Properties	240
Industrial Properties	41
Public Service Properties	345
Public Parks, Forested & Conservation Properties	158
TOTAL PARCELS	27,728
Source: NYS Office of Real Property, 2006.	

2.5.2 Parcels Eligible for AAR Zone Designation

The AAR zone is a floating zone, unmapped at initial adoption, and created by amendment to the Town's zoning map through exercise of the Town Board per the procedures set forth in the Zoning Amendment. The Town Board could have full discretion regarding any petition to rezone a site to the AAR zone. The total aggregate number of units allowable in AAR

zones is limited to 800 units. The Town Board could, by resolution, increase the total aggregate number of units allowable in AAR zones (refer to Appendix D).

In order to determine which parcels may be eligible for the AAR zone, a review of the Rockland County GIS data for the Town of Clarkstown was conducted. The Zone Amendment specifically excludes land in the following zoning categories from being eligible for AAR designation, R-160, R-80, R-40, MRS, RS, PED, and M.

All other zones were analyzed to determine a list of potentially eligible parcels. The following criteria were used:

- Parcels which are three (3) acres or larger , Assemblage of properties or parcels not in the same ownership at the time of adoption of this Local Law so as to meet minimum acreage requirements is prohibited.
- Any parcel that may be designated as AAR must be proximate to public transportation, shopping, community and commercial services.
- Properties that are developed for multi-family use at the time of adoption of this amendment are not eligible for redevelopment in the AAR zone.
- All zones shall be eligible hosts for the floating zone except: R-160, R-80, R-40, MRS, RS and M, where the uses provided herein are prohibited. Joint applications for a zone change and AAR designation are prohibited.
- Only non-residential parcels which abut residential districts that are eligible hosts for the floating zone are eligible for floating zone designation.

All vacant parcels, three acres or more were included in the eligible inventory. Review of the parcels by the Town Planning department indicated there are pending site plan applications before the Planning Board on several of these parcels. Since these parcels meet the eligibility criteria they have been included to allow the applicant to file an amended site plan if desired.

A review of under utilized parcels larger than three acres identified a number of parcels that are developed in single family residential which would not be likely candidates for the AAR zone since they are either developed to the maximum extent practical or are environmentally constrained. Based upon this review underutilized parcels less than 6 acres in size have not been included in the analysis. Public utility parcels have also not been included in the analysis.

The results of this analysis indicate there are thirty one (31) privately-owned vacant or underutilized parcels in the Town which may be eligible. The location of these parcels have been shown in Figure 2-2, AAR Zone Eligible Parcels.

It is important to note that, due to the number of assumptions utilized in the analysis, it is likely that (1) there are eligible parcels which have not been identified and/or (2) additional parcels may become eligible prior to adoption of the proposed law. For example, since the study excludes parcels with improved structures, it does not take into account the possibility that structures may be demolished thus rendering the parcel vacant and therefore eligible. Parcels could theoretically be assembled prior to the adoption of the law. Limitations with respect to the underlying GIS data may have led to inadvertent exclusion of eligible parcels.

However, because the methodology utilized identified land available to develop far in excess of the 800 units maximum provided for in the law, it was not necessary to further refine the basic assumptions.

The results of this analysis indicate there are 21 residentially zoned parcels and an additional 10 parcels which abut residential zones which meet the eligibility criteria. These parcels have been shown in Figure 2-2 AAR Zone Eligible Parcels, and are listed in Table 2-2.

Table 2-2			
Parcels Eligible for Active Adult Residential Zoning			
<i>Parcel No.</i>	<i>Name</i>	<i>Existing Zoning</i>	<i>Total Acres</i>
1	34.17-1-1	R-22/R-80/R-40	61.1/0/0
2	43.07-1-16	R-15	30.0
3	43.14-3-48	R-15	4.1
4	50.12-1-26	R-15/R-40	14 /1.6
5	51.06-3-1	R-15	12.6
6	52.20-1-20	R-22	6 of 11.4
7	53.13-2-22	MF-1	3.0
8	53.13-2-26	MF-1	3.0
9	57.2-1-45	R-15	4.3
10	59.2-1-3,4 & 5	R-22	10.4
11	63.15-1-43	R-22	53.6
12	35.18-1-4	R-22/R/80	71.0
13	43.07-1-2.3	R-22	5.1
14	44.07-2-17	R-15/LIO	8.0/0
15	51.09-1-50	R-22	17.7
16	52.16-1-74	R-22	20 of 39.0
17	57.14-3-2	MF-2	12.4
18	58.07-1-86	R-22	6 of 9.2
19	63.07-2-51	R-15	6.0
20	63.11-2-2	R-15	10.5
21	65.11-1-5	R-22	5 of 10.3
22	44.08-1-7	LIO-abuts R-15	9.0
23	52.15-1-4	LIO-abuts R-15	3.2
24	52.19-1-1	LIO/R-15	16.9
25	63.16-1-1	LO/R-15	14.9
26	64.07-1-9.2	LO-abuts R-15	8.4
27	64.08-3-7.3	LO/R-15	8.0/1.3
28	43.11-2-2 & 3 43.07-1-24 & 25	PO-abuts MF-3	4.8
29	35.20-1-5	LIO-abuts MF-2	6.2
30	63.15-1-44	LO/LIO abuts R-22	75.1
31	64.07-1-8	LO/R-15	4.0/3.4

3.0 ENVIRONMENTAL SETTING, POTENTIAL IMPACTS AND MITIGATION

3.1 Geology, Topography and Soils

3.1.1 Existing Conditions

Geology

Clarkstown is located within both the Triassic Lowland and the Manhattan Prong, both a part of the New England Upland physiographic province. The majority of the Town of Clarkstown is underlain by the Brunswick Formation, however a small part of the eastern portion of the Town of Clarkstown is underlain by the Palisades Diabase both are part of the Newark Group. The Brunswick formation is primarily made up of sandstone, siltstone, mudstone and conglomerate. Sandstone, siltstone and mudstone are all sedimentary rocks with different size rock grains from fine-grains (mudstone), intermediate size grains (siltstone), to a coarser sand size grain. Conglomerates are also sedimentary rocks consisting of individual stones and round fragments, cemented together and are characterized by clasts, or grains/pebbles, larger than sand.

Topography

Within Clarkstown, topography ranges from flat valleys to steeply sloping hillsides. The ridges of hilltops primarily run north to south through the Town. Elevations range from sea level along the Hudson River to areas of 600 feet above mean sea level (msl) along different hilltops through the Town. Topography at 50' contours is shown in Figure 3.1-1, Environmental Conditions.

Soils

The Soil Conservation Service (SCS) of the United States Department of Agriculture has categorized soils according to their properties and ability to support certain activities and land uses. Mapping units (soils with similar characteristics), are categorized based on an area's suitability for various activities, such as woodland management, recreation, wildlife habitat, and development.

The Town of Clarkstown is predominately underlain by two soil types: Wethersfield and Wethersfield-Urban land complex. These two soil units are predominately shown on the soil survey map supplied by the United States Department of Agriculture Soil Conservation Service Soil Survey of Rockland County except in the southwest corner of the Town in which the Holyoke-Rock outcrop soil is most predominate. Characteristics of these three (3) soil types are described below.

Wethersfield, gravelly silt loam (WeA, WeB, WeC, WeD)

This soil unit is very deep and well drained. Slopes range from 0 percent to 3 percent (WeA), 3 percent to 8 percent (WeB), 8 percent to 15 percent (WeC), and 15 percent to 25 percent (WeD). The different ranges coincide with the A, B, C or D designation that follow the soils abbreviation (We). Permeability is moderate in the surface layer and subsoil and slow or very slow in the substratum. The water table is found 1.5 to 2.5 feet below the ground surface from February to April and the water capacity is considered moderate. The depth to bedrock

is found less than 60 inches below the ground surface. This soil type is not considered to be a hydric soil by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

Wethersfield-Urban land complex (WuB, WuC, WuD)

This soil complex consists of very deep and well drained Wethersfield soils as well as area covered by buildings, streets, and other impervious structures. The areas of urban land and Wethersfield soils are so mixed that they can not be mapped separately. The characteristics of this complex and the above Wethersfield (We) soil unit are very similar. The difference lies in the coverage of urban development and the slope ranges. Slopes range from 2 percent to 8 percent (WuB), 8 percent to 15 percent (WuC) and 15 percent to 25 percent (WuD). This soil complex is not considered a hydric soil by the USDA NRCS.

Holyoke-Rock outcrop, complex (HoC, HoD, HoF)

This soil complex consists of shallow, well drained or somewhat excessively drained Holyoke soils as well as exposed bedrock that appear commonly as ledges. It consists of a percentage of Holyoke soils, rock outcrops, and other soils. The percentages, like the slope ranges, coincide with the C, D, and F designations. The HoC complex consists of 60 percent of Holyoke soils, 15 percent rock outcrop, and 25 percent other soils, and has a slope range of 3 percent to 15 percent. The HoD complex consists of 55 percent Holyoke soils, 20 percent rock outcrop, and 25 percent other soils, and has a slopes range of 15 percent to 25 percent. The HoF complex consists of 45 percent Holyoke soils, 30 percent rock outcrop, and 25 percent other soils, and has a slopes range of 25 percent to 50 percent. The permeability is moderate throughout. The water table is found at more than 6 feet below the ground surface with the available water capacity being very low. The bedrock can be found 10 to 20 inches below the ground surface. This soil complex is not considered to be hydric by the USDA NRCS.

The Soil Survey for Rockland County categorizes soils according to their ability to support site development. Limitations to development are categorized from slight to moderate to severe. Restrictions may include slopes, wetness, depth to rock and perc rates. Most of the developed areas of Clarkstown overlay areas with limitations for development with the limitations being moderate or slight with only some considered severe along soils the steeper slope soil types.

3.1.2 Potential Impacts

Geology

Based on their environmental sensitivity, areas with challenging geology, including the Palisades Ridge have already been excluded from consideration as eligible parcels.

The geology of the Town is not restrictive with regard to potential construction. The existing zoning regulations with regard to construction and noise limitations still apply. In the event that blasting is required, site specific blasting plans will be developed. These blasting plans will meet all New York State requirements and Chapter 220 of the Code of the Town of Clarkstown which regulates blasting activity. The use of proper blasting techniques minimizes the potential effects of blasting to nearby properties.

Site specific analysis will be conducted as a requirement for requesting a zone petition necessary to implement the active adult zone.

Topography

The steepest areas of the Town are part of the Hudson Highlands located along the Palisades Ridge. This area is part of the R-160 Conservation Density Residence Zone. These properties have been excluded as eligible hosts to the AAR zone based upon their environmental sensitivity.

Excluding the Palisades Ridge, the overall topography of the remainder of the Town, as shown by the 50 foot contours shown on Figure 3.1-1, Environmental Conditions, is relatively flat. However, areas of steep slope are contained on individual properties. Per the existing site plan regulations, site specific analysis must indicate areas of steep slope in the following categories 0% to 10% , 10% to 15%, 15% to 30%, 30% to 50% and areas over 50%.

The existing zoning regulations requires that, "for land containing slopes of 30% to 50%, a reduction of 50% of the buildable land area within the steep slope shall be taken. No portion of the land area of that portion of a lot with slopes in excess of 50% may be counted as part of the buildable land area."

The primary consideration with regard to steep slopes is the potential for erosion. As a result of soil and slope disturbance, there is an increased potential for siltation to occur in areas downgradient of the site. The control of stormwater runoff during construction will be important to minimize construction-related soil erosion and sediment impacts. With proper construction, installation and maintenance, soil erosion control measures will minimize potential off-site impacts.

Soils

The Town of Clarkstown is predominately underlain by two soil types: Wethersfield and Wethersfield-Urban land complex. These predominate soils have a severe limitation for percolation rates in septic fields, however all eligible parcels are part of the Rockland County Sewer District, thus soil percolation limitations will not cause a significant environmental impact since no septic fields will need to be constructed. All eligible parcels are located within the Rockland County Sewer District which further eliminates potential soils impacts.

Soils can be undermined and can erode as a result of improper or lack of stabilization and control during and after construction activities. This occurs especially after rain events, where rainfall can erode wet soils. To address potential soil erosion, the zoning local law regulates land development activities to ensure proper stormwater management including the NYSDEC "zero net increase in stormwater runoff" stipulations. As a result of the policies and regulations which are in place and in consideration of the fact that all eligible parcels reviewed are located within the Rockland County Sewer District, it is not anticipated that there would be any significant impacts resulting from the adoption of the zoning local law amendment.

As the time of site specific request for zone petition, site specific Storm Water Pollution Prevention Plans will be required to demonstrate there will be no site specific impacts related to storm water.

3.1.3 Mitigation Measures

No mitigation measures are proposed specific to the zone amendment. However, at the time of site-specific zone petitions and development applications are submitted, site-specific mitigation measures may be required.

