Waterford

Waterford Area Management Plan
Loudoun County, Virginia
Adopted October 19, 1987
Waterford
Area Management Plan

Adopted October 19, 1987

Loudoun County
Department of Planning
1 Harrison Street, SE
PO Box 7000
Leesburg, VA 20177-7000
WATERFORD AREA MANAGEMENT PLAN
ADOPTED OCTOBER 19, 1987

CITIZENS’ COMMITTEE FOR THE
WATERFORD AREA MANAGEMENT PLAN

William Ballinger, Chairman
Paul Rose, Vice Chairman
Ken Andrews
Ronald Blake
Ruth Bentley
Constance Chamberlin
Hilary Cooley
Thurman Costello, Jr.
Bruce Drenning

R. H. "Tim" Ehlies (resigned 8/84)
John Fulbright, Jr. (resigned 10/84)
Frances Gleadall (resigned 8/84)
B. Powell Harrison, Jr.
Lloyd Hutchison, Jr.
W. Brown Morton, III
Charles Piercy
Innes Saunders
Nicole Sours

LOUDOUN COUNTY DEPARTMENT OF PLANNING,
ZONING AND COMMUNITY DEVELOPMENT

SUPPORT STAFF

Frederick P. D. Carr, Director
Milton Herd, Chief of Comprehensive Planning
Arthur Smith, Senior Planner, Transportation
Richard Calderon, Senior Planner
Teckia Cox, Planner I
Nicholas Pinchot, Planning Specialist
Sandra Jennings, Senior Secretary
Jean White, Secretary I
Maeve Ertel, Graphics Specialist

Former Staff:

Richard Rein, Planner II, Project Manager
Susanne Allen, Planner II
Sandra Tiffany, Graphics Assistant
LOUDOUN COUNTY BOARD OF SUPERVISORS

Betty Tatum, Chairman
Andrew R. Bird, III, Vice Chairman
Thomas S. Dodson
Ann Kavanagh
Frank Lambert
Steve W. Stockman
Charles Bos

Guilford District
Sterling District
Mercer District
Dulles District
Catoctin District
Broad Run District
Leesburg District

Philip A. Bolen, County Administrator

LOUDOUN COUNTY PLANNING COMMISSION

John A. Stowes, Chairman
Patricia Richardson, Vice Chairman
Conlee Lynn Adams, Jr.
Carol Carington
Jewell Emswiler
Roger M. Lloyd
James Boyd
William Ray

Catoctin District
Guilford District
Mercer District
Dulles District
Leesburg District
Broad Run District
Sterling District
Blue Ridge District
One of the primary purposes of the Waterford Area Management Plan is to manage future land uses in a way that does not overwhelm Waterford and its people. The "change management" is a logical extension of the County's current idea of "growth management" which is an attempt to understand the issues, manage the transitions and respect the past as Loudoun County moves toward the 21st century. Rapid or large scale development in a place such as Waterford, which has remained physically constant for over 150 years, could irreparably damage its unique character. To the extent that nothing is static and change is inevitable, the County and the Waterford area's citizens should work to ensure that change occurs within the context of a managed planning process. The real issue is not to prevent the village of Waterford and its rural surroundings included within the National Historic Landmark from changing but how to affect change, how to influence and give it in a positive, equitable and life-enhancing direction. With this in mind, the following Preamble is offered for this Plan:
PREAMBLE

The purpose of the Waterford Area Management Plan is to recommend policies and programs that will help the County manage growth and change in the Waterford area, so as to conserve the historic and architectural character of the Waterford National Historic Landmark District. It is further the purpose to sustain and enhance community assets and private property values in the Waterford area and to enhance the Waterford area as a place to live, work, enjoy and visit.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION AND SUMMARY OF PLAN</td>
<td>1</td>
</tr>
<tr>
<td>Background of Plan</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of Plan and Summary of Major Recommendations</td>
<td>6</td>
</tr>
<tr>
<td>Land Use Planning Background</td>
<td>10</td>
</tr>
<tr>
<td>II</td>
<td>17</td>
</tr>
<tr>
<td>INVENTORY AND ANALYSIS OF ISSUE</td>
<td>17</td>
</tr>
<tr>
<td>Growth Management, Land Use and Existing Zoning</td>
<td>17</td>
</tr>
<tr>
<td>Village</td>
<td>17</td>
</tr>
<tr>
<td>Surrounding Rural Area</td>
<td>24</td>
</tr>
<tr>
<td>Public Facilities and Utilities</td>
<td>29</td>
</tr>
<tr>
<td>Elementary School</td>
<td>36</td>
</tr>
<tr>
<td>Electric and Telephone</td>
<td>38</td>
</tr>
<tr>
<td>Transportation</td>
<td>39</td>
</tr>
<tr>
<td>Environment</td>
<td>57</td>
</tr>
<tr>
<td>Historic and Scenic Resources</td>
<td>61</td>
</tr>
<tr>
<td>Economic Development - Tourism</td>
<td>77</td>
</tr>
<tr>
<td>III</td>
<td>83</td>
</tr>
<tr>
<td>LAND USE PLAN: GOALS, POLICIES AND IMPLEMENTATION OPTIONS</td>
<td>83</td>
</tr>
<tr>
<td>Primary Goal</td>
<td>83</td>
</tr>
<tr>
<td>Land Use, Development and Utilities</td>
<td>83</td>
</tr>
<tr>
<td>Goal</td>
<td>83</td>
</tr>
<tr>
<td>Policies</td>
<td>83</td>
</tr>
<tr>
<td>Land Uses Within the Village</td>
<td>87</td>
</tr>
<tr>
<td>Rural Development</td>
<td>87</td>
</tr>
<tr>
<td>Utilities</td>
<td>89</td>
</tr>
<tr>
<td>Implementation Recommendations</td>
<td>91</td>
</tr>
<tr>
<td>Historic and Scenic</td>
<td>93</td>
</tr>
<tr>
<td>Goal</td>
<td>93</td>
</tr>
<tr>
<td>Policies</td>
<td>93</td>
</tr>
<tr>
<td>Implementation</td>
<td>94</td>
</tr>
<tr>
<td>Agriculture and Natural Environment</td>
<td>94</td>
</tr>
<tr>
<td>Goals</td>
<td>94</td>
</tr>
<tr>
<td>Policies</td>
<td>94</td>
</tr>
<tr>
<td>Implementation</td>
<td>94</td>
</tr>
<tr>
<td>Transportation</td>
<td>94</td>
</tr>
<tr>
<td>Goal</td>
<td>94</td>
</tr>
<tr>
<td>Policies</td>
<td>95</td>
</tr>
<tr>
<td>Implementation</td>
<td>96</td>
</tr>
<tr>
<td>Economic Development</td>
<td>100</td>
</tr>
<tr>
<td>Goals</td>
<td>100</td>
</tr>
<tr>
<td>Policies</td>
<td>100</td>
</tr>
<tr>
<td>Implementation</td>
<td>100</td>
</tr>
<tr>
<td>Extension of Historic and Cultural Conservation</td>
<td>101</td>
</tr>
<tr>
<td>Overlay Zoning District</td>
<td>104</td>
</tr>
<tr>
<td>Design Standards</td>
<td>105</td>
</tr>
<tr>
<td>Options for Amending the Subdivision Ordinance, Zoning Ordinance and Zoning Map</td>
<td>105</td>
</tr>
<tr>
<td>Comprehensive Plan for Historic Resources</td>
<td>106</td>
</tr>
<tr>
<td>Optional County Programs</td>
<td>107</td>
</tr>
<tr>
<td>Proposed Study Committees</td>
<td>111</td>
</tr>
</tbody>
</table>

APPENDIX I: Policy and Program Recommendations
Rural Village and Agricultural Conservation Policy Areas | 113 |

APPENDIX II: Examples of Appropriate Non-residential Uses for Location Within Waterford’s Village Commercial Area | 117 |

APPENDIX III: Specific Application of Rural Plan’s Land Use Policy Areas to Waterford Plan | 119 |

GLOSSARY | 121 |
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE NUMBER</th>
<th>PAGE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Location in County</td>
</tr>
<tr>
<td>2</td>
<td>Waterford Planning Area</td>
</tr>
<tr>
<td>3</td>
<td>Regional Setting</td>
</tr>
<tr>
<td>4</td>
<td>Location and Sequence of Area Plans</td>
</tr>
<tr>
<td>5</td>
<td>Waterford Incorporation Line</td>
</tr>
<tr>
<td>6</td>
<td>Resource Management Areas</td>
</tr>
<tr>
<td>7</td>
<td>Existing Land Use</td>
</tr>
<tr>
<td>8</td>
<td>Properties Under Easement - Village</td>
</tr>
<tr>
<td>9</td>
<td>Existing Zoning</td>
</tr>
<tr>
<td>10</td>
<td>Existing Land Use - Rural Area</td>
</tr>
<tr>
<td>11</td>
<td>Subdivision and Development Activity</td>
</tr>
<tr>
<td>12</td>
<td>Absentee and Leased Land</td>
</tr>
<tr>
<td>13</td>
<td>Property Under Easement - Rural Area</td>
</tr>
<tr>
<td>14</td>
<td>Existing Zoning - Rural Area</td>
</tr>
<tr>
<td>14A</td>
<td>Sewer Plant and Lines</td>
</tr>
<tr>
<td>15</td>
<td>Boundary of Engineering Study Area for Sewage Treatment Plant</td>
</tr>
<tr>
<td>16</td>
<td>Waterford Elementary School Attendance Area</td>
</tr>
<tr>
<td>17</td>
<td>Existing Roads</td>
</tr>
<tr>
<td>18</td>
<td>Average Daily Trips</td>
</tr>
<tr>
<td>19</td>
<td>External Roadway Improvements</td>
</tr>
<tr>
<td>20</td>
<td>Internal Roadway improvements</td>
</tr>
<tr>
<td>21</td>
<td>Recommended Sidewalks and Pathways</td>
</tr>
<tr>
<td>22</td>
<td>Parking Improvement Program</td>
</tr>
<tr>
<td>23</td>
<td>Existing Natural Features</td>
</tr>
<tr>
<td>24</td>
<td>Development Suitability - Village</td>
</tr>
<tr>
<td>25</td>
<td>Development Suitability - Rural Area</td>
</tr>
<tr>
<td>26</td>
<td>Local Historic District Boundary - Village</td>
</tr>
<tr>
<td>27</td>
<td>Historic Districts - Rural Area</td>
</tr>
<tr>
<td>28</td>
<td>Scenic Resource Inventory - Natural Setting</td>
</tr>
<tr>
<td>29</td>
<td>Scenic Resource Inventory - Visual Context</td>
</tr>
<tr>
<td>30</td>
<td>Scenic Resource Analysis - Sensitivity Level &amp; Critical Views</td>
</tr>
<tr>
<td>31</td>
<td>Example of Visual Absorption Capability</td>
</tr>
<tr>
<td>32</td>
<td>Rural Plan Policy Areas for Waterford</td>
</tr>
<tr>
<td>33</td>
<td>Rural Village Policy Area and Proposed Village Limit Line</td>
</tr>
<tr>
<td>34</td>
<td>Recommended Future Land Uses - Village</td>
</tr>
<tr>
<td>35</td>
<td>Recommended Future Land Uses - Rural Area</td>
</tr>
<tr>
<td>36</td>
<td>Potential Location for Historic Preservation Byway</td>
</tr>
<tr>
<td>37</td>
<td>Historic Districts of Loudoun County</td>
</tr>
<tr>
<td>38</td>
<td>Example of Rural Residential Cluster Lots</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>NUMBER OF TABLE</th>
<th>PAGE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>Vacant Developable Properties in the Village and Potential Units Based on Existing Conditions</td>
<td>20</td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>Existing Zoning in Waterford Planning Area</td>
<td>24</td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>Traffic Volumes on Waterford Area Roads</td>
<td>43</td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>Possible Off-street Parking Lot Sites</td>
<td>56</td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>Summary of Existing Conditions</td>
<td>82</td>
</tr>
</tbody>
</table>
CHAPTER I.

INTRODUCTION AND SUMMARY OF PLAN
CHAPTER ONE
INTRODUCTION AND SUMMARY OF PLAN

I. BACKGROUND OF THE WATERFORD AREA MANAGEMENT PLAN

The Waterford Area Management Plan is a long-range, comprehensive land use plan for the village of Waterford and the related surrounding area (Figure 1, page 2). The plan examines the current conditions, existing and potential use conflicts and proposes future land uses, policies and implementation methods, such as zoning district modifications and other land use related programs. The time frame of the plan is for a twenty year period.

The boundary of the Waterford Area Management Plan is the same as the boundary of the Waterford Historic District as listed in the National Register of Historic Places. (See Figure 2, page 3)

As part of the expanding Washington metropolitan area, Loudoun county will continue to experience growth pressures. The most recent projections indicate a 45% population increase during the 1980's, from 57,421 in 1980 to 83,000 people by 1990. Much of this residential growth will occur in the eastern sections of the county where adequate central sewer and water utilities are currently located, but a certain portion of this growth can be expected to locate west of the Catoctin Ridge in the County’s largest agricultural area. The financial difficulties facing many Loudoun farmers and the general uncertainty about the future of Loudoun’s agricultural industry combined with the attractive scenic quality, available land base and competitive land prices make western Loudoun a prime location for new rural residential development.

Recognizing this issue, the county has undertaken a land use planning program that is based on the fundamental principle of orderly growth which attempts to channel new growth in and around existing population centers with available public services, such as eastern Loudoun and the western towns, while also maintaining the open farmland of western Loudoun. Both the adopted Resource Management Plan and the Rural Land Management Plan are based on this important idea of growth management. The County recognizes the value of concentrated growth which has less of an impact on Loudoun’s environmental, agricultural and scenic resources and provides an important fiscal benefit by locating necessary public facilities and services within existing population centers.

The village of Waterford (as shown on Figures 1 and 3, pages 2 and 4) which give the regional setting and location within the County and its surroundings fit into this overall growth management program in a unique manner for a variety of reasons. While it is labeled a village in both the RMP and Rural Plan and is thought of as a village by many Waterford and County Residents, it has the following special characteristics:

- Waterford is one of the largest villages in the County with a 1982 estimated population of 210.
The policies of the Rural Land Management Plan govern land use of all areas without adopted area plans.

**LOCATION OF AREA MANAGEMENT PLANS**

1. Eastern Loudoun
2. Leesburg
3. Rural Land Management Plan
4. Round Hill
5. Dulles North
6. Cub Run
7. Dulles South
8. Waterford
9. Purcellville**
10. Middleburg*
11. Lovettsville
12. Hamilton*

*Plans Not Yet Initiated  **Drafted

FIGURE 4.
It was an incorporated town for 100 years (1836 - 1936) (see Figure 5, page 7) and was similar to the County towns, such as Purcellville, Hamilton and Leesburg, in that it provided essential commercial, business and institutional services to its surrounding agricultural community.

Waterford is one of two unincorporated County villages (St. Louis is the other) which have publicly owned and operated sewage treatment plants. Waterford’s plant has a total capacity that could approximately double the existing 115 buildings in the village.

Waterford and a surrounding area of about 1,450 acres have been designated a National Historic Landmark by the U. S. Department of Interior, one of four in the County and one of the very few of approximately 1,500 National Historic Landmarks in the entire nation that is a village rather than a single building site.

These four specific factors, combined with the County’s need to assess the growth pressure facing western rural Loudoun, and the importance of implementing the growth management principles of the RMP and Rural Land Management Plan were the reasons for the Board of Supervisors’ decision in September 1983 to prepare the Waterford Area Management Plan.

The Board and the Planning Commission jointly appointed an eighteen member Citizens' Advisory Committee and directed it to work with county staff to examine community issues and resolve land use conflicts through the preparation of the Waterford Area Management Plan. The Committee held its first meeting on November 3, 1983. The Committee met weekly through February 9, 1984 to review the major planning issues and problems, explore options to resolve these issues and provide direction to the planning staff for actual writing of the draft plan document. The staff completed a draft plan in July, 1984. The Committee met and reviewed the staff draft, made revisions and voted to recommend the plan to the Planning Commission on December 12, 1984. The Planning Commission reviewed the citizen’s draft plan between October, 1986 and June, 1987, certifying a revised draft to the Board of Supervisors on June 3, 1987. The Board revised the draft further and adopted the Plan on October 19, 1987.

The Waterford Area Management Plan is similar in structure and general content to the area plans which have been adopted for the Leesburg, rural, and Eastern Loudoun areas and, like these other plans, is a component of the County’s overall Comprehensive Plan. It includes goals, policies and detailed programs which the County will use to guide the location, timing and character of development in the Waterford area.

II. PURPOSE OF PLAN AND SUMMARY OF MAJOR RECOMMENDATIONS

A. PURPOSE OF PLAN

The Waterford Area Management Plan has the following major purposes:

1. To implement the County’s growth management program which promotes orderly growth in existing population centers with adequate
public services rather than development in the County’s major agricultural areas;

2. To serve as a guide for the County to make future land use and zoning decisions in the Waterford area;

3. To enable citizens in the Waterford area and other areas of the County to express their views to the Planning Commission and the Board of Supervisors as to what their desires are for the community’s future;

4. To examine the existing and potential land use issues and problems and to propose policies and implementation recommendations which address them.

B. TWO PARALLEL PLANS

Waterford’s historic significance and scenic quality is wholly dependent upon the visual connection between the village and the surrounding agricultural area as indicated by the federally designated 1,450 acre National Historic Landmark District. The basis for the retention of this historic designation and the potential for an expanded tourism program are both subject to the maintenance of the existing scenic character.

The Waterford Area Management Plan can be thought of as two separate, but closely linked plans: one for the village and one for the surrounding rural area. This is because these areas have distinctly different land uses, population and housing densities, transportation conditions and public facilities. For this reason, the Waterford Plan has used two of the Rural Land Management Plan’s Land Use Policies Areas as the basis for this plan: Rural Village and Agricultural Conservation. However, one of the primary goals of the Waterford Area Plan is to protect an historic rather than an agricultural resource. Agricultural uses in the rural area surrounding the village are historic and should be encouraged, but in any case where Waterford Area Management Plan guidelines conflict with those of the Rural Land Management Plan, the Waterford Area Management Plan shall supersede.

C. PUBLIC AND PRIVATE COOPERATION

Some of the plan’s proposed implementation recommendations are the responsibility of the County, while others can be implemented primarily by private interests or through the cooperative efforts of village residents. The County should concentrate on determining the appropriate location for future connections to the sewage treatment plant and review of applications for new land uses, rezonings, site plans and implementation of the Historic District Ordinance. Other recommendations, such as a tourism program, village pedestrian system, parking areas and road improvements depend upon the initiative and desires of village residents and the private sector with
some assistance provided by the County and/or State.

D. SUMMARY OF MAJOR RECOMMENDATIONS

The plan’s policy and implementation recommendations are in Chapter Three and can be summarized as follows:

1. Use the policies of the Rural Land Management Plan’s Agricultural Conservation Policy Area (refer to Appendix I page 113 for those Rural Plan Policies that this plan endorses) as the guide for all future land use decisions unless otherwise established by this plan.

2. Designate a Village Limit Line (VLL) to define the hard edge of the village and to establish the sewer service area. Sewer service will be permitted outside this line only if it is established that such service will contribute to the protection of the hard edge, critical views and rural setting of the Waterford National Historic Landmark, as stated in the goals of this plan.

3. Allow appropriate land uses within the village’s existing commercially zoned area and encourage residential development and rezonings that will enhance the existing village character.

4. Provide incentives through optional programs for the maintenance of agriculture as the primary land use in the rural area surrounding the village, as well as to guide development in directions which will contribute to the protection of the Waterford National Historic Landmark.

5. Extend the boundaries of the existing County Historic District Overlay Zone to conform with the boundaries of the National Historic Landmark, and concurrently identify with specificity those areas within the District which can accommodate development without negatively impacting the integrity of the Landmark.

6. Explore the need for a comprehensive village improvement program, including the advantages and disadvantages of an upgraded vehicular and pedestrian circulation system, new off-street parking areas, a central water supply system and a tourism program.

7. Amend the existing zoning and subdivision ordinances and map to include new zones and/or zoning regulation provisions that will help protect the State and National Historic Districts.

8. Utilize the sewage treatment plant and community water and wastewater systems as positive incentives to locate development in locations which will contribute to the protection of the Waterford National Historic Landmark.
9. Encourage the accumulation of funds to purchase properties or interests in properties where such purchase is appropriate and necessary.

10. Protect private property values to the greatest extent possible while being consistent with the other goals of this plan.

III. COMPREHENSIVE LAND USE PLANNING BACKGROUND

A. PURPOSE AND SCOPE OF COMPREHENSIVE PLANNING

The primary purpose of comprehensive planning is to establish guidelines that will be used to evaluate and influence future land uses, proposed developments, public facilities and zoning changes in a community. This is accomplished by means of a comprehensive plan document. There are five basic steps in the preparation of a comprehensive plan described as follows:

1. Inventory and Analysis

   This first task looks at the current land use and community conditions and determines the existing and anticipated future issues and problems of the community.

2. Goals

   Goals are general statements expressing long-range community aspirations and representing significant positive gains that should be achieved by the local government. They serve to establish the directions which the community will take. Goals describe the 'ideal end condition that is sought.

3. Identification and Examination of Issues, Conflicts and Potential Problems

   The existing land use conflicts, issues and problems are identified and examined for their effects on the community.

4. Formulation, Evaluation and Selection of Suitable Policies and Land Uses

   This step involves the formulation and examination of various policies and alternative land uses that will resolve the identified issues and problems. The most feasible options are then selected and described by means of policy statements (guidelines for action to achieve the goals) and a recommended land use pattern.
5. **Implementation of Policies and Land Use Recommendations**

   This step sets out the concrete and specific means by which the proposed policies and land uses can be achieved. Examples are zoning changes, ordinance amendments, public facility investments and land use related programs.

6. **Review and Update of Plan**

   After a certain period of time (about five years), the plan should be reviewed and modified based on any new information, identified problems or changes in land uses or community desires.

**B. STATE ENABLING LEGISLATION**

   Article 4, Section 15.1 - 446.1 of the code of Virginia mandates that all governing bodies in the State shall adopt a comprehensive plan and outlines the basic purpose of a comprehensive plan with the following suggested elements:

   1. Designation of areas for various types of public and private development use;

   2. Designation of a transportation system and community service facilities, such as schools or a sewage disposal plant;

   3. Designation of historical areas;

   4. An official map and proposed implementation methods such as a capital improvements program, zoning ordinance and map, and subdivision ordinance.

   The most important legal aspect of the State legislation is that once the plan is adopted by the local governing body, "it shall control the general or approximate location, character and extent of each feature shown on the plan" (Section 15.1 - 456 (a)). The plan is thus given legal standing as a general guide for making land use and zoning decisions.

