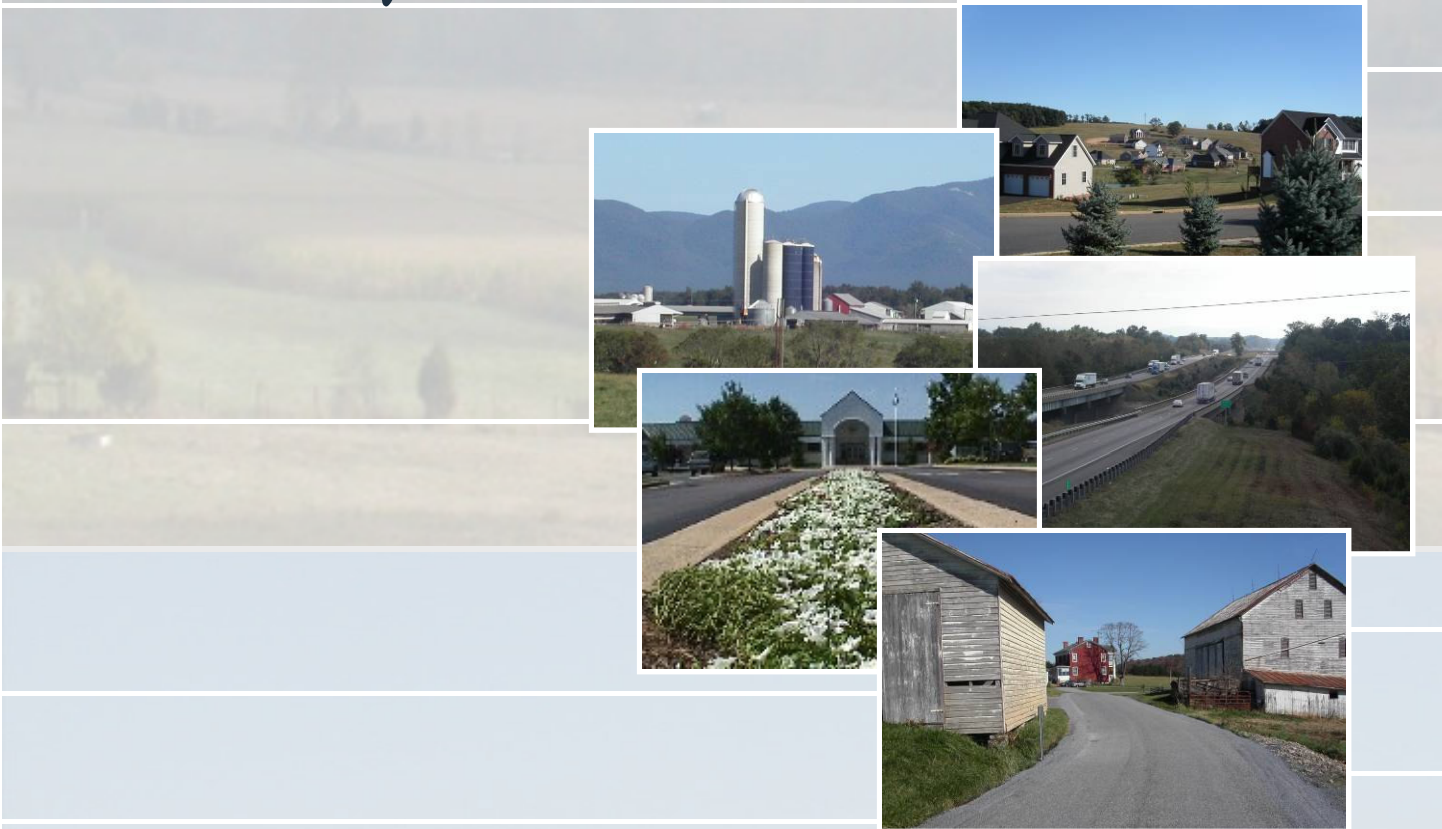


Comprehensive Plan Update

GROWING TOGETHER TO SHAPE OUR FUTURE: 2007-2027

Comprehensive Plan



County of AUGUSTA

Adopted: April 25, 2007
As amended January 28, 2009

Augusta County, Virginia

Board of Supervisors

Nancy Taylor Sorrells, Chairman

David R. Beyeler, Vice-Chairman

F. James Bailey, Jr.

Kay D. Frye

Larry C. Howdysshell

Tracy C. Pyles, Jr.

Wendell L. Coleman

Riverheads District

South River District

Beverley Manor District

Middle River District

North River District

Pastures District

Wayne District

County Administrator

Patrick J. Coffield

Assistant County Administrator

John C. McGehee

Director of Community Development

Dale L. Cobb

Senior Planner

Rebecca L. Earhart

Associate Planner

Jeremy E. Sharp

Planning Commission

Joseph Shomo

Stephen N. Bridge, Vice-Chairman

Wayne F. Hite

Kitra Shiflett

Thomas H. Byerly

Justine D. Tilghman

James W. Curd, Chairman

Comprehensive Plan Steering Committee

Charles Huffman, Chairman

Bill Tueting, Vice Chairman

John Brown

Virginia Carter

Mark Gatewood

Ian Heatwole

Jeanne Hoffman

Steve Klein

Leah Root

Kitra Shiflett

Justine Tilghman

Don Vreuls

James Wenger

Support, assistance, and participation were provided in preparing this Plan by many members of the community at large as well as various county, regional, state, and federal agencies.

Consulting assistance provided by:

Kimley-Horn and Associates

Center for Watershed Protection

Center for Housing Research - Virginia Tech

Renaissance Planning Group

Herd Planning and Design

Chandler Planning

Augusta County Comprehensive Plan Update 2007-2027

Volume 1

April 25, 2007, as amended January 28, 2009

Table of Contents

Volume 1

I. Introduction and Summary	1
A. Summary of this Plan	1
1. The Planning Process.....	1
2. Scope and Organization – How to Read this Plan.....	2
3. The Plan’s Major Recommendations.....	4
4. Summary of General Land Use Policies.....	7
B. The Purpose of the Comprehensive Plan	8
1. The Comprehensive Plan in Virginia.....	8
2. Comprehensive Planning in Augusta County.....	10
II. Population Estimates	15
A. Population Estimates	15
B. Population Projections	15
C. Recommendation	16
III. Thoroughfare Plan	18
A. Overview	18
B. Proposed Thoroughfare Plan Strategies	18
1. Spot Improvements.....	18
2. Upgrading Existing Local Roads to Secondary Roads.....	20
3. Network Development.....	20
C. Proposed Roadway Cross-Sections	21
1. Two-Lane Urban Collector Roadway.....	24
2. Two-Lane Rural Collector Roadway.....	26
3. Four-Lane Urban Collector Roadway.....	27
4. Four-Lane Rural Collector Roadway.....	28
5. Unstriped Urban Local Roadway.....	28
6. Two-Lane Urban Local Roadway.....	29
7. Two-Lane Primary Roadway.....	31
8. Four-Lane Primary Roadway.....	31
D. Sub-Area Thoroughfare Plans	32
1. Weyers Cave and Mount Sidney.....	32
2. Verona.....	38
3. Fishersville.....	38
4. Stuarts Draft.....	39
5. Jolivue, Mint Spring, and Greenville.....	39
E. Existing Safety/Capacity Issues Maps	40

IV. Goals, Objectives, and Policies.....	43
A. Introduction: Overall County Vision.....	43
B. Strategies for Growth.....	43
1. Planning Policy Areas.....	44
2. Future Land Use Categories.....	48
C. Agriculture.....	50
D. Economy.....	54
E. Education.....	56
F. General Government.....	59
G. Historic Resources.....	62
H. Housing.....	65
I. Human Services.....	68
J. Land Use and Development.....	69
K. Library.....	79
L. Natural Resources.....	80
M. Parks and Recreation.....	90
N. Public Safety (Including Law Enforcement and Fire and Rescue).....	92
O. Transportation.....	95
P. Utilities.....	104
V. Planning Policy Area/Future Land Use Map.....	109
A. Planning Policy Area/Future Land Use Map.....	Insert
VI. Implementation Strategy.....	110
VII. Annual Reviews and Annual Scorecard.....	116
A. Annual Plan Review.....	116
B. Annual Scorecard.....	116
VIII. Capital Improvements Plan.....	121
A. Overview.....	121
B. Capital Facility Cost Forecasts.....	122
C. Schools.....	122
D. Public Utilities.....	125
E. Detention.....	126
F. Courts.....	127
G. Emergency Services.....	127
H. Government Administration.....	128
I. Libraries.....	128
J. Parks and Recreation.....	129
K. Solid Waste Management.....	130
L. Stormwater Management.....	130
M. Transportation.....	131
N. Capital Sinking Funds.....	133

Volume 2

IX. Existing Conditions Analysis..... 134

A. Introduction..... 134

B. Description of County and Natural Resources..... 134

 1. Location..... 134

 2. History..... 136

 3. Geography..... 139

 4. Climate..... 139

 5. Geology and Soils..... 139

 6. Groundwater..... 141

 7. Watersheds..... 142

 8. Wetlands..... 143

 9. Steep Slopes..... 143

 10. Floodplains..... 143

 11. Public Lands..... 145

 12. Planning Issues..... 147

C. Supplemental Natural Resources Section..... 147

 1. Introduction..... 147

 2. Watersheds..... 147

 3. Development and Impervious Cover..... 150

 4. Natural Heritage Resources..... 154

 5. Natural Resources and Agriculture..... 157

 6. Natural Resources and Forestry..... 161

 7. Groundwater..... 161

 8. Flood Control..... 171

 9. Surface Water..... 172

D. Demographics and Socioeconomics..... 176

 1. Population Change..... 176

 2. Race and Ethnicity..... 179

 3. Elderly and Persons with Disabilities..... 179

 4. Incomes and Poverty..... 179

 5. Earnings by Place of Work..... 181

 6. Planning Issues..... 181

E. Housing..... 182

 1. Homeownership..... 182

 2. Affordability..... 183

 3. Manufactured Housing..... 185

 4. Housing Demand..... 185

 5. Areas of Concern..... 187

 6. Planning Issues..... 187

F. Employment and Economy..... 188

 1. Diversity of Major Sectors..... 188

 2. Labor and Employment..... 192

 3. Unemployment..... 195

 4. Planning Issues..... 195

G. Transportation	195
1. Sidewalks, Bikeways, and Greenways.....	196
2. Roadways.....	197
3. Incidents.....	202
4. Currently Planned Roadway Improvements.....	203
5. Passenger Rail.....	205
6. Freight Rail.....	207
7. Airports.....	209
8. Planning Issues.....	209
H. Supplemental Transportation Section	211
1. Introduction.....	211
2. Overview.....	211
3. Analyze Existing Transportation Network.....	212
4. Develop Traffic Growth Projections.....	216
5. Identify Future Network Constraints.....	220
I. Community Facilities, Services, and Utilities	220
1. Administrative Facilities.....	220
2. Education.....	223
3. Water and Sewer Service.....	227
4. Solid Waste Management.....	232
5. Energy and Communication Facilities.....	233
6. Police Protection.....	233
7. Fire and Emergency Medical Services.....	235
8. Libraries.....	239
9. Parks and Recreation.....	240
10. Health and Social Services.....	246
11. Planning Issues.....	246
J. Historic Resources	247
1. Surveys and Reports.....	247
2. Historic Sites.....	248
3. Historic Villages.....	251
4. Threats to Historic Resources.....	251
5. Planning Issues.....	252
K. Government Structure and Finance	253
1. Government Structure.....	253
2. Finances.....	254
3. Planning Issues.....	258
L. Land Use	258
1. Existing Land Use.....	258
2. Land Development Regulations.....	264
3. Comprehensive Plan and Planning Policy Areas.....	269
4. Development Patterns.....	272
5. Rezoning.....	274
6. Planning Issues.....	275

M. Buildout Analysis.....	276
1. Zoning Buildout Analysis.....	276
2. Comprehensive Plan Planning Policy Area Buildout Analysis.....	281
3. Conclusions.....	285
4. Planning Issues.....	286
X. Future Conditions Scenarios.....	288
A. Introduction.....	288
1. Assumptions.....	288
B. Scenario 1 – Density Based Controls.....	293
1. Methodology.....	294
2. Development Projection.....	295
3. Implementation.....	299
C. Scenario 2 – Revised Planning Policy Areas.....	303
1. Existing Planning Policy Areas.....	303
2. Methodology.....	306
3. Projected Development.....	310
4. Implementation.....	312
XI. Appendices.....	316

Table of Maps

Volume 1

Map 1 – Thoroughfare Plan Concept Map.....	19
Map 2 – Thoroughfare Plan Weyers Cave, Mount Sidney Sub Area Analysis.....	33
Map 3 – Thoroughfare Plan Verona Sub Area Analysis.....	34
Map 4 – Thoroughfare Plan Fishersville Sub Area Analysis.....	35
Map 5 – Thoroughfare Plan Stuarts Draft Sub Area Analysis.....	36
Map 6 – Thoroughfare Plan Jolivue, Mint Spring, Greenville Sub Area Analysis.	37
Map 7 – Thoroughfare Plan Safety and Capacity Concerns.....	41
Map 8 – Thoroughfare Plan High Crash Road Segments.....	42

Volume 2

Map 9 – Regional Location.....	135
Map 10 – Magisterial Districts.....	137
Map 11 – Wetlands and Floodplains.....	144
Map 12 – Hydrologic Units (Watersheds).....	149
Map 13 – Priority Watersheds for Development Impacts.....	153
Map 14 – Natural Heritage Resources.....	155
Map 15 – Priority Agricultural Watersheds.....	158
Map 16 – Protected Land.....	160
Map 17 – Forest Patches > 100 Acres.....	162
Map 18 – Wildfire Risk Assessment, Wildland/Urban Interface, and Woodland Communities.....	163
Map 19 – ACSA Source Water Protection Zones.....	165
Map 20 – Karst Geologic Zones.....	168
Map 21 – Leaking Underground Storage Tanks.....	169
Map 22 – Priority Watersheds for Groundwater Protection.....	170
Map 23 – Flood Control and Safety Dams.....	173
Map 24 – 2006 Impaired Streams.....	175
Map 25 – Roadway Network.....	199
Map 26 – Passenger Railroads.....	206
Map 27 – Freight Railroads.....	208
Map 28 – Airports.....	210
Map 29 – Average Annual Daily Traffic Counts – 2005.....	213
Map 30 – Road Segments by Function Type.....	214
Map 31 – Road Segments Level of Service - 2005.....	217
Map 32 – Road Segments Classified by Policy Area.....	218
Map 33 – Road Segments Level of Service – 2025.....	221
Map 34 – Failing Road Segments Level of Service – 2025.....	222
Map 35 – Public Facilities.....	224
Map 36 – Water Service Areas.....	228
Map 37 – Sewer Service Areas.....	231
Map 38 – Solid Waste Management Facilities.....	234

Map 39 – Fire and Rescue Locations.....	237
Map 40 – Existing Parks and Recreational Facilities.....	241
Map 41 – Existing Land Use.....	260
Map 42 – Prime Farmlands.....	262
Map 43 – Agricultural/Forestal Districts and Conservation and Riparian Easements.....	263
Map 44 – Existing Zoning.....	266
Map 45 – 2005 Planning Policy Areas.....	270
Map 46 – Development Patterns.....	273
Map 47 – Build Out Existing Zoning.....	280
Map 48 – Build Out 1994 Comprehensive Plan.....	284
Map 49 – Future Conditions Scenario 1: Density Based Controls.....	298
Map 50 – Future Conditions Scenario 2: Revised Planning Policy Areas.....	308

I. Introduction and Summary

A. Summary of this Plan

The Augusta County Comprehensive Plan 2007-2027 is an update of the county's existing Comprehensive Plan which was adopted in 1994. Upon adoption this new Plan replaces and supersedes the 1994 document. The Comprehensive Plan consists of formal goals, objectives, and policies which will guide the land use decision-making of county officials during the next 20 years. The Plan will be reviewed at least every five years and modified or updated as deemed appropriate by the Board of Supervisors.

The Comprehensive Plan is not a law or ordinance. It is a guide for land use decision making. It establishes the long term goals which the county seeks to achieve, and it establishes the policy guidelines for when, where, and how to provide public facilities, change zoning designations, and otherwise facilitate, coordinate, and regulate development. Some of the Plan's policies are implemented upon adoption of the Plan. Other policies are not implemented directly by the Plan, but rather will be implemented through future changes to the county's development regulations after adoption of the Plan. It should also be noted that there is no definition section found in the Plan. Instead, terms are used in this Plan as they are defined by County Code. Where a term is not defined by the County Code, a definition is provided in the Plan at the point where the term is introduced.

Included in the Plan is an implementation strategy, which outlines the tasks that need to be completed in order to implement the policy recommendations and the parties responsible. Also included is an annual scorecard designed to aid elected and appointed officials, as well as staff, in determining whether the vision of this Plan is being implemented. Finally, this Plan includes a capital improvements plan to provide baseline estimates of the cost of implementing the Plan.

1. The Planning Process

This Comprehensive Plan is the result of almost two years of work by county citizens, elected and appointed officials, staff, and consultants. At the outset of the planning process a Steering Committee comprised of 15 people (13 citizens and 2 board members, later revised to just the 13 citizens) was appointed to represent the county and guide staff and consultants through the process, serving as a liaison to the citizens. The Steering Committee held almost 30 meetings beginning in May 2005. Additionally, three worksessions were held to bring the Board of Supervisors and Planning Commission together with the Steering Committee to discuss the Plan's vision, goals, and policies. The public was invited to attend all of these meetings.

The county also held nine public input meetings; one in October 2005, five in January 2006, and three in January 2007. There was significant public participation at each of these meetings, with a total of more than 1800 citizens in attendance. A great deal of research and data collection by consultants and staff

took place along the way, including a citizen survey on development issues that was distributed in the Summer of 2005 and received more than 1500 responses.

All of the information collected during this process was reviewed in detail by the Steering Committee, providing valuable insight into the state of the county and the desires of the citizens for its future. A great many of the suggestions received at the public input meetings made it into the Plan itself.

2. Scope and Organization – How to Read this Plan

Although this Plan is a lengthy and complex document, it is organized in a logical and orderly fashion, as follows:

Section I: Introduction and Summary

This section contains a brief summary of the Plan's recommendations, as well as an explanation of the purpose and legal foundation of the Comprehensive Plan in Virginia.

Section II: Population Estimates

This section contains updated population estimates that were produced for the county following completion of the Existing Conditions Analysis and the Future Conditions Scenarios. These estimates were used as the official estimates for the remaining sections of the Plan but were not incorporated into the prior Plan documents.

Section III: Thoroughfare Plan

The Thoroughfare Plan makes recommendations on ways in which the county can mitigate the transportation problems that are anticipated in the next twenty years. These recommendations include spot enhancements to existing roadways as well as proposed connections that may be needed to respond to specific failing road segments.

Section IV: Goals, Objectives, and Policies

This section contains the goals, objectives, and policies as well as the vision for each of the four Planning Policy Areas established by the Plan. The goals spell out the vision for Augusta County in 2027. Each goal represents an ideal, desired end-state for a particular community resource. Within the goals are numerous objectives and policies. The objectives are specific subsections of the goals, while the policies are recommended actions that the county should take toward the realization of the goals.

Section V: Planning Policy Area/Future Land Use Map

This map ties directly with the recommendations found in the Goals, Objectives, and Policies. The map first divides the county into four Policy Areas, Urban Service Areas, Community Development Areas, Rural Conservation Areas, and Agricultural Conservation Areas. These Policy Areas divide the county geographically into areas of different intensity of development, from the more-developed Urban Service Areas to the more rural Agricultural Conservation Areas. Next, the Future Land Use categories designate specific land uses for parcels in the Urban Service and Community Development Areas.

Section VI: Implementation Strategy

This section outlines the tasks that need to be completed in order to implement the policy recommendations and the parties responsible for completing them. These tasks include policy changes, ordinance changes, and further planning and technical study efforts for particular community resources or geographical areas.

Section VII: Annual Reviews and Annual Scorecard

This section outlines the process that should be followed for reviewing and amending the Plan. The Plan amendment process is designed to take place on an annual basis following the annual review process. The Annual Scorecard is designed to be the initial part of the annual review process, aiding elected and appointed officials, as well as staff, in determining whether the vision of this Plan is being implemented by presenting a multitude of county data that can be tracked annually to determine what trends are present.

Section VIII: Capital Improvements Plan

The Capital Improvements Plan (CIP) sets the framework for linking capital improvements with land use decisions. The CIP provides a systematic approach to planning and financing the capital improvements that will be necessary to implement the policies of the Plan.

Section IX: Existing Conditions Analysis

The Existing Conditions Analysis provides a snapshot of the current conditions of the county from a planning perspective. Demographics, socioeconomics, housing, employment and economy, transportation, community facilities, natural resources, and land use elements have all been analyzed. This section also includes a buildout analysis that depicts what residential growth will occur under current zoning conditions and future land use policies, information which can be used to assess the effectiveness of the current land use regulations.

Section X: Future Conditions Scenarios

The Future Conditions Scenarios are intended to provide an opportunity to evaluate and compare different growth scenarios. Two scenarios were developed; density based controls and revised Planning Policy Areas. Each scenario assumes that growth will occur in the county at the same rate. The scenarios are designed to influence the location, concentration, and type of future growth.

Section XI: Appendices

This section includes a variety of background information collected during the Comprehensive Plan Update process. Background data collected for the Existing Conditions Analysis, survey results, records of contact, and other information is included here.

3. The Plan's Major Recommendations

Vision for Augusta County in the Year 2027

At their visioning workshops of September 13th and 28th, 2006, the Board of Supervisors, Planning Commission, and Comprehensive Plan Steering Committee affirmed the vision concepts and the broad goals and strategies of the 1994 Plan. While the original vision statement from 1994 still reflects the county's basic values and desires concerning its future, a new vision statement provides insight gained from more than a decade of implementing the original plan and a more focused view of the future. Thus, a narrative description of Augusta County 20 or more years in the future, that reflects the essential values of county citizens, as expressed by the county leaders working on their behalf, is:

- **The county's population and employment** will continue to steadily increase, but new growth will be located mainly in the designated Urban Service Areas, thereby preserving the county's agricultural industry and rural character.
- **Urban development** will be encouraged to be compact, pedestrian-oriented, interconnected with a network of streets, sidewalks and trails, and protective of natural resources. New neighborhoods will be places with beauty, identity and charm, which citizens are proud to call home. A blending of uses, housing types, densities and costs will be available to the county's increasingly diverse population.
- **Agriculture** will continue to be the predominant land use in the county and a major part of the economy. The small amount of residential development built within agricultural areas will be incrementally added and very low density, thereby causing minimal disruption to agricultural activities.
- **The county's scenic beauty and natural environment** will be preserved, with farms, forests, mountains, rivers and streams providing the framework and context for development in the urban areas, and continuing to define the landscape in the rural areas.
- **The compact, interconnected pattern of new development** will allow the county to continue to provide high quality, efficient and cost-effective public services and facilities. These may include transportation improvements that maintain and improve safety, capacity and overall mobility for pedestrians and bicyclists as well as motor vehicles, while improving the overall quality of life in neighborhoods.

Policy Areas

Planning Policy Areas are geographic areas designated in the Plan as appropriate for a particular range of future land uses and public facilities. The location and extent of these areas are based primarily upon the existing land use pattern, the location of public facilities and natural resources, and the expected demand for development. The Planning Policy Area/Future Land Use Map shows the locations of these Policy Areas.

The general purpose of designating geographic Planning Policy Areas is to provide a logical and predictable framework for implementing zoning and subdivision regulations and making cost-effective investments in public facilities and services. Additionally, the Policy Areas serve as an implementation tool for many of the policies identified in the Goals, Objectives, and Policies.

Key objectives of the Policy Areas are to:

- Help set priorities for the location of public utilities so as to minimize public costs.
- Designate appropriate areas for various types and densities of land uses so as to minimize conflicts between neighboring residents.
- Ensure that an adequate total amount of land is designated for the full range of land uses needed to meet expected market demand.

Policy Areas are not zoning districts, but are areas which will be eligible for different zoning districts, depending on the suitability of the area for a specific purpose. Policy Areas are somewhat flexible and may be modified by the county as development and fiscal needs change. However, they will be most effective in achieving county goals if they are closely followed in making land use and capital decisions.

Definitions of Policy Areas

Urban Service Areas: Urban Service Areas are defined as areas which are appropriate locations for development of a full range of public and private land uses of an urban character on public water and sewer, in either the immediate or long term future. They include the areas of Fishersville, Stuarts Draft, Verona, Mt. Sidney, Weyers Cave, Jolivue, and Craigsville, among other locations.

Urban Service Areas are priority locations for:

- Significant amounts of urban residential and employment growth
- Expansions of public water and sewer service
- Local and regional public facilities
- Most “one-of-a-kind” public facilities such as hospitals
- Most industrial development – light, medium, and heavy, with adequate facilities and buffers
- Larger scale urban residential and business developments
- Larger scale mixed use developments, where different combinations of residential, business, and industrial uses will be found within a development

Community Development Areas: Community Development Areas are local community settlements which have existing public water or public sewer systems

in place or which have relatively good potential for extensions of either of those utilities. These areas are appropriate locations for future low density, rural land uses based upon road access, the existing land use pattern, and proximity to existing public facilities and services, although they are planned to remain predominantly residential in character.

Community Development Areas are priority locations for:

- Moderate amounts of small scale residential and employment growth at marginally higher densities than in the Rural Conservation Areas
- Limited expansions of public water or sewer service
- Local public facilities
- Small scale, low-intensity commercial and/or light industrial developments

Rural Conservation Areas: Rural Conservation Areas are areas which are substantially subdivided and/or developed with residential uses, which have no public water or sewer service and which have few existing intensive agricultural operations. They are therefore priority locations for moderate amounts of future rural residential development. Ideally, any development would be in the form of incremental additions to existing settlements.

Rural Conservation Areas are priority locations for:

- Moderate amounts of low density rural residential development on individual wells and septic fields, including clustered development (although there are concerns about groundwater protection)
- Non-intensive agricultural and forestry activities

Agricultural Conservation Areas: Agricultural Conservation Areas are areas which have mainly farm or forest uses and have generally the lowest overall density of residential uses, have no public water or sewer service, and have most of the county's intensive agricultural operations. These areas are planned to remain in predominantly agricultural and forestal uses with very little additional residential development.

Agricultural Conservation Areas are priority locations for:

- Minimal, incremental amounts of very low density rural residential development on individual wells and septic fields
- A full range of long term agricultural, forestry and natural resource industry activities, including intensive agricultural operations.

Rural Communities: The designated Rural Communities include many of those existing local community settlements which function as cultural, historic, social or economic focal points for surrounding rural areas. While most do not have public

water or sewer service, and are therefore located in the Rural Conservation or Agricultural Conservation Areas, a few do have public services and are located in a Community Development Area. These areas are designated with a future land use of Rural Community on the Planning Policy Area/Future Land Use Map.

4. Summary of General Land Use Policies

The four Planning Policy Areas are each allocated a portion of the total future residential growth:

- The Urban Service Areas are planned to accommodate at least 80% of the total future residential growth.
- The Community Development Areas are planned to accommodate up to 10% of the total future residential growth.
- The Rural Conservation Areas are planned to accommodate up to 5% of the total future residential growth.
- The Agricultural Conservation Areas are planned to accommodate up to 5% of the total future residential growth.

Population estimates produced for this Plan indicate that approximately 17,700 new residents can be expected in the county by 2027. Given that the 2000 Census estimates that there are 2.56 persons per household in Augusta County that means that the county will need to provide approximately 6,900 new housing units to accommodate those new residents. Should the persons per household rate continue to fall, even more housing units would be required.

If the recommendations of this Plan are fully implemented, the Urban Service and Community Development Areas should easily be able to accommodate 90% or more of those new housing units in developments of moderate to high density. Additional land has been placed in those categories in order to ensure that enough land is available for development at any one time, helping to make sure that land located in the Rural and Agricultural Conservation Areas remains affordable for residents interested in keeping their land in agricultural production.

The Plan balances the land designated for potential development by designating the remaining land areas to remain primarily in agricultural, forestal, and low density rural uses for the foreseeable future. The Plan's policies are aimed at increasing the efficiency of providing both public and private services, thereby minimizing the local tax burden and maximizing the economic base of the county.

The future land use categories function within the geographic areas defined by the Urban Service and Community Development Areas. They serve to identify the specific use and density that is proposed for a parcel. There are thirteen future land use categories identified by the Planning Policy Area/Future Land Use Map.

Those areas include:

- Industrial
- Business
- Public Use
- Community Mixed Use (may include a variety of residential uses at a density of six to twelve dwelling units per acre and, on up to 40% of the total land area, retail and office uses and in some, but not all, cases industrial uses)
- Neighborhood Mixed Use (may include a variety of residential uses at a density of four to eight dwelling units per acre and convenience retail and office uses on up to 20% of the total land area)
- Multifamily Residential (between nine and sixteen dwelling units per acre)
- Single-Family Attached Residential (between four and eight dwelling units per acre)
- Medium Density Residential (between three and four dwelling units per acre)
- Planned Residential (may include a variety of residential uses at a density of four to eight dwelling units per acre)
- Low Density Residential (between one-half and one dwelling unit per acre)
- Rural Community
- Urban Open Space
- Flood Plain

Like the Planning Policy Areas, the future land use categories are not zoning classifications. Instead they act to inform the decision making process on rezoning and development applications. Since the land located in the Rural and Agricultural Conservation Areas is expected to remain rural in character, those Policy Areas do not have designated future land uses.

B. The Purpose of the Comprehensive Plan

1. The Comprehensive Plan in Virginia

There are several fundamental reasons for a locality to prepare and implement a Comprehensive Plan. These include:

- To forecast and prepare for future changes in the community. These may include changes such as population size, employment base, environmental quality, and the demand for public services and facilities.
- To identify the concerns, needs, and aspirations of local citizens for the quality of life in the community and use these to set clear goals for the future.
- To establish policies, or courses of action, needed to achieve those goals and protect the public health, safety, and welfare.

- In Virginia and many other states, to conform with state requirements that every local government adopt and maintain a Comprehensive Plan.

Section 15.2-2223 of the Code of Virginia requires that every locality in the Commonwealth adopt a Comprehensive Plan. Section 15.2-2230 requires the local Planning Commission to review that Plan at least once every five years. Section 15.2-2223 specifically states that “*the comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, including the elderly and persons with disabilities.*”

It further states that the Comprehensive Plan shall be general in nature and that it shall:

- Designate the general or approximate location, character, and extent of each feature, including any road improvement, and any transportation improvement, shown on the plan, including where existing lands or facilities are proposed to be extended, widened, removed, relocated, vacated, narrowed, abandoned or changed in use.
- Develop a transportation plan that designates a system of transportation infrastructure needs and recommendations that may include the designation of new and expanded transportation facilities and that support the planned development of the territory covered by the plan.
- Show the long-range recommendations for the general development of the territory and may include such items as the designation of areas for different kinds of public and private land use, a system of community service facilities, historical areas, and areas for the implementation of groundwater protection measures.

In Virginia, the local Comprehensive Plan is a guide for the governing body to follow in making both long-range and day-to-day decisions regarding all aspects of community development. The governing body can exercise discretion in how strictly it interprets and follows the Plan.

However, the Code provides that the construction, extension, or change in use of streets or other public facilities be subject to review and approval by the Planning Commission as to whether the general location, character, and extent of the proposed facility is in substantial accord with the adopted Comprehensive Plan. The Plan therefore, has great control over the construction of public facilities and utilities, as well as private land uses.

2. Comprehensive Planning in Augusta County

Past Comprehensive Plans for Augusta County

Augusta County's first Comprehensive Plan was adopted in 1970. Only the land use portion was actually adopted by the Board of Supervisors. The basic goal of this Plan was to achieve a balanced pattern of land use throughout the county by defining areas best suited for agriculture, conservation, and urban development, and then encouraging urban development to take place inside defined service areas for public facilities and utilities in order to keep public facility and service costs to a minimum.

This strategy was aimed at preventing a fragmented, inharmonious, and disorderly pattern of urban development. However, the Plan was prepared with relatively little public input, and therefore did not enjoy a sense of "ownership" on the part of citizens or local officials. Thus it was not strongly relied upon by the county to provide guidance over its land use decision-making.

Another Comprehensive Plan was adopted in 1987. The basic strategy of this Plan was to scatter new development in a dispersed pattern throughout the county in response to requests from property owners. This Plan also had relatively little public involvement in its creation. In addition, the relative lack of comprehensiveness and clarity in the policies contributed to an undermining of its effectiveness in providing consistent guidance for the day-to-day decision making of the Board of Supervisors on land use matters. Further, the strategy of promoting scattered development raised concerns.