3.2 Water Resources

3.2.1 Existing Conditions

Groundwater-Water Supply

The provision of an adequate supply of safe drinking water and the treatment of sanitary waste are critical environmental issues which relate to residential development within the Town and the County as a whole. Rockland County is unique in that all of the drinking water comes from within the County.¹

United Water New York is a private municipal water company which serves the Town of Clarkstown. Water is derived from 53 drilled wells, from Lake DeForest, located within Clarkstown and from the Letchworth Reservoirs. On average about 43 inches of rain fall each year in the Hackensack River watershed, the source of the water supply. Water service is provided to more than 267,000 people in most of Rockland County. About 70 percent of the water is derived from wells located throughout Rockland County and 30 percent is supplied directly from the Lake DeForest and Letchworth reservoirs.

Ground water filters naturally through the layers of the earth. It is then stored in deep porous rocks known as aquifers. Water in Rockland County is stored in the Ramapo-Mahwah Aquifer. The Ramapo-Mahwah Aquifer is a valley-fill aquifer composed of unconsolidated sand and gravel with some silt and clay. This aquifer is part of the Ramapo River Basin Aquifer System, which underlies most of the central and eastern portions of Rockland County. The Ramapo River Basin Aquifer System was designated a sole-source aquifer by the United States Environmental Protection Agency (USEPA).

The Safe Drinking Water Act (SDWA), Public Law 93-523, of December 16, 1974 contains a provision in Section 1424(e), which states that:

“If the Administrator [of the USEPA] determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create significant hazard to public health, he shall publish notice of that determination in the Federal Register. After the publication of any such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health, but a commitment for Federal financial assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer.”

The Ramapo River Basin Aquifer has been determined to be hydraulically connected to the Ramapo River. Thus, this aquifer is directly affected by surface water. Pumping of the groundwater could result in a lowering of the river's water elevation. This direct connection indicates that the water quality of the river could also directly affect the water quality of the groundwater on which the Town and County depend.

¹ Living on the Watershed, Rockland County

Surface Water

Surface water is present in reservoirs, rivers, lakes and streams. The Town of Clarks town is primarily located within the Hackensack River watershed. Minor watersheds within the Town drain either to the Saddle River or to the Hudson River. Lake DeForest is a man made lake that was created by excavating wetlands of the upper Hackensack River and is now the largest surface water feature in the Town. Lake DeForest receives streamflows from much of the northern sections of the Town. The Hackensack River flows southward into New Jersey and ultimately discharges, along with the Passaic River, into Newark Bay. The Bay is part of the Upper New York Harbor system, an inshore extension of the Atlantic Ocean.

Watercourses and Wetlands

Water Courses and NYSDEC wetlands located within the Town of Clarks town are shown on Map 4, Environmental Conditions. Watercourses and wetlands serve numerous functions, including but not limited to:

- pollutant removal from surface waters by trapping sediment, removing nutrients and detoxifying chemicals;
- ground water recharge, including aquifers, and surface waters, thereby maintaining stream flows needed by plants and animals to survive;
- flood control by storing and then slowly releasing storm water runoff;
- shoreline stabilization by preventing erosion caused by stream flow;
- provision of aquatic habitat, including species on New York or federal lists of special concern, threatened, rare and endangered species;
- open space and visual relief from intense development in developing areas;
- recreational opportunities, including fishing, hunting, nature study, hiking and wildlife watching; and
- outdoor laboratories and living classrooms for the study and application of biological, natural and physical sciences.

The United States Army Corps of Engineers (ACOE) has federal jurisdiction over activities that occur within or impact wetlands. The Corps' official definition of a wetland is:

Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

The United States Fish and Wildlife Service (FWS) is responsible for preparing the National Wetlands Inventory (NWI) maps which establish potential locations for wetlands. There may be other wetlands present in the Town which can only be determined through site-specific surveys. The FWS defines wetlands as:

Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water . . . Wetlands must have one or more of the following three attributes: (1) at

least periodically, the land supports predominantly hydrophytes [plants that live in aquatic habitats], (2) the substrate is predominantly undrained hydric soil, and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

In New York State, the NYSDEC regulates wetlands 12.4 acres or larger. The NYSDEC has prepared maps indicating the approximate location of wetland boundaries. These boundaries are approximate and are verified through field delineation. The NYSDEC defines wetlands as:

Wetland means those areas of the state that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support the growth of hydrophytic vegetation. They include the lands and water of the state that support a preponderance of hydrophytic vegetation and also support other wetlands indicators [hydrophytic vegetation, hydric soils, and wetland hydrology].

State wetlands are classified I, II, III and IV depending on the prevalence of one or more of 43 wetland characteristics. While all wetlands have value, Class I and II wetlands are generally considered more valuable than Class III and IV wetlands.

Four areas of NYSDEC-regulated wetlands are located within the Town of Clarkstown. The largest wetland is located in the north central portion of Town, along the Hackensack River, which drains into Lake DeForest, the freshwater reservoir for 30% of Rockland County. Wetlands continue along the course of the Hackensack River as it drains to the south. A smaller wetland area is located along the Naurashank Brook in the southwest corner of the Town. These wetland areas are shown in Figure 3.1-1.

Disturbances to wetlands that are less than 1/10th of an acre require a Nationwide General Permit from the ACOE and their regulatory authority does not extend to isolated wetlands. NYSDEC does not regulate wetlands under 12.4 acres. Given these jurisdictional limitations, not all wetlands are regulated or protected by these two agencies.

Water Quality

Lakes and streams within Clarkstown provide a variety of benefits including: flood storage and retention, water supply, habitat for fish and wildlife, and recreation and open space. Streams and rivers also add aesthetic quality to a community and can thereby enhance property values.

The New York State Department of Environmental Conservation (NYSDEC) has classified most of the streams in New York State according to their specified "best use". This designation is based upon such factors as stream flow, water quality and bordering lands. Past, present and possible future uses of each lake, stream or pond, or portion thereof are also considered. The designation means that water quality standards must be protected in order to maintain the best use classification, so that surrounding land uses must be planned accordingly.

The NYSDEC stream classifications and best uses are shown below. Each class includes all uses for lower classes as well, so that a Class A stream is considered suitable for drinking, swimming and fishing. In addition, a designation of (t) following any letter indicates that the stream is suitable for trout habitat, while (ts) would indicate suitability for trout spawning.

Surface Waters

<u>Class</u>	<u>Best Water Use</u>
AA and A	Drinking and All Other Uses
B	Swimming
C	Fish Propagation
D	Fishing

Streams within the Town flow primarily through the upper watershed of the Hackensack River, and include most of the headwaters of this watershed. Other watersheds present include small streams that drain directly to the Hudson River along the eastern boundary of the Town and headwater streams of the Saddle River in the southwestern corner of the Town. All of these streams cross through densely populated suburban areas. The Hackensack River drains southward and discharges directly into Newark Bay to the west of Upper New York Harbor. The Saddle River flows south to its confluence with the Passaic River which also discharges into Newark Bay.

The Hackensack River has several major headwater drainages that extend throughout much of the Town. These drainages include the East and West Branch Hackensack Rivers in the eastern and northern portions of the Town as well as the larger tributary systems of Pascack Brook and Nauraushaun Brook that extend through the central portion of the Town. The Hackensack River has been designated by the NYSDEC as a Class A watercourse over much of its length and the river is used as a drinking water supply by the Village of Nyack and communities in northern New Jersey townships. The Pascack Brook and its subtributaries originate as Class C streams but are reclassified as Class C(T) and Class A streams generally within the lower reaches of the brook south of the NYS Thruway. Nauraushaun Brook and its subtributaries originate as Class C or C(T) streams in the Town. The lower reaches of the main stem of the brook is reclassified as a Class C(T) or Class A stream within the Town of Orangetown before the brook discharges into the Hackensack River.

The Hudson River drainages comprise two small Class C freshwater and saltwater streams that originate within the Village of Upper Nyack and flow directly to the river.

Pine Brook and its subtributaries form a portion of the Saddle River headwater drainage that extends into Spring Valley in Clarkstown. This portion of Pine Brook is designated by the NYSDEC as a Class C watercourse. Lower reaches of the Pine Brook within New York and New Jersey support trout habitat.

The most important element of stream protection is to preserve the natural character and vegetation of the stream to decrease runoff velocities, reduce erosion, and protect water quality. Any activity that disturbs the bed or banks of a stream classified "C(T)" or better requires a permit from the NYSDEC. The NYSDEC generally regulates activities within 50 feet of the stream. NYSDEC does not regulate or protect streams that are designated "D".

Floodplain

The National Flood Insurance Program allows property owners to purchase subsidized, federally backed flood insurance within communities that participate in the program. In return for this insurance protection, participating communities implement floodplain management procedures to reduce flood risks to new development. Through this mechanism, the Federal Emergency Management Agency (FEMA) and participating communities are able to reduce future flood losses.

FEMA prepares a Flood Insurance Rate Map (FIRM) for each municipality, which illustrates the Special Flood Hazard Areas, i.e., areas subject to inundation by a flood having a one percent or greater probability of being equaled or exceeded during any given year. FEMA refers to this flood as the 100-year flood or base flood, and the area of inundation as the 100-year floodplain.

According to FEMA, floodplain management techniques should include regulation within the 100-year floodplain of all development, including commercial or residential buildings, roadways, infrastructure and excavation. Development in areas adjacent to floodplains should be designed to prevent any increase in stormwater discharge, and preserve existing drainage systems. Existing structures within the floodplain should be elevated, anchored, moved or otherwise flood-proofed.

Areas which are designated as FEMA floodplains are shown in Figure 3.1-1,, Environmental Conditions.

[Http://www.msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1](http://www.msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1)

Water Supply

In accordance with both the New York State Sanitary Code [10 NYCRR Part 5] and the New York State Realty Subdivision Laws [Article 11, Title II, Public Health Law and Article 17, Title 15, Environmental Conservation Law], the Rockland County Department of Health (RCDOH) must assess the adequacy of a public water supply system to support additional water demands that would result from proposed expansion of the system to serve new customers. Neither proposed additions to the water supply distribution system, nor realty subdivisions that would rely on such additions can be approved without documentation of sufficient water supply capacity to serve a newly proposed project while meeting New York State design standards within the entire water supply system.

RCDOH assessment of such proposed additions to the United Water New York (UWNY) system is based upon a comparison of UWNY's projected maximum day, or peak, demand for 2006 and the peak water supply capacity that is currently available. The baseline for these assessments is UWNY's February 10, 2006 Engineer's Report prepared in support of the Route 9W Golf Subdivision in Orangetown, NY, which includes the following information:

- The projected peak demand for 2006 is 47.5 million gallons per day (MGD), including 0.8805 MGD to account for post-2005 additions to the UWNY water supply system; and,

- UWNY's available peak supply capacity at the time of the report was 47.5 MGD. This capacity included a total of 7.0 MGD from the Ramapo Valley Well Field (3.0 MGD of which is available for only 3 days).

Effective July 18, 2006, UWNY acquired a water allocation permit for three reservoirs in the former Letchworth water system. On July 27, 2006, UWNY received NYSDOH approval to operate the Letchworth water treatment plant during the summer season at a rate of up to 1.0 MGD. UWNY's total available peak supply capacity is now 48.5 MGD, exceeding the projected peak demand by 1.0 MGD. Therefore, the capacity available to support post-2005 growth within the UWNY distribution system is comprised of the 0.8805 MGD already included in the 2006 projection plus the 1.0 MGD surplus, a total of 1.8805 MGD. If the actual peak demand during 2006 exceeds the projected peak demand, the capacity available to support additional growth will be immediately reduced by the difference between actual and projected.

The table, which lists 2006 United Water commitments, included in Appendix D, summarizes this assessment and specifies the balance of water supply capacity that has not yet been allocated to an approved project. This table will be updated as new projects are approved by the RCDOH, and as new supply capacity is added to the UWNY water supply system.

3.2.2 Potential Impacts

In order to minimize the potential environmental impact that could be associated with increased density as a result of an applicant seeking a density bonus, the applicant shall be required to show that the environmental impact of the proposed senior development will not be any greater than that of the as-of-right development under the existing zoning or that the applicant has incorporated appropriate mitigation measures into the project.

In the drafting of the proposed zoning amendment the Town specifically excluded those areas outside of the hamlet centers which lack the necessary infrastructure and services to support Active Adult Residences. Also excluded were zones which were designed to;

- To minimize development near streams and marshes, rock outcrops, upon high places and steep slopes or near parks.
- To minimize erosion and the likelihood of damage due to flooding or runoff, and to preserve or enhance natural stormwater storage.
- To promote the enjoyment of scenic vistas and natural areas by residents and visitors.
- To protect the watershed of the Hackensack River.
- To minimize the loss of forest cover on steep slopes and escarpments.
- To encourage creation, preservation or enhancement of wildlife cover and habitat; and to foster the continuity of natural ecosystems.

