

## Chapter 8 Implementation

### Introduction

Planning is a continuous process. The Comprehensive Plan is intended to provide a vision of the future for Warren County. The Plan is not a static document because communities are always changing. The Comprehensive Plan provides general guidelines and recommendations to the County for proper evaluation of piecemeal improvements and day to day development decisions against their long-range impact upon the County. The Plan is not a document which encourages regimentation. It is, however, a guide which encourages development patterns that permit orderly and efficient community growth within the context of a rural setting.

This chapter is divided into two parts. The first part is a list of the implementation recommendations, by chapter, which would be annual, ongoing activities. These activities would not require extensive use of County resources. However, they might require technical assistance to community organizations involved in such activities.

The second part of this chapter contains specific implementation recommendations, which will require expenditure of County resources. Recognizing that this plan is intended to be a 15-year document, these recommendations have been organized by chapter, by suggested time frames for implementation. The time frames are: 1-3 years, 3-5 years, 5-10 years, and 10-15 years. Placing these activities within time frames, allows the County to develop more specific plans and generate the needed resources to implement these activities. Finally, the time frames are not set in stone. Since the County is continually changing, any specific activity may be implemented as the County deems necessary, regardless of the specific time frame indicated. This allows the County flexibility shifting its resource use to the most important needs at any particular phase of the planning period. **Figure 8.1**, at the end of this chapter, presents the recommendations in an implementation schedule and identifies the organization(s) responsible for the specific activity.

<p><b>The following recommendations should be undertaken on an annual or continuous basis to implement the Plan's policies.</b></p>
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### Chapter 3 - Natural Resources and Environment

**Agriculture** - Protect and enhance prime agricultural soils from erosion and encourage marketing of local produce.

**Best Management Practices** - Encourage the best recognized soil and water conservation management practices. This would include pollution control, with particular attention to ground water contamination for all agricultural, forestry, and development areas, including parking lot runoff. Individual development sites and projects should be evaluated in accordance with the County Comprehensive Plan, Performance Standards, and Zoning Overlay Districts.

**Citizen Participation** - Include County residents on committees and advisory Boards that provide additional input and comment to the Planning Commission and/or Board of Supervisors.

**Encourage Adopt-A-River, Roads** - Encourage beautification programs which would involve and encourage local citizens to respect and preserve the environment.

**Encourage Open Space** – Encourage local citizens to preserve open space by placing their property in scenic easements. Encourage programs that foster preservation and assist farmers, such as agricultural and forestall districts.

**Environmental Impact Statement** - Enforce the County Zoning Ordinance (Section 180-64 A [1]), provision that requires the preparation and presentation of an Environmental Impact Statement by all proposed developers which identifies potential environmental problems and suggests appropriate mitigation strategies.

**Floodway Development Prohibition** - Prohibit development within river and stream floodways. Encourage the use of floodway areas for recreational uses, agriculture, non-structural uses, and natural space. Adopt appropriate measures to protect floodway water resources from agricultural contamination. Also, prohibit the building of storage sheds, pit privies, or septic systems, in the flood zone.

**No-Net-Change** - Continue to prevent no-net-change in runoff at development sites. Drainage techniques normally channel storm water runoff away from the structure and off of the site. The volume, velocity, and sediment content of storm water runoff leaving a developed site should be no greater than pre-development levels. Use Best Management Practices to limit discharge of oil, gas, etc. from parking lots and garages. Special requirements are needed when development occurs in areas such as karst terrain, where storm water directly enters the groundwater through depressions, sinkholes, and fractures.

**Permit Evidence** - Require evidence of all federal, state, and local environmental and health permits as a condition for development approval, thereby assuring that potential air, water, and soil contamination is addressed.

**Preserve Natural Vegetation** - Expressly prohibit site clear-cutting, thereby preserving natural vegetation and trees during development. Require the protection of mature trees and vegetation preservation during development. If tree removal is unavoidable, require replacement plantings. Encourage generally-accepted good forest management practices when private logging operations are anticipated. Where vegetation is removed, require grass seeding for erosion control.

**Recycling and Education** - Maintain recycling program and continue the County's twice a year cleanup days. Promote recycling through educational programs in local schools and civic associations.

## Chapter 4 - Land Use and Growth Management

**Agricultural and Forestal District Expansion** - Encourage expansion and addition of voluntary Agricultural and Forestal Districts throughout rural areas. A district has recently been approved for the Bentonville/Overall area.

**Aided Self-Help** - Encourage the formation and continuance of aided self help programs.

**Building Codes** - Adopt and enforce federal and state building codes to remove substandard rental housing conditions.

**Citizen Participation** - Include County residents on committees and advisory boards that provide additional input and comment to the Planning Commission and/or the Board of Supervisors.