The most recent Comprehensive Plan was adopted in 1994. A significant amount of growth had occurred since the adoption of the 1987 Plan and the impacts of that growth produced concerns about a variety of issues including the cost and quality of public facilities and services, environmental quality, and agricultural land uses, to name only a few. This Plan focused on establishing clearly-identified geographic areas for the different types of development that were anticipated, specifically aimed at concentrating development where services were available. The development of this Plan included a great deal of public input and it has been generally well received by the public. A significant number of the recommendations of the 1994 Plan have since been implemented by the county.

1999 Comprehensive Plan Update

In accordance with the Virginia Code requirements that a comprehensive plan be reviewed every five years, the county in 1999 undertook a review of the 1994 Plan. The 1999 review considered the entire 1994 Plan, but the consensus of the county officials and citizens was that the Plan remained a good one and that further efforts to implement it were needed. Following the 1999 review, a number of changes were made to the county's development regulations to bring them more in line with the goals of the 1994 Plan. The Plan itself remained largely unchanged.

Updating the 1994 Comprehensive Plan

While the 1994 Plan was very well received and has proven to be a valuable tool for guiding development and providing government services, by 2004 it was clear that portions of it needed to be updated to reflect the changing conditions that had emerged in the last decade. A study, conducted by the Chandler Planning Group, was initiated in early 2004 to determine what aspects of the 1994 Plan needed the most attention in an update process. The results of this assessment showed that the general goals and objectives of the Plan were strongly supported but there were significant concerns about the continued scattered development taking place in the county, the lack of a strong transportation or utilities component in the Plan, the need for more effective agricultural preservation programs, the lack of a strategy for financing new growth, and the lack of a clearly defined strategy for implementing the recommendations of the Plan.

Following receipt of the results of this assessment, the Board of Supervisors determined to move forward with the Comprehensive Plan Update. There were several elements to the update process, each of which was overseen by the Comprehensive Plan Steering Committee:

Existing Conditions (May 2005 through November 2005)

The first phase of the update process focused on determining the existing conditions of Augusta County. The existing conditions element began with another assessment of the desires of county officials for the updated Plan. This time, the county's consultant – Kimley Horn and Associates – interviewed each member of the Board of Supervisors as well as department and agency heads in the county. This process proceeded concurrently with the data collection process, as well as the distribution and collection of a citizen survey on development issues. More than 1,500 responses were received as a part of the survey process. The survey results were tabulated and analyzed by staff and reviewed by the Steering Committee. They were ultimately utilized throughout the planning process. The existing conditions element culminated with the delivery of the Existing Conditions Analysis document and a public meeting at the Government Center in October 2005 to present its findings. Around 400 people were estimated to be in attendance at this meeting. Attendees provided a significant amount of input on the document and the planning process as a whole. A number of revisions were made to the Existing Conditions Analysis based on the public input received at the meeting.

Future Conditions (November 2005 through February 2006)

Once the Existing Conditions Analysis was complete the process moved forward to the Future Conditions Scenarios. These scenarios were intended to evaluate a handful of different planning strategies that could be employed by the updated Plan. After Steering Committee consideration of several different scenarios, two were ultimately selected and presented to the public at five heavily-attended meetings in January 2006. A total of approximately 900 people were estimated to

be in attendance at these meetings. These meetings, held at each of the five county high schools, resulted in significant public input that led the Steering Committee to move forward with the second of the two scenarios, which supported the continued use of the Planning Policy Areas concept from the 1994 Plan.

Updating the Land Use Maps (March through November 2006)

Following the completion of the Future Conditions Scenarios, the Steering Committee moved forward with updating the Planning Policy Area and Future Land Use maps. The process began with the development of a new Planning Policy Area Map. This map was initially developed by county staff using Geographic Information System (GIS) software to match the boundaries of the different Policy Areas to the locations of specific resources, such as public utility lines, intensive agricultural sites, and conservation easements. The Steering Committee then worked to refine the Policy Area boundaries, reviewing individual map change requests and evaluating the overall need for different intensities of development. The process ultimately resulted in a set of four Planning Policy Areas – reduced from the six found in the 1994 Plan – that the Committee felt would be appropriate to guide future development of the county.

The Future Land Use Map was developed following completion of the Planning Policy Area Map. This map was also developed initially by staff using GIS software, matching the boundaries of the future land use categories to existing and proposed land uses. The Steering Committee again worked to refine these boundaries, resulting in a map with eleven separate future land use categories, including several new categories intended to encourage the mixing of uses in development areas like Fishersville and Stuarts Draft as well as maintaining the rural character of communities like Churchville and New Hope. These two separate maps were later merged into a single Planning Policy Area/Future Land Use Map.

Updating the Goals, Objectives and Policies (June through December 2006)

At the same time they were considering the Planning Policy Area and Future Land Use maps, the Committee was working to update the Goals, Objectives, and Policies. A consulting team from Renaissance Planning Group, with assistance from the Center for Watershed Protection, was hired to develop the transportation and natural resources sections of the Plan, including the Goals, Objectives, and Policies (as well as to develop the Thoroughfare Plan and update the existing and future conditions information for those sections). County staff was responsible for updating the remaining sections, which remained generally similar in content, if not format, to those that were found in the 1994 Plan. The Steering Committee was intensively involved in this process, meeting two to three times each month between June and December. Those meetings included two joint worksessions with the Board of Supervisors and Planning Commission that confirmed the overall vision for the Plan. The updated Goals, Objectives, and Policies were completed in December.

Policy Maker Briefings (September 2006)

As the update process proceeded with the development of the Land Use Maps and the Goals, Objectives, and Policies, staff, again with the assistance of the consultant team from Renaissance, held a pair of Policy Maker Briefings. The Policy Maker Briefings were designed to bring together the Board of Supervisors and the Planning Commission with the Steering Committee in order to gain consensus on the vision and significant policies of the Plan. The first briefing was intended to confirm the vision established by the Planning Policy Areas while the second briefing had the goal of linking the agreed-upon vision with the rest of the Plan. The three groups provided valuable input into the process and several of the suggestions that were made were ultimately incorporated into the Plan.

Draft Plan (December 2006 through January 2007)

After completing their work on the different elements of the updated Plan in December 2006 the Steering Committee moved to complete the Draft Plan and present it to the public. As staff put the finishing touches on the Plan, its main points were presented to the Board of Supervisors and the Planning Commission in a third Policy Maker Briefing with the Steering Committee in early January 2007. Following that step, a series of three meetings was held around the county at the end of January to present the Draft Plan to the public. These meetings were also well attended, with a total of approximately 500 people in attendance. Once again, significant public input was collected and incorporated into the document. This public input included suggested text changes as well as revisions to the Land Use Maps.

Plan Adoption (February 2007 through April 2007)

Following the January public meetings, the Steering Committee held a final pair of meetings to discuss the suggestions that were offered by the public. The Steering Committee worked to address each of these suggestions and made a number of changes to the text and the maps of the Plan. On February 20th they voted unanimously to send the revised Draft Plan to the Planning Commission and the Board of Supervisors. The Planning Commission and the Board of Supervisors elected to hold a joint public hearing on the Plan on March 21st, where staff presented the Steering Committee's recommended changes to the public and heard formal comment on the Plan. Following the hearing, the Planning Commission held a worksession where the comments from the hearing were discussed. In response to these comments, the Planning Commission made text and map changes as well. They voted unanimously at their April 10th meeting to recommend adoption of the Plan with changes to the Board of Supervisors. Finally, the Board of Supervisors considered the Plan at their April 25th meeting where they made additional changes to the text and map and voted to adopt the revised Plan.

Fishersville Small Area Plan (September 2007 through January 2009)

Following adoption of the Comprehensive Plan the Board of Supervisors elected to prepare the first of the follow-up small area plans identified in the implementation strategy for the Urban Service and Community Development Areas in and around the community of Fishersville. A ten-member citizen advisory committee was appointed and met six times to consider plan concepts and policy recommendations. Three public meetings were also held to collect citizen input on the plan's concepts. Public hearings were held in August 2008 and January 2009, with multiple worksessions held in between by the Planning Commission and the Board of Supervisors. Several of the land use recommendations included in the Small Area Plan were incorporated into the land use designations for the countywide Future Land Use Plan. The Fishersville Small Area Plan was formally adopted in January of 2009. At the same time associated amendments to this Plan were made.

II. Population Estimates

Kimley-Horn and Associates, Inc. (KHA) compiled population data maintained for Augusta County to serve as the foundation for subsequent efforts to update the Comprehensive Plan. Population estimates, representing past and present conditions, were collected from nationally recognized research centers and used to formulate population projections. A summary of these population estimates through the year 2030 and the recommendations for incorporating population projections into the Augusta County Comprehensive Plan Update are presented below.

A. Population Estimates

A population estimate is an indirect measurement of past or present conditions based on a series of direct measurements, or indicators. These measurements collectively form the framework for reasonably estimating interim year populations between the federal decennial censuses. Direct measurements for estimating population may include tax return information, number of recorded births or deaths, migration statistics, number of licensed drivers, estimated housing stock, and civilian group quarters (household) population. Generally, population estimates are considered more accurate than future year population projections because they are based on current data.

The Demographics and Workforce Section of the University of Virginia's Weldon Cooper Center is responsible for producing Virginia's official population estimates for counties and independent cities. Annual population estimates published by this research center for a fourteen year period (1990–2004) are included in **Figure 1**. As documented by the research center, this information is calculated using a ratio-correlation statistical method developed from a prediction equation based on regression analysis, a statistical technique that measures the relationship between one or more independent variables and a dependent variable. The Weldon Cooper Center generates a new prediction equation once every ten years using decennial population data collected by the U.S. Census Bureau.

Historical population estimates published by the Weldon Cooper Center were compared against similar information maintained by the Real Estate Center at Texas A&M University and the U.S. Census Bureau to validate observed growth trends and formulate future year projections. Information presented by these two research centers is calculated using a tax return method (county/independent city series) and generates slightly different statistics than those developed by the Weldon Cooper Center. However, historical growth trends presented by the Weldon Cooper Center appear to be valid based on information presented by the two independent research centers.

B. Population Projections

A population projection is a conditional (“if, then”) statement about the future based on a set of assumptions developed from a base year population and observed growth trends. In this analysis, a linear extrapolation curve based on observed annual

population estimates between 1990–2004 and a linear trend line for future year population projections using a least squares method are utilized. By using a least squares method, it is possible to minimize the sum of the squared deviations (or vertical distances) between the observed values and computed estimates to anticipate future population. Projections were developed for all three historical population data sets presented by the research centers. Population projections, organized by five year increments (2005–2030), are presented in **Figure 1**.

The Virginia Employment Commission (VEC) is responsible for producing Virginia’s official future year population projections for counties and independent cities. However, it is the experience of county staff that VEC estimates have proven to be significantly lower than actual growth experienced in Augusta County. Thus, the county is electing to investigate other sources of population projections for use in the Comprehensive Plan update process. The VEC population projections for 2010–2030 are included in the attached table for reference.

The results of this analysis support the county’s observation that the VEC population projections are low compared to the linear extrapolation curves developed for all three of the existing population data sets.

C. Recommendation

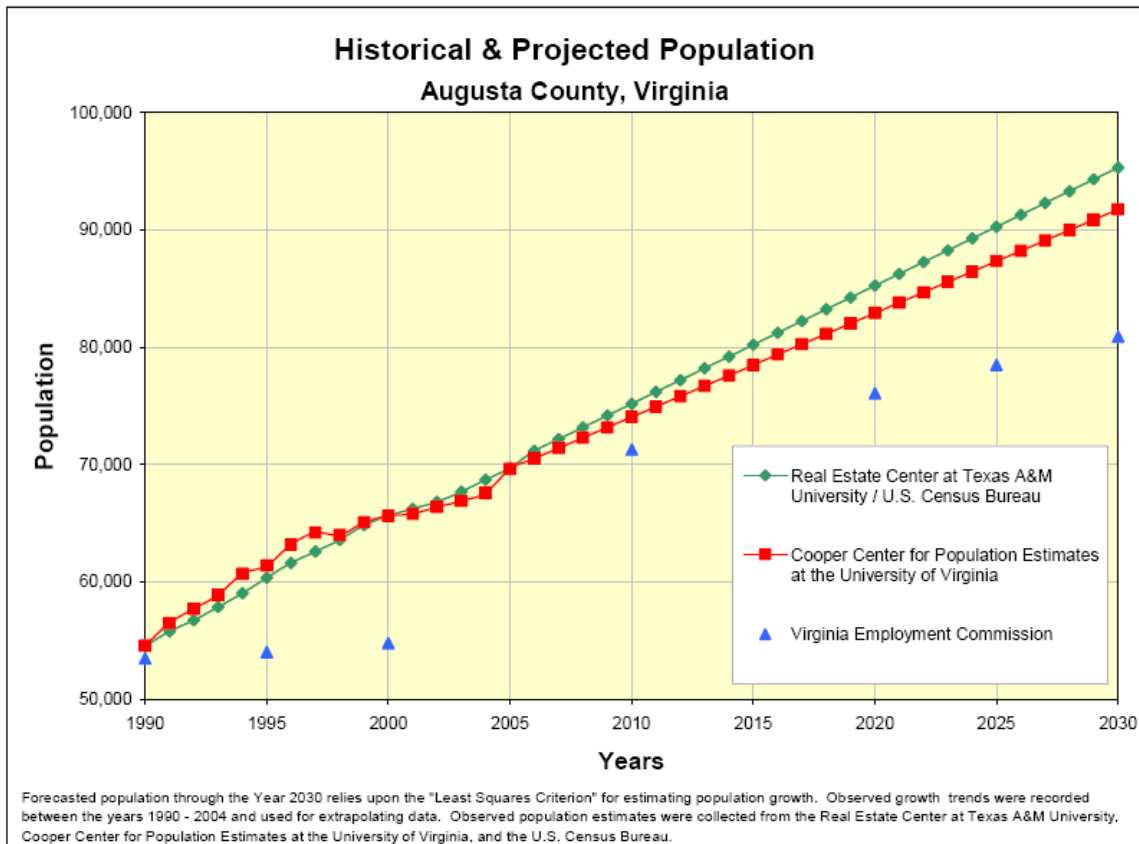
Based on the analysis described above, it has been recommended that Augusta County begin with population statistics from the Weldon Cooper Center data set as they develop the Comprehensive Plan Update. These population estimates are validated by independent research centers and officially recognized by the Commonwealth of Virginia. Furthermore, the trend line for population projections calculated using the Weldon Cooper Center data set is more consistent with those developed for the Real Estate Center at Texas A&M University and U.S. Census Bureau data sets.

Also, it is recommended that the county refine the Weldon Cooper Center population projections (as necessary) when possible. Influential factors that should be considered by county staff may include:

- The holding capacity of vacant, undeveloped land for accommodating new growth (especially steep slopes and environmentally-sensitive areas)
- The community’s tolerance to growth and the potential for self-imposed limits
- Available capacity of public infrastructure and services to support anticipated growth
- Market rate absorption and the impact of economic conditions on growth in the community

These physical, policy, and market forces could impact build-out population, buildout year, or growth rates assumed for these preliminary population calculations, and should be reviewed carefully to provide a comprehensive projection.

Figure 1. Historical and Projected Population for Augusta County 1990-2030



Augusta County Historical & Projected Population Comparison of Available Data Sets *				
	Real Estate Center at Texas A&M University	Cooper Center for Population Estimates at the University of Virginia	Virginia Employment Commission	U.S. Census Bureau
1990	54,600	54,600	53,500	54,600
1991	55,800	56,500	-	55,800
1992	56,700	57,700	-	56,700
1993	57,900	58,900	-	57,900
1994	59,000	60,700	-	59,000
1995	60,400	61,400	54,000	60,400
1996	61,600	63,200	-	61,600
1997	62,600	64,200	-	62,600
1998	63,600	64,000	-	63,600
1999	64,800	65,100	-	64,800
2000	65,600	65,600	54,800	65,600
2001	66,200	65,800	-	66,200
2002	66,800	66,400	-	66,800
2003	67,700	66,900	-	67,700
2004	68,700	67,600	-	68,700
2005	69,700	69,600	-	69,700
2010	75,200	74,000	71,300	75,200
2015	80,200	78,500	-	80,200
2020	85,300	82,900	76,100	85,300
2025	90,300	87,300	78,500	90,300
2030	95,300	91,700	80,900	95,300

* = All population estimates and projections are rounded to the nearest hundred people.

III. Thoroughfare Plan

A. Overview

Based on existing traffic data and projected population growth by Policy Area in Augusta County, traffic volumes in 2025 were projected and levels of service were identified for roadway segments. The 2025 levels of service are displayed in **Map 33**. Traffic conditions on the segments that are already failing based on 2005 conditions are projected to further deteriorate by 2025, with most segments of Interstate 81 reaching an LOS of “F.” Additional segments in the Route 11 corridor and in the Urban Service and Community Development Areas around Fishersville and Stuarts Draft are projected to fail. Other segments at LOS “D” include Route 340 just north of Waynesboro, and segments perpendicular to the Interstate 81/Route 11 corridor around Weyers Cave, Verona, and Staunton. The following Plan provides recommendations for mitigating the projected failing segments.

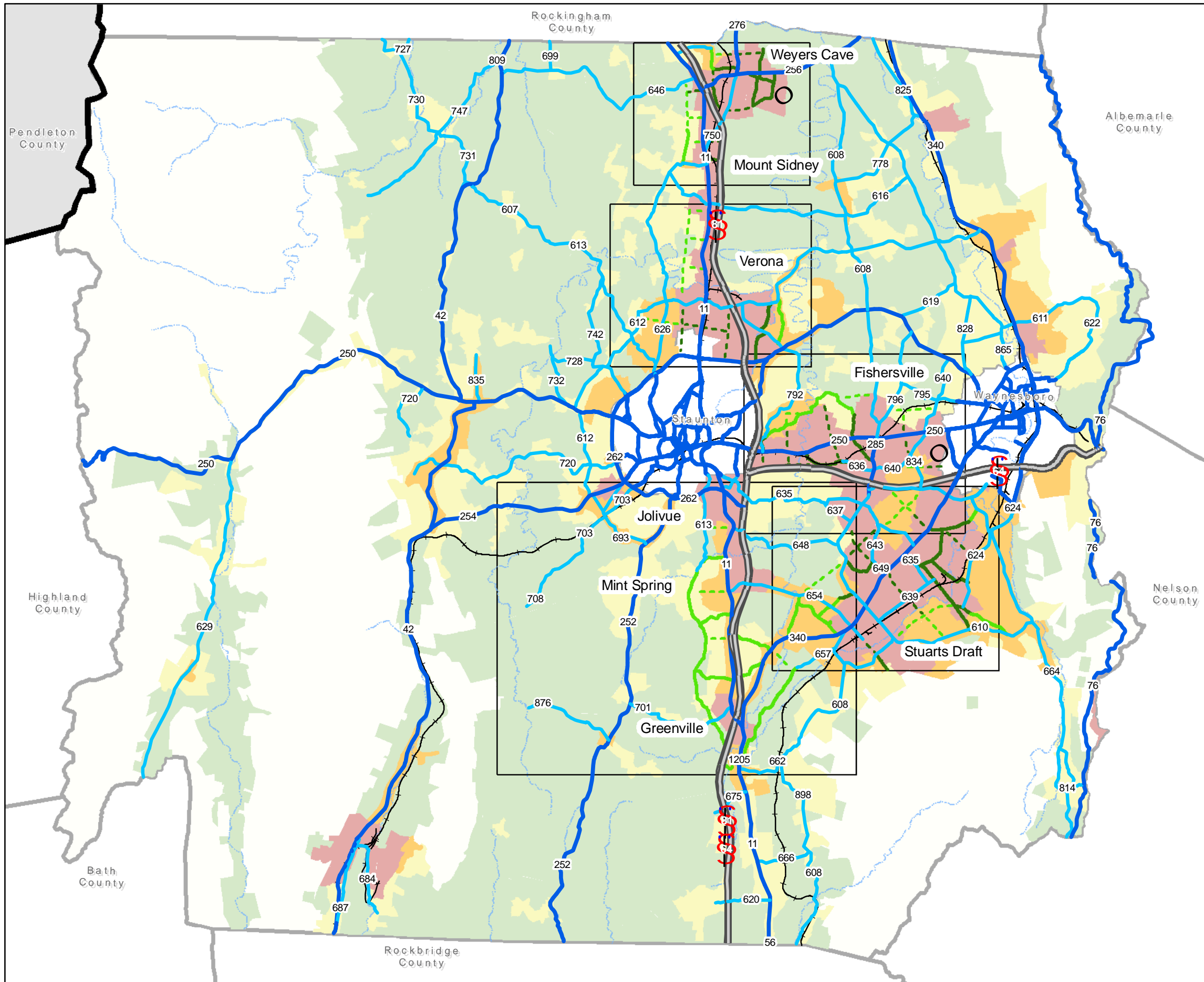
B. Proposed Thoroughfare Plan Strategies

During the Augusta County Comprehensive Plan Steering Committee Meeting on October 19, 2006, the Committee completed an exercise to prioritize the type of roadway improvement strategies that would be most effective, feasible, and appropriate based on the Policy Area that each roadway segment falls within. In general, the strategies recommended for Urban Service Areas were similar to those recommended for Community Development Areas, while the strategies recommended for Rural Conservation and Agriculture Conservation Areas were also similar to one another. Improving existing roadways ranked as the highest priority for all Planning Policy Areas, while the development of road networks also ranked highly for Urban Service and Community Development Areas. The priorities from the Committee are used in the Thoroughfare Plan, shown in **Map 1**, to generate the recommendations for mitigating projected failing road segments in 2025. The strategies fall into three general categories proposed in the Thoroughfare Plan:

1. Spot Improvements

This strategy involves making small-scale, strategic improvements to existing road segments to correct design deficiencies that currently limit the capacity on these roads. Spot improvements may include strategies such as applying access management strategies to limit excessive turning movements from roadways, improving or coordinating traffic signal timings, or adding turning or through lanes to alleviate bottlenecks. As these are typically the least costly types of improvements to make, they were recommended as the first priority strategy for all Policy Areas.

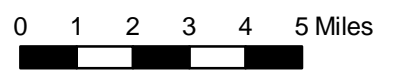
Detailed corridor studies are typically used to identify the specific type and location for spot improvements. Corridor studies are recommended for all failing road segments to identify potential spot improvements and assess their cost and



Legend

- Interstate
- Primary
- Secondary
- Railroads
- Rivers and Streams
- Airports
- Enhance Local to Urban Secondary, 2 lane
- Enhance Local to Rural Secondary, 2 lane
- Proposed Urban Secondary, 2 lane
- Proposed Rural Secondary, 2 lane
- Urban Service Area
- Community Development Area
- Rural Conservation Area
- Agricultural Conservation Area

NOTE: This map depicts a conceptual future roadway framework as part of the overall County Thoroughfare Plan. It generally shows existing roadways (except for local roads), a conceptual grid of ideal roadway spacing (approximately one mile spacing) and potential future roadway connections. It should be noted that all potential connections shown are also conceptual in nature and are not intended to represent actual proposals for roadway alignments. The need for future roads and potential alignments should be confirmed with more detailed area-specific plans.



Thoroughfare Plan
Map 1
Concept Map
 Augusta County
 Comprehensive Plan
 2007-2027



effectiveness compared to strategies such as road widening or constructing parallel roadways. The two highest priorities for corridor studies are:

- a. Route 11 countywide; and
- b. Route 608 from Route 340 to Route 610.

Spot improvements have already been recommended in recent corridor studies for Route 608 from Route 340 to Route 254 and Route 636/640 from Route 250 to the Augusta Medical Center.

2. Upgrading Existing Local Roads to Secondary Roads

This strategy is also designed to increase the capacity of existing roadways, but may necessitate more comprehensive and expensive improvements to existing roads. Local roads likely do not meet current secondary road standards based on pavement type (or lack of paving), lane width, or roadway geometry. However, many local roads in Augusta County are located where they have the potential to make a vital connection in the secondary road network. By upgrading existing roads rather than constructing new roads or widening existing roads, additional network capacity can be provided at a cost that is most likely cheaper than other road construction strategies. As this strategy is similar to spot improvements in that it improves conditions on existing roads rather than constructing new roads, this strategy was also recommended for all Policy Areas.

3. Network Development

Where spot improvements and road upgrades cannot improve the capacity on a roadway adequately to improve the LOS to “C” or better, new road construction to create a network of streets is the next priority for mitigation in Urban Service and Community Development Areas. The network is intended to relieve traffic on existing congested roadways (e.g. Route 11) by providing alternative travel paths that allow travelers to make local connections that bypass the congested roadways, resulting in more direct travel with shorter vehicle trip lengths. Road networks are also vital for limiting future congestion in currently undeveloped Urban Service and Community Development Areas where the networks help to diffuse traffic throughout the network rather than concentrating it onto a limited number of major roads. Networks also serve the county’s goal of promoting walkability in communities, as pedestrians typically will walk only ¼ of a mile on average for most trips. Short block lengths provide opportunities for making walking trips that may not be possible with more sparsely spaced roads.

The road network recommendations should be considered conceptual in the sense that they are not proposed alignments but rather are general locations where a road connection would make a vital link in the network and would help to relieve traffic on existing congested roadways. An ideal grid of streets includes collector streets spaced ½-to-one mile apart with local streets spaced 300-600 feet apart. The Thoroughfare Plan demonstrates two layers of a proposed collector road network:

- a. Conceptual Grid: The conceptual grid is an idealized overlay based on a collector street spacing of ½-to-one mile between collectors. This grid is illustrative only.
- b. Proposed Connections: The proposed connections are conceptual road locations that provide the road connections necessary to enhance the existing road network to function more closely to the idealized overlay grid.

The Thoroughfare Plan is intended only to identify the need for the proposed collector connections. Not every proposed connection may be feasible as they do not take into account existing development or features such as railroads, rivers, wetlands, and topography that may present a challenge to their development. The precise alignment and feasibility of the roads will need to be determined through more detailed studies, such as small area plans, and coordinated through specific development proposals. The small area plans and development proposals should also provide alignment recommendations for the local street network.

The proposed connections also include recommendations from approved studies, such as the proposed Triangle Drive extension, the Route 636 extension, and Alternative “A,” or the Route 909 extension, from the Stuarts Draft Transportation Study.

C. Proposed Roadway Cross-Sections

The proposed roadway cross-sections illustrate context-sensitive applications of VDOT standards that support the transportation and land use goals of the Comprehensive Plan. Whereas the conventional roadway design in Augusta County is appropriate for moving vehicles safely and at high speeds of travel, this design places a heavy burden on a small number of facilities while encouraging development patterns that are inconsistent with the county’s vision for future growth and development. In contrast, the road types proposed here are intended mainly for shorter local and commuter trip-making as opposed to long-distance regional travel, and place more of an emphasis on providing for multiple modes of travel while enhancing existing and future community design. This approach is intended to achieve better balance between the need to move vehicles and the need to create livable communities.

In the following cross-sections, some dimensions are provided as a range where the precise widths will need to be determined based on the function of the roadway and the context within which the road fits in the community. It should also be noted that the proposed cross-sections are idealized without consideration for right-of-way constraints. Dimensions may need to be modified or elements of the cross-sections may need to be removed based on the characteristics of a roadway corridor and the availability of right-of-way. While the recommendations in the thoroughfare plan are for two-lane roads, four-lane cross-sections are also presented below in the event that a road widening or new four-lane road is proposed in the future. Local coordination

with the VDOT Residency is essential to the successful design and approval of context-sensitive road facilities. The standards published in the Institute of Transportation Engineers' *Context Sensitive Design for Major Urban Thoroughfares* should be considered in addition to VDOT design standards.

All proposed new road connections on the Thoroughfare Plan map are intended to be secondary roads. Additional local roads are recommended within Urban Service and Community Development Areas, but their precise locations and alignments need to be determined through small area plans and development proposals to meet the connectivity standards outlined in the Transportation Element of the Comprehensive Plan. The following eight roadway types are proposed for the Thoroughfare Plan, along with an indication of where these roadway types are appropriate:

Table 1. Proposed Roadway Types by Planning Policy Area

	Roadway type	Planning Policy Areas
1	Two-lane urban secondary roadway	USA
2	Two-lane rural secondary roadway	CDA, RCA, ACA
3	Four-lane urban secondary roadway	USA
4	Four-lane rural secondary roadway	CDA, RCA, ACA
5	Unstriped urban local roadway	USA
6	Two-lane urban local roadway	USA
7	Two-lane primary roadway	USA, CDA, RCA, ACA
8	Four-lane primary roadway	USA, CDA, RCA, ACA

Only the first two of these roadway types are recommended in the thoroughfare plan maps. The two-lane urban commercial roadway is intended for all proposed collector roads or local-to-collector upgrades within the Urban Service Areas. A variation of this road type is also provided for use in a residential area, but as a collector road is intended to carry a moderate volume of traffic, commercial activity is typically more appropriate along a collector corridor. The two-lane rural roadway is intended for all proposed collector roads or local-to-collector upgrades within the Community Development, Rural Conservation, and Agricultural Conservation Areas. The primary roadway and four-lane road sections are provided in the event that the need for new or improved primary or four-lane roads is identified in the future. The local road sections are designed to be located within the collector road grid but are not displayed in the thoroughfare plan. These road types are more applicable for small area plans and subdivision development plans. A summary of the standards for all road types is provided in **Table 2**.

Table 2. Proposed Road Standards by Roadway Type

Roadway type	Design Speed	Number of Traffic Lanes	Traffic Lane Width	Median Width	Parking Lane Width
1. Two-lane urban collector roadway					
a. Commercial cross-section	25-35 mph	2	10-11'	n/a	8'
b. Residential cross-section	25-35 mph	2	10-11'	n/a	7'
2. Two-lane rural collector roadway	35-45 mph	2	11-12'	n/a	n/a
3. Four-lane urban collector roadway	25-35 mph	4	10-11'	11'	8'
4. Four-lane rural collector roadway	35-45 mph	4	11-12'	12'	n/a
5. Unstriped urban local roadway	25 mph	1+	14-16'	n/a	7'
6. Two-lane urban local roadway					
a. Residential cross-section	25 mph	2	10'	n/a	7'
b. Commercial cross-section	25 mph	2	10'	n/a	8'
7. Two-lane primary roadway	45 mph	2	12'	n/a	n/a
8. Four-lane primary roadway	45 mph	4	12'	12'	n/a

Roadway type	Bike Lane Width	Buffer Width	Sidewalk Width	Trail Width	Total ROW Width
1. Two-lane urban collector roadway					
a. Commercial cross-section	5'	n/a ¹	8-10'	n/a	62-68'
b. Residential cross-section	5'	6'	5'	n/a	66-68'
2. Two-lane rural collector roadway	n/a	6-10'	n/a	10'	54-64'
3. Four-lane urban collector roadway	5'	n/a ¹	8-10'	n/a	99-107'
4. Four-lane rural collector roadway	n/a	6-10'	n/a	10'	88-100'
5. Unstriped urban local roadway	n/a	6'	5'	n/a	50-52'
6. Two-lane urban local roadway					
a. Residential cross-section	n/a	6'	5'	n/a	56'
b. Commercial cross-section	n/a	n/a ¹	8-10'	n/a	52-56'
7. Two-lane primary roadway	n/a	10'	n/a ²	10'	64'
8. Four-lane primary roadway	n/a	10'	n/a ²	10'	100'

(1) If on-street parking is not provided, a buffer width of six feet is recommended.

(2) Where a multi-use trail is not provided, a sidewalk with a minimum width of 5' should be provided.