Groundwater

All of the eligible parcels are included in the Rockland County Sewer District. Any Active Adult Residential development that were to take place as a result of creation of this zone would not be expected to have any impact on groundwater.

Surface Water

The proposed zoning local law amendment is consistent with the zoning regulations which regulate stormwater runoff and management stormwater flow in a manner that protects the water quality of receiving water bodies, thus the development of Active Adult Residential development will be subject to these regulations. The proposed Zone Amendment is not anticipated to have a significant impact on surface water.

Wetlands

Portions of parcel numbers 9 and 14 are located within the NYS DEC mapped wetlands as shown in Figure 3.1-1, Environmental Conditions. All the other eligible parcels are located outside of NYS DEC wetlands. There may be limited areas of ACOE wetlands on eligible parcels. Wetland analysis will be conducted to determine the presence of wetlands as part of the site specific analysis prior to the granting of a zone petition by the Town Board.

Watercourses

Parcels 17, 19 and 20 are located along the Pascack Creek, within the 100 year floodplain of this watercourse. Parcels 2, 28, 5, 15, and 9 are located along a tributary to the Hackensack River. There are no other eligible parcels adjacent to watercourses within the Town. All parcels will be evaluated for stormwater impacts as part of the site specific analysis prior to the granting of a zone petition by the Town Board.

Floodplains

Parcels 19 and 24 are located almost entirely within the FEMA 100 year flood plain. The high ground portions of Parcel 19 are developed. Although this parcel is eligible as underutilized, there is limited development potential as a result of the floodplain location. All eligible parcels which are located within the 100-year floodplain will need to take this constraint into consideration in developing site specific plans for development.

Water Supply

Development of any of the eligible parcels for Active Adult Residential development will require site specific analysis including an assessment of the availability of potable water. United Water's current process to assure adequate water supply and pressure require an engineering analysis of the site plan in advance of issuing a willingness to serve. Applicants must provide a site plan in sufficient detail to insure adequate connection to water mains with regard to both water supply and water pressure. In addition, as described above, United Water is keeping a tally of their available water resources and the commitments which have been made to specific projects. A phone conversation with United Water representatives indicated that United Water is keeping up with development demands and is adding capacity improvements to insure available water supply.² A list of United Water's commitments through the end of 2006 is included in Appendix D. United Water's projections indicate the unallocated water supply balance available for new development projects is 1.2282 mgd. As discussed in Section 3.6, a projected population increase of up to 1440 persons may result from implementation of the proposed zoning amendment. At 75 gallons per day the projected water

² Phone Conversation with Mr. Robert Raczko, United Water Engineer, January 8, 2007.

usage of all the eligible parcels would be 108,000 gallons per day or 0.108 MGD, well within the United Water projection of water supply available for new development.

The projected demand for new projects will be deducted from the remaining surplus supply capacity only after the applications for water main extensions and/or subdivisions are approved by the RCDOH. Plans must be submitted in accordance with the RCDOH Engineering Plan Submittal Procedure. Project approvals are contingent upon compliance with New York State design standards as specified in the Recommended Standards for Water Works, 2003 Edition. Complete engineering plans that are: (1) submitted in accordance with the above-referenced RCDOH procedure, (2) meet all applicable technical design standards, and (3) are otherwise approvable in accordance with federal, state and local laws or regulations, will be compared to the remaining available water supply capacity on a "first in, first out" basis for final approval. Incomplete submittals, or submittals that do not comply with design standards **will not** constitute a "reservation" of available supply capacity.

3.2.3 Mitigation Measures

No mitigation measures are proposed specific to the zone amendment. However, at the time site-specific zone petitions and development applications are submitted, site-specific mitigation measures may be required.

A site specific analysis at the time of site plan application including an engineering analysis to determine adequate water supply and pressure will be submitted to United Water as part of the Site Plan application process.

3.3 Ecology

3.3.1 Existing Conditions

The New York State Natural Heritage Database was reviewed with respect to the proposed adoption of the AAR Zone Amendment. The project locations are adjacent to a designated Significant Coastal Fish and Wildlife Habitat. This Habitat is part of New York State's Coastal Management Program (CPM), which is administered by the NYS Department of State (DOS). Projects which may impact the habitat are reviewed by DOS for consistency with the Coastal Management Program.

The New York Natural Heritage Database includes the following list of vegetation and plant Communities which are considered rare or endangered and have been observed in the project vicinity.

Vegetation

- Glaucous Sedge
- Straw Sedge
- Catfoot
- Green Milkweed
- Reflexed Sedge
- Still Leaf Golden Rod
- Violet Wood Sorrel
- Basil Mountain Mint
- Torry's Mountain Mint
- Small Flowered Crowfoot

Plant Communities

- Rocky Summit Grassland
- Oak Tulip Tree Forest

Wildlife

The New York Natural Heritage Database lists the Bog Turtle as a threatened and endangered species which has been observed recently in the Town of Clarkstown. The bog Turtle can move 1 mile or more from documented locations.

The New York Natural Heritage Database includes the following list of wildlife which are considered rare or endangered but have not been observed in the project vicinity since 1979.

- Perigrine Falcon
- Mud Sunfish
- Eastern Pearlshell
- Shortnose Sturgeon
- Allegheny Woodrat

Clarkstown is located within the New York – New Jersey Highlands Region. The Highlands are composed of a series of ridges and valleys that are part of the Appalachian Mountains that stretch from the Delaware River to western Connecticut. The region has been studied in numerous reports, including most recently a Technical Report prepared in 2003 which accompanies the 2002 Highlands Regional Study Update. According to the Study, the

Highlands region harbors over 200 species of plants and almost 50 species of vertebrate animals that are listed on Federal or State inventories for species that are endangered, threatened, or of concern.

Considered part of the Hudson Highlands Region, the Palisades Ridge is located along the northern border of the Town and along the coastline of the Hudson River. Properties in this area, zoned R-160 have been excluded by the Town from hosting the AAR zone based upon environmental sensitivity.

Highlands Conservation Act

In November 2004 (subsequent to the completion of the initial 2002 draft Plan), President Bush signed the Highlands Conservation Act. The Act is intended to assist Connecticut, New Jersey, New York and Pennsylvania in conserving priority land and natural resources in the Highlands region. The purposes of the Act are to:

- Recognize the importance of the water, forest, agricultural, wildlife, recreational, and cultural resources of the Highlands region, and the national significance of the Highlands region to the United States.
- To authorize the Secretary of the Interior to work in partnership with the Secretary of Agriculture to provide financial assistance to the Highlands States to preserve and protect high priority conservation land in the Highlands region.
- To continue the ongoing Forest Service programs in the Highlands region to assist the Highlands States, local units of government, and private forest and farm landowners in the conservation of land and natural resources in the Highlands region.

As mentioned previously, Clarkstown is located in the Highlands region. The New York- New Jersey Regional Study: 2002 Update, published in December 2002, includes a Conservation Values Assessment. The GIS-based Conservation Values Assessment model weighs the conservation value of the following general resources:

- Maintaining an adequate supply of high quality water;
- Conserving productive forest lands;
- Conserving areas of high biodiversity and habitat value;
- Conserving productive agricultural land; and
- Providing adequate recreational opportunities for natural, historic and cultural resource-based uses.

Individual resources within each of the five general resource areas were assigned a value ranging from 0 to 5 (highest value). Figure 2-25 of that Study illustrates a composite of conservation values for the NY/NJ Highland Region. The Grant F. Walton Center for Remote Sensing and Spatial Analysis (CRSSA) at Rutgers University maintains a geographic information systems (GIS) database which maps the conservation values on a municipal level.¹

Vacant and open space property along the northern border and , along the Hudson River have extensive areas of "moderate to higher" resource value. Areas in the north central part of the Town are shown to have the "highest" resource value. As stated above these areas have already been excluded based upon ecological sensitivity.

¹ got to <http://dbcrrsa2.rutgers.edu/website/highlands/viewer.htm>.

During SEQRA review of any proposed project, the conservation value of land within the Town should be considered when determining the appropriate design and layout of a development, and whether the development should be clustered to promote conservation of open space.

3.3.2 Potential Impacts

Endangered Species

As listed earlier, the New York Natural Heritage Database identifies a list of vegetation and plant Communities which are considered rare or endangered and have been observed in the project vicinity. Specific consideration to these plants and plant communities will need to be addressed during the site specific analysis of any zone petition.

As discussed, the bog turtle can move one mile or more from documented locations, and thus location of it's habitat will be of significant concern in the site specific analysis of any eligible parcel seeking AAR designation for development.

Environmentally Sensitive Areas

The most ecologically sensitive areas in the Town are located in the Highlands and along the Palisades Ridge. The Town specifically excluded this area based upon the ecological sensitivity near streams and marshes, rock outcrops, steep slopes and parkland thus encouraging the preservation of wildlife cover and habitat and protecting natural ecosystems. In drafting the zoning law, the Town intentionally avoided ecologically sensitive areas by excluding certain zones.

Parcel numbers 22 and 29 are located at the base of one of the steepest portions of the Palisades Ridge, along the border of the excluded conservation zone. Special attention should be paid to the ecological considerations of developing these parcels.

The proposed Zone Amendment will continue to be guided by the environmental constraint regulations provided in the overall zoning code which help to limit the impact to vegetation and wildlife.

The language of the active adult residential zone encourages the applicant to consider clustering to preserve open space. Clustering would allow larger areas of unfragmented habitat to be preserved. The Planning Board has the ability to request an applicant to cluster an active adult residential development where it determines that a conventional development would be detrimental to the Town's natural resources. The Town zoning law limits development on environmentally sensitive lands by deduction of 50% of the wetland areas and 50% of the steep slope areas from the buildable area calculations. The zoning local law includes stormwater management regulations to protect the quality of receiving streams and waterbodies which would limit impacts to aquatic habitats.

These recommendations will help to reduce potential impacts to vegetation and wildlife in comparison to development that could proceed under the existing zoning local law. No significant impacts are anticipated from the adoption of the proposed zoning local law amendment.

3.3.3 Mitigation Measures

No mitigation measures are proposed specific to the zone amendment. However, at the time site-specific zone petitions and development applications are submitted, site-specific mitigation measures may be required.

3.4 LAND USE AND ZONING

Historical Overview

As described in the 1966 Development Plan, Clarkstown began as an agricultural community with farms scattered throughout, and small hamlet centers serving many everyday needs. Early economic development activities included serving the needs of the agricultural community; cutting ice from Rockland Lake, and cutting quarry stone from the Palisades, both for the New York City market. The products of these growing and extractive industries were sent to market on the many trains that served the area and by small boats on the Hudson River. Most of the forests in the parcels and County, particularly in the west, were clear cut to provide lumber for building and charcoal for the iron ore furnaces of the region.

The physiography of the parcels is dominated by several major elements and some lesser elements. The major elements include the Palisades Ridge that separates much of Clarkstown from the Hudson River. Most of the river front property was purchased by, or given to, the Palisades Interstate Park Commission to protect it from further quarrying. The ridge turns to the northwest and continues as the physical separation between Clarkstown and Haverstraw. The acquisition of land within the Palisades Interstate Park system has given the parcels a forested open space border on the east and north, in the vicinity of Rockland Lake.

The second major physiographic element of the parcels is what was know as the Great Swamp of the Hackensack River. Much of the swamp was impounded to create Lake DeForest. This barrier to east-west movement in the Town encouraged predominantly north-south development patterns in the Town.

The agricultural nature of the Town of Clarkstown was changed by the construction of the New York State Thruway (opened in 1955), and completion of the Tappan Zee Bridge, opened December 15, 1955 which connected Clarkstown and other municipalities in Rockland County with Westchester County. The Thruway also provided easy access for points in Rockland County to New York City, upstate New York and New Jersey via the Garden State Parkway connection. The Palisades Interstate Parkway, a scenic route high above the Hudson River was completed in 1959, further increased the accessibility and attractiveness of Rockland County and the Town of Clarkstown as a place to live. The Cross Westchester Expressway connecting the Thruway with the Connecticut Turnpike completed in 1960 shortened travel time from Rockland County to New England, as well as shopping and industrial centers in Westchester and Connecticut.

These transportation improvements led to a building boom in the late 1950's and early 1960's and changed the nature of Clarkstown from agricultural to a desirable residential area. The Town population grew by 56.3 percent from 1960 to 1966¹. Many of the people who moved to Clarkstown during this period still live there. The twenty year old newly weds of the 1960's are the senior citizens of Clarkstown's population today. According to the survey conducted by the Citizen Advisory Board for Housing² 81 percent of the seniors surveyed have lived in their current home for more than 20 years. The purpose of creation of the AAR floating zone is to allow these residents to remain in the Town in an affordable manner.

3.4.1 Existing Land Use

¹ Town of Clarkstown Development Plan, August 1966.

² Citizens Advisory Board for Housing in the Town of Clarkstown, Final Report September 2002.

