

10 Growth Forecasts

Based on historic and current trends, projections can be built regarding population and housing units. The projections are used to estimate growth rates and land demand projections in the town, and how the land use plan can best accommodate anticipated residential and commercial growth.

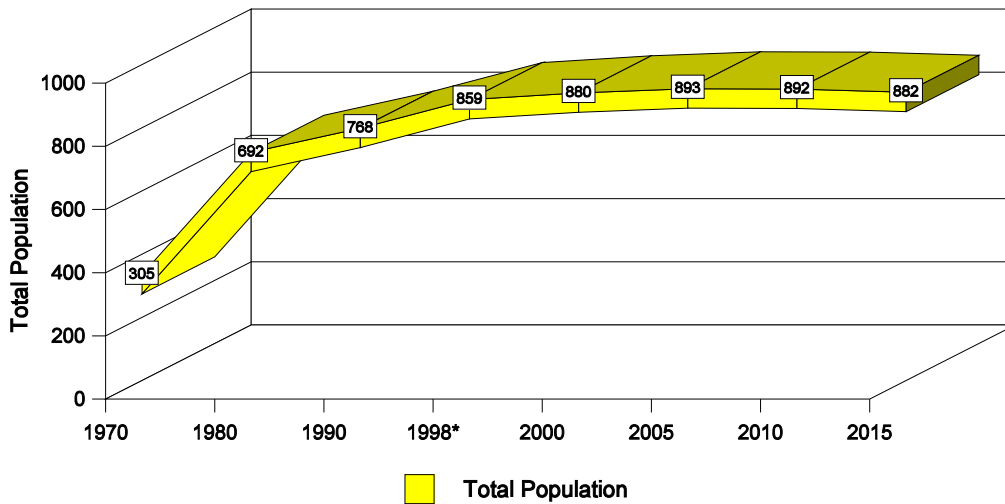
10.1 Population Trends and Projections

Wisconsin Department of Administration (WDOA) Projections

In 1993 the Wisconsin Department of Administration's (WDOA) Demographic Services Center prepared baseline population projections to the year 2015 for communities and counties of the state. The WDOA utilized a projection formula that calculates the annual numerical population change (yearly population estimates), and which estimated extended community population projections.

The projections prepared by the WDOA are presented in Figure 10-1. The WDOA projections predict Cloverland will experience a population increase of 2.7% from the 1998 population estimate to the year 2015.

Figure 10-1
Population Trends and Projections
Town of Cloverland
1970 - 2015

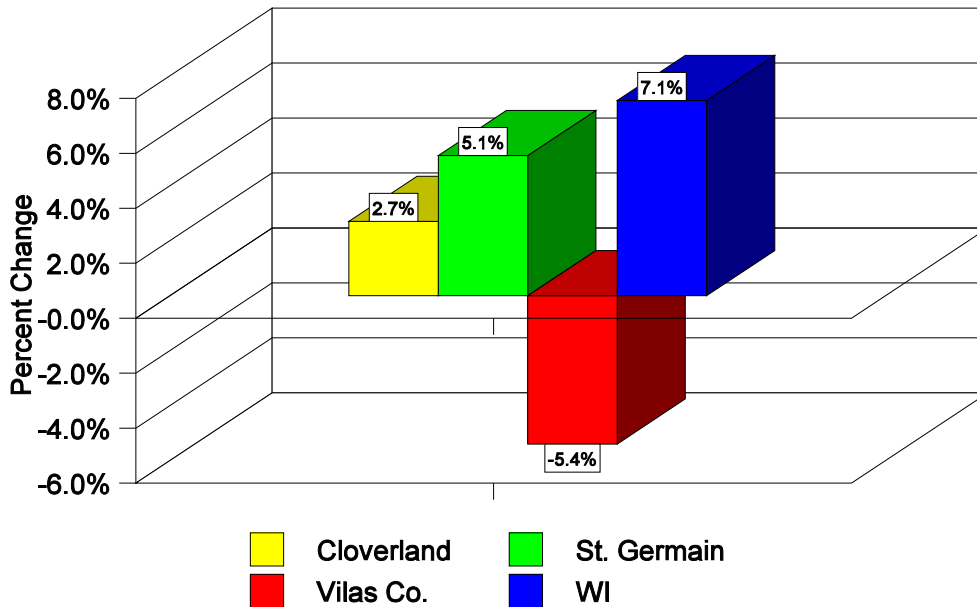


Source: Wisconsin Demographic Services Center *Official Municipal Population Projections 1990 - 2015*.