**C. LOUDOUN COUNTY PLANNING PROGRAM**

1. **Resource Management Plan and Area Plans**

   Loudoun County's interpretation of the state mandate has been to develop an overall policy plan for the entire County (Resource Management Plan (RMP), adopted in 1979) followed by specific land use plans based on the RMP for different County areas and communities. These area plans examine the RMP goals, policies, and implications for land use for a particular County area, and then set guidelines for that area based on the RMP. To date, the County has
adopted the Eastern Loudoun Area Management Plan, the Rural Land Management Plan, the Leesburg Area Management Plan, and the Dulles North Area Management Plan. Figure 4, page 5 illustrates the current location and sequence for the various area plans.

Both the RMP and the Rural Plan include the area to be covered in the Waterford Area Management Plan. Therefore, these two plans provide the overall land use and policy framework for the development of the Waterford Plan.

The other existing elements of the County planning program are the Zoning Ordinance, which regulates by district the types of uses and building density that can be located on a property, and the Subdivision Ordinance which regulates actual land development and construction.

2. Citizen Participation

An important aspect of Loudoun's land use planning program has been the extensive public participation which was instituted so that citizens can have direct and early involvement in the County's land use decisions. At the direction of the Board of Supervisors and the Planning Commission, each area plan has a Citizens' Advisory Committee (from 18 to 29 members on the five plans to date) that works closely with the County Planning staff. Weekly meetings, open to the public, are held for approximately six months. Advisory Committees include citizens from other parts of the County as well as residents of the area or community being studied.

Once the Citizens’ Advisory Committee has finished its work, the area plan is submitted to the Planning Commission for review; after completing its review, the Commission refers the document to the Board of Supervisors for final review and adoption. Both the Planning Commission and the board hold at least one public hearing on area plans, and normally there are also public information meetings, thus allowing for additional citizen participation beyond that provided by the Citizens’ Advisory Committee.

IV. GENERAL POLICY RELATIONSHIP TO RESOURCE MANAGEMENT PLAN AND RURAL LAND MANAGEMENT PLAN

While the adopted Resource Management Plan and the Rural Land Management Plan provide the general policy framework for development of the Waterford Area Management Plan, it is designed to protect the unique historic resource, the Waterford National Historic Landmark District. While there will be some growth within the boundaries of the Waterford Area Management Plan, because of the importance of retaining those qualities which led to Waterford’s designation as a National Historic Landmark, growth will not be encouraged. In any case where the guidelines in the Waterford Area Management Plan conflict with
the more general guidelines of the Resource Management Plan or the Rural Land Management Plan, the Waterford Area Management Plan shall supersede. Following are excerpts from these two plans and an analysis of their meaning for Waterford.

A. RESOURCE MANAGEMENT PLAN

The RMP designates Waterford as a Village Center Resource Management Area described as follows (Figure 6, page 14):

"The purpose of the Village Center Resource Management Area is to both accommodate an appropriate amount of growth in existing villages, if desired by local residents, while maintaining their character and scale, and to permit the development of new villages in furtherance of the County's traditional growth character, pattern and scale. The village centers of Loudoun County are predominantly residential areas that have a higher use density and intensity than the surrounding agricultural areas. The villages are generally separated from major community centers and have their own distinct identities and sense of place. Major public facilities such as high schools and large commercial land uses are not normally associated with village centers." (Resource Management Plan, p. 215.)

The area around the village is included within the County's Long-term Agricultural and Rural Residential Resource Management Area. Most of the land around Waterford is considered to be within the Long-term Agricultural Resource Management Area which is described in the following manner:

"These farm areas, due to their size, productivity and tenure have been in the past, and will continue to be the core of Loudoun County's agricultural base. These areas are not in the immediate path of urban development, nor are they scheduled to be developed with respect to long-range comprehensive land use planning. These are farm areas where agricultural land use retention efforts should be initially directed and should form the basis for the development of long-term land use programs to protect these important farms. (Resource Management Plan, p. 125.)"

B. RURAL LAND MANAGEMENT PLAN

The Rural Plan has a similar approach as it divides the County into five land use policy areas. Each policy area has a distinct purpose and the land uses within each have historically been different with the types of policies reflecting this. Waterford is designated as one of the fourteen Rural Village Policy Areas while the land around the village is within the Agricultural Conservation Area (see Figure 31, page 83). Appendix I is an excerpt from the Rural Plan that summarizes the policy and program recommendations for these two land use policy areas. Appendix III applies the Rural Plan's land use policy areas specifically to the Waterford Area Plan.
In essence, the Rural Plan recommends the following:

1. **Rural Village Policy Areas:**

   Allow growth and development to occur in and around villages with adequate public facilities. New development should be compatible with the existing architectural character, density, scale and layout of the existing village.

2. **Agricultural Conservation Policy Area:**

   Discourage development and focus efforts to maintain the existing agricultural industry and its associated low density, dispersed development pattern.
CHAPTER II. INVENTORY AND ANALYSIS OF ISSUES
CHAPTER TWO

INVENTORY AND ANALYSIS OF ISSUES

This section provides basic data, information and analysis of existing conditions and examines the issues for the Waterford planning area. Issues are perceived community conflicts or land use problems that an area plan examines and attempts to solve. The planning, land use and zoning issues regarding the village of Waterford and the related surrounding area are primarily a result of the changing nature of the rural Loudoun landscape from predominantly agricultural to a mixed community of farming and residential land uses. This ongoing land use change and continual growth pressure affects different parts of the County in different ways; in the case of Waterford, the transformation clearly illustrates the differences between the Loudoun County of the past 200 years and the Loudoun County of the 1980’s and raises important questions about the way rural Loudoun will grow and change in the future.

During the 18th, 19th and early part of the 20th century, Waterford and the surrounding farmland were closely tied culturally and economically. The village had many businesses and commercial establishments that provided essential services to the nearby farmers, and many of the village residents worked in the village or on the farms. Today Waterford is predominantly a residential community with residents who commute to work elsewhere. In contrast, most of the land around Waterford is still in agricultural land use, but as explained previously and discussed extensively in the Rural Plan, growth pressures and financial uncertainty are contributing to the conversion of farmland to residential land use throughout the County. Thus, the only remaining connection between the village and its rural, agricultural surroundings is one of appearance in that Waterford still looks the same as it did in the past: a small, compact village, surrounded by an open agricultural countryside. It is this largely unchanged appearance that makes Waterford a unique and significant historic resource in the region, state and nation.

I. GROWTH MANAGEMENT, LAND USE AND EXISTING ZONING

A. VILLAGE

1. Growth and Residential Development

The village of Waterford was first settled in 1733 by Quakers who came to Loudoun from Pennsylvania. The majority of the land subdivision was completed by 1816 with actual property development, building construction and street layout occurring throughout the 19th and early 20th centuries. Land around the village was also subdivided, but was kept in larger parcels for farming. The physical size and extent of the village has not changed for 168 years.

Waterford’s size remained fairly stable for most of its history with a population of approximately 300 to 400 people into the early 20th century. The 1982 village population was 210 reflects a decline that is primarily due to a lower average number of persons per household (2.31)
As indicated in Figure 7, page 19, residential use is the primary land use within the village which currently has 91 dwelling units at an overall density of 1.13 units per acre, primarily on quite small lots. Eliminating three large parcels, these lots have an average size of .45 acres; 24 residences are on lots smaller than one-quarter acre. Growth in the village has been negligible with only one house built in the last seven years. Thus, there can be no realistic projections based on the village’s past growth that can be used to predict the future population. The lack of soil percolation for septic fields, the existing ownership intent within the village which up to the present has been not to develop vacant parcels, and the largely unchanging agricultural land use pattern immediately adjacent to the village have combined to create a unique situation in which growth has not occurred. Based on existing R-1 and R-2 zoning, there are 10 properties totaling 60 acres within the village with available land that could be developed to yield an additional 84 units (Table 1, page 20). If these properties are subdivided in a conventional fashion, the site design may not be compatible with the character and scale of the village.

2. Commercial, Office and Institutional Uses

The village has several part-time antique/gift shops, a hardware store, a small grocery, the Loudoun Mutual Insurance Company (13 employees), the offices of the Waterford Foundation (two employees), the office of a historian/map maker and the unmanned office of the C&P Telephone Company. There are no commercial uses outside of the village in the remaining planning area.

The Waterford Foundation, a private, non-profit organization, owns eleven buildings, two fields and one vacant building lot, all under both facade and open space easement. Some of the buildings are used only during the annual three day Waterford Fair and some are used for other community and scheduled activities. The majority of village residents are members of the Waterford Foundation. Additional institutional uses in the village are three churches, a branch of the U. S. Post Office and two cemeteries.

Waterford was originally a mixed use community with businesses, shops, small industries, churches and residences that were located in close proximity to one another throughout the village. In both 1834 and 1920 Waterford had about 20 business and commercial establishments. Much of this commercial vitality has declined, however, with only a few businesses remaining. Agriculturally related services that were once provided in Waterford are now mostly located in the larger and more accessible towns of Leesburg and Purcellville.

* **Gazetteer of Virginia**, Joseph Martin, 1835, p. 216


<table>
<thead>
<tr>
<th>Tax Map #</th>
<th>Acres</th>
<th>Owner</th>
<th>Existing Zoning</th>
<th>Current Use</th>
<th>Existing Units</th>
<th>Potential Additional Units Based on Existing Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>28A1 G-6</td>
<td>1.47</td>
<td>FREEMAN</td>
<td>R-2</td>
<td>VACANT</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>H-6</td>
<td>.66</td>
<td>HOLMES</td>
<td>R-2</td>
<td>VACANT</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>B-7</td>
<td>9.64</td>
<td>E. JAMES</td>
<td>R-1</td>
<td>FIELD</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>I-1</td>
<td>.98</td>
<td>CUTTER</td>
<td>R-2</td>
<td>WOODED YARD</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>I-14</td>
<td>2.86</td>
<td>BAUMGARDNER</td>
<td>R-1</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I-15</td>
<td>7.04</td>
<td>BAINES</td>
<td>R-1</td>
<td>YARDS &amp; FIELD</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>I-8</td>
<td>.67</td>
<td>NICHOLS</td>
<td>R-2</td>
<td>YARD</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>G-1A &amp;1B</td>
<td>.50</td>
<td>WATERFORD FOUNDATION</td>
<td>R-2</td>
<td>VACANT</td>
<td>0</td>
<td>1**</td>
</tr>
<tr>
<td>I-6</td>
<td>41.28</td>
<td>PAYETTE</td>
<td>R-1</td>
<td>VACANT</td>
<td>2</td>
<td>44***</td>
</tr>
<tr>
<td>28: 30A</td>
<td>5.15</td>
<td>BAYLY</td>
<td>R-1</td>
<td>YARD &amp; FIELD</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

| TOTALS   | 70.25 |           |                 |             | 8              | 64                                                       |

* Assumes availability of on-site water supply.
** Only one unit permitted by easement.
*** If developed under cluster provisions for R-1.
Waterford cannot return to the past when it provided essential business and commercial services to the surrounding agricultural area, but if it is to retain the characteristic diversity of a village and provide for the convenience needs of residents and visitors, it is important to maintain some land for small scale commercial and other nonresidential uses.

The currently zoned 3.75 acres of commercial land is located in the heart of the "downtown" area on Main Street. There are 15 lots and 10 buildings with a total of approximately 24,000 square feet of floor area. Thirty-seven percent of the land area is in residential use, occupied by four houses, which may have to be modified if commercial uses are proposed. Within the remaining 2.4 acres, three lots totaling .65 acres have commercial uses. These include the unmanned C&P Telephone Company building and a part-time art gallery/residence. Of two lots totaling 3,382 square feet of available floor space, one is occupied by a stained glass business and the other is vacant. One of the major hindrances to developing the commercial viability of this area is the lack of parking. This problem may be partially solved if the recommendation for new village parking areas listed in the Transportation section is implemented.

Another commercial issue concerns the kinds of uses permitted as home occupations. Certain uses, such as antique sales, have a nuisance potential as they can result in both commercial intrusions and parking congestion in existing residential sections of the village. These kinds of uses are more appropriately located in commercially zoned areas.

The existing grocery and hardware stores provide essential local convenience services to village residents, but are located outside the commercially zoned area on properties zoned R-2. They are thus nonconforming, "grandfathered" uses that will not necessarily continue if ownership changes. The grocery store is immediately adjacent to properties within the existing C-1 zoning, while the hardware store is surrounded by properties currently zoned residential. If future residential development occurs, there will be an even greater need for the services provided by these establishments. Thus, the grocery store property could be rezoned from residential to commercial with certain conditions and restrictions without setting a precedent for the rezoning of lots nearby or to the south along Second Street. This is not, however, the case with the hardware store whose rezoning would represent spot zoning.

The commercial land use issue is also closely tied to tourism. Expansion of a village tourism program could result in more tourist related businesses locating in Waterford, but these uses would be serving a different clientele and would not be providing services to the agricultural or village community as in the past. Examples of suitable
commercial uses would be restaurants, small inns, and arts and crafts shops. These uses should be located in the downtown commercially zoned area rather than in the rest of the village which is now residentially zoned.

While Waterford has become predominantly a residential community, the positive aspect of this land use change has been the efforts of the residents to maintain the historic architectural character of the village’s buildings through private efforts in restoration, rehabilitation and voluntary donation of perpetual easements that have led to Waterford’s becoming a nationally recognized historic resource. Sixty preservation easements have been recorded protecting building exteriors and open spaces on both individual lots and larger parcels (Figure 8, page 23). These easements place various kinds of restrictions on the kinds of uses and modifications that can occur to the properties and buildings.

3. **Existing Zoning** (See Figure 9, page 25)

   Zoning specifies the allowed uses and densities of a particular property and reflects a combination of the desires of the local community, the general public interest, County land use goals and policies, and the wishes of individual landowners. In many cases, these factors may not be compatible, thus resulting in land use conflicts within an area. Table 2, page 24 lists the existing zoning districts in the Waterford planning area and the land area within each. Figure 9, page 25 shows the area in each zoning district.
### TABLE 2
EXISTING ZONING IN WATERFORD PLANNING AREA

<table>
<thead>
<tr>
<th>Zoning Category</th>
<th>Village (acres)</th>
<th>Remaining Planning Area (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1 (General Commercial)</td>
<td>3.75</td>
<td>0</td>
</tr>
<tr>
<td>R-2 (Residential Two Dwelling Units per Acre)</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td>R-1 (Residential One Dwelling Unit per Acre)</td>
<td>78</td>
<td>96</td>
</tr>
<tr>
<td>A-3 (Agricultural/Residential One Dwelling Unit per Three Acres)</td>
<td>0</td>
<td>894.25</td>
</tr>
<tr>
<td>F-1, F-2, F-3 (Regulatory 100 Year Flood Hazard District)</td>
<td>1</td>
<td>336</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>123.75</strong></td>
<td><strong>1,326.25</strong></td>
</tr>
</tbody>
</table>

Historic District Overlay Zone: 49.4 acres (includes all of C-1 and R-2 and 4.5 acres of R-1 area)

### B. SURROUNDING RURAL AREA

1. **Agriculture and Rural Residential Development**

   There are ten dwelling units in the plan's rural area and the population is estimated to be 30 people* with an average of 3 persons per household. Combined with the 210 people in the village, this gives a total planning area population of 240.

   Figure 10, page 27 shows the existing land uses in the rural area surrounding the village. There are about 1,278 acres of land presently in agricultural use** in the planning area. The major crops are corn, wheat and hay. Livestock include cattle, horses and sheep.

* Estimate derived from Loudoun County planimetric maps.

** Data obtained from Loudoun County Commissioner of the Revenue and the USDA Soil Conservation Service.
The planning area is located within the 18,000+ acre Catoctin Agricultural and Forestal District which was adopted by the Board of Supervisors in 1980 and is scheduled for review in 1988.

The land around Waterford, with its rich soil and ample rainfall, has historically been part of the County’s stable long-term agricultural area with many farms owned by the same family for several generations. Due to several factors, including rising land values, increasing rural residential development in the County and the economic difficulties facing Loudoun’s farmers whose average age is in the mid-50’s, there has been a greater pressure for land conversion to residential uses.

Landowner equity and protection of property values was an important consideration in the development of the Rural Land Management Plan and is an important concern in and around Waterford. For many farmers and farmland owners their land is their retirement fund, and while many wish to keep farming as long as they are physically and financially able, they do not want the government to take any actions that might inhibit their freedom to subdivide and develop their land, or their ability to sell their land for development.

Another aspect of the land value issue is the relatively higher property values around Waterford compared to other rural areas in the County. Analysis indicates that this may be because of the village’s historic reputation and character.

Of the total 1,278 acres currently in farm use, 256 acres are subdivided but are still being farmed. There are seven parcels that are already subdivided, undeveloped and unfarmed in the planning area totalling 33 acres. There are also seven other properties totalling 106 acres that are less than 25 acres and are in the Use-Value Assessment Program. Most of the subdivision activity within the planning area is located along Route 704 and on the west side of Route 662 in lots primarily ten acres or greater in size (Figure 10, page 27). There is also subdivision activity along Route 781 northwest of the village just outside the planning area.

Leased land and absentee ownership are two factors that may indicate speculative owners are either conglomerates of many individuals, or people who do not live on the land but own it for investment purposes, or who are retired farmers, and therefore are probably more likely to sell and/or subdivide the land than a younger owner/operator.

* Memorandum from William C. Gardner, Loudoun County Chief Appraiser, December 14, 1983.
SUBDIVISION AND DEVELOPMENT ACTIVITY

- AREAS OF GREATEST SUBDIVISION
- HOUSES BUILT BETWEEN 1977 AND 1982

FIGURE 11.
There are properties totalling 226 acres in absentee ownership and properties totalling 405 acres that are leased. (See Figure 12, page 30)* In some instances, these two categories include the same properties.

There are also five properties totaling 241 acres under permanent open space easement in the plan’s rural area and along the Waterford Corridor Route 662. (See Figure 13, page 31)

2. **Existing Zoning**

As indicated in Table 2 and Figure 14, page 32 the rural area around Waterford is predominantly zoned A-3, one dwelling unit per three acres (894 acres) with the remainder in R-1, one unit per acre (96 acres). When the average development in rural Loudoun of one unit per seven acres** is applied to this area, there is a potential for approximately 141 additional dwelling units.

II. **PUBLIC FACILITIES AND UTILITIES**

A. **SEWAGE TREATMENT AND WATER SUPPLY**

1. **Village**

   a. Sewage Treatment:

   Waterford is served by a wastewater treatment plant that is owned and operated by the Loudoun County Sanitation Authority (LCSA). Figure 14A, page 32A shows the location of the plant and existing sewer lines. The facility was built for the purpose of solving a potentially severe health problem due to malfunctioning septic systems and was not constructed to encourage additional growth in the village. It began operation in 1978. The plant has 60 existing connections of a possible total of 115 buildings in the village and a current flow of approximately 10,000 GPD (gallons per day).

   The sewage treatment plant was designed with a total capacity of 58,000 GPD to serve a projected population for the

---

* Data obtained from Loudoun County Commissioner of the Revenue and U.S.D/A/Soil Conservation Service.

** Assuming new development in rural Loudoun, regardless of existing zoning, occurs at an average density of one unit per seven acres due to road frontage, septic limitations, environmental constraints and owner’s desire. Also excluding land placed under open space easement.
WATERFORD
AREA MANAGEMENT PLAN

ABSENTEE OWNED AND LEASED LAND

XXX ABSENTEE OWNERSHIP

XXX LEASED LAND

FIGURE 12.
PROPERTIES UNDER EASEMENT-RURAL AREA

- VIRGINIA HISTORIC LANDMARKS COMMISSION
- VIRGINIA OUTDOORS FOUNDATION

FIGURE 13.
EXISTING ZONING-RURAL AREA

- A-3
- C-1
- R-2
- REGULATORY 100-YEAR FLOOD HAZARD DISTRICT

FIGURE 14.
VILLAGE OF WATERFORD-SEWAGE TREATMENT SYSTEM

SEWAGE TREATMENT PLANT

SEWER LINE

FIGURE 14A
year 2000 of 557 people which now appears high considering that the population was only 210 people in 1982. This is due to the fact that the population forecasts were based on inaccurate information in that the 1965 estimated village population of 434 was probably too high. The plant is large enough to serve all of the existing 115 buildings and approximately 75 additional connections depending on flow rates. Assuming a small percentage of this would be nonresidential uses, the plant could provide service to an estimated 67 to 135 additional dwelling units.

The plant was built with a combination of Federal, State and County funds. The LCSA’s policy is to ensure that properties within the engineering study area for the plant” (Figure 15, page 34) will be guaranteed capacity and service in the plant. Based on existing zoning, there could be 64 additional dwelling units built on vacant parcels in the village (Table 1, page 20) leaving a remaining plant capacity for another 47 to 115 units to hook up. This excess capacity and future potential expansion capacity should be used in a legal and regulated manner to assist in achieving the goals of this plan.

If this additional residential development does occur, it will do so incrementally over a period of time and will be influenced by many other factors including water supply, zoning requirements, road capacity and access, land and building prices, the local and regional housing market, property size and location, County policy, landowner intent and overall land use impact. The important point is that central sewer service is not a constraint to growth and that there is sufficient capacity to add about 75 buildings to the existing 115.

One of the principal methods available to manage the growth and development density in and around the village is for the Waterford Area Management Plan to develop policies regarding connections to the treatment plant. It is the present position of the LCSA that the decision to provide service to any properties outside of the service area line shown in Figure 14 should be determined by the County’s growth management policies for the Waterford area. This could be accomplished by proposing a Village Limit Line (VLL) for the Waterford Area Management Plan similar to the Urban Limit Line (ULL) concept established for Leesburg in the adopted Leesburg.

*Feasibility Study on Water and Sewerage Facilities for the Community of Waterford, prepared for Loudoun County Board of Supervisors, Greenhorne, O’Mara, Dewberry and Nealon, 1966.
BOUNDARY OF ENGINEERING STUDY AREA FOR WATERFORD SEWAGE TREATMENT PLANT
Area Management Plan (p.iii) and proposed in the Rural Land Management Plan (p. 232) for use around the County's five other incorporated towns with central sewer and water facilities: Purcellville, Hamilton, Round Hill, Middleburg and Lovettsville. Sewer capacity could also be used to encourage density reduction to serve cluster development in areas which have high visual absorption capacity rather than in random areas determined solely by soil percability.

Another issue is the potential health problem caused by existing septic systems which may be contaminating wells in the village (discussed further in the Environmental Section).

b. Water Supply:

Waterford residents are served by individual well systems. Studies of geologic conditions and an analysis of existing well yields indicate that local subsurface conditions vary in their ability to provide a sufficient and reliable supply of potable water for individual and community needs. During the period of acquiring grants to build the sewer plant, funds were also sought for the construction of a central water system. The project was abandoned, however, when available financing could not be found.

The current situation that relies on numerous private well systems has several drawbacks, including increased expense and difficulty for the homeowner when wells run dry or produce low yields, dependence on two small local ponds and Catoctin Creek for fire control and possibility of contamination from failing drainfields. All of these problems could be addressed with the construction of a central groundwater supply system that could be owned and operated by the LCSA in conjunction with the existing sewage treatment plant.