The Town of Clarkstown encompasses approximately 40 square miles. Approximately 80 percent of the area of Clarkstown is already developed.³ There are 743 parcels of vacant land, scattered throughout the Town. Table 2.1-1 categorizes land uses by lot count within Clarkstown. Existing Land Use is shown in Figure 3.4-1.

Table 3.4-1 Existing Land Use	
General Land Use Category	Number of Parcels
Agricultural Properties	16
Residential Properties	24,994
Vacant land	743
Commercial Properties	1093
Recreation and Entertainment	98
Community Service Properties	240
Industrial Properties	41
Public Service Properties	345
Public Parks, Forested & Conservation Properties	158
TOTAL PARCELS	27,728
Source: NYS Office of Real Property, 2006.	

The New York State Office of Real Property Services is the source for existing land use patterns within the Town of Clarkstown. Various types of existing land use are described below.

Single-Family Residential

Single-family detached dwellings on individual lots ranging in size from 10,000 square foot lots to lots of more than 2 acres are the predominant land use within the Town.

In the northwest portion of the Town, single-family dwellings are located on larger parcels than in other areas. Along Route 59, single-family dwellings are interspersed among the commercial uses which line this roadway.

Multifamily Residential

Multi family residential development is located throughout the Town. A small portion of the existing multifamily is located near the existing hamlet centers of New City, Bardonia, Congers, Nanuet and along the border of the Village of Spring Valley.

Neighborhood Commercial

Land uses in this category, as shown on Figure 3.4-1, Existing Land Use, include retail and service-oriented businesses, shopping centers, free standing stores, gasoline and automobile

³ Clarkstown Comprehensive Plan Update June 30, 1999.

service stations, funeral homes, banks, markets, restaurants, and bars. These uses are also predominantly located in the hamlet centers.

Regional Shopping

The location of the recently constructed Palisades Center Mall and the Nanuet Mall, in combination with the commercial businesses located along Route 59, provide significant regional shopping opportunities. The location of this concentration of shopping is facilitated by the excellent access to the New York State Thruway in the Town.

Agricultural Lands

There is one active farm in the town located in the north east quadrant of the town, known as Davies Farm. The farm provides fresh produce at a road side stand, pick your own produce and recreational and open space value. The farm is approximately 71 acres and is located in an R-22 zone. Land use guidelines for Rockland County encourage preservation of active agricultural land use where possible.⁴

Transportation and Utilities

The New York State Thruway and Route 59 bisect the Town of Clarkstown in an east-west direction across the southern portion of the town. NYS Routes 303 and 304 travel north-south along the east and west sides of Lake DeForest respectively. Only Congers Road, County Route 80, crosses Lake De Forest. Lake DeForest provides water to 80 percent of Rockland County. This water resource and distribution of water is managed by United Water of Rockland. This major water body is a significant deterrent to east-west travel across the Town. US Route 9W and the Palisades Interstate Parkway provide north-south movement on the east and west perimeters of the Town.

Light Industry/ Heavy Industrial

Heavy commercial and light industrial uses account for approximately 41 lots within the Town of Clarkstown. Tilcon Industries operates two stone quarries. One is located east of Route 303, just north of Thruway Exit 12, the other is located at the New City/Haverstraw border on the north end of town. Other industrial uses are located along Route 9W in the northeast portion of the Town.

Community Services/Government

Community facilities include Town Hall, six public libraries, seven fire stations, six ambulance Corps, and two police stations, the Town of Clarkstown and the Rockland County Sheriffs Headquarters. The Clarkstown Police station was renovated in 2005. The location of these facilities can be seen in Figure 3.6-1.

⁴ Rockland County: River to Ridge, 2001.

Parks, Recreation, and Open Space

State, county, and town, parkland comprise approximately 158 parcels in the Town of Clarkstown. The largest park is the Rockland Lake State Park along the shore of the Hudson River. The Davenport Preserve is located in north New City.

The largest Town-owned recreation area is the “Congers Lake Memorial Park,” located east of Route 303 in Congers which is developed with a swimming pool, sports fields and playground equipment. The largest County Owned park is Buttermilk Falls, located in Central Nyack, in the southeastern portion of the Town. The lands of the Palisades Interstate Park Commission form a linear stretch of open space from New York City, through Rockland County to the Bear Mountain Bridge.

Most of the county owned parkland is contained in Buttermilk Falls and the Mountain View Nature preserve located along Mountainview Road, just north of the Thruway, which is used for passive recreation such as bird watching and hiking,

Vacant and Underutilized Land

There are 743 vacant parcels of land in the Town.. As stipulated in the Zone Amendment, eligible parcels must be more than 3 acres in size. A total of 31 parcels, 3 acres or more acres in size, located in eligible zones have been evaluated in this GDEIS. Of these parcels, 18 are vacant and 13 are underutilized. As described earlier, underutilized parcels less than 6 acres and public utility parcels were excluded from the analysis. These parcels are shown as Figure 3.4-2, AAR Eligible Parcels. These parcels are also listed by section, block and lot numbers, including the total acres, existing zoning and development potential in Table 3.4-2.

3.4.2 Existing Zoning

The Existing Zoning is shown in Figure 3.4-3. The 40 square miles of the Town are divided into the following zoning districts:

- R-80 Low Density Residence (80,000 square feet)
- R-40 Low Density Residence (40,000 square feet)
- R-22 Medium Density Residence (22,500 square feet)
- R-15 Medium Density Residence (15,000 square feet)
- R-10 Medium High Density Residence (10,000 square feet)
- RG-1 General Residence, Low Density
- RG-2 General Residence, Medium Density
- LO Laboratory Office
- PO Professional Office
- LS Local Shopping
- CS Community Shopping
- MRS Major Regional Shopping
- LIO Light Industrial Office
- M Manufacturing
- MF Multi Family

- PED Planned Economic Development
- R-160 Conservation Density Residence District (160,000 square foot lot size)

The purpose of each zone, as set forth in the Town Zoning law, is as follows:

R-80. This district is the lowest-density residential district in the town and is mapped in outlying areas away from hamlet centers, community facilities and services and generally in areas of more rugged topography.

R-40. This district is the next to the lowest density residential district and is mapped between the outlying areas of town and the more built-up residential subdivisions and can be better served with community facilities and services.

R-22. This district is in the middle of the range of single-family residential districts and generally on the periphery of the fifteen-thousand-square-foot subdivision areas, and acts as a transitional district between said subdivision areas and the lower density areas.

R-15. This is the medium-density residential district of the town that is most attractive to subdivision activity and is mapped over a majority of the residential areas as a large belt surrounding the hamlet centers.

R-10. This district permits the highest density of single-family detached housing and therefore is mapped close to the commercial facilities of the hamlet centers and for the most part reflects the existing residential character of the development.

RG-1. This district permits condominium and cooperative garden apartment developments at a relatively low density for multifamily housing; it also provides for rental-type garden apartments by special permit of the Town Board. This district provides for widest range of housing types for new construction.

RG-2. This district permits all types of garden apartments at what is considered a medium density for multifamily housing; it also allows other housing types. As mapped, this district coincides almost entirely with existing garden apartment developments or those under construction or committed.

LO. This district is designed primarily to provide a restrictive district for a group of certain laboratory and office uses in a park like development. The regulations of the district are intended to ensure not only the compatibility of the district uses with each other, but with adjacent districts.

PO. This district provides areas for professional office services near the hamlet centers and local and community shopping areas with limited types of commercial sales and services. This district is often adjacent to residential areas and serves as a transitional district between commercial and residential areas.

LS. This district offers local shopping convenience goods and services to the surrounding residential areas of the town and is not meant to attract shoppers from other areas because of specialty items or services.

CS. This district offers goods and services that are needed by a larger segment of the town, including items of a more special nature such as clothing, banks and printing shops. This district does attract persons throughout the town but is not meant to be a major attraction to large numbers of shoppers from adjacent towns or counties.

RS. This district offers the full range of commercial shopping needs from convenience to shopping specialty items in a location that is on or immediately adjacent to major state highways, in order to handle shoppers from the surrounding region.

MRS. This district offers the full range of commercial shopping center services, including without limitation convenience, shopping specialty items, and department stores on a site consisting of at least 30 acres in one or more lots and in a location on or immediately adjacent to major highways, in order to serve shoppers from the surrounding region. After October 26, 1999, newly established MRS Districts must consist of at least 75 acres.

LIO. The purpose of the Limited Light Industrial Office District is to permit the development of selected industrial uses on land planned and suited to such uses but at the same time protecting the character of the surrounding residential areas or planned residential areas. Manufacturing operations are to be permitted only if they are incidental or accessory to the primary operation of the plant, or allowed by special permit of the Town Board. This district is planned and intended for industrial land uses characterized by low land coverage, with large year-round landscaped setbacks for protection of residential areas, attractive building designs and developing an industrial park like setting. The regulations are designed to promote industrial developments using the highest acceptable planning standards to properly handle any obnoxious and objectionable external effects upon the surrounding residential areas, circulation systems, drainage and other natural features. All references throughout this entire chapter to "10 Industrial Office" are hereinafter deemed to refer to "LIO Light Industrial Office."

M. This district permits the full range of office, manufacturing, storage and related uses, subject to performance standards and screening provisions, on sites which are adjacent to major regional roadways, causing a minimum of disruption to the residential activities of the community, while serving the economy of the town and region.

PED. The intent of the PED District is to permit greater flexibility in the design and development of offices, warehousing and industrial parks than is generally possible under conventional zoning. It is further intended to promote the economic and efficient use of land by permitting the provision of certain commercial uses within an executive park setting. The PED regulations are designed to give the developer a knowledge of the general type of development which will be permitted before completion of detailed designs for every building and parcel, while providing the town with assurances that the overall development will be satisfactorily planned and constructed in accordance with an overall conceptual plan for the entire tract.

R-160. The Conservation Density Residence District was established to provide protection to the town's scenic resources, including streams, wooded-areas, steep slopes, large open spaces and scenic vistas, by controlling and limiting development that would otherwise encroach upon these scenic resources. Specifically, the purpose of the district:

- To support the practice of avoiding intensive development through the granting of land donations, negative easements and other limited interests in land.
- To minimize development near streams and marshes, rock outcrops, upon high places and steep slopes or near parks.
- To provide for volume and routing of vehicular and pedestrian traffic with the least practicable impact to and within conservation areas.
- To minimize erosion and the likelihood of damage due to flooding or runoff, and to preserve or enhance natural stormwater storage.
- To promote the enjoyment of scenic vistas and natural areas by residents and visitors.
- To protect the watershed of the Hackensack River.
- To minimize the loss of forest cover on steep slopes and escarpments.
- To encourage creation, preservation or enhancement of wildlife cover and habitat; and to foster the continuity of natural ecosystems.

MF-1, MF-2 and MF-3: The Multifamily MF-1, MF-2 and MF-3 Zones were established in order to provide additional housing opportunities in attached housing developments. These zones are designed for areas which can provide local services necessary to support relatively intensive housing development and where such developments will be compatible with the existing scale of development. As such, these zones are intended to be located in the dense portions of the town's hamlets.

3.4.3 Proposed Zone Text Amendment

The proposed Zone Amendment specifies the following criteria for parcels to be considered for Active Adult Residential Zoning;

- Any parcel that may be designated as AAR must be proximate to public transportation, shopping, community and commercial services.
- Properties that are developed for multi-family use at the time of adoption of this amendment are not eligible for redevelopment in the AAR zone.
- All zones shall be eligible hosts for the floating zone except: R-160, R-80, R-40, MRS, RS, M and PED, where the uses provided herein are prohibited. Joint applications for a zone change and AAR designation are prohibited.
- Only non-residential parcels which abut residential districts that are eligible hosts for the floating zone are eligible for floating zone designation.

- The total aggregate number of units allowable in AAR zones established pursuant to this section shall be no more than 800. The Town Board may, by resolution, increase the total aggregate number of units allowable in AAR zones.
- Only parcels which are three (3) acres or larger in net lot area, after deduction of areas with development limitations as per Section 290-21 D, shall be eligible for AAR zone designation.
- Assemblage of properties or parcels not in the same ownership at the time of adoption of this Local Law so as to meet minimum acreage requirements is prohibited.

3.4.4 Change in Development - Potential Impacts

Major changes in land use would not occur as the proposed zoning amendment encourages active adult residential dwellings in, or adjacent to, existing areas of residential development.

The approximate development potential was examined for the vacant and underutilized parcels eligible to host the proposed active adult zone within the Town, to determine the potential development build-out upon implementation. Thirty one (31) privately-owned vacant or underutilized parcels in the Town which may be eligible were examined. The location of these parcels are shown in Figure 3.4-2, AAR Zone Eligible Parcels.

All vacant parcels, three acres or more were included in the eligible inventory. Review of the parcels by the Town Planning department indicated there are pending site plan applications before the Planning Board on several of these parcels. Since these parcels meet the eligibility criteria they have been included to allow the applicant to file an amended site plan if desired.