Table 2. Proposed Road Standards by Roadway Type (Cont'd)

Roadway type	Daily capacity estimate ³	Minimum driveway spacing	Minimum median opening spacing	Intersection spacing	Corner radius
1. Two-lane urban collector roadway					
a. Commercial cross-section	7,000	250'	n/a	300-600'	25-30'
b. Residential cross-section	7,000	250'	n/a	300-600'	25-30'
2. Two-lane rural collector roadway	8,000	n/a⁴	n/a	n/a	n/a
3. Four-lane urban collector roadway	16,400	250'	660'	300-600'	25-30'
4. Four-lane rural collector roadway	16,400	n/a ⁴	n/a	n/a	n/a
5. Unstriped urban local roadway	2,800	n/a	n/a	300-600'	15-25'
6. Two-lane urban local roadway					
a. Residential cross-section	4,800	n/a	n/a	300-600'	15-25'
b. Commercial cross-section	4,800	n/a	n/a	300-600'	15-25'
7. Two-lane primary roadway	13,100	660'	1320'	> 660'	n/a
8. Four-lane primary roadway	32,800	660'	1320'	> 660'	n/a

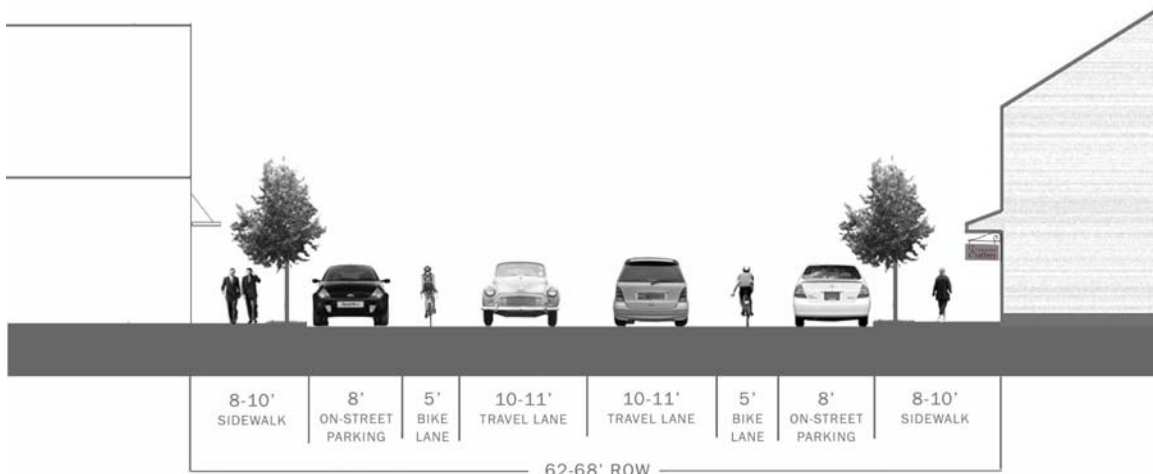
(3) Daily capacity estimates are based on FDOT Generalized Level of Service Tables. Actual capacities will vary based on design speed, turn-lane design, traffic signal spacing, the presence of medians, etc.

(4) Although no spacing standards are provided for rural roads, direct access to collector roads is discouraged.

Additional detail on each roadway type is provided on the following pages:

1. Two-Lane Urban Collector Roadway

Commercial Cross-Section

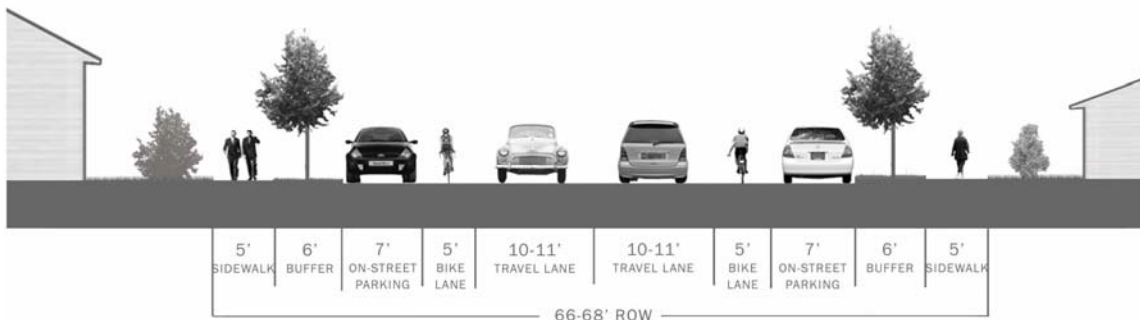


Within a commercial area, a two-lane urban road (with curb and gutter) serves the needs of customers and employees arriving by car, bike, and on foot, as well as providing for through traffic movement. This street type is designed for 25-35 mph traffic depending on whether the function of the road is intended more for local traffic or more for commuter traffic. A narrow lane width of 10 feet may be

appropriate for 25 mph local traffic, whereas a wider lane width of 11 feet is recommended for 35 mph commuter traffic. On-street parking can be provided in this cross-section to serve three functions: the provision of front-door parking access, traffic calming for through traffic, and a protective barrier between pedestrians and vehicle traffic. A bike lane designed next to on-street parking should be a minimum of five feet in width to prevent parked car doors from opening unexpectedly on a cyclist. The sidewalk should be a minimum of eight feet in width although a sidewalk 10 feet in width is more appropriate where heavy pedestrian traffic is expected and/or buildings are designed to be located directly adjacent to the sidewalk. Street trees, pedestrian-scaled lighting, benches, and other pedestrian amenities are encouraged to be placed within a buffer between the edge of the curb and the sidewalk. These may be located in a grass buffer or in/on the sidewalk as long as a clear sidewalk width of six feet is provided where no objects are located.

Where on-street parking is not provided, a bike lane five feet in width is recommended as measured from the edge of the curb. A grass buffer of a minimum six feet in width is also recommended between the edge of the curb and the sidewalk for the placement of street trees or other pedestrian amenities.

Residential Cross-Section

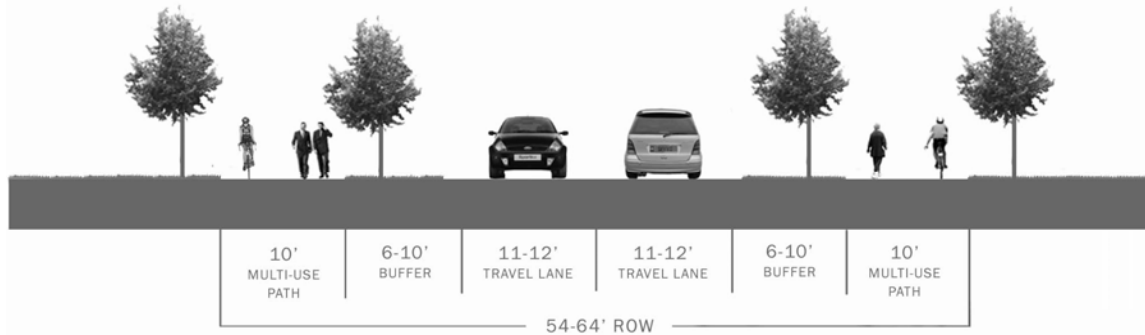


Within a residential area, a two-lane urban road (with curb and gutter) serves the needs of residents by car, bike, and on foot, as well as providing for through traffic movement. This street type is designed for 25-35 mph traffic depending on whether the function of the road is intended more for local traffic or more for commuter traffic. A narrow lane width of 10 feet may be appropriate for 25 mph local traffic, whereas a wider lane width of 11 feet is recommended for 35 mph commuter traffic. On-street parking can be provided in this cross-section to serve three functions: the provision of resident or visitor parking, traffic calming for through traffic, and a protective barrier between pedestrians and vehicle traffic. A bike lane designed next to on-street parking should be a minimum of five feet in width to prevent parked car doors from opening unexpectedly on a cyclist. The sidewalk should be a minimum of five feet in width. Street trees, pedestrian-scaled lighting, benches, and other pedestrian amenities are encouraged to be

placed within a grass buffer of a minimum 6 feet in width between the edge of the curb and the sidewalk.

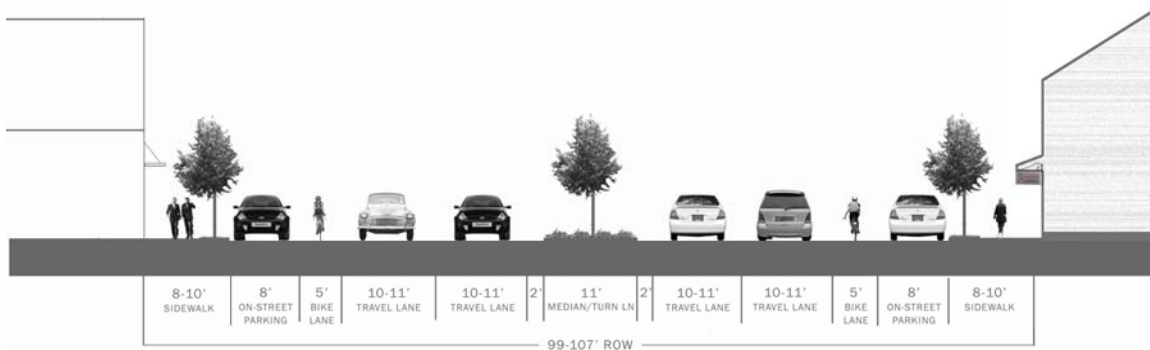
Where on-street parking is not provided, a bike lane five feet in width is recommended as measured from the edge of the curb. A grass buffer of a minimum six feet in width is also recommended between the edge of the curb and the sidewalk for the placement of street trees or other pedestrian amenities.

2. Two-Lane Rural Collector Roadway



Within a rural area, where the land along the corridor is largely undeveloped, an open roadway section without curb and gutter is recommended. This roadway type is designed for 35-45 mph traffic with a lane width ranging from 11-12 feet depending on the anticipated traffic volume and intended travel speed. In this context, cycling within the vehicular travel way is uncomfortable for all but the most experienced cyclists. It is not necessary or feasible to provide cycling facilities along every primary roadway, but where cycling facilities are desired or are identified in a local or regional bicycle plan, a multi-use trail 10 feet in width is recommended to be located six to 10 feet outside of the travel way to serve both cycling and pedestrian travel. Street trees and pedestrian-scaled lighting are encouraged to be placed within the grass buffer between the edge of the shoulder and the multi-use trail. Where agricultural traffic is anticipated, it is preferable to keep the buffer area clear from objects to allow large vehicles additional room to operate.

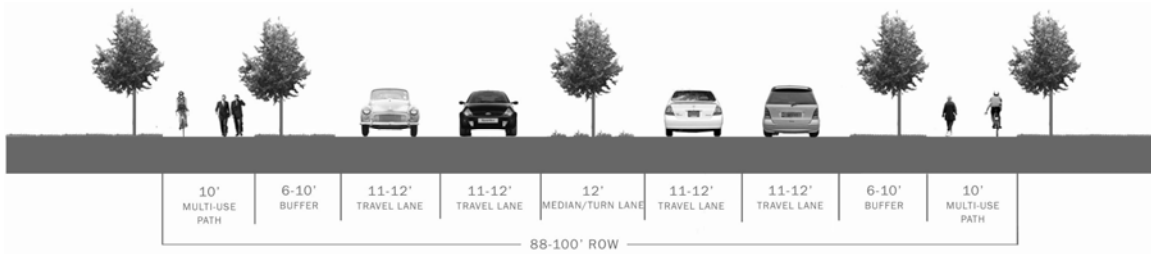
3. Four-Lane Urban Collector Roadway



Within a commercial area, a four-lane urban road (with curb and gutter) serves the needs of customers and employees arriving by car, bike, and on foot, as well as providing for through traffic movement. This street type is designed for 25-35 mph traffic depending on whether the function of the road is intended more for local traffic or more for commuter traffic. A narrow lane width of 10 feet may be appropriate for 25 mph local traffic, whereas a wider lane width of 11 feet is recommended for 35 mph commuter traffic. With four travel lanes, the inclusion of a raised median with turn lanes increases safety for vehicles through access management and for pedestrians by providing a refuge that allows crossing of only one direction of traffic at a time. A landscaped median also provides an aesthetically pleasing and traffic calming design to a corridor. On-street parking can be provided in this cross-section to serve three functions: the provision of front-door parking access, traffic calming for through traffic, and a protective barrier between pedestrians and vehicle traffic. A bike lane designed next to on-street parking should be a minimum of five feet in width to prevent parked car doors from opening unexpectedly on a cyclist. The sidewalk should be a minimum of eight feet in width although a sidewalk 10 feet in width is more appropriate where heavy pedestrian traffic is expected and/or buildings are designed to be located directly adjacent to the sidewalk. Street trees, pedestrian-scaled lighting, benches, and other pedestrian amenities are encouraged to be placed within a buffer between the edge of the curb and the sidewalk. These may be located in a grass buffer or in/on the sidewalk as long as a clear sidewalk width of six feet is provided where no objects are located.

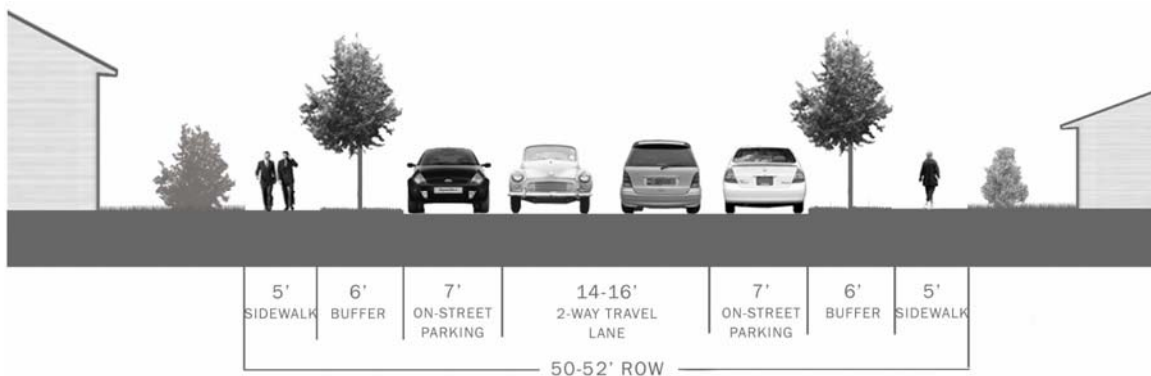
Where on-street parking is not provided, a bike lane five feet in width is recommended as measured from the edge of the curb. A grass buffer of a minimum six feet in width is also recommended between the edge of the curb and the sidewalk for the placement of street trees or other pedestrian amenities.

4. Four-Lane Rural Collector Roadway



Within a rural area, where the land along the corridor is largely undeveloped, an open roadway section without curb and gutter is recommended. This roadway type is designed for 35-45 mph traffic with a lane width ranging from 11-12 feet depending on the anticipated traffic volume and intended travel speed. With four travel lanes, the inclusion of a median with turn lanes increases safety for vehicles through access management and for pedestrians by providing a refuge that allows crossing of only one direction of traffic at a time. In this context, cycling within the vehicular travel way is uncomfortable and potentially unsafe for all but the most experienced cyclists. It is not necessary or feasible to provide cycling facilities along every primary roadway, but where cycling facilities are desired or are identified in a local or regional bicycle plan, a multi-use trail 10 feet in width is recommended to be located six to 10 feet outside of the travel way to serve both cycling and pedestrian travel. Street trees and pedestrian-scaled lighting are encouraged to be placed within the grass buffer between the edge of the shoulder and the multi-use trail. Where agricultural traffic is anticipated, it is preferable to keep the buffer area clear from objects to allow large vehicles additional room to operate.

5. Unstriped Urban Local Roadway

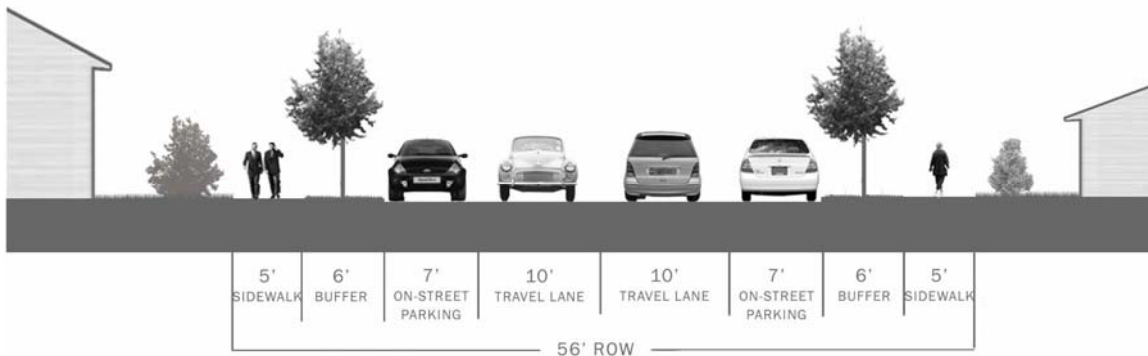


Within a residential area, an unstriped urban road (with curb and gutter) serves the needs of residents by car, bike, and on foot, as well as providing for a very low volume of through traffic movement; there is a strong emphasis on safety and low travel speeds. This street type is designed for 25 mph traffic with an unstriped travel way between 14 and 16 feet in width. This width allows for two-way

traffic to safely pass but only at very low travel speeds. On-street parking can be provided in this cross-section to serve three functions: the provision of resident or visitor parking, traffic calming for through traffic, and a protective barrier between pedestrians and vehicle traffic. A bike lane of five feet in width can be provided, but the anticipated traffic speed and volume on this type of street is low enough to allow cyclists to safely travel within the vehicular travel way. The sidewalk should be a minimum of five feet in width. Street trees, pedestrian-scaled lighting, benches, and other pedestrian amenities are encouraged to be placed within a grass buffer of a minimum 6 feet in width between the edge of the curb and the sidewalk.

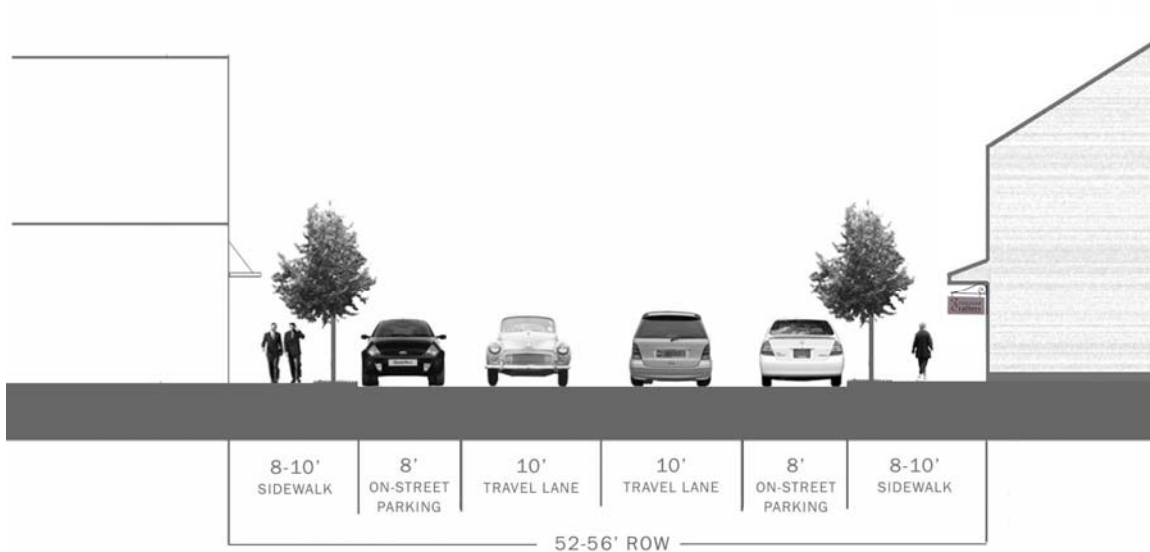
6. Two-Lane Urban Local Roadway

Residential Cross-Section



Within a residential area, a two-lane urban road (with curb and gutter) serves the needs of residents by car, bike, and on foot, as well as providing for a low volume of through traffic movement. This street type is designed for 25 mph traffic with a narrow lane width of 10 feet. On-street parking can be provided in this cross-section to serve three functions: the provision of resident or visitor parking, traffic calming for through traffic, and a protective barrier between pedestrians and vehicle traffic. A bike lane of five feet in width can be provided, but the anticipated traffic speed and volume on this type of street is low enough to allow cyclists to safely travel within the vehicular travel way. The sidewalk should be a minimum of five feet in width. Street trees, pedestrian-scaled lighting, benches, and other pedestrian amenities are encouraged to be placed within a grass buffer of a minimum 6 feet in width between the edge of the curb and the sidewalk.

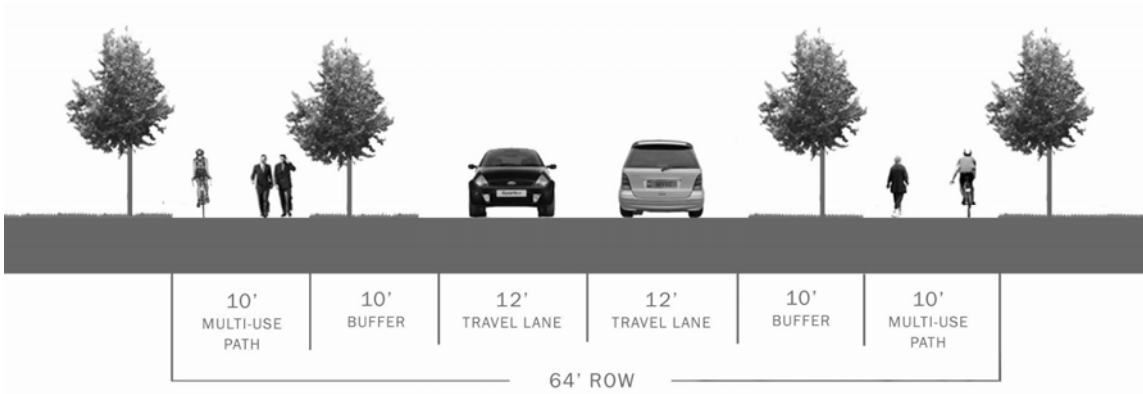
Commercial Cross-Section



This design may also be used within a commercial area, where a two-lane urban road (with curb and gutter) serves the needs of customers and employees arriving by car, bike, and on foot, as well as providing for minimal through traffic movement. This street type is designed for 25 mph traffic with a narrow lane width of 10 feet. On-street parking can be provided in this cross-section to serve three functions: the provision of front-door parking access, traffic calming for through traffic, and a protective barrier between pedestrians and vehicle traffic. The sidewalk should be a minimum of eight feet in width although a sidewalk 10 feet in width is more appropriate where heavy pedestrian traffic is expected and/or buildings are designed to be located directly adjacent to the sidewalk. Street trees, pedestrian-scaled lighting, benches, and other pedestrian amenities are encouraged to be placed within a buffer between the edge of the curb and the sidewalk. These may be located in a grass buffer or in/on the sidewalk as long as a clear sidewalk width of six feet is provided where no objects are located.

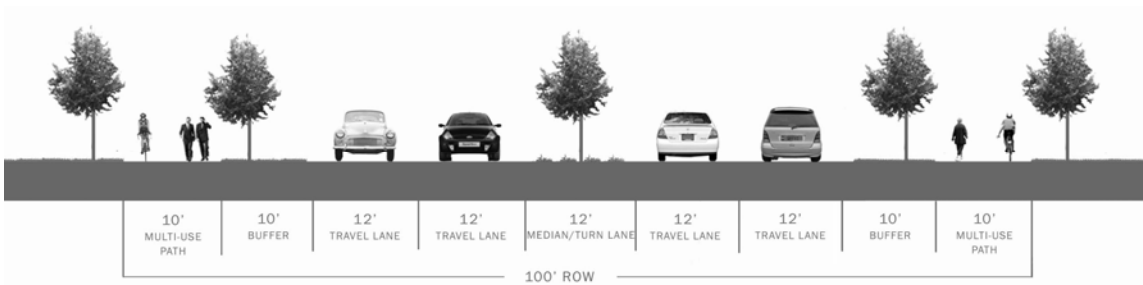
Where on-street parking is not provided, a bike lane five feet in width is recommended as measured from the edge of the curb. A grass buffer of a minimum six feet in width is also recommended between the edge of the curb and the sidewalk for the placement of street trees or other pedestrian amenities.

7. Two-Lane Primary Roadway



In an urban or a rural area, where development is set well back from the street or the land along the corridor is largely undeveloped, an open roadway section without curb and gutter is recommended and is demonstrated here, although a design with curb and gutter may also be appropriate. This roadway type is designed for 45 mph traffic (potentially 55 mph in a rural area) with a lane width of 12 feet. In this context, cycling within the vehicular travel way is uncomfortable for all but the most experienced cyclists. It is not necessary or feasible to provide cycling facilities along every primary roadway, but where cycling facilities are desired or are identified in a local or regional bicycle plan, a multi-use trail 10 feet in width is recommended to be located 10 feet outside of the travel way to serve both cycling and pedestrian travel. At a minimum in an urban area, a sidewalk five feet in width should be provided. Street trees and pedestrian-scaled lighting are encouraged to be placed within the grass buffer between the edge of the shoulder and the multi-use trail or sidewalk.

8. Four-Lane Primary Roadway



In an urban or a rural area, where development is set well back from the street or the land along the corridor is largely undeveloped, an open roadway section without curb and gutter is recommended and is demonstrated here, although a design with curb and gutter may also be appropriate. This roadway type is designed for 45 mph traffic (potentially 55 mph in a rural area) with a lane width of 12 feet. With four travel lanes, the inclusion of a median with turn lanes

increases safety for vehicles through access management and for pedestrians by providing a refuge that allows crossing of only one direction of traffic at a time. In this context, cycling within the vehicular travel way is uncomfortable for all but the most experienced cyclists. It is not necessary or feasible to provide cycling facilities along every primary roadway, but where cycling facilities are desired or are identified in a local or regional bicycle plan, a multi-use trail 10 feet in width is recommended to be located 10 feet outside of the travel way to serve both cycling and pedestrian travel. At a minimum in an urban area, a sidewalk five feet in width should be provided. Street trees and pedestrian-scaled lighting are encouraged to be placed within the grass buffer between the edge of the shoulder and the multi-use trail or sidewalk.

D. Sub-Area Thoroughfare Plans

Maps 2-6 display the Thoroughfare Plan recommendations for the following sub areas:

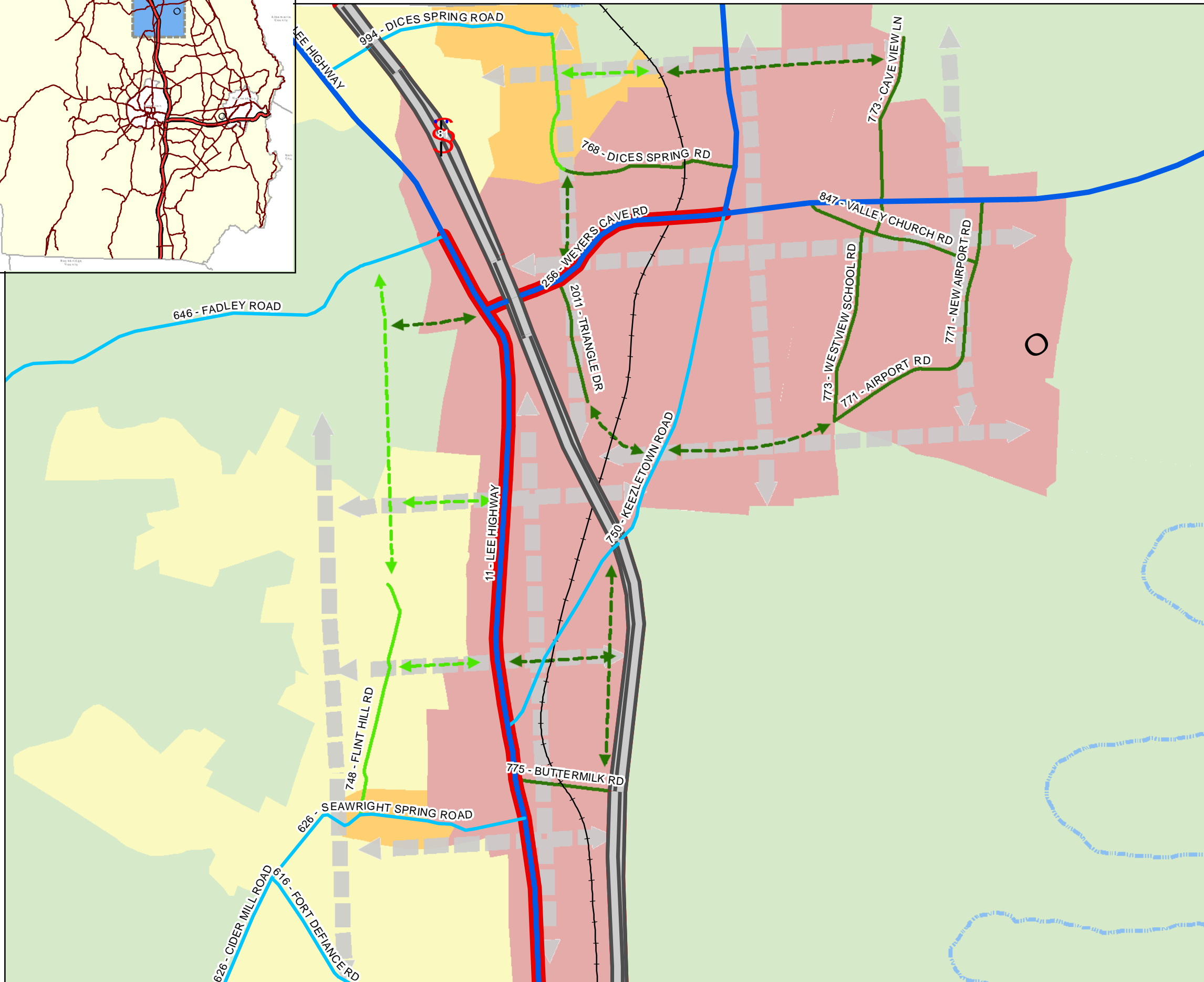
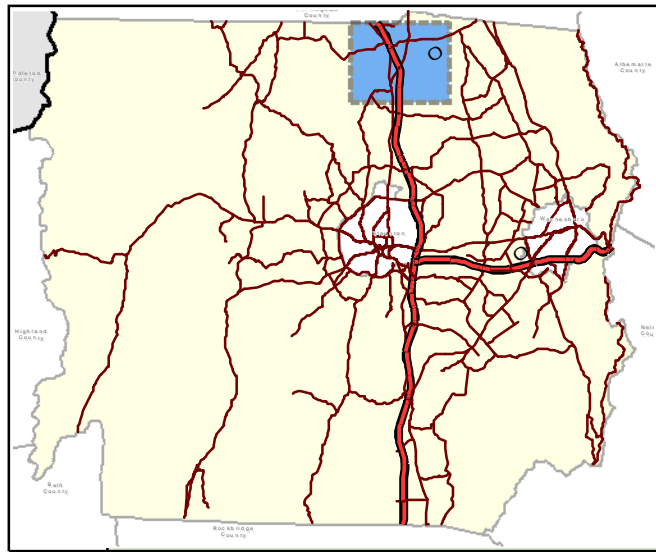
- **Map 2:** Weyers Cave and Mount Sidney
- **Map 3:** Verona
- **Map 4:** Fishersville
- **Map 5:** Stuarts Draft
- **Map 6:** Jolivue, Mint Spring, and Greenville

The following narrative describes the existing conditions and Thoroughfare Plan recommendations for each sub area:

1. Weyers Cave and Mount Sidney

The Weyers Cave and Mount Sidney sub area is projected to have failing roadway segments along Route 11 south of Route 646 and on Route 256 around the I-81 interchange. Currently, Route 11 serves as a major north-south travel corridor both as a reliever to I-81 and for local traffic movement, putting significant stress on this facility. The corridor is located within an Urban Service Area where continued development is expected in the future. The recommendation in **Map 2** demonstrates the development of a network of streets adjacent to Route 11 that would create parallel travel corridors to Route 11 and additional connections for local traffic to avoid the need for every trip to use Route 11. Route 11 is also recommended for a more detailed corridor study to identify potential spot improvements, intersection improvements, or access improvements that may increase the capacity through this corridor.