**Drainage Preservation Easements** - Preserve natural drainage ways and incorporate them into proposed development plans for the area.

**Economic Development** - Continue providing ample sites with adequate infrastructure, thereby developing a diverse economic base for the County.

**Geographic Information System** – Update and maintain a County geographic information system. The system would serve as a centralized location for the storage of and management of all County data.

**Indoor Plumbing/Adequate Sanitation** - Provide technical assistance and create partnerships with non-profits/for profit organizations to provide indoor plumbing and to upgrade substandard conditions for all existing low and moderate income residents.

**Manufactured Housing** - Manufactured housing is a means of providing affordable housing. Continue to allow manufactured housing that is constructed off site, transported in one or more sections, and placed on a permanent foundation, to be used as a dwelling. Establish performance standards to ensure their use creates a safe, sanitary, living environment. The current zoning regulations regarding mobile homes should be periodically reviewed to determine if ordinances are in place and to ensure that they make a positive contribution to the housing stock and to the community.

**State and Federal Program Participation** - Encourage rural property owners, including farmers, to participate in State and Federal Programs designed to foster resource conservation. Such programs might include: Agricultural Cost-Share and Conservation Easements.

**Volunteerism** - Coordinate local resources, non-profit organizations, local agencies, church groups, and for profit organizations, to rehabilitate, build, and upgrade the County's housing stock.

## Chapter 5 - Community Facilities

**Awareness of Existing Tools** - Support educational efforts by promoting awareness of existing tools as is done in *A Property Owner's Guide to Resource Protection*, the Virginia Department of Conservation and Historic Resources publication.

**Citizen Participation** - Include County residents on committees and advisory boards that provide additional input and comment to the Planning Commission and/or Board of Supervisors.

**Communication Center** - While the current communications center is operating well under the management of law enforcement, a joint operated communications center should be established and maintained with the appropriate policies and procedures in place, as well as appropriate fire and rescue training for the communications officers.

**E-911 Management** - The County should fund a person to maintain the E-911 System, maps, road names, house numbering, and equipment list. Additionally, this person would provide other logistical support to the Joint Communications Center necessary to provide the highest quality of service to County citizens.

**Endowment Fund** - Support and encourage the creation of an endowment fund to provide additional Library service such as: computers, typewriters, and other related equipment and services.

**Equipment & Training** - Continue funding for special equipment, as well as regular and specialized training to maintain the level of fire and rescue services needed to provide quality service to Warren County citizens.

**Historically Significant Open Spaces** - Encourage and assist property owners to voluntarily place scenic easements on lands associated with historic buildings, sites, and archaeological resources representing all the County's historical time periods and cultures.

**Insurance** - Continue the funding of a comprehensive County-wide insurance plan for volunteer fire and rescue companies.

**ISTEA & Other Transportation Grants** - Explore and apply for transportation grants for hiking and biking trails.

**Pilot Recycling Program** - Encourage and support a private pilot program of street side pick-up of recyclable materials in one of the County's larger neighborhoods. If this program is successful it could be expanded into other areas.

**Public Education/Participation** - Encourage school system and community wide participation in an historical resources management program through education and public awareness. Additionally, provide encouragement for the incorporation of environmental concept curriculum in the Warren County Schools and in civic associations.

**Recreational Review** - Periodically evaluate recreational facilities and programs to determine if the community's needs are being met. This can be accomplished through regular surveys of residents and facilities' users.

**Residential Institutions** - Require that nursing homes and similar institutions to provide passive open space and on-site outdoor activity facilities.

**Review Development Proposals** - Review development proposals which might adversely affect historic resources when granting permits for development or other forms of land alteration, such as grading and mining. Negotiate mitigation measures where possible.

**Rural Historic Resources Survey** - Continue to follow the policies and recommendations set forth by the 1991 Rural Historic Resources Survey Report of Warren County. Regulate and control development activities to prevent impairment to historical sites.

**Scenic Byways** - Support the Virginia Scenic Byways and Scenic Rivers programs.

**Sheriff's Department Review** - Conduct yearly reviews and evaluations of the Sheriff's Department's services to ensure that resources are being effectively used before proceeding with service expansion.

**State and Federal Programs** - Support state and federal programs, such as the National Register of Historic Places, which fosters incentives for structures' protection or restoration.

**Support Archaeological Research** - Support archaeological research through preservation and through encouraging developers to allow archaeologists a limited time to excavate their land before development begins.

**Support Organizations** - Support efforts of preservation and cultural organizations and encourage open communications between these organizations.

**Support Owners** - Encourage and assist property owners to pursue state and national register designation. Include tax incentives for major structural or exterior renovation or the donation of protective historic easements.