There are several issues which would have to be addressed including availability of water and system cost, both capital and operating. Preliminary assessments of local geologic conditions indicate that there may be formations that will provide sufficient yields to serve the village, but the system may require several wells to generate a stable, long-term supply. Without detailed study, field work and analysis comparing the costs and benefits (both monetary and social) of a central public versus individual private systems as well as important considerations such as the number of wells that

* Information obtained from the Loudoun County Health Department
need to be drilled, actual locations, capital and operating costs, and system management cannot be determined.

Another issue related to a central water supply system is the design and appearance of a storage tank which would not be visually incompatible with the National Historic Landmark village and its scenic, agricultural setting.

2. **Surrounding Rural Area**

Both sewage treatment and water supply are provided by individual septic systems and private wells in the rural area as agriculture is the predominant land use and residential development is at a very low density. If future growth does occur in the rural area, it will be in the form of subdivisions of three to ten acres with the actual density determined by zoning requirements, existing road frontage and soil permeability. If a rural residential cluster development is proposed, it can be serviced by a mass drainfield and well system if certain policies and requirements of the County and the State Health Department are met.

B. **ELEMENTARY SCHOOL**

The Waterford Elementary School was built in 1965 and is located on Route 665 just north of the village. The school has a design capacity of 190, a use capacity of 140 and a September, 1983 enrollment of 80. Children in the planning area attend Blue Ridge Middle School and Loudoun Valley High School in Purcellville. The attendance area for the school is shown in Figure 16, page 37.

Waterford Elementary School is classified as one to the County's small schools many of which have experienced a decline in enrollment causing an increase in operating costs per pupil. As a result of this, these schools have been reviewed for operation alternatives. The school age population in the area served by the school has declined from 143 students in 1977 to 80 in 1982, a drop of 44%. Excluding debt service and transportation costs, the total operating cost for the school in 1979 - 1980 was $1,277 per pupil. This figure does not compare favorably with those of a typical eastern Loudoun School, such as Meadowland Elementary (built in 1979), at $732 for the 1979 - 1980 school year. On the other hand, because Waterford Elementary was built fourteen years earlier (1965 versus 1979), the debt service cost per pupil of $63 is much less than Meadowland's $536. When operating and debt service costs are factored together, the two schools have comparable total per pupil costs of $1,340 for Waterford and $1,267 for Meadowland.

* "Report of the Small Schools Study", Loudoun County School Board, May 26, 1981
WATERFORD ELEMENTARY SCHOOL ATTENDANCE AREA

FIGURE 16.
The athletic fields adjacent to the school building are used by the County Parks and Recreation Department and the Waterford Citizens’ Association for organized soccer, Little League Baseball and local softball from May through August and thus provide an important recreation function for the community. There are also tennis courts available for public use. The fields were improved and are frequently maintained by community volunteers.

The school is used during off hours by several community groups, such as the 4-H Club and the League of Women Voters. In addition, the community is extensively involved in providing volunteer assistance averaging 125 to 130 hours per month. This amount of volunteer time is about average for all County schools, but much higher in terms of number of hours per pupil and thus is quite remarkable when the 80 student enrollment of Waterford is compared with that of County middle and high schools which have over 1,000 students. A significant portion of this volunteer time is given by individuals in the community who do not have children enrolled in the school. Thus, the volunteer program indicates a strong commitment by the community to the school and should be considered along with debt service cost when the School Board reviews enrollment and operating costs.

Waterford Elementary is centrally located and could provide service to more of the north-central rural portion of the County between Routes 287 and 15 if future growth occurs in this area. Considering the potential for growth in the village, it can be anticipated that school enrollment figures might increase during the next ten to twenty years. The school also participates with the community in the annual three day Waterford Fair by providing hot lunches and dining facilities to visitors with the revenue retained and used for various school activities and programs.

A final factor to consider is that the Waterford School has been an integral feature of the community for many years. While new and large 720+ student elementary schools may be able to provide specialized instructors and equipment, a small rural school such as Waterford’s has the ability to treat each child as an individual both in terms of his family and as a member of the immediate rural or village community. In addition, the school provides the unique opportunity for village residents and their farm neighbors to come into contact with each other, thereby providing an important community identification.

C. ELECTRIC AND TELEPHONE

Within the village, telephone service is provided by Chesapeake and Potomac (C&P), and electric service is handled by Virginia Power. All of the utility lines are connected by wires on aboveground poles and are a detraction from the historic, architectural quality of the village.
III. TRANSPORTATION

A. BACKGROUND

The overall goal for the transportation system in rural Loudoun is to provide a safe and efficient road network that meets the travel needs of its users. These needs include movement of agricultural products and machinery, work trips, commercial and recreation services, school trips and regional needs of through travelers and tourists. The road network was created over the last two hundred years to serve the needs of farms, towns, and villages.

In the case of Waterford, the village was once a commercial center serving the surrounding agricultural areas. Because of this function, early roads in the area were built as spokes feeding into the village as the hub. Over time, this commercial function faded and now the village and its surrounding countryside are included on the Virginia Landmarks Register and the National Register of Historic Places. Further, because of its value as a unique National Historical Resource, the village and its environs have been designated by the U.S. Secretary of the Interior as a National Historic Landmark. This is the most honorific recognition the Department of the Interior can bestow upon historic property.

The function of the village of Waterford has changed and its value to the heritage of Loudoun County and the State of Virginia is now immense. However, the regional road network around the village has not changed. All roads still lead to, and now through, the village. The village's location as a focal point of a regional road network and its prime role, now and in the future, as a historical resource are basically incompatible, since improvements which would expedite the flow of through traffic would significantly change the historic streetscape of Waterford, while attracting additional through traffic.

Figure 17, page 40 shows the existing road network, which exhibits a hub and spoke form, in and around Waterford and within the planning area.

New travel patterns on the old, but still existing, road network have resulted in growing numbers of vehicles going into and through the village. The current physical configurations of the streets are unable to efficiently or safely handle the resulting traffic volumes. Routes 662 and 665 in the village of Waterford (Main Street, Second Street and High Street) are now being used as connecting links between the central and northern portions of the County and points to the south and east. This disturbs and intrudes on the community and presents a safety hazard to motorists and pedestrians because of the narrow streets and lack of parking. To the extent that village roads must serve an increasing number of through trips, these problems will worsen. Thus, an important transportation issue is the appropriate handling of through trips.
It is crucial to recognize that physical improvements to streets within the village cannot be the major solution to this problem. First, major scale improvements would, in all likelihood, be destructive of the historic and visual aspects of the village. Second, these improvements would result in through trips being squeezed into the village to the detriment of residents and businesses.

There is a critical need to rationally and efficiently realign the road network in the Waterford area to accomplish two objectives: (1) Preserve and enhance the village's role as a unique and irreplaceable historical and architectural resource, and (2) Provide an adequate transportation network for a substantial portion of Northern Loudoun County, focusing on appropriate higher speed roads for through trips.

The Rural Land Management Plan recommends that the County should use the existing road network, to the maximum extent possible, to form the major elements of its future system as this will minimize disturbance to existing land uses and environmental and historic resources. This Waterford Plan reinforces that concept, which in the case of Waterford, means a selective number of new facilities should be linked to existing roads to modify the current hub and spoke alignment of Waterford area roads to a more rational regional system which can better serve through trips. This approach solves the transportation problems of the areas surrounding Waterford, at the same time as it protects the village and alleviates current traffic safety problems.

The Waterford Transportation Plan's recommendations also include internal service to the village’s residents and visitors. The lack of sufficient parking is a problem which produces inconveniences for residents and could be a major constraint if the village decides to encourage tourism. Adequate off-street parking facilities, in conjunction with a safe amount of on-street parking on improved streets can alleviate this situation. The provision of a comprehensive system of sidewalks and pathways within the village can provide a viable and healthy alternative to short auto trips.

It is important that all selected road improvements within the village be designed and constructed in a manner that is sensitive to the village's character and streetscape and considers the existing locations of buildings, trees and other elements.

B. CURRENT AND PROJECTED TRAFFIC VOLUMES

Table 3, page 43 shows Average Daily Vehicle Trips (ADT) on local streets within the village and on regional roads to and from the community in the period 1978 - 1984. In addition, estimates have been made of vehicle trips for the year 2005. Two major patterns are evident from examining the data on Waterford area traffic volumes. First, the total amount of traffic on
routes from the North has been increasing substantially in the period 1978-1984. On a percentage basis, these increases include Rt. 681: +50%, Rt. 622: +108%, Rt. 665: +38%. Second, volumes on internal village streets and from the village to the south were basically stable during the period 1978-1982. This was probably accounted for by a decrease in locally generated trips during the period. If this is true, through trips were accounting for an increasing portion of the total trips. Second, the stable pattern for traffic volumes on internal streets and on Rt. 662 to the south ended in the period 1982-1984 and substantial growth was seen.

Apparently, both locally generated trips as well as through trips are now increasing in Waterford. If current trends continue we can expect to see increases of approximately 5% - 8% per year for the near future. This will exacerbate traffic problems in the village and increase the need for short-term physical improvements to the road system.
### TABLE 3

**TRAFFIC VOLUMES ON WATERFORD AREA ROADS**

**DAILY TRAFFIC (VDP)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rt. 665: Between Rts. 673/662</td>
<td>291</td>
<td>299</td>
<td>293</td>
<td>444</td>
<td>900 (1)</td>
</tr>
<tr>
<td>2. Rt. 665: Between Rts. 662/666</td>
<td>355</td>
<td>417</td>
<td>407</td>
<td>491</td>
<td>1,200 (2)</td>
</tr>
<tr>
<td>3. Rt. 665: Between Rts. 666/698</td>
<td>425</td>
<td>519</td>
<td>496</td>
<td>650</td>
<td>1,400 (2)</td>
</tr>
<tr>
<td>4. Rt. 665: Between Rts. 698/785</td>
<td>681</td>
<td>569</td>
<td>650</td>
<td>773</td>
<td>1,600 (2)</td>
</tr>
<tr>
<td>5. Rt. 665: Between Rts. 785/783H</td>
<td>733</td>
<td>705</td>
<td>703</td>
<td>774</td>
<td>1,600 (2)</td>
</tr>
<tr>
<td>6. Rt. 665: Between Rts. 783/806H</td>
<td>711</td>
<td>845</td>
<td>743</td>
<td>850</td>
<td>1,700 (2)</td>
</tr>
<tr>
<td>7. Rt. 665: Between Rts. 806/662H</td>
<td>724</td>
<td>841</td>
<td>772</td>
<td>890</td>
<td>1,750 (2)</td>
</tr>
<tr>
<td>8. Rt. 662: Between Rts. 703/704</td>
<td>1,303</td>
<td>1,187</td>
<td>1,265</td>
<td>1,555</td>
<td>2,800 (1)</td>
</tr>
<tr>
<td>9. Rt. 662: Between Rts. 704/665</td>
<td>1,692</td>
<td>1,694</td>
<td>1,693</td>
<td>1,841</td>
<td>3,400 (2)</td>
</tr>
<tr>
<td>10. Rt. 662: Between Rts. 665/806F</td>
<td>769</td>
<td>718</td>
<td>713</td>
<td>1,144</td>
<td>2,000 (2)</td>
</tr>
<tr>
<td>11. Rt. 662: Between Rts. 806/783S</td>
<td>729</td>
<td>712</td>
<td>695</td>
<td>1,142</td>
<td>2,000 (2)</td>
</tr>
<tr>
<td>12. Rt. 662: Between Rts. 783/698S</td>
<td>830</td>
<td>849</td>
<td>808</td>
<td>1,212</td>
<td>2,100 (2)</td>
</tr>
<tr>
<td>13. Rt. 662: Between Rts. 698/695</td>
<td>46</td>
<td>47</td>
<td>87</td>
<td>96</td>
<td>300 (2)</td>
</tr>
<tr>
<td>14. Rt. 681: Between Rts. 698/694</td>
<td>418</td>
<td>506</td>
<td>522</td>
<td>629</td>
<td>1,300 (2)</td>
</tr>
<tr>
<td>15. Rt. 693: Between Rts. 752/681</td>
<td>99</td>
<td>86</td>
<td>120</td>
<td>183</td>
<td>400 (2)</td>
</tr>
<tr>
<td>16. Rt. 698: Between Rts. 681/662</td>
<td>397</td>
<td>422</td>
<td>706</td>
<td>806</td>
<td>1,600 (2)</td>
</tr>
<tr>
<td>17. Rt. 662: Between Mill/2nd St.M</td>
<td>946</td>
<td>952</td>
<td>877</td>
<td>959</td>
<td>2,100 (2)</td>
</tr>
<tr>
<td>18. Rt. 783: Patrick Street</td>
<td>NCA</td>
<td>NCA</td>
<td>NCA</td>
<td>145</td>
<td>250 (2)</td>
</tr>
<tr>
<td>19. Rt. 785: Main Street</td>
<td>NCA</td>
<td>NCA</td>
<td>NCA</td>
<td>131</td>
<td>250 (2)</td>
</tr>
<tr>
<td>20. Rt. 698: Water Street</td>
<td>NCA</td>
<td>NCA</td>
<td>NCA</td>
<td>213</td>
<td>400 (2)</td>
</tr>
</tbody>
</table>

**F. Factory Street**

(1) VDOT Estimate from "Rural Loudoun County Transportation Study"

**H. High Street**

(2) Loudoun Staff Estimate

**M. Main Street**

(3) Assumes Route 287 - Route 15 through Route not in Operation, volumes would be lower for many segments with the Route.

NCA No count available

**Source:**

VDOT Traffic Counts 1978 - 1984
Loudoun County Traffic Counts 1984

In the absence of new routes around Waterford, total daily traffic volumes on Waterford's streets are expected to approximately double by the year 2005. It is further expected that most of this increase will result from through traffic.
The current and projected traffic volumes on Waterford’s roads would not normally be considered high for an area in which standard road improvements could or should be implemented, but Waterford’s roads are as unique as the village itself. The roads are narrow; in many instances the distance between buildings on opposite sides of Main Street and Second Street is less than 45 feet, and when the distance between existing street trees is considered, there is often less than 25 feet. This leaves little room for roadway improvements.

C. RURAL PLAN CRITERIA

The Rural Land Management Plan lists ten factors which should be considered in designing specific road improvements and in assigning priorities between road segments competing for improvement funds. Because of the character of the village, the traffic safety and historic preservation factors have been combined for this plan. The factors are listed below in an order which responds to the village of Waterford’s unique features.

1. Correction of safety hazards (sight distances, curves, width, etc.); through physical and traffic management techniques which are consistent with and enhance preservation of historic and scenic areas.

2. Consistency with the Resource Management Plan and adopted area plans.

3. Development of an efficient unified highway network. (Connector roads that connect villages, towns and activity centers to primary roads.)

4. Roadway capacity.

5. Relationship to the County’s existing economic growth and development policies.

6. Encouragement of growth in existing concentrations of population, industrial and commercial centers.

7. Agricultural use of roads.

8. Ability to serve truck and commercial trips.

9. Ability to serve commuter work trips.

In the Waterford Historic Area, transportation improvements should focus on correcting safety hazards and preserving and maintaining historic and scenic areas. In addition, the improvements should directly relate to the
kind of tourism management policies and program, if any, the community decides to implement.

It is important to note that the order of these criteria change when viewed through the perspective of the commuter, the trucker, and the farmer. In their view the ability of the road network to serve commuter work trips, agricultural movements and truck and commercial trips becomes very desirable. Therefore, there is a basic dissonance in what is the optimal transportation solution for the internal village streets and the kind of performance characteristics through traffic would demand from these facilities. This reinforces the conclusion that it is not in the interest of either preserving Historic Waterford or in serving these external trip needs to attempt to funnel nonlocal traffic through the village. Instead, improvements to village streets should center on correction of safety hazards and preservation, while high performance roads outside the village are the more rational response to the travel needs of commuters and other through trips.

D. RECOMMENDED ROADWAY IMPROVEMENT PROGRAM

1. External Rural Roads

As can be seen from Figure 18, page 46, most of the round trips which pass through the village of Waterford originate from development north of the village (Routes 681 and 665). Many of these trips are probably destined for Leesburg, Eastern Loudoun County, Fairfax County and the Metropolitan Washington Regional Core. Improvements to upgrade Rt. 662 between Route 681 and Route 15 could intercept these trips north of Waterford and channel them to Route 15. These improvements would include upgrading Rt. 662 to a 2 lane (24 feet of pavement, shoulders, drainage) rural collector road. The majority of this road improvement would be along existing rights-of-way, with a small section of new right-of-way between Routes 695 and 681, and a small section east of Route 661.

The construction of this facility would provide a superior level of service for trips coming from a large area of northern Loudoun County while at the same time protecting our unique historical resource, the village of Waterford. The total length of this improvement would be approximately five miles. This improvement would also serve to protect Route 662 between Waterford and Route 9 and Route 698 between Waterford and Leesburg from large volumes of future traffic. It is noted that both of these road segments are resources of high aesthetic value to Loudoun County and that the Rural Land Management Plan states these roads should be designated as Virginia Byways (p. 184, RLMP adopted, November 5, 1984).

This improvement should be extended by improvements to Routes 681, 694, and 693. This would provide a new high
1984 ADT'S ON SEGMENT OF WATERFORD'S ROAD SYSTEM AND PRECENTAGE CHANGE FROM 1978 TO 1984

FIGURE 18.
performance facility between Route 287 and 15, and improve transportation for a large area of northern Loudoun County.

If additional trip pressure builds up in the future from areas west of Waterford, a new road segment could be constructed to the west of Waterford, running from the intersection of Route 662 extended/Route 681 to an appropriate intersection with Route 704.

The proposed system of external road improvements is shown in Figure 19, page 48.

It is recommended that a more detailed study of the proposed Route 662 improvement be quickly implemented by the County and VDOT. Since the route crosses the Catoctin Mountains, there will be instances where curves need to be smoothed and grades addressed in order to provide an adequate road. Assuming these efforts reaffirm the engineering viability of the improvement, funds to begin its implementation should be identified within the Six-Year Secondary Road Construction Program at the earliest feasible date. Another important part of this effort will be the determination of the cost of the improvement and an estimate of its completion time, given current resource limitations within the Six-Year Program.

At points leading into Waterford from these new and upgraded facilities, appropriate signage should be installed noting that the roads to the village are for local traffic only and that through traffic should use the appropriate through routes. In addition, appropriate speed limits could be implemented on the local roads to Waterford to make the through roads an even more attractive path for through trips. In the construction of these external road improvements, extreme care should be exercised in protecting agricultural operations and making sure the roads are compatible with the existing landscape.

2. Internal Village Roads

Road improvements in the village of Waterford will be strongly influenced by the narrowness of current roads, the short distances between facing buildings and/or property lines, and the presence of a significant number of medium to large size trees which could be imperiled by construction projects. On Main Street between the Mill and Second Street, for example, facing buildings are sometimes within 45 feet of each other.

Along with the implementation of appropriate improvements for these streets, a number of transportation system amenities, including coordinated on-street/off-street parking, and pedestrian pathway/sidewalk elements need to be considered.
EXTERNAL ROADWAY IMPROVEMENTS

EXISTING R.O.W.

NEW R.O.W.

FIGURE 19.
There is currently a need for a variety of selected improvements to Main Street, Second Street and High Street because of the current deteriorating physical conditions of these roads. However, these improvements should be totally compatible with the existing historic streetscape of Waterford and should focus on improving traffic safety, and not moving large numbers of vehicles, including through traffic. It would be inappropriate to attempt to jam a typical street section, which might be suitable for more modern kinds of development, through the heart of historic Waterford.

For example, the complete reconstruction of streets with a 30 foot street section, curb and gutter plus sidewalks, such as exists in downtown Leesburg, would significantly alter the historic visual quality of the village. It would also probably result in the removal of a significant number of beautiful old trees with are so vital to the village’s streetscape.

Instead, a coordinated program of selected improvements should be implemented. These would include:

- Lowering of street crowns where necessary.
- Repairs to the edge of pavement and elimination of dangerous drops between the edge of pavement and adjoining "shoulders".
- Regrading where needed.
- Selective widening of pavement to accommodate appropriate on-street parking.
- Necessary drainage improvements.
- Use of street surfacing materials appropriate to the historic visual aspects of the village.

These improvements should strive to provide two lanes for moving traffic at speeds compatible with safety and one lane (or area) for on-street parking.
A serious safety problem exists at the point where Rt. 662 (Main Street) comes within a few feet of the exposed and unprotected edge of the Old Mill. At this point, going eastbound into the village, the road bends from a shallow left curve into a very sharp right curve with the edge of the pavement narrowly avoiding the Mill. For safety reasons, it is recommended that the road be appropriately widened and the two curves be smoothed with the objective of gaining a substantial increase in sight distance. The mitigation of adverse impacts to the property along the north side of the road will be a limiting factor in the amount of curve straightening and pavement widening which can be accomplished.

An appropriate protective device is also required to shield the exposed edge of the Mill. More conventional devices such as guard rails or heavy posts would be visually incongruent with the area or unsafe to motorists. However, innovative approaches, such as sand barrels housed in a historically appropriate low profile breakaway structure, may provide safety for motorists and the Mill while being consistent with the character of the area. An additional stop sign or signs should also be considered in the vicinity of this site.

It is recommended that the intersection for Butcher’s Row and Water Street be reconstructed to alleviate the current severe interaction angle. An innovative approach should receive appropriate consideration for this intersection.

Figure 20, page 51 shows the recommended Internal Road Improvement Programs. It includes improvements to Route 662 south of Waterford and Route 698 toward Leesburg, consistent with their scenic character.

Traffic Safety. A frequent complaint within the village is the excessive speeds of vehicles passing through Waterford. Posting of speed limit signs has not deterred this highly unsafe practice. A combination of measures is suggested to bring this problem under control. It is recommended that traffic safety personnel from VDOT conduct a comprehensive traffic safety study to determine which measures will be most effective in curbing speeding while being compatible with the historic nature of the village. Among the measures which could prove effective are:

- Installation of new stop signs at strategic locations within the village.
- Warning signs against speeding on approach roads to the village.
- Street surfacing material (such as cobblestones) which deters high speed driving.
o Increased traffic law enforcement in village.

Other measures could be suggested through a traffic safety study.

E. SIDEWALKS AND PATHWAYS

A system of sidewalks should be developed in coordination with the road improvements. These sidewalks should be constructed using materials appropriate to Waterford's historic atmosphere. At present some sidewalks of various widths and materials exist on a lot by lot basis and in conditions of maintenance varying from adequate to poor. The differing physical appearance and condition of existing sidewalks adds to the visual aspects of the village, but also functions as a barrier to pedestrian trips.

There is a need for a coordinated walkway/path system in the village to serve residents, school children and visitors. Currently children are bused to the elementary school from short distances within the village, and there are numerous places where pedestrians must share the streets with vehicles; this is a potentially hazardous situation, particularly along Main and Second Streets.

Responsibility for the construction of sidewalks could be taken by VDOT or the local community, or shared between the two entities. Innovative widths and mixtures of materials such as flagstones, exposed aggregated, sand-laid bricks or cobblestones should be used in keeping with the streetscape of the village.

The local community, through the Waterford Foundation should coordinate detailed planning for appropriate sidewalk sections in conjunction with detailed County/VDOT planning for the selected road improvements.