A review of under utilized parcels larger than three acres identified a number of parcels that are developed in single family residential which would not be likely candidates for the AAR zone since they are either developed to the maximum extent practical or are environmentally constrained. Based upon this review underutilized parcels less than 6 acres in size have not been included in the analysis. Public utility parcels have also not been included in the analysis.

It is important to note that, due to the number of assumptions utilized in the analysis, it is likely that (1) there are eligible parcels which have not been identified and/or (2) additional parcels may become eligible prior to adoption of the proposed law. For example, since the study excludes parcels with improved structures, it does not take into account the possibility that structures may be demolished thus rendering the parcel vacant and therefore eligible. Parcels could theoretically be assembled prior to the adoption of the law. Limitations with respect to the underlying GIS data may have led to inadvertent exclusion of eligible parcels. However, because the methodology utilized identified land available to develop far in excess of the 800 units maximum provided for in the law, it was not necessary to further refine the basic assumptions.

The results of this analysis indicate there are 21 residentially zoned parcels and an additional 10 parcels which abut residential zones which meet the eligibility criteria. This would allow construction of 1687 units. However, the text of the law limits the active adult unit count to a maximum of 800 units. This analysis was conducted to assess the impact of 800 units, which represents a maximum impact scenario.

For purposes of this analysis, 65 percent of the land area of each eligible parcel was assumed to be developable. To account for environmental constraints, 25% of the acreage was deducted, and an additional 10% of the land area was deducted to account for road layout and design inefficiencies.. These assumptions are utilized to obtain an "order of magnitude" assessment of the potential buildup resulting from application of the AAR zone to the eligible parcels. This calculation is an obvious generalization and will be refined based upon environmental analyses conducted as part of the submission of a site-specific development application. The results of the analysis for the 31 potentially eligible parcels evaluated is shown in Table 3.4-2.

There is no way to determine which of these properties will make an application, be granted a zone petition and developed as active adult residential development. This GDEIS describes in a general manner the impacts to categories of parcels. Site specific analysis will be required for each applicant prior to the granting of a zone petition by the Town Board. Table 3.4-2 separates the impacts of eligible parcels which are zoned residential from those parcels which abut a residential zone, since the impacts to these two categories of properties differ.

A demographic multiplier of 1.8 was utilized to project the population of senior residential units. This multiplier is approximately half of 3.63, the multiplier used to project the population for a single family four bedroom home. Based upon the Maximum Density Bonus of 100% to properties zoned for single family residential the population impact is the same. Half of the population at twice the density produces no net gain. As discussed in Section 3.7, to assess traffic impacts the trip generation rates were compared for single family and active adult developments. Trip generation for active adult residences, during the p.m. peak hour are 0.275 trips per unit, trip generation for single family, during the p.m. peak hour are 0.9 trips per unit. Thus, the traffic impacts would be reduced for properties changed from single family to active adult, even when the maximum density bonus is applied to the AAR properties.

Properties which are zoned non-residential but abut eligible residentially zoned properties are eligible. In this instance, the population impact represents a 100% increase in population. However, there is a significant decrease in the traffic impacts of these properties. For example a 30 acre parcel zoned LIO would generate more than 500 p.m. peak hour trips, but if zoned active adult, including the maximum density bonus would generate only 32 p.m. peak hour trips if developed for senior adult housing .

Eligible non-residential parcels, if granted a zone petition for Active Adult Residential use, would no longer be available for non-residential development. This would be evaluated carefully at the time the zone petition is applied for.

The Town of Clarkstown recognizes that the senior citizen population is largely comprised of individuals with limited or fixed incomes who, given present market conditions, find it increasingly difficult to acquire and/or maintain a single family home. The proposed Zone Amendment balances the creation of high-density residential areas with the goal of meeting the need for construction of moderate income senior citizen dwellings. The proposed Zone Amendment calls for cluster development to be considered to mitigate environmental impacts and encourages development in the higher density hamlet centers, where services to support this type of development are already present.

3.4.5 Mitigation

No adverse impacts are anticipated thus, no mitigation measures are proposed specific to the zone amendment. However, at the time site-specific zone petitions and development applications are submitted, site-specific mitigation measures may be required.

**Table 3.4-2
Change in Development Potential for
Parcels Eligible for Active Adult Residential Zoning**

Parcel No.	Name	Existing Zoning	Total Acres	Existing Residential Development Potential	Existing Population Projection 3.63	Existing Trip Generation PM Peak	Possible Development under AAR w/ Maximum Density Bonus	Change in Development Potential	AAR Population Projection 1.8	AAR Trip Generation PM Peak	Number of Affordable Units	Maximum Density Bonus			
1	34.7-1-1	R-22/ R-80/R-40	61.1/ 0	77	280	69	154	77	277	42	15	77			
2	43.07-1-16	R-15	30.0	59	214	53	118	59	212	32	12	59			
3	43.14-3-48	R-15	4.1	8	29	7	16	8	29	4	2	8			
4	50.12-1-26	R-15/R-40	14/1.6	27	98	24	54	27	97	15	5	27			
5	51.06-3-1	R-15	12.6	25	91	23	50	25	90	14	3	25			
6	52.2-1-20	R-22	6 of 11.4	8	29	7	16	8	29	4	2	8			
7	53.13-2-22	MF-1	3.0	10	30	8	12	2	22	3	1	2 MF			
8	53.13-2-26	MF-1	3.0	10	30	8	12	2	22	3	0	2 MF			
9	57.2-1-45	R-15	4.3	8	29	7	16	8	29	4	2	8			
10	59.20-1-3,4,5	R-22	10.4	12	44	11	24	12	43	7	2	12			
11	63.15-1-43	R-22	53.6	70	254	63	140	70	252	39	14	70			
12	35.18-1-4	R-22/R/80	71.0	92	334	83	184	92	331	51	18	92			
13	43.07-1-2.3	R-22	5.1	7	25	6	14	7	25	4	1	7			
14	44.07-2-17	R-15/LIO	8.0/0	16	58	14	32	16	58	9	3	16			
15	51.09-1-50	R-22	17.7	23	84	21	46	23	83	13	5	23			
16	52.16-1-74	R-22	20 of 39.0	26	94	23	52	26	94	14	5	26			
17	57.14-3-2	MF-2	12.4	80	142	64	96	16	173	26	4	16 MF			
18	58.07-1-86	R-22	6 of 9.2	8	29	7	16	8	29	4	2	8			
19	63.07-2-51	R-15	6.0	12	44	11	24	12	43	7	2	12			
20	63.11-2-2	R-15	10.5	20	73	18	40	20	72	11	2	20			
21	65.11-1-5	R-22	5 of 10.3	7	25	6	14	7	25	4	1	7			
Total Residential				605	2036	533	1130	525	2035	310	101	455			
22	44.08-1-7	LIO-abuts R-15	9.0	0	0	152	36	35	65	10	4	18			
23	52.15-1-4	LIO-abuts R-15	3.2	0	0	54	12	12	22	3	1	6			
24	52.19-1-1	LIO/R-15	16.9	0	0	285	66	66	119	18	7	33			
25	63.16-1-1	LO/R-15	14.9	0	0	252	58	58	104	16	6	29			
26	64.07-1-9.2	LO-abuts R-15	8.4	0	0	142	32	33	58	9	3	16			
27	64.08-3-7.3	LO/R-15	8.0/1.3	2	7	135	36	34	65	10	2	18			
28	43.11-2-2 & 3 43.07-1-24 & 25	PO-abuts MF-3	4.8	0	0	81	50	50	90	14	2	8 MF			
29	35.20-1-5	LIO-abuts MF-2	6.2	0	0	105	48	48	86	13	2	8 MF			
30	63.15-1-44	LO/LIO abuts R-22	75.1	0	0	1267	196	196	353	54	20	98			
31	64.07-1-8	LO/R-15	4.0/3.4	7	25	60	23	16	41	6	2	8			
Total Non-Residential				9	32	2533	557	548	994	153	49	242			
Total				614	2068	3066	1687	1073	3029	463	150				
Applied Density				R-15 (3 units per Acre)	MF-1 (5 units per Acre)										
				R-22 (2 units per Acre)	MF-2 (10 units per Acre)										
					MF-3 (13.6 units per Acre)										
				Maximum Density Bonus (MDB): SF 100%; MF 20%											
				Affordable Housing as a % of MDB; SF 20%; MF 25%											
				LO/LIO FAR: 0.4											
				Trip Generation PM Peak - SF 0.9, MF 0.8, AA 0.275, Office 1.49											

3.5 Demography

3.5.1 Existing Conditions

Population

According to U.S. census data, Clarkstown had a population of 81,600 persons in 2005, a slight decrease in population compared to 2000 census estimates. Rockland County showed a comparable decrease in population.

Clarkstown population is aging in place. The 2005 median age of a Clarkstown resident increased from 33.3 years in 1990 to 39.1 in 2000 to 42.3 years of age in 2005. The number of persons 55 years of age and older grew significantly. In 1990, this age group represented 19.9 percent of the Town population. In 2005, this age group represented 29.2 percent. It is also significant to note, in 2005, the age group 45 to 55 represented 16 percent of the population, indicating the median age will continue to increase if a significant number of persons in this age group remain in Clarkstown. While the 55 and older segment of the population has increased, the school age population (5 to 18 years old) has decreased slightly. In 1990, there were 19,602 persons 5-18 years old, representing 24.7 percent of the population. This segment of the population decreased to 18,653 persons in 2005, representing 23 percent of the population.

Table 3.5-1 Town and County Population								
	2005 Population	2005 Median Age	2005 Household Size	2005 Family Size	2000 Population	2000 Median Age	2000 Household Size	2000 Family Size
Town of Clarkstown	81,600	42.3	2.85	3.31	82,082	39.1	2.9	3.27
Rockland County	285,088	37.4	3.07	3.51	286,753	36.2	3.01	3.47
Source: US Census Bureau, 2005.								

According to the Comprehensive Plan Update, the education level of Town residents is similar to other metropolitan suburban communities with 93 percent of the adult population having at least graduated high school and just over 47 percent reporting at least a bachelors degree. This is reflective of the many technical and professional jobs in the area, and also relates to the quality of life expectations of Town residents.

Housing

The housing stock in the Town has increased by 3,295 dwelling units, or 12.5 percent from 1990 levels¹. Home ownership predominates within the Town of Clarkstown with 82.6 percent of total housing units being owner occupied.

Census data for 2005 indicate there are 29,616 total housing units in the Town, of which 28,650 or 96.7 percent are occupied. Of the total housing units, 23,659 or 82.6 percent are

¹ 2005 US American Community Survey Census data compared to 1990 US Census Data.

owner occupied, the remaining 4,991 units or 17.4 percent are rentals. The homeowner vacancy rate is 0.2 percent while the rental vacancy rate is 6.6 percent. Single family detached units represent 69 percent of the housing stock, an additional 8 percent is single family attached. Approximately 22 percent of the housing is multifamily, and less than one percent is mobile homes.

US Census 2005 statistics indicate that the median household income for Clarkstown (\$98,545) also rose from 2000 levels (\$82,107). Clarkstown's median income of \$98,545 is higher than the median household income for Rockland County (\$78,649). Similarly, the per capita income is higher i.e., \$42,464 in Clarkstown compared to \$32,770 in Rockland County.

Approximately 17% of Clarkstown households rent their homes compared to the approximately 26% that rent their homes countywide. The median value for owner-occupied housing units in Clarkstown (\$495,700) is higher than the median for Rockland County (\$472,200).

A comparison of median housing values and rents indicates that in 2005, Clarkstown's housing was less affordable than housing in Rockland County as a whole.

3.5.2 Potential Impacts

The proposed zoning local law introduces a floating zone to accommodate active adult residences (age 55 and over). Implementation of this zone would require a zone change of the Town Board. The floating zone may only land on lots of 3 acres or more in the above mentioned designated zones. As defined in the text of the law:

- Affordable Units** - shall mean units offered as a sales price at which Income Eligible individuals and households can qualify for the purchase, calculated on the basis on underwriting standards of mortgage financing available for the development.
- Income Eligible** - for the purpose of the AAR zoning district, the term shall mean those individuals and households with an income that does not exceed 80% of the Rockland County Median Income.
- Rockland County Median Income** - the Rockland County median income for a family of a certain size as determined annually by the United States Department of Housing and Urban Development.

As described in Section 3.4., Land Use, parcels of land in the town which meet the eligibility criteria were reviewed. Using the development assumptions detailed in section 3.4, and based upon the number of eligible parcels, the AAR floating zone, including density bonuses, could result in a total build out of 1,687 age-restricted dwelling units. However, the proposed AAR Zone Amendment limits development to a maximum of 800 dwelling units of age-restricted housing. An analysis has been conducted based upon the maximum impact of 800 AAR units.