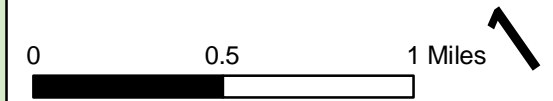
Access management improvements are also recommended on the Route 256 segment where the presence of the I-81 interchange will continue to put significant traffic pressure on this roadway. Additionally, a network that includes the recommendations from the Triangle Drive study is proposed in the Urban Service and Community Development Areas to the east of I-81. Turn lane



Legend

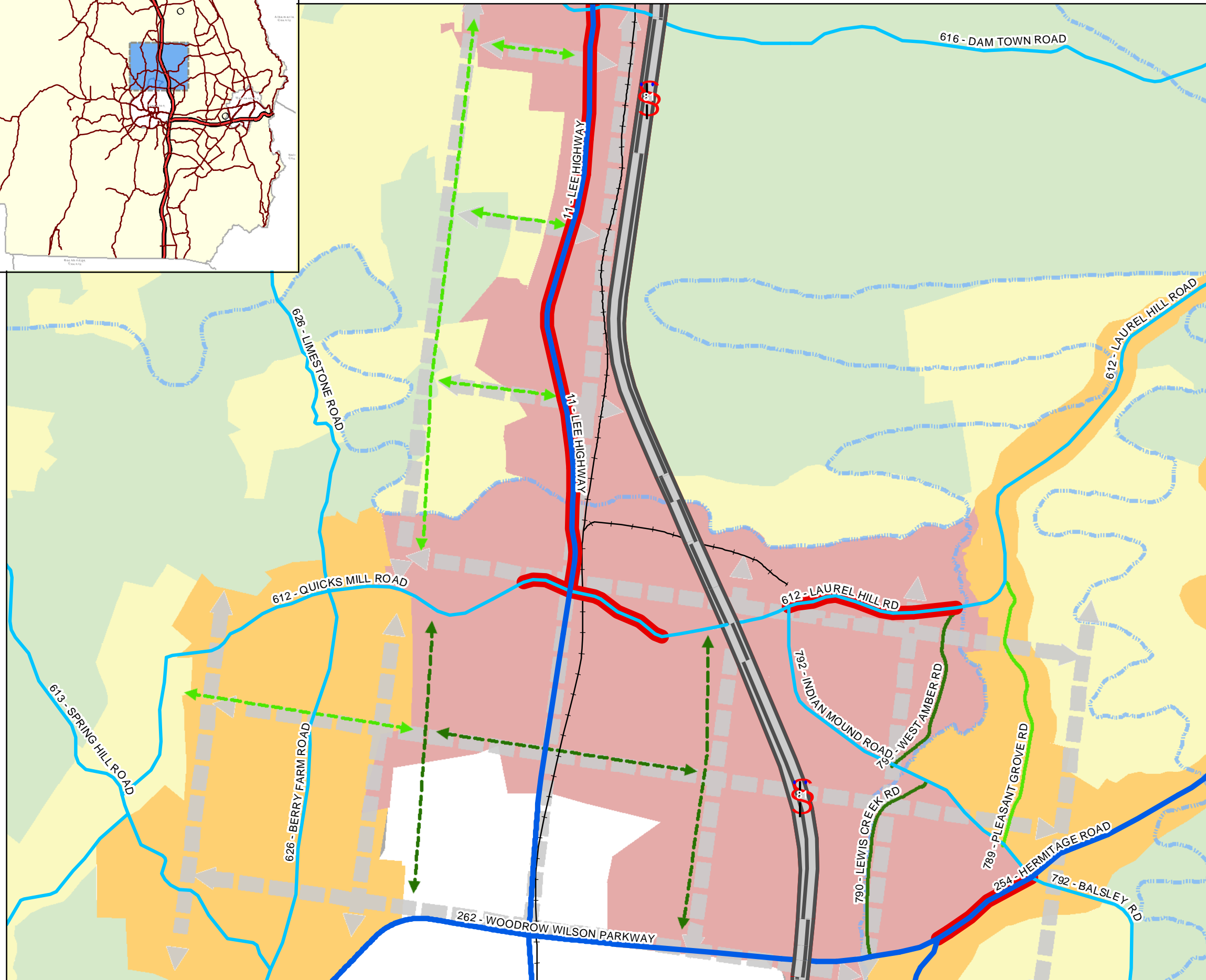
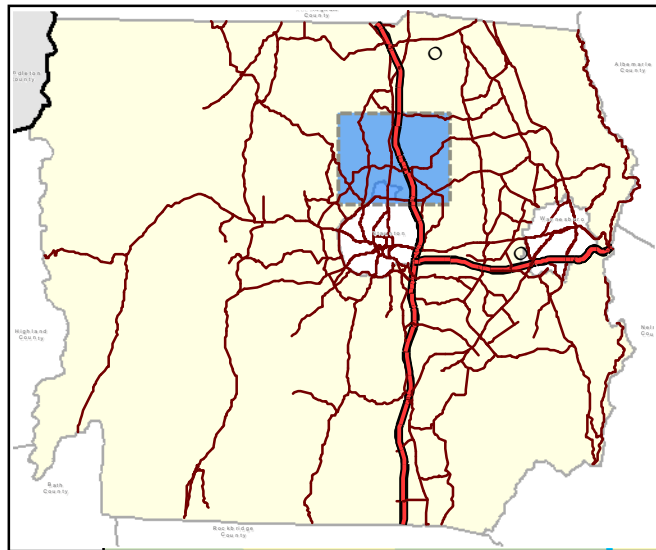
- Interstate
- Primary
- Secondary
- Railroads
- Airports
- Rivers and Streams
- Spot Improvements for Failing LOS in 2025
- Enhance Local to Urban Secondary, 2 lane
- Enhance Local to Rural Secondary, 2 lane
- Proposed Urban Secondary, 2 lane
- Proposed Rural Secondary, 2 lane
- Conceptual Grid (approx. 1 mile)
- Urban Service Area
- Community Development Area
- Rural Conservation Area
- Agricultural Conservation Area

NOTE: This map depicts a conceptual future roadway framework as part of the overall County Thoroughfare Plan. It generally shows existing roadways (except for local roads), a conceptual grid of ideal roadway spacing (approximately one mile spacing) and potential future roadway connections. It should be noted that all potential connections shown are also conceptual in nature and are not intended to represent actual proposals for roadway alignments. The need for future roads and potential alignments should be confirmed with more detailed area-specific plans.



Thoroughfare Plan
Map 2
Weyers Cave, Mount Sidney
Sub Area Analysis
 Augusta County
 Comprehensive Plan
 2007-2027





Legend

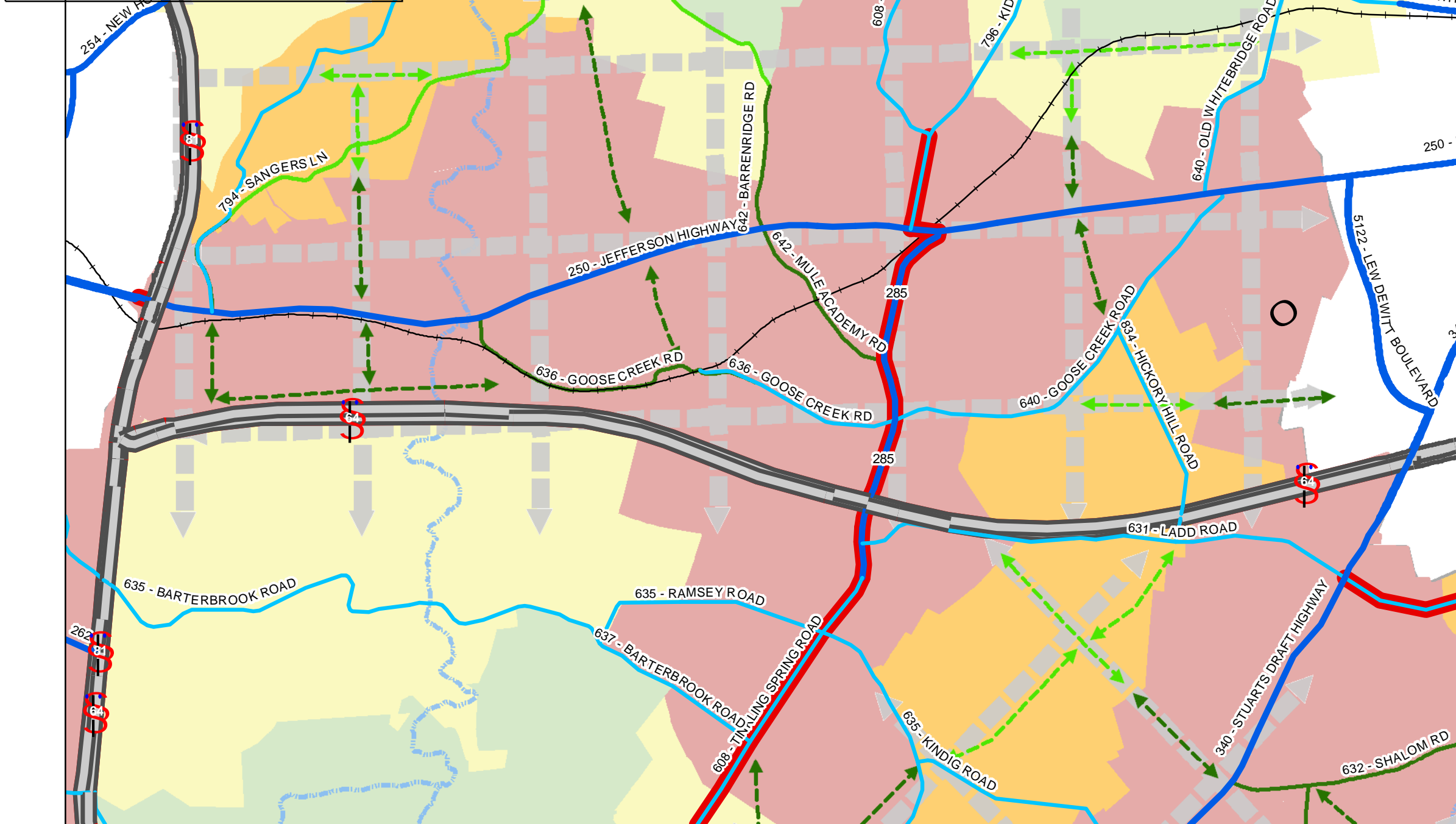
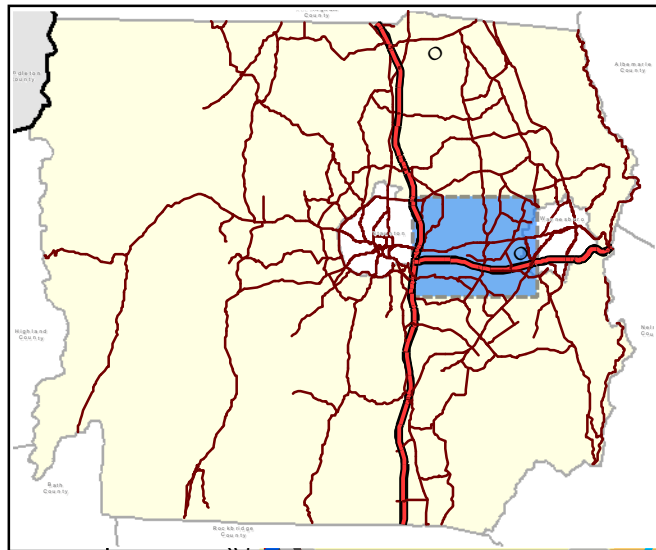
- Interstate
- Primary
- Secondary
- Railroads
- Rivers and Streams
- Spot Improvements for Failing LOS in 2025
- Enhance Local to Urban Secondary, 2 lane
- Enhance Local to Rural Secondary, 2 lane
- Proposed Urban Secondary, 2 lane
- Proposed Rural Secondary, 2 lane
- Conceptual Grid (approx. 1 mile)
- Urban Service Area
- Community Development Area
- Rural Conservation Area
- Agricultural Conservation Area

NOTE: This map depicts a conceptual future roadway framework as part of the overall County Thoroughfare Plan. It generally shows existing roadways (except for local roads), a conceptual grid of ideal roadway spacing (approximately one mile spacing) and potential future roadway connections. It should be noted that all potential connections shown are also conceptual in nature and are not intended to represent actual proposals for roadway alignments. The need for future roads and potential alignments should be confirmed with more detailed area-specific plans.



Thoroughfare Plan
 Map 3
 Verona
 Sub Area Analysis
 Augusta County
 Comprehensive Plan
 2007-2027

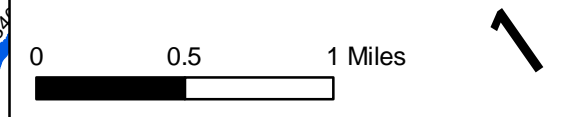




Legend

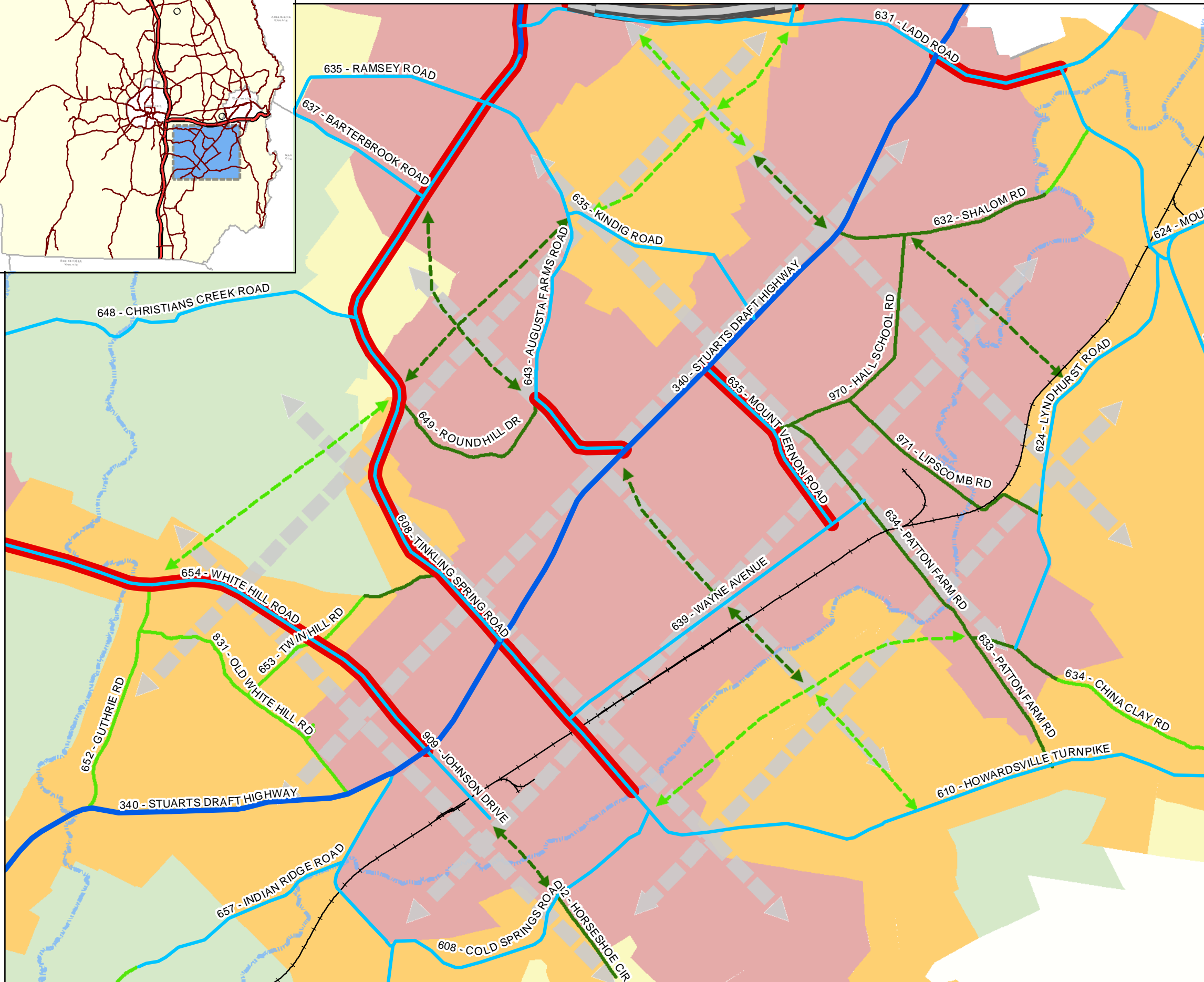
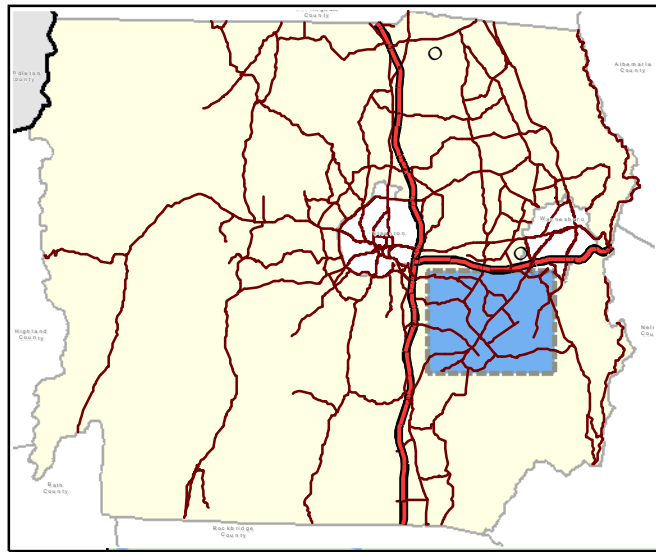
- Interstate
- Primary
- Secondary
- Railroads
- Airports
- Rivers and Streams
- Spot Improvements for Failing LOS in 2025
- Enhance Local to Urban Secondary, 2 lane
- Enhanced Local to Rural Secondary, 2 lane
- Proposed Urban Secondary, 2 lane
- Proposed Rural Secondary, 2 lane
- Conceptual Grid (approx. 1 mile)
- Urban Service Area
- Community Development Area
- Rural Conservation Area
- Agricultural Conservation Area

NOTE: This map depicts a conceptual future roadway framework as part of the overall County Thoroughfare Plan. It generally shows existing roadways (except for local roads), a conceptual grid of ideal roadway spacing (approximately one mile spacing) and potential future roadway connections. It should be noted that all potential connections shown are also conceptual in nature and are not intended to represent actual proposals for roadway alignments. The need for future roads and potential alignments should be confirmed with more detailed area-specific plans. Some elements of the Stuarts Draft sub area analysis appear on this map.



**Thoroughfare Plan
Map 4
Fishersville
Sub Area Analysis
Augusta County
Comprehensive Plan
2007-2027**

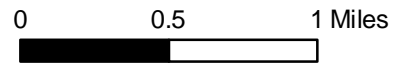




Legend

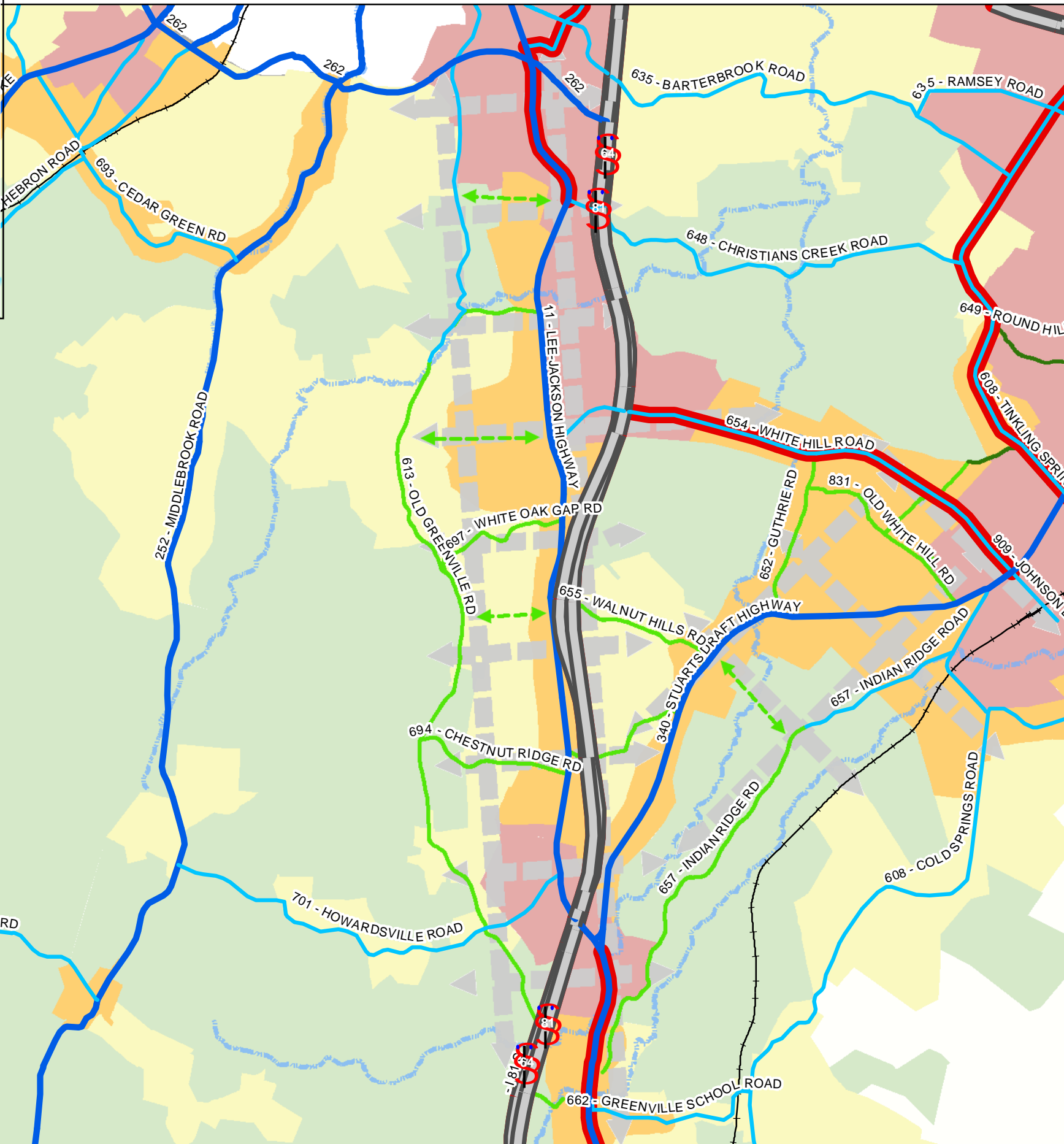
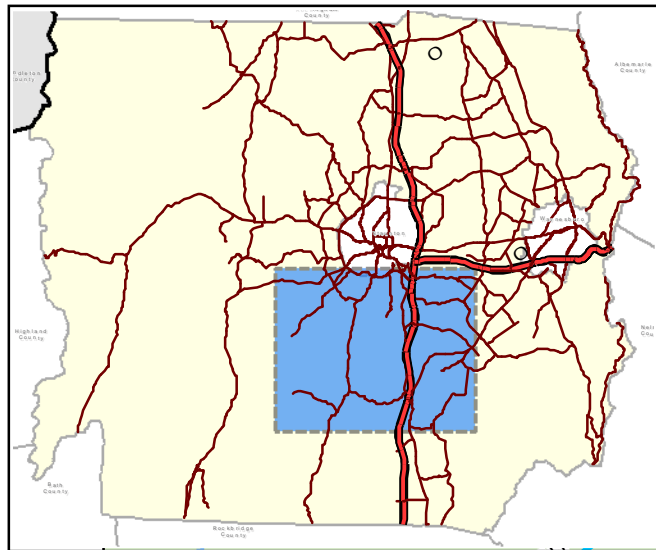
- Interstate
- Primary
- Secondary
- Railroads
- Rivers and Streams
- Spot Improvements for Failing LOS in 2025
- Enhance Local to Urban Secondary, 2 lane
- Enhanced Local to Rural Secondary, 2 lane
- Proposed Urban Secondary, 2 lane
- Proposed Rural Secondary, 2 lane
- Conceptual Grid (approx 1 mile)
- Urban Service Area
- Community Development Area
- Rural Conservation Area
- Agricultural Conservation Area

NOTE: This map depicts a conceptual future roadway framework as part of the overall County Thoroughfare Plan. It generally shows existing roadways (except for local roads), a conceptual grid of ideal roadway spacing (approximately one mile spacing) and potential future roadway connections. It should be noted that all potential connections shown are also conceptual in nature and are not intended to represent actual proposals for roadway alignments. The need for future roads and potential alignments should be confirmed with more detailed area-specific plans.



**Thoroughfare Plan
Map 5
Stuarts Draft
Sub Area Analysis
Augusta County
Comprehensive Plan
2007-2027**





Legend

- Interstate
- Primary
- Secondary
- Railroads
- Rivers and Streams
- Spot Improvements for Failing LOS in 2025
- Enhance Local to Urban Secondary, 2 lane
- Enhance Local to Rural Secondary, 2 lane
- Proposed Urban Secondary, 2 lane
- Proposed Rural Secondary, 2 lane
- Conceptual Grid (approx. 1 mile)
- Urban Service Area
- Community Development Area
- Rural Conservation Area
- Agricultural Conservation Area

NOTE: This map depicts a conceptual future roadway framework as part of the overall County Thoroughfare Plan. It generally shows existing roadways (except for local roads), a conceptual grid of ideal roadway spacing (approximately one mile spacing) and potential future roadway connections. It should be noted that all potential connections shown are also conceptual in nature and are not intended to represent actual proposals for roadway alignments. The need for future roads and potential alignments should be confirmed with more detailed area-specific plans.



Thoroughfare Plan
Map 6
Jolivue, Mint Spring,
Greenville
Sub Area Analysis
Augusta County
Comprehensive Plan
2007-2027



improvements at the intersection of Routes 256 and 276 are included in the 2007 VDOT Six Year Improvement Program (SYIP). Both network proposals rely on a combination of upgrading existing roadways that already provide key connections, albeit below a collector roadway standard, and on new street connections that will be constructed as development necessitates.

2. Verona

The Verona sub area is projected to have failing roadway segments along Route 11 north of Route 612, on two segments of Route 612 on either side of I-81, and on Route 254 near the Staunton boundary. Currently, Route 11 serves as a major north-south travel corridor both as a reliever to I-81 and for local traffic movement, putting significant stress on this facility. The corridor is located within an Urban Service Area where continued development is expected in the future. The recommendation in **Map 3** demonstrates the development of a network of streets adjacent to Route 11 that would create a parallel travel corridor to Route 11 and additional connections for local traffic to avoid the need for every trip to use Route 11. Route 11 is also recommended for a more detailed corridor studying to identify potential spot improvements, intersection improvements, or access improvements that may increase the capacity through this corridor. Turn lane improvements on Route 11 south of Route 616 are included in the 2007 VDOT SYIP.

Within Verona and to the east of I-81, additional network connections are recommended throughout the Urban Service and Community Development Areas. This network proposal relies mainly on new street connections that will be constructed as development necessitates, although a few existing local roads that currently do not meet VDOT's secondary road standards are recommended for upgrades to bring them into the secondary road network.

3. Fishersville

The Fishersville sub area currently has a failing roadway segment on Route 285 between Route 250 and I-64 and is projected to have additional failing roadway segments on Route 608 north of Route 250 and on portions of Route 608 and 631 addressed in the Stuarts Draft sub area. Route 285 experiences significant congestion due to the presence of the I-64 interchange and the fact that this roadway is the only major direct connector between Stuarts Draft and Fishersville. Access management improvements are recommended on the Route 285 and 608 segments within the I-64 interchange area as well as improvements to the design of the interchange itself. An additional connection south from the intersection of Routes 834 and 631 would also provide a parallel route for travel between Stuarts Draft and Fishersville. The Route 608 study recommends spot improvements for both Routes 608 and 285. One significant recommendation is to realign the intersection of Routes 285, 608, and 250 to improve the current offset intersection.

The remainder of the network recommendations for the Fishersville sub area relies on a combination of upgrading existing roadways that already provide key connections, albeit below a collector roadway standard, and on new street connections that will be constructed as development necessitates, and includes the Route 636 extension proposed in the 636/640 Corridor Study. There is also a recommendation to upgrade the local segment of Route 636 and to provide an additional crossing of the railroad to develop a road network in the Urban Service Area south of Route 250. North of Route 250, an upgraded Sangers Lane may provide another key east-west corridor, although ideally an east-west collector would be located closer to Route 250.

4. Stuarts Draft

The Stuarts Draft sub area currently has a failing roadway segment on Route 608 between Route 340 and Route 610 and is projected to have failing roadway segments along the entire length of Routes 608 and 654, and on segments of Routes 631, 635 (Mt. Vernon Road), and 649 adjacent to Route 340. Spot improvements have already been recommended for Route 608 that need to be implemented where feasible. Spot improvements are also recommended rather than developing a street network for Route 654, which runs mainly through a small strip of Community Development Area surrounded by Agricultural Conservation Area. Throughout the remainder of the Urban Service and Community Development Areas, a network of streets is proposed to help relieve the projected congested corridors. Extending Route 909 and upgrading Route 634, as a part of the overall network concept, are recommended to relieve the congested segment of Route 608 through downtown Stuarts Draft. Additional parallel roads with rail and river crossings are recommended as well, although the cost of these proposed crossings will make them less feasible to implement.

The network proposal relies on a combination of upgrading existing roadways that already provide key connections, albeit below a collector roadway standard, and on new street connections that will be constructed as development necessitates.

5. Jolivue, Mint Spring, and Greenville

The Jolivue, Mint Spring, and Greenville sub area is projected to have failing roadway segments along Route 11 north of Route 648 and south of Route 340, and on segments of Routes 654 and 608 addressed in the Stuarts Draft sub area. Currently, Route 11 serves as a major north-south travel corridor both as a reliever to I-81 and for local traffic movement, putting significant stress on this facility. The corridor is located within an Urban Service and Community Development Area where continued development is expected in the future. The recommendation in **Map 6** demonstrates the development of a network of streets adjacent to Route 11 that would create a parallel travel corridor to Route 11 and additional connections for local traffic to avoid the need for every trip to use Route 11. Route 11 is also recommended for a more detailed corridor study to identify potential spot improvements, intersection improvements, or access

improvements that may increase the capacity through this corridor. One particular location where improvement is needed is at the intersection of Route 340 with Route 11. Both roads carry significant traffic volumes and the current intersection design is problematic both for traffic operations and for safety.

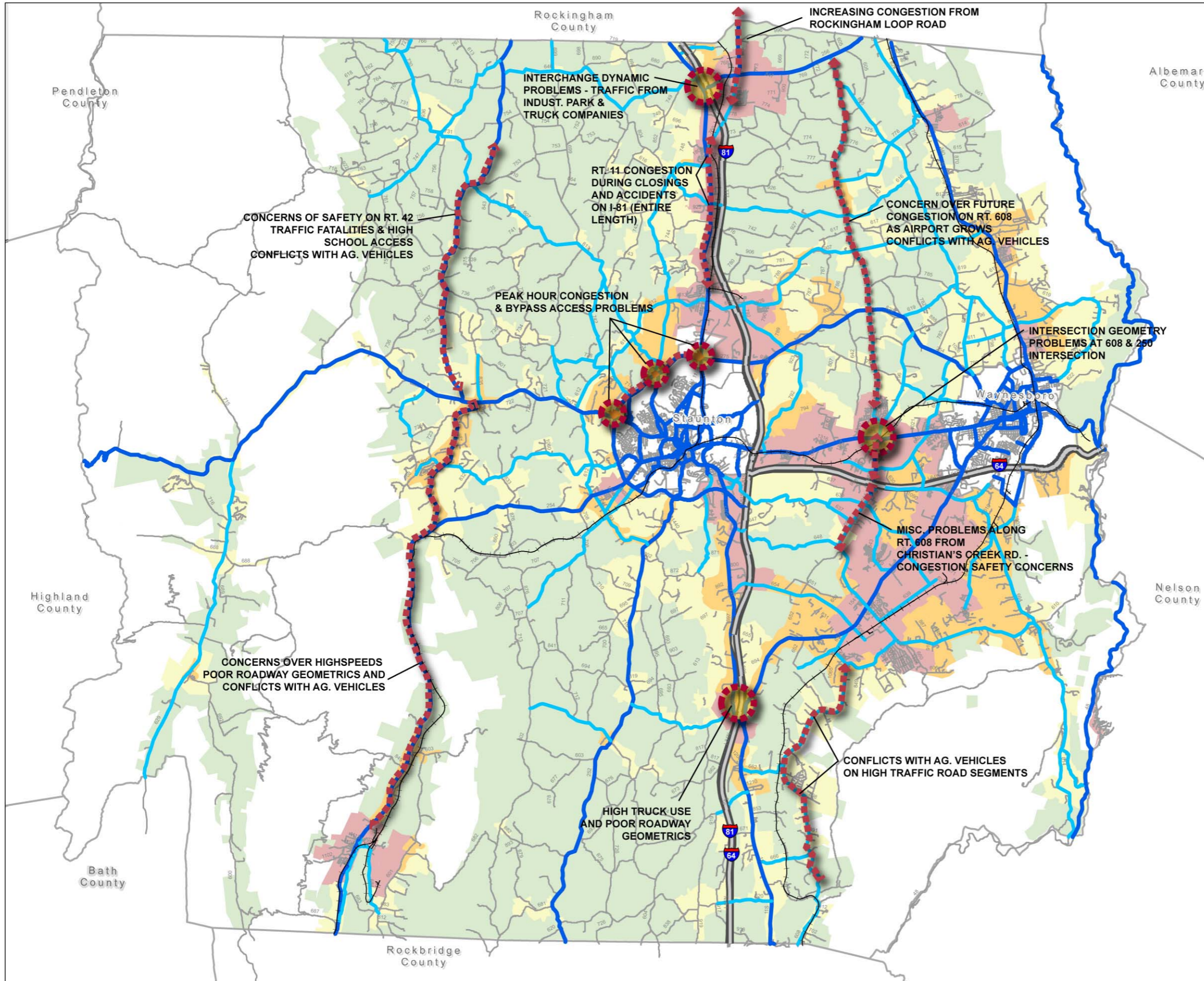
East of I-81, a few additional network connections are recommended, mostly relying on upgrading existing roadways that already provide key connections, albeit below a collector roadway standard.