In Waterford it would be desirable for electric and telephone utility lines to be buried in conjunction with road improvements.

Sidewalk improvements should be coordinated with a system of connecting pathways.

Walking within the village of Waterford is preferred by most residents because of its small size, lack of parking for cars and social contact. Walking is difficult in many areas of the village because of lack of sidewalks or road shoulders, or because of broken and deteriorated existing sidewalks.

Figure 21, page 53 shows a recommended system of coordinated sidewalks and pathways. As previously discussed these facilities can be constructed using a variety of building materials which are consistent with the historical and visual aspects of the village, pedestrian safety, and convenience and maintenance requirements and costs. This recommended
RECOMMENDED SYSTEM OF COORDINATED SIDEWALKS AND PATHWAYS

PATHWAYS

SIDEWALKS

FIGURE 21.
system includes a pathway along the west side of Rt. 662 extending south to the community pool.

The construction of this system, with any modifications required by the community, will eliminate the need for a car on many short trips within the village. It is also a way of linking the developed portions of the village with the natural amenities of the surrounding countryside.

F. PARKING IMPROVEMENT PROGRAM

There is currently a shortage of adequate on-street and off-street parking spaces in the village. On-street parking along Main street and Second street is often along both sides of the narrow roads, and at times the two lane roads can be encumbered to the extent that only one lane of traffic is serviceable. To complicate the situation there is a virtual absence of off-street parking in the existing Main Street/Second Street commercial area.

Assuming the construction of the selected street improvements with one lane of on-street parking on Main, Second and Factory Streets, it is estimated a maximum of 60-90 on-street spaces could be provided. The need to preserve trees, which are important to the streetscape of the village, could reduce this supply of on-street spaces.

The recommended Rural Village Commercial Zone may contain approximately 25,000 square feet of retail commercial space. This land use could require up to 135 parking spaces. This demand could not be handled by on-street spaces. Added to the retail/commercial demand is the need for resident parking and tourist parking. On-street parking on Second Street should be primarily used to serve residents. On Main Street some short-term on-street parking will be needed for retail/commercial/service purposes with the balance used for residential and tourist parking.

Considering commercial, residential, and tourist demand, there is an estimated aggregate 1995 demand for approximately 250 total parking spaces in the Main Street/north Second Street area. Depending on the relationship between tree preservation and on-street spaces, there is a potential supply of 30-50 on-street spaces. Therefore, there is a potential need for up to 150 off-street parking spaces in this area.

One mechanism to provide off-street spaces is to require that they be provided at the time of development or redevelopment. This technique would work well in the undeveloped eastern portion of the village or if any development should occur in the southern portion of the village. However, in the Main Street/north Second Street area, provision of spaces contiguous to the development may be impossible since it would require the removal of a historic structure or be incompatible with the overall character of the village. Therefore, a system of community off-street parking lots is
PARKING IMPROVEMENT PROGRAM

- ON STREET PARKING (TWO-WAY STREET OPERATIONS)
- OFF STREET LOT SITES

FIGURE 22.
recommended. Possible locations for these lots are shown in Figure 22, page 55. The possible capacities for these lots are also shown in Table 4.

**TABLE 4**
**POSSIBLE OFF-STREET PARKING LOT SITES**

1. Northwest Lot  
   Between Route 662 and  
   Catoctin Creek  
   40 - 70 Cars  
   2 - 4 Buses  
   Tourist Oriented Lot

2. Post Office Lot  
   South of the Rural  
   Village Commercial Area  
   10 - 20 Cars  
   Commercial Oriented

3. Water Street Lot  
   North of Water Street  
   10 - 20 Cars

4. Northeast Lot  
   On old school lot north  
   20 - 60 Cars  
   1 - 2 Buses

**TOTAL SPACES**  
  80 - 170 Cars  
  3 - 6 Buses

Construction of these lots could be the responsibility of the local community or joint County/Community projects. This plan recommends that the County Zoning Ordinance be amended so new and expanded commercial development would have the option to either provide on-site/off-street parking or contribute to the construction/maintenance of off-site community/public parking lots which can reasonably serve such development.

It is crucial that the lots be constructed with designs, materials and screening/buffering, appropriate to historic Waterford. In the case of some facilities it could be appropriate to waive dust-free surface paving requirements provided that the ultimate surface was visually compatible with the village and subject to adequate maintenance.

**G. PUBLIC TRANSPORTATION**

The viability of public transportation services for Waterford are limited by the small size of the village. However, a community oriented shared ride program focusing on carpools and vanpools could be effective. This program could be primarily operated by the Waterford Citizens Association with assistance from the County and State and the Metropolitan Washington Council of Governments (COG). A locally operated volunteer driver program
could provide service for mobility impaired citizens and along with the carpool/vanpool program serve to strengthen community bonds and spirit.

If tourist demand exceeds the amount of parking which can reasonably be provided in the village, a shuttle bus could operate to the village from an outlying parking area or from Leesburg. Such service might be seasonable or only operate on weekends. Depending on the frequency and structure of the service, it could be used by local residents needing to travel to Leesburg without interfering with the shuttle’s primarily tourist clientele.

IV. ENVIRONMENT
A. INVENTORY OF NATURAL FEATURES

The Waterford area has many of the characteristic natural environmental features found throughout the western portion of the County that provide tangible and intangible benefits such as clean air and water, scenic beauty and economic return.

1. Water/Hydrology

Waterford is located within a six square mile drainage basin of the 61 square mile Upper Catoctin Watershed. Catoctin Creek is a state designated Scenic River and a dominant physical feature in the area. The planning area has 336 acres of land within the 100 year floodplain which is 23% of the total land area.

2. Topography

The area is part of the Catoctin Valley and has a rolling landscape character with alternating valleys and fairly steep hills. Elevations range from 350 feet (above sea level) to 650 feet. There are approximately 160 acres of steep slopes greater than 15%, which is 11% of the total planning area. About 60 acres of this 160 are greater than 25%.

3. Geology/Soil

Waterford is within the upland Piedmont physiographic province that is underlain by gneiss, schist and greenstone, all very hard rocks that are generally low in water yield, resulting in an unreliable supply of groundwater.

Soils differ according to elevation and underlying geologic formation and have varying suitabilities for agriculture, building and road construction, and septic systems. A general classification system developed by the County Department of Natural Resources yields the following information:
a. Good potential for septic systems = 352 acres (24% of total planning area).

b. Prime Farmland* = 320 acres (22% of total planning area). In many cases, these two soil categories overlap.

4. Vegetation

The approximately 165 acres of woodland (11% of total planning area) are found mostly along watercourses, on steep slopes and in hedgerows, as most of the land is actively farmed. Predominant species include oak, hickory and tulip poplar in upland areas and sycamore, maple, willow, river birch and sweetgum along creeks and streams.

Figure 23, page 59 illustrates the approximate location of the area's existing natural features described above.

B. ANALYSIS OF ENVIRONMENTAL RESOURCES

The two-fold purpose for proper management of environmental resources is to protect the public from potential natural hazards, such as flooding or slope failure and to enhance the positive economic and aesthetic benefits of a resource, such as the soil holding and visual qualities of woodlands.

In the Waterford area, as with most of rural, agricultural Loudoun County, man's activities have achieved a relative state of balance over the past 200 years because farmers, to be successful, must understand and properly manage the land and water resources. This does not mean that farming activities do not cause environmental problems such as soil erosion and water pollution from fertilizer and pesticide use, but it should be recognized that, in general, farming has a much smaller negative impact than development on the following natural resources:

* Defined by the County Department of Natural Resources as soil types which generally have high inherent fertility, good water holding capacity and deep rooting zones, are not subject to periodic flooding and have an estimated potential corn yield average greater than 125 bushels per acre.
EXISTING NATURAL FEATURES

- 100 YEAR FLOODPLAIN
- WOODLAND
- HILLSIDE/STEEP SLOPE

FIGURE 23.
o Water: Due to minimal impervious surfaces, farming reduces flooding and storm runoff and maintains natural stream flow and groundwater recharge, thus protecting existing and potential surface and ground water supplies.*

o Soil: On the average, erosion from farmland produces 500 tons of sediment per square mile per year while development activity yields from 10,000 to 100,000 tons of sediment per square mile per year.**

o Air: 1) Agricultural land use results in less auto travel than suburban development, therefore, greatly reducing a potential source of air pollution; 2) Open areas, such as farmland, provide an important source of clean air that helps to reduce regional air pollution.

o Vegetation: In developed areas large contiguous tracts of woodlands, along with their associated benefits, are greatly diminished, while rural agricultural areas such as Loudoun still have large sections of forests and woodland. For example, approximately 23% of Fairfax County’s land area is forested (51,378 acres)*** while about 30% of Loudoun is in woodland cover (99,052).****


** Water Resources Protection Technology, J.T. Tourbier and R. Westmacott, Urban Land Institute, 1981, Figure 5, page 5.


**** Natural Resource Inventory of Loudoun County, Loudoun Soil and Water Conservation District, 1981, page 8.

The potential health hazard posed by failing septic systems in the village is an additional environmental issue that should be addressed separately. A recent Health Department survey did not find any individual systems producing above ground pollution, but it can be assumed that the private waste disposal systems in the village built prior to Health Department permit procedures (such as pit privies and cesspools) and the close proximity of wells to septic systems due to the relatively high density of the village could result in a groundwater pollution problem. The sewage treatment plant was built to solve this problem, and until all existing homes are connected (only about 50% are at present), there will continue to be a potential health hazard in the community (see Public Facilities section for additional discussion).
Overlay Policy Area for managing the environment of rural Loudoun County. As the Waterford Plan is included within the Rural Plan’s study area, it is appropriate for this plan to refer to the Rural Plan when making environmentally related land use decisions.

The Rural Plan’s basic approach within this Overlay Policy Area is to restrict use activities in certain environmental areas, such as floodplains and steep slopes, to protect public safety and private property and to offer incentives for the protection of valuable resources, such as certain woodlands or unique natural areas.

Wildlife: Wildlife habitats are permanently altered and reduced in size in urban/suburban areas while Loudoun’s agricultural areas contain numerous open fields, pasture land, natural water courses, forested areas and edges between field and woodland that provide necessary cover and food for fish and wildlife species.

The key to managing the Waterford area’s natural environment is to ensure that future changes in land use, both in the village and the surrounding rural, agricultural area do not significantly alter the water resources, landforms and existing woodlands. This is especially important as the natural environment provides much of the setting that makes the Waterford area a unique historic and scenic resource. The Rural Land Management Plan has examined rural environmental issues in extensive detail and recommends an Environmental

Figures 24 and 25, pages 62, 63 indicate general development suitability based on the constraints posed by the existing environmental conditions for both the planning area and the village.

V. HISTORIC AND SCENIC RESOURCES

Waterford was settled in 1733 by Quakers who migrated from Pennsylvania. The village quickly became a commercial center for the surrounding rich and productive farmland. It remained fairly prosperous throughout the 18th and early 19th centuries, at one time rivalling Leesburg as a trade and market center, but the effects of the Civil War and the post-war construction of the railroad, which bypassed Waterford, led to the village’s isolation and gradual decline as a commercial center.

The village of Waterford and its environs represent an outstanding collection of examples of Loudoun County’s architectural history with particular emphasis on the first half of the nineteenth century. Over time, the buildings from different periods have responded to the natural landforms and each other to form a unified village character. Each building was constructed individually, generally using locally obtained materials, and reflected the taste and concern of the owner or builder. The Quaker and Tidewater architectural styles, both of which are found in other parts of the County, are also located in the planning area.
VILLAGE OF WATERFORD-DEVELOPMENTAL SUITABILITY

- Areas with severe limitations for development (100-year floodplain, slopes > 25%)
- Areas suitable for development with special standards (Class IV soil, slopes 15% to 25%)
- Areas generally suitable for development (no significant environmental limitations)

FIGURE 24.
DEVELOPMENT SUITABILITY-RURAL AREA

- AREAS WITH SEVERE LIMITATIONS FOR DEVELOPMENT
  (100 YEAR FLOODPLAIN, SLOPES > 25%)
- AREAS SUITABLE FOR DEVELOPMENT WITH SPECIAL STANDARDS
  (CLASS IV SOIL, SLOPES 15% TO 25%)
- AREAS GENERALLY SUITABLE FOR DEVELOPMENT
  (NO SIGNIFICANT ENVIRONMENTAL LIMITATIONS)

FIGURE 25.
The village provides an important cultural link with the past because of the variety of carefully crafted buildings and overall historic character. It is also a pleasant place to live because of its human scale, proximity to the countryside and small town, 19th century charm.

The Waterford Historic District (the village and approximately 1450 acres) was placed on the Virginia Landmarks Register and the National Register of Historic Places in 1969 and was chosen to be a National Historic Landmark District in 1970.* Only 5% of the more than 27,000 National Register listings are also designated as Natural Historic Landmarks. The key element of the landmark designation is the integral visual relationship between Waterford and the surrounding rural landscape; in particular the clear distinction between the village with its hard edge, and the open land around it. The village is also a part of the County Historic Cultural and Conservation Overlay Zoning District. (See Implementation Recommendations and glossary for further explanation of Historic District Zoning.) The boundaries of the approximately 1,450 acre National Historic Landmark extend to the first major ridgeline around Waterford and were determined by a visual and topographic assessment of what could be readily seen from the village. (Figures 26, and 27, pages 65, 66) indicate the existing boundaries of these two historic designations. (See glossary for explanation of National Historic Designations.)

All structures in the village have been architecturally surveyed by the Virginia Historic Landmarks Commission and ten structures in the planning area outside the village have been similarly documented. Forty-four major structures in the village and all of the outbuildings associated with them have been protected with facade easements donated to the Virginia Historic Landmarks Commission, the Virginia Outdoors Foundation, or the National Trust for Historic Preservation. (Figure 31, page 64)

Closely related to Waterford's unique historic character is its setting. The dense, relatively urban form of the village has a sharply defined edge and is visually distinct from the surrounding countryside of open fields, steep hillsides, woodlands, farm related activities and buildings. Catoctin Creek is a dominant visual element in the area and was designated a State Scenic River in 1977**. From the village there are attractive views of the surrounding hilltops, side slopes and valleys and reciprocally, some of these locations offer outstanding views of Waterford. There are also numerous vistas of the area from vantage points along nearby roads, such as the south entry to the village along the Waterford corridor (Route 662), along Route 898 east and west of Waterford and from points on Route 681 and Route 704.

* There are Four National Landmark sites in the County: Oak Hill, Oatlands, and Balls Bluff as well as The Waterford district.

** Catoctin Creek Scenic Rivers Designation Senate Bill No. 627; Scenic Rivers Act. Title 10, Chapter 15, Section 10-167 to 10-175.
WATERFORD
AREA MANAGEMENT PLAN

VILLAGE OF WATERFORD HISTORIC DISTRICT BOUNDARIES

FIGURE 26.
One of the tasks of the Waterford Area Management Plan is to incorporate the community's historic and scenic resources in the overall comprehensive land use plan. Along with the rarity of the National Historic Landmark designation, an unusual set of circumstances contributes to the community's unique and scenic character and defines what Waterford is:

a. Physical Development in Response to Natural Setting:

The area's environment determined the siting and shape of the village. The first section was developed next to Catootin Creek (for water power) and was flanked by the steep hills to the east. Later, the village spread south and east parallel to the creek and up the steep hills. Early buildings were placed right on the street without setbacks and were tall because of the hill behind them while lots toward the creek were long and narrow. This diversity was based on the settler's response to the natural setting and is an identifying characteristic repeated throughout the village.

b. Cessation of Growth and Distinct Edge Between Village and Countryside:

Due primarily to a lack of growth and development after initial subdivision in the early 1800's and the continuing use of the surrounding land for agriculture, Waterford has retained the same setting and not increased in physical size for over 150 years. The importance of the area's scenic resources is due to the rarity of the sharply defined edge of the village and its location within an open, rural countryside. For almost 200 years, Waterford served the surrounding agricultural community as a commercial and cultural center; the fact that this is no longer the case does not diminish the physical and visual relationship for purposes of historic interpretation. The sharp edge between the architecture of the village and the open lands adjacent is a feature which is not found in more modern settlements. This relationship between the sharply defined village and its virtually undeveloped setting was a central factor in the designation of the Waterford Historic District as a National Historic Landmark.

c. Diversity of Architecture:

The village architecture is not typical of a single period in the 18th or 19th century, but a mixture of many different styles, including Greek Revival, Georgian, Federal, Gothic Revival, Queen Anne, Italianate and vernacular cottages of log, frame or brick.

d. Private Rehabilitation Efforts:

It is remarkable that the entire village has continued to maintain its scale and architectural character considering that most of the buildings in the village have been privately rehabilitated by many different individuals over a 40 year period without benefit of an overall management program.
The Waterford Foundation has played an integral part in this work by purchasing and restoring many community buildings, such as the mill and the old school.

e. Living Community:

Unlike many "historic villages" such as Williamsburg, Waterford is not like and has never been a museum or a period restoration. It is a modern day community of 210 people who live a 20th century lifestyle in a community that still has many of the charms and physical qualities that were characteristic of the 19th century small towns in America.

f. Existing Tourism:

Waterford is one of the leading tourist attractions in Loudoun County and the annual three day fair is a major regional event.

Following this general analysis of Waterford's historic and scenic resources is a detailed analysis broken down into Architectural Design and Scenic Resources.

A. ARCHITECTURAL DESIGN

The buildings in and around Waterford represent many different architectural styles from the 18th and 19th centuries. The factors that give the village its overall design quality are its human scale, the handcrafting and attention to detail evident in the structures, and the variety and diversity of lots, buildings and streetscapes that together produce a unity of place, the major elements of which are described below:

1. Height - Most of the houses are two story with some that are two and a half or three stories on the northeast side of Main Street.


3. Roofs - In the village, setbacks are consistent within small areas or along specific streets. Buildings are oriented to the streets, are centered on the lot frontage and have responded to the varied topography. In the rural areas, buildings are clustered, sited on the side of a slope for protection from inclement weather and surrounded by big shade trees to modify summer heat. Most are gabled, covered originally with wood shingles; many are now metal for fire protection.

4. Siting - in the village, setbacks are consistent within small areas or along specific streets. Buildings are oriented to the streets, are centered on the lot...
oriented to the streets, are centered on the lot frontage and have responded to the varied topography. In the rural areas, buildings are clustered, sited on the side of a slope for protection from inclement weather and surrounded by big shade trees to modify summer heat.

5. Townscape - The village streets were laid out in a basic grid pattern that appears irregular because it is superimposed on the steep slopes. Streets continue as roads out of the village or dead end at the sharply defined edge of the village. Lots are relatively similar in size, but vary in shape. There is a large variety of building sizes and styles whose central placement on the lots gives the streets an orderly rhythm of alternating solids and spaces.

6. Rural - Landscape The natural environment dominates the built environment, while retaining a sense of harmony between the two.

B. SCENIC RESOURCES

In assessing Waterford's scenic resources, the standards issued by the Department of the Interior for National Historic Landmarks provide an initial framework:

"Continuing integrity is essential in maintaining the quality of national significance . . . An adverse effect on the integrity of a Landmark, whether due to an action of the owner or to circumstances beyond his control, can constitute cause for withdrawal of the designation, the plaque, and the certificate . . . Generally, adverse effect occurs under conditions which include, but are not limited to:

o Destruction or alteration of all or part of the property;

o Isolation from, or alteration of, its surrounding environments;

o Introduction of visual, audible, or atmospheric elements that are out of character with the property and its setting."

This does not mean that the rural land around the village must retain the same land uses and appearance as this would be unfair to the people who own the land and unrealistic in terms of the changing nature of Loudoun County. It does mean, however, that if and when changes occur within this area, (from farming to residential land use, for example) that the essential scenic and historic character of the 1,450 acre Waterford National Historic Landmark should be maintained. Retention of the distinct visual separation between the village and the surrounding rural landscape is of particular importance.

Visual assessment is a relatively new field of study and unlike other aspects of planning analysis, is difficult to perform due to its inherent subjectivity and lack of quantifiable standards.

Most of the detailed research and work in what is referred to as Visual Resource Management (VRM) has been performed by specialists in the academic community, private consultants in disciplines such as landscape architecture or natural resource management and federal agencies with large land holdings in the western U.S., such as the Forest Service, Bureau of Land Management (BLM) or the Soil Conservation Service (SCS). These agencies all began Visual Resource Management studies in response to the requirements of the Federal Land Policy and Management Act of 1976 (PL 94-579).

Some of these studies have developed general concepts and guidelines on scenic assessment and Visual Resource Management for use on federally owned land to determine the impacts of large scale development projects and can be of assistance in understanding the visual and scenic quality of any given area or the possible effects of a proposed land use change, such as those that may occur in the Waterford area.

Defined as: "The management of the 'seen' aspects of both the land and the activities which occur upon it - the administration of the land's scenic or aesthetic attributes." (Source #3 listed below, p. 3)

The following is a proposed Visual Resource Management method for the Waterford planning area:

1. **Inventory of Scenic Resources**

   The inventory procedure provides an overview of an area’s major visual image and has three stages beginning with the natural environmental setting of an area and proceeding to an examination of how man has adapted to this natural landscape:

   This portion of Route 662, known as the Waterford Corridor, is the most heavily travelled entry to the village. The other major features of the area which comprise the natural setting include Catoctin Creek and a rolling landscape of ridge tops, steep side slopes and open valleys. The boundary of the National Historic Landmark District is just beyond the first ridge line that surrounds the village as defined and adopted by the U.S. Department of Interior. (Figure 26, page 65). There are important, visually dominant elements in the natural setting. In Waterford, the natural setting begins at the junction of Routes 9 and 662 at the turn which heads north into a valley bounded and confined by tree lined ridges on both sides.

   b. **Manmade Adaptations:**

   The second step analyzes how man has both modified and adapted to the natural setting most notably by means of buildings, structures and roads. In the rural area around Waterford (as in most of rural western Loudoun) farm buildings have been traditionally arranged in a cluster, preferably near water. They are located on the side rather than the top of a hill away from prevailing winds or in a valley near water.

   The architectural styles for farm residences were similar to those used in the village, but over time, farm buildings were modified and expanded with fewer restrictions because of the greater amount of available open land. Along with the main barn and other functional outbuildings, tenant houses are located nearby and add to the overall building cluster. Around Waterford, farms and buildings have been tucked into the distinctive rolling hill and valley landscape.

   In the village, the buildings and streets also fit with natural landforms and topography, but because of their diversity and density, they leave a greater impression of man’s occupation than in the rural area.
c. Visual Context:

This final component of the visual inventory summarizes and combines the natural setting and man's adaptations to it. As these first two inventory steps indicate, the Waterford area can be divided into two distinct visual contexts: rural and village (Figure 29, page 74). In the rural context, the landforms dominate and provide the setting which contains the farm buildings and structures. The village context is predominantly a built environment similar in character to many urban areas and thus the spaces are enclosed and defined by the structures. There is a clearly defined, sharp edge between the village and the rural area that has been maintained over time and is so rare that it was one of the primary factors leading to the designation of the Waterford Historic District as a National Historic Landmark.