A typical age-restricted dwelling unit will have two bedrooms. It is anticipated that the average household size of an age-restricted dwelling unit would be 1.8 persons per

household. It is projected that up to 1,440 persons would inhabit age-restricted developments created by the AAR zone.

In comparison, estimates of the residential development potential of all eligible parcels indicates that 614 units of single family detached residences could be built. This would result in a population of approximately 2,068 persons based upon a multiplier of 3.63 for a typical four-bedroom single family residential unit in the northeast region as published in the Urban Land Institutes Development Assessment Handbook (1994). Implementation of this floating zone would likely result in a reduction in the total population that would otherwise be introduced as a result of new non-age restricted, single-family detached housing. In addition, as mentioned previously, this development would not introduce any schoolage children to the community. Without the AAR zone, more than 500 schoolage children could be introduced.

The zoning local law amendment (Appendix C) gives preference to existing Clarkstown residents, encouraging their relocation from single family residences into active adult residential accommodations. This creates housing turnover whereby the single family residence is occupied by a new household, possibly with schoolchildren. It should be noted that active adults who sell their single family residences would likely do so because they desire to make a lifestyle and economic change - this would happen regardless of whether or not active adult housing is located in Clarkstown. However, the AAR zone allows these active adult households to continue to reside in the community where they have established social and family ties.

Adoption of the zoning local law amendment would result in a change to the demography of the Town's population. Implementation of the AAR zone will result in a population increase of persons 55 and older, resulting in an increase in this segment of the population. However to the extent the AAR zone meets the need of active adults already living in Clarkstown, the resulting population increase would be more balanced, from the in-filling of vacated single family homes.

Affordable Housing Impacts

The purpose and intent of the AAR zone is to provide housing to accommodate a range of independent living accommodations for active adults, (i.e., persons age 55 years and older), and to create housing or provide financial resources to assist income eligible active adults to obtain or retain housing. The Town of Clarkstown recognizes that the senior citizen segment of the active adult population, (i.e., senior citizens or persons 65 years of age and older), is largely comprised of individuals with limited or fixed incomes who, given present market conditions, find it increasingly difficult to acquire and/or maintain a single family home. The AAR zone requires affordable housing be integrated into age-restricted housing developments, in order to implement the affordable housing goals, policies and objectives set forth in the Town's Comprehensive Plan.

Income eligible, active adults applying for affordable units shall be selected on a first-come, first-served system utilizing the following categories of priority, in order of preference. Within each category, priority shall be based on longevity of residence:

- Clarkstown Residents;
- Parents and Children of Clarkstown Residents;
- Former Clarkstown Residents;

- Income Eligible Rockland County Residents;
- All others.

For the purpose of the AAR zoning district, the term “income eligible” shall mean those individuals and households with an income that does not exceed 80% of the Rockland County Median Income for a family of a certain size as determined annually by the United States Department of Housing and Urban Development. The Rockland County 2006 median family income for a two person family was \$75,200, thus income eligible families would have a household income of about \$60,000.

The sales price of an affordable housing unit will be determined by limiting the combination of Principal, Interest, Taxes and Insurance (PITI). To be manageable the PITI, relative to housing costs should to equate to approximately a one-third of the gross household income. For active adults, ages 55 and over, mortgages time periods would likely be 10 to 15 years. Typically, based upon the equity build up in a single family residence, people in this demographic would have a sizable down payment, up to 50 percent or more. Using these assumptions, the sales price of the affordable unit is projected to be approximately \$220,000. Grant monies may be available to subsidize the purchase price to about \$180,000. As discussed, preference will be given to Clarkstown residents.

Active adult residential developments would result in the conversion of vacant or underutilized land into residential uses. The increased market value of the project site, with these improvements, would result in an increase in property tax revenues. The potential to generate net property tax revenues depends on the burden placed on local community service providers. However, these developments would place minimal to no demand on the school districts, the cost of which comprises the largest segment of a Town resident's tax bill. The project would likely place demand on such services as police and fire protection, ambulance service, and senior citizen facilities and centers.

According to the Town Tax Assessor, the affordable units would be assessed at the affordable market price, thus preserving the affordability with regard to taxes. This would result in reduced tax revenue to the various taxing districts when compared to the sales price of a market rate unit. Management of the affordable units will be project specific.

3.5.3 Mitigation Measures

While the Town's demography may change, this is not considered an adverse impact, as there is a demonstrated need for active adult housing in the Town of Clarkstown. Thus, no adverse impacts are anticipated from adoption of the AAR Zone Amendment. At the time a site-specific zone petition and development application is submitted, mitigation measures may be required.

3.6 Community Facilities and Services

3.6.1 Existing Conditions - Police, Fire, Ambulance, Health Services & Schools

Police Protection

The Clarkstown Police Department provides police protection services to properties within the 40 square mile area that comprises the Town of Clarkstown. The police department headquarters is centrally located within the Town at 20 Maple Avenue, New City .

The Town of Clarkstown police force provides police protection for the Town of Clarkstown including the hamlets of Bardonia, Central Nyack, Congers, Nanuet, New City, Rockland Lake, Valley Cottage, West Nyack and portions of the Villages of Nyack and Spring Valley. The Clarkstown Police Department employs 171 police officers and 25 civilian employees who provide 24-hour per day coverage. According to the most recent Annual Report the department handles approximately 63,000 service calls per year. Census data indicates Clarkstown had a population of 81,600 persons residing in the Town of Clarkstown in 2005. Based upon these figures, the police department receives 0.064 calls per month per capita. There are presently 2.1 police officers per 1,000 residents.

The police department provides 24 hour patrol coverage with an average of 11 manned vehicles on the road at all times.

Sworn personnel are also involved in various programs including Crime Prevention, Accident Investigation and Reconstruction, STOP DWI, Commercial Vehicle Enforcement, Intelligence, Youth Court, Explorers, Smart Sales, and Child Vehicle Restraint.

Typical response time to a 911 call for service would be approximately five minutes depending upon the exact location of the call for assistance.

Fire Protection

There are seven fire districts which cover the Town of Clarkstown listed below, the location of the fire stations are shown in Figure 3.6-1:

Central Nyack Fire Department
43 Waldron Avenue
Central Nyack, NY 10960 (845) 358-0678

Congers Fire Department
64 Lake Road
Congers, NY 10920 (845) 268-6562

Nanuet Fire Department
Prospect Street
Nanuet, NY 10954 (845) 623-9690

New City Fire Department
15 Maple Avenue
New City, NY 10956 (845)

Rockland Lake Fire Department
1 Rockland Lake
Box 24
Valley Cottage, NY 10989 (845) 268-0604

Valley Cottage Engine Company
1 Lake Road
Box 48
Valley Cottage, NY 10989 (845) 268-8707

West Nyack Fire Engine Company
42 Strawtown Road
Box 352
West Nyack, NY 10994 (845) 358-6377

All fire departments which service the Town are staffed by 100% volunteers and provide full 24 hour, 7 day per week coverage. Current response time is an average of five to seven minutes. Departments are typically headed by a Chief, a deputy Chief, one to three Captains, and eight to ten Lieutenants who oversee firematic operations. Each fire department also has a civil division of the department which is headed by the President, Vice President, Secretary and a Treasurer who perform administrative operations.

Each department operates its own equipment including one to four engines, one of two tower ladder trucks, heavy rescue vehicles, light rescue vehicles, and patrol cars. A department is typically staffed by more than 100 volunteer members who respond from the individual fire stations. These alarms typically consist of structural fires, motor vehicle accidents (MVA's), automatic alarms, vehicle fires, brush fires, underwater rescue, mutual aid, and various other calls for assistance. The local Fire Departments do not respond to medical emergency calls. This service is provided by one of four Ambulance Corps.

Although the Fire Department responds to a variety of emergencies, the majority of serious incidents are structural fires. These incidents have ranged from small one-room fires to large commercial fires requiring the response of over 20 fire departments from two counties. The Fire Departments are assisted by mutual aid from the other Fire departments.

Ambulance & Health Services

Emergency ambulance service is provided to the Town by five ambulance providers, including the Rockland Paramedic Service, New Hempstead Ambulance, Village of New Square Emergency Service, Congers/Valley Cottage Volunteer Ambulance Corps and Rockland Ambulette Service. Average response time is between three and five minutes. Each of the ambulance providers are staffed by volunteers. Volunteer staff have been augmented with paid EMTs to cover day tours from Monday through Friday when most volunteers are at their full time jobs. This is necessary in order to meet their mission to provide the highest quality of pre-hospital emergency medical care to the community.

Community Facilities and Services

February 13, 2007

The Town of Clarkstown is located midway between two acute care facilities in Rockland County, Nyack Hospital located in Nyack, and Good Samaritan Hospital located in Suffern. Services offered by these hospitals include: alcohol & substance abuse, ambulatory surgery, Birthing , Cancer programs, Cardiac Services, diagnostic imaging, emergency services, mental health , MRI center, nutritional services, occupational therapy, pediatrics, physical therapy, prostate cancer treatment, quicklab, speech & hearing, wound care center, and weight loss facilities.

Nyack Hospital operates approximately 350 beds and Good Samaritan Hospital operates approximately 370 beds. These hospitals provide medical, surgical, intensive care, recovery, maternity, pediatrics, and behavioral health services.

According to Hospital representatives, its physicians represent all of the medical specialties and offer their patients the latest in medical care supported by nursing, clinical, and technical staff.

Schools

Children residing in the Town of Clarkstown and enrolled in public schools would attend facilities in one of the following four school districts: Clarkstown Central, East Ramapo Central, Nanuet Union Free, and Nyack Union Free. Clarkstown Central covers the majority of the town and encompasses the central portion of the town. The East Ramapo School District covers the western border of the Town. The Nanuet Union Free School District covers the western portion of the Town south of the Thruway. The Nyack Union Free School District covers the southeastern portion of the Town.

3.6.2 Potential Impacts - Police, Fire, Ambulance, Health Services & Schools

A typical age-restricted dwelling unit design would consist of either single-family detached patio home, single-family attached town homes, or multifamily dwellings with up to two bedrooms. Based upon the active adult nature of this population, including the restrictions with regard to children, a demographic multiplier of 1.8 persons per unit was used for this analysis. It is anticipated that implementation of the AAR Zone Amendment would result in a projected population increase of 1,440 persons occupying these age-restricted dwellings.

In comparison, in accordance with the existing zoning, the development potential of 614 single family detached residences would result in a potential population of 2,068 persons, based upon a multiplier of 3.63 for a four bedroom single family residential unit in the northeast region, as published in the Development Assessment Handbook, Urban Land Institute. (1994). This represents a reduction of 628 persons.

Police Protection

The Police Department 2005 Annual Report indicates that the Town of Clarkstown was ranked as the fifth safest community in the nation and the second safest community of its size. The Police Department, the Police Commission, and the Town government officials are committed to providing the citizens of the Town of Clarkstown with professional service.

Based on planning standards contained in the Development Impact Assessment Handbook published by the Urban Land Institute (1994), standard factors for police protection recommend two (2) police personnel per 1,000 persons which further breaks down to 1.5 police personnel

per 1,000 persons for residential uses and 0.5 police personnel per 1,000 persons for non-residential uses. Based on this standard, 1,440 persons would increase police staffing needs by about 2 police officers. By comparison, build out of all eligible parcels under the existing zoning would result in an estimated increase in population of 2068 persons. This would result in increased police staffing needs more than 3 officers. This does not include the demand created by any non-residential uses introduced in the non-residential zones that could result under the existing zoning law. The additional tax revenue generated by the active adult residential development could help to support this increase. The Clarkstown Police Department will review site/subdivision plans at the time of site specific request for a zone petition.

Fire Protection

Based on planning standards published in the Development Impact Assessment Handbook, approximately 1.65 fire department personnel per 1,000 population is recommended to provide adequate fire protection service. Up to 1,440 new residents would generate demand for an additional 2.4 fire department personnel. By comparison, The projected population of 2068 persons under existing zoning would result in increased fire protection needs by 3.4 officers. This also does not include the demand created by any non-residential uses introduced in the non-residential zones that could result under the existing zoning law. Development of the active adult residential properties will generate annual property tax revenues to the fire district to offset the additional demand. Since the various parcels are located throughout the Town, and since the Town is divided among seven (7) fire districts, it is not anticipated the burden will fall on any one fire district. Site specific analysis will include detailed fiscal analysis to confirm these projections. The Fire Department will review site/subdivision plans at the time of site specific request for a zone petition for fire code compliance and adequate accessibility for fire emergency vehicles.

Ambulance & Health Services

Based on planning standards published in the Development Impact Assessment Handbook, approximately 36.5 calls per 1,000 population are made annually. Based on this standard, an additional 1,440 residents would increase EMS calls by approximately 50 calls annually, on average. Distributed among the five ambulance providers, this represents an average of 10 additional calls annually to any one ambulance provider. By comparison, the projected population of 2068 persons under existing zoning could be expected to increase the number of EMS calls by more than 75 calls.