E. Existing Safety/Capacity Issues Maps

The Comprehensive Plan Steering Committee also identified primary roadway safety and capacity issues in the county. **Map 7** shows the primary areas of concern on the countywide road network. In general, several types of concerns were noted:

- Roads or road segments that had high speed combined with poor geometrics (horizontal or vertical road alignments) that contributed to a perceived or real safety issue. These included portions of Routes 42 and the Route 608 and 250 intersection and Greenville Interchange at I-81.
- Existing or anticipated problems with traffic congestion, such as on portions of Route 608 and the Route 262 (old Route 275) Bypass intersections north and west of Staunton.
- Periodic congestion on Route 11, which serves as the designated “overflow” route during emergency diversions from I-81.

The information provided by the Steering Committee provides an important “on the ground” qualitative supplement to the existing and projected traffic conditions resulting from the quantitative analysis. Additionally, VDOT has identified road segments with high crash rates as part of the Central Shenandoah Long Range Transportation Plan, shown in **Map 8**. All of these information sources should be used by the county in determining priorities for more detailed studies and improvement plans for roadways, especially in prioritizing the subsequent corridor studies and small area plans that are recommended in the Comprehensive Plan policies.



Legend

■ ■ ■ ■ Issue areas identified by Steering Committee

Planning Policy Areas

- Urban Service Area
- Community Development Area
- Rural Conservation Area
- Agricultural Conservation Area

Existing Thoroughfare System

- Interstate
- Primary
- Secondary
- Local Roads
- Railroads-Augusta

Boundaries

- Augusta County
- West Virginia

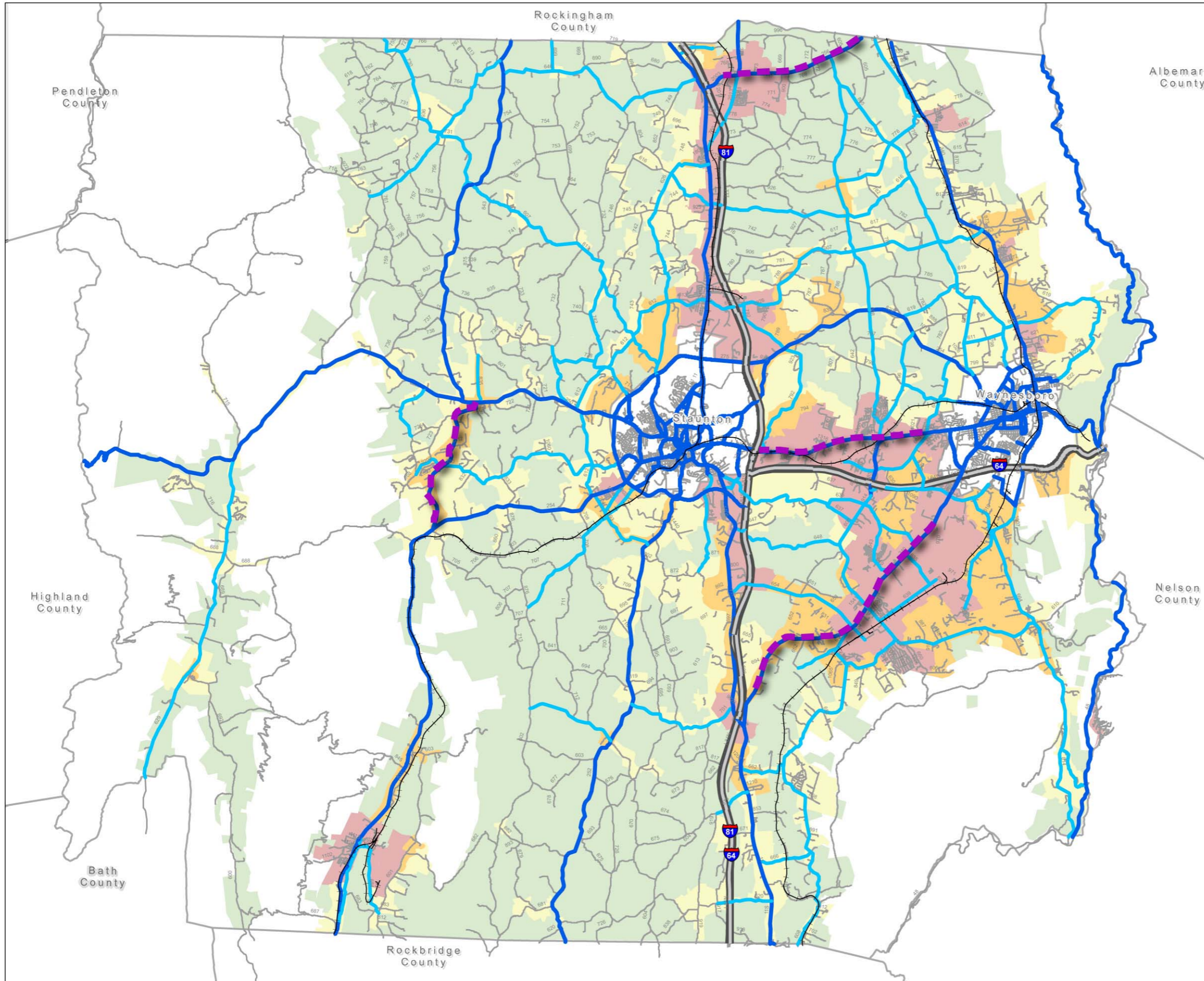
0 1 2 3 4 5 Miles



Thoroughfare Plan
 Map 7
 Safety and Capacity Concerns
 from Steering Committee Meeting
 October 19, 2006

Augusta County
 Comprehensive Plan
 2007-2027





Legend

High crash rate road segment
 (Source: VDOT, LRTP. Note: Data were available only for Primary and Secondary Roads, not Interstates.)

Planning Policy Areas

- Urban Service Area
- Community Development Area
- Rural Conservation Area
- Agricultural Conservation Area

Existing Thoroughfare System

- Interstate
- Primary
- Secondary
- Local Roads
- Railroads-Augusta

Boundaries

- Augusta County
- West Virginia

0 1 2 3 4 5 Miles



Thoroughfare Plan
 Map 8
 High Crash Road Segments
 Identified by VDOT in the
 Central Shenandoah
 Long Range Transportation Plan

Augusta County
 Comprehensive Plan
 2007-2027



IV. Goals, Objectives, and Policies

A. Introduction: Overall County Vision

At their visioning workshops of September 13th and 28th, 2006, the Board of Supervisors, Planning Commission, and Comprehensive Plan Steering Committee affirmed the vision concepts and the broad goals and strategies of the 1994 Plan. While the original vision statement from 1994 still reflects the county's basic values and desires concerning its future, a new vision statement provides insight gained from more than a decade of implementing the original plan and a more focused view of the future. Thus, a narrative description of Augusta County 20 or more years in the future, that reflects the essential values of county citizens, as expressed by the county leaders working on their behalf, is:

- **The county's population and employment** will continue to steadily increase, but new growth will be located mainly in the designated Urban Service Areas, thereby preserving the county's agricultural industry and rural character.
- **Urban development** will be encouraged to be compact, pedestrian-oriented, interconnected with a network of streets, sidewalks and trails, and protective of natural resources. New neighborhoods will be places with beauty, identity and charm, which citizens are proud to call home. A blending of uses, housing types, densities and costs will be available to the county's increasingly diverse population.
- **Agriculture** will continue to be the predominant land use in the county and a major part of the economy. The small amount of residential development built within agricultural areas will be incrementally added and very low density, thereby causing minimal disruption to agricultural activities.
- **The county's scenic beauty and natural environment** will be preserved, with farms, forests, mountains, rivers and streams providing the framework and context for development in the urban areas, and continuing to define the landscape in the rural areas.
- **The compact, interconnected pattern of new development** will allow the county to continue to provide high quality, efficient and cost-effective public services and facilities. These may include transportation improvements that maintain and improve safety, capacity and overall mobility for pedestrians and bicyclists as well as motor vehicles, while improving the overall quality of life in neighborhoods.

B. Strategies for Growth

In addition to the vision statement from the 1994 Plan was an overall strategy for growth. This strategy begins the task of implementing the Plan's vision for the county. It was also affirmed by the group at the two September workshops and is included largely unchanged in this Plan. The strategy is broken down into three primary concepts:

- Promote a compact, coordinated, orderly, and balanced pattern of development in order to preserve farming and the rural character of the county and make more efficient use of existing and planned public facilities and services.
- Establish distinct areas for urban and rural development as well as areas for a full range of agricultural and forestal uses.
- Implement planning policies and regulations using a reasonable combination of voluntary and mandatory measures.

Following these strategy concepts are the goals, objectives, and policies, which are designed to more specifically delineate the strategy for growth. The goals are divided into 14 sections including agriculture, economy, education, general government, historic resources, housing, human services, land use and development, library, natural resources, parks and recreation, public safety, transportation, and utilities. Within these 42 goals are numerous objectives and policies. The objectives are specific subsections of the goals, while the policies are recommended actions that the county should take toward the realization of the goals. Most goals include one or more objective. Most objectives include one or more policy.

1. Planning Policy Areas

The Planning Policy Areas and the Future Land Use Categories also work to implement the county's vision. As a result of the Comprehensive Plan update process, the number of Planning Policy Areas has been reduced from six to four. The two Policy Areas that were removed were those designated "potential" by the 1994 Plan. These Potential Urban Service and Potential Community Development Areas were removed in order to more efficiently implement the goals of this Plan, since they often led to confusion regarding the amount and type of development permitted within them. The boundaries of the Planning Policy Areas can be found on the attached Planning Policy Area/Future Land Use Map.

The four Policy Areas identified on the Planning Policy Area/Future Land Use Map include:

- Urban Service Areas (80% of future residential growth)
- Community Development Areas (10% of future residential growth)
- Rural Conservation Areas (5% of future residential growth)
- Agricultural Conservation Areas (5% of future residential growth)

While it is anticipated that each of these Policy Areas will absorb their share of residential growth, at approximately the rates outlined above, it is the intention of this Plan to encourage as much development as possible to take place in the Urban Service and Community Development Areas. Because of this, a target of 90% of future residential development locating in these areas has been established. While this is an ambitious target, input at the public meetings on the Plan update has been focused on maintaining the rural character of the county and a belief that too much growth has been occurring in the rural areas. In the last four years over

70% of residential growth has been occurring in the newly defined Urban Service and Community Development Areas, so increasing this to 90% should be attainable if the recommendations of the Plan are implemented. **Table 3** provides a statistical breakdown of the County by Planning Policy Area.

Table 3. Acreage by Planning Policy Area

Policy Area	Acres	Percent
Urban Service Area	40,574	6.6%
Community Development Area	34,881	5.6%
Rural Conservation Area	82,948	13.4%
Agricultural Conservation Area	246,901	39.8%
Public Land	214,409	34.6%
Total	619,713	100.0%

Source: Augusta County GIS

Urban Service Areas

Urban Service Areas are defined as areas which are appropriate locations for development of a full range of public and private land uses of an urban character on public water and sewer, in either the immediate or long term future.

Urban Service Areas are characterized by relatively substantial amounts of existing development and public utilities and facilities, substantial amounts of available developable land, and good transportation access. Those areas designated as Urban Service Areas are those which are appropriate for urban development on public water and sewer within the 20 year timeframe of this Plan. The infrastructure is not in place at this time to provide service to every parcel identified as being in the Urban Service Area. However, as development occurs the expectation is that it will be on public water and sewer service. It is also recognized that not every parcel of land in the Urban Service Area will be sold for development within the next 20 years and not every parcel, due to site specific considerations, is appropriate for development at the densities proposed.

The development that is expected to take place in the Urban Service Areas is expected to be compact, interconnected, and pedestrian oriented while remaining sensitive to the context of the surrounding development as well as the surrounding natural features. Due to the urban nature of the development planned for these areas, intensive agricultural operations would not be encouraged to locate or expand in these areas.

Urban Service Areas are priority locations for:

- Significant amounts of urban residential and employment growth
- Expansions of public water and sewer service
- Local and regional public facilities
- Most “one-of-a-kind” public facilities such as hospitals

- Most industrial development – light, medium, and heavy, with adequate facilities and buffers
- Larger scale urban residential and business developments
- Larger scale mixed use developments, where different combinations of residential, business, and industrial uses will be found within a development

Community Development Areas

Community Development Areas are local community settlements which have existing public water or public sewer systems in place or which have relatively good potential for extensions of either of those utilities. These areas are appropriate locations for future low density, rural land uses based upon road access, the existing land use pattern, and proximity to existing public facilities and services, although they are planned to remain predominantly residential in character.

Most of the Community Development Areas have only public water service. The New Hope area has only public sewer service. Community Development Areas do not have both public water and sewer service; therefore they are only suitable for lower density, primarily residential uses. As development occurs over the very long term and public water and sewer service is extended, some Community Development Areas may evolve to the point that they are designated Urban Service Areas. The infrastructure is not in place at this time to provide service to every parcel identified as being in the Community Development Area. However, as development occurs the expectation is that it will be on public water or sewer service. It is also recognized that not every parcel of land in the Community Development Area will be sold for development within the next 20 years and not every parcel, due to site specific considerations, is appropriate for development at the densities proposed.

The development that is expected to take place in the Community Development Areas is expected to be compact, interconnected, and pedestrian oriented while remaining sensitive to the context of the surrounding development as well as the surrounding natural features. Clustered developments would be encouraged in these areas.

As they are existing local community settlements and areas where the county wishes to continue to promote residential development, intensive agricultural operations would not be encouraged to locate or expand in the Community Development Areas.

Community Development Areas are priority locations for:

- Moderate amounts of small scale residential and employment growth at marginally higher densities than in the Rural Conservation Areas
- Limited expansions of public water or sewer service

- Local public facilities
- Small scale, low-intensity commercial and/or light industrial developments

Rural Conservation Areas

Rural Conservation Areas are areas which are substantially subdivided and/or developed with residential uses, which have no public water or sewer service and which have few existing intensive agricultural operations. They are therefore priority locations for moderate amounts of future rural residential development. Ideally, any development would be in the form of incremental additions to existing settlements.

Any development taking place in the Rural Conservation Areas would be expected to be sensitive to the context of the surrounding agricultural areas as well as the surrounding natural features. Such development would primarily be in the form of Rural Residential subdivisions as well as business uses related to agriculture.

Recognizing the potential conflicts between residential and agricultural operations, new intensive farming operations would not be encouraged to locate in these areas. However, existing operations are recognized to have priority for expanding their operations.

Rural Conservation Areas are priority locations for:

- Moderate amounts of low density rural residential development on individual wells and septic fields, including clustered development (although there are concerns about groundwater protection)
- Non-intensive agricultural and forestry activities

Agricultural Conservation Areas

Agricultural Conservation Areas are areas which have mainly farm or forest uses and have generally the lowest overall density of residential uses, have no public water or sewer service, and have most of the county's intensive agricultural operations. These areas are planned to remain in predominantly agricultural and forestal uses with very little additional residential development.

Any development taking place in the Agricultural Conservation Areas would be expected to be sensitive to the context of the surrounding agricultural areas as well as the surrounding natural features. Such development would primarily be in the form of new dwellings on minor subdivision lots as well as business uses related to agriculture. Clustered developments would not be encouraged in these areas.

Agricultural Conservation Areas are priority locations for:

- Minimal, incremental amounts of very low density rural residential development on individual wells and septic fields
- A full range of long term agricultural, forestry and natural resource industry activities, including intensive agricultural operations.

Rural Communities (Overlay)

The designated Rural Communities include many of those existing local community settlements which function as cultural, historic, social or economic focal points for surrounding rural areas. While most do not have public water or sewer service, and are therefore located in the Rural Conservation or Agricultural Conservation Areas, a few do have public services and are located in a Community Development Area. These areas are designated with a future land use of Rural Community on the Planning Policy Area/Future Land Use Map.

The Rural Communities are generally appropriate locations for some amount of future rural development in accord with the generally limited road access, facilities and services. Any future development in these areas should conform to the established development pattern in the community. These areas are seen as potential locations for future small scale, business activity serving local needs.

2. Future Land Use Categories

The future land use categories function within the geographic areas defined by the Urban Service and Community Development Areas. They serve to identify the specific use and density that is proposed for a parcel. There are thirteen future land use categories identified by the Planning Policy Area/Future Land Use Map. Those areas include:

- **Industrial**, where industrial uses of varying scale and scope would be appropriate
- **Business**, where business uses of varying scale and scope would be appropriate
- **Public Use**, which identifies land owned by, or utilized by, a federal, state or local government agency
- **Community Mixed Use**, which may include a variety of residential uses at a density of six to twelve dwelling units per acre and, on up to 40% of the total land area, retail and office uses and in some, but not all cases, industrial uses
- **Neighborhood Mixed Use**, which may include a variety of residential uses at a density of four to eight dwelling units per acre and convenience retail and office uses on up to 20% of the total land area
- **Planned Residential**, which may include a variety of residential uses at a density of four to eight dwelling units per acre

- **Multifamily Residential**, which may include residential buildings housing between nine and sixteen dwelling units per acre, as well as manufactured home developments
- **Single-Family Attached Residential**, which may include attached residential units like townhouses and duplexes at a density of between four and eight dwelling units per acre; will be found only in the Urban Service Area
- **Medium Density Residential**, which may include detached residential units at a density of between three and four dwelling units per acre
- **Low Density Residential**, which may include detached residential units at a density of between one-half and one dwelling unit per acre; will be found only in the Community Development Area
- **Rural Community**, where an appropriate mix of uses may be found that conforms to the established development pattern in a rural community; will be found only in the Community Development Area
- **Urban Open Space**, which identifies land permanently set aside for open space uses such as conservation easements and county recreation areas
- **Flood Plain**, which includes lands identified by the Federal Emergency Management Agency (FEMA) as prone to flooding during a 100-year flood event and therefore unsuitable for most land uses

Like the Planning Policy Areas, the future land use categories are not zoning classifications. Instead they act to inform the decision making process on rezoning and development applications. Since the land located in the Rural and Agricultural Conservation Areas is expected to remain rural in character, those Policy Areas do not have designated future land uses. **Table 4** provides a statistical breakdown of the future land use categories.

Table 4. Acreage by Future Land Use Category

Future Land Use	Acres	Percent
Industrial	5,807	7.7%
Business	4,216	5.6%
Public Use	2,752	3.7%
Community Mixed Use	3,462	4.6%
Neighborhood Mixed Use	3,357	4.4%
Multifamily Residential	824	1.1%
Single-Family Attached Residential	862	1.1%
Medium Density Residential	14,695	19.5%
Planned Residential	2,880	3.8%
Low Density Residential	30,728	40.7%
Rural Community	1,019	1.4%
Urban Open Space	537	0.7%
Flood Plain	4,316	5.7%
Total	75,455	100.0%

Source: Augusta County GIS

C. Agriculture

Goal 1: Enhance the economic strength of the county's agriculture and forestry industry.

Objective A: Maintain an organizational framework to provide leadership and advocacy for the agricultural and forestry industry.

Policy 1: Agriculture Industry Board. Continue to support the Agriculture Industry Board. The Agriculture Industry Board should work with the Board of Supervisors to review issues related to the preservation and promotion of agriculture and forestry in Augusta County.

Policy 2: Director of Agriculture Development. Support the Director of Agriculture Development position. The Director should serve as staff to the Agriculture Industry Board. The Director should be responsible for agricultural program administration, leadership, and advocacy focused on sustaining agriculture programs and improving the economic viability of agriculture and forestry in Augusta County. The Director of Agriculture Development and the Virginia Cooperative Extension Service should work with landowners who want their land to remain in agricultural production to ensure that their land remains productive.

Policy 3: Promotion and Education. The Director of Agriculture Development and the Agriculture Industry Board should work cooperatively with the Extension Service and other state and federal agencies to provide education for agricultural landowners detailing the importance of keeping their land in agricultural and forestry production. Additionally, a program for educating non-farming residents on the benefits of the agricultural economy should be developed.

Objective B: Provide a range of voluntary options for farmers and farmland owners for keeping their land in farming and open space land uses. Provide sufficient incentives and protections for agricultural land uses so as to reduce the number of new dwellings constructed in the Rural Conservation and Agricultural Conservation Areas over the next 20 years.

Policy 1: Agricultural and Forestal Districts. The county should add incentives to encourage the creation and support of additional Agricultural and Forestal Districts in the Rural Conservation and Agricultural Conservation Areas as well as to support the continuation of the existing Districts.

Policy 2: Conservation Easements. The county should support the placement of conservation easements on property located in the Rural Conservation and Agricultural Conservation Areas.

Policy 3: Purchase of Development Rights. The county should establish a purchase of development rights (PDR) program to protect farmland, open space, community character, and natural resources within the county. The purchase of development rights program should encourage the placement of conservation easements on property in the Agricultural Conservation and Rural Conservation Areas. The county should provide a consistent and sufficient level of funding to the PDR program to ensure its success.

Policy 4: Transfer of Development Rights. The county should explore the feasibility of establishing a transferable development rights program.

Objective C: Ensure that the agricultural and forestry industry in Augusta County has available to it a wide array of methods for maintaining a viable agricultural economy.

Policy 1: Agricultural Development and Enhancement. The county should encourage the further development of the local agricultural industry through multiple approaches, including promoting and marketing the local agricultural industry through such organizations as local farm agencies, educational institutions, and farmers markets. The county should also encourage the continued development of new agricultural crops, products, and processes for use in Augusta County.

Policy 2: Agricultural Enterprise District. The county should explore the establishment of an Agricultural Enterprise District through the Virginia Department of Agriculture and Consumer Services and the utilization of the Agricultural Enterprise Grant program for qualified businesses to develop and implement business plans.

Policy 3: Agricultural Tourism: The county should explore the expansion of its agri-tourism industry. The county should explore amendments to its ordinances to encourage compatible agri-tourism businesses and should encourage the linkage of the tourism and agriculture industries in area-wide economic development strategies.

Objective D: Support programs to help ensure the transition of agricultural land ownership from one generation of farmers to the next. The county should work with state and federal agencies as well as local organizations to develop programs that will assist young farmers in acquiring resources ranging from education and mentorship to investment capital and tax breaks.

Policy 1: Agricultural Education and Youth Programs. The Board of Supervisors and the School Board should vigorously support agriculture education and youth programs. New and innovative programs should be implemented that will encourage young people to develop entrepreneurial

skills, learn from mentors in the agri-business community, and create new and diverse agriculture enterprises.

Goal 2: Protect existing agricultural and forestry operations in the Rural Conservation and Agricultural Conservation Areas from conflicts with other land uses and from being converted to other land uses.

Objective A: Minimize the number and level of conflicts between agricultural and residential land uses.

Policy 1: Establishment and Expansion of Intensive Agricultural Operations. The county should encourage intensive agricultural operations in the Agricultural Conservation Areas, requiring only relatively minimal setbacks from neighboring properties and residentially zoned property. The county should discourage such operations from locating in the Community Development and Urban Service Areas, with strict standards in terms of setback requirements on the farm property. The county should allow expansion of existing intensive agriculture operations in the Rural Conservation Areas in accord with the policies for those areas contained in this Plan.

Policy 2: Forest Management. The county should encourage the practice of forest management in the Rural Conservation and Agricultural Conservation Areas.

Policy 3: Permitted Uses in Agricultural Zoning Districts. The county should conduct a study to determine the appropriate permitted uses and restricted uses in the agricultural zoning districts.

Policy 4: Reciprocal Setbacks. Reciprocal setbacks should be implemented for single-family and multi-family housing located in or adjacent to the Rural Conservation or Agricultural Conservation Areas.

Policy 5: Residential Dwellings. The county should examine the different methods available for restricting the number of new dwellings constructed in the Rural Conservation and Agricultural Conservation Areas.

Objective B: Discourage encroachment of residential land uses into areas that have good prospects for long-term farming or forestry activities.

Policy 1: Clustering of Dwellings in the Rural Conservation Areas. In the designated Rural Conservation Areas, the county should encourage the clustering of new dwellings so as to preserve 80% of the parent tract in permanent open land, with a minimum lot size of one acre. The county should require conventional residential subdivisions to have a minimum lot size of two acres.

Policy 2: Residential Development in the Agricultural Conservation Areas. In the designated Agricultural Conservation Areas, the county should require new lots to be a minimum of one acre. The county should strongly discourage rural cluster developments as well as conventional residential rezonings and subdivisions.

Objective C: Reduce the number and size of new residential lots being created in the Rural Conservation and Agricultural Conservation Areas.

Policy 1: Lot Creation. Explore and implement methods for reducing the number of lots created in agriculturally zoned areas through the minor subdivision process. New minimum or maximum lot sizes, limits on the family member exception, and restrictions on boundary line adjustments, as well as other available methods, should be considered. Regulations relating to the configuration of new lots should also be considered.

Policy 2: Annual Report. Data such as the percentage of minor subdivision lots created in each Planning Policy Area and zoning district should be included as part of the annual Comprehensive Plan review process.

Policy 3: Minor Subdivision Activity. Data on the rate and location of minor subdivisions should be monitored regularly. A report including this data should be provided to the Board of Supervisors at least semi-annually. Significant changes in the rate of subdivision should be reported to the board immediately.

Goal 3: Ensure that agricultural and forestry operations use environmentally sound methods.

Objective A: Support a variety of programs and strategies for farmers to ensure that their operations are both profitable and environmentally sound.

Policy 1: Best Management Practices (BMPs). Encourage BMPs through cooperation with those federal, state and county agencies, including the Headwaters Soil and Water Conservation District, the Natural Resources Conservation Service, and the Virginia Department of Forestry, that provide technical support to the farming and forestry industries.

Policy 2: Farm Conservation and Forest Management Plans. The county should encourage landowners to develop a conservation plan for their farming operation or a forest management plan for their forestry operation.

Policy 3: Nutrient Management Plans. The county should continue to require nutrient management plans for new intensive agriculture facilities.

Policy 4: Public Education. The county should make available, to all county farmers and foresters, information on environmentally sound practices and the federal, state, and local programs that encourage them.

D. Economy

Goal 1: Retain and expand the business and industrial operations currently located in the county. The primary focus of economic development efforts should be to retain the county's existing employers and facilitate their growth and expansion.

Objective A: Prepare, with public input, and adopt a strategic plan for the economic development of the county. The strategic plan should include strategies for retaining and expanding the businesses and industries now operating in the county.

Policy 1: Develop an Existing Industry Program. The strategic plan should make recommendations on how the county should work to improve its outreach efforts for existing businesses and industries.

Policy 2: Training. The strategic plan should make recommendations for developing a workforce training program to ensure that existing businesses and industries have a sufficient supply of skilled and well-trained workers available.

Policy 3: Financial Incentives for Expanding Existing Businesses. The strategic plan should make recommendations on the establishment of a financial incentive program to encourage and assist existing businesses and industries in expanding their operations.

Goal 2: Attract industries and businesses which are compatible with and enhance the county's economic climate as well as its environmental, scenic, agricultural, and historic character.

Objective A: Prepare, with public input, and adopt a strategic plan for the economic development of the county. The strategic plan should identify the strengths and weaknesses of the county and develop an action plan for attracting new industries that are compatible with the county.

Policy 1: Target Industries. The strategic plan should research and make recommendations on which types of businesses and industries are most compatible with Augusta County's strengths and assets. The county should focus its business promotion and recruitment efforts on the target industries identified by the strategic plan.

Policy 2: Recruitment of Business. The strategic plan should make recommendations on strategies the county should employ for recruiting new businesses and industries. The county should be proactive in seeking to recruit new businesses and industries.

Policy 3: Identify Sites. The strategic plan should identify the best potential industrial and business sites which are suitably located and which have adequate land, roads, and utilities to support business and industrial development.

Policy 4: Office of Economic Development. The strategic plan should make recommendations on the establishment of an Office of Economic Development or additional staffing in the Community Development Department to be responsible for business and industrial recruitment and retention in the county.

Policy 5: Balanced Industry Base. The county should seek to attract businesses and industries that will help to maintain a balanced economy. The county should, in particular, respond to the loss of businesses and industries by attracting new businesses and industries that will help to regain that balance. The strategic plan should make specific recommendations on how the county should respond to changes in its business and industry base.

Policy 6: Training. The strategic plan should make recommendations on how the county should develop a training program to provide training to ensure an adequate trained and skilled labor force to meet the needs of the identified target businesses and industries.

Policy 7: Marketing Strategies. The strategic plan should make recommendations on how the county can market itself for potential new businesses and industries. The marketing strategies may include improvements to the county's website as it relates to economic development, as well as any other strategies for marketing and promoting the county to its target businesses and industries.

Objective B: Provide adequate land and facilities for future business and industrial development.

Policy 1: Suitable Locations. Ensure that new business and industrial development occurs in suitable locations and is compatible with existing and planned adjacent land uses.

Objective C: Ensure the county's unemployment rate remains low and wages remain competitive.

Policy 1: Employers Offering Competitive Wages. The county should work to attract new businesses and industries that pay competitive wages.

Objective D: Maintain or improve the county's ratio of population to jobs.

Objective E: Increase the coordination of economic development efforts with the state as well as with neighboring jurisdictions.

Policy 1: Shenandoah Valley Partnership. Continue to participate in and support the economic development efforts of the Shenandoah Valley Partnership.

Policy 2: Virginia Economic Development Partnership. Continue to participate in and support the economic development efforts of the Virginia Economic Development Partnership. Encourage available business and industrial sites to be listed on the VirginiaScan website and in other similar programs.

Goal 3: Maintain the overall high quality of life in the county which serves as a major attraction for new employers and employees.

Objective A: Capitalize on the economic assets of the agricultural landscape, natural beauty, and historic resources.

Policy 1: Agriculture. Economic development staff, in cooperation with the Director of Agriculture Development, should promote the continued and enhanced viability of the local agricultural industry, including innovative farming practices, new products, and support businesses. The county should continue to support and encourage the continuing work of the Cooperative Extension Service in providing technical assistance to the local agricultural industry.

Policy 2: Tourism. Promote the local tourism industry, including the conservation of the agricultural, historic, and environmental resources that fuel it.

Policy 3: Agricultural Tourism. The county should explore and promote all possibilities for expanding agricultural tourism.

E. Education

Goal 1: Ensure that the county's public education facilities and services meet the needs of local residents by producing well educated graduates that are prepared for a lifetime of learning and for working in tomorrow's economy.

Objective A: The School Board should prepare, with public input, and adopt a strategic plan for the county's public education system. The strategic plan should consider the number and location of new and upgraded public school facilities to ensure that they are located efficiently and cost-effectively.

Policy 1: Coordinated Planning Efforts. The location of new and expanded school facilities should be coordinated with the land use policies of the county's Comprehensive Plan and with the planning, construction, and improvement of other public facilities in order to maximize efficiency and economies of scale. The strategic plan should make recommendations on the best way to accomplish this.

Policy 2: Capital Improvements. Recommended school capital improvement projects should be proposed by a system to include real and projected enrollment growth, the age of the existing facilities, their remaining productive life and the ability to deliver special programs and services to all students in the school. Consideration for placement of facilities should also consider travel time involved with getting students to and from school in the most efficient and economical manner, given the unique characteristics of Augusta County. The strategic plan should make recommendations on the best way to administer such a system.

Policy 3: Development Impact on Enrollments. Before approving rezonings and planned developments, consider their potential impact on the school system so as to minimize school crowding.

Policy 4: Schools as Focal Points of Communities. The strategic plan should recommend ways in which public school facilities can best serve as focal points of local communities and civic activities, while meeting the primary function of educating children.

Policy 5: School Siting. The strategic plan should make recommendations on planning, siting, and designing schools that are conveniently accessible, but continue to maintain a safe and secure environment.

Policy 6: Safe Routes to School Program. The county should pursue grants from the Virginia Safe Routes to School Program to infill pedestrian and cycling infrastructure to improve safety near elementary and middle schools.

Policy 7: Multi-Purpose Schools. The strategic plan should make recommendations on ways to ensure that school facilities continue to be multi-purpose community facilities that benefit all county citizens, after the primary function of educating the children is met.

Policy 8: Flexibility of Schools. The strategic plan should make recommendations on ways in which school facilities can expand and contract in response to changing short-term needs.