**Tourism** - Promote the County's historic sites through tourism, via such items as pamphlet distribution by the Chamber of Commerce and by other organizations.

**Volunteer Programs** - Establish a volunteer program for the Park and Recreational Department, thereby increasing of manpower at a minimum cost.

**Waterfront Access** - Acquire land along both forks of the Shenandoah River to ensure public access to the river.

## **Chapter 6 - Economic Development**

**Business Attraction** - Aggressively market the County to industrial and commercial prospects. Emphasize the attraction and growth of businesses that maintain and enhance the County's quality of life.

**Citizen Participation** - Include County residents on committees and advisory boards that provide additional input and comment to the Planning Commission and or Board of Supervisors.

**Education** - Provide students with basic skills to be able to obtain jobs within the local economy.

**Enterprise Zone** - Use the existing enterprise zones to permit new businesses' state, as well as local tax incentives. Provide zone expansions as needed and permitted by State Law.

**Job Opportunities** – Provide job opportunities that pay a living wage, provide health and retirement benefits and demonstrate a positive interest in existing and new industries, as well as in an increased variety of job opportunities.

**Site Identification** - Identify potential sites compatible with the Future Land Use map for industrial, commercial, and office development, based on the following locational and market criteria:

- Availability of infrastructure
- Commercial/Community Center location
- Access to major transportation routes
- Compatibility with surrounding development

**Small Business Assistance** - Develop programs which would assist small business with marketing of products and services. Assist local entrepreneurs to locate and acquire new business financing.

## **Chapter 7 - Infrastructure**

**Citizen Participation** - Include County residents on committees and advisory boards that provide additional input and comment to the Planning Commission and or Board of Supervisors.

**Coordination of Land Use/Transportation Planning Process** - Place more emphasis on coordination between the County, Town, VDOT, staffs on matters related to planning and programming, improvements, and transportation systems' management. Several steps can be taken to improve the current transportation planning process. The County and State should work together to evaluate the County Comprehensive Plan's transportation system implications. A coordinated State and County transportation management policy should address expansion of car-pooling. This is particularly important at the major collector highway intersections serving commutersheds.

**Intermodal Surface Transportation Efficiency Act (ISTEA) & Other Transportation Grants** - Explore and apply for transportation grants for funding of major infrastructure projects.

**Right-of-Way Reservation and New Road Construction** - Preserve right-of-ways for road improvements consistent with the Comprehensive Plan, State Transportation Plan, and CIP.

**The following recommendations should be implemented within 1 to 3 years after the Plan's adoption.**

## **The Top Implementation Strategies**

**Adequate Public Facilities Standards** - From the County's Comprehensive Plan a Level of Service Policies (LOS) must be developed. LOS policies provide the basis and criteria on which to evaluate alternatives and to determine capital requirements. With the establishment of LOS policies, the County would make a clear statement to developers which would reflect the public's expectations for County services. Establishing LOS policies and public services' standards, this would ensure that sufficient services are in place or would be provided as development occurs. LOS standards could ensure that service expansion coincide with new development.

**Capital Programming** - Capital programming has been recognized as a pro-active way of avoiding some of the problems associated with the providing of public facilities. To assure that opportunities for pre-planned expansion are not missed, continued implementation of the County Capital Improvements Program (CIP) is important in meeting future needs. Coordinate the CIP with the County's Comprehensive Plan. Annually evaluate the relationship between the County's available resources and the demands upon the County's public facilities created by the proposed developments.

**Citizen Participation** - Include County residents on committees to develop the overall framework on landscaping/beautification, corridor standards, and other relevant topics. The committees would serve as advisors to the Planning Commission and the Board of Supervisors.

**Voluntary Proffers** – Voluntary proffers provide a direct means of obtaining the needed capital improvements to service new developments. Proffers are developed from a capital program detailing the costs associated with providing additional services. Maintain a proffer system associated with the County’s Capital Improvements Plan (CIP).

### **Chapter 3 - Natural Resources and Environment**

**Directed Development** - Direct the majority of future County development to designated districts where public sewer services are in place or are planned. Limit the future use of on-site sewage treatment systems to those areas where public sewage systems are unavailable. Discourage large concentrations of individual on-site sewage treatment facilities in rural and environmentally sensitive areas.

**Limit Future Development** - Enact zoning provisions which would limit the types and intensities of development permitted in designated conservation and development districts and in such environmentally fragile areas as karst terrain, steep slopes, and flood plains. Particularly sensitive areas should be limited to low density residential uses and park and recreation uses.

**Performance Standards** - Incorporate into zoning and subdivision ordinances new performance standards for environmental protection within sensitive areas which would protect natural features and identify potential hazards such as wetlands, critical plant and wildlife habitat, karst terrain, floodplains, and slopes subject to erosion. Such standards will allow quantification of existing and potential problems and would define performance criteria in excess of minimum property standards applicable to less sensitive areas. Additionally, these standards would address site design and infrastructure.

**Zoning Related Incentives** - Develop zoning criteria that will encourage cluster development while discouraging both residential and commercial strip development. Cluster housing development with the minimum number of outlets to state and County roads, with broad tree and greenway buffers between the structures and public roads, should be given priority consideration and should be rewarded by reduced taxes on land that is left in a natural state or that is dedicated to parks or preserves. Another incentive for such development could be the allowance of additional units clustered within the original site acreage.

### **Chapter 4 - Land Use and Growth Management**

**Accessory Apartment Units** - Permit Accessory Apartment units to be utilized with adequate safeguards to protect the character of existing neighborhoods. This strategy will stimulate new, moderate cost rental housing for both young and elderly households while preserving larger, older homes and allowing elderly homeowners to stay in their residence. The original home should be an owner occupied and should appear from the outside as a single family dwelling.

**Bonus Densities for Affordable Housing** - Grant bonus densities to planned development projects to encourage the provision of more affordable housing as authorized by the 1994 General Assembly. An ordinance provision should be written, allowing bonus densities to support more affordable housing.

**Commercial Apartments** - Permit apartments in conjunction with commercial establishments in village zones.

**Greenways and Landscaping** - Revise development regulations that encourage and provide incentives for the preservation of greenways in development projects. Additionally, continue to provide high landscaping standards associated with development projects.

**Flexibility in housing types** - Foster land use patterns and provide builder incentives to encourage flexibility in housing types by reducing land costs. This type of program can be achieved by planned residential development and cluster development provisions within the County's zoning ordinances. This strategy can also be implemented by allowing maximum flexibility in configuring lots into clusters rather than relying on minimum size lots to determine the desired density in that neighborhood. The increased flexibility will allow for maximum efficiency in providing infrastructure (water and sewer) to homes. Multiple-family housing should be encouraged in areas close to activity and employment centers.

**Cluster Development** - This type of development would aid in preserving open space and in reducing contractor's development costs. This type of development can provide a wide variety of housing types and creative site design.

**Preservation Performance Criteria** - Developments must demonstrate to the County that land use and development meets the following aspects:

- No more land shall be disturbed than is necessary to provide for the desired use or development.
- Preservation to the maximum extent possible, native vegetation consistent with the use and development allowed.
- Any land disturbing activity that exceeds an area of 2,500 square feet (including construction of all single-family houses, septic tanks, and drain fields, but otherwise defined in Section 10.1560 of the Code of Virginia) shall comply with the requirements of the local sediment and erosion control ordinance.
- The establishment of a vegetative buffer around significant sinkholes and karst areas to enhance and protect water quality.

**Public Service Limitation** - As the County develops water and sewer service for the Rural Villages, limits on the expansion of these services into outlying rural

areas must be developed. Without such limits sprawling development patterns will result.

**Stream Buffer Zones** - Designate stream buffer zones to protect water quality, establishing buffer zones along streams where commercial logging operations and other development activities are occurring.

**Zoning Provisions** - Adopt zoning provisions for the orderly growth and development of Rural Villages. These villages should retain their traditional character as they develop into service centers for the surrounding agricultural and rural areas. Additionally, the provision of dual uses on single parcels of land or within an existing building, must be included in the ordinance revision. Finally, allowances must to be made for possible new Villages in the County.

## Chapter 5 - Community Facilities

**Cluster Development** - Encourage developers to utilize cluster development by reducing lot size and/or consolidating lot layout in order to provide compensating amounts of open space within the subdivision. Although no increase in the number of lots is allowed, consolidation of layout would save the developer infrastructure costs and the County would acquire significant open space at no cost.

**Dedication or Payment-in-Lieu** - To support County recreation facility acquisition and improvement needs, require dedication of public park space or payment-in-lieu of dedication, by developers.

**Develop a School Plan** - This plan would identify the school division's for educational instruction and physical facilities needs.

**Education** - Encourage school system and community wide participation in an historical resources management program through education and public awareness.

**Establish Response Priorities of Fire & Rescue Departments** - The Warren County Fire Chief should establish running orders for each of the County's fire and rescue companies in the County such as, which company is 1st, 2nd, or 3rd due in Town and County areas, thus eliminating the duplication of equipment on fire calls.

**Implement The 1994 Fire & Rescue Study** - Implemented the recommendations in the report as soon as possible, with special funding if necessary (i.e. Fire Tax).

**Inventory** - Establish an inventory of all parks and recreation facilities, private and public, throughout the Town and County. By keeping an overall view of the all facilities, the County and Town can ensure that needs are met in a timely and cost effective manner.

**Ordinance Revision** - Provide requirements for open space and recreational facilities in the County's zoning and subdivision ordinance.

## Chapter 6 - Economic Development

**Management Guidance** - Work through the Economic Development Authority to provide small and new businesses with the necessary management and marketing skills to facilitate success.

**Small Business Assistance** - Develop programs which would assist small business with marketing of products and services. Assist local entrepreneurs to locate and acquire new business financing.

## Chapter 7 - Infrastructure

**Adequate Public Facilities Standards** - Establish public facility and design standards for new development proposals.

**Development of Local and Circulation Plans** - Developing traffic circulation plans for each community center and/or village center to provide adequate traffic facilities and access control on a smaller scale.

**Highway Corridor Overlay Zoning** -.Overlay zoning should include access controls, transportation impact analysis for high volume-uses, as well as design and landscaping requirements. Overlay zoning brings additional design requirements and standards above those of the underlying zone

**Lower Threshold for Land Disturbing Permit** - Lower the threshold from 10,000 to 5,000 square feet for the issuance of a Land Disturbing Permit in lieu of an erosion and sediment control plan.

**Revise Ordinance** - Revise the existing ordinances pertaining to septic systems in the County. Increase the development and/or design standards for County septic systems. Establish a buffer between septic systems and perennial streams and the Shenandoah River.

<p><b>The following recommendations should be implemented within 3 to 5 years after the Plan's adoption.</b></p>
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## Chapter 3 - Natural Resources and Environment

**Natural Space Requirements** - Establish natural space requirements and limit the extent to which a site can be covered by impervious surfaces. Requirements should specify minimum areas that must remain undisturbed and available for stormwater infiltration and site vegetation. There should be a maximum retention of natural vegetation and trees related to open spaces, with site clear-cutting

expressly prohibited. A minimum resource protection buffer of 50 feet must be required along areas of karst terrain, wetlands, perennial rivers, and streams.

**Permit Evidence** - Require evidence of all federal, state, and local environmental and health permits as a condition of development approval, thereby assuring that potential air, water, and soil contamination is addressed. Local standards will have to be written.

**Slope Density Regulation** – Investigate controlling development, including building permits, in areas where the site slope could pose an environmental danger. Enact slope density regulations.

**Views, Vistas, Tourism, and Rural Character** - To preserve views from the Skyline drive and vistas along County roads, both vital to tourism and rural character, discourage clear cutting and unnecessary reduction of tree cover and other natural vegetation by application of best management practices. Encourage cluster development and discourage strip development.

## Chapter 4 - Land Use and Growth Management

**Indoor Plumbing and Adequate Sanitation** - Provide technical assistance and create partnerships with non-profits and for profit organizations, to provide indoor plumbing and to upgrade substandard conditions for all existing low and moderate income residents.

**Ordinance Revision** – Continue to require as part of the County’s Zoning Ordinance, that commercial forest activities, including the sale of trees, in residential areas be conducted in accordance with the guidelines established in the *Logger's Guide*, Virginia Department of Forestry, latest edition. The Ordinance should require that property owners submitted a pre-harvest plan prior to conducting logging activity. The pre-harvest plan should include a map identifying the following:

1. Property boundaries
2. Streams and drainage
3. Critical areas
4. Road and trail locations
5. Stream and drainage crossings
6. Log landings and mill seats
7. Stream-side management zones (SMZ's)
8. Other environmental concerns

Other items that should also be considered include:

1. Road and trail specifications
2. Harvesting equipment to be used
3. Timing of the harvest
4. Logging contract specifications

5. Special planning for wet areas
6. Obstructions such as rock outcroppings
7. When and where best management practices will be used

**Timber Resources** - Commercial and non-commercial forest cutting should be conducted to ensure long term forest viability and to minimize negative environmental impacts, particularly along streams, rivers, and wetlands. Water resources can be protected by providing buffer zones along these environmental features.

## Chapter 5 - Community Facilities

**Alternative School Funding** - Explore alternative funding sources for the school system, such as private sector grants and partnerships. Support the development of the Warren County School private endowment fund.

**Government Center Future Expansion** – Purchase additional building next to the Government Center to allow for expansion in the future.

**Meet Existing Needs First** – Evaluate replacement sites for all of the existing compactor sites prior to looking at additional sites.

**Parking Facilities** - Provide adequate parking for citizens as well as for employees.

## Chapter 6 - Economic Development

**Increase Capital** - Work with the local finance and banking community to increase the availability of seed and start-up capital for new and small businesses.

**Public/Private Partnerships** - Encourage public/private partnerships that will provide well serviced and properly located industrial sites which can be developed quickly.

**Shell Building Program** - Invest in a shell building program that will provide available space as well as incubator facilities for new and small businesses.

**Tourism** - Continue to emphasize and promote tourism as an industry. This should be accomplished through coordination with local, regional, and State Tourism Development Boards and agencies.

## Chapter 7 - Infrastructure

**Commercial and Industrial Parks** - Discourage linear development and encourage interior uses in planned parks where access control is efficient and where interior roads, rather than arterial or collector roads, provide access to each use. This land use technique will discourage shallow strip development.

This technique provides deeper commercial and industrial zoning and permits effective site design to maximize access point usage. When between two and five commercial uses can use a single access point, substantial traffic flow improvement can result.

**Preserve Water Quality-Revise Ordinance** - Revise the existing ordinances pertaining to the County's septic systems. Increase the development and/or design standards for the County's septic systems. Establish a buffer between septic systems and perennial streams and the Shenandoah River.

**Stormwater Management Plan and Ordinances** - For all new developments, develop and implement a stormwater management plan and ordinances associated with the plan, to address stormwater management issues.

**Traffic Impact Analysis** - Require a traffic impact analysis of all major new projects, as part of the zoning process and implementation of the LOS Policy. This analysis would be used to determine if post development traffic levels and patterns will be consistent with the LOS policy. At a minimum, the traffic analysis should include a description of past and present roadway conditions, existing roadway capacity, traffic accident data, existing and projected traffic volumes (ADT and peak traffic), existing and projected service levels, and existing and proposed sight lines. Where the County has short-term improvements scheduled, the development could include such improvements in the traffic impact analysis. Precise standards for the preparation of these analyses should be adopted.

**Traffic Access Management** - Create, initiate, and support an access management program. Ordinances would ensure that access opportunity is not unnecessarily pre-empted along key road links, or near major intersections, particularly those along the designated Highway Corridor Districts. Consider the following techniques in managing access to principal corridor roadways.

- Limit the number of conflict points by installing physical barriers, modifying driveways, and installing signals at entrances.
- Separate basic conflict areas by regulating the minimum spacing of driveways, spacing driveways optimally in the permit authorization stage, consolidating access for adjacent properties, buying abutting properties, denying access to small frontage parcels, and requiring access via collector streets, such as service roads.
- Minimize the need for traffic deceleration by geometrically designing access points.
- Remove turning volumes or queues from through lanes sections by pavement marking alterations, geometric

design modifications, right-of-way acquisition, or by requiring adequate internal site circulation.

- Adopt guidelines for access type and minimum spacing of intersections.
- Revise zoning and subdivision provisions to require reverse frontage lots on all County roads and to minimize left turn movements or conflicts, both on the site and in the street.

Design driveways in order to achieve clear sight lines based on design speeds as adopted by VDOT. Require that site access and circulation conform to the following standards:

- Arrange vehicular site access to avoid traffic use of local residential streets.
- Require that site access roads have sufficient traffic carrying capacity to accommodate the amount and type of traffic generated by proposed development.
- Require that provisions are made within the road for turning lanes, directional islands, frontage/service roads, driveways, and traffic controls.

**The following recommendations should be implemented within 5 to 10 years after the Plan's adoption.**

### **Chapter 3 - Natural Resources and Environment**

**Coordination With Other Agencies** - In light of the increased pressure on the animal habitats in the National Park and in the County, it is essential that greenways and travel corridors, in cooperation with the National Park and the National Forest, be established in appropriate areas. This would help increase carrying capacity for animals that are so important to tourists, conservationists, and hunters.

**Extend bike and hiking paths** – Cooperate with the Town of Front Royal to extend Front Royal's biking and hiking paths into the County, along the south fork of the Shenandoah River and along routes 55 E., 340 S, and 522 S. Greenways should be established in sufficient width to assure preservation of natural tree growth and seasonal beauty such as trillium, dogwood, and redbud, with which the County is blessed. Such paths and greenways should lead visitors into areas which would help them experience the great year round beauty of our mountains, the bursting forth of life in the spring, and the riot of fall color.

**Recreation** - Provide access to the County's natural features through a variety of means such as biking/hiking paths and public access to the Shenandoah River and tying into existing bike paths. This will allow residents to experience the enjoyment of the County's recreational opportunities.

## Chapter 4 - Land Use and Growth Management

**Related Lands Study** - The Shenandoah National Park is in the process of developing a related lands study in conjunction with counties bordering the Park. Warren County should actively work with the Park Service on the development of a local study for the County's use in planning and development regulations. Additionally, much of the information gathered should be available in a digital format and should to be incorporated into the County Environmental Data Base.

**Focused Development** - Traditionally, villages like Bentonville, Browntown, Limeton, Reliance, and Rivermont, were focused around elementary schools, churches, convenience stores, and the fire hall. With school consolidation, the local village schools are gone and a more mobile population has decreased the importance and viability of village stores. Stricter health regulations and potential pollution problems make additional development difficult in some of the traditional centers. As a way to refocus rural residential growth at these existing centers, the County should consider small scale sewage treatment plants and water systems to serve these villages. Much of Warren County is divided by hilly terrain, rivers, parks, and the National Forest. These conditions make future centralized sewage treatment and water systems prohibitively expensive. Additionally, a central system's spokes promote linear strip development which would destroy our rural character.

**Rural Character** - Construct small sewage treatment facilities in rural villages such as, Browntown, Bentonville, and/or Limeton which could combine services with the Raymond R. "Andy" Guest, Jr., Shenandoah River State Park. Locate future elementary schools in some of the villages, after sewage systems are in place, as a way of giving them a focus and decreasing the busing of younger students.

**Utilize local, state, and federal funds for housing programs** - There should be a concerted effort to review the County's history of housing funding source use. In addition, other funding sources should be identified and utilized. A funding development plan should be developed and timetables established for the application of available funds. Encourage partnerships with County government agencies and non-profits to secure and apply for these funds.

Some of the sources to be explored are:

- Virginia Housing Partnership Program
- Virginia Housing Production Program
- Community Development Block Grants

- HUD Section 236 Program
- HUD Section 202 Housing for Elderly and Handicapped
- HUD Section 8 Housing Vouchers

## Chapter 5 - Community Facilities

**Additional Facilities** - Warren County and the County's Volunteer Fire and Rescue Department have identified a void in the level of fire and rescue protection in the northern end of the County; the Reliance and Rockland areas. This area includes the County's commercial and industrial growth area. The Department is planning to produce a plan to provide for the needs of the citizens in this area using a partnership between the citizens, commercial business/industry, and the County. The Department is projecting implementation within three years. To date, plans include an advanced life support engine that will be used as an A.L.S. first responder for medical calls, while also serving the industrial and residential needs of the community. Additional units would be added as time and resources permit.

**Chase Vehicles** - There should be three chase vehicles strategically placed in Warren County, with three full-time paid paramedics staffing these units during the day and staffed by volunteers at night. This concept would give County citizens the best medical coverage possible with limited funds. This type of program is working well in neighboring counties.

**A Community Center** - The current community center - Raymond E. Santmyers Youth Center is located within town limits. The facility is relatively small and is highly utilized by the community. The Park and Recreation Department had previously identified the need for a larger Community Center to serve the community.

The proposed Community Center calls for 25,000 to 40,000 square feet. Recommendations for possible use include multipurpose rooms, an auditorium, indoor track, gymnasium, sauna, specialized activity areas (such as racquetball or basketball), game room, arts and crafts areas, kitchen, lobby, and rest rooms. An indoor pool facility also is recommended. A daycare activity room may potentially increase facility usage and revenue. User fees would recoup some construction and maintenance costs. The County and Town currently lack space for large group meetings, seminars; as well as large scale business and job fairs needed to secure adequate results.

**Consulting the Virginia Department of Conservation and Recreation** - Take advantage of recreational consultation and workshops offered by the Department of Conservation and Recreation. These services will provide information about streamlining local departmental operations and the best methods of developing, operating, and maintaining, park and recreation programs.

**Educational Opportunities** - Periodically review and evaluate the current programs and ensure that expanded educational programs are provided in a cost efficient manner. Additionally, ensure that the programs use a child/student centered approach.

**Intermodal Surface Transportation Efficiency Act (ISTEA) & Other Transportation Grants** - Explore and apply for transportation grants for funding of major infrastructure projects.

**Library Expansion** - Develop a capital improvements program to fund expansion of library resources and facilities. Such resources would include additional books, seating facilities, typewriters, and word processors, or IBM compatible computers for patrons' use. Additionally, develop branch libraries in County locations where population concentrations are sufficient to support such facilities. Explore the possibility of locating branch libraries in conjunction with new park sites in different sections of the County. Each new branch should have a complete reference collection. Future branch libraries should have staggered hours of operation to meet the residents' needs.

**Nature trails for hiking, cross country skiing, and biking** - These needs can be met by Warren County and the Town of Front Royal joining with adjacent counties to produce Greenways and Trails. These trails would link park lands, conservation areas, scenic landscapes, and historic/cultural sites. Initial projects would extend the Town's proposed trails' plan into the County to link State and Federal Parks with the Town's existing facilities. Such a project could use existing rights-of-way (i.e. road shoulders).

**New School Facilities** - When new facilities are constructed, plan and provide for instruction materials, transportation needs, and renovations (to existing school buildings and administrative offices) as well as for the building of a new schools.

**Special User Groups and Facility Accessibility** - Ensure the availability of a variety of programs for people of all ages and for special user groups, such as the physically disabled. Also, when planning new facilities or upgrading existing ones, design the facility to be completely accessible to the physically disabled.

**Traditional Parks consisting of ball parks and playground facilities** - Facilities should be established near population centers at each side of the County (north, south, east, and west). Acquire tracts of land in each of the County areas to provide fully developed park sites and to allow for future expansion. Future parks and similar facilities must be distributed in County locations where users live. Explore using school sites for additional facilities.

**User Fees** - Develop and expand a system of user fees which would generate revenues for supporting park maintenance, operational costs, and facility improvements.

**Virginia Outdoors Fund** - Apply for Virginia Outdoors Fund money to assist in acquiring and developing recreational lands.

## **Chapter 6 - Economic Development**

**Training Programs** - As identified in the Warren County Strategic Plan, implement an ambassador training program. Approximately 17% of all jobs in the community are in service related positions. These are the people that tourists most often meet, therefore, it is these individuals who often will have the greatest impact on a visitor's impression of our community. It is imperative that service personnel be trained community representatives.

**Water and Sewer Service** - Examine alternative means of providing solutions for servicing the County's water and sewer needs, including State and Federal Agency grant funds. Ultimately, a regional water and sewer authority should be developed. Currently the County does not have a water or a sewer system.

## **Chapter 7 - Infrastructure**

**Development Service Districts** - Development Service Districts are based on the premise that new development can be serviced most efficiently if it is limited to certain County areas. A Development Service District's key to success is the availability of services and capital improvements; therefore, provision of water and other types of infrastructure is mandatory to accommodate anticipated growth.

**Inspection & Maintenance of Stormwater Management Facilities** - Conduct annual inspections of any stormwater control devices by County inspectors to ensure proper facility maintenance. Maintenance can be undertaken by a property owner's association, or by the County through a special taxing district.

**Special Taxing Districts** - Consider using special taxing districts to aid in financing public facilities.

<p><b>The following recommendations should be implemented within 10 to 15 years after the Plan's adoption.</b></p>
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## **Chapter 3 - Natural Resources and Environment**

**Alternative Drinking Water Supplies** – Enhance conservation and appropriate use of ground water. Measure ground water quality and levels. Explore the development of alternative drinking water supplies in areas where groundwater quality or levels are decreasing.

## Chapter 4 - Land Use and Growth Management

**Environmental Hazards** - Determine the nature and magnitude of environmental hazards. Explore, adopt, and implement, means of reducing these hazards.

**Housing Trust Fund** - Consider setting up a local Housing Trust Fund. The Virginia Housing Development Authority (VHDA) and the Virginia Department of Housing and Community Development (VDHCD) administer a State fund to be used as a revolving loan fund to induce the development of low and moderate income housing.

**Public Service Limitation** - As the County develops water and sewer services, limit the extension of such services into outlying rural areas to prevent sprawling development patterns. Additionally, as such services become available for Rural Villages, limits on the expansion of these facilities, outside of the village, must be developed.

## Chapter 5 - Community Facilities

**Ensure Compatibility** - Provide architectural guidelines for new development in historic zones, thereby ensuring compatibility with existing historic structures.

**Local Historic Districts** - Establish historic overlay districts, located throughout the County, as part of the County's zoning ordinance. These districts provide protection over and above the regular zoning regulations for such areas. Local historic overlay districts are established by the Board of Supervisors after required public hearings and may be proposed by any property owner, neighborhood organization, or by any County Board or Commission.

**Neighborhood Parks** - Encourage developers to design subdivisions with a central theme of a neighborhood park that would include playground apparatus, open space, and a hard-surfaced activity area. In addition to providing recreational areas in the County, residents would have the enjoyment of having a park within easy walking distance of their home which would provide limited types of recreation for the entire family.

**Parks and Facilities Distribution** - Available parks and similar facilities must be distributed in the County in locations where users live. Explore using school sites for additional facilities.

## Chapter 6 - Economic Development

**Free Trade Zone** - Maintain designation as a free trade zone especially for areas in and around the Inland Port facility.

## **Chapter 7 - Infrastructure**

**Establish A Regional Water and Sewer Authority** - Develop a Water and Sewer Authority to provide service extensions where appropriate into the County, or to develop County owned facilities.