Based on planning standards published in the Development Impact Assessment Handbook, four (4.0) hospital beds should be provided per 1,000 persons. Based on this standard, the projected population increase associated with proposed zoning amendment has the potential to increase the need for beds in hospitals serving the Town of Clarkstown area by approximately 0.57 beds. It is not anticipated this will be a significant impact.

The eligible parcels are distributed throughout the Town, thus reducing the potential impact to any one EMS provider. The impact to Emergency Service Workers in this area will be fully evaluated as part of site specific analysis.

Schools

Based upon the intent of the zone amendment, (i.e., to limit development to households with persons ages 55 years and older), it is anticipated that minimal to no school age children would be introduced by an AAR development. Property tax revenues generated to the school districts as a result of construction would likely be "net" revenue.

There are four school districts in the Town of Clarkstown. The following list shows the distribution of eligible parcels among the four school districts:

- Clarkstown Central School District -
Parcel Numbers 1,2,3,5,7,8,12,13,14,15,18,21,22,26,27,28,29,31
- Nanuet Union Free School District -
Parcel Numbers 9,11,19,20,25,30
- Nyack Union Free School District -
Parcel Numbers 6,10,16,23,24
- East Ramapo Central School District -
Parcel Numbers 4,17

The greatest number of eligible parcels are located within the Clarkstown Central School District, however these parcels have a wide distribution based upon the large area the district covers. The largest acreage of eligible property is located within the Nanuet Union Free School District, located in the southwest portion of the Town. The impact to any one school district will be evaluated at the time of site specific application and zone petition.

3.6.3 Mitigation

No mitigation measures are proposed specific to adoption of the AAR Zone Amendment. However, at the time site-specific zone petitions and development applications are submitted, mitigation measures may be required.

3.7 Transportation

3.7.1 Existing Conditions

Road Network

The existing road system consists of local, county, state, and federal jurisdictional roads. Major roads are shown on Figure 3.7-1. The New York State Thruway and NYS Route 59 bisect the Town of Clarkstown in an east-west direction across the southern portion of the Town. NYS Routes 303 and 304 travel along the east and west sides of Lake DeForest, respectively. Only Congers Road and County Route 80 cross the Lake De Forest. This major water body is a significant deterrent to east-west travel across the Town. US Route 9W and the Palisades Interstate Parkway (limited to passenger vehicles only) provide north-south movement on the east and west boundaries of the Town.

New York State Thruway - The most heavily traveled road in Clarkstown is Interstate Route I-87 known locally as the Thomas E. Dewey Thruway or the New York State Thruway. The road is maintained by the New York State Thruway Authority. This road is classified by NYSDOT as a Principal Arterial Interstate. The 2004 Average Annual Daily Traffic (AADT) on this major roadway in the vicinity of Exit 12 is 122,434. Four interchanges provide access to the Thruway in the Town of Clarkstown: Exit 11 in Nyack, Exit 12, Route 303, at the Palisades Mall, Exit 13, Palisades Interstate Parkway and Exit 14, Route 59, in the western portion of the Town.

Palisades Interstate Parkway - The Palisades Interstate Parkway (PIP) runs generally northwest-southeast through the Town of Clarkstown. This is a limited access parkway, and as such is restricted to use by passenger vehicles only. The road is maintained by the Palisades Interstate Park Commission. This road is classified by NYSDOT as a principal arterial expressway. The 2004 Average Annual Daily Traffic on this roadway in the vicinity of its intersection with the Thruway is 80,115. The PIP connects the NY metropolitan area in the vicinity of the George Washington Bridge through New Jersey and Rockland County to Harriman State Park and the Bear Mountain Bridge.

NYS Route 59 provides east-west access across the southern portion of the Town. NYS Route 59 provides commercial access to the commercial developments and several Villages along its length. This road is maintained by the NYS DOT and is classified as a principal arterial. The 2004 Average Annual Daily Traffic on this roadway in the vicinity of its intersection with the PIP is 35,424. NYS Route 59 extends from Route 9W in Nyack to the junction with NYS Route 17 just north of Suffern.

US Route 9W provides north-south access along the eastern border of the Town adjacent to the Hudson River providing residential and commercial access to adjacent land uses. This road is maintained by the NYS DOT and is classified as a principal arterial. The 2004 Average Annual Daily Traffic (AADT) on this roadway north of its intersection with the Thruway is 10,682. Route 9W travels from the Borough of Fort Lee in Bergen County, New Jersey, through Rockland and Orange Counties, continuing north where it terminates in Albany, New York.

NYS Route 303 provides north-south access to the east of Lake DeForest to the adjacent residential and commercial land uses. It also serves as a collector road to access the Town's major highways. The road is maintained by the NYS DOT and is classified as a principal arterial. The 2004 Average Annual Daily Traffic on this roadway in the vicinity of its intersection with the Thruway is 28,039. North of Lake Road, which is the connector to US Route 9W, the AADT drops to 17,474 in the vicinity of Congers Road.

NYS Route 304 provides north-south access along the west side of Lake DeForest to the adjacent residential and commercial land uses. It also serves as a collector road to access the Town's major highways. The road is maintained by the NYS DOT and is classified as a principal arterial. The 2004 Average Annual Daily Traffic on this roadway in the vicinity of Congers Road (CR 80) is 20,587.

County Route 80 known locally as New Hempstead Road, west of NYS Route 304, and Congers Road, east of NYS Route 304, is the only roadway in the Town to cross Lake DeForest. This road provides east-west access in the northern portion of the Town. This Roadway is maintained by the Rockland County Highway Department.

The Rockland County Highway Department maintains a total of 323 lane miles, of which 98 are located within the Town of Clarkstown¹. The Town Highway Department maintains the remainder of public roadway totaling approximately 300 miles².

Design Classifications

As identified above, roads may be identified by their functional classifications. The functional classification of a road ranges from a local road that accesses a few small residential properties to a primary arterial which may travel the entire width of the nation. Both roads provide an important function in the movement of persons or goods.

According to the New York State Department of Transportation, roads in Clarkstown are considered "urban" due to their location within the New York Metropolitan Area. Urban roads are further classified by the New York State Department of Transportation as Principal Arterials, Other Principal Arterials, Minor Arterials, Collectors, and Local Roads.

- **"Principal Arterials"** are characterized by corridor movement with trip length and density suitable for substantial statewide or interstate travel. Access to the interstate system is limited to approximately 10-mile intervals, though exceptions are made in the urban sections of these highways.
- **"Other Principal Arterials"** are typically highways which provide rapid corridor movement to interstate and regional destinations, but also provide access to adjoining land uses, although service to adjoining land uses are intended to be secondary to traffic through movements. Generally, access is not as limited as with Principal Arterials.

¹ Phone Conversation Mr. Connors, Deputy Supt. Rockland County Highway Department. January 25, 2007.

² Phone conversation Town of Clarkstown Highway Department, January 25, 2007.

- **“Minor Arterials”** This type of roadway provides more access to adjoining land uses, and has a higher frequency of access points and intersections with collectors and the local street system.
- **“Collectors”** serve primarily as a roads that connect the local street system with the arterial system. Generally, there are no access limits. Access to individual properties along a collector road is frequent.
- **“ Local Roads”** The primary purpose of “Local Roads” is to provide access to abutting land uses. The remaining roads in Clarkstown are Local Roads.

Level of Service

The Highway Capacity Manual (Institute of Transportation Engineers) documents the methodology used for modeling levels of service (LOS). Level of service is a measure of the operational quality of an intersection; level of service A is the highest, most efficient level, and level of service F is the lowest level. The operational quality of an intersection is based on the average amount of time a vehicle is delayed.

From a policy standpoint, the New York State Department of Transportation (NYS DOT) generally seeks a minimum level of service D (delay of 55 seconds or less for a signalized intersection). The NYS DOT Highway Design Manual notes, “In some cases, it may be necessary to accept Level of service E or F on individual lane groups due to unreasonable costs or impacts associated with improving the level of service.”

The following descriptions characterize each Level of Service grade in qualitative terms for arterials such as the NYS Thruway, Palisades Interstate Parkway, and NYS Route 59:

- LOS A - Average travel speed of about 90 percent of free flow speed. Stopped delay at signalized intersections is minimal.
- LOS B - Average travel speeds drop due to intersection delay and inter-vehicular conflicts, but remain at 70 percent of free flow speed. Delay is not unreasonable.
- LOS C - Stable operations. Longer queues at signals result in average travel speeds of about 50 percent of free flow speeds. Motorists will experience appreciable tension.
- LOS D - Approaching unstable flow. Average travel speeds down to 40 percent of free flow speed. Delays at intersections may become extensive.
- LOS E - Average travel speeds 33 percent of free flow speed. Unstable flow. Continuous backup on approaches to intersections.
- LOS F - Average travel speed between 25 and 33 percent of free flow speed. Vehicular backups, and high approach delays at signalized intersections.

Peak hours are based on the time of day that typically has the highest capacity requirements and is the most critical for operations. The AM peak hour corresponds with the weekday morning peak commuter traffic period. The PM peak hour corresponds with the weekday evening peak commuter traffic period.

Public Transportation

Mass transit in the Town of Clarkstown is provided primarily by Rockland County on the Transport of Rockland Lines (TOR) , there are seven TOR transit bus routes which provide local bus service in the town throughout the day with limited weekend service. Service is provided along the main roadways of Route 303, Route 304 Route 59, County Road 80 and Kings Highway. Destinations include commuter lots, shopping areas, and public service locations, (i.e. Rockland Community College, libraries and municipal buildings).

Express commuter bus service is provided over the Tappan Zee Express to Tarrytown and White Plains in Westchester County facilitating connections to the bus and commuter rail facilities located at the White Plains Transportation Center.

Rockland Coaches (Red and Tan Lines) provides regional transit service to New Jersey, Pennsylvania and upstate New York.

The Clarkstown Mini Trans provides short local loops to commercial and service destinations. This system could be expanded to serve the needs of active adult residents upon completion of specific active adult development.

In addition to fixed route service, T.R.I.P.S. is a curbside-to-curbside para-transit bus service for Rockland County residents who are physically or mentally challenged or senior citizens over the age of 60 who find it difficult or impossible to use fixed-route bus service. T.R.I.P.S. is a shared-ride transportation system. Passengers may or may not go directly to their destination and there may be several pick-ups and drop-offs along the way. T.R.I.P.S. operates only within Rockland County. T.R.I.P.S. service is provided throughout Rockland County six days a week, Monday through Saturday, and on selected holidays.

The MTA provides express commuter rail service from the Town of Clarkstown to New York City on the Metro North Railroad. There are three station stops in the Clarkstown vicinity, Spring Valley, Nanuet and Pearl River, the train then expresses to the Secaucus Transfer Station. Weekday commuter service is currently available, mid day and weekend service is anticipated to be available in 2008. Express service is available to New York's Penn Station via the recently completed, Secaucus Transfer Station throughout the day. The transfer station connects New Jersey Transit's rail lines with New York's Penn Station. The transfer station allows riders of the NJ Transit rail Lines access to New York Penn Station, instead of transferring via the PATH. Local train service is operated by NJ transit on the Pascack Valley Line. A station stop is available in Clarkstown at Nanuet for local service.

3.7.2 Potential Impacts

Road Network

A site specific traffic study should accompany any substantial zone petition for the AAR Zone. At the time a site-specific traffic study is prepared, such study would take into account traffic to be generated as well as traffic anticipated from other area developments as part of any analysis.

The Comprehensive Plan Update makes numerous recommendations for improvements to the Town's road system. Specifically, the plan calls for reducing the road right of way width

to coincide with the 30 foot of pavement width. The official map, a legally adopted document, designates the dedicated right of way for three categories of facilities: roads, drainage ways and parks. Through the 1990's, Clarkstown used the mapping of these facilities to obtain land for the future widening of streets. Since the Town is approximately 80 percent developed, the Comprehensive Plan Update recognized that there was little likelihood that any roads would need to be widened to the extent contemplated thirty or more years ago, when the town population was much less. The official map required pavement of up to 60 feet and right of way of up to 80 feet. Since widening of this magnitude will not be necessary, and in some cases, is not feasible, the Plan Update recommends that the pavement width in most cases be reduced to 30 feet. Where additional rights of way have been acquired, it may, in some cases be appropriate to utilize this right of way for sidewalk or bikeway connections, particularly leading to hamlet centers, schools, parks, places of worship and community services.

The Comprehensive Plan Update also identifies intersections which should be monitored for capacity or safety improvements - these intersections are listed below: Any development in the vicinity of the listed intersections should conduct a complete traffic capacity analysis.