Objective B: The School Board should prepare, with public input, and adopt a strategic plan for the county's public education system. The strategic plan should consider ways in which the public schools can provide the best possible educational programs to ensure that they are established, maintained, and delivered in an efficient, equitable, and cost-effective manner.

Policy 1: Curriculum. The strategic plan should make recommendations on how the public schools can provide the most rigorous, relevant, and diverse curriculum possible.

Policy 2: Continued Support of Local Educational Resources. The strategic plan should recommend ways in which the county and the School Board can continue to encourage students to use fully the facilities and opportunities at Valley Vocational-Technical Center, the Central Shenandoah Valley Regional Governor's School, Blue Ridge Community College, and nearby colleges and universities.

Policy 3: Staffing. The strategic plan should recommend programs to maintain a competitive edge in attracting, hiring, and retaining highly qualified staff while continuing to provide positive staffing ratios in the classroom.

Policy 4: Career and Technical Education Programs. The strategic plan should explore potential new career and technical education programs that will assist young people as they attempt to acquire the education and experience they will need to move into the workforce of the 21st Century.

Policy 5: Technology in the Classroom. The strategic plan should make recommendations on how the School Board can continue to improve the level of technology in the classrooms.

Policy 6: Continuing Education. The strategic plan should recommend ways in which the percentage of students continuing their education beyond the high school level can be increased.

Policy 7: Graduation Rate. The strategic plan should recommend ways in which the percentage of students graduating from the county's high schools can be increased.

Objective C: The county should work with the School Board to ensure that the public education system is effectively administered in conjunction with overall county planning efforts.

Policy 1: Contributions from Developers. The county should explore the options available for collecting contributions from developers to help offset the costs of providing additional school facilities and services for new residential developments.

Policy 2: Monitor Trends. The county, in cooperation with the School Board, should monitor trends in public and non-public enrollments, on a regional basis, to anticipate changes in demand for school facilities. Improving the data collection and management procedures for state reports and operational decisions should be a priority.

Goal 2: Foster the educational attainment of all county residents.

Objective A: Provide assistance to those children attending private schools or being home schooled.

Policy 1: Augusta County Library. The county should continue to recognize the role that the public library plays in supporting the education of home school and private school students.

Objective B: Continue to support area colleges and adult education facilities.

Policy 1: Blue Ridge Community College. The county should continue to provide support to Blue Ridge Community College.

Policy 2: Valley Vocational-Technical Center. The county should continue to support the School Board's adult education efforts at Valley Vocational-Technical Center.

F. General Government

Goal 1: Manage the county's expenditures and investments so as to obtain maximum long-term efficiency and value from each dollar expended.

Objective A: Efficiently and effectively plan for the county's capital improvements. Maintain a low to moderate level of debt burden for county capital expenditures, consistent with state guidelines.

Policy 1: Capital Improvements Program (CIP). The county should develop, refine, and use its CIP as a planning and budgeting tool for all capital investment decisions. The CIP, based on the policies of the Comprehensive Plan, should be revised annually and should forecast capital expenditures for five year periods.

Objective B: Maintain the lowest possible property tax burden necessary to provide a level of public facilities and services desired by county citizens and required in order to protect the public health and safety.

Policy 1: Service Plans. The county should prepare agency service plans in order to specify the standards for service levels in key county programs. Service plans should be linked to the Comprehensive Plan and CIP, and should be updated on a regular basis with public involvement.

Objective C: Coordinate the planning, funding, and delivery of all public facilities and services with the cities of Staunton and Waynesboro, as well as other applicable neighboring localities, so as to maximize economies of scale and minimize redundancies.

Policy 1: Regional Planning Efforts. The county should continue to participate in regional planning efforts such as the Central Shenandoah Planning District Commission.

Policy 2: Coordinated Emergency Services Programs. The county should work with the cities of Staunton and Waynesboro to provide backup Emergency Operations Center coverage. The county should explore further options for coordinating the delivery of emergency services with the cities and the neighboring localities, including shared services agreements, and mutual aid agreements.

Policy 3: Regional Educational Programs. The county should continue to participate in regional educational programs such as Valley Vocational-Technical Center and the Central Shenandoah Valley Regional Governor's School.

Objective D: Actively work to increase the participation of citizen volunteers in the delivery of county services to the maximum degree feasible.

Goal 2: Manage the allocation of costs and benefits of public services in a fair and equitable manner so that all residents receive their fair share of facilities and services and contribute their fair share of funding for those facilities and services.

Objective A: Allocate the costs and benefits of new and existing facilities and services in a balanced and equitable manner so that those who benefit pay a fair share of the costs.

Policy 1: Fiscal Impact Analysis. The county should examine the feasibility of establishing a fiscal impact analysis procedure. In order to aid the county in estimating and forecasting its capital and service expenditures, the fiscal impact of each major development proposal should be analyzed.

Policy 2: Proffer Guidelines. The county should examine the possibility of establishing guidelines for the proffering of land, facilities, and/or funds to offset a portion of the cost of providing capital facilities to serve a new development. Flexibility should be encouraged in the type and mix of proffers so that the county can work with developers to determine the most appropriate proffer package for a particular project.

Policy 3: Special Service Districts. The county should examine the possibility of establishing special service districts to provide the funding for additional public facilities and services for particular areas of the county that desire such additional facilities and services. Such districts should be located in the Urban Service or Community Development Areas designated in the Comprehensive Plan.

Objective B: Ensure that all county residents equitably pay for resources that benefit all county residents.

Policy 1: Funding Increased Density in Urban Areas. The county should develop a strategy for ensuring that the infrastructure improvements that permit higher densities in the Urban Service and Community Development Areas are funded by all county residents.

Policy 2: Funding Agricultural Preservation Methods. The county should develop a strategy for ensuring that the tools that work to preserve the agricultural nature of the Rural Conservation and Agricultural Conservation Areas are funded by all county residents.

Objective C: Allocate new investments in public facilities and services within the county on the basis of population growth, and local demand/need, in accordance with Comprehensive Plan and Capital Improvements Program policies.

Policy 1: Central and Local Facilities. The county should balance the need to centralize as many facilities and services as possible for purposes of economy and efficiency with the need to disperse them for purposes of providing convenient service to all county residents.

Policy 2: Combine Public Facilities. When feasible and consistent with service delivery objectives, the county should locate compatible public facilities together on a shared site in order to minimize the costs of land and utilities and to provide maximum convenience to citizens.

Objective D: Utilize taxation methods that encourage the preservation of productive agricultural areas while ensuring that the land is fairly and equitably assessed.

Policy 1: Sliding-Scale Land Use Taxation. The county should explore the utilization of a voluntary sliding-scale land use taxation program in the agricultural zoning districts.

Policy 2: Revalidation Schedule. The county should explore the possibility of changing to a different land use tax revalidation schedule. The county should work to establish the revalidation schedule that is both most efficient for county staff and the most equitable for the county's landowners.

Policy 3: Open Space. The county should explore the possibility of restricting enrollment in the land use taxation program to only those properties that are used for productive agricultural and forestry purposes.

G. Historic Resources

Goal 1: Identify and protect the basic physical integrity of the county's historic and prehistoric sites and structures.

Objective A: Continue taking the necessary steps to identify and preserve all of the county's significant historic and prehistoric sites and structures.

Policy 1: Historic Districts. The county should encourage the voluntary submission of proposals for local historic districts in areas which have a significant concentration of historically significant sites, or individual sites of special historic significance and along corridors which lead to historic areas.

Policy 2: Historic Overlay Zoning District. The county should consider establishing a historic overlay zoning district in the Zoning Ordinance. Such overlay districts could contain design guidelines for new construction in order to ensure compatibility of architectural form and materials.

Policy 3: Historic Resources Inventory. The county should explore updating the existing historic resources inventory.

Policy 4: Preservation Plan. The county should explore developing a separate historic preservation plan for its historic resources.

Policy 5: Funding Sources. The county should explore all available state and federal funding sources for historic preservation projects.

Objective B: Promote the preservation of historic resources through all available government, private business, or nonprofit options.

Policy 1: Conservation Easements. Encourage and promote the use of conservation easements in the Rural Conservation and Agricultural Conservation Areas to preserve land and structures of scenic and/or historic significance. Proposed easements for historic resources in the Urban Service and Community Development Areas should require approval of the Board of Supervisors.

Policy 2: Coordinate Efforts. Work with federal, state, regional, and neighboring local officials to coordinate and reinforce efforts to promote historic preservation efforts and programs.

Policy 3: Civil War Battlefield Areas. Encourage the continuing efforts of local residents in the Piedmont or other Civil War battlefield areas to organize voluntary measures to maintain agricultural and forestal land uses on the battlefield sites and the surrounding areas, and to otherwise preserve the battlefield areas.

Policy 4: Purchase of Development Rights Program. Examine possible ways in which a purchase of development rights program for agricultural land preservation can be linked with the preservation of historic and prehistoric resources.

Policy 5: Certified Local Government Program. The county should explore becoming a Certified Local Government as designated by the Virginia Department of Historic Resources.

Policy 6: Taxation Policies. The county should examine the development of taxation policies that are supportive of the preservation of historic resources.

Goal 2: Foster new development that is compatible in character with the county's historic resources.

Objective A: Guide new development so it is compatible with the county's historic and scenic character.

Policy 1: Preservation in New Developments. Through the development review process, work with developers and builders to strongly encourage the preservation of historic structures and sites and to incorporate them into the design of new development projects.

Policy 2: Road Design. Work closely with VDOT and developers to strongly encourage flexibility in the design of new public roads and road improvements when needed to preserve significant historic features, structures, and sites. Modifications to curve radii, pavement width, and

other standards may be necessary and appropriate in order to preserve the character and integrity of historic resources.

Policy 3: Context-Sensitive Design. The county should encourage any development that occurs in or near historic areas to incorporate creative and sensitive design so as to limit the visual impact on the surrounding area.

Objective B: Maintain the historic character of the county's rural towns and villages while encouraging their development as commercial and cultural centers.

Policy 1: Adaptive Reuse. Encourage the adaptive reuse and rehabilitation of existing historic structures for new and innovative uses, while retaining the integrity of the structure and the compatibility of the use with existing and planned neighboring land uses.

Policy 2: Zoning Classifications. The county should consider implementing zoning classifications that would allow business and residential uses in historic villages to grow moderately in keeping with their existing character.

Goal 3: Foster public education and greater appreciation and understanding of historic and archaeological resources, and public support for preservation of those resources.

Objective A: Enhance local awareness and understanding of the county's historic resources and their relationship to the county's current culture and economy, as well as the tourism industry.

Policy 1: Education. Promote public and private education efforts about the county's historic resources and efforts to conserve them. Encourage public awareness efforts through the schools, the media, and local civic and business organizations.

Policy 2: Tourism. Foster a strong and complementary relationship between tourism promotion and historic preservation efforts. Encourage the promotion and awareness of the county's historic resources through the tourism industry development process. Consider developing a countywide heritage tourism program.

Policy 3: Historic Resource Information. Compile and maintain a file, in the form of a GIS database, on local historic resources for use by citizens and by county and state agencies in the review of public and private plans and development proposals.

Policy 4: Augusta County Historical Society. Support the activities of the Augusta County Historical Society as it seeks to study, collect, preserve, publish, educate about, and promote the history of Augusta County and its communities.

H. Housing

Goal 1: Ensure the provision of a variety of housing types and values that will meet the needs of county residents.

Objective A: Help to ensure that the local housing market offers a range of housing densities, types and prices.

Policy 1: Mixed Use Development. In urban areas, encourage mixed use and mixed income developments which provide compact communities that can offer more convenient access to employment and shopping and more efficient and economical dwelling units at a somewhat higher than average density.

Policy 2: Adaptive Reuse and Rehabilitation. Encourage the adaptive reuse and rehabilitation of existing structures, particularly historic structures in order to increase the opportunities for variety and economy in the housing stock.

Policy 3: “High value” Housing. Encourage builders and developers to provide “high value” housing rather than simply “affordable” housing. To have maximum affordability, moderately-priced housing should be located and designed to be efficient, durable, close to work and shopping, and easily maintained so that it will appreciate in value over the course of time.

Policy 4: Retiree and Elderly Housing. Promote the development of housing to accommodate the growing retiree and elderly population. Monitor the provision of adequate senior care facilities to accommodate the growing retiree and elderly population.

Policy 5: Equal Access to Housing. Continue working to provide equal access to all housing in the county, particularly at the neighborhood level.

Policy 6: Ordinance Changes. When evaluating proposed changes to the Zoning and Subdivision Ordinances, the county should consider the impact such changes might have on the balance of housing densities, types, and prices.

Objective B: Ensure the provision of an adequate supply of safe, suitable and affordable housing for all county residents of all income levels.

Policy 1: Housing Plan. The county should prepare, with public involvement, a housing plan to study the housing needs of the county as well as the feasibility of implementing new local and regional housing programs.

Policy 2: Coordinate with Neighboring Jurisdictions. The county recognizes that the housing market is regional in nature and therefore the issues of affordable housing should be approached from a regional perspective. The county should therefore coordinate its efforts to provide affordable housing with those of the cities and other neighboring localities in order to maximize efficiency and effectiveness. Such cooperative efforts could include housing authorities, specific housing projects, and a range of local, state, or federally funded assistance programs.

Policy 3: Community-Based Housing Initiatives. Encourage public and private efforts to provide affordable housing and to rehabilitate substandard housing stock, including housing trust funds, cooperative housing projects, transitional housing, volunteer efforts, self-help groups, and apprentice programs.

Policy 4: Federal and State Programs. Explore the further use of federal and state programs to help meet local housing needs, including Block Grants for housing rehabilitation and HUD Section 8 rental housing vouchers. Encourage local developers, builders, and financiers to participate in federal and state housing programs.

Policy 5: Housing Trust Fund. Explore the feasibility of establishing a local housing trust fund, or other similar program, to assist in financing affordable housing efforts. Funding assistance could come from both public and private sources including developer proffers, the county government and local businesses and industries. The trust fund could provide various forms of financial assistance including land and interest rate buy downs, second trust financing, and direct assistance for construction of affordable units.

Policy 6: Housing Authority. Explore the feasibility of establishing a local or regional housing authority, potentially in conjunction with either or both of the cities. Such an Authority could administer and coordinate a variety of programs and initiatives to ensure an adequate supply of affordable housing for local citizens.

Policy 7: Housing Code. Examine the feasibility of adopting and administering the Virginia Maintenance Code to ensure the upgrading of existing, substandard and unsafe housing.

Objective C: Encourage the construction of good quality housing which provides a sound economic investment for the citizen and a tax base enhancement for the county.

Goal 2: Ensure that housing development occurs in a pattern which is efficient and affordable to the county taxpayers at large in terms of providing public facilities and services.

Objective A: Encourage housing development to locate in areas where adequate water and/or wastewater service is available, roads and schools have adequate capacity, and emergency services have adequate coverage.

Policy 1: Rezoning Decisions Based on Planning Policy Area. The county should ensure that all decisions on residential rezonings are compatible with the Planning Policy Area in which the rezoning request is located at the density envisioned by the Plan.

Policy 2: Staunton and Waynesboro as Growth Areas. The county should recognize the role of the cities as growth areas and should expect the cities to be centers of future development.

Goal 3: Ensure that new and existing residential areas are protected from conflicts with incompatible land uses and the county's agricultural and environmental resources are protected from conflicts with incompatible residential land uses.

Objective A: Limit residential development in the Rural Conservation and Agricultural Conservation Areas.

Policy 1: Residential Developments in Rural Conservation Areas. The county should limit residential developments in Rural Conservation Areas to only rural residential developments, permitted residential cluster developments, and individual lots created through the minor subdivision process.

Policy 2: Residential Developments in Agricultural Conservation Areas. The county should limit residential developments in the Agricultural Conservation Areas to only individual lot creation through the minor subdivision regulations.

Objective B: Enact measures to separate residential uses from intensive agriculture uses in the Rural Conservation and Agricultural Conservation Areas.

Policy 1: Reciprocal Setbacks. Reciprocal setbacks should be implemented for single-family and multi-family housing located in or adjacent to the Rural Conservation or Agricultural Conservation Areas.

I. Human Services

Goal 1: Maintain the current quality of public health and social services to residents of all ages and needs in the county, in conjunction and cooperation with local, state, and federal agencies.

Objective A: Protect citizens in at-risk situations from neglect, abuse, and exploitation.

Policy 1: Youth Services. The county should continue to focus efforts to meet the special needs of local youth through promoting cooperative and coordinated efforts of all public and private entities that serve children and young adults, including public and private schools, public safety agencies, social services, civic organizations, and local youth-oriented businesses. Services such as employment training, teen pregnancy prevention, substance abuse prevention, and juvenile offender programs should continue to receive county support.

Policy 2: Mental Health and Substance Abuse Services. The county should support the mental health and substance abuse services provided by federal, state, and local government agencies as well as other programs provided by nonprofit organizations.

Policy 3: Disability Services. The county should support all government, private, and nonprofit programs that provide services to disabled individuals.

Policy 4: Elderly Services. The county should promote and support public and private services, projects, and policies which focus on assisting and involving senior citizens, including transportation assistance, adult day care, recreation and education programs, volunteer programs, and library services.

Objective B: Promote conditions that support the development of healthy individuals and families.

Policy 1: Health Department Programs. The county should continue to support the Virginia Department of Health in its efforts to promote proper nutrition, immunizations, family planning, environmental health, cancer screening, and other public health programs.

Policy 2: Social Services Programs. The county should continue to support the Department of Social Services through such programs as food stamps, Medicaid, Family Access to Medical Insurance Security (FAMIS), and other child and adult services.

Policy 3: Retiree and Elderly Housing. The county should promote the development of housing to accommodate the growing retiree and elderly population. The county should monitor the provision of adequate senior care facilities to accommodate the growing retiree and elderly population and ensure that they are located in close proximity to the facilities that are needed to serve them.

Objective C: Foster the support of the private sector in meeting local social and human service needs.

Objective D: Coordinate with state and federal agencies and programs, as well as with the cities, regional agencies, and neighboring localities to ensure that human service needs are adequately met.

Policy 1: Support Effective Programs. The county should support those programs which are cost-effective and have shown demonstrated effectiveness in achieving program goals.

J. Land Use and Development

Goal 1: Encourage a compact, orderly, and coordinated development pattern in the Urban Service and Community Development Areas

Objective A: Provide a convenient, safe, and efficient network of urban land uses.

Policy 1: Development Pattern. Encourage compact, mixed-use, pedestrian-oriented communities which combine a range of residential unit types and densities with limited neighborhood commercial business uses in a convenient and coordinated pattern.

Policy 2: Parcel Consolidation. Encourage the consolidation of small tracts into larger tracts in order to facilitate the coordination of land development and the provision of adequate public facilities and amenities.

Policy 3: Infill Development. Encourage carefully designed development on vacant or under-used infill parcels, while requiring compatibility of land use with adjacent properties and adequate buffers to ensure sensitive transitions between uses and densities.

Policy 4: Unit Types. Encourage a full range of dwelling unit types and densities in order to provide for all market segments in the community.

Policy 5: Strip Development. Discourage a “strip” business and industrial development pattern of multiple, closely-spaced road entrances along major road corridors so as to maintain visual harmony and avoid excess

traffic congestion. This pattern can be prevented through the use of reverse frontage lots, by consolidating smaller parcels into larger, coordinated projects, and by consolidating road entrances to ensure a minimum of 660 feet between commercial entrances on Thoroughfare Plan road corridors. Parking and loading areas should be encouraged to locate to the side and rear of commercial business and industrial buildings and should be screened from neighboring residential properties. Access from secondary collector roads rather than arterial roads should be encouraged. Industrial access roadways should be designed so that industrial traffic remains separated from residential traffic.

Policy 6: Development Around Interstate Interchanges. The county should encourage development around the interchanges on Interstates 64 and 81 to proceed in an efficient pattern that allows for the efficient use of the road network. The county should prepare interchange area plans for these areas and should encourage the use of Planned Unit Developments in these areas. Design strategies outlined in the 2005 “Augusta County Design Principles” booklet should be encouraged in these areas.

Policy 7: Development Around Route 262 Loop. The county should examine whether development should be encouraged to take place in the areas of the county west of Interstate 81, particularly in those areas along the Route 262 Loop around Staunton.

Policy 8: Development North of Waynesboro. The County and the Service Authority should examine ways in which public water and wastewater services can be extended to the area immediately adjacent to the northern boundary of the City of Waynesboro, north of Route 250 and west of Route 254, in order to serve existing and future residential developments in that area.

Policy 9: Location of Business Development. Larger scale, regional, and community businesses and higher intensity business uses should be permitted only in designated Urban Service Areas, where the majority of future population growth is expected to occur, and where the services and facilities necessary to support these businesses are located.

Smaller scale, local neighborhood business uses may locate in the designated Urban Service Areas or Community Development Areas.

Also, business uses may be permitted in areas designated Mixed-Use on the Planning Policy Area/Future Land Use Map provided they are designed in such a manner that the different uses are fully compatible with each other.

Policy 10: Location of Industrial Development. Most industrial uses should be permitted only in designated Urban Service Areas, where the roads, utilities, and other necessary infrastructure are sufficient to support such uses.

Natural resource industries which require particularly large buffer areas and which are generally compatible with agricultural and forestal activities may locate in the Urban Service and Community Development Areas only if compatible with existing and planned adjacent uses.

Proposals for new industrial development or expansion should be evaluated in terms of the consistency and compatibility with the Planning Policy Area/Future Land Use Map and the other policies of this Plan as well as with the infrastructure available in the surrounding area.

Objective B: Increase the percentage of new residential units locating in the Urban Service Areas to 80% of all new residential development. Increase the percentage of new residential units locating in the Community Development Areas to 10%.

Policy 1: Urban Service Area Residential Densities. The density of developments in the Urban Service Area should be from three to sixteen units per acre. In general, maximum residential development densities in the Urban Service Areas, as identified on the Planning Policy Area/Future Land Use Map, will be as follows:

A: Medium Density Residential. Medium Density Residential areas should have densities between three and four dwelling units per net acre.

B: Single-Family Attached Residential. Single-Family Attached Residential areas should have densities between four and eight dwelling units per net acre. Only attached residential units such as townhouses and duplexes should be encouraged in these areas.

C: Multifamily Residential. Multifamily Residential areas should have densities between nine and sixteen dwelling units per net acre. Only multifamily residential units should be encouraged in these areas.

D: Planned Residential. Areas designated Planned Residential should have densities of four to eight dwelling units per net acre. A variety of residential types should be encouraged in these areas.

E: Neighborhood Mixed Use. Areas designated Neighborhood Mixed Use may have a density of up to four to eight dwelling units per net acre. In addition to a variety of residential uses, these neighborhoods

may have convenience retail and office uses on up to 20 percent of the total land area.

F: Community Mixed Use. Areas designated Community Mixed Use may have a density of up to six to twelve dwelling units per net acre. In addition to a variety of residential uses, on up to 40% of the total land area in the neighborhood, there may be retail and office uses and in some, but not all, cases industrial uses.

Policy 2: Community Development Area Residential Densities. The density of developments in the Community Development Areas should be limited to not more than one dwelling unit per net acre. In general, maximum residential development densities in the Community Development Areas, as identified on the Proposed Land Use Map, should be as follows:

A: Low Density Residential. Low Density Residential areas should have densities between one-half and one dwelling unit per net acre.

Policy 3: Rezoning Approvals. Requests for increased residential densities for specific sites should be evaluated in terms of the Planning Policy Area/Future Land Use Map, the pattern of existing development in the vicinity of the site, road access, available and planned public facilities and the level of facilities proffered by the applicant.

Policy 4: Role of Cities in Absorbing New Residential Development. The county should recognize the role of Staunton and Waynesboro in absorbing new residential development in the region.

Policy 5: Rural Communities. Encourage any new development in and adjacent to the county's rural communities, as identified by this Plan, to conform to the established development pattern in the community. Work with VDOT to determine how any transportation expansions or improvements can be designed to conform to the existing pattern. Rural communities with public water and/or sewer service will have a designation of Rural Community on the Planning Policy Area/Future Land Use Map where uses compatible with the existing development pattern in the community will be encouraged. The county should explore the feasibility of establishing new zoning districts for use in these communities, particularly for business and residential uses.

Objective C: Prevent conflicts between residential, business, and industrial land uses as well as agricultural uses located in adjacent Rural Conservation and Agricultural Conservation Areas.

Policy 1: Buffers. The county should strongly encourage that adequate buffers be provided on each site to provide protection and transition between uses of differing densities or intensities. Buffers should use existing topography and vegetation to the maximum extent possible but should provide additional buffer materials wherever necessary to provide adequate visual and aural protection between adjacent properties.

Business and industrial developments should be strongly encouraged to provide adequate landscape or topographic buffers and screening between the business or industrial use and any existing or planned adjacent non-business or industrial uses.

Policy 2: Transitions. Medium Density Residential uses should generally serve as transitions between lower and higher density residential uses. Higher density residential uses should serve as transitions between business and industrial uses and lower density residential uses. Low and Medium Density Residential uses should serve as transitions between higher intensity uses and agricultural uses located in adjacent Rural Conservation and Agricultural Conservation Areas.

Similar uses and intensities should generally front each other across local and collector roads. Uses should gradually change at the side and rear property boundaries, or across major arterial roads. Reverse lot frontage should be used wherever possible.

Policy 3: Mixed Use Development. A mixture of residential, business, and industrial uses should be encouraged in areas designated Planned Residential, Neighborhood Mixed Use, or Community Mixed-Use on the Planning Policy Area/Future Land Use Map. Mixed use developments may include a mixture of residential uses, a mixture of residential and business uses, a mixture of business and industrial uses, or some other combination. Developments that incorporate a mixture of uses should be designed in such a manner that conflicts between different uses can be minimized.

Objective D: Enhance the character of the urban environment.

Policy 1: Small Area Plans. The county should develop a series of small area plans for the portions of the Urban Service and Community Development Areas that require additional detailed planning efforts as well as a series of interchange area plans for those Interstate interchanges that require additional attention. Recommendations should include the layout of the transportation network, the appropriate arrangement of land uses, and the inclusion of schools, parks, and other civic uses.

Policy 2: Neighborhood Identity. Create new neighborhoods with a clear visual identity and sense of place.

Policy 3: Public Facilities. Schools, parks, community centers, and other public facilities should be located and designed so as to provide a focus for urban neighborhoods and communities, with clear visual identities and convenient access for pedestrians as well as vehicles.

Policy 4: Existing Features. Existing natural and cultural features should provide the framework for the design and development of any site. Such features should be preserved and incorporated into the new development to the maximum practical extent.

Existing topography, woodlands and natural drainage channels should be preserved to the maximum extent possible as new urban areas are developed. Clearing and grading should be kept to a minimum through the use of clustering, flexible street design standards, phased development, carefully designed and managed shared parking, and similar techniques.

New development should be strongly discouraged from steep slopes in excess of 25% grade.

Existing historic structures should be preserved and integrated into new development as an identifying feature of a project.

Policy 5: Development Standards. The county should require that new residential developments provide adequate on-site facilities to accommodate the needs of the new residents and coordinate those improvements with adjacent sites and with the county. Such facilities may include but not be limited to recreation facilities, land for schools, community centers or other public use sites, adequate stormwater management facilities and adequate roads and parking.

Policy 6: Urban Open Space. The county should encourage the use of open space preservation programs, such as conservation easements, in the Urban Service and Community Development Areas for recreational, open space, and natural resource preservation purposes. The utilization of any such programs in these areas would require approval by the Board of Supervisors and may require allowances for additions and improvements to water and wastewater lines, public roads, and other identified infrastructure needs. The Urban Open Space category on the Planning Policy Area/Future Land Use Map should be used to identify existing open space recreational and preservation sites within the Urban Service and Community Development Areas. As additional land is preserved in these areas, it should be identified on the Planning Policy Area/Future Land Use Map as Urban Open Space.

Objective E: Maintain the safety and capacity of the urban road system.

Policy 1: Road Access. Encourage residential subdivisions to be designed with an internal focus and internal, reverse lot road frontage, rather than “stripping” the existing state highways. All residential subdivisions should be discouraged from having a single point of entry onto collector roads.

Policy 2: Traffic Calming. Calm vehicle traffic within communities and near schools with pedestrian-oriented streetside design. Design strategies such as buildings located at minimum setback distances, on-street parking, and streetscaping amenities such as street trees, benches, and lighting should be encouraged where appropriate.

Objective F: Provide efficient suitable land area to meet the economic development goals of the county.

Goal 2: Maintain the county’s predominantly rural character, including the small towns and villages.

Objective A: Reduce the number and size of new residential lots being created in the Rural Conservation and Agricultural Conservation Areas. Reduce the percentage of rural residential lots from over 50% to less than 10% of all new residential lots.

Policy 1: Lot Size. Encourage rural residential development to occur with a minimum individual lot size of two acres for conventional subdivisions and one acre for clustered subdivisions.

Policy 2: Subdivision Regulations. Examine possible amendments to the subdivision regulations that would assist the county in restricting the amount of new residential development taking place in the Rural Conservation and Agricultural Conservation Areas.

Policy 3: Rezonings. In the Rural Conservation Areas, the county should encourage rezonings to Rural Residential to foster incremental additions to existing settlements.

Objective B: Provide sufficient incentives and protections for agricultural land uses so as to lose no more than 5% of the current total acreage of farmland in the Rural Conservation and Agricultural Conservation Areas over the next 20 years.

Policy 1: Agricultural and Forestal Districts. The county should add incentives to encourage the creation and support of additional Agricultural

and Forestal Districts in the Agricultural Conservation and Rural Conservation Areas as well as to support the continuation of the existing Districts.

Policy 2: Conservation Easements. The county should support and encourage the placement of conservation easements on property located in the Rural Conservation and Agricultural Conservation Areas. The county should adopt a policy for the review of proposed easements within a specific distance (i.e. ½ to 1-mile) of significant public facilities such as the Shenandoah Valley Regional Airport or Blue Ridge Community College.

Policy 3: Purchase of Development Rights. The county should establish a purchase of development rights (PDR) program to protect farmland, open space, community character, and natural resources within the county. The county should provide a consistent and sufficient level of funding to the PDR program to ensure its success.

Policy 4: Transfer of Development Rights. The county should explore the feasibility of establishing a transferable development rights program.

Objective C: Locate at least 90% of all new residential development in the Rural Conservation and Agricultural Conservation Areas either in small clusters or at the edges of existing settlements, so as to cause minimal disruption of the rural landscape.

Policy 1: Unit Types. The county should allow only single family detached dwellings in the rural areas. Permit accessory dwelling units where appropriate.

Policy 2: Clustering of Dwellings in the Rural Conservation Areas. In the designated Rural Conservation Areas, the county should encourage the clustering of new dwellings so as to preserve 80% of the parent tract in permanent open land, with a minimum lot size of one acre. The county should require conventional residential subdivisions to have a minimum lot size of two acres, with overall densities of the rezoned property, of one dwelling per five acres.

Policy 3: Clustering of Dwellings in the Agricultural Conservation Areas. In the designated Agricultural Conservation Areas, the county should strongly discourage rural cluster developments as well as conventional residential rezonings and subdivisions.

Policy 4: Rural Communities. Encourage any new development in and adjacent to the county's rural communities, as identified by this Plan, to conform to the established development pattern in the community. Work

with VDOT to determine how any transportation expansions or improvements can be designed to conform to the existing pattern. The county should explore the feasibility of establishing new zoning districts for use in these communities, particularly for business and residential uses.

Objective D: Prevent conflicts between residential, business, and industrial land uses and agricultural land use activities.

Policy 1: Siting of Dwellings. Encourage the use of “building area” designations on individual lots in all rural developments in order to provide maximum residual open land and maximum separation between neighboring farm activities and other land uses.

Policy 2: Non-Residential Development. Limited, compatible, small scale, rural business uses may locate in the designated Rural Conservation and Agricultural Conservation Areas if adequate buffers between adjacent properties, road access, and on-site well and sewage disposal are sufficient to ensure long term public health and safety. Compatible home occupation uses should be encouraged in the rural areas.

Natural resource industries which require particularly large buffer areas and which are generally compatible with agricultural and forestal activities may locate in the Agricultural Conservation Areas, contingent upon the industry providing adequate road access and protection of existing environmental resources.

Objective E: Maintain the scenic character of the rural environment.

Policy 1: Environmental Features. Encourage residential development located in the Rural Conservation and Agricultural Conservation Areas to be sited so as to protect and preserve existing environmental features including streams, views and the horizon, to the maximum extent possible, for the benefit of both new and existing residents.