*Wisconsin Department of Administration Official Population Estimate 1998.

Figure 10-2 presents a comparison of the projected percent change in population from the 1998 population estimate to the 2015 population projection for the towns of Cloverland and St. Germain, Vilas County, and the state of Wisconsin.

**Figure 10-2
Comparative Population Projections
Town of Cloverland and Selected Areas
1998-2015**



The comparison of the population projections from 1998 to 2015 presents some interesting information for the planning area. Both Cloverland and St. Germain are expected to increase slightly from 1998 to 2015, while Vilas County as a whole is projected to decrease through 2015. However, the actual outcome will likely be different than the projection. While the projections by the WDOA are based on sophisticated modeling using population trends and economic conditions, the attractiveness of the area for year-round recreational opportunities and the ability of commerce and freedom of location afforded through the Internet will likely contradict these projections. The town and the county can expect, as the regional trends have identified, that many of the seasonal/recreational homes will be converted to year-round retirement homes while new families continue to discover the abundance of recreational opportunities and natural beauty in the area.

Population Projections Based on Recent Building Permit Data

A comparative method of projecting population growth (1990 to 2015) is based on building permit activity trends. Cloverland’s 19-year average of 15 additional housing units was used to calculate the straight-line housing projection from 1998 to 2015. The population projections are derived by using the projected number of total housing units bases on the 19-year permit trend and calculating the total number of occupied units based on the breakdown of housing units which existed in the town in 1990, which was 39.3%. The number of occupied units were then multiplied by the projected number of persons per household to establish the projected population. The results of these calculations are presented in Table 10-1 and compared to the WDOA forecast.

Table 10-1
Population Projections Based on
Building Permit Activity Data
Town of Cloverland
1990-2015

| | 1990 | 1998 | 2000 | 2005 | 2010 | 2015 |
|--|------------|------------|------------|------------|------------|------------|
| Total Housing Units | 826 | 988 | 1,018 | 1,093 | 1,168 | 1,243 |
| Occupied Units (39.34% of total units) | 325 | 389 | 400 | 430 | 459 | 489 |
| Persons Per Household | 2.36 | 2.21 | 2.13 | 2.05 | 1.96 | 1.89 |
| Total Population | 768 | 859 | 853 | 881 | 901 | 924 |

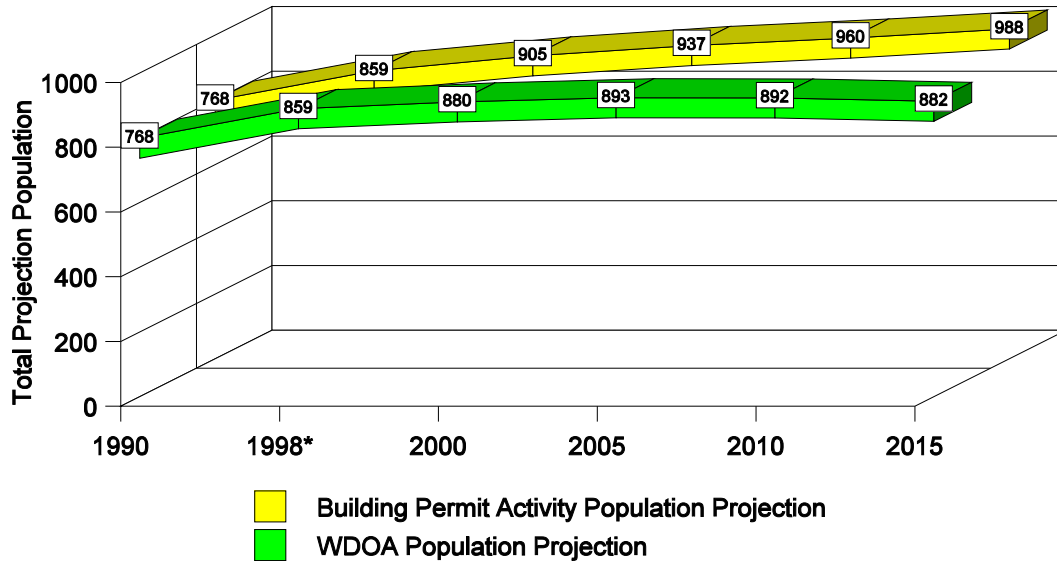
Source: 1990 U.S. Census Data; WDOA Wisconsin Household Projections by Household Types 1990-2015, whereby the increments used to obtain the projected number of persons per household for the Town of Cloverland were based on Vilas County’s projection increments; Vilas County Zoning Office, Building Statistics, 1991-1997; Foth & Van Dyke, 1999.

Based on the derived projection presented in Table 10-1, the Town of Cloverland is projected to grow from an estimated 859 persons in 1998 to 988 persons in 2015. This is a 15% increase for the 17-year period.

Comparative Population Projections

For comparison purposes, Figure 10-3 presents the WDOA population projections and the derived population projection based on the building permit activity trend. The figure depicts the differences between projections which should be used as parameters for the actual population growth in Cloverland by 2015, while 1990 data is included as a baseline.

**Figure 10-3
Comparative Population Projections
Town of Cloverland
1990-2015**



Source: WDOA *Official Municipal Population Projections*, Vilas County Annual Zoning Report 1990 - 1998, Foth & Van Dyke derived population projections 1999; *WDOA, Demographics Services Center, Wisconsin Dept of Health & Social Services licensed accommodations list March 12, 1999

Summary of Population Projections

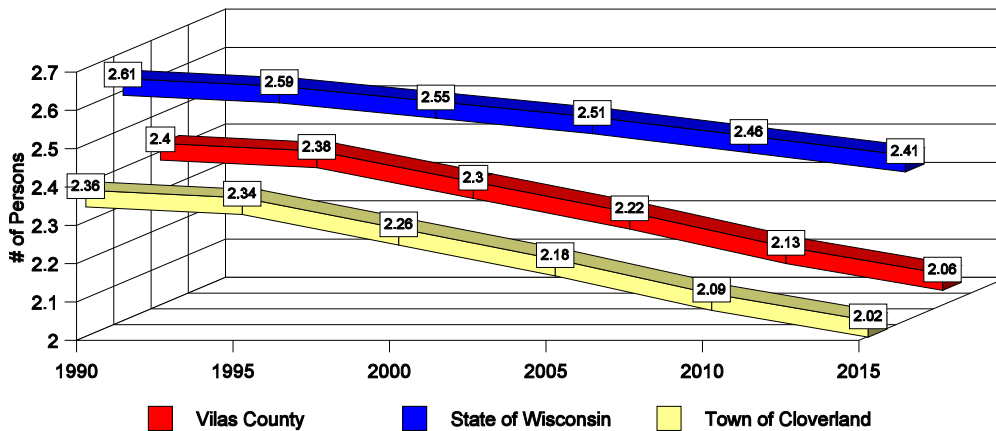
The population projections calculated by the WDOA, and those derived by Foth & Van Dyke based on building permit activity, create a range which the Town of Cloverland can use as a guide for future development needs and services. The WDOA population projection for Cloverland projects a population increase of 2.7% between the 1998 estimate and the year 2015, while Foth and Van Dyke’s building permit-based projection anticipates a 15% increase over the same period. This comparative trend analysis creates a range for which to plan for, of an increase of 23 persons to 129 persons, or a variance of 106 individuals between the two projections.

In comparison, during the eight-year period from 1990 through 1998, the town’s population increased by 91 persons, representing a growth rate of 11.8%. In accord with the 1998 estimated population, both projections appear to be realistic. Therefore, it is anticipated that the actual population level in the town will continue to increase, and will be ahead of the WDOA projection but will likely fall short of the projection derived based on building permit trends.

10.2 Housing Unit Projections

In conjunction with population projections, housing units projections are calculated to determine future land use needs and acreage demands as well as future demands on the town's public facilities and services. To begin the housing unit projections, a review of the average Cloverland household size was completed relative to change in the projected persons per household. As presented in Figure 10-4, the number of persons per occupied housing unit is projected to decline between the year 1990 and 2015 for the town of Cloverland, as well as throughout the county and state.

Figure 10-4
Projected Persons Per Household
Town of Cloverland, Vilas County, and State of Wisconsin
1990-2015



Source: Department of Administration, Division of Energy and Demographic Services, Demographic Services Center, Wisconsin Household Projections by Household Type 1990-2015, December 1993; U.S. Bureau of the Census, 1990 Census of Population and Housing, STF3A

Housing Unit Projections Based on WDOA Data

Housing unit projections are an important element to understand potential land demands. Specifically, the projections are used to allocate required acreage to accommodate the expected increase in residential development, and to some degree the commercial development need, throughout the planning period.

Projections in Table 10-2 are based on the number of year-round housing units, which includes all occupied and vacant units which are either for sale or for rent. It does not include seasonal units which are assumed to remain constant. The projections for seasonal housing units are presented following the year-round housing unit projections. Table 10-2 provides the total year-round WDOA housing unit projections for the Town of Cloverland.

Table 10-2
Projected Number of Year Round Housing Units
Town of Cloverland
1990-2015

| Characteristics | 1990 | 1998 | 2000 | 2005 | 2010 | 2015 |
|---------------------------------|------------|------------|------------|------------|------------|------------|
| Population | 768 | 859 | 880 | 893 | 892 | 882 |
| Person Per Household | 2.36 | 2.21 | 2.13 | 2.05 | 1.96 | 1.89 |
| Occupied Units (@90.8%) | 325 | 389 | 413 | 436 | 455 | 467 |
| Vacant Year Round Units (@9.2%) | 33 | 39 | 40 | 41 | 46 | 47 |
| Total Year Round Units | 358 | 428 | 455 | 480 | 501 | 514 |

Source: U.S. Bureau of the Census, 1990 Census of Population and Housing, STF1A; WDOA Demographic Service Center, Official Municipal Population Projections 1990-2015.

Note: The increments used to obtain the projected household size for the Town of Cloverland were taken from Vilas County's projection increments according to the Demographic Services Center.

The important information presented in this projection table is the projected addition of 53 year-round housing units between the estimated number of year-round housing units in the town in 1998 and the year 2015, representing a 12.4% increase overall.

Projected Seasonal and Recreational Housing Growth

Utilizing the year-round housing unit projections for the Town of Cloverland from 1998 to 2015, projections for the number of seasonal housing units were calculated for the same period. These projections are presented in Table 10-3.

Table 10-3
Projected Number of Seasonal Housing Units
Town of Cloverland
1990-2015

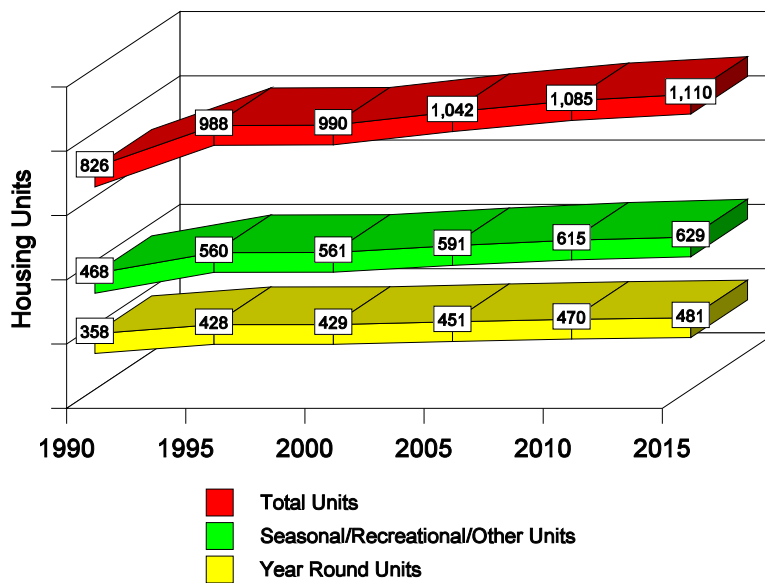
| Housing Units | 1990 | 1998 | 2000 | 2005 | 2010 | 2015 |
|----------------------------|------------|------------|------------|--------------|--------------|--------------|
| Year Round Units (@ 43.3%) | 358 | 428 | 429 | 451 | 470 | 481 |
| Occupied Units | 325 | 389 | 389 | 410 | 427 | 437 |
| Vacant Year Round Units | 33 | 39 | 40 | 41 | 43 | 44 |
| Seasonal Units (@56.7%) | 468 | 560 | 561 | 591 | 615 | 629 |
| Total Housing Units | 826 | 988 | 990 | 1,042 | 1,085 | 1,110 |

Source: U.S. Bureau of the Census, 1990 Census of Population and Housing, STF1A; WDOA Demographic Service Center, Official Municipal Population Projections 1990-2015.

Note: Projections based on actual 1990 census data where occupied units accounted for 39.3 %, vacant year round 4 %, and seasonal units 56.7 % of the total housing units in the Town of Cloverland.

Similar to the year-round housing unit projections, seasonal housing units are projected to increase by 12.3% for an additional 69 units by 2015. Overall, Cloverland can expected the total number of housing units to climb from an estimated 988 units in 1998 to 1,110 total housing units in 2015 based on the WDOA information. This indicates that the town will experience less growth through the planning period than was experienced more recently between 1990 and 1998 whereby an estimated 162 units were added in the town, resulting in a 19.6% increase in housing units during this eight-year time period. These projections are presented graphically in Figure 10-5.

**Figure 10-5
Projected Number of Housing Units by Year-Round, Seasonal, and Total Units
Town of Cloverland 1990-2015**



Source: U.S. Bureau of the Census, 1990 Census of Population and Housing, STF1A; WDOA Demographic Service Center, Official Municipal Population Projections 1990-2015.

Note: Projections based on actual 1990 census data where occupied units accounted for 39.3 %, vacant year round 4 %, and vacant other 56.7 % of the total housing units in the Town of Cloverland.

Housing Unit Projections Based on Recent Housing Development Activity

An additional measure that assists in the illustration of the growth in residential housing units for the Town of Cloverland is the housing development activity. Table 9-4 in the Land Use section displays the housing development activity from 1980 to 1998 which includes single-family units, multi-family units, and mobile homes or trailers. The 19 year average of 15 housing unit permits annually for Cloverland was used to calculate the projected number of housing units for the town from 1998 to 2015.

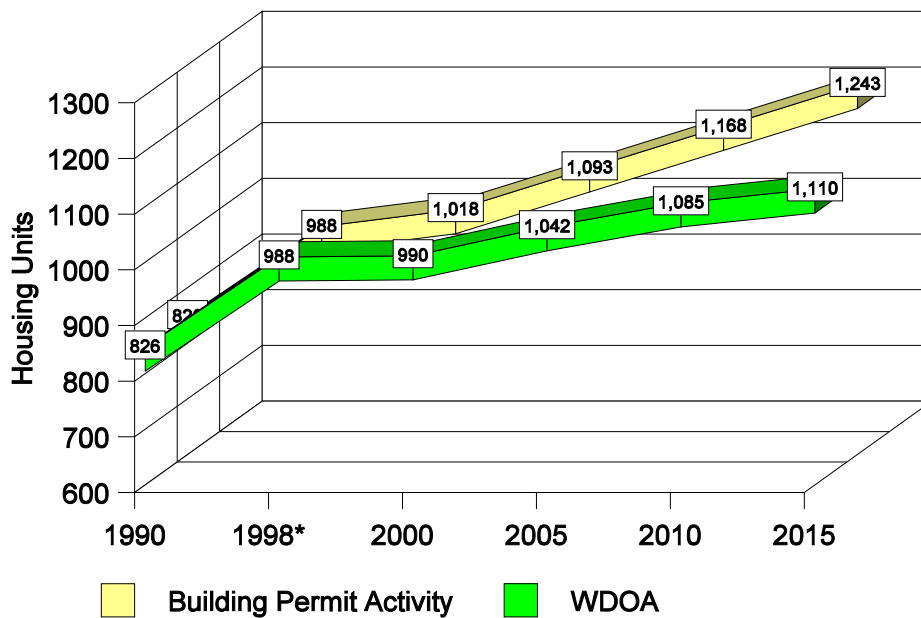
Using this method of projecting housing units, the total number of housing units in Cloverland is projected to reach 1,243 units by the year 2015, an increase of 25.8% from the estimated number

of housing units in 1998. This projection estimates there will be 133 more housing units in the town than that projected based on the WDOA data.

Comparative Housing Projections

Figure 10-6 illustrates both the WDOA housing unit projections and the projection prepared based on recent building permit activity data, simultaneously. The figure depicts the differences between projections which should be used as parameters for the anticipated growth in housing units in Cloverland through the year 2015.

**Figure 10-6
Comparative Housing Unit Projections
Town of Cloverland
1990-2015**



Source: Vilas County Zoning Office Annual Reports, 1990 - 1998. U.S. Bureau of the Census, 1990 Census of Population and Housing, STF1A; WDOA Demographic Service Center, Official Municipal Population Projections 1990-2015.

The WDOA and building permit projections were then divided into the different types of housing units, including: single-family units, multi-family units, and other units. This division of the total housing unit projections by housing type uses the 1990 percentages of housing types provided in the 1990 Census of Population and Housing for the Town of Cloverland.

Table 10-4
Projected Housing Units by Type
Town of Cloverland
1990 - 2015

| Type of Housing Units | WDOA | | | | | | Building Permits | | | | |
|----------------------------|------------|------------|------------|--------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|
| | 1990 | 1998 | 2000 | 2005 | 2010 | 2015 | 1998 | 2000 | 2005 | 2010 | 2015 |
| Single Family* (@98.8%) | 816 | 976 | 978 | 1030 | 1072 | 1097 | 976 | 1,006 | 1,080 | 1,154 | 1,228 |
| Multi-Family (@1%) | 8 | 10 | 10 | 10 | 11 | 11 | 10 | 10 | 11 | 12 | 12 |
| Other** (@0.2%) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| Total Units | 826 | 988 | 990 | 1,042 | 1,085 | 1,110 | 988 | 1,018 | 1,093 | 1,168 | 1,243 |

*Single family includes attached units, detached units, and mobile homes or trailers.

**Other housing units refers to living quarters that are occupied, or could be occupied, which do not fall into any of the other categories. Examples include houseboats, railroad cars, campers, vans, etc.

Source: U.S. Census of Population and Housing 1990, STF 1 Table H41; Foth & Van Dyke housing unit projections calculated from Wisconsin Department of Administration population data.

The projection of total housing units by type of housing assumes the 1990 percent of housing units by type will remain the same until 2015. Single-family units will continue to account for the largest share of housing units with 98.8% of all housing units.

Summary of Housing Unit Projections

The housing unit projections prepared using building permit trends from 1990 to 1998 are somewhat more aggressive when compared to the projections prepared utilizing WDOA data. Utilizing the building permit activity trends, it is projected that Cloverland will have 1,243 total housing units by the year 2015, an increase of 255 units (25.8%) from the estimated number of housing units in the town in 1998 (988). In contrast, the WDOA data projects the town will have 1,110 housing units, an increase of 122 units (12.3%) over the same planning period. The two projections vary by 133 housing units.

The U.S. Census Bureau indicates that there were 826 total housing units in Cloverland in 1990. However, between 1991 and 1998 there were 162 building permits issued for residential development in the town of Cloverland, resulting in an estimated 988 housing units in the town in 1998. This indicates that the WDOA estimate is slightly low as it projects there will be 990 units in the town in the year 2000. Thus, the projection based on building permit activity over the past 19 years appears to be a more reliable indicator of projected housing units growth. However, ultimately it is likely that the projected number of housing units for the town will be closer to a number which falls between the two projection scenarios.

10.3 Residential Land Use Acreage Needs

Projections of future land use types are a fundamental element in the development of the Preferred Land Use Map. To achieve "managed growth", demands for acreage to accommodate different land use types must be forecasted and ultimately located on the Preferred Land Use Map. In the town of Cloverland, adequate acreage for planned residential is required to accommodate foreseeable needs and react to anticipated demands.

To accomplish this task, housing unit projections were utilized to develop Table 10-5. Table 10-5 compares anticipated residential acreage demands based on WDOA and building permit projections. The comparison timeline covers a 17 year period from 1998-2015 and is based on the composition of 100% single family units, which includes mobile homes (as a percentage of land use, single family residential occupies over 98.8% of the existing residential land use in the town). The densities of the unit projections were based on input from the Cloverland Land Use Planning Committee and assumptions relative to the location of the anticipated development. The building permit forecast was based on the average number of residential housing units (15 new units) that were permitted per year in the Town of Cloverland over the last 19 years (1980-1998). The WDOA projection was based on official census projections.

**Table 10-5
Residential Acreage Projections
1998-2015**

| Parcel Size | Estimated % of Developments | WDOA | | Building Permit | |
|------------------|-----------------------------|--------------------------|----------------------|--------------------------|----------------------|
| | | Potential Dwelling Units | Acreage Requirements | Potential Dwelling Units | Acreage Requirements |
| 10 acres or more | 10% | 12.0 | 120.0 | 25.0 | 250.0 |
| 5.0 acres | 10% | 12.0 | 60.0 | 25.0 | 125.0 |
| 2.5 acres | 30% | 37.0 | 92.5 | 77.0 | 192.5 |
| 1.5 acres | 30% | 37.0 | 55.5 | 77.0 | 115.5 |
| 1.0 acre or less | 20% | 24.0 | 24.0 | 51.0 | 51.0 |
| Total | 100% | 122.0 | 352.0 | 255.0 | 734.0 |

Source: WDOA U.S. Bureau of the Census, 1990 Census of Population and Housing, STF1A; WDOA Demographic Service Center, Official Municipal Housing Unit Projections 1990-2015. Foth & Van Dyke Estimates & Projections

* Required units 1990-2015.

Based on Table 10-5, the Town of Cloverland could see a residential acreage need range of between 352 acres and 734 acres from 1998-2015. The acreage associated with residential need is based on assumptions of continued growth and development occurring in accordance with the percentages allocated in Table 10-5. The projection based on building permit activity over the past 19 years appears to be a more reliable indicator of projected housing units growth. However,

ultimately it is likely that the projected number of housing units for the town will be closer to a number which falls between the two projection scenarios.

10.4 Commercial Land Use Acreage Needs

Given the town of Cloverland's high seasonal residential and relatively low commercial base in the town, commercial need can be difficult to forecast. To that end, the *Town of Cloverland Land Use Plan* used two different alternatives to forecast commercial acreage need. The first option calculated a percentage of commercial land use to total land use to develop a commercial (business) development ratio. The development ratio option anticipates a direct relationship to service demands and population levels. The second option for forecasting commercial land demand projections consisted of analyzing the average number of commercial building permits issued over the last 19 years (1980-1998). The average number of permits were straight-line forecasted throughout 2015, with each permit attributed a land acreage to calculate demands and potential property conversions to commercial use.

**Table 10-6
Commercial Acreage Projections**

Option 1: Acreage - Population Ratio¹

| Existing Commercial ² Acreage - 1998 | Existing Population 1998 | WDOA Population Projection | | Building Permit Population Projection | |
|---|--------------------------|-----------------------------------|---------------------------|---------------------------------------|---------------------------|
| | | Projected Commercial Acreage 2015 | Projected Population 2015 | Projected Commercial Acreage 2015 | Projected Population 2015 |
| 76.7 | 859 | 78.7 (+2.0) | 882 | 88.2 (+11.5) | 988 |

¹Ratio = Acreage divided by population.

²Includes home based business.

Option 2: Commercial Permit Forecast

| Total Commercial Building Permits 1980-1998 | Potential Commercial Building Permits 1999-2015 | Potential Acreage Required 2.0 Ac/Permit |
|---|---|--|
| 14 | 13 | 26.0 |

The acreage-population ratio (Option 1) anticipates a slight gain of 2.0 acres of commercial use based on the WDOA population forecast. Based on the building permit forecast, only 11.5 acres of commercial may be needed if the population increases in accord with Table 10-1. Option 2, based on commercial permits, anticipates 26.0 acres of commercial land may be needed if future permit activity mirrors past volume.

The plan acknowledges, based on the existing percentages, continued business growth in Cloverland most likely will be home-based businesses, followed by service related business. The

town's location between the city of Eagle River and the town of St. Germain offers the population the opportunity to secure business services in those areas where it already exists, therefore reducing the demand for commercial uses in Cloverland.