- PIP Exit 10 at Middletown/Germonds/W. Clarkstown Road New City
- Germonds Road at Route 304, New City
- North Main Street - Congers Lake Road, New City
- Lake Road and Route 303, Valley Cottage
- Lake Ridge Shopping Center, Valley Cottage
- Middletown Road - Route 59 to Church Street, Nanuet
- Middletown Road and Church Street, Nanuet
- Smith Street between Route 59 and Route 304 Southbound Ramps, Nanuet
- College Avenue and Church Street, Nanuet.

Trip Generation and Distribution

The proposed AAR Zone Amendment could introduce up to 800 units of new dwellings. These units are likely to be a combination of multifamily dwellings, townhouse and small single family patio homes. Potential trip generation has been calculated for both active adult senior units and traditional single family units to provide a comparison of the potential trip generation. Tables 3.7-1 and 3.7-2 show the projected trip generation rates and total trips generated using the Institute of Transportation Engineers (ITE)'s Trip Generation. Since the location of the potential sites is distributed throughout the Town, distribution of this potential traffic would be dispersed town wide. Trip generation for eligible AAR parcels was calculated using the ITE Land use code 251 Senior Adult Housing. These trip generation rates are specific to senior citizen housing.

It should be noted that the peak hour for Senior Adult Housing generally does not coincide with the peak hour of adjacent street traffic. The a.m. peak hour occurs between 10 a.m. and 12 noon. The p.m. peak hour occurs between 1 p.m. and 6 p.m. This would minimize the impacts of Active Adult trip generated traffic on local area roads during the peak hours.

Table 3.7-1 Trip Generation Rates				
Land Uses {ITE Code}	Trips			
	A.M. Peak Hour		P.M. Peak Hour	
	IN (Trips/ Unit)	OUT (Trips/ Unit)	IN (Trips/ Unit)	OUT (Trips/ Unit)
800 Senior Adult Housing units {251}	0.079	0.130	0.168	0.107
614 Single Family Residential units {210}	0.179	0.536	0.563	0.331
1,698,500 square foot office space {710}	0.937	0.128	0.253	1.237

Trip Generation, Institute of Transportation Engineers, 7th edition, Washington, DC, 2003.

Table 3.7-2 Trip Generation Estimates						
Land Uses	Trips					
	A.M. Peak Hour			P.M. Peak Hour		
	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)
800 Senior Adult Housing units {251}	63	104	167	134	86	220
614 Single Family Residential units {210}	103	307	410	325	191	533
1,698,500 square foot office space {710}	1591	217	1808	430	2103	2533

Trip Generation, Institute of Transportation Engineers, 7th edition, Washington, DC, 2003.

Implementation of the proposed Active Adult residential zone will result in a reduction of the peak hour trips when compared with the 614 units of single family development and the 1,698,500 square feet of office under the existing development potential. Trip generation could be less for the non-residential zoning, since the LO and LIO zones allow light industrial and warehouse, uses which have lower trip generation rates and which may be in more demand.

An assessment of traffic impacts compared the trip generation rates for single family and Senior Adult Housing developments. Trip generation for Senior Adult residences, during the p.m. peak hour are 0.275 trips per unit, while trip generation for single family, during the p.m. peak hour are 0.9 trips per unit. Thus, the traffic impacts would be reduced for properties converted from potential single family development to active adult development, even when the maximum density bonus is applied.

Properties which are zoned non-residential abutting eligible residentially zoned properties are considered eligible for Active Adult residential use. There is a significant decrease in the traffic impacts of non-residentially zoned properties that are developed for an age-restricted development. For example a 30 acre parcel zoned LIO, would generate more than 500 p.m. peak hour trips if developed for office use, but if zoned for "senior adult housing", including the maximum density bonus would generate only 32 p.m. peak hour trips.

Public Transit

Public transit is provided by the Transport of Rockland (TOR) and available throughout the town. A review of the current routings of the bus routes indicates that service is available in each of the hamlet centers. Transit service is provided where a current ridership need exists.

Where there is no public transportation available in the vicinity of an eligible parcel, accommodations would need to be made to address this need at the time a zone petition was requested. This is typical of transit planning where routes are adjusted based upon the location of new ridership. The following list shows the type of public transit currently available to the eligible properties.

- Transport of Rockland Service is available to parcels; 3,17,21,23,26, 27,28 and 31.
- Rockland Coaches Transit Service is available to parcels; 2,5,6,7,8,13 and 16.
- Clarkstown Mini Trans Service is available to parcels; 1,4,10,15,18 and 24.
- No Service Currently Available; 6,9,11,12,14,19,20,22,25, 29 and 30.

The availability of public transit is important, especially for an aging population. Increased public transit usage would result in positive impacts to the roadway network by decreasing reliance on automobile use. The availability of increased public transit for active adults could encourage increased ridership for the general population town wide.

3.7.3 Mitigation Measures

As the implementation of the AAR Zone Amendment is not anticipated to have any adverse impacts, no mitigation is proposed. Site-specific traffic studies will be undertaken at the time a specific project is proposed. At the time a site-specific zone petition and development application is submitted, transportation mitigation measures may be required.

4.0 ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED

Upon implementation of the AAR Floating Zone, a portion of the land in the town zoned for Laboratory Office or Light Industrial Office, may be utilized to implement the active adult residential zone. These properties would no longer be available for development as Laboratory Office or Light Industrial use, resulting in a loss to the Town of Clarkstown Tax Base.

As listed on Table 3.4-2, there are 10 non-residential eligible parcels which were included in the analysis. Using the general development assumptions outlined in the study, a development assessment under existing zoning indicates approximately 1,698,500 square foot of laboratory office space could be built on these parcels. The environmental impacts of each development application will be fully evaluated as part of the site specific analysis prior to the granting of a zone petition.

No other adverse environmental impacts have been identified that may result from implementation of the Town of Clarkstown Active Adult Floating Zone Amendment. Any impacts resulting from zone petitions for site specific development will be fully evaluated during site plan review.

5.0 Alternatives

This DGEIS considers two alternatives: the No Action alternative, and development of the eligible parcels as-of-right under the Existing Zoning.

5.1 No Action Alternative

The No Action Alternative is the scenario that would occur if no action were taken, if none of the eligible parcels were to be developed. Under this scenario vacant land would remain vacant and underutilized properties would remain as is. Under the No-action alternative, none of the impacts identified in this report, whether adverse or beneficial, would occur.

5.2 Existing Zoning - Development As-of-Right

Under the Existing Zoning Alternative, land use and development would continue to be influenced by the existing zoning local law. The existing zoning does not provide a specific zone for active adult communities. The present zoning does not reflect the recommendations of the Town of Clarkstown Comprehensive Plan, nor the recommendations of the Final Report of the Citizens Advisory Board for Housing in the Town of Clarkstown.

Without adoption and implementation of the proposed zoning amendment, many of the public needs and purposes identified in Chapter I of this DGEIS will remain unserved and the public benefits will not be realized.

As shown in Table 3.4-2, development under the existing zoning would allow 614 residential units to be built including no senior citizen housing and providing no affordable housing. Population projections for these 614 units are estimated at with a population projection of 2068 persons compared to the 1440 persons projected from the AAR zone implementation. In addition, without the AAR zone, more than 500 schoolage children could be introduced. Traffic generation projections indicate p.m. peak hour traffic generation under existing zoning to be 3066 trips. Trip generation rates for active adult housing are less than one third the rates for single family housing.

Development of the eligible parcels as active adult senior residential will result in a reduced population and a significant reduction in traffic impacts. In addition the effect of clustering the AAR development will further reduce environmental impacts.

Adoption of an unmapped floating zone amendment, which stipulates specific conditions, available as a discretionary zone petition to be issued by the Town Board, after a comprehensive site specific review, allows for implementation of this zone in various areas throughout the Town on a case by case basis. This method of implementation allows for the greatest degree of local control over implementation of the Zone Amendment disbursing the potential for impacts town wide while meeting the goals and objectives of the Town of Clarkstown Comprehensive Plan, and the recommendations of the Final Report of the Citizens Advisory Board for Housing in the Town of Clarkstown with regard to senior citizen housing.

6.0 Irreversible and Irretrievable Commitment of Resources

As discussed previously in this DGEIS, certain parcels of land are shown as eligible hosts to the active adult residential floating zone. Implementation of this zone will help achieve the Town's goals, set forth in the Comprehensive Plan update and the findings of the Final report of the Citizens Advisory Board for Housing, with regard to providing affordable senior citizen housing.

Future development that is in accord with the zoning local law amendment would commit land to active adult residential use. Once committed to this use, this land would be unavailable for economic development for the foreseeable future.

Any development can result in the loss of forested habitat. However, the current zoning local law, and the Town's environmental controls limits these potential impacts to the maximum extent.

The finite resources that are typically irretrievably committed by land development include the building materials and energy required for construction, operation and maintenance of the development once completed. Construction involves the commitment of a variety of materials, including but not limited to: fill, concrete, asphalt, steel, lumber, paint products, and other building materials. The operation of construction equipment results in consumption of fossil fuels and other energy resources. When completed, new residences consume fossil fuels and electricity to meet heating, cooling, lighting and other energy needs.

Development also requires a commitment of person hours of labor, which can be viewed as beneficial to the community, the local economy, and the construction industry. It is anticipated that a portion of the construction-related employees at any construction site would come from the Town of Clarkstown. Many construction workers are likely to come from areas throughout Rockland County and nearby counties. Construction employees could have a positive impact on existing local businesses providing such services as food convenience shopping, gasoline, etc.

Other manpower commitments, which are incidental and required only in an emergency, include the services of police personnel, fire departments, and/or ambulance corps.

7.0 Growth Inducing Aspects

Implementation of the zoning local law amendment would result in no significant increase or decrease in the Town's residential "build-out" compared with existing regulations. The majority of eligible parcels are located in Residential, R-15 or R-22 zones. The reduced demographic multiplier as a result of the active adult nature of the population compensates for the increase in density as a result of density bonuses for affordable units. Density bonuses are not as significant (20%) for properties located in multifamily districts.

A total of 800 units of Active Adult Residences may be built as a result of the proposed Zone Amendment. As described in Section 3.5 Socioeconomic Conditions, demographic multipliers for typical two bedroom AAR units is 1.8 persons per unit, resulting in a population increase of up to 1440 persons.

The Zone Amendment gives preference to existing Clarkstown residents, encouraging relocation from their current single family residence into active adult residential accommodations, thus freeing up existing single family residences. There will be a repopulation of the single family homes vacated by Clarkstown seniors who vacate single family homes to relocate to active adult housing. This will tend to balance the demographic effect, in terms of age distribution, of the increased population.

Clarkstown is served by municipal water, and by public sewer. The zoning local law amendment establishes maximum densities of development based on a variety of factors, including environmental constraints.

In the long-term, any new resident population will introduce some consumer demand for retail and service establishments located throughout the Town. Approximately 30 percent of household income is spent on retail goods and services. A substantial portion of these expenditures are made at supermarkets, local convenience stores, apparel stores, restaurants and service businesses such as gas stations and hair salons. According to the latest Census of Retail Trade the following categories of retail businesses would be expected to benefit in proportion to the amount of sales generated by each category:

Table 7-1 New York State: Percent Sales by Retail Category	
Category	Percent
Motor Vehicles	20.9
Furniture/Home Furnishings	3.1
Electronic and appliance stores	3
Building Materials	7.8
Food and beverage	18.3
Health and personal care	7.4
Gasoline service stations	5.7
Clothing	9.5
Sporting goods and hobbies	3.4
General merchandise (warehouse clubs, department stores)	11.4
Miscellaneous (florist, office supplies)	3.9
Non-store retailers (electronic shopping, fuel distributors)	5.5
Source: U.S. Census Bureau, 1997 Economic Census: Retail Trade New York.	

To the extent these uses are allowed by the proposed zoning and there is sufficient market demand, the above listed establishments may be expected to benefit or be introduced as a result of household expenditures made by future Clarkstown residents.

8.0 Effects on the Use and Conservation of Energy Resources

Implementation of the proposed active adult residential zone may result in the construction of up to 800 new residences. These units will be constructed to the most recent and energy efficient standards.

Residential and commercial building designs submitted for construction permits on or after the effective date of July 3, 2002 must comply with the Energy Conservation Construction Code of New York State ("Energy Code"). The Energy Code addresses the design of energy-efficient building envelopes and the installation of energy-efficient mechanical, lighting and power systems through requirements emphasizing performance for residential uses. Requirements apply to heating and cooling systems, the hot water system, electrical system, material and equipment specifications and sealing the building envelope.

In terms of lighting standards, the NYS Energy Code requires:

- Manual or automatic controls or switches that allow occupants to dim lights and turn them on or off when appropriate. The Code identifies control, switching, and wiring requirements that apply to all buildings.
- Total connected loads for indoor lighting systems that do not exceed power allowances for a building. The Code demonstrates how to comply with interior-lighting power limits.
- Energy-efficient exterior lighting. The Code specifies criteria for complying with exterior-lighting requirements.

Adherence to the NYS Energy Code will result in energy savings.