Clearing and grading should be kept to a minimum through the compact siting of streets and lots. Existing topography and vegetation, including tree lines, hedgerows, and stream channels should be preserved and used as the basic framework for new development.

New Development should be strongly discouraged from steep slopes in excess of 25% grade.

Policy 2: Buffers. Encourage dwellings located in the Rural Conservation and Agricultural Conservation Areas to be screened from existing state roads by existing or planted vegetative buffers, or by existing hills or ridges. Encourage the sensitive and creative use of existing topography

and vegetation to provide buffers between new rural dwellings and existing roads and neighboring farms. Require new residential developments to provide sufficient buffers from existing adjacent farming operations.

Policy 3: Ridgeline Development. New development should be strongly discouraged from ridgelines.

Objective F: Maintain the safety and capacity of the rural road system.

Policy 1: Public Roads. Require all lots in Rural Residential subdivisions to be served by public roads accepted into the VDOT system.

Policy 2: Road Access. Discourage direct access to Thoroughfare Plan roads from individual lots. Encourage residential subdivisions to be designed with an internal focus and internal, reverse lot road frontage, rather than “stripping” the existing state highways. All residential subdivisions should be discouraged from having a single point of entry onto collector roads.

Policy 3: Flexibility in Road Design. Encourage VDOT to be flexible in its standards for new rural roads in terms of vertical and horizontal curvatures in order to allow developers to preserve existing topography and vegetation.

Objective G: Keep the cost of providing public services to rural areas to a minimum.

Policy 1: Development Standards. Require that new residential developments provide adequate on-site facilities to accommodate the needs of the new residents. In rural areas, it is expected that fewer on-site facilities will be needed than in urban areas due to the lower population densities of rural development. However, contributions for off-site facilities will be appropriate to offset a portion of the costs of the facilities that the county will provide to new rural residents.

Policy 2: Water and Sewer. Public water and sewer facilities should not be provided or extended to the designated Rural Conservation or Agricultural Conservation Areas during the timeframe of this Plan, except when necessary to mitigate an imminent and severe public health hazard. At such time as that public water or sewer service is extended to these areas they should be re-designated Community Development Areas, unless the board decides otherwise.

Goal 3: Keep the cost of providing public services and facilities to a minimum.

Objective A: Guide the location of new development towards a pattern which facilitates the efficient provision of public services and facilities and a balance of compatible land uses and communities in which people can live, work, and play.

Goal 4: In regulating development, ensure that the overall, long-term common good of the community is kept in balance with the freedom and rights of the individual landowner.

K. Library

Goal 1: Establish and maintain library facilities and services that provide efficient, effective, and readily available service to all county residents in accordance with state service standards.

Objective A: Provide high-quality library facilities, services, and programs that are efficient, effective, and readily available to serve all county residents.

Policy 1: Library Facilities and Service Delivery. The county should continue to use the Main Library in Fishersville as its major facility, supplemented by the Churchville Library and the two library stations in Craigsville and Deerfield.

Policy 2: Library Facility Improvements. In the short term, library improvements should be focused on renovating the Main Library and transitioning the Craigsville Station to a new facility while continuing to support the Churchville Library and the Deerfield Station. In the longer term, a branch facility will likely be appropriate in the Verona area. The county should encourage the increased use of technological advances to improve library service delivery.

Policy 3: Physical Condition. Make all library facilities clean, safe, attractive, in compliance with the Americans with Disabilities Act, and adaptable to new technologies.

Policy 4: School Libraries and Public Libraries. The Library should continue to support the education of public, private, and home-schooled students. The library collections should supplement the materials found in the school libraries and support the curriculum and the Virginia Standards of Learning.

Policy 5: Coordinate Efforts and Resources. The library system should continue to cooperate with neighboring jurisdictions in sharing materials, technology, and services. Economies of scale that may be achieved through further sharing or combining of resources should be explored.

Policy 6: Common Space. Provide meeting room facilities that are of adequate size and accessible for the wide variety of public activities that are conducted in library facilities.

Policy 7: Library Planning. The Augusta County Library Board should continue to conduct its own planning efforts. The Long Range Plan should be updated regularly. A plan for future branches and outreach services should be developed. The library's planning should be considered a part of the county's planning process.

Policy 8: Changing Demographics. The library should be prepared to respond to changes in the county's demographic situation, particularly the anticipated growth in both immigrant and elderly populations.

Objective B: The county should seek to achieve state standards for library facilities and services during the course of the next five to ten years, and to maintain those service levels as the population grows.

L. Natural Resources

Goal 1: Protect the fundamental integrity of the county's natural environmental systems into the long-term future for the enjoyment and benefit of local citizens, businesses, tourism, recreation, and other species that co-exist within the county.

Objective A: Protect the water, air, natural systems, and water supplies of Augusta County.

Objective B: Protect the natural and scenic beauty of the county's mountains and rural landscapes.

Objective C: Protect the county's forests and special and distinctive habitats.

Objective D: Participate in state and regional programs to protect local waterways, the Shenandoah River, and the Chesapeake Bay.

Policy 1: Purchase of development rights. The county should establish a purchase of development rights program to protect farmland, open space, community character, and natural resources within the county. The county should provide a consistent and sufficient level of funding to the PDR program to ensure its success.

Policy 2: Easements & Land Protection. Promote other conservation easement and land acquisition programs, as well as a possible transfer of development rights program. Land protection techniques could be targeted to active agricultural lands, large and interconnected forest

patches, natural heritage conservation sites and unique natural features, important scenic vistas, and important stream valleys.

Policy 3: Tributary Strategy. Work with the Department of Conservation & Recreation's Shenandoah Valley Office to identify, prioritize, and implement appropriate measures in the Tributary Strategy that also fulfill the goals and objectives noted in this Comprehensive Plan. Seek grant and in-kind funding to implement demonstration projects and innovative practices.

Policy 4: Economic Benefits. Inform the citizens and decision-makers about the economic benefits provided by the county's natural resources. Compile data on the direct and indirect economic benefits from prime farmland, forestry, tourism, recreation, water supply, water quality, and flood control that are made possible by the county's natural resources base. Communicate these benefits effectively so that natural resources issues can be considered fairly in land use and growth discussions.

Policy 5: Natural Resources GIS. Maintain a natural resources geographic information system as part of the county's existing GIS capabilities. The purpose of the natural resources GIS would be to keep data updated and available for comprehensive planning, development review, and education and outreach. Various federal, state, regional, and local agencies already maintain GIS layers, but there is currently no one agency that integrates all the layers that are relevant to the county.

Layers most useful to the county include: impervious cover (derived from CAMA), forest cover and wildfire risk areas from the Virginia Department of Forestry, protected lands and the Conservation Lands Needs Assessment from the Department of Conservation & Recreation, natural heritage resources from DCR, source water protection zones from ACSA, karst features from the Division of Mineral Resources, leaking underground storage tanks from the Department of Environmental Quality, impaired streams from DEQ, dams subject to Dam Safety Regulations from DCR and the Army Corps of Engineers, and dam breach inundation zones from Headwaters SWCD and other dam operators.

Goal 2: Promote efficient and effective stormwater strategies appropriate to each Policy Area to protect water quality and control flooding.

Objective A: Develop watershed-based stormwater plans for the Urban Service Areas (USAs) that allow efficient land development while protecting water quality and controlling stormwater quantity that can damage downstream stream channels and property.

Policy 1: Prioritized List. Create a prioritized list of USA watershed-based stormwater plans so that the county can pursue these plans in an incremental fashion.

A: Content of Plans. Each plan should include: an inventory of existing stormwater facilities and problem areas, a study of options to retrofit stormwater practices within existing developments, an assessment of new regional or subregional facilities, an assessment of on-site stormwater measures (including Low-Impact Development) needed to supplement regional facilities, an assessment of non-engineered approaches (such as flood plain restoration), and likely funding sources and cost-allocation strategies. These plans should acknowledge the intention to achieve density within the USAs as a means of reducing development in the rural areas.

B: Conduct Plans Through Partnerships. The county should seek partnerships to carry out, finance, and implement the plans. Potential partners include: Headwaters Soil & Water Conservation District, Virginia Department of Conservation & Recreation, private businesses and developers, and the cities of Waynesboro and Staunton.

Policy 2: Policies for Pro-Rata Share & Other Funding Systems. Existing County Code allows pro-rata share contributions for areas subject to a “general drainage improvement program.” The county should establish policies and procedures for implementing pro-rata share and other systems to fund watershed-based stormwater plans for the USAs. The county should also pursue public/private partnerships to implement these plans, including proffers to set aside land for and/or construct stormwater facilities and fee-in-lieu contributions (trading off on-site stormwater compliance with contribution to a watershed solution).

Objective B: Develop innovative strategies to control stormwater quality and quantity in all Policy Areas. Particular strategies may be amended in the USAs, pending the completion of particular watershed-based stormwater plans noted in Objective A.

Policy 1: Modify Stormwater Code. Modify Chapter 18, Regulation of Stormwater, to allow and encourage Low-Impact Development (LID) and remove obstacles to incorporating LID design, such as disconnecting impervious areas, into development projects. Develop policies and procedures that supplement the Virginia Stormwater Management Handbook that allow for LID credits as a way to provide incentives for implementation.

Policy 2: Demonstration Projects. Seek to demonstrate LID techniques on new public and private projects as an outreach and learning tool. Seek grant funding to help defray design and construction costs.

Policy 3: Maintenance Agreements. Ensure that recorded maintenance agreements are secured for each project that includes stormwater management facilities.

Policy 4: State Stormwater Regulations. Keep abreast of changes to stormwater regulations at the state level, and modify county ordinances and programs to be consistent with state programs.

Policy 5: Stormwater Program Consistent With State & Federal Guidelines. Develop a stormwater program with the required minimum elements of the Federal and Virginia programs applicable to municipal separate storm sewer systems (MS4s). These program elements include: (1) public education and outreach, (2) public participation, (3) illicit discharge detection and elimination, (4) construction stormwater management, (5) post-construction stormwater management, and (6) pollution prevention and good housekeeping at municipal operations.

Objective C: Encourage natural, cost-effective solutions to flood control and stormwater management in all Policy Areas.

Policy 1: Policy on Natural Solutions. Establish policies in the stormwater, zoning, and subdivision regulations that provide incentives for naturalized and revegetated flood plains, riparian buffers, and natural channel stream restoration. Incentives that can be considered include: density bonuses, stormwater credits (partial waiver of on-site requirements), recognition as “Clean Water Sites,” and possible cost-share funds.

Goal 3: Promote development layout that protects natural and scenic resources by design.

Objective A: Adopt development design standards, known as performance standards, that can be applied to projects subject to rezoning requests, PUDs, special use permits, and other non-administrative approvals (with the exception of any agricultural and forestry activities). The Performance Standards Table (see Policy 1 below) can serve as a guideline. It is not expected that every development design will incorporate all of the natural resources features in the table. County staff and the developer should consider the most salient natural resources features for each development site.

Objective B: Consider adopting performance standards that can be incorporated into the zoning and subdivision ordinances, and which would

apply to all development applications. Consider making the standards mandatory in the Rural Conservation and Agricultural Conservation Areas, while maintaining flexibility in the Urban Service and Community Development Areas.

Policy 1: Performance Standards Table

Natural Resources Feature	Urban Service Area	Community Development Area	Rural Conservation Area	Agricultural Conservation Area
Riparian Buffers	35 feet on either side of stream. To extent feasible, make sure that impervious areas do not short-circuit buffers (e.g., carried in pipe through buffer)	35 feet on either side of stream; ensure that impervious areas do not short-circuit buffer.	100 feet on either side of stream or limit of flood plain (wider of the two); ensure that impervious areas do not short-circuit buffer.	100 feet on either side of stream or limit of flood plain (wider of the two); ensure that impervious areas do not short-circuit buffer.
Flood Plains	<ul style="list-style-type: none"> No habitable structures Develop greenways & recreation areas 	<ul style="list-style-type: none"> No habitable structures Develop greenways & recreation areas 	<ul style="list-style-type: none"> No development or filling in flood plain Develop small-scale trails Promote reforestation 	<ul style="list-style-type: none"> No development or filling in flood plain Promote reforestation
Flood Control Dam Inundation Zones	<ul style="list-style-type: none"> Allow expansions to existing development with education and possible mitigation measures For new residential development, locate habitable structures outside of zone if reasonable alternatives exist 	<ul style="list-style-type: none"> Allow expansions to existing development with education and possible mitigation measures For new residential development, locate habitable structures outside of zone if reasonable alternatives exist 	No habitable structures if reasonable alternatives exist	No habitable structures if reasonable alternatives exist
Natural Heritage Resources & Critical Habitat	<p>Preserve in open space to the extent feasible.</p> <p>Work with DCR on conservation management plans</p>	<p>Preserve in open space to the extent feasible.</p> <p>Work with DCR on conservation management plans</p>	<p>Preserve through cluster design</p> <p>Work with DCR on conservation management plans</p>	<p>Preserve through development layout and adequate lot sizes</p> <p>Work with DCR on conservation management plans</p>
Slopes	Avoid slopes > 25%, especially associated with stream valleys	Avoid slopes > 25%, especially associated with stream valleys	Set aside slopes > 25% and ridgelines through cluster	No grading, roads, building sites on slopes > 25% and

Natural Resources Feature	Urban Service Area	Community Development Area	Rural Conservation Area	Agricultural Conservation Area
			design	ridgelines
Source Water & Recharge Areas for Public Water Supplies (VA Dept. of Health Zone 1 or more detailed zone identified by ACSA study)	<ul style="list-style-type: none"> Restrict land uses that pose contaminant threat Avoid stormwater practices that infiltrate or can contaminate groundwater; ensure adequate water quality treatment Encourage revegetation 	<ul style="list-style-type: none"> Preserve as open space to the extent feasible Restrict land uses that pose contaminant threat Avoid stormwater practices that infiltrate or can contaminate groundwater; ensure adequate water quality treatment Encourage revegetation Provide enhanced on-site sewage disposal system design 	<ul style="list-style-type: none"> Set aside critical areas through cluster design Encourage reforestation Provide enhanced on-site sewage disposal system design 	<ul style="list-style-type: none"> Limit clearing on lots to minimum necessary Encourage reforestation Provide enhanced on-site sewage disposal system design
Wetlands	<ul style="list-style-type: none"> Obtain all required federal and state permits Provide 35 foot buffer from edge of wetlands 	<ul style="list-style-type: none"> Obtain all required federal and state permits Provide 35 foot buffer from edge of wetlands 	<ul style="list-style-type: none"> Obtain all required federal and state permits Provide 100 foot buffer from edge of wetlands Provide enhanced water quality treatment 	<ul style="list-style-type: none"> Obtain all required federal and state permits Provide 100 foot buffer from edge of wetlands Provide enhanced water quality treatment
Unique Natural Features (e.g., caves, major karst features, critical habitat)	Tie in with greenways, active and passive recreation, and flood plain preservation	Tie in with greenways, active and passive recreation, and flood plain preservation	Use cluster design to protect the features listed in this table to the extent achievable, as well as active agricultural and forestry uses	Provide open space amenities through development layout and lot sizes; maximize continued use of active agricultural and forestry areas

Goal 4: Sustain the natural resources base that allows for productive, healthy, and environmentally-sound agricultural and forestry land uses.

Objective A: In the Rural Conservation and Agricultural Conservation Areas, adopt policies and incentives to maintain parcel sizes that allow for meaningful agricultural and forestry operations.

Policy 1: Easements. Support conservation easement programs, as well as applicable purchase and transfer of development rights programs. Land protection techniques should be targeted to active agricultural lands, large and interconnected forest patches, and natural resources and natural heritage resources.

Policy 2: Resolve Tax Conflicts. Study and resolve any tax incentive conflicts between enrollment in an Agricultural and Forestal District and placement of property in conservation easements. The county should investigate state-authorized incentives for preservation of agricultural and forestry lands.

Policy 3: Promote Forestry on Private Land. Promote woodlots and sound forestry management on large parcels of land outside of the county's public land (national forest and national park) to sustain a healthy forestry economy and to help protect water quality and game and non-game wildlife.

Policy 4: Development Layout. In the context of development proposals, the county should seek to preserve the viability of agriculture and forestry on the property in question as well as adjacent properties. Cluster designs in the RCA and lot configurations in the ACA should consider this a paramount design objective.

Objective B: Promote agricultural and forestry operations that protect water quality and natural resources.

Policy 1: Agricultural Best Management Practices (BMPs). Work with partner agencies, including the Headwaters SWCD and the Natural Resources Conservation Service, to promote agricultural BMPs and nutrient management planning.

Policy 2: Forestry BMPs & Management Plans. Work with partner agencies, including the Virginia Department of Forestry, to promote forest management plans and forestry BMPs.

Policy 3: BMP Incentives. Consider providing incentives for agricultural and forestry BMPs whereby landowners that implement BMPs are offered tax or other financial incentives.

Policy 4: National Forest Management Plans. Work with the U.S. Forest Service to promote the county's interests during revision of the George Washington/Thomas Jefferson National Forest Management Plan.

Objective C: Raise citizen and landowner awareness about land protection and possible conflicts with agriculture and forestry.

Policy 1: Land Preservation Outreach. The county, with assistance from the Director of Agriculture Development, should develop a brochure that outlines the various programs and how landowners can access key information and resources.

Policy 2: Targeted Outreach Materials. The county should develop brochures and outreach materials that can be distributed with building permits or by other means to raise awareness for people living in or moving to the county's rural areas. Outreach can be targeted to residential developments within the Rural Conservation and Agricultural Conservation Areas, adjacent to Agricultural and Forestal Districts, and within the Woodland Home Communities and Wildland/Urban Interface Areas identified by the Virginia Department of Forestry. Information can include what to expect from active agricultural and forestry operations, ways to protect water quality and wildlife habitat on rural residential properties, and methods to reduce risk from wildfires. The county should collaborate in this task with organizations and agencies such as the Department of Forestry and the Headwaters SWCD.

Goal 5: Protect the quality and quantity of groundwater as the primary source of drinking water for county residents and as a source of water to springs and headwater streams.

Objective A: Work with the Augusta County Service Authority (ACSA) to develop wellhead protection strategies to apply to existing and needed future water supply sources that serve the Urban Service and Community Development Areas.

Policy 1: Adopt Source Water Protection Overlay. Support ongoing source water protection efforts, including the source water protection ordinance developed by the Augusta County Service Authority. Assist the ACSA in protecting public water supplies. Supplies in karst areas are of particular importance.

Policy 2: Groundwater Studies. Support Augusta County Service Authority efforts to investigate new groundwater sources and pursue geologic investigations to determine areas of influence for springs and wells.

Policy 3: Contaminant Source Inventory. Work with the ACSA on a new initiative to develop a GIS-based contaminant source inventory as a growth coordination and early warning tool for existing and proposed development. Features to consider for such an inventory include: items addressed in the Virginia Department of Health's Source Water Assessment Program, leaking underground storage tanks, particular karst

features where groundwater is uniquely vulnerable (e.g., sinkholes), confined animal operations, and other sources that use, store, or dispose of hazardous chemicals.

Objective B: Protect the quality and quantity of groundwater that serves private, individual wells and provides source water to springs and headwater streams.

Policy 1: On-Site Sewage Disposal System Maintenance. Encourage proper use and maintenance of all on-site sewage disposal systems, including septic systems, through education and outreach. Educational materials should be distributed with building permits for properties that will use wells and on-site sewage disposal systems.

Policy 2: Mandatory Pump-Out of Septic Systems. Consider a mandatory septic pump-out program adapted from the requirements of the Chesapeake Bay Preservation Act and Regulations.

Policy 3: Performance Standards. Use performance standards for development to protect forest stands, land covers, and karst features that are important for groundwater recharge.

Policy 4: Standards for Cluster Designs. Primarily in the Rural Conservation Areas, provide standards for the safe provision of water and wastewater in cluster development. These standards can address: (1) the physical separation of wells from on site sewage disposal system drainfields (instead of having them interspersed throughout the development footprint), (2) possible use of open space for drainfields and reserve drainfields, (3) strategic location of wells through geophysical surveys and other means, and (4) allowing centralized utilities only if they are operated and maintained by the Service Authority or a public responsible maintenance entity approved by the county.

Policy 5: Nonconventional Sewage Disposal Systems. Continue to adhere to the existing policy on nonconventional sewage disposal systems in Chapter 11 of the County Code.

Goal 6: Protect the citizens, property, and natural resources of the county from flood damage by integrating public safety with environmental protection.

Objective A: Ensure that the operation of flood control dams is coordinated with upstream and downstream land uses.

Policy 1: Map Inundation Zones. Support the Headwaters Soil & Water Conservation District (SWCD) and other public and private owners of flood control dams to accurately map all breach inundation zones. This

should also apply to other dams that are subject to state dam safety regulations.

Policy 2: Dam Improvements. Support the Headwaters SWCD on needed dam safety improvements (necessitated by downstream development and subsequent changes to hazard classifications) in order to be in full compliance with Dam Safety standards and regulations.

Policy 3: Outreach Within Inundation Zones. Work with Headwaters SWCD and the County Fire & Rescue Department to develop outreach materials for residents within inundation zones, real estate agents, and other audiences that highlight the nature of the inundation zones and steps for emergency preparedness.

Policy 4: Discourage Habitable Structures. Once the breach inundation zones are mapped, consider applying zoning or other land use tools to recommend that habitable structures not be located within an inundation zone when reasonable alternatives exist to locate the same level of development outside of the zone.

Policy 5: Upstream Development. Map all flood control dam watersheds and keep abreast of upstream development to ensure that increases in flow associated with development do not compromise the integrity of the lakes or dams. Also, ensure that no development takes place below the elevation of the dam.

Objective B: Promote natural flood control strategies that protect public safety and help restore streams and riparian areas.

Policy 1: Establish Policy. Establish policies in the Stormwater, Zoning, and Subdivision regulations that provide incentives for naturalized and revegetated flood plains, riparian buffers, and stream restoration based on natural channel design concepts.

Policy 2: Work with Partner Agencies. Work with the Virginia Department of Forestry, Department of Conservation & Recreation, Headwaters SWCD, Natural Resources Conservation Service, the Virginia Department of Transportation, and other agencies to fund and install appropriate stream and riparian buffer restoration projects.

Policy 3: Revise Flood Plain District. Review and revise the Floodplain Overlay District to disallow habitable structures within the flood plain and to strongly discourage any filling that decreases flood plain capacity. Consider coordination of flood district provisions with the cities of Waynesboro and Staunton.

M. Parks and Recreation

Goal 1: Establish and maintain parks and recreational facilities and services that are efficient, effective, and readily available to all county residents in accord with state service standards.

Objective A: Develop new parks and recreational facilities that can efficiently and effectively provide readily available services to all county residents.

Policy 1: Land Acquisition. A major priority for the county’s parks and recreation development strategy is to acquire adequate land on which parks and recreation facilities can be established. Land can be acquired through a variety of mechanisms including public, fee simple purchase, developer proffers, conversion of existing, under used public facility sites and civic group dedications.

Policy 2: Location of New Facilities. The county should undertake the acquisition, planning, and development of parks and recreational facilities at various levels throughout the county to provide services in an efficient and effective manner to all residents. The following recommendations found in the Augusta County Comprehensive Parks, Recreation and Open Space Master Plan from November 2003, should provide guidance for the location of new parks and recreational facilities.

A: Central Recreational Facility. The county should develop one central recreational facility to provide facilities and programs on a countywide basis. The facility should be located in the Verona area and should accommodate both indoor and outdoor activities including a swimming pool, gymnasium facilities, and a multi-purpose field complex, as well as appropriate support facilities.

B: Major Recreational Facilities. The county should develop new major park facilities in and around the communities of Fishersville, and Churchville and should continue efforts to expand the major park facility being developed in Stuarts Draft. These facilities will vary depending on the needs of the areas they serve, but each would offer an array of programs and services.

C: Community Recreational Facilities. The county should develop a series of community recreational facilities in individual communities throughout the county as opportunities and needs arise.

D: Connections and Trails. The county should develop or identify “linear” facilities, which provide their own recreational opportunities and may provide connections between other recreational facilities and resources.

E: Greenways. The county should prepare a Greenways Plan incorporating its existing trails and major parks and recreational areas.

Policy 3: Proffers. Encourage developers to provide parks and recreation sites and facilities as integral elements of large residential developments to meet the needs of the additional population that the developments will house as well as residents of the surrounding areas. The county should explore possible ways in which the developers of smaller residential developments can contribute to the parks and recreational needs of the county. Encourage non-residential developments to contribute land and facilities to the neighboring residential community. Such land and improvements should be proffered to the county in coordination with the county's planning policies, CIP, and parks and recreation services standards.

Objective B: Proactively plan for the future parks and recreational needs of Augusta County. Coordinate the parks and recreation planning process with various public and private entities in the county, as well as with the Community Development Department.

Policy 1: Coordinate Planning Efforts. Planning for parks, open space conservation, scenic and historic preservation and land development should all be coordinated and integrated into a unified effort on the part of each agency and jurisdiction involved, including private sector and local community initiatives. In providing assistance to community organizations, the county should coordinate such efforts and funding so that they are consistent with a countywide approach to providing parks and recreational services so as to achieve maximum efficiency of money spent, as well as an appropriate balance in the location of facilities and services.

Policy 2: Parks and Recreation Master Plan. The county should continue to update, with public involvement, the Parks and Recreation Master Plan.

Policy 3: Regional, State, and Federal Assistance. Coordinate with and seek the assistance of regional, state, and federal recreation and natural resource agencies in planning, funding, and providing parks and recreational facilities and services.

Policy 4: City/County Cooperation. Formalize agreements for new facilities and programs and enhance communication with the cities of Staunton and Waynesboro.

Policy 5: Public/Private Cooperation. Encourage cooperative efforts between the county, the cities, and private sector businesses and

organizations to develop public parks and recreational facilities for the benefit of citizens at large, and to use private facilities in a cooperative and complementary manner.

Policy 6: Volunteer Support. The county should foster cooperative contributions of volunteer assistance for its parks and recreational programs, including support from civic groups and organizations. The county should seek to coordinate such assistance and explore incentives to encourage continued and coordinated volunteer support.

Policy 7: Shared Facilities. The county should continue to cooperate with the School Board in coordinating the use of school recreational facilities for the benefit of county citizens at large. The county should encourage the shared use of all public recreation resources in order to maximize efficiency and minimize duplication. Due to the different missions of the two entities, however, the county should explore the further development of its own system of parks and recreational facilities, supplemented by and coordinated with school facilities.

Objective C: Better utilize the historical and natural resources of Augusta County to provide for the recreational needs of county citizens.

Policy 1: Trail Connections to Parks. The county, with public involvement, should develop a greenways plan to explore the potential for connecting residential areas to the parks and recreational facilities located in the county.

Policy 2: Relating Park Facilities to Historic and Natural Resources. The county should explore, through the greenways plan, the potential for building new park facilities in locations that would allow them to relate to historic locations and buildings or natural resources like rivers or ridgelines.

N. Public Safety (Including Law Enforcement and Fire & Rescue)

Goal 1: Ensure that adequate public safety services are provided countywide in an efficient, effective, and economical manner.

Objective A: Maintain and support the continuation, development, and enhancement of the fire and rescue services.

Policy 1: Training Programs. Carry out and expand the training programs for fire and rescue personnel. Explore the feasibility of developing a formalized Officer Candidate School to prepare career and volunteer staff for officer positions.

Policy 2: Training Facilities. The county should continue its efforts to develop a regional fire and rescue training facility.

Policy 3: Volunteers. Continue to actively encourage the volunteer-based fire and rescue system. Develop further incentives for recruiting, training, and retaining volunteers. Explore methods to maximize the efficiency and capability of the volunteer system. Explore the feasibility of having all volunteer staff trained to the minimum EMT certification.

Policy 4: Private Sector Support. Foster the support of the private sector in maintaining and improving fire and rescue protection services and facilities, including businesses and industries as well as local citizens and civic groups. Consider specific incentive programs for local businesses and industries to encourage the participation of employees in public safety volunteer efforts.

Policy 5: Fire and Rescue Stations. Focus capital improvements to fire and rescue facilities on the existing companies and stations. Evaluate, with public involvement, possible locations and staffing arrangements for the development of new fire and rescue facilities at key locations to provide more comprehensive coverage countywide. Potential changes may include relocating Company 10 to the area of Route 11 south of Route 262 in the Jolivue area, adding emergency medical services to the relocated Station 10, and possibilities for partnering with the Shenandoah Valley Regional Airport and Rockingham County for the staffing of a station at the Airport.

Policy 6: Fire and Rescue Master Plan. The county should continue to regularly update the Fire and Rescue Master Plan.

Policy 7: Feasibility of Fire Prevention Code. Explore the adoption of a fire prevention code, including the cost of administration and enforcement.

Policy 8: Fire Prevention Division. The county should examine the possibility of establishing a Fire Prevention Division of the Fire and Rescue Department. Such a division would be responsible for enforcing the fire prevention code and for managing the fire prevention and investigation program.

Objective B: Maintain and support the continuation, development, and enhancement of the law enforcement services.

Policy 1: Innovative Law Enforcement Efforts. Encourage the continuation and enhancement of innovative law enforcement efforts such as Neighborhood Watch and Business Watch programs.

Policy 2: Innovative Detention Efforts. The county should explore the feasibility of implementing innovative programs such as electronic incarceration which may help reduce detention capacity needs.

Objective C: Develop and improve the emergency communications and geographic information systems in order to provide the most effective and cost-efficient emergency services.

Objective D: Work with the cities of Staunton and Waynesboro and the other adjacent localities to provide efficient, effective, and economical public safety service.

Policy 1: Shared Services/Mutual Aid Agreements. The county should encourage the use of shared services and mutual aid agreements with the neighboring localities in order to enhance service delivery in the county and in applicable areas of the neighboring localities.

Policy 2: Coordinated Emergency Services Programs. The county should work with the cities of Staunton and Waynesboro to provide backup Emergency Operations Center coverage. The county should explore further options for coordinating the delivery of emergency services with the cities.

Goal 2: Establish a land use and development pattern that facilitates the efficient provision of public safety services.

Objective A: Encourage a compact and efficient development pattern that permits the most cost effective provision of public safety services. Encourage developers to work with public safety agencies to provide any land or improvements necessary to ensure the efficient provision of public safety services.

Objective B: Ensure that sufficient fire flow is available throughout the county's public water system to permit public safety agencies to respond sufficiently to fires.

Policy 1: Water System Modeling and Improvements. The county should continue its efforts to model its public water systems and to examine the steps that will be necessary to provide sufficient fire flow in all areas served by public water.

Objective C: Explore all possibilities for providing adequate fire and rescue service to the rural and agricultural areas.

Policy 1: Fire Suppression Infrastructure. The county should explore the possibilities for providing the infrastructure necessary to provide fire and

rescue service to the rural and agricultural areas. Further utilization of systems such as dry hydrants should be explored.

Goal 3: Encourage the promotion of public awareness and understanding of public safety issues, needs, and activities.

O. Transportation

Goal 1: Maintain and enhance a safe and efficient roadway network that supports the intended land uses and development patterns planned for Urban Service and Community Development Areas, that provides accessibility within communities and mobility between communities and around the region, and that supports economic development.

Objective A: Apply access management standards to maintain the capacity on Thoroughfare Plan roadways and roadways designated for non-residential uses.

Policy 1: Driveway Spacing. Minimize conflicts caused by turning vehicles by allowing driveways to be spaced no closer than 660' on arterial roads and 250' on collector roads. Driveways on an arterial or collector street should not be located closer than 230' to an intersection with another street.

Policy 2: Consolidated Access. Encourage the consolidation of driveways or provision of alternate local access to meet the driveway spacing standards and minimize driveway connections to arterial or collector streets. Access should be provided from the local street grid where possible. Otherwise, direct access to arterial or collector streets should be shared to serve multiple parcels with cross-access between parcels. Discourage individual access points for single-family homes from Thoroughfare Plan roadways.

Policy 3: Restricted Access. Encourage the use of raised medians to restrict turning movements. The spacing between median openings should be no less than 1320' on arterial streets and 660' on collector streets.

Objective B: Apply operational and spot improvements to existing roadways to increase the capacity.

Policy 1: Identify Bottlenecks or Safety Concerns. Assess the need for operational and spot improvements through corridor studies, traffic impact studies, and safety studies.

Policy 2: Improve Intersection Operations. Where the overall intersection or any movement of a signalized intersection operates at an LOS D or

worse, potential mitigation strategies include re-timing signals, signal synchronization, or lane re-striping. Where the overall intersection or any movement of an unsignalized intersection operates at an LOS D or worse, intersection improvements including signalization, lane re-striping, or constructing a roundabout will be considered.

Policy 3: Spot Improvements. Where roadway segments create a bottleneck or a safety concern, spot improvements, including the addition of turn lanes or improving roadway geometry, will be considered.

Objective C: Develop grid street networks to promote community development and to provide alternative routes, reduce vehicle trip lengths, and to promote walkability.

Policy 1: Small Area Plans. Within Urban Service Areas and Community Development Areas, develop small area plans that analyze the conditions within the small area and recommend a cohesive plan for the development of the small area. Recommendations should include the layout of the transportation network, the appropriate arrangement of land uses, and the inclusion of schools, parks, and other civic uses.

Policy 2: Collector Grid Street Spacing. Encourage the development of a grid of collector streets at a spacing of one-half to one mile apart to serve trips between and within communities.

Policy 3: Local Grid Street Spacing. Encourage the development of a grid of local streets at a spacing of 300-600' apart to serve trips within communities and provide a walkable scale of development.

Policy 4: Interconnected Subdivisions. Subdivisions should be designed into a grid of streets with interconnections to adjacent subdivisions and commercial development. Isolated subdivisions that do not connect to surrounding development are strongly discouraged.

Policy 5: Walkable Communities. Develop compact, mixed-use, pedestrian-oriented communities with housing located in close proximity to jobs, shopping, schools, and services.

Objective D: Coordinate with communities and VDOT to ensure that roadway projects are designed to meet the context of the community.

Policy 1: Traffic Calming. In existing or developing communities, discourage lane widths greater than 11'. Calm vehicle traffic within communities and near schools with pedestrian-oriented streetside design. Encourage buildings to be located at minimum setbacks near the street right-of-way, locate parking behind buildings, allow on-street parallel

parking, and provide streetscaping amenities such as street trees, benches, and lighting between streets and sidewalks. Where streets are expected to be widened in the future, the setback should account for the anticipated maximum expansion of the roadway.

Policy 2: Intersections. Discourage corner radii larger than 30' at the intersections of collector streets with other collector streets, local streets, or driveways. Collector street corner radii as small as 25' are encouraged where staff and VDOT agree that a smaller radius is acceptable. Discourage corner radii larger than 25' at the intersections of local streets with other local streets or driveways. Local street corner radii as small as 15' are encouraged where staff and VDOT agree that a smaller radius is acceptable. Discourage channelized turning movements in existing or developing communities. Any new roads should be aligned to intersect at a 90-degree angle with existing roads and aligned directly towards the opposite leg of the intersection.

Policy 3: Alternate Design Standards. Promote the use of innovative design standards such as the ITE *Context Sensitive Solutions in Designing Major Urban Thoroughfares* in coordination with VDOT.

Objective E: Promote transit use between communities and non-motorized transportation within communities.

Policy 1: Pedestrian Facilities. Sidewalks should be located on both sides of any new or reconstructed streets. Sidewalks should be a minimum of five feet in width. Sidewalks should be set back from arterial streets by 10 feet and from collector and local streets by six feet. Street trees and pedestrian-scaled lighting are encouraged to be located between the street and the sidewalk to help buffer pedestrians from vehicle traffic.

Policy 2: Cycling Facilities. Bicycle lanes should be considered on both sides of any new or reconstructed arterial or collector street, as well as on any streets identified in the Central Shenandoah Bicycle Plan. Bicycle lanes should be a minimum of four feet in width as measured from the edge of pavement, or five feet in width as measured from the edge of the parking lane where on-street parallel parking is present. Shared use paths should be a minimum of 10 feet in width.

Policy 3: Promote Safe Routes to Schools. Emphasize the construction of pedestrian and cycling facilities within a 2-mile radius of elementary and middle schools. Pursue grants from the Virginia Safe Routes to School Program to infill pedestrian and cycling infrastructure to improve safety near elementary and middle schools.

Policy 4: Public Transportation. Encourage initiatives for public transportation and transit alternatives put forth by private sector or community groups, including public/private partnerships.

Policy 5: Ride Sharing. The county will encourage ridesharing alternatives such as carpooling, vanpooling and park and ride lots put forth by private sector or community groups and will help coordinate such initiatives with the cities and VDOT.

Objective F: Interstate Interchange Protection. Protect the traffic capacity and economic development potential within a one mile radius of I-81 and I-64 interchanges through coordinated land use and transportation strategies.

Policy 1: Interchange Area Plans. Develop interchange area plans that provide specific recommendations for improving existing interchange access conditions and guidelines for future development or redevelopment of transportation facilities and land uses surrounding the interchange.

Policy 2: Access Management. Strictly enforce the access management standards identified in this Plan.

Policy 3: Local Street Development. Provide alternate local routes through the development of parallel routes or grid street networks within the interchange area, preserving the capacity of arterial roads for regional traffic.

Policy 4: Land Development. Encourage the development of major regional traffic generators within the interchange areas as these locations are best suited to carry regional traffic while minimizing traffic impacts on local streets and communities. Discourage low-intensity uses such as single-family housing within interchange areas.

Objective G: Where network constraints cannot be adequately addressed through operational improvements to existing streets or by creating mixed-use communities with a grid street network, secondary strategies that may be acceptable include adding parallel connectors and widening existing roads.

Policy 1: Add Parallel Connectors. Parallel roadway connectors may be constructed to add capacity adjacent to an existing, constrained roadway corridor.

Policy 2: Widen Existing Roads. Where roadway segments are operating at an LOS D or worse and all other strategies have been considered, adding lanes to existing roadways may be acceptable. Four-lane roads should be divided with a raised median and designed with left turn lanes to maximize the capacity of the facility. Four-lane roads through existing or

developing communities should be designed to match the context of the community and promote walkability.

Objective H: Coordinate with private land developers to ensure that the county's transportation and land use policies are implemented and to assess the impacts of proposed development.

Policy 1: Traffic Impact Studies. Traffic impact studies are required by the applicant for any development proposal generating over 100 daily trips. The methodology for traffic impact studies will be coordinated with VDOT and the results will be reviewed by VDOT and county staff. The traffic impact study must include a transportation network plan that indicates the location of road, pedestrian, and bicycle facilities.

Policy 2: Off-site Mitigation. Off-site mitigation should be required in cases where traffic impacts from proposed development cause an intersection movement or roadway segment to operate at an LOS D or worse.

Policy 3: Develop Public Roads. New roads in the county will generally be public, state-maintained roads. Private roads may be allowed in master-planned communities or planned-unit developments where an acceptable design is proposed for alleyways or other non-standard road sections.

Policy 4: Right-of-Way Acquisition. Developers shall provide the right-of-way for, and design and construct, proposed new roadways or roadway widenings indicated in the Thoroughfare Plan, small area plans, corridor plans, or similar adopted plans and studies.

Goal 2: Maintain and enhance the safety and efficiency of a rural road system in the Rural Conservation and Agricultural Conservation Areas that also preserves the county's rural character.

Objective A: Maintain and enhance the existing road network.

Policy 1: Access Management. Discourage direct access to Thoroughfare Plan roads from individual lots. Encourage consolidated access points to serve new rural development. Protect the capacity and safety of existing rural roadways through the use of reverse frontage lots, shared access, and cross-access connections.

Policy 2: Prioritize Unpaved Road Improvements. Prioritize paving needs based on roadway volume, projected development on the roadway, safety concerns, connectivity to Thoroughfare Plan roads, and adjacent landowner desire for paving.

Policy 3: Rural Rustic Road Program. Submit annual recommendations to VDOT for unpaved road improvements that qualify for the Rural Rustic Road Program. These roads must meet secondary road standards. Wherever possible, gravel or unpaved roads should be kept in their unpaved state, but well maintained.

Policy 4: Pave in Place Program. Submit annual recommendations to VDOT for unpaved road improvements that qualify for the Pave in Place Program. These roads do not need to meet secondary road standards.

Policy 5: New Rural Roads. Require that public, state-maintained roads be provided to serve land that is rezoned for rural residential development. Permit private access easements only for minor subdivision lots.

Policy 6: Maintenance of unpaved roads. The county's 300 miles of unpaved road network are important for circulation, rural connectivity, and the agricultural economy, and should be maintained even if they remain unpaved.

Objective B: Apply operational and spot improvements to existing roadways to increase the capacity.

Policy 1: Identify Bottlenecks or Safety Concerns. Assess the need for operational and spot improvements through corridor studies, traffic impact studies, and safety studies.

Policy 2: Improve Intersection Operations. Where any movement of a signalized intersection operates at an LOS D or worse, potential mitigation strategies include re-timing signals and signal synchronization. Where any movement of an unsignalized intersection operates at an LOS D or worse, intersection improvements including signalization or constructing a roundabout will be considered.

Policy 3: Spot Improvements. Where roadway segments create a bottleneck or a safety concern, spot improvements, including the addition of turn lanes or improving roadway geometry, will be considered.

Objective C: Where network constraints cannot be adequately addressed through operational improvements to existing streets, secondary strategies that may be acceptable include adding parallel connectors and widening existing roads.

Policy 1: Add Parallel Connectors. Parallel roadway connectors may be constructed to add capacity adjacent to an existing, constrained roadway corridor.

Policy 2: Widen Existing Roads. Where roadway segments are operating at an LOS D or worse and all other strategies have been considered, adding lanes to existing roadways may be acceptable. Four-lane roads should be divided with a raised median and designed with left turn lanes to maximize the capacity of the facility. Four-lane roads through existing or developing communities should be designed to match the context of the community and promote walkability within existing or developing communities.

Goal 3: Implement the county's Thoroughfare Plan.

Objective A: Use the Thoroughfare Plan to guide future transportation decisions. The Thoroughfare Plan provides recommendations that address strategies to mitigate projected congested roadway conditions in 2025.

Policy 1: New Road Construction. Develop grid road networks and parallel road corridors in Urban Service and Community Development Areas.

Policy 2: Road Upgrades. Upgrade sections of substandard rural roads where the road is identified as a component of the future collector road network.

Policy 3: Access, Operational, and Spot Improvements. Increase the capacity of existing roads to maintain or increase the capacity of the roadway through small-scale improvements such as access management, operational improvements, and other spot improvements.

Policy 4: Local Road Networks. Develop small area plans for Urban Service and Community Development Areas to provide further detail for the layout of local road networks.

Policy 5: Interstate 81 Improvements. Coordinate with regional and state agencies to ensure that Interstate 81 Improvements are integrated into development plans for Augusta County. Ensure that plans for Interstate 81 improvements include mitigation strategies to relieve congestion on Route 11 resulting from Interstate 81 construction.

Goal 4: Support the development of air, rail, transit, and bicycle facilities for transportation and economic development.

Objective A: Increase countywide opportunities for non-automobile options such as rail, air, bus, and bicycle transportation.

Policy 1: Airports. Encourage the viability and further development of Shenandoah Valley Regional Airport, including coordinating adjacent land uses and transportation improvements to best facilitate the full use of the airport. The county will encourage the expansion of operations at the airport for commercial and private air traffic. Encourage the continued use and expansion of Waynesboro's Eagle's Nest Airport to absorb a portion of the regional demand for private and commercial air travel.

Policy 2: Rail Facilities. Encourage the continued and further use of rail facilities for business, industrial and passenger service, including tourism functions. Encourage the coordination of adjacent land uses to best facilitate the maximum use of the railroads.

Policy 3: Intermodal Transfer Facility. Assess the need for an intermodal transfer facility to complement current freight movement by truck, rail, and air.

Policy 4: Public Transportation. The county will coordinate with the cities of Staunton and Waynesboro and other local organizations to maximize the potential for long-distance trips to be served by bus.

Policy 5: Demand-Responsive Transportation. The county will coordinate with Coordinated Area Transportation Services, Blue Ridge Community College, and the City of Staunton to provide demand-responsive transportation services in the county.

Policy 6: Trail Facilities. Promote the development of a countywide interconnected system of shared-use paths and trail facilities for transportation, recreation, and tourism, connecting to neighboring cities and counties. Support the recommendations of the Central Shenandoah Valley Greenway Plan.

Policy 7: Bicycle Facilities. Promote the development of a countywide interconnected system of bicycle lanes for transportation, recreation, and tourism. Support the recommendations of the Central Shenandoah Valley Bicycle Plan. Encourage the development of bicycle facilities on arterial and collector streets within Urban Service and Community Development areas.

Policy 8: Pedestrian Facilities. Promote the development of sidewalks and other pedestrian facilities on all streets within Urban Service and Community Development areas.

Goal 5: Support a coordinated, cooperative, and comprehensive transportation planning process.

Objective A: Increase, mobilize or leverage the necessary funding for transportation planning and for proposed transportation improvements.

Policy 1: Pursue Transportation Funding Sources. The county will pursue a range of funding sources to support local transportation projects including funds through VDOT, SAFETEA-LU, and public/private partnerships.

Policy 2: Revise Countywide Budget Allocations. The county should revise its current transportation funding allocation system to ensure that each district receives an appropriate portion of funding relative to the costs for constructing and maintaining the transportation facilities needed to support the projected growth within each district. Districts containing Urban Service and Community Development Areas will receive a significantly higher proportion of future growth than those containing Rural Conservation and Agricultural Conservation Areas, necessitating a far more extensive transportation network. Additionally, urban roads are more expensive to construct than rural roads, they carry a higher volume of traffic, and they also typically include the provision of pedestrian and bicycling facilities. It is also important to maintain rural roads. Budget allocations should also provide for adequate road maintenance in the Rural and Agricultural Conservation Areas.

Policy 3: Prioritize Safety Improvements. The highest priority for transportation funding in the county should be to address safety concerns.

Policy 4: Maintain and Enhance Existing Transportation Infrastructure. To determine the appropriate strategy for addressing roadway congestion, first consider improving existing roadways through access management strategies, operational improvements, and spot improvements. Consider developing parallel roads or road networks to relieve traffic from congested roadways as a second option. Road widening may be considered as a third option in the event that the first two strategies are not projected to relieve the roadway congestion.

Objective B: Support effective implementation through coordination, communication, and participation at local, regional, state and federal levels.

Policy 1: County Transportation Manager. Consider hiring a County Transportation Manager to oversee and coordinate all transportation planning activities in the county.

Policy 2: Coordination. Improve communications and joint planning between residents, landowners, the county, the cities of Staunton and Waynesboro, VDOT and the PDC, including conducting special technical studies of major proposed developments within urbanizing areas when

necessary. The VDOT Six Year Plan, functional classifications and matching fund allocations, together with the county's Comprehensive Plan, CIP, local road network plans and developer proffers, will provide the framework for coordinated road planning and construction. Design standards should be revised through coordination with VDOT to ensure implementation of the best and most current practices.

Policy 3: Public Participation. Keep the public informed of transportation needs and planned short and long-term improvements. Involve the public in the development of transportation plans and the design of transportation projects.

Policy 4. School System Coordination. Coordinate with the county school system to ensure safe access to schools and to integrate school development plans into transportation planning efforts. Promote use of the Safe Routes to School Program for infrastructure and education funding.

P. Utilities

Goal 1: Ensure that all county residents have access to a safe and adequate water supply and that private water and wastewater systems do not pose long-term public health or environmental threats to the county and its residents.

Objective A: Develop water supply sources to meet current and future county demands for a safe source of drinking water.

Policy 1: Wellhead Protection. The county should work with the Augusta County Service Authority to develop a program that will protect its existing and future public water supplies.

Policy 2: Exploration for Additional Sources. The Service Authority should continue its efforts to identify new sources that can be developed to meet the anticipated demands for public water.

Policy 3: Contaminant Source Inventory. The county should develop a GIS-based contaminant source inventory as a growth coordination and early warning tool for existing and proposed development.

Objective B: Develop wastewater treatment systems that meet current and future county demands and do not pose long-term public health or environmental threats to the county and its residents.

Policy 1: Mandatory Maintenance. The county should consider developing a strategy for the mandatory maintenance of all private sewage disposal systems.

Policy 2: Mandatory Pump-Out of Septic Systems. The county should consider a mandatory septic pump-out program adapted from the requirements of the Chesapeake Bay Preservation Act and Regulations.

Policy 3: Incentives for System Maintenance. The county should evaluate alternatives for providing incentives to those land owners who properly maintain their private sewage disposal systems.

Policy 4: Direct Discharge. The county should prohibit private sewage disposal systems that rely on direct discharge.

Objective C: The county should continue its efforts to meet the requirements of the Chesapeake Bay Program as set forth by the Virginia Department of Environmental Quality (DEQ).

Policy 1: Wastewater Treatment Plants. The ACSA should complete the expansion projects at the Fishersville, Weyers Cave, Middle River, and Stuarts Draft Wastewater Treatment Plants prior to 2010. The county should complete any other expansion or renovation projects. The county should take the necessary steps to ensure that the county wastewater treatment plants can achieve permit compliance for the allocated nutrient discharge caps for nitrogen and phosphorous.

Goal 2: Ensure that public sewer and water facilities are provided in an efficient and cost-effective manner in terms of the size, location, design, and pattern of the systems.

Objective A: Coordinate the provision of public water and sewer with the location of development.

Policy 1: Water Supply. All new development in the county must be provided with water from a well, a spring, or a public water supply.

Policy 2: First Priority Locations. Designated Urban Service Areas are the first priority locations for the provision and expansion of public water and sewer facilities.

Policy 3: Second Priority Locations. Designated Community Development Areas are generally the second priority locations for the provision and expansion of public water service.

Policy 4: Extending Public Water and Sewer Service to Community Development Areas. The county should attempt, wherever possible, to extend public sewer service to those Community Development Areas that have only public water service in order to reduce the number of dwellings

on private sewage disposal systems and to facilitate a more efficient land use pattern. Similarly, the county should attempt to extend public water service to those Community Development Areas, like New Hope, that have only public sewer service.

Policy 5: Rural Areas. Public water and sewer facilities will not be provided or extended to the designated Rural Conservation or Agricultural Conservation Areas during the timeframe of this Plan, except when necessary to mitigate an imminent and severe public health hazard. At such time as public water or sewer service is extended to these areas they should be re-designated Community Development Areas, unless the board decides otherwise.

Policy 6: Design and Sizing. Public water and sewer facilities should be designed and sized to serve full development of the entire planning area and/or subarea. When a subarea is opened for development through the extension of public water and sewer lines, those lines should be sized with consideration for the reasonable capacity of the land within that subarea, and to ensure that such lines are fully in accord with the land use policies and development densities established in this Plan.

Policy 7: Linkage and Coordination of Water and Sewer Systems. When feasible and consistent with the other policies of this Plan, additional utility linkages may be made in order to gain similar efficiencies and back-up capabilities. Board approval will be required when a line extension will have to cross a Rural Conservation or Agricultural Conservation Area.

When opening a new subarea with utility service, both water and sewer systems should be extended together to the subarea whenever feasible, rather than extending either one of the services separately, except for minor extensions within a Community Development Area that is currently served by only one of the two types of service.

The county will cooperate with the Service Authority in the Authority's preparation of a Master Plan for sewer and water facilities which the Authority will prepare subsequent to the adoption of the Comprehensive Plan.

Policy 8: Planning Commission Approval. Major extensions or installations of new public utilities will require Planning Commission approval, pursuant to State Code §15.2-2232. Section 15.2-2232 requires the Planning Commission to determine whether or not a proposed public facility is in conformance with the adopted Comprehensive Plan. The review process may include a public hearing and is required to be completed within a 60 day period.

Policy 9: Water Tank Elevations. The county should discourage the location of new development near or above elevations determined by the Service Authority in order to ensure the best possible service for all customers.

Objective B: Allocate the costs and benefits of new and existing public sewer and water facilities in a balanced and equitable manner so that those who benefit pay a fair share of the costs.

Policy 1: Funding. Funding for the capital and operational costs of providing public water and/or sewer extensions should be funded by the developer or landowner who will benefit from the extension. The county may provide financial assistance in combination with other sources such as state and federal grants or loans, private grants or loans, low interest financing to the affected property owners, or other similar mechanisms aimed at keeping the fiscal impacts on county citizens at large to a minimum.

When a developer or landowner funds a trunk line extension to serve an area, pro-rata reimbursements may be made by adjacent landowners/developers who connect to such extensions at a later time.

Policy 2: Ownership and Operation. All new public water and sewer facilities in the county must be owned and operated by the Augusta County Service Authority.

Policy 3: Mandatory Connections. In areas where public water and/or sewer facilities are provided, connections of new structures to the system(s) should be mandatory in order to equitably fund the cost of such services. The precise timing and funding of such connections should be based upon the circumstances of the particular utility extension project.

Goal 3: Ensure that solid waste disposal services and facilities are provided in an efficient and cost-effective manner.

Objective A: Continue to update, with public involvement, the county's Solid Waste Management Plan in order to ensure that solid waste disposal service is provided in a manner that is environmentally safe, adequate in capacity and economical to local residents for the long-term.

Policy 1: Regional Landfill. Continue current plans for developing and using the expanded regional landfill site to meet short and medium term local solid waste disposal needs. Review and update those plans on a periodic basis, particularly in regards to the efficient use and accessibility of the landfill site and its access roads.

Policy 2: Solid Waste Collection Sites. The county should study the current system of solid waste collection sites in order to determine the appropriate number and location of these sites.

Policy 3: Solid Waste Collection. The county should study the feasibility of a solid waste collection system for residents located in the Urban Service and Community Development Areas.

Policy 4: Recycling. Promote and expand local recycling efforts for residential, business, and industrial users. Coordinate with neighboring localities and regional agencies to pursue the identification and development of expanded local and regional markets for recycled materials. Consider options for expanding the list of materials that can be recycled at county recycling centers.

Policy 5: Household Hazardous Waste. Promote educational efforts regarding the safe and proper disposal of household hazardous waste materials. Continue support for semi-annual collection efforts.

Goal 4: Ensure that new and existing development in the county is provided with adequate protection from stormwater and flooding through cost-effective and equitable measures.

Goal 5: Coordinate with non-public utility providers including telephone, gas and electric services in order to ensure adequate provision of services.

Objective A: Achieve such coordination through the ongoing processes for Comprehensive Planning, CIP and land development project reviews.

Policy 1: Coordinated GIS Database System. Develop a coordinated GIS database system for mapping all applicable utilities, both public and private, located within the county.

V. Planning Policy Area/Future Land Use Map

A. Planning Policy Area/Future Land Use Map

See attached map.

VI. Implementation Strategy

One of the primary weaknesses of the previous planning efforts by Augusta County has been the lack of a concrete strategy for the implementation of the Plan. Therefore, a significant focus of this Plan is to identify specific tasks that need to be completed. Most of the tasks have already been identified as a part of the Goals, Objectives, and Policies. The purpose of the Implementation Strategy is to link these tasks with a responsible party in order to ensure that they are considered in the implementation process by the appropriate personnel.

The Implementation Strategy outlines the tasks that need to be completed in order to enact the recommendations of the Goals, Objectives, and Policies, as well as the Planning Policy Area/Future Land Use Map. The tasks identified by the Implementation Strategy include recommendations for considering policy changes, ordinance changes, and further planning and technical study efforts for particular community resources or geographical areas.

The Implementation Strategy (**Table 5**) is divided into 14 sections by topic area. These topic areas correspond directly to the sections of the Goals, Objectives, and Policies. There is also an additional section for ordinance changes. Each task is linked directly to one or more objective or policy and has one or more responsible party.

Table 5. Implementation Strategy		
	Task	Responsible
Ordinance Changes		
n/a	Revise the zoning and subdivision ordinances in order to implement the recommendations of the Comprehensive Plan	Consultant, Community Development, County Attorney
Land Use		
Land Use: 1.D.1 Trans: 1.C.1	Prepare small area plans for Weyers Cave, Stuarts Draft, and Fishersville	Community Development
Land Use: 1.A.6 Trans: 1.F.1	Prepare interchange area overlay plans for Verona, Woodrow Wilson Parkway, Mint Spring, and Greenville	Community Development, VDOT
Land Use: 1.B.5	Study the need for new zoning districts for the identified Rural Communities (as part of the ordinance revisions)	Consultant, Community Development, County Attorney
Land Use: 1.D.5	Study the need for ordinance changes related to the provision of adequate on-site facilities (as part of the ordinance revisions)	Consultant, Community Development, County Attorney
Land Use: 2.C.2 Ag: 2.B.3	Establish guidelines and regulations for cluster subdivisions in the RCA (as part of the ordinance revisions)	Consultant, Community Development, County Attorney
Land Use: 2.E.3	Study the need for ordinance changes to discourage new development from ridgelines (as part of the ordinance revisions)	Consultant, Community Development, County Attorney
Land Use: 2.A.2 Ag: 2.C	Monitor the amount of new residential development in the RCA and ACA	Community Development
Agriculture		
Ag: 2.B.1 Ag: 2.B.2	Study the possibility of comprehensively rezoning land zoned agriculture to XA in ACA and GA in USA, CDA, and RCA	Community Development, County Attorney, PC, BOS
Ag: 1.A.1	Establish an Agriculture Industry Board	BOS
Ag: 1.B.3 Land Use: 2.B.3 Hist Res: 1.B.4 Nat Res: 1.D.1	Establish a purchase of development rights program	Agriculture Development, Ag Industry Board
Ag: 1.B.4 Land Use: 2.B.4	Study the feasibility of establishing a transferable development rights program	Community Development, Agriculture Development, Ag Industry Board
Ag: 1.A.3 Ag: 1.C.1 Nat Res: 4.C.1	Develop a promotional plan for agricultural programs	Agriculture Development, Ag Industry Board
Ag: 1.C.3 Ag: 2.A.3	Study the need for Zoning Ordinance changes related to agri-tourism, agri-business, and permitted uses in ag zoning (as part of the ordinance revisions)	Consultant, Community Development, Agriculture Development, Ag Industry Board, County Attorney
Ag: 2.A.4 Housing: 3.B.1	Implement reciprocal setbacks for housing located in or adjacent to the RCA and ACA (as part of the ordinance revisions)	Consultant, Community Development, Agriculture Development, Ag Industry Board, County Attorney

	Task	Responsible
Land Use: 2.B.1 Ag: 1.B.1	Add incentives to the Ag/Forestral District regulations to encourage the creation and support of additional AFDs	Agriculture Development, Ag Industry Board, County Attorney, Community Development
Economy		
Econ: 1.A Econ: 2.A	Prepare strategic plan for economic development	Consultant, IDA, Community Development
Education		
Educ: 1.A Educ: 1.B	Prepare a strategic plan for education	School Board
General Government		
Gen Gov: 2.A.1	Study the feasibility of establishing a fiscal impact analysis procedure	Community Development, County Attorney
Gen Gov: 2.A.2 Parks: 1.A.3 Educ: 1.C.1	Study the feasibility of establishing a proffer guidelines system	Community Development, County Attorney
Gen Gov: 2.A.3	Study the feasibility of establishing a system of special service districts for the funding of infrastructure improvements	Community Development, County Attorney, Service Authority
Gen Gov: 1.C Housing: 1.B.2 Parks: 1.B.1 Pub Safe: 1.D Hu Serv: 1.D	Develop a plan for coordinating public service provision with applicable neighboring localities and agencies	County
Gen Gov: 2.B	Develop a strategy for ensuring USA/CDA infrastructure improvements and RCA/ACA preservation programs are funded by all county residents	Community Development, County Administrator, Service Authority, Ag Development, BOS
Gen Gov: 2.D Nat Res: 4.A.2	Explore new land use taxation methods	Commissioner of Revenue, County Attorney, Ag Development
Historic Resources		
Hist Res: 1.A.2	Study the feasibility of establishing a historic overlay zoning district	Community Development, County Attorney
Hist Res: 1.A.4	Consider developing a historic preservation plan	Community Development
Hist Res: 1.A.3 Hist Res: 3.A.3	Consider updating the county's historic resources inventory and establishing a GIS database for use in the review of plans and development proposals	Community Development
Hist Res: 1.B.5	Consider applying for the Certified Local Government program	Community Development, BOS
Hist Res: 1.B.6	Study changes to county tax policies that would encourage historic preservation measures	Finance, BOS
Hist Res: 3.A.2	Study the feasibility of establishing a countywide heritage tourism program	Community Development
Housing		
Housing: 1.B.1	Prepare a housing plan to study the housing needs of the county and the feasibility of establishing local and regional housing programs	Community Development

	Task	Responsible
Housing: 1.A.4 Hu Serv: 1.B.3	Monitor the provision of adequate senior housing	Community Development
Housing: 1.B.7	Study the feasibility of adopting the Virginia Maintenance Code	Building Inspection, County Administrator
Library		
Library: 1.A.7	Develop a plan for future library branches and outreach services	Library
Natural Resources		
Nat Res: 1.D.4	Develop a promotional program on the economic benefits provided by the county's natural resources	Community Development
Nat Res: 2.A	Develop watershed-based stormwater plans for the USAs	Consultant, Community Development
Nat Res: 2.B.1	Modify the stormwater ordinance to allow and encourage LID (as part of the ordinance revisions)	Consultant, Community Development, County Attorney
Nat Res: 2.B.2	Seek to demonstrate LID techniques on new public and private projects as an outreach and learning tool	Community Development
Nat Res: 2.C.1	Modify ordinances in order to provide for cost-effective solutions to flood control and stormwater management (as part of the ordinance revisions)	Consultant, Community Development, County Attorney
Nat Res: 3.A	Adopt performance standards that can be applied to projects subject to county review	Community Development
Nat Res: 3.B	Consider adopting performance standards into county ordinances	Community Development, BOS
Nat Res: 4.B.3	Consider providing incentives for agricultural and forestry BMPs	Agriculture Development, Community Development
Nat Res: 5.A.3 Utilities: 1.A.3	Develop a GIS-based contaminant source inventory	Community Development, Service Authority, GIS
Nat Res: 5.B.4	Consider developing standards for the safe provision of water and wastewater in cluster developments (as part of the ordinance revisions)	Consultant, Community Development, County Attorney, Service Authority
Nat Res: 6.A.1 Nat Res: 6.A.2 Nat Res: 6.A.3 Nat Res: 6.A.5	Support all public and private owners of flood control dams as they work to map, assess, and improve their facilities	Community Development
Nat Res: 6.A.4 Nat Res: 6.A.5 Nat Res: 6.B.3	Consider ordinance changes to control the amount and type of development in floodplains and flood inundation zones	Consultant, Community Development, County Attorney
Parks and Recreation		
Parks: 1.B.2	Update Parks and Recreation Master Plan	Parks and Recreation
Parks: 1.A.2	Develop new parks and recreational facilities to meet the requirements of the Parks and Recreation Master Plan	Parks and Recreation
Parks: 1.B.3	Seek assistance from regional, state, and federal recreation and natural resource agencies in planning, funding, and providing parks and recreation facilities	Parks and Recreation

	Task	Responsible
Parks: 1.C.1 Parks: 1.C.2	Prepare a greenways plan to study the potential for connecting parks and recreational facilities to residential, historic, and natural resource locations	Parks and Recreation, Community Development
Public Safety		
Pub Safe: 1.A.1	Expand fire and rescue training programs	Fire and Rescue
Pub Safe: 1.A.2	Expand fire and rescue training facilities	Fire and Rescue
Pub Safe: 1.A.3	Study the feasibility of training all volunteer fire and rescue staff to the minimum EMT certification	Fire and Rescue
Pub Safe: 1.A.4	Study the potential for developing an incentive program for encouraging participation in public safety volunteer efforts	Fire and Rescue
Pub Safe: 1.A.5	Evaluate possible locations and staffing arrangements for the development of new fire and rescue facilities at key locations to provide more comprehensive service	Fire and Rescue
Pub Safe: 1.A.7 Pub Safe: 1.A.8	Study the potential for adopting a fire prevention code and establishing a fire prevention division	Fire and Rescue, County Attorney
Pub Safe: 1.B	Explore innovative law enforcement and detention efforts	Sheriff
Pub Safe: 2.B.1	Study the necessary steps for ensuring the adequate provision of fire flow to all areas of the county served by public water	Fire and Rescue, Service Authority, County Administrator, BOS
Pub Safe: 2.C.1	Study the provision of fire suppression infrastructure in the RCA and ACA	Fire and Rescue
Transportation		
Trans: 1.B.1	Identify operational and spot improvements, through corridor studies, for Route 11, Route 608, and additional congested corridors	Consultant, Community Development, VDOT
Trans: 1.E.3 Educ: 1.A.6	Pursue Safe Routes to Schools grants to improve safety near elementary and middle schools	Community Development
Trans: 2.A.3 Trans: 2.A.4	Submit annual recommendations to VDOT for unpaved road improvements that qualify for Rural Rustic Road Program and Pave in Place Program	Community Development, VDOT
Trans: 4.A.3	Assess the need for an intermodal transfer facility to complement current freight movement by truck, rail, and air	Community Development, VDOT
Trans: 5.A.2	Revise transportation budget allocations to concentrