In 2030, Huntersville will have a variety of housing options with higher intensity residential development and redevelopment generally focused within two miles of the I-77/NC-115 corridor (area two below) and lower intensity residential in the east and west areas of town (area one & three below) and in mixed-use village nodes at important crossroads. Residential uses should be located in close proximity to commercial services and employment opportunities and be accessible by a connected street network offering auto, pedestrian, bicycle and mass-transit mobility options.
FOCUS AREA: HOUSING

1.0 INTRODUCTION

As previously noted in the Introduction and Framework section, over the past two decades, the Town of Huntersville has experienced rapid growth and development, going from a population of 3,014 in 1990 to a 2010 US Census population of 46,773. Over this same period of time, the number of housing units in Huntersville has increased from 1,330 to 18,477. The tremendous increase in housing units since 1990 has had a number of implications, including increases in traffic congestion, school-age population and the associated demand for commercial, municipal and institutional services.

2.0 HISTORICAL TRENDS

The rapid growth in Huntersville since 1990 has fueled a single-family housing boom that has vaulted the community from a small former mill town to a thriving suburban center. Table H-1 below illustrates the tremendous residential growth that has occurred in Huntersville during this time.

Table H-1
Residential Growth Since 1990

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>3,014</td>
<td>1,330</td>
</tr>
<tr>
<td>2000</td>
<td>24,960</td>
<td>9,859</td>
</tr>
<tr>
<td>2010</td>
<td>46,773</td>
<td>18,477</td>
</tr>
</tbody>
</table>

Source: U.S. Census

Table H-2 shows the breakdown of new building permits for single and multi-family dwellings since 2000. As can be seen from this table, the peak of new residential construction was in 2006 when 1,291 single and multi-family units were permitted. The lowest number of residential permits issued in the past decade was in 2010 when only 232 single-family permits and no multi-family permits were issued.

Table H-2

<table>
<thead>
<tr>
<th>Year</th>
<th>Single-Family</th>
<th>Multi-Family</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>860</td>
<td>328</td>
<td>1188</td>
</tr>
<tr>
<td>2001</td>
<td>811</td>
<td>320</td>
<td>1131</td>
</tr>
<tr>
<td>2002</td>
<td>733</td>
<td>0</td>
<td>733</td>
</tr>
<tr>
<td>2003</td>
<td>906</td>
<td>0</td>
<td>906</td>
</tr>
<tr>
<td>2004</td>
<td>897</td>
<td>0</td>
<td>897</td>
</tr>
<tr>
<td>2005</td>
<td>1027</td>
<td>0</td>
<td>1027</td>
</tr>
<tr>
<td>2006</td>
<td>1041</td>
<td>250</td>
<td>1291</td>
</tr>
<tr>
<td>2007</td>
<td>704</td>
<td>0</td>
<td>704</td>
</tr>
<tr>
<td>2008</td>
<td>369</td>
<td>0</td>
<td>369</td>
</tr>
<tr>
<td>2009</td>
<td>236</td>
<td>0</td>
<td>236</td>
</tr>
<tr>
<td>2010</td>
<td>232</td>
<td>0</td>
<td>232</td>
</tr>
<tr>
<td>TOTALS</td>
<td>7,816</td>
<td>898</td>
<td>8714</td>
</tr>
</tbody>
</table>

Source: Mecklenburg County

Housing: Huntersville 2030 Community Plan
3.0 OVERVIEW OF HOUSING TYPES

The predominant housing type in the Town of Huntersville is single-family, comprising 15,705 units or approximately 85% of the 18,477 total housing units within the town limits as of 2010. As used in this section, the term “single-family” includes detached single-family, attached single-family (townhomes) and duplexes. Multi-family refers to three or more units and comprises 2,772 units or approximately 15% of the total number of housing units in Huntersville. The vast majority of the single-family units are located in subdivisions built since 1990. Of the 100 named subdivisions in Town, 63 are built out, 28 are in various stages of build-out and nine have been approved but not yet started.

Existing multi-family units are located primarily in 11 apartment complexes. Map H-1 shows the location of all residential land uses constructed or approved in Huntersville in yellow.

4.0 HOUSING COST & AFFORDABILITY

4.1 Housing Cost

Housing prices in Huntersville reflect, in part, the Town’s proximity to Charlotte and Lake Norman. In 2000, U.S. Census figures placed the median value of a single-family home in Huntersville at $182,800. In 2008, the Census estimate was $247,800, representing a 36% increase from 2000.
Table H-3 compares Huntersville home values from 2000 and 2008 with surrounding communities, Mecklenburg County, North Carolina and the U.S.

### Table H-3


<table>
<thead>
<tr>
<th>Location</th>
<th>Year</th>
<th>2000¹</th>
<th>2008²</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huntersville</td>
<td>$182,800</td>
<td>$247,800</td>
<td>(+ 36%)</td>
<td></td>
</tr>
<tr>
<td>Cornelius</td>
<td>$236,500</td>
<td>$298,800</td>
<td>(+ 26%)</td>
<td></td>
</tr>
<tr>
<td>Davidson</td>
<td>$270,000</td>
<td>$353,671</td>
<td>(+ 31%)³</td>
<td></td>
</tr>
<tr>
<td>Mecklenburg County</td>
<td>$141,800</td>
<td>$186,200</td>
<td>(+ 31%)</td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td>$108,300</td>
<td>$145,600</td>
<td>(+ 34%)</td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>$119,600</td>
<td>$192,400</td>
<td>(+ 61%)</td>
<td></td>
</tr>
</tbody>
</table>

Sources:
1. U.S. Census Data
2. U.S. Census Estimates
3. Estimate provided by City-Data

Multiple listing figures for 2010 show the average purchase price for a home sold in Huntersville at $266,450.

### 4.2 Housing Affordability

The U.S. Department of Housing and Urban Development (HUD) defines housing as “affordable” when a household pays no more than 30 percent of its annual income on housing.

According to HUD, families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.

Using 2008 U.S. Census estimates, the median household income for the Town of Huntersville was $86,210. The estimated median house value was $247,800 and the median rent was $875. Using the 30% total housing cost (mortgage or rent, plus insurance, taxes and utilities) figure, approximately 59% of households in Huntersville could afford the median priced home. The income required to afford this median priced home is approximately $68,000 or higher.

Based on the 30% of income affordability threshold, 85% of Huntersville residents could afford the median rent (equal to an annual household income of approximately $35,000 or higher).

In a “Housing Opportunity Index” report prepared by Wells Fargo and the National Association of Home Builders in February 2011, 77.6% of the homes for sale in the Charlotte-Gastonia-Rock Hill area were considered affordable for households earning the median household income. Nationally, 72.2% of homes were affordable to a median household income.
4.3 Housing Values

The distribution of housing values is another valuable measure of how affordable the housing stock is for Huntersville residents. Table H-4 shows the percentage of housing units for a variety of price ranges.

Table H-4
Huntersville Housing Units by Value, 2008

<table>
<thead>
<tr>
<th>Value</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 49,999</td>
<td>4.2%</td>
</tr>
<tr>
<td>$50,000 - $99,999</td>
<td>7.9%</td>
</tr>
<tr>
<td>$100,000 - $149,999</td>
<td>11.3%</td>
</tr>
<tr>
<td>$150,000 - $199,999</td>
<td>17.9%</td>
</tr>
<tr>
<td>$200,000 - $249,999</td>
<td>24.8%</td>
</tr>
<tr>
<td>$250,000 - $299,999</td>
<td>13.4%</td>
</tr>
<tr>
<td>$300,000 - $399,999</td>
<td>14.5%</td>
</tr>
<tr>
<td>$400,000 - $499,999</td>
<td>4%</td>
</tr>
<tr>
<td>$500,000 - $749,999</td>
<td>1.2%</td>
</tr>
<tr>
<td>$750,000 - $999,999</td>
<td>.3%</td>
</tr>
<tr>
<td>$1 million +</td>
<td>.5%</td>
</tr>
</tbody>
</table>

Source: U.S. Census

The largest percentage of homes are within the $200,000 to $249,999 range (24.8%), followed by those in the $150,000 to $199,999 range.

5.0 HOUSEHOLD SIZE & HOME SIZE

At 2.67 persons per household, Huntersville exceeds the national average of 2.61 persons per household. This is consistent with the low median age, 35.2 years, of Huntersville’s population, compared with the U.S. average of 37.2 years and the high percentage of residents under five years old, 8.4%, versus the national average of 6.5%. Table H-5 compares the number of persons per household in Huntersville with surrounding communities, Mecklenburg County, North Carolina and the U.S.

Table H-5
Persons per Household - 2009

<table>
<thead>
<tr>
<th>Location</th>
<th>2009¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huntersville</td>
<td>2.67</td>
</tr>
<tr>
<td>Cornelius</td>
<td>2.31²</td>
</tr>
<tr>
<td>Davidson</td>
<td>2.30³</td>
</tr>
<tr>
<td>Mecklenburg County</td>
<td>2.40</td>
</tr>
<tr>
<td>North Carolina</td>
<td>2.48</td>
</tr>
<tr>
<td>U.S.</td>
<td>2.60</td>
</tr>
</tbody>
</table>

Sources:
¹U.S. Census Data
²2008 U.S. Census Data
³Onboard Informatics

Average home sizes in the U.S. have increased from 953 sq. ft. in 1950 to 2,438 sq. ft. in 2009. In Huntersville, the average size home built in 2009 was 2,672 sq. ft., which was nearly 10% larger than the national average.

Census Facts:
At 35.2 years, Huntersville residents are two years younger than the U.S. average of 37.2 years.
Table H-6 shows the average size of homes built in Huntersville since 2001 as compared with the U.S. and the south region.

Table H-6
Average Square Feet of Single-Family Homes Built in Huntersville/U.S./South Region (2001-2010)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2,482</td>
<td>2,324</td>
<td>2,351</td>
</tr>
<tr>
<td>2002</td>
<td>2,652</td>
<td>2,320</td>
<td>2,317</td>
</tr>
<tr>
<td>2003</td>
<td>2,565</td>
<td>2,330</td>
<td>2,335</td>
</tr>
<tr>
<td>2004</td>
<td>2,539</td>
<td>2,349</td>
<td>2,268</td>
</tr>
<tr>
<td>2005</td>
<td>2,524</td>
<td>2,434</td>
<td>2,463</td>
</tr>
<tr>
<td>2006</td>
<td>2,363</td>
<td>2,469</td>
<td>2,499</td>
</tr>
<tr>
<td>2007</td>
<td>2,519</td>
<td>2,521</td>
<td>2,573</td>
</tr>
<tr>
<td>2008</td>
<td>2,706</td>
<td>2,519</td>
<td>2,564</td>
</tr>
<tr>
<td>2009</td>
<td>2,672</td>
<td>2,438</td>
<td>2,488</td>
</tr>
<tr>
<td>2010</td>
<td>2,691</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

These figures indicate that over the last two full years of reporting, the average home size in the US and south region has been decreasing. The table also shows the average home size in Huntersville is approximately 9% larger than that constructed in the US and south region.

6.0 APPROVED / UN-BUILT HOUSING INVENTORY & FUTURE DEMAND PROJECTIONS

As noted in Table H-2, the number of residential building permits for new homes has dropped significantly since the peak of the housing market in 2006. One of the results of this drop in building permits has been a slower absorption rate for approved, yet un-built housing units. As of December 31, 2010, there were 4,236 approved (un-built) single-family house lots and 3,634* approved (un-built) multi-family units. Single-family house lots include attached (townhomes), detached units and duplexes, while multi-family is defined as three or more units.

(*This figure assumes all 2,305 units approved in the Bryton transit oriented development will be multi-family, however, it is possible that some of these units may be converted to townhomes, which would be classified as single-family units.)

Based upon a 2030 population projection of 89,597 (medium growth scenario) for the Town, a total of 3,670 multi-family units and 13,900 single-family units would be required to meet the demand for housing generated by this growth.

Citizen Survey: 61% of survey respondents indicated that they thought Huntersville was a good or excellent place to retire.
Figure H-1 below depicts the number of approved un-built single-family and multi-family dwelling units as of December 31, 2010 along with the number of units required to accommodate the 2030 medium growth scenario population projection. Based on these figures, by 2030 there will be a need for an additional 9,664 single-family homes to accommodate the projected population growth. For multi-family, there will be a need for an additional 36 units to meet the demand to be generated by projected population growth. It is clear from Figure H-1 that even if Bryton contains a number of townhome units as opposed to multi-family units, there is a substantial inventory of approved multi-family units to accommodate future growth for many years to come.

7.0 CHANGING DEMOGRAPHICS & HOUSING TYPES

In addition to the significant projected growth in population between 2010 and 2030, one of the major changes likely to occur in the Town of Huntersville over the next 20 years is an increase in the 65 and over population and the associated demand for housing and other services to accommodate that aging population.

The current composition of Huntersville’s population stands in stark contrast to that for the U.S. as a whole. Based on 2010 Census figures, the total percentage of residents in Huntersville under five years old was 8.4%, (3,929 residents), compared to 6.5% for the nation as a whole. At the other end of the spectrum, the Town’s 65 years and older population was 6.7% (3,134 residents), while the comparable figure for the U.S. was 13.1%. The figures for Huntersville’s neighbors, Cornelius and Davidson, are both lower, at 6.5% and 5%, respectively, for the population group under five years and 10.1% and 12.4%, respectively, for the population over 65. U.S. Bureau of the Census projections shows that the percentage of U.S. population over 60 in 2030 will be equal to 20%.

Early data for 2011 shows a gradual increase in the number of single-family building permits issued for the year, with a projected peak in building permits between 2020 and 2025.
NC State Demographic Office figures estimate that the state’s percentage of 65+ population will be 17.8% by 2030, compared to 12.8% in 2010. Applying the same projected statewide increase in the 65 and over population to Huntersville would result in a 2030 figure of approximately 11.7%, or 10,483 residents age 65 or older, an increase of 7,349 residents between 2010 and 2030.

The projected trends for the aging of U.S. and NC populations have a number of potential housing implications for Huntersville. First, household sizes, and consequently the size of homes, are likely to decrease. Second, the type of housing for an older population will tend toward multi-family (either apartments or condominiums) rather than single-family. This is consistent with the overall trend in Huntersville toward a higher percentage of multi-family relative to single-family dwellings. Third, this multi-family housing is also likely to be located closer to amenities and services and closer to transportation facilities (i.e. road, bus and rail). Finally, whether age restricted retirement communities, seniors who choose to remain in their homes, or some type of congregate living (with or without nursing care), it is likely that the demand for senior housing will increase by 2030. The need for this type of housing will drive the market and may require accommodations by the Town, both in terms of its development regulations as well as its service delivery.

It should also be noted that since the elderly population is living longer and healthier lives, at least a portion of this population may desire to live in smaller single-family homes in mixed-use areas, rather than exclusively in retirement communities or congregate care type facilities. This market dynamic is therefore, likely to increase the demand for smaller, ranch-style homes over the next 20 years.

8.0 DESIGN OF HOMES

The “Green Building” movement will also have an impact on future housing built in Huntersville through the year 2030.

Green building (also known as green construction or sustainable building) is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building’s life-cycle: from site location to design, construction, operation, maintenance, renovation, and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort.

Although new technologies are constantly being developed to complement current practices in creating greener structures, the common objective is that green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by:
- Efficiently using energy, water, and other resources
- Protecting occupant health and improving employee productivity
- Reducing waste, pollution and environmental degradation

The Green Building movement has clearly become mainstream and by every indication will continue to gain acceptance and be a driving force within the residential housing and building market through 2030.

**Citizen Survey: 91% of survey respondents support development that promotes economic growth, environmental protection and a high quality of life (i.e. “sustainable” development).**

**9.0 RESIDENTIAL LAND USE PATTERN & DENSITY**

**9.1 Rural and Transitional Zoning Districts**

With the adoption of the Huntersville Community Plan in 1995, Huntersville intended development on the eastern and western areas of Town to be different from the conventional sprawl pattern where all useable land is developed into houses, lots and streets with only unbuildable land left untouched (see Figure H-2).

The 1995 Community Plan called for “then” current densities to remain (two-and-a-half units an acre) but recommended development be clustered “…while preserving usable and scenic open space along historically rural corridors” through the establishment of Village Clusters (50-100+ acres), Hamlet Clusters (10-60 acres) and Farmhouse clusters (less than 12 lots).

The Zoning Ordinance was amended in 1996 to promote “…compact neighborhoods that set aside significant natural vistas and landscape features…” consistent with the vision of the 1995 Community Plan. From 1996 until the first part of 2003, the eastern and western areas of Huntersville’s zoning jurisdiction were zoned Open Space (OPS), allowing up to two-and-a-half units an acre plus density bonuses when more than 15% of the subdivision was devoted to open space (see Map H-2, with green area representing the OPS zone in 2002). The OPS zones covered about 58% of Huntersville’s 63 square miles of zoning jurisdiction and allowed single-family homes as well as townhomes as illustrated in Figure H-3.
Between 1996 and 2003, a total of 3,705 dwelling units were approved in 17 subdivisions within the OPS zone at an average density of two units an acre. The residential subdivisions approved in the OPS zone during that time period raised community concerns about infrastructure impacts (particularly schools and roads) and environmental impacts (clear cutting of trees, mass site grading, increase in paved area and storm-water runoff, etc.). Responding to those community concerns, the Huntersville Town Board placed a moratorium on new residential subdivisions in 2002 that lasted until the zoning and subdivision codes were amended in early 2003.
The 2003 amendments changed the OPS zone into the Rural District zone, allowing less than one unit an acre (see green area in Map H-3), and Transitional District zone, allowing approximately one-and-a-half units an acre (see brown area in Map H-3). Townhomes were not permitted in either the Rural or Transitional zones.

The Town adopted further density modifications in 2007 to the Rural zone, reducing the allowable density to approximately 0.6 units an acre, and Transitional zone, approximately one unit an acre. Between 2003 and 2010, a total of 1,598 residential units were approved in 12 subdivisions within the Rural and Transitional zoning districts at an average density of one unit per acre.

While the Rural and Transitional zones encompass 22,730 acres of Huntersville’s zoning jurisdiction, just slightly over 50% of that area (12,076 acres) is vacant and could be developed in the future (see Table H-7).

### Table H-7
Land Use & Acreage for Development in Rural and Transitional Districts

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Church</td>
<td>339</td>
<td>1%</td>
</tr>
<tr>
<td>Conservation</td>
<td>738</td>
<td>3%</td>
</tr>
<tr>
<td>County Owned</td>
<td>4,918</td>
<td>22%</td>
</tr>
<tr>
<td>Farmhouse Cluster</td>
<td>358</td>
<td>2%</td>
</tr>
<tr>
<td>Subdivisions</td>
<td>3,244</td>
<td>14%</td>
</tr>
<tr>
<td>Industrial</td>
<td>199</td>
<td>1%</td>
</tr>
<tr>
<td>Utility</td>
<td>858</td>
<td>4%</td>
</tr>
<tr>
<td>Vacant</td>
<td>12,076</td>
<td>53%</td>
</tr>
</tbody>
</table>

Map H-3
2011 Huntersville Zoning Map
Assuming current density maximums do not change (i.e. 0.6 units/acre in the Rural Zoning District and one unit/acre in the Transitional Zoning District), a total of 9,234 single-family lots could be accommodated at future maximum build-out in these two zoning districts (see Table H-8). While it is not likely that all properties will be subdivided to the maximum densities, Table H-8 illustrates the highest build-out potential given current development standards.

Table H-8
Build-Out Potential of the Rural and Transitional Zoning Districts

<table>
<thead>
<tr>
<th>Zone</th>
<th>0 - 10 Acres</th>
<th>10 + Acres</th>
<th>Current Maximum Units per Acre</th>
<th>Max. Units at Build-out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>2,628</td>
<td>4,477</td>
<td>.6</td>
<td>4,263</td>
</tr>
<tr>
<td>Trans.</td>
<td>1,785</td>
<td>3,186</td>
<td>1.0</td>
<td>4,971</td>
</tr>
<tr>
<td>Total</td>
<td>4413</td>
<td>7,663</td>
<td>NA</td>
<td>9,234</td>
</tr>
</tbody>
</table>

However, given this period of great change in the housing market, it is recommended the Town revisit development standards within the next five years to determine if adjustments are warranted.

9.2 Neighborhood Residential Zoning District

Together with the Rural and Transitional Zoning Districts, the other primary district available for future residential development is the Neighborhood Residential (NR) District (see yellow area, Map H-3). This zoning district has no minimum lot size or lot width. Any lot less than 60’ wide must be served by an alley. Furthermore, no more than 30% of the total housing units within a major subdivision, located outside one quarter mile of a designated transit station, can be attached houses, apartments and mixed-use buildings.

Currently, there are 1,242 acres of land within the Neighborhood Residential zoning district that are not developed. In Table H-9 is a chart illustrating the range in the number of housing units that could be built within the undeveloped Neighborhood Residential parcels, depending on the average density of development. Since there is no minimum or maximum density limits in the NR zone, the number of dwelling units built per acre will vary greatly.

As the Town grows and infrastructure is expanded, some portions of the Transitional District and key sections of the Rural District at important crossroads may be rezoned for higher intensity development where they represent logical extensions to existing development or are within mixed-use development nodes identified in area plans.

At this time, it is not recommended to change current density limits in the Rural and Transitional zoning districts.
Map H-4 depicts parcels which are five acres or larger and available for development within the R, TR and NR zones.

<table>
<thead>
<tr>
<th>Un-Developed NR Property</th>
<th>Avg. Density of Development</th>
<th>Max. Units at Buildout</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,242 acres</td>
<td>3 units/acre</td>
<td>3,726 units</td>
</tr>
<tr>
<td>1,242 acres</td>
<td>5 unit/acre</td>
<td>6,210 units</td>
</tr>
<tr>
<td>1,242 acres</td>
<td>8 units/acre</td>
<td>9,936 units</td>
</tr>
</tbody>
</table>

Table H-9
Build-out Potential Range in the Neighborhood Residential Zoning District

10.0 FUTURE RESIDENTIAL DEVELOPMENT PATTERN

In terms of future residential development, a mixed-use village development pattern will compliment the current development pattern which focuses higher density in the core of Town (area 2, following page) and lower density development within the Town’s eastern and western areas (areas 1 & 3, following page). The new village development pattern is focused in small and large mixed-use centers located at the intersection of major thoroughfares (see circles, following page). Map H-5 illustrates this pattern.
As stated in the Economic Development and Commercial Focus Area (Section 8.0 and Map CD-2), it is important that future mixed-use village nodes in the eastern and western areas of Huntersville should not be rezoned for speculative purposes but instead be established to meet an existing need after significant public input is received following the development of an area plan.

It is anticipated that future mixed-use village nodes in the eastern and western areas of town will be characterized by a small commercial component (under 40,000 sq. ft.), civic uses, a variety of residential types, and significant open space with very low density development surrounding the village (see Figure H-4).

The objective of this pattern is to provide a definable edge to the village, thereby avoiding sprawl.

Map H-5
Huntersville Development Pattern

Figure H-4
Example of Small Mixed-Use Village Development
In contrast to the small mixed-use village development shown in Figure H-4, is the large mixed-use development known as Bryton, located in the south central area of town, just north of I-485 and along the future North Corridor rail line. Approved as a transit oriented development with commercial and employment areas, Bryton will consist of 198 single-family units, 2,305 multi-family units, 1 million square feet of commercial space and 1.2 million square feet of office/flex light industrial space (see Figure H-5).

The mixed-use node development pattern has been recommended in a series of Small Area Plans prepared since 2005 (see Map I-2) and is consistent with the “centers, corridors and wedges” land use pattern that Charlotte-Mecklenburg adopted in 1995. Similar to Huntersville’s approach to the integration of land use and transportation, this plan recommended focusing development in areas that can be served by existing services and are located along major thoroughfares. This land use pattern is intended to avoid “sprawl” development, allowing for the efficient provision of public utilities, roads and services, along with the preservation of open space and recreation areas to serve these nodes.

11.0 REDEVELOPMENT AREAS

While the housing stock for the Town of Huntersville is relatively new, there are older more established areas that have vacant lots, mobile homes and older stick-built homes which may be candidates for redevelopment. The “Huntersville Downtown Master Plan” and the “East Huntersville Area Development Plan” identify several areas appropriate for redevelopment as shown on Maps H-6 and H-7 on the next page. Town policies and regulations should be directed toward providing incentives for redevelopment of these areas, including tax incentives, public infrastructure improvements and small area planning.

Citizen Survey: 65% of survey respondents indicated support for self-sustained and contained village type communities.
12.0 HOUSING POLICIES AND ACTION ITEMS

Policy H-1: Development Pattern
Continue to follow existing residential development pattern as reflected in “Map of Zoning Districts,” focusing higher intensity development generally within two miles of the I-77/NC-115 corridor and lower intensity development east and west of this corridor extending to the Town boundaries.

Policy H-2: Node Development
Continue to encourage mixed-use village development pattern at key intersections as identified in Small Area Plans adopted by the Town.

Action H-2.1: Small Area Plans
Prepare small area plans if one does not exist in areas of the community that are or will be experiencing development pressure.

Policy H-3: Mixed-Use Development
Support and encourage self-sustained developments where commercial and employment uses are in close proximity to residential uses (see Commercial Development Policy CD-1 & CD-3).
Policy H-4: Development Principles
For proposed developments, either in the core or within identified nodes, adhere to the principles set forth in the Zoning Ordinance and adopted small area plans to ensure an appropriate mix of residential, commercial and employment uses to maximize land use and transportation efficiencies while minimizing environmental impacts.

Action H-7.1: Review of Ordinances
Review Zoning Ordinance and Subdivision Regulations to identify any barriers to energy efficient design in residential construction and encourage builders to employ LEED principles.

Policy H-8: Development in the Transitional and Rural Areas
Maintain the development standards in the Transitional and Rural zones and consider adjustments if warranted by changes in the housing market.

Action H-8.1: Analysis of Rural and Transitional Development Standards
Within five years, analyze the development standards within the Rural and Transitional District zones to determine if adjustments are necessary.

Policy H-5: Senior Housing
Encourage housing options which accommodate senior citizens (e.g. age restricted/retirement communities, congregate care/assisted living facilities,) allowing seniors to remain in the community.

Action H-5.1: Review Ordinances to Identify Barriers to Senior Housing
Review Town Zoning Ordinance and Subdivision Regulations to identify any barriers to the provision of housing for senior citizens.

Policy H-6: Energy Efficient Design
Encourage energy efficient design through the use of “Leadership in Energy and Environmental Design” (LEED) principles and practices for residential construction, including alternative energy usage (solar, wind etc.).

Policy H-7: Housing Affordability
Support appropriate mix of housing for all income levels.

Policy H-9: Future Residential Development
Higher intensity residential development will be focused generally within two miles of the I-77/NC-115 corridor and future mixed use nodes in the eastern and western areas of Huntersville’s zoning jurisdiction (See Commercial Development Policy CD-2).

Policy H-10: Redevelopment Areas
Support redevelopment of older established residential areas, consistent with adopted plans, Zoning Ordinance and Subdivision regulations.
Environment in 2030

In 2030, the Town of Huntersville will be a community that continues to place a high value on the preservation and enhancement of the natural environment, as well as its scenic and cultural assets, through the adoption and implementation of progressive land use and transportation policies. The use of renewable and alternative energy sources (e.g. solar and wind) will be encouraged, together with Green Building” and “Green Neighborhood Development” Leaders in Energy & Environmental Design (L.E.E.D) technologies and practices, to reduce environmental impacts and dependence on non-renewable resources. New growth and development will be directed away from environmentally sensitive and protected areas and toward those areas which can accommodate development, resulting in an environmentally, economically and socially sustainable land development pattern.
FOCUS AREA: ENVIRONMENT

1.0 INTRODUCTION

The Town of Huntersville features an abundance of natural resources and environmental features, along with scenic and cultural assets, that serve to define the community’s character and therefore, require special attention to ensure their preservation and enhancement (see Figure E-1, Map E-1).

Figure E-1
Latta Plantation

Huntersville has for many years placed a strong emphasis on establishing environmental protection measures, such as “Low Impact Design” (L.I.D) water quality standards, tree preservation, open space standards and other “smart growth” design principles such as mixed-use and cluster development to reduce the effects of growth and development on the natural environment.

In addition to development standards aimed at protecting the environment, a significant portion of the Town’s land area is under private conservation easements or is publicly owned open space (park or other).

In particular, Mecklenburg County has acquired large tracts of land in the western area of Huntersville in order to protect Mountain Island Lake and the water intake for the Charlotte-Mecklenburg Utilities water plant located just south of Huntersville. The extent of this land can be seen in Map E-1.

Results of the “2030 Community Plan - Resident Survey” reflect strong support for preservation of the Town’s rural areas, balanced by a development pattern that limits environmental impact, including the use of development incentives and building design that enhances and complements the Town’s rural areas. Residents also strongly support the use of alternative energy sources for existing and new development and the redevelopment of older structures in an “environmentally friendly” manner. These sentiments are best captured in the following survey response:
As Huntersville continues to grow, the challenge will be to balance the preservation of its natural environment and resources with the growth and development that will occur over the next 20 years. The success of this balancing effort will, in large part, determine the character of Huntersville for the next generation.

1.1. Existing Environmental Features

In 2004, a Natural Resource Inventory Map was prepared for the Town. This map identified sensitive environmental areas such as water features (streams, lakes, etc.), steep slopes, wetlands, and floodplains. Map E-2 displays streams and water bodies in Huntersville.

This inventory map is an important tool both for identifying areas that are candidates for preservation and/or special protection and to guide growth to areas that are suitable and appropriate for development. The data displayed on this map is useful in guiding new development proposed in Huntersville and should continue to be used for this purpose and others as they may arise.

91% of survey respondents “Support development that promotes economic growth, environmental protection and high quality of life (i.e. “sustainable” development).”
1.2. Protected Land

A large portion of Huntersville’s total land area (approximately 15%) is comprised of either privately conserved or publicly owned protected or park land. Map E-1 identifies these areas. Table E-1 shows the type and acreage of protected, conserved and park land.

<table>
<thead>
<tr>
<th>Land Type</th>
<th>Size (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protected (Public Nature Preserves and open space)</td>
<td>4,787</td>
</tr>
<tr>
<td>Conserved (Private)</td>
<td>648</td>
</tr>
<tr>
<td>Parks</td>
<td>510</td>
</tr>
<tr>
<td><strong>TOTALS:</strong></td>
<td><strong>5,945</strong></td>
</tr>
</tbody>
</table>
**Protected land** is property which has some type of designation which would prohibit or constrain the type or extent of development that could occur on that property. Examples would include land located within one of several nature preserves (e.g. Latta Plantation). The largest tracts of protected land are found in the Town’s “Extra-Territorial Jurisdiction (ETJ),” primarily within the various nature preserves, located within Huntersville. A total of 4,787 acres of protected land is located in Huntersville. **Map E-1** shows protected land in dark green color.

**Conserved land** is another category of open space which serves a valuable role in the preservation and conservation of Huntersville’s natural resources and scenic views.

Currently, all of the conserved land in Huntersville falls under the jurisdiction of the Catawba Land Conservancy Trust, a private, not-for-profit organization whose mission is to set aside large tracts of land for open space preservation. The mechanism used to accomplish this mission is through the use of “Conservation Easements,” which impose long-term development restrictions on property in exchange for a reduction in taxes paid. Several property owners have taken advantage of this program. A total of 648 acres is currently classified as conserved land in Huntersville. **Map E-1** shows conserved land in light yellow color.

**Park land** is the final category of land and includes county and town owned parks and open space and totals approximately 510 acres. **Map E-1** shows conserved land in light green color.

### 2.0 CURRENT ENVIRONMENTAL REGULATIONS

As previously noted, the Town of Huntersville has adopted a series of environmental regulations that serve to minimize environmental impact associated with land development. A summary of these regulations is outlined below.

#### 2.1 Mountain Island Lake Watershed Overlay District (MIL-O)

Adopted in 1993, the MIL-O District is intended to provide for the protection of public water supplies as required by the “N.C. Water Supply Watershed Classification and Protection Act.” The District includes two sub-areas, “Critical” and “Protected”, with limitations established on uses, maximum impervious coverage, and buffer protection. The MIL-O District serves to limit environmental (i.e. water quality, shoreline and habitat) impacts within the district, including land areas within most of the Town’s “Nature Preserves.”
2.2 Lake Norman Watershed Overlay District (LN-O)

The LN-O District serves a similar role to that of the MIL-O District. As with the MIL-O District, the LN-O District includes both “Critical” and “Protected” areas, along with restrictions on use, impervious coverage and buffer protection.

Similar to the MIL-O District, the LN-O District provides valuable water quality protection along with preservation and protection of shorelines for Lake Norman, its tributaries and their associated habitats.

2.3 Tree Preservation

According to the “Purpose” section of the Town’s “Tree Preservation, Protection and Removal” Ordinance, “Wooded sites provide distinct aesthetic, economic and environmental significance and value as a natural resource of the Town. Existing vegetation plays a critical role in maintaining aesthetics, water quality, minimizing erosion and downstream flooding, and increasing quality of life.” Approved in 2003, the ordinance requires a site analysis for all development in residential and commercial zoning districts, with specific tree preservation standards for significant forest stands, specimen trees and heritage trees. According to the ordinance, 100% of Heritage Trees shall be preserved, 10% to 50% of Specimen Trees and between 10% and 50% of the existing tree canopy shall be preserved, depending on the specific zoning district. In instances where tree preservation standards cannot be met, replanting or contribution to a Tree Fund/Bank is required to offset the loss of trees if approved by the Planning Board. *(Source: Article 7.4, Huntersville Zoning Ordinance)*

2.4 Buffer Yards & Landscaping

In addition to its tree preservation requirements, the Town requires buffer yards to provide visual and distance separation between adjacent properties, except those located within the Town Center (TC) and Transit Oriented Development (TOD) zoning districts. The Town also requires the planting of street trees along public and parking lots to ensure:

“a pedestrian friendly environment along with providing distinct aesthetic, economic and environmental significance, and value as a future natural resource to the Town”. *(Source: Article 7.7, Huntersville Zoning Ordinance)*

2.5 Open Space

The Town’s development regulations require the provision of Urban Open Space and Natural Recreational and Agricultural Open Space for most development proposals. Urban Open Space is defined as “all areas not divided into private or civic building lots, streets, right-of-way, parking or easements for purposes other than open space conservation”.

*Environment: Huntersville 2030 Community Plan*
Urban Open Space is required in all zoning districts except Rural and can consist of squares, parks, forecourts, plazas, parkways and greenbelts. (Source: Article 7.10, Huntersville Zoning Ordinance)

The purpose of Natural Recreational and Agricultural Open Space in the Rural and Transitional zones is to preserve agricultural and forestry lands, natural and cultural features, and rural character that would likely be lost through conventional development approaches. Lands to be preserved as open space should include wetlands and the areas immediately adjacent to them; floodways; soils unsuitable for septic systems; mature woodlands; significant wildlife habitat; prime agricultural farmland; historic, archaeological and culture features listed (or eligible to be listed) on national, state or local registers or inventories; significant views into and out from the site; and aquifers and their recharge areas. The subdivision process is discussed in Section 3.0 of this focus area.

2.6 Water Quality

In 2003, the Town adopted “Water Quality” regulations consistent with the National Pollution Discharge Elimination System (NPDES) Storm Water Permit and other requirements as established by the U.S. Clean Water Act. The purpose of these regulations is to establish storm water management requirements and controls to prevent surface water quality degradation to the extent practicable in the streams and lakes within the Town Limits. Compliance with the Town’s Water Quality standards requires the use of “Low Impact Development (LID),” which seeks to more closely replicate a site’s predevelopment characteristics (i.e. ecology) as compared to conventional storm water management techniques. “The goal of LID is to develop site design techniques, strategies, and ‘Best Management Practices’ (BMPs) to store, infiltrate, evaporate, retain, and detain runoff on the site to more closely replicate pre-development runoff characteristics and to better mimic the natural and unique hydrology of the site thereby limiting the increase in pollutant loads caused by development.” (Source: Article 8.17.13 – Huntersville Zoning Ordinance)

An excellent example of the application of LID principles to an existing development is depicted in Figure E-2. This picture shows the retrofit of an existing shopping center parking lot to reduce the amount of impervious area through the removal of parking spaces and replacement with rain gardens. Rain gardens are vegetated areas which allow for the infiltration of storm water runoff. These rain gardens serve to allow for on-site recharge of the water table, as well as filtration of surface pollutants, such as engine oil and sediments.
2.7 Surface Water Improvement and Management (S.W.I.M.) Stream Buffers

Adopted in 2001, the purpose of S.W.I.M. Stream Buffers are “to filter pollutants, store floodwaters, provide habitat, and contribute to the ‘green infrastructure.’ Stream systems are comprised of each stream and its respective drainage basin”. (Source: Article 8.25, Huntersville Zoning Ordinance) (Map E-1 shows the S.W.I.M. buffers within the Town of Huntersville shaded in blue.) The S.W.I.M. buffers include all perennial and intermittent streams within the Town’s jurisdiction, and consist of a “minimum” 30 foot buffer extending outward from the top of a stream bank. The width of the S.W.I.M. buffer is based on the total drainage basin size and covers three zones, as noted in Table E-2.

**Table E-2**
S.W.I.M. Stream Buffers: Minimum Buffer Widths by Basis Size and Buffer Zone

<table>
<thead>
<tr>
<th>Basin Area</th>
<th>Stream Side Zone</th>
<th>Managed Use Zone</th>
<th>Upland Zone</th>
<th>Total Buffer (each side of stream)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;50 ac.</td>
<td>N/A</td>
<td>N/A</td>
<td>30 ft.</td>
<td>30 ft.</td>
</tr>
<tr>
<td>&gt;50 ac.</td>
<td>20 ft.</td>
<td>None</td>
<td>15 ft.</td>
<td>35 ft.</td>
</tr>
<tr>
<td>&gt;300 ac.</td>
<td>20 ft.</td>
<td>20 ft.</td>
<td>10 ft.</td>
<td>50 ft.</td>
</tr>
<tr>
<td>&gt;640 ac.</td>
<td>30 ft.</td>
<td>45 ft.</td>
<td>25 ft. or balance of flood plain</td>
<td>100 ft. or entire flood plain</td>
</tr>
</tbody>
</table>

Source: Article 8.25, Huntersville Zoning Ordinance

Within each zone there are restrictions on uses allowed, as well as on the disturbance of vegetation and alteration of terrain.
3.0 SUBDIVISION DEVELOPMENT PROCESS

For all major subdivisions, an “Existing Features (Site Analysis) Plan” must be submitted as part of the application, in order to determine significant features to be preserved. The “Existing Features Plan” shall include, at a minimum, the following information:

1. **The location and area calculations of constraining features** including wetlands, slopes over 25%, watercourses, intermittent streams and floodways, S.W.I.M. buffers (outside of floodways), watershed buffers, and all rights-of-way and easements.

2. **The location of significant features** such as woodlands, tree lines, specimen and heritage trees, open fields or meadows, scenic views into or out of the property, watershed divides and drainage ways; existing structures, cemeteries, roads, tracks and trails; significant wildlife habitat; prime agricultural farmland; historic, archeological and cultural features listed (or eligible to be listed) on national, state or county registers or inventories; and aquifers and their recharge areas.

3. **The location of existing or planned utility easements** (above and below ground) to include, but not limited to power/transmission, water, sewer, gas, phone, and cable.

4. **A topographical map showing original contours at intervals of not less than four feet and existing tree lines.**

Following this analysis, for development located within the Rural and Transitional zoning districts, each subdivision sketch plan shall adhere to a four-step process:

1. **Step 1 - Designation of Open Space.** Areas to be designated should consist of wetlands, floodways, flood fringe and significant trees as well as sensitive and noteworthy natural, scenic and cultural resources on the property.

2. **Step 2 – Location of House Sites.** Based on the designation of open space, potential house sites are tentatively located.

3. **Step 3 – Street and Lot Layout.** Once open space and tentative house sites have been identified, streets can be located, taking care to avoid conservation areas and wetland crossings.

4. **Step 4 – Lot Lines.** Following Steps 1-3, lot lines can be drawn, where applicable.

This process is intended to locate and position new development to minimize environmental impacts and avoid impacts on particularly sensitive and noteworthy natural, scenic and cultural resources on the property.
4.0 SIGNIFICANT ENVIRONMENTAL ISSUES

4.1 Lighting

As a rapidly developing community that is expected to continue to exhibit a strong growth pattern over the next 20 years, the Town must be cognizant of actual or potential environmental issues that may arise. One such issue relates to lighting. Excessive night-time lighting can have negative environmental (e.g. disruption of habitat) as well as social and economic (e.g. reduction in privacy and loss of property value) impacts. While the Town’s current lighting standards are intended to minimize these impacts, it will be important to monitor and adjust requirements over time to ensure that these impacts do not worsen and, in fact, are reduced where possible.

4.2 Air Quality

Air quality will continue to be a major concern for the Town of Huntersville through 2030. Currently, the Town, situated within the Charlotte Metropolitan region, is located in a “non-attainment” area for air quality. According to the most recent data compiled by the “Mecklenburg-Union Metropolitan Planning Organization (MUMPO)” – the regional agency responsible for monitoring compliance with Federal and State air quality standards - the primary source of air pollutants continues to be the automobile. Alternatives to automobile use (i.e. walking, bicycling, mass transit) provide excellent opportunities to reduce auto emissions. Investments in sidewalks, greenway trails, bus and rail transit, as well as improved connectivity of the Town’s street network to better integrate residential, commercial and recreational land uses will all help to improve air quality in Huntersville.

4.3 Waste Disposal

The Town of Huntersville has taken an aggressive stance toward the reduction of both residential and non-residential waste that is generated within its jurisdiction. An enhanced recycling program, yard waste composting, and appliance pickup (as well as participation in and support for other efforts to safely dispose of harmful products, along with stream and road cleanup efforts) are all important to maintaining a healthy environment. Several inactive landfills are located in Huntersville, including the Griffin Landfill which includes a “capped” household waste site, as well as an active commercial/construction debris site.

Continued monitoring of groundwater and air quality impacts at active and inactive landfill sites are essential. Where opportunities exist for converting former or current landfills to productive (e.g. recreational) uses, they should be pursued. Harnessing methane gas from landfill sites is another option that may offer beneficial and productive reuse of these sites.
4.4 Alternative Energy

In 2009, Huntersville adopted regulations that would permit Wind and Solar Energy Facilities. Solar panels are now permitted in all residential and non-residential zoning districts, subject to specific requirements. Wind Energy facilities are permitted in both residential and non-residential districts, subject to setback restrictions for facilities adjacent to occupied structures and minimum lot size requirements for minor (10 acres) and major (30 acres) facilities.

5.0 BUILDING & NEIGHBORHOOD DESIGN (LEED)

Increasing energy costs, scarcity of building materials and a concern regarding air and water quality associated with development have resulted in a new generation of building and site design standards which address these concerns through the use of energy saving building design, recycled materials and the use of landscape and other techniques to reduce overall energy consumption and environmental impact. Many of these practices come under the broad umbrella of Leadership in Energy & Environmental Design (LEED). LEED is a third-party certification program and the nationally accepted benchmark for the design, construction and operation of high-performance “green buildings.”

Developed by the U.S. Green Building Council (USGBC), LEED is intended to provide building owners and operators the tools they need to have an immediate and measurable impact on their buildings’ performance, utilizing metrics such as energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health:

1. sustainable site development
2. water savings
3. energy efficiency
4. materials selection
5. indoor environmental quality

Source: (U.S. Green Building Council)

The LEED green building certification program encourages and promotes global adoption of sustainable green building and development practices through a suite of rating systems (Figure E-3) that recognize projects that implement strategies for better environmental and health performance.
Since its inception in 1998, the U.S. Green Building Council has grown to encompass more than 14,000 projects in the United States and 30 countries covering 1.062 billion square feet (99 km²) of development area. The hallmark of LEED is that it is an open and transparent process where the technical criteria proposed by USGBC members are publicly reviewed for approval by the almost 20,000 member organizations that currently constitute the USGBC.

In 2009, the USBGC, in partnership with the Congress for New Urbanism (CNU) and Natural Resources Defense Council (NRDC) developed a rating system for “Green Neighborhood Development,” representing a more “holistic” approach to land development than simply “green buildings.” The LEED for Neighborhood Development (LEED-ND) system includes three categories: Smart Location and Linkage, Neighborhood Pattern and Design, and Green Infrastructure and Buildings.

According to CNU, this new rating system will help to achieve environmental sustainability by incorporating high-performance “green” buildings in compact, mixed-use neighborhoods that reduce driving by making walking and transit attractive options for commuting and other trips. Huntersville’s land development regulations are consistent with many of the LEED-ND criteria, resulting in developments which reflect LEED principles and are consistent with sustainable land development practices.

6.0 SUSTAINABILITY

Perhaps the most far-reaching trend affecting and influencing land use and transportation policies in the 21st Century is the Sustainability movement. The most widely accepted definition of sustainability comes from the work of the United Nations’ Bruntland Commission, established in 1983. The commission defined sustainability as: “meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

Benjamin A. Herman, Fellow of the American Institute of Certified Planners (FAICP), notes that “Sustainability is a balanced approach that considers people, planet and prosperity.” By “people,” it means community well-being and equity. “Planet” refers to the environment and resource conservation. And “prosperity” means economic vitality.
Herman adds: “In the long run, sustainability means adapting human activities to the constraints and opportunities of the natural systems we need to support life.”

Communities from California to Florida are adopting “Sustainability Plans” and forming commissions to oversee these plans. While these plans vary in scope and content, their primary focus is to guide communities in their attempt to achieve a balance between economic growth, environmental preservation and community building. This balance is the so called “triple bottom line” of sustainable growth (Figure E-4).

Finally, within the area of “Social Sustainability,” the following can be found: affordable housing ordinance (Davidson, NC), civic engagement process (Seattle, WA), and the preservation of cultural and historic resources (Groton, MA).

The preservation and enhancement of our natural, scenic and cultural assets, in the context of economic prosperity and community well-being, is vital to ensuring a high quality of life for Huntersville residents. The continued efforts of Huntersville to place a high priority and value on these assets will yield both tangible and intangible benefits, well into the future.

Figure E-4
Sustainability – The Triple Bottom Line

The Sustainability movement is broad and is reflected in a wide spectrum of plans, programs and policies in small and large towns and cities throughout the U.S. Within the area of “Environmental Sustainability” are initiatives ranging from “zero” emission public transit (Oakland, CA) to enhanced recycling (Cincinnati, OH). Within the “Economic Sustainability” category are “farm fresh food” (Portland OR), “smart energy” (Boulder, CO) and cultivation of existing business (Pittsburgh, PA).
7.0 ENVIRONMENT POLICIES & ACTION ITEMS

**Policy E-1: Preservation and Environment**
Support the preservation and enhancement of the natural environment, along with its scenic and cultural assets.

**Action E-1.2: Environmental Features Map**
Maintain GIS “Environmental Features” map, including significant water features, wetlands, steep slopes, habitats and tree strands.

**Policy E-1.3: Historic, Scenic and Cultural Resources Map**
Maintain GIS “Historic Properties, Scenic and Cultural Resources” map, including historic designations, scenic vistas and significant places.

**Policy E-2: Location of New Development**
Avoid locating new development in areas of significant environmental, scenic or cultural resources.

**Policy E-3: Environmental Regulations**
Support and enhance environmental regulations pertaining to tree preservation, buffer yards, open space, water quality, wetland and stream protection.

**Action E-3.1: Modify Regulations to Enhance Environmental Protection**
Review existing environmental protection regulations to determine what, if any, modifications are required to maintain or enhance current levels of protection.

**Policy E-4: Reduce Outdoor Lighting**
Support reduction in outdoor lighting to lowest possible levels to maintain public safety, while limiting glare, habitat impacts and loss of privacy.

**Action E-4.1: Revise Lighting Ordinance**
Review lighting ordinances in effect in other communities to determine if adjustments to current Ordinance are necessary and determine if pre-existing non-conforming lights should be brought-up to current standards when expansions exceed a certain size.
Policy E-5: Vehicle Miles Traveled (VMT)
Support reduction in vehicle miles travelled (VMT), through capital investments in sidewalks, greenways, enhanced connectivity and mass transit (bus & rail).

Action E-5.1: Reduce VMT through Capital Infrastructure Projects
Support funding capital infrastructure projects which will reduce VMT.

Policy E-6: Alternative Energy
Support for “Alternative Energy”, including wind, solar, and other viable options.

Policy E-7: Sustainability
Support land use and transportation policies which are environmentally, economically and socially sustainable.

Policy E-8: LEED Building Design & LEED Neighborhood Development
Support policies that promote LEED Building Design and LEED-Neighborhood Development.

Action E-8.1: LEED Public Buildings
Require minimum L.E.E.D. standards to be met for all public buildings built in Town.