In summary, the inventory indicates that the Waterford area’s visual image is formed by a combination of the natural and manmade elements, the essence of which can be expressed as a small, densely settled village tucked into a rolling, rural Virginia agricultural landscape.

2. Analysis of Scenic Resources

The next stage in a Visual Resource Management Program is to assign a rating or rank to an area based on the inventory findings. It is difficult to rate landscapes due to the inherent subjectivity and potential biases involved. It can, however, be a valid and worthwhile effort, as it is based on the premise that many scenes and landscapes have intrinsic value and meaning to many different people, and those scenes with the most variety, vividness, unity and uniqueness (see Glossary for definitions of these four terms) in a County or region have the greatest potential to be considered by the general public as having high scenic value.*

a. Sensitivity Level**

An initial analysis technique is to define the Sensitivity Level of a scenic resource which is based on the idea of general public

* Defined as a relative measure of people's concern for a given area's scenic quality that is based on an assessment of viewer activity, local values and the broader cultural significance of a specific visual resource.

SCENIC RESOURCE INVENTORY: VISUAL CONTEXT

- RURAL VISUAL CONTEXT
- VILLAGE VISUAL CONTEXT

FIGURE 29.
concern for scenic quality. It is derived from several factors, such as number of viewers, type of viewer (local residents, tourist, daily commuters, etc.), probable expectations, length of time in which viewer interacts with a particular view (travel speed, ability to see along a road, stationary view from a given point), and location (road, home, other building, open field). Areas are placed into one of three categories:

i. Critical Views (High Sensitivity) - Areas that are highly visible from specific locations with the potential to be seen by many people.

ii. Average Sensitivity - Due to landform or topographic changes, these areas are not as easily seen from the same locations by as many individuals.

For the Waterford Area Management Plan, High and Average Sensitivity Levels have been proposed based on visibility from public roads (primarily the Waterford Corridor - Route 662), topography, relative proximity of viewer and sight distance (Figure 30, page 76). Land use alterations within areas of High Sensitivity would be more readily perceived by a greater number of people.

b. Visual Absorption Capability*

The second analysis method that is useful in understanding Waterford's visual resources is Visual Absorption Capability. The three factors that determine Visual Absorption Capability are:

i. Natural Environment - Landforms and vegetation are the most significant influences.

ii. User perception - Similar to the determinations for Sensitivity Level, including number of viewers, location, etc.

iii. Activities and Land Uses - Existing and proposed land uses, and other activities, such as farming, residential development, etc.

Some general guidelines for determining Visual Absorption Capability are:

i. As distance from the viewer increases, the Visual Absorption Capability increases;

ii. As the size and scale of a proposed activity increases, the Visual Absorption Capability decreases;

* Defined as the physical capacity of a landscape to absorb proposed development or management activities and still maintain its inherent visual character and quality.
SCENIC RESOURCE ANALYSIS:
SENSITIVITY LEVELS AND CRITICAL VIEWS

HIGH SENSITIVITY (CRITICAL VIEWS)

AVERAGE SENSITIVITY

FIGURE 30.
iii. Certain areas have an inherently low Visual Absorption Capability, such as ridge tops (easily seen by many people) and edges (such as the sharply defined edge between the village of Waterford and the surrounding rural area);

iv. As slope steepness and length increases, Visual Absorption Capability decreases;

v. As vegetative screening increases (natural or planted), Visual Absorption Capability increases.

Figure 31, page 78 shows some examples of how the guidelines can be applied in a general fashion to the Waterford planning area by locating areas with a relatively high or low Visual Absorption Capability.

3. **Summary of Scenic Resource Analysis**

This section has introduced several new and different concepts to help understand and plan for the Waterford area’s scenic resources, the key points of which are summarized below:

a. The scenic resource analysis is based on the general concept of Visual Resource Management as practiced by various federal agencies.

b. Based on examination of the natural setting and man’s adaptations to it, the Waterford area can be divided into two distinct visual contexts of rural and village (Figure 31, page 78).

c. Based on number of viewers, their general expectations, and view locations, the Waterford area can be separated into areas with Critical Views and Average Sensitivity Levels; these two categories have different implications regarding the effect various land use changes could have on the area’s scenic resources (Figure 31, page 78).

d. There are also various existing natural elements that can determine the Visual Absorption Capability in specific locations to screen or visually block future land use changes and development (Figure 31, page 78).

VI. **ECONOMIC DEVELOPMENT - TOURISM**

Closely related to the historic and scenic resources is tourism, which is dependent on Waterford’s historic character and nationwide reputation.

Tourism is currently the second largest industry in the County and is a base industry that requires minimal public expenditures to sustain it. It is current County
WATERFORD
AREA MANAGEMENT PLAN

Buildings sited high on the hillside slope or crest are therefore highly visible due to the relatively low visual absorption capability.

Buildings sited down the hillside are less visually intrusive due to the relatively higher visual absorption capability.

Geometric clearings and houses centered in clearings are highly visible due to the lack of consideration of the visual absorption capabilities of natural landforms and woodlands.

Clearings with natural shapes, emphasizing the land form are less visible as the visual absorption capabilities of natural topography and woodlands have been taken into account.

EXAMPLES OF VISUAL ABSORPTION CAPABILITY

FIGURE 31.
policy, as expressed in the adopted Resource Management Plan (p. 241) and in the efforts of the Office of Economic Development, to encourage growth of the tourist industry, most of which is based on Loudoun's historic and scenic resources. As part of the Washington D.C. metropolitan region with a total population of more than three million people, the County has an enormous tourist market from which to draw.

Tourism in Waterford is currently focused on the three day Waterford Homes Tour and Crafts Exhibit, which drew 30,000 visitors in 1986. The Fair, which takes place annually in early autumn, is estimated to generate at least $750,000 making it one of the largest single events in the County. In 1986, local craftsmen, civic clubs, and service organizations earned approximately $175,000 at the Fair. Many Loudoun groups such as the Leesburg Optimist Club, the Waterford PTA, the Loudoun County Junior Women's Club, the Hamilton Ruritan Club, Leesburg Jaycees, Lovettsville Lions, and the Loudoun County Humane Society derive a substantial portion of their annual budgets from the Fair. Approximately $120,000 was earned by the Waterford Foundation, the sponsoring organization. The rest went to craft demonstrators and local businesses.

The great economic benefit of tourism is its infusion into an area of new money earned elsewhere and left behind to circulate through the local economy. The tourist dollar is used and reused for supplies, utilities, salaries, and retail purchases, and the tourist, directly or indirectly, contributes to retail sales, gasoline, liquor, real estate and income taxes. How much this multiplier effect benefits a particular community depends on the degree of community self-sufficiency - the ability of the community to supply these supporting goods and services. Since Waterford itself can supply virtually none of them, the impact of the tourist dollar generated in Waterford is immediately felt throughout the rest of Loudoun County, which can and does provide the goods and services. The Waterford Foundation, in fact, has a stated policy that it will buy in Loudoun County to the greatest extent possible.

In most cases, the tourist dollar demands an effort on the part of the community to attract it, although the investment is generally less than for the development dollar which can require additional housing, schools, and related services. In the case of the Waterford Fair, almost all of that investment is made by the Waterford Foundation. The result is that for Loudoun County, the tourist dollars from the Waterford Fair are virtually free dollars, requiring little County effort or investment to attract them.

There are no statistics on tourism in Waterford at other times, but the village is often a part of a leisurely Sunday drive that people take through scenic, rural Loudoun. The narrow streets and lack of parking facilities discourage many other visitors, particularly those in buses.

There is a legitimate reluctance on the part of current village residents to support additional tourism, as Waterford is much too small to handle the large crowds, increased traffic, and major commercial development found in places such as Williamsburg or Leesburg. In addition, there is the real danger that too much
tourism could destroy the cultural integrity of the historic resource. Since Waterford is a National Historic Landmark, what happens to Waterford is of relevance to the nation and to future generations. On the other hand, precisely because Waterford is a National Historic Landmark, there is also a responsibility to provide visitors with an opportunity to understand the history of Waterford, and to experience the unique quality of this historic resource.

Tourism in Waterford could also provide increased benefits to the County’s revenue base, as it would provide an additional attraction which might encourage visitors to remain overnight in the County. The difficulty lies in finding a balanced approach that provides for the needs and interests of visitors, respects the privacy and lifestyle of the residents, generates an adequate amount of revenue to make the program worthwhile and does not destroy the village as a living community - one of the aspects that makes Waterford very different from such museum towns as Williamsburg, and indeed one of the aspects of the village that visitors appreciate most.

The question of whether or not to encourage tourism at times other than during the Fair is a controversial one in the village. Up to this point, the Waterford Foundation has been extremely reluctant to encourage tourism during the rest of the year. However, if village residents and groups such as the Waterford Citizens’ Association agreed that it should be done, the Foundation, with its record of continuity and experience in running the Fair, would be the logical organization to manage any additional tourism.

An expanded tourism program could include an interpretive walking tour designed to accommodate visitors brought in by bus. An adequate walkway system and bathroom facilities would be necessary to accomplish this type of tour program. Such tours should be scheduled and planned, perhaps with the cooperation of the County’s Group Tour Coordinator. The revenue from the bus tours could go toward village improvements, such as walkways, and to buy land to protect the scenic quality of the National Historic Landmark.

This interpretive program could also be used as part of the education of Loudoun students in local history. The Waterford Foundation, with the encouragement of the Loudoun County School Board and the help of the National Endowment for the Humanities, has already established a living history program in the one room schoolhouse it owns on Second Street. Loudoun County school children can experience a typical school day of the 1860’s when they visit Waterford. This project has been developed by the Foundation and is being provided at no cost as part of its education program.

It is important that village residents examine and address the issue of tourism because if it is ignored or opposed without sufficient investigation then Waterford could have a tourism program developed by private interests that might not adequately address the long-term integrity of the historic resource or the needs of village residents.
Table 5 (following page) summarizes the existing conditions and major inventory findings for the village of Waterford and the surrounding rural area.
<table>
<thead>
<tr>
<th>VILLAGE</th>
<th>REMAINING PLANNING AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAND AREA</td>
<td>136 acres</td>
</tr>
<tr>
<td>POPULATION</td>
<td>210 people</td>
</tr>
<tr>
<td>LAND USE</td>
<td>Predominantly residential</td>
</tr>
<tr>
<td>DWELLING UNITS</td>
<td>91</td>
</tr>
<tr>
<td>ZONING</td>
<td>Mixture of R-2, R-1, C-1</td>
</tr>
<tr>
<td>WASTEWATER TREATMENT</td>
<td>LCSA owned plant - Available capacity to approximately double existing population</td>
</tr>
<tr>
<td>WATER SUPPLY</td>
<td>No central system - Individual wells with variable yields</td>
</tr>
<tr>
<td>TRANSPORTATION</td>
<td>Two-lane paved roads with lack of parking and pedestrian space</td>
</tr>
<tr>
<td>ELEMENTARY SCHOOL</td>
<td>Declining enrollment</td>
</tr>
<tr>
<td>ENVIRONMENT</td>
<td>Catoctin Creek floodplain, steep slopes, variable soil conditions and numerous mature trees</td>
</tr>
<tr>
<td>HISTORIC</td>
<td>County Historic District, State Historic Register and National Landmark</td>
</tr>
<tr>
<td>SUBDIVISION ACTIVITY</td>
<td>None recently</td>
</tr>
<tr>
<td>TOURISM</td>
<td>Three day annual Fair in October</td>
</tr>
</tbody>
</table>
CHAPTER THREE

LAND USE PLAN: GOALS, POLICIES AND IMPLEMENTATION OPTIONS

PRIMARY GOAL

The central, dominant goal of this plan is to ensure that future land use and development in the area is compatible with the historic architecture and development pattern of the village and the visual character of the surrounding agricultural landscape. The County recognizes the importance of the area retaining those qualities essential to Waterford’s designation as a National Historic Landmark. An important element of this goal, however, is that private property values be preserved to the greatest extent possible while being consistent with the other goals and policies of this plan.

I. LAND USE, DEVELOPMENT AND UTILITIES

A. GOAL

In order to achieve the primary goal, this plan establishes as a goal the use of incentives, based primarily on allowing community or central facilities, such as sewer and water, to achieve open space and proper siting and density of growth compatible with achieving the primary goal, coupled with the use of the County’s police powers where appropriate and necessary to achieve the primary goal.

B. POLICIES

1. Growth Management

   For purposes of guiding future land use decisions, this plan endorses in general the Rural Land Management Plan’s concept of the Rural Village Policy Area and Agricultural Conservation Area to the extent that they further the goal of protecting the historic character of the Waterford Planning Area with the understanding that some specific policies of these policy areas may not apply. The line between the two policy areas is indicated on Figures 32 and 33, pages 84 and 85. This line also serves as the recommended Village Limit Line (VLL) which defines the hard edge of the village.

2. Compatible Development

   a. Additional development within the proposed VLL for the Village of Waterford (Figure 33, page 85) must be compatible with the existing village scale and architectural character, respect the historic qualities recognized in Waterford’s designation as a National Historic Landmark, and not conflict with the other policy recommendations in this plan.
RURAL PLAN POLICY AREAS FOR WATERFORD

- RURAL VILLAGE POLICY AREA
- AGRICULTURAL CONSERVATION POLICY AREA

FIGURE 32.
WATERFORD
AREA MANAGEMENT PLAN

RURAL VILLAGE POLICY AREA AND VILLAGE LIMIT LINE

- RURAL VILLAGE POLICY AREA
- AGRICULTURAL CONSERVATION AREA
- VILLAGE LIMIT LINE

FIGURE 33.
VILLAGE OF WATERFORD-RECOMMENDED FUTURE LANDUSE

- RESIDENTIAL (MAXIMUM DEVELOPMENT DENSITY OF 2 UNITS PER ACRE.)
- MIXED USE (RESIDENTIAL, COMMERCIAL, INDUSTRIAL, INSTITUTIONAL, OFFICE AND OPEN SPACE THAT IS COMPATIBLE WITH THE EXISTING VILLAGE SCALE AND CHARACTER.)
- NONRESIDENTIAL (NONCONFORMING USES ARE ENCOURAGED TO CONTINUE.)
- INSTITUTIONAL
- OPEN SPACE

FIGURE 34.
b. All future building construction within the designated VLL that results in a wastewater flow shall be required to connect to the public sewage treatment system. All expansion of existing structures within the VLL that are served by individual sewage systems and are located 300 feet or less from the public sewer line shall be required to connect to the public sewage treatment system. Expansion of existing structures served by individual systems and located more than 300 feet from the public sewer line shall be addressed according to local Health Department policies on a case by case basis.

c. The County will encourage that new dwellings in Waterford be designed, sized and sited in such a manner as to ensure compatibility with the existing village scale and character.

3. Land Uses Within the Village (See Figure 34, page 86)

a. The County will allow appropriate types of small scale commercial or office development to locate within the existing 3.75 acres currently zoned C-1 for the purpose of maintaining and concentrating future commercial and non-residential uses in the center of the village, thereby discouraging scattered commercial development. Allowed uses shall, in all cases, be compatible with the existing village scale and character and shall not cause traffic safety hazards, excessive noise or disruptions to the residential areas of the village. Convenience type uses that serve the local community are particularly encouraged. (Appendix II lists examples of appropriate uses.)

b. No further rezonings to commercial or other non-residential uses will be permitted on properties south of the lot occupied by the existing grocery (Tax Map 28A-1-A 25) or the other presently commercially zoned property.

4. Rural Development (See Figure 35, page 88)

a. The County will discourage overall/gross densities greater than one unit per three acres for any tract of land outside the designated VLL.

b. The County will not approve rezonings to higher residential densities or to commercial or industrial classifications.

c. If agricultural land is to be converted to another land use, the County will encourage low-intensity uses of a residential or institutional nature which maintain the visual character and open spaces of a farm.
WATERFORD
AREA MANAGEMENT PLAN

SEE FIGURE 34 FOR VILLAGE DETAIL

RECOMMENDED FUTURE LAND USES-RURAL AREA

- Agricultural (Rural residential cluster and nonresidential uses allowed that are compatible with existing agricultural scale and character.)
- Residential (Maximum development density of 2 units per acre.)
- Mixed Use (Residential, commercial, industrial, institutional, office and open space that is compatible with the existing village scale and character.)
d. Rural land within the Waterford planning area will be high priority for the donation, sale, transfer or proffer of open space conservation easements. The County will encourage private, State or Federal funding for acquisition of open space easements in this area.

e. If development is proposed, the County will encourage properly sited cluster residential developments for the purpose of preserving the farmland owners' agricultural operations and ensuring a permanent low density development pattern that is more compatible with the area's existing agricultural and scenic character.

f. Agricultural uses are the preferred land use in the Agricultural Conservation Area surrounding the village within the National Historic Landmark boundary. Agricultural uses will be encouraged and new residential uses which do not help achieve the goals of this plan will be discouraged. Right-to-farm policies, as provided for under the Code of Virginia, shall be in force.

5. Utilities

a. Sewer Service Area:

The Loudoun County Sanitation Authority (LCSA) will provide central sewer service by means of the Waterford sewage treatment plant to all existing and future development within the proposed Village Limit Line in accordance with its charter and established policies.

Service to development outside of this line will be allowed only if:

i. Overall permissible density of a tract of land is voluntarily reduced to a level which contributes towards achieving the primary goal of the plan; and

ii. Development is clustered in areas which have high visual absorption capacity; and

iii. Open space easements are placed on the balance of the property; and

iv. Appropriate safeguards such as restrictive easements are present to ensure that such extensions will only serve appropriately located development; and

v. Sufficient capacity is reserved so that all buildable lots of record within the Village Limit Line will be guaranteed access to and capacity in the sewer system; and
vi. Criteria for allowing such extensions are adopted by the County.

b. Connections

Future development within the proposed VLL shall be required to connect to the sewage treatment plant. The County encourages all owners of buildings within the proposed VLL that are not currently served by the treatment plant to connect for the purposes of improving public health and enhancement of the overall quality of the community. All expansion of existing structures with the VLL that are served by individual sewage systems and are located 300 feet or less from the public sewer line shall be required to connect to the public sewage treatment system.

c. Plant Expansion

The County will prohibit expansion of the current capacity of the sewage treatment plant. The LCSA and the County shall notify the State Water Control Board (SWCB) that no further connections to the plant will be allowed once the current capacity is reached and that the plant will not be expanded beyond its present capacity if the monthly average flow influent reaches 55,100 GPD or 95% of the total approved capacity of 58,000 GPD for three consecutive months within the timeframe of this plan. (This action will be taken with the intent of satisfying the SWCB's Policy for Sewage Treatment Plant Loadings effective February 1, 1981 pursuant to Section 62.1-44.15(5) of the Code of Virginia.)

d. The County will prohibit individual package treatment plants, "Cyclet" type systems or pump and haul operations in this area except in cases where there is a severe health hazard due to the failure of an existing system and approval of a new system is recommended by the Health Department. Such severe hazards shall be dealt with on a case by case basis.

e. Communal water and wastewater systems will be allowed if:

i. Sewer line extensions cannot be appropriately safeguarded to ensure that such extensions will only serve appropriately located development; and

ii. Overall permissible density of a tract of land is voluntarily reduced to a level which contributes towards achieving the primary goal of the plan; and
iii. Development is clustered in areas which have high visual absorption capacity as identified in this plan and by further study; and

iv. Open space easements are placed on the balance of the property; and

v. Such systems meet State Water Control Board and Health Department standards; and

vi. Such systems are conveyed to the Sanitation Authority in order to ensure proper maintenance and operation; and

vii. Costs of constructing, operating and maintaining the facility shall be borne by the developer and users; and

viii. Criteria for allowing such systems are adopted by the County.

f. No new development proposed to be served by individual wells will be approved until an environmental review has been performed on the effects of this development on the existing wells.

C. IMPLEMENTATION RECOMMENDATIONS

This section lists various regulatory and financial techniques which are available to the County to implement the land use goals and policies set forth in this plan.

Prior to implementing any of these techniques, the County should carry out a study of the planning area to determine the existing development potential with the Landmark District, and to identify specifically those areas within the District which have high visual absorption capacity and which can accommodate development without negatively impacting the integrity of the National Landmark. Such study should be completed within six months after the adoption of this plan. In doing the study, the County will accept technical input from landowners in the area and other interested parties. Once this study is completed, the Board will then need to decide which of the implementation techniques it wishes to use to achieve the goals of the Plan.

1. Historic District Overlay Zone

Expand the existing County designated Waterford Historic Cultural and Conservation District overlay zone so as to include all land within the National Historic Landmark District in order to better ensure that future development in the planning area will be visually compatible with the existing historic architectural fabric. Additionally,
initiate revisions to the Zoning Ordinance which will clarify and better define the procedures for architectural review in order to make that process more timely and efficient.

2. **Incentives**
   
a. Adopt criteria for extension of sewer lines beyond the Village Limit Line which will ensure that any such extension will help to achieve the stated policies and goals of this plan.
   
b. Adopt criteria for allowing the use of communal water and wastewater systems which will ensure that any such system will help to achieve the stated policies and goals of this plan.

3. **Compensation**

   The County could also consider a variety of compensatory mechanisms to help achieve the land use goals in the area. The use of eminent domain to acquire open space easements or fee simple ownership of certain lands within the District where appropriate or necessary would help ensure that the visual integrity of the National Landmark is preserved. Such land acquisitions could also be made on a voluntary or limited priority basis. Funds could be provided from a variety of potential governmental and/or private sources.

4. **Special Permit Overlay Zone**

   An overlay zone could be established which would require Special Exception permits for new buildings based upon specific design and location criteria. Such an overlay zone could guarantee visual compatibility while adding flexibility for landowners.

5. **Rural Commercial Zoning District**

   Develop a new Rural Commercial Zoning District (RC-1) for agricultural areas and villages such as Waterford to replace the existing C-1 district. This new zone would have more specific and restrictive use criteria to ensure compatibility with adjacent existing uses.

6. **New Zoning Regulations for Historic District**

   Initiate the development of new zones and/or zoning regulations based upon the study recommendations contained above for a rural historic district which will establish standards for siting, clustering and density which will meet the goals of this plan including preserving the hard edge, critical views and rural setting of the Waterford National Historic Landmark District.
7. Flexibility in Development Regulations for Historic Districts

Initiate amendments to the Subdivision and Zoning Ordinances that would incorporate more flexible design standards for development in county Historic Districts so as to encourage compatible site planning and road design. Such standards could include narrower streets, narrow lots, smaller building setbacks or yard requirements and other features that will allow new development to be more visually compatible with the existing historic character of the Landmark.

8. Water Supply Study

Undertake a feasibility study of a central water supply system to serve properties within the Village Limit Line due to the long-standing inadequacy of water supplies from individual wells in the village. Extension of any such system beyond the village may also be utilized as an incentive for appropriate compatible development and feasibility of such extension should be included in the study.

II. HISTORIC AND SCENIC

A. GOAL:

Maintain the existing agricultural landscape pattern and visual quality of the Waterford National Historic Landmark and conserve and enhance the existing historic and architectural character of the village of Waterford.

B. POLICIES:

1. Encourage that all proposed rural developments use the following principles in order to protect the scenic and historic qualities of the planning area:

a. Use existing areas with relatively high Visual Apsorption Capability, such as landforms and woodlands as screens and buffers;

b. Locate buildings and structures away from areas with relatively low Visual Absorption Capability such as ridgetops and steep side slopes, as generally identified in the study.

c. Plant trees to screen, visually enhance and soften the appearance of new buildings.

2. The County will encourage and assist owners of open land immediately surrounding Waterford to consider all public and private options and incentives available for preserving their agricultural land.
C. IMPLEMENTATION RECOMMENDATION

Amend the Historic District Zoning Ordinance to streamline the process, including a timeline for requisite review process.

III. AGRICULTURE AND NATURAL ENVIRONMENT

A. GOALS:

Maintain the local agricultural industry as part of the Waterford area's traditional land use pattern, economy, visual character and social structure.

Protect the health, safety and welfare of the planning area's citizens from potential environmental hazards and maintain the positive functional, aesthetic, and psychological benefits provided by the area's environmental features and natural resources.

B. POLICIES

The Waterford Area Management Plan endorses the Environmental Overlay Policy Area concept and the Agricultural Conservation Policy Area concept of the Rural Land Management Plan and shall use the specific policy and program recommendations and other implementation measures contained in the Plan (pp. 187-220, adopted November 5, 1984) and in this plan to manage the natural and agricultural resources of the Waterford area.

C. IMPLEMENTATION

The Rural Land Management Plan contains various implementation recommendations for preserving agricultural and environmental resources including use-value assessment, open space conservation easements, clustered development and others appropriate to the Waterford Planning Area.

IV. TRANSPORTATION

A. GOAL

The County's central transportation goal for the Waterford area is to foster the development of a transportation system which will help to achieve the primary goal of protecting the Landmark by facilitating the movement of vehicles and people in the Waterford Planning Area in such a way as to minimize community disruption, safety hazards and negative visual and environmental impact.
B. POLICIES

1. **External Improvements**

   The County will encourage certain critical improvements to roadways that surround the Waterford Planning Area so as to facilitate the movement of traffic around, rather than through the Village.

2. **Internal Improvements**

   Any improvements to existing roads or development of new roads within the planning area shall be compatible with the historic fabric of the Village and its rural setting. Road improvements should be designed to discourage the use of the Village's internal street system as a major regional through route.

3. **Sidewalks and Paths**

   The County will encourage the establishment of a compatible walkway system within the Village and planning area.

4. **Parking**

   The County will encourage the establishment of four new off-street parking areas as designated in Table 4, page 56.

5. **Public Transportation**

   The County will encourage ride sharing by residents within the area and will consider the feasibility of establishing a shuttle bus system for the area.

6. **Existing Roads**

   The County will discourage implementation of any but the most essential changes to existing roads which traverse the scenic and historic National Historic Landmark Area and the Waterford Corridor with retention of the existing two-lane format.

7. **Agricultural Traffic**

   A high priority shall be given to providing adequate width and weight capacity on the County's secondary roads and bridges for the movement of agricultural equipment and products.

8. **School Buses**

   A high priority shall be given to the correction of road hazards with special attention given to school bus routes.
9. **Frontage Improvements**

Subdivisions over three lots should contribute to the improvement of adjacent secondary roads. This contribution involves the dedication of appropriate land for the secondary road’s right-of-way, where required.

In addition, the developer would be responsible for constructing frontage improvements, if deemed appropriate to the historic district, along the adjacent secondary road in conjunction with construction of the subdivision, or placing adequate funds for such improvements into an escrow account, to be used at the time the road would be improved.

C. **IMPLEMENTATION RECOMMENDATIONS**

1. **External Rural Roads**
   
a. *Byway:*

   Work in conjunction with VDOT toward the long-term transportation solution of an Historic Preservation Byway (Figure 36, page 97) that can provide an alternative north-south route west of the Village.

   b. *Road Improvements:*

   i. Immediately undertake a study to upgrade Route 862 between Route 681 and Route 15 to a rural collector road to intercept trips from north of Waterford and channel them to Route 15. If warranted by the study, place such improvements on the Six-Year Plan.

   ii. Improve Routes 781, 694 and 693 to provide a high performance facility between Routes 287 and 15.

   iii. If warranted, add a new road segment west of Waterford running from the intersection of Route 862 extended/Route 681 to an appropriate intersection with Route 704.

   iv. Following the installation of new and upgraded facilities, place appropriate signage at points leading into Waterford denoting local routes and through routes.

2. **Internal Village Roads**

   a. Study and adopt a coordinated program of improvements which will improve the safety of the internal village roads while
POTENTIAL LOCATIONS FOR HISTORIC PRESERVATION BYWAY

- FIRST ALTERNATIVE
- SECOND ALTERNATIVE

FIGURE 36.
maintaining the integrity of the National Historic Landmark. Such improvements should include:

i. Lowering of street crowns where necessary.

ii. Repairs to the edge of pavement and elimination of dangerous drops between the edge of pavement and adjoining shoulders.

iii. Regrading where needed.

iv. Selective widening of pavement to accommodate appropriate on-street parking.

v. Necessary drainage improvements.

vi. Use of street surfacing materials appropriate to the historic visual aspects of the Village.

These improvements should strive to provide two lanes for moving traffic at speeds compatible with safety and one lane (or area) for on-street parking.

b. Improve the safety of Route 662 where it passes the Old Mill by use of appropriate widening and straightening measures and use of historically appropriate breakaway structures to shield the exposed edge of the Mill.

c. Reconstruct intersection of Butcher’s Row and Water Street to alleviate the severe intersection angle.

d. Undertake a study in conjunction with VDOT on the best methods for reducing vehicle speeds within the Village including:

i. Installation of new stop signs at strategic locations within the Village.

ii. Warning signs against speeding on approach roads to the Village.

iii. Street surfacing materials (such as cobblestones) which deter high speed driving.

iv. Increased traffic law enforcement in the Village.

3. Sidewalks and Pathways

Figure 21, page 53 shows a recommended system of
coordinated sidewalks and pathways. These facilities can be constructed using a variety of building materials which are consistent with the historical and visual aspects of the Village, pedestrian safety and convenience and maintenance requirements and costs. This recommended system includes a pathway along the west side of Route 662 extending south to the community pool.

4. **Parking Improvement Program**

   a. Establish a balanced system of on-street and off-street parking to be implemented in the Village that includes the following:

   i. Long-term parking for commercial/tourist activities which shall be accommodated in off-street facilities.

   ii. Reserve the majority of on-street spaces for residential use with a limited number of spaces allocated for short-term parking for commercial activities.

   iii. Amend the Zoning and Land Subdivision Development Ordinances (LSDO) to require new development and major redevelopment to provide adequate off-street parking where appropriate, with the option of providing it on-site or off-site.

   iv. Provide sufficient space to accommodate a limited number of tour/charter buses consistent with the Village’s tourism program.

   v. Designate snow emergency routes through the Village.

   b. Amend Zoning and LSDO Ordinances to require lots to be constructed with designs, materials and screening/buffering appropriate to historic Waterford.

5. **Public Transportation**

   Study feasibility of operating a shuttle bus service to the area from an outlying parking area or Leesburg to meet tourist demand.

6. **Frontage Improvements**

   Establish criteria and amend LSDO to allow flexibility in frontage improvement requirements so as to provide that such improvements are appropriate to the historic district.
V. ECONOMIC DEVELOPMENT

A. GOALS:

1. **Tourism**

   Provide additional opportunities for visitors and tourists to appreciate the historic value of Waterford in a manner that enhances the economic benefits provided to the County, maintains the Village’s integrity, furthers preservation and community development efforts and minimizes disturbance to village residents.

2. **Commercial**

   Maintain a sufficient area within the Village only for the provision of local commercial convenience uses to serve Waterford area residents and visitors.

B. POLICIES

In conformance with existing county policy, as stated in the Resource Management Plan (pp. 241, 248), the County recognizes Waterford as an outstanding historic resource with state and national significance that provides economic benefits to the County and therefore encourages tourism in a manner that does not conflict with or intrude on the Village’s existing quality of life and will not adversely affect the existing character of the National Historic Landmark.

C. IMPLEMENTATION RECOMMENDATIONS

1. **Development of a New Rural Commercial District**

   Replace the existing C-1 commercial district with a new Rural Village Commercial Zoning District that includes uses suitable for villages such as Waterford (see Appendix II). The existing 3.75 acres of C-1 in the Village as well as existing commercial uses should be rezoned to this new district and expanded to include the two adjacent parcels which are located on the south and west borders of the existing C-1 commercial district and are within the Village Limit Line.

2. **Revision of the Zoning Ordinance’s Definition of Home Occupation**

   Revise the existing Home Occupation definition (Article 10, Section 1003, p. 140 of the Zoning Ordinance) to exclude uses that are not within the concept and intent of home occupation and are more appropriately located in commercially zoned districts.
3. **Study Committee for the Management of Tourism in Waterford**

   The Waterford Foundation and interested Waterford residents should establish a Tourism Management Study Committee to explore the potential for controlled tourism in Waterford which would:

   a. Provide visitors with an understanding of a unique national historic resource;

   b. Increase revenues to protect and maintain the Waterford National Historic Landmark District and increase the County's economic base;

   c. Include Waterford in a comprehensive tourism program for the County.

   The assistance of such groups as the County Office of Economic Development, the County Tourism Advisory Committee, the Virginia Division of Tourism and representatives of other historic tourist attractions in the County and State, historic preservation organizations and private sector interests should be sought.

4. **Study Committee for Village Improvements**

   The Waterford Citizens' Association, Waterford Foundation and interested village residents should establish a study committee to identify the future public needs of the Village such as a pedestrian system, off-street parking areas, village and road improvements and public restrooms and make recommendations to the County for their implementation.

D. **EXTENSION OF THE COUNTY'S HISTORIC AND CULTURAL CONSERVATION OVERLAY ZONING DISTRICT**

   The purpose of the Historic District Overlay Zone is to enable the County to review the proposed architecture and siting of a new development or buildings (farm buildings are excluded) for compatibility with their surroundings in certain designated Historic Districts. Review is done by the Historic District Review Committee, made up of County citizens appointed by the Board of Supervisors. There are nine existing Historic Districts in the County (Figure 38, page 103) including two that are administered by towns (Leesburg and Middleburg) and two that cover rural open land (Goose Creek: 10,000 acres and Oatlands: 1,000 acres). The location of the existing Waterford District is indicated in Figure 26, page 65.

   The following three points are important to consider when assessing the effects of the County's existing Historic District Ordinance:
HISTORIC DISTRICTS OF LOUDOUN COUNTY

- HISTORIC DISTRICT ADMINISTRATED BY LOUDOUN COUNTY
- HISTORIC DISTRICT ADMINISTRATED BY INCORPORATED TOWN

FIGURE 37.
1. The County Historic District is an overlay zone superimposed on the existing zoning and therefore does not affect the number of units allowed by the existing underlying zoning such as A-3 or R-1 (see Figure 26, page 65).

2. While the ordinance provides the necessary legal authority for the Historic District Review Committee to carry out its duties, the review procedure has been characterized by discussion and negotiation between the applicant, County staff and the Committee. In addition, the ordinance contains adequate provisions for the applicants to appeal the Committee’s decisions;

3. Historic District Zoning protects and enhances the property values of an area by providing assurance to landowners and prospective buyers that the historic and scenic qualities of an area will remain. In many instances these qualities are major contributors to the market value of a property.

The Design Review Policy Recommendations under Historic and Scenic Resources should be implemented by means of extending the boundaries of the Historic District Overlay Zone to conform with the boundaries of the Virginia Historic Landmark designation and the National historic Landmark District (Figure 27, page 66). The purpose of this extension is:

1. To protect the historic and scenic character of the National Historic Landmark;

2. To assist landowners, developers and architects in designing and locating new developments and residential buildings that are compatible with this character;

3. Enable the County, Federal and State districts to be consistent. This is also in conformance with the implementation recommendations in the Rural Land Management Plan (page 227).

The design review criteria should respect the differences between the rural and urban visual contexts of the area as defined by the Waterford Rural Village and Agricultural Conservation Policy Areas. Historic District Guidelines for the Waterford area based on this distinction between the Village and its rural surroundings shall provide the basis for design review by the Historic District Review Committee for all applications in the Waterford Historic District.

Based on the above analysis, the following recommendations should be implemented:
1. The County should extend the boundaries of the Waterford Historic and Cultural Conservation Zoning District to conform with the boundary of the Waterford National Historic Landmark District.

2. The County will require that both individual applicants for new construction, modification or demolition and the Historic District Review Committee refer to the County’s Historic District Design Guidelines when preparing and reviewing applications for the Waterford Historic District.

3. The County should examine the existing Historic Site and Historic and Cultural Conservation Zoning Overlay District ordinance for the purpose of strengthening its effectiveness in carrying out its stated intent including such elements as review procedure, enforcement, fairness and consistency of application. This effort should include an examination of the important differences and distinctions between building in a dense urban area such as Waterford and a sparsely settled rural agricultural area such as the land outside the Village.

F. DESIGN STANDARDS FOR THE WATERFORD HISTORIC DISTRICT OVERLAY ZONE

The protection of the historical and architectural significance of the Waterford Historic District is greatly enhanced by the provisions of the County’s Historic Site and Historic and Cultural Conservation Zoning District Ordinance (Article 7, Section 750-750.16) which requires review and approval of the design of new construction within the overlay zone by the Historic District Review Committee.

In order to achieve maximum compatibility of new construction with existing sites, structures, buildings, objects and landscape features and to provide a fair and efficient review and enforcement procedure for the public, clear and comprehensive design review standards and guidelines are required. These standards and guidelines should include general criteria which apply equally to all historic overlay zones in the County and specific criteria which recognize the individual historical, architectural and scenic characteristics of each historic district. In the Waterford Historic District, for example, there are architectural details, uses of materials, orientation and siting of buildings and landscape features that are specific to Waterford. There is also a difference within the Historic District itself in the character and density of the district within the Village Limit Line and the rural areas outside the Village Limit Line but within the Waterford Area Plan boundary which is also the boundary of the Waterford Historic District listed in the Virginia Landmarks Register and the National Register of Historic Places.

The tax savings incentives provided for the rehabilitation of historic buildings for business related purposes by the Tax Reform Act of 1976 and the Economic Recovery Tax Act of 1981 as amended are of significant
interest to owners of historic properties listed in the National Register or included in eligible historic districts. From January 1983 to June 1984 over 88 million dollars of historic rehabilitation work was generated in the Commonwealth of Virginia alone in response to these incentives.

In order to qualify for the investment tax credits and other Federal grant-in-aid programs administered by the Virginia Historic Landmarks Commission, projects must meet The Secretary of the Interior’s Standards for Historic Preservation Projects. The standards, including the rehabilitation standards, are accompanied by guidelines for applying the standards. It is imperative, therefore, that the standards and guidelines adopted by the County for use by the Historic District Review Committee include, as a minimum, The Secretary of the Interior’s Standards for Historic Preservation Projects. Otherwise, projects which meet County standards might not meet the investment tax credit eligibility standards. This would be an unfair economic hardship on property owners.

Therefore, the following recommendations should be implemented:

1. The County should develop and adopt Historic District Design Review Standards and Guidelines with general criteria which apply equally to all historic overlay zones as well as specific criteria which identify and recognize the individual historical, architectural and scenic characteristics of each historic district. (Note: The Historic District Guidelines were adopted as part of Section 750 of the Zoning Ordinance, by reference, on September 21, 1987.)

2. The County’s Historic District Design Review Standards and Guidelines should include The Secretary of the Interior’s Standards for Historic Preservation Projects and the guidelines for implementing the standards so that the County’s standards and guidelines will be consistent and compatible with the State and Federal standards used in evaluating projects for investment tax credit eligibility and other State and Federal preservation incentive programs.

G. OPTIONS FOR AMENDING THE SUBDIVISION ORDINANCE, ZONING ORDINANCE AND ZONING MAP

The County has various options available to it for implementing the policies of this plan through amendments to its land development ordinances. These options include:

1. Reducing Allowable Development Density

The Zoning Ordinance and/or zoning map could be amended so as to reduce the number of permitted residential dwellings on acreage within and/or around the Village. Such a “downzoning” could be accomplished by changing the zoning map so that land designated as A-3 is changed to an A-10 classification and land designated R-1...
is changed to A-3. Or, a new, lower density zoning district could be established for land around the Village which would permit a maximum overlay district of one or fewer houses per 10 acres.

A reduction in permitted density by the use of the County’s police power could also be combined with the County’s power of eminent domain so that some partial financial compensation could be provided to the landowner in conjunction with the reduction in permitted development density. Funding for such action could be provided for in the County’s Capital Improvement Program.

A "downzoning" would be most effective in preserving the character of the National Historic Landmark District if it is combined with incentives or requirements for the clustering of dwelling units onto areas of a site that will create the least visual impact.

2. Mandatory or Incentive-Based Clustering

Clustering of houses into groups and/or on smaller lots while retaining the overall density provided by the ordinance would allow for a development pattern that is more in keeping with the historic character of the area. While large-scale clusters raise issues regarding the safety of on-site waste disposal and traffic, small-scale clusters, especially if combined with a reduction of overall density could be very effective in preserving the existing visual character of the area while still affording significant development opportunities to the landowners.

3. Special Permit Overlay Zone

An overlay zone could be established in conjunction with the County Historic District designation that would require Special Exception permits for new dwellings. Specific design and location standards would be established in the ordinance so that conditions could be placed on new development in order to ensure visual compatibility.

4. Increase Flexibility in Subdivision and Zoning Regulations

The land development ordinances could be modified so that development within County Historic Districts could incorporate more flexible design standards such as narrower streets, narrower lots, smaller setbacks and other features that will allow new development to be more visually compatible with the existing.

II. COMPREHENSIVE PLAN FOR HISTORIC RESOURCES

Part of the County’s proposed comprehensive planning program, as outlined in the RMP, is the undertaking of special studies (RMP, p. ix). In addition to the
ongoing area planning, the County has a critical need for the preparation of special studies in the form of functional plans that examine a particular issue or resource on a Countwide basis. These include transportation, environment and sewage treatment/water supply.

Included among these are Loudoun’s historic and scenic resources. They are one of the most prominent and recognized elements that contribute to Loudoun’s unique character and are a major component of the existing tourist industry. The proposed Historic Resource Plan should incorporate policies and programs for the management of the County’s historic resources, including:

1. An overall assessment and visual analysis of the County’s historic and scenic resources.

2. A review of the existing County Historic District Ordinance.


4. The identification of potential additional County Historic Districts.

III. OPTIONAL COUNTY PROGRAMS

A. ON-SITE DENSITY TRANSFER/RURAL RESIDENTIAL CLUSTER DEVELOPMENT

One of the recommendations of the Rural Land Management Plan is to allow clustered residential developments in the Agricultural Conservation Area. The purpose is:

1. To preserve the core of a farm operation in cases of estate settlement or financial reversal in which a farm’s assets (potential house lots, farmland, farm house, barns) must be equitably divided among creditors and/or heirs.

2. To assist a farmer in financing a farm project, e.g., irrigation, greenhouse, etc., with the sale of only a small portion of the farm.

3. To establish a permanent low density residential pattern in the County’s agricultural areas with large blocks of contiguous open land under easement.

Other requirements include:

1. Density: 25 acres per unit.
2. Review and approval: subdivision process.
4. Initial tract size: 50 acres minimum.
5. No central water or sewer.
6. Class III roads, owned and maintained by homeowners' association.
7. Minimum lot size: 40,000 square feet (one acre).
8. Maximum site coverage for lots and roads: 10% for 25 acre density.
9. Residual Land: Must be a contiguous block in a single parcel and placed under a permanent easement which restricts use to agricultural and/or open space.

As an example of how a rural residential cluster development would work, Figure 39, page 110 illustrates a ten-lot clustered subdivision located along a spine road that has two access points on a state route. The development occupies a total of about 21 acres of a hypothetical 250 acre farm and the lots are approximately one and one-half acre in size. Such a development should not be in a critical view or visible from the village of Waterford. Care should be taken to utilize natural landscape features as buffer elements. The remaining acres of the property shall be placed under a permanent open space easement.

B. SUMMARY OF RURAL PLAN'S ADDITIONAL OPTION PROGRAMS

All of the following programs proposed in the Rural Land Management Plan should be available to landowners within the Agricultural Conservation Area of the Waterford planning area.

1. Use Value Taxation ("Land Use")

The County should continue the existing Use-Value Taxation Program which taxes farmland at its use, rather than market, value. In Loudoun County in the mid-1980's the typical market value of good farmland was about $2,000 per acre, while the typical use-value was about $400 per acre. Buildings and other structures are not eligible for the program so the total tax saving to the farmer was about 50%.

2. Agricultural and Forestral Districts

The County should encourage the renewal of existing districts and the formation of new districts. These are voluntary on the part of the landowners and are formed with a minimum of 200 acres for a period from four to ten years.

The benefits include protection from nuisance ordinances and allowing qualifying land within the District to remain eligible for Use-Value Assessment during the term of the District. It does not, however, limit residential development or other non-agriculturally related activities unless the specific ordinance for a particular district limits lot size. For this reason, the Rural Plan recommends that land within these districts be precluded from subdivision and development at a density less than one unit per 25 acres.
EXAMPLE OF A RURAL RESIDENTIAL CLUSTER

FIGURE 38.
3. **Transfer of Development Rights (TDR) and Density Transfer**

   The basic concept of these two programs is to "send" the allowed units from a piece of land to another property which "receives" them. By transferring the development rights or existing density from the County's agricultural area to other areas more suitable for development, the County can help to implement its growth management policies and hopefully keep farmland from being developed. Major elements of the TDR program are yet to be formulated, including obtaining enabling legislation from the State. Density transfer can be implemented and works through the existing rezoning/proffer system. In both cases the Agricultural Conservation Area is the primary "sending" area.

4. **Conservation Easements**

   The County should develop a program in which the County leases conservation easements from a landowner for periods of five, eight or 16 years with an accompanying compensation that is greater than what is given through Use-Value Taxation.

5. **Right to Farm**

   The County should support existing State legislation which helps protect the rights of farmers to carry out normal farming activities without interference from neighbors or the County.

6. **Agricultural Industry Development**

   The County should continue a comprehensive agricultural promotion effort with the full-time Agricultural Development Officer acting in an educational, promotional and advisory capacity to the local farming community, the public and the Board of Supervisors.

7. **Voluntary Agricultural Zoning**

   The County should establish an A-50 zoning district which would be available on a voluntary basis. This district should have a minimum lot size of 50 acres with fewer permitted uses than those allowed in A-3.

   The purpose of the A-50 district is to encourage agricultural uses and to afford protection from use conflicts for landowners who wish to carry out farming activities and want to have a lower development density for their land. Such a zone may provide extra protection from nuisance suits against farming activities.
IV. **PROPOSED STUDY COMMITTEES**

Certain issues addressed in this plan can be explored further through the efforts of study committees that should be established by interested groups and residents in Waterford with some assistance and advice provided by the County and State if necessary.

A. **STUDY COMMITTEE FOR THE MANAGEMENT OF TOURISM IN WATERFORD**

The Waterford Foundation and interested Waterford residents should establish a Tourism Management Study Committee to explore the potential for controlled tourism in Waterford which would:

1. Provide visitors with an understanding of a unique national historic resource.

2. Increase revenues to protect and maintain the Waterford National Historic Landmark District and increase the County’s economic base.

3. Include Waterford in a comprehensive tourism program for the County.

The assistance of groups such as the County Office of Economic Development, the County Tourism Advisory Committee, the Virginia Division of Tourism and representatives of other historic tourist attractions in the County and State, historic preservation organizations and private sector interests should be sought.

B. **STUDY COMMITTEE FOR VILLAGE IMPROVEMENTS**

The Waterford Citizens’ Association, Waterford Foundation and interested village residents should establish a study committee to identify the future public needs of the Village such as a pedestrian system, off-street parking areas, village road improvements and public restrooms and make recommendations to the County for their implementation.
WATERFORD
AREA MANAGEMENT PLAN

APPENDICES
APPENDIX I

RURAL LAND MANAGEMENT PLAN (Adopted November 5, 1984)
Pages 243-247

POLICY AND PROGRAM RECOMMENDATIONS
RURAL VILLAGE AND AGRICULTURAL CONSERVATION POLICY AREAS

The following are policies in the Rural Plan that are endorsed by this plan:

I. AGRICULTURAL CONSERVATION AREAS

These are areas which are not included in the previous three policy areas, defined as those lands which lie west of the Broad Run Watershed, more than one-half mile from the corporate limits of the five largest western towns, outside the Leesburg Fringe Area and not within a designated Rural Village. The Agricultural Conservation Area will be the major location of the County's efforts to preserve open space, agricultural land and the agricultural industry.

A. LAND USE

1. Growth Pattern
   a. The County will discourage new nonfarm residential development in these areas.
   b. The County will encourage the continuation of agricultural and low intensity open space land uses in these areas.

2. Agriculture
   a. The County shall strongly encourage the continuation of agricultural uses in the Agricultural Conservation Areas. Agriculture is the preferred use in these areas.
   b. All of the County's existing and proposed agricultural preservation and farmland retention programs including all of those set forth in this plan shall apply to qualified land in the Agricultural Conservation Areas.
   c. Right-to-farm legislation shall apply here. Such right-to-farm regulations shall apply to all residential uses, including those existing prior to the legislation.

3. Residential Density
   a. The County will encourage owners of rural land in the Agricultural Conservation Areas to avail themselves of the conservation program options set forth in this and other area
plans rather than carrying out conventional residential subdivisions and development proposals.

b. When development does occur, the County will discourage densities greater than one unit per three acres.

c. The County will encourage landowners to voluntarily rezone their property to lower density zoning categories such as A-10 and A-50.

d. The County will encourage low density residential clusters, as set forth in the residential section of this plan. (See page 125 of the Rural Plan.)

4. Dwelling Unit Types

The County will allow single-family detached units in these areas but shall prohibit multi-family and single-family attached (such as "townhouse") units.

5. Housing

The County will encourage housing rehabilitation in these areas, particularly for farm buildings and tenant houses.

6. Commercial

a. The County shall discourage new commercial uses in the Agricultural Conservation Areas and shall prohibit them in all areas not currently zoned for commercial use.

b. The County shall allow expansion of existing commercial uses only if uses are small-scale, agriculturally-based enterprises, and only by Special Exception.

7. Industrial

a. The County shall allow industrial uses which are compatible with existing agricultural, residential and industrial uses.

b. The County shall require that new or expanded mining or mineral extraction activities be located in a Natural Resource Extraction Overlay Zoning District.

8. Institutional

The County shall allow compatible, small-scale institutional uses in the Agricultural Conservation Areas.
9. **Historic and Scenic**

   The County shall encourage the preservation of historic structures and sites by promoting the establishment and expansion of County Historic Districts, donation of easements, TDR, Density Transfer, designation on the State and National Registers of Historic Places, inclusion in the County’s inventory of historic sites, private and public restoration and/or adaptive reuse and rehabilitation and other public and private mechanisms.

**B. PUBLIC FACILITIES AND UTILITIES**

1. **Public Facilities**

   The County will not locate new public facilities such as schools, libraries and fire/rescue facilities in these areas.

2. **Water and Sewer**

   a. The County shall prohibit the extension of water or sewer lines into these areas.

   b. The County shall prohibit the establishment of package treatment plants in these areas. The County may grant, by Special Exception, the expansion of existing package treatment plants only for the purpose of serving existing residents or for serving new industrial or institutional uses.

   c. Combined septic drainfields will be allowed for cluster development only, and only with approval from the Health Department.

   d. "Pump and haul" operations shall be prohibited.

3. **Transportation**

   (This policy has been purposely deleted as it was contrary to the Waterford Plan.)

**C. IMPLEMENTATION**

1. **Transferable Development Rights (TDR) and Density Transfer**

   a. This Rural Plan designates the Agricultural Conservation Areas as the highest priority locations for agricultural and farmland preservation efforts.
b. The Agricultural Conservation Areas are hereby designated as sending areas for TDRs.

c. These areas shall not be receiving areas for TDRs. (See pages 48-55 of the Rural Plan for detailed provisions for TDR.)

2. Cluster Development

The County shall cluster residential developments on combined septic systems (subject to Health Department approval of the septic system) at an overall density of one unit per twenty-five acres for the purpose of expanding or improving the farmland owners’ existing agricultural operations and ensuring a permanent low density development pattern. Such cluster subdivisions shall be given a timely review and approval process. (See cluster recommendations, page 125 of the Rural Plan.)

3. Rezoning Policy

a. The County will encourage the voluntary rezoning of farmland and other open land to lower density zoning classifications such as A-10 and A-50.

b. The County shall not approve rezonings to higher residential densities on land within the Agricultural Conservation Areas during the time frame of this plan.

c. The County shall not approve rezonings from A-3 to higher intensity classifications such as commercial or industrial except in the case of industrial uses which can be shown to be compatible with surrounding land uses and that are existing or designated in the County’s Comprehensive Plan.

d. The County shall not approve any rezonings to or expansion of C-1 Zoning Districts.
APPENDIX II

EXAMPLES OF APPROPRIATE NON-RESIDENTIAL USES FOR LOCATION
WITHIN WATERFORD’S VILLAGE COMMERCIAL AREA

The uses listed below should all have the following principal characteristics:

0 Small-scale (approximately 2,500 to 3,500 square feet of floor space;
0 Compatible with adjacent residential uses (minimal noise and traffic);
0 Individually owned and operated.

This list is not meant to be either exhaustive or restrictive; the purpose is simply to
give an idea of the kinds of commercial uses that might work in Loudoun County villages
such as Waterford. The new rural commercial zoning district proposed and
recommended in both this plan and the Rural Land Management Plan would be the
appropriate place for developing a comprehensive list of appropriate uses.

0 Studio space - artist, craftsperson, writer, etc.
0 Office - architect, insurance, attorney, real estate, consultant
0 Hand manufacture (some power tools acceptable, restricted noise level): custom
  millwork, cabinet making, furniture restoration, silversmith, jewelry design and
  manufacture
0 Antique sales
0 Art gallery, art supplies, custom framing
0 Craft manufacture and retail outlet
0 Grocery, market
0 Hardware, garden supplies
0 Food shop: sandwich, light refreshment, ice cream
0 Fabric shop, quilting and sewing supplies
0 Interior decorating
0 Stationery
0 Post Office
0 Photography
0 Restaurant
0 Residential Uses
APPENDIX III

SPECIFIC APPLICATION OF RURAL PLAN'S LAND USE POLICY AREAS TO WATERFORD AREA PLAN

I. FACTORS TO CONSIDER IN DETERMINATION OF LINE BETWEEN POLICY AREAS

Several factors were examined to determine an appropriate location for the line between the two Policy Areas, (See Figure 32, page 84 and Figure 33, page 85) including:

A. Waterford's designation as a National Historic Landmark, and the need to allow only minimal growth to retain that designation.

B. The County tax map (#28A), property lines and ownership interest.

C. The original boundary for the Town of Waterford (established in 1836 and unincorporated by vote in 1936, see Figure 5, page 7)

D. The use of natural features such as Catoctin Creek and other smaller watercourses;

E. The sewage treatment plant's gravity service area based on topography;

F. The existing developed area of Waterford.

II. FINAL DETERMINATION OF LINE BETWEEN POLICY AREAS

The final line chosen (Figure 32, page 84) was essentially a combination of the factors outlined above.
GLOSSARY

Area Plans:

The specific detailed land use plans which Loudoun County adopts for various areas of the County. Loudoun has adopted four of these to date (1987) and has three others in various stages of completion.

Class III Road:

A privately owned road designed for direct access to individual lots whose owners are responsible for its maintenance.

Cluster Development (Rural):

Rural residential development consisting of single-family dwelling units built on small lots of approximately one acre, clustered together on one portion of the tract but at much lower overall gross densities, so that most of the site is kept in open space with only a small portion of the site divided into building lots.

Commercial:

Any wholesale, retail or service business activity established to carry on trade for profit.

Compatible:

Not in conflict with; in harmony with.

Comprehensive Plan:

The general plan for the County. Every county in Virginia must have a Comprehensive Plan which spells out policies for future development in order to ensure orderly growth and the protection of the public health and welfare. The Comprehensive Plan may consist of a number of components such as local area plans.

Conservation Easement:

An interest in land owned by another that entitles its holder to a specific limited control set forth in a deed recorded in the Clerk’s Office. Such an easement, as envisioned in this plan, would establish certain restrictions as to the use of land as spelled out in this text.

Density:

The average number of dwelling units per acre of land in a residential development. Development density refers to the total tract area less three factors (100 year floodplain, slopes 25% or greater, proposed commercial, office and industrial area) divided by the number of dwelling units in the development proposal. This is a more useful concept for
analysis than overall or "gross" density which refers to the total tract area regardless of site conditions. Net density refers to a specific portion of a given tract divided by the number of units proposed within that specific area.

Density Transfer:

The act of allowing additional dwellings to be built on a parcel of land designated for development in return for further limiting the number of dwellings to be built on a different parcel of land designated for conservation. (See page 48 of the Rural Plan for a more detailed definition.)

Development:

The act of building or the existence of structures for human habitation or business use including houses, stores, schools, offices, roads, etc.

Easement:

A right, usually by virtue of the ownership of one parcel of land, to use or enjoy some portion of the land of another.

Equity:

The net value which a landowner holds in his property, not including the value possessed by a person or institution which holds a lien or mortgage on the property.

Erosion:

The wearing away and removal of materials of the earth's crust by natural means; in this plan refers to transportation of topsoil particles by means of moving water (see stormwater runoff).

Floodplain, 100 Year:

Land adjoining a watercourse or other water body that will be inundated to a defined height by water from a flood which has a 1% change of occurring in any year.

Groundwater:

Water found beneath the ground surface in a saturated zone. Major source of water supply for local residents.

Historic District:

A zoning district overlaid on an existing zoning district and adding additional architectural and design controls to the regulations of the base district. Referred to in Loudoun County Zoning Ordinance as Historic Site District/Historic Cultural and Conservation District. There are eight Historic Districts in the County; six administered by the County and two by incorporated towns.
Industrial:

Non-residential and non-commercial employment uses such as mining, milling and manufacturing.

Institutional:

Public or private health, recreational or educational uses such as parks, schools, libraries and camps.

Land Use Policy Area:

As proposed in the Rural Land Management Plan, division of the County into five distinct types of areas in which specific land use policies and programs will be applied.

MGD:

Million gallons per day (refers to sewage treatment or water supply flows).

National Historic Landmark:

District, site or structure listed on the National Register and considered to be of unusual importance to American history, architecture, archaeology and/or culture. Under the jurisdiction of the Secretary of the Interior. Designation does not imply control over the properties included. There are four in Loudoun County.

National Register of Historic Places:

A register of districts, sites, buildings, structures and objects, significant in American history, architecture, archaeology and/or culture. The Register is maintained by the Secretary of the Interior and administered by the Keeper of the National Register. Local nominations to the Register are made by the State Department of Historic Resources. Designation does not imply control over the properties included. There are nine districts and 25 sites in Loudoun County on the National Register.

Open Space:

Land which is in a largely natural state with few if any buildings or other structures. Examples include passive parks, farmland and vacant land.

Package Treatment Plan:

A self-contained sewage treatment system designed to serve small-scale development similar to what is served by septic systems.

Perpetual Easement:

A partial right to use, enjoy or control the land of another which is unlimited with respect to time so long as the right is not extinguished. The right may not be
extinguished arbitrarily. However, it may be extinguished because of future actions, for example, by a cessation of the purposes for which the easement was created, by an express release or by a change in condition not contemplated at the time of creation. The easement right is shown on a deed, recorded in the jurisdiction where the land is located.

Public Facilities:

Public works supplied generally by a government organization. Examples include: public roads, schools, water and sewer facilities, fire stations and libraries.

Residential:

Structures which are built for and occupied by private households rather than government or businesses. Private dwellings.

Rural:

Land areas which are not served by central water and sewage facilities and which have predominantly low intensity land uses such as large lot residential or agricultural uses.

Sensitivity Level:

A relative measure of people’s concern for a given area’s scenic quality that is based on an assessment of viewer activity, local values and the broader cultural significance of a specific visual resource.

Scenic Rivers: (Sec 10-167(b) Code of Virginia)

"Rivers, streams, runs and waterways, including their shores and immediate environs which possess great natural and pastoral beauty." Designated by an Act of the General Assembly on recommendation of the Commission on Outdoor Recreation. In Loudoun County there are two Scenic Rivers: Catoctin Creek from Waterford to the Potomac River and Goose Creek from the Fauquier County line to the Potomac River.

Secondary Road:

A road owned by the Virginia Department of Transportation whose construction and/or maintenance is funded through the Commonwealth of Virginia Secondary Road Account. In Loudoun County secondary roads are those numbered 800 and above.

Septic System:

Subsurface sewage disposal system that uses the natural absorption of soil to treat wastewater. The common use is to serve one dwelling, but could be designed to serve several homes. Drainfield refers to the soil absorption trench fed by pipes from the dwelling.
Steep Slopes:

Surface formation with a vertical incline greater than 8.5 degrees or 15%, or greater than 25%, a sufficient steepness to cause problems such as erosion or increased flooding when disturbed for land development or other purposes.

Stormwater Runoff:

The portion of the total precipitation that does not sink into the soil but instead flows across the ground or other surface and eventually reaches a watercourse.

Subdivision Ordinance:

The local ordinance which sets forth the regulations which guide site development standards such as road and grading requirements, utility provision, etc.

Transferable Development Rights (TDR):

The process whereby an owner of designated rural land may sell his right to develop habitable structures to a landowner of designated urban land who may then build at a higher density on that urban land. The rural land from which the development rights have been sold is placed under a perpetual open space easement.

Uniqueness:

As used in scenic analysis, refers to the scarcity of an object or landscape in a particular region. The object can be physical, biological and/or of human interest.

Unity:

As used in scenic analysis, refers to a single harmonious visual unit in terms of the combined quality of the landscape elements.

Use-Value Taxation:

A program authorized by the State and implemented by localities at their option in which qualifying agricultural and forestal land is taxed at its use value for agriculture rather than its fair market value for development.

Variety:

As used in scenic analysis, includes the number of objects, the distribution, and the relationship in terms of scale between them. Variety is in opposition to monotony where repetition of objects is uninteresting and implies low level scenic quality. Landscapes with the greatest variety or diversity have the potential of possessing higher levels of scenic quality.
Visual Absorption Capability:

The physical capacity of a landscape to absorb proposed development or management activities and still maintain its inherent visual character and quality.

Virginia Landmarks Register:

A register of districts, sites, structures significant in Virginia history and/or culture designated by the Virginia Historic Resources Board and administered by the Department of Historic Resources. Designation does not imply control over the properties included. There are ten districts and 25 sites in Loudoun County on the Virginia Register.

Village Limit Line:

The boundary which defines the edge of and encloses the village of Waterford’s growth area beyond which central utilities will not be extended within adopted planning time periods unless the special circumstances defined elsewhere in this plan are in effect.

Visual Resource Management:

The management of the "seen" aspects of both the land and the activities which occur upon it - the administration of the land’s scenic or aesthetic attributes.

Vividness:

As used in scenic analysis, refers to that quality in the visual landscape which is strong enough to make a lasting impression. Contrast is the most obvious source of vividness.

Zoning District:

A classification of land which designates and limits allowed uses, lot sizes, building setbacks and other land development regulations.

Zoning Ordinance:

The local ordinance which defines and implements zoning requirements such as permitted uses, lot sizes, setbacks, etc.
CPAM 1992-0010
Greenways and Trails Policies

Adopted September 21, 1994
SECTION I: BACKGROUND

A. INTRODUCTION

Greenways are areas of open space, usually linear, which connect and protect various natural, recreational, and cultural resources. They often follow linear landscape features such as streams, ridges, or abandoned railroads. Greenways can be publicly or privately owned, and may be open or closed to visitors. They are not necessarily parks or public land. Parts of a greenway may be a scenic resource or an important wildlife habitat, owned and maintained by a private landowner, with no public access. Other parts may include public trails for hiking, bicycling, or horseback riding. Greenways that include trails provide linkages for people to natural and community resources. They enable citizens to travel without motor vehicles to schools, community centers and parks.

Greenways serve a variety of functions, including recreation, alternative transportation, wildlife habitat, water quality protection, flood hazard reduction, aquifer recharge, erosion prevention, property value enhancement, economic development and scenic beauty.

The Loudoun Greenways plan encourages pathway connections which would provide our own residents with alternative transportation corridors, independent of car ownership. It is a comprehensive plan which takes a "big picture" look at Loudoun's future development. It recognizes the need for Loudoun's existing communities to develop resource corridors which unify the County, creating an amenity for the benefit of business and residential communities as well as the tourist industry.

B. CONTEXT AND PURPOSE

Loudoun County and its county seat, the Town of Leesburg, border the Potomac River in northern Virginia approximately 35 miles northwest of Washington, D. C. The County as a whole offers a wealth of historic and natural features and a blend of urban amenities, rural landscapes, and small communities.

Proximity to Washington and the presence of a major international airport, Dulles, in the southeast part of the County stimulate strong growth trends. While development provides welcome economic opportunities, many citizens are concerned about the effects of growth and the potential for loss of local recreational opportunities and valuable natural, scenic and historic resources. Greenways and trails are one method of preserving some of these features unique to the County.

The purpose of this plan is to acknowledge a commitment to the establishment of a countywide system of greenways and trails. This system should link people and resources, put open space within a short walk of people's homes and connect major regional and national trails. Greenways can protect natural resources and do not necessarily contain trails or have public access. Where
trails provide a link between home and work, an alternative to auto dependent transportation can be provided.

C. RELATIONSHIP TO OTHER COUNTY DOCUMENTS

Loudoun County's Comprehensive Plan consists of several related documents with the General Plan performing the function of an "umbrella" document which establishes county-wide goals and policies. Chapter 8 of the General Plan addresses implementation as a continuing process with future actions which should be undertaken to implement the Plan.

County-wide Recommendation #21 is the action of adopting CPAM 1992-0010, Greenways Plan, as an element of the General Plan. The Greenways Plan would also add one more building block toward implementing policy recommendations for Water Quality Buffers (#5), Scenic River Corridors and Potomac Shoreline Protection (#10), Protection of Endangered and Threatened Habitats (#23), and Rural Transportation Strategies for Bicycle Routes (#18).

In recognition of existing County policy and public testimony which encourage a viable agricultural community, the following goals and policies will apply only to the rapidly developing areas of the County described in the following area plans: Eastern Loudoun Area Management Plan, Dulles North Area Management Plan, Dulles South Area Management Plan, Cub Run Area Management Plan, Leesburg Area Management Plan, and the adopted plans for the Urban Growth Areas of the western towns.

D. COMMUNITY PLANNING PROCESS

The documentation for the greenways and trails system is contained in the 1993 Greenways and Trails Master Plan for Loudoun County and Leesburg, Virginia. This plan was developed by a citizen-government partnership, through an open public process. As a result of a Memorandum of Understanding signed by the County of Loudoun, the Town of Leesburg, the directors of the Leesburg and Loudoun County Parks and Recreation Departments, representatives of the National Park Service's Rivers, Trails and Conservation Assistance Program, and the Northern Virginia Regional Parks Authority, a citizens' advisory committee was formed in the fall of 1989. The group represented the interests of businesses, development, landowners, conservationists and recreationists. The Plan was developed over a two year period and was based on regular public input from public workshops, presentations and public meetings. Documentation of specific public outreach is contained on page 69 of the 1993 Greenways and Trails Master Plan for Leesburg and Loudoun County, Virginia.
SECTION II: COMMUNITY GOALS

A. MISSION STATEMENT

The purpose of a greenways and trails system is to preserve the County’s essential natural and historic resources as the County passes from rural to suburban, to provide recreation for a growing population, and to provide alternative transportation corridors.

B. GOALS OF THE GREENWAYS AND TRAILS SYSTEM

- Link neighborhoods and communities including schools, shopping areas, community centers, parks and other public facilities
- Link towns in Loudoun County.
- Provide recreational opportunities and alternate transportation corridors for foot traffic, cyclists and horseback riders.
- Protect historic resources.
- Protect rivers, streams, and drainage basins.
- Protect ecologically critical and sensitive areas.
- Maintain and link wildlife habitats.
- Provide natural flood and erosion control to discourage channelization.
- Include scenic roads.

SECTION III: POLICIES

A. RESOURCES

A sound greenways and trails system depends on the identification of the County’s significant natural, cultural, recreational and community resources. The Citizens’ Committee dedicated the first year of its effort to identifying and mapping those resources, using a variety of existing data and the knowledge of local citizens. These resources contribute greatly to the distinctive character of the County. They can serve as the hubs and spokes of a greenways and trails network and can provide a basis for making decisions on where greenways should be located. Listed below are the county resources agreed to by the Committee as significant features of the County. These resources are contained in the Geographic Information System Map created by the citizens. (resources described on pages 14, 15, and 16 of the Greenways and Trails Master Plan for Leesburg and Loudoun County, Virginia.)

- State Scenic Rivers
- Perennial Streams
- Floodplains
- Ridges
- Natural Heritage Sites
- Existing and Planned Parks
Greenways Policies

- Existing and Planned Trails
- Historic Sites and Districts
- Historic Settlements
- Schools
- Community Centers
- Discontinued Roads
- Scenic Roads
- Incorporated Towns

POLICIES

1. The inventory of cultural, historic and natural resources should be maintained with the County GIS and should be used for reference in greenway and trail planning.

2. Greenways should be a mechanism to protect important or sensitive resources.

B. PUBLIC PARTICIPATION

The process of turning a plan for greenways into a reality will require a cooperative effort involving many people and organizations. While the total land area of any proposed greenways network is relatively small, its benefits will be widely felt and its many parts varied in terrain, ownership, and proposed use. The County will play an integral role in establishing the system although it is unlikely that a single entity would have the means to acquire or manage an extensive system. Therefore, it is recommended that a network of greenways and trails be owned and managed through a partnership effort, rather than by a single agency organization. The system could be established piece by piece by a number of different entities using a variety of public and private conservation methods. Public agencies, private organizations, businesses, civic groups, clubs and individuals should participate in the creation and management of the system. It is assumed that exact locations of greenways and trails will be determined by the communities of interest.

POLICIES

1. Inform and educate the public about the opportunities generated by the greenways and trails system.

2. Encourage public involvement in the planning and development of the greenways and trails system.

C. DEVELOPMENT STRATEGIES

Members of the community have expressed concern about the loss of open space and the changing character of the County resulting from increased development. Greenways are a way to retain some rural landscapes and incorporate open space within developments. Citizens also
expressed a desire for trails between adjacent developments to allow walking and/or biking to neighbors' houses or other parts of the community. The greenways concept is a mechanism to guide the development process to create useful areas of open space.

POLICIES

1. Incorporate greenways and trails plans into the land development process and land use decisions. Creation of greenways and trails should occur primarily in the developing areas of the County with initial effort focused on the rapidly developing areas of the eastern portion of the County and around the western towns.

2. Create options and incentives which will encourage landowner participation in the establishment of greenways and trails.

3. Coordinate the establishment of greenways and trails with landowners using a variety of conservation methods. Three categories of landowners should be encouraged to participate in the greenways and trails system:

   • The development community: proffers of greenways and trails should be encouraged and referrals administered by the Planning Department with input from impacted agencies and citizens as needed.

   • Private landowners: voluntary donations, conservation easements, bequests, leasebacks, remainder interest and other non-coercive methods should be facilitated to encourage participation by private landowners.

   • Public land: negotiations of right-of-ways through land already dedicated to public benefit including, but not limited to, County, State and Federally owned land, utility easements, and roads discontinued for public maintenance.

4. Parcels under consideration as greenways or trails must meet one or more of the following criteria

   a. **Linkage:** The identified parcel will provide linkage between or to a significant natural, cultural or historic resource as defined on pages 14, 15, 16 of the Greenways and Trails Master Plan for Leesburg and Loudoun County and listed in Section III.A above.

   b. **Resource Protection:** The parcel contains an identified natural resource or species of value.

   c. **Recreation Enhancement:** The parcel will enhance recreational opportunities either by providing a connection to an existing park or recreational facility or providing in and of itself opportunities for hiking, biking or horseback riding.
d. **Economic Enhancement**: The parcel provides increased access to local business and shopping areas including but not limited to bed and breakfasts and tourist sites.

**D. TRANSPORTATION**

Greenways and trails that are designed to link communities and commercial areas can encourage some people to travel without motor vehicles, thus reducing traffic congestion on roadways. Planning for alternative transportation and recreational opportunities for foot traffic, cyclists and horseback riders is an important public responsibility to provide for increased user safety on transportation corridors. A greenways master plan can be an important element of compliance with the Clean Air Act of 1991.

**POLICIES**

1. Multi-use trails should be encouraged within major road corridors as shown in Appendix G of the *Greenways and Trails Master Plan for Leesburg and Loudoun County, Virginia*. Portions of this trail system should be incorporated as an element of the regional COG Bicycle Plan.

2. Loudoun County review of applications for discontinued roads should encourage appropriate conversions to the greenways and trails system.

3. Loudoun County should pursue grant funding of greenway and trail projects which can be combined with other transportation goals and policies.

**E. FUNDING, ADMINISTRATION AND MAINTENANCE**

Financial and management issues are critical to both the initial establishment of greenways and their long-term vitality. Local government funds for greenways may be scarce and greenways frequently must compete for funds with other uses such as developed parks. The mechanisms used for protecting land or securing public access can be a major factor determining the cost of implementing greenways. Public land purchase, the most expensive technique, is only one of a variety of possible techniques. Others include land donations, purchases or donations of easements, landowner agreements and acquisition by nonprofit groups.

Maintenance is one need that is often overlooked; greenway interests may focus on the establishment of the greenway and neglect to consider long-term maintenance. Long-term greenway success will require careful planning for funding and maintenance. Administrative overhead might be reduced if the system were managed by a private organization focused only on the greenway system.
POLICIES

1. Require that established greenways and trails adequately provide for long-term funding, maintenance, and administration for the implementation of the greenways and trails system through public-private partnerships.

2. When possible the County would jointly hold easements to guarantee long-term protection of land.

3. Assure that right of eminent domain is not utilized to establish greenways and trails.

F. ECONOMIC DEVELOPMENT

The Greenways Master Plan recommends the creation of a comprehensive greenways and trails system primarily based on such natural landforms as valleys and ridges. Other elements are based on an assemblage of linear open spaces of various kinds to create a green infrastructure for the County. Like other forms of infrastructure necessary for development, greenways are part of a good business plan. These key elements of a community's memorable image are increasingly becoming today's marketing tools for economic development.

Few communities today can ignore the economic benefit of tourism. Loudoun's primary tourist attractions are its natural and historic resources. The greenways could include a footpath, a horse path, a bike path or none of the above, simply providing visual respite to the urban resident. The W&OD Regional Trail is an example of a greenway which attracts visitors, businesses and residents to Loudoun. One such business, the Cornerstone Bed and Breakfast near Paeanian Springs derives as much as 50 per cent of its clientele from cyclists who ride out from Washington and Maryland to tour the Loudoun area.

In order to attract a balanced variety of businesses, provide housing options with desirable amenities for all income levels, and assist government in managing the resources of Loudoun County, it is time to plan for a greenway system.

POLICIES

1. Loudoun County should incorporate greenways and trails in economic development planning and promotion.

2. Coordinate with an overall tourism plan for Loudoun County.
CPAM 1996-0003
Strategic Land Use Plan for Telecommunication Facilities

Adopted November 6, 1996
Strategic Land Use Plan for Telecommunication Facilities

Adopted as part of Loudoun County’s Comprehensive Plan November 6, 1996
Adopted by:
The Loudoun County Board of Supervisors

Dale Polen Myers, Chairman

Lawrence S. Beerman                         Joan G. Rokus
Jim Burton                                        Elanore C. Towe
Helen A. Marcum                               Steve Whitener
David G. McWaters                              Scott K. York

Prepared Initially by:
The Loudoun County Planning Commission

C. Terry Titus, Chairman

Robert F. Dupree                              Alfred P. Van Huyck
Karl Hellmann                                     Bernard J. Way
George Kirschenbauer                           Teresa White
David Olson                                         John Whitmore

With Staff Assistance From:

James P. “Irish” Grandfield, Project Manager
Jim Wasilak, Planner
Joel Gallihue, Planner
Larr Kelly, Assistant County Attorney
John Lassiter, Zoning Planner
Robert Burke, Fire Marshall’s Office

Loudoun County Department of Planning, 1 Harrison St. S.E.
PO Box 7000 Leesburg, VA 20177
(703) 777-0246
SECTION I: BACKGROUND

A. INTRODUCTION

There are currently more than forty commercial public telecommunication antenna sites in Loudoun County (see “Existing and Proposed Telecommunication Antennas” map available through the County). Changes in commercial public telecommunication demand and technology have caused a great demand for additional antenna mounting facilities, mostly in the form of lattice towers or monopoles. The increased demand for these facilities poses a number of important land use issues for Loudoun County including facilitating collocation of antennas, ensuring appropriate siting and design, and mitigating impacts of telecommunication facilities.

The policies outlined in this document were developed by the Transportation, Subdivision, and Site Plan Committee of the Loudoun County Planning Commission to balance the public demand for commercial public telecommunication service with the County’s desire to avoid proliferation of towers and monopoles. Guidance is provided for the location and design of commercial public telecommunication facilities only, not amateur operations. The intent of these policies is to provide the overall land use strategy for allowing commercial public telecommunication service in Loudoun County, while mitigating any negative impacts.

B. GOAL AND OBJECTIVES

Goal:
Loudoun County recognizes that modern, effective, and efficient telecommunications is an essential part of creating an attractive economic development environment and meeting the desires of its citizens for high quality service. The County seeks to encourage improvements in telecommunications services while mitigating the impacts on its residents, nearby land uses, scenic beauty, and rural heritage.

Objectives:

1. To identify a hierarchy of areas where future commercial public telecommunication facilities can be located, while minimizing the proliferation of towers and monopoles;

2. To require collocation of commercial public telecommunication facilities on existing structures and towers;

3. To attempt to ensure compatibility of telecommunication facilities with nearby land uses;

4. To establish siting and design criteria to mitigate negative impacts;
5. To establish commercial public telecommunication tower and monopole removal policies; and

6. To establish a process by which an applicant can demonstrate their compliance with these policies.

7. To stay abreast of changing technologies that may reduce the need for new towers and monopoles.

C. COMMUNITY PLANNING PROCESS

The proposed policies were developed initially by the Transportation, Subdivision, and Site Plan Committee of the Planning Commission over a three month period in the spring of 1996 that included two public input sessions. As part of their review, the Committee heard presentations from citizens, telecommunication providers, the FCC, Leesburg Airport, and the County’s Fire and Rescue staff. The Committee then reviewed existing County policy and regulations and looked at the policy and regulations of several other jurisdictions.

On May 22, 1996, the Committee presented the recommended draft policies to the Planning Commission Committee of the Whole. The draft policies were then sent to referral agencies for review. The Planning Commission held a public hearing on the draft telecommunication policies on June 12, 1996 and made further amendments to the draft policies at their June 19 work session. The Board of Supervisors held a public hearing on these policies on September 4, 1996 and subsequently added two new policies and revised others. On November 6, 1996, the Board approved this comprehensive plan amendment establishing this document as part of the County’s comprehensive plan.

D. RELATIONSHIP TO OTHER COUNTY DOCUMENTS

Loudoun County’s Comprehensive Plan consists of the General Plan, several area management plans, strategic plans, and related documents. The General Plan provides the overall countywide goals and policies for managing growth and development while the area management plans and strategic plans outline more specific strategies for local planning areas or particular issues. These telecommunications policies are a strategic plan consisting of goals and policies for the siting and design of telecommunication facilities. As such, these telecommunication policies supersede Energy and Communication Policies 4,5, and 6 on page 83 and Energy and Communication policy 2 on page 156 in the General Plan and apply in all areas of the County.
SECTION II. TELECOMMUNICATION POLICIES

A. LOCATION POLICIES

The location policies establish a hierarchy of preferred locations for new commercial public telecommunication facilities. The County’s first preference is to have new antennas collocate on existing tall structures, monopoles and towers in order to minimize the need for new towers and monopoles. When a telecommunication antenna cannot locate on an existing structure for technical or location reasons, the County then prefers that new towers or monopoles be located where they are most compatible with surrounding land uses.

The second level of preferred locations for new monopoles or towers is in industrial and employment areas, within overhead transmission line rights-of-way, and on public sites or volunteer fire and rescue company properties (see the “Public Facility Sites” and “Telecommunications By-Right Zoning” maps available through the County). The policies provide incentives, such as allowing monopoles as a by-right use, for applicants to locate in these preferred areas. In urban eastern Loudoun County, the policies encourage telecommunications antennas additionally on light poles within the VDOT or Dulles Greenway right-of-way, and potentially on towers on existing low-rise heavy industrial buildings.

In order to protect the scenic rural beauty of Loudoun County, commercial public telecommunications towers and monopoles in rural areas will be allowed only by special exception. Furthermore, the County will not allow new towers or monopoles to locate in County designated historic districts.

Countywide Location Policies

1. To minimize the need for new towers and monopoles, the County prefers that new commercial public telecommunication antennas be located on existing buildings, towers, monopoles, water tanks, overhead utility transmission line structures and other tall structures wherever possible. Commercial public telecommunication antennas should be permitted by-right on all existing towers, monopoles, and other tall structures subject to performance standards to mitigate visual impacts.

2. Where it is not feasible to locate on an existing structure, the County prefers that new towers or monopoles be located

   a. In planned and zoned industrial and employment areas,
b. Within overhead utility transmission line rights of way where structures greater than eighty (80) feet in height already exist, and

c. On public sites or volunteer fire or rescue company properties where such facilities mitigate adverse impacts on the character and use of the public or public safety site.

3. In order to encourage location in industrial and employment areas, commercial public telecommunication monopoles up to 199 feet in height should be a by-right use, subject to performance standards to mitigate visual impacts, in areas that are both planned and zoned for industrial and employment uses (such as the GB, PDGI, PDSA, PDOP, PDIP, PDRDP, and MRHI zoning districts but not the employment areas within PDH districts) provided that the monopole is not located within 750 feet of a residentially zoned property.

4. In order to facilitate use of volunteer fire and/or rescue company sites, telecommunication monopoles should be permitted as a by-right use up to 199 feet in height, subject to performance standards to mitigate visual impacts, on fire and/or rescue sites in rural and agricultural areas (specifically A3, A10, A25, all CR, and RC zoning districts). In addition, The County encourages use of other public sites where telecommunication uses should be permissible as an accessory use by special exception. Any Zoning Ordinance amendments should also consider adoption of visual impact performance standards to mitigate impacts on adjacent residential or other sensitive uses.

5. Except for areas where towers or monopoles are permitted by right, an applicant for a new commercial public telecommunication tower or monopole will demonstrate to the County that location on an existing tall structure is not feasible. An applicant will evaluate the feasibility of using existing or approved towers, monopoles, or other structures greater than 50 feet in height within a one mile radius of any proposed site in the Eastern Loudoun Urban Growth Area and within a two-mile radius elsewhere in the County. Technological, physical, and economic constraints may be considered in determining unfeasibility. Collocation may be determined to be unfeasible in the following situations:

a. Planned equipment would exceed the structural capacity of existing and approved towers or monopoles, considering existing and planned use of those towers, and such towers or monopoles cannot be reinforced to accommodate planned or equivalent equipment at a reasonable cost;

b. Planned equipment will cause interference with other existing or planned equipment for that tower or monopole, and that the interference cannot be prevented at a reasonable cost;
c. Existing or approved towers or monopoles do not have space on which planned equipment can be placed so as to provide adequate service; or

d. Existing or approved towers or monopoles will not provide adequate signal coverage.

6. The County encourages new towers and monopoles to locate in overhead utility transmission line rights of way where there are existing tall structures. The Zoning Ordinance should be amended to allow monopoles up to 199 feet in height by-right, subject to performance standards, within overhead utility transmission line rights of way where there are existing transmission support structures greater than eighty (80) feet in height.

Urban Location Policies

1. The County should revise the Zoning Ordinance to allow towers up to 40 feet in height on existing buildings in areas which are both planned and zoned for heavy industrial uses (such as MRHI and PDGI) subject to performance standards to mitigate visual impacts.

2. The County encourages the location of commercial public telecommunication antennas on light poles and other existing tall structures in the right of way of the Dulles Greenway and VDOT’s arterial roads.

Rural Location Policies

The County recognizes the importance of maintaining the natural scenic beauty and historic character of the rural and historic areas. As such, monopoles and towers are prohibited within the County’s Historic and Cultural Conservation Districts. As in urban areas, the County prefers locating new antennas on existing towers, monopoles or other tall structures. When existing structures cannot be used, new monopoles or towers should be sited within the right-of-way for overhead utility transmission lines where the visual impact of an additional tall structure would be minimal. Elsewhere, towers and monopoles should be located in rural areas only by Special Exception and subject to design criteria for mitigating visual impacts.

1. The County prefers that commercial public telecommunication antennas locate on existing tall structures where possible.

2. Except within overhead utility transmission line rights of way as specified in Countywide Location Policy six (6), commercial public telecommunication towers and monopoles will be permissible in agricultural-residential areas (such as the A-3, A-10, A-25, and CR zoning
districts) only by special exception and subject to performance standards to mitigate visual impacts.

3. Commercial public telecommunication towers and monopoles are prohibited within County designated historic districts.

B. DESIGN STANDARDS

This plan calls for design standards to address visual and land use impacts of commercial public telecommunication facilities. There are two main components of the design strategy. The first is to limit the need for new towers and monopoles by providing for collocation. The second is to mitigate visual impacts through appropriate setbacks, screening, and design. The policies will help minimize and mitigate impacts through appropriate siting and design and provide guidance for development of new Zoning Ordinance performance standards.

Tower and Monopole Design

1. Due to their reduced visual impacts, when technologically and physically feasible, monopoles are the preferred design.

2. Tower and monopole sites should be designed and constructed to the minimum height necessary to accommodate at least three providers on the tower or monopole and provide sufficient land area for additional equipment buildings unless doing so would:

   a. Create an unnecessary visual impact on the surrounding area; or

   b. No additional need is anticipated for any other potential user in this area; or

   c. There is some valid economic, technological or physical justification as to why collocation is not possible.

Countywide Visual Impacts

1. The visual impact of commercial public telecommunication facilities should be mitigated so as to blend with the natural and built environment of the surrounding area.

2. The specific communication facility design issues that should be examined in looking at visual impact are: the setting, color, lighting, topography, materials and architecture. Towers and antennas should be neutral in color to blend with the background, unless specifically required by the FAA to be painted or lighted otherwise.
3. To mitigate the visual and noise impacts of new equipment buildings and accessory uses, these structures should blend in with the surrounding environment through the use of appropriate color, texture of materials, topography, scale of buildings, landscaping and visual screening.

Rural and Historic Areas

1. New commercial public telecommunication facilities sited in rural and historic areas should conform with the following design considerations:
   a. Monopole or tower sites should be sited within areas of existing mature vegetation so that the maximum amount of the structure and associated buildings are screened;
   b. Monopoles or tower sites shall not be located along ridge lines but down slope from the top of the ridge lines to protect views of the Catoctin, Bull Run, and Hogback Mountains, the Short Hill, and the Blue Ridge;
   c. Monopoles or towers proposed where mature vegetative buffering or topographical conditions will not contribute to screening shall demonstrate that there is no existing mature vegetated area nearby that could be used instead. In all cases, the County encourages camouflaging the facility to mitigate visual impacts;
   d. Monopoles or towers should generally be sited toward the interior of a property rather than close to a property line unless a lesser visual impact would occur from locating it elsewhere. Visual impacts should be mitigated by measures onsite rather than relying on offsite conditions for mitigation.

2. When there is not a feasible location with existing mature vegetation then the preferred location for a new tower or monopole is close to existing tall structures.

3. Commercial public telecommunication towers or monopoles on the property of a structure or site that is listed on the National Register of Historic Places should show how the visual impact on views from or toward the structure will be mitigated. The applicant should provide visual imagery from several different perspectives to help determine the extent to which the facility could be designed to mitigate the visual impact on the historic structure or site.
4. Applicants proposing a telecommunication tower or monopole within one mile of a County
designated Historic District or State Scenic Byway should provide both a visual impact
analysis and justification why the tower or monopole could not be sited elsewhere.

Publicly Owned or Controlled Facilities and Volunteer Fire or Rescue Companies

1. Applicants for commercial public telecommunication towers or monopoles must
demonstrate that there will not be any physical or technological interference with the
existing or planned function of the public facility or volunteer fire or rescue company
facility.

2. Required landscaping may be less stringent for public sites or volunteer fire or rescue
company sites where the visual impact of the support building is otherwise mitigated or is
consistent with the surrounding area.

By-Right Uses

1. Commercial public telecommunication monopoles in employment or industrial areas should
locate toward the interior of a lot rather than along the common boundary with existing or
planned residential areas and should mitigate visual impacts onsite rather than relying on
offsite conditions for visual mitigation.

2. Within employment or industrial areas, commercial public telecommunication monopoles
should be separated from residentially zoned property by a minimum of 750 feet. Along
existing overhead utility transmission line rights of way, the 750 foot separation does not
apply.

3. In some locations, such as in industrial areas, required landscaping may be less stringent
where the visual impact of the support buildings is otherwise mitigated or consistent with
the surrounding area.

Arterial Road Corridors

1. The County may consider allowing towers or monopoles in major and minor arterial road
corridor setback areas if the tower can be sited within existing mature vegetation or the
topographical conditions are such that the visual impact of locating within the setback is
less than a nearby location that adheres to the setback.
C. SAFETY AND HEALTH POLICIES

This plan addresses two main issues related to safety and health. The first is the potential for conflict between new towers or monopoles and existing airports. The Metropolitan Washington Airports Authority (MWAA) and the Town of Leesburg have expressed concern with coordination between the commercial public telecommunication providers, the County, and the airport authorities. The Plan calls for a commercial public telecommunications provider to demonstrate to the County that they have contacted the appropriate airport authorities prior to submission of a land development application so that any potential airport issues can be addressed.

The second issue relates to the appropriate abandonment of a site no longer maintained for commercial public telecommunication use. The County has included a policy to require that a site no longer used for commercial public telecommunications be returned as nearly as possible to pre-existing site conditions.

Policies

1. Applicants for any commercial public telecommunications facility shall demonstrate that they have complied with applicable regulations of the FCC and the FAA. If a proposed telecommunications tower or monopole is higher than 200 feet or within (5) five miles of either Dulles or Leesburg Airports, the applicant will provide verification that he/she has notified the appropriate airport authority (Metropolitan Washington Airports Authority or the Town of Leesburg) and that the FAA has determined that the proposed facility is neither a hazard nor an obstruction to aviation.

2. An applicant or its successors shall remove all unused structures and facilities from a commercial public telecommunication site, including towers and monopoles, within 90 days of cessation of commercial public telecommunication use or the expiration of the lease, whichever occurs first, and the site should be restored as closely as possible to its original condition.

D. IMPLEMENTATION POLICIES

The implementation policies specify strategies for the County to execute this telecommunications plan. The policies give guidance to applicants proposing new commercial public telecommunication facilities as well as outline further actions the County intends to take to implement these policies.
1. The County should initiate a *Zoning Ordinance* amendment to develop regulations that comply with this plan. The *Zoning Ordinance* performance standards for commercial public telecommunication facilities should be revised to be in conformance with these policies.

2. The County should maintain maps of existing and proposed telecommunication facilities, public facility sites, and areas of by-right zoning for telecommunication monopoles for information purposes.

3. The Joint Annexation Committees for Purcellville and Round Hill should be encouraged to adopt the County’s commercial public telecommunication policies for their Urban Growth Areas.

4. Require all applications for future monopoles and towers to:
   
   a. Demonstrate that the location proposed has resulted from the systematic review of all options from the hierarchy of County location preferences and justify the option selected.
   
   b. Demonstrate compliance with all design criteria. The applicant should provide a photo-image or other similar visual simulation to show the proposed tower or monopole in relation to its surroundings. The applicant should provide such visual imagery from several different perspectives to help determine the extent to which the facility could be designed to mitigate the visual impact on area residences and roads.
   
   c. Address the terms and conditions under which collocation by other users would be acceptable.

5. Applicants for proposed new towers should notify in writing and meet with citizens in the vicinity of the proposed site at least three weeks prior to the Planning Commission public hearing.

6. Applicants for proposed new towers are encouraged to provide space on the tower for Loudoun County Fire and Rescue communication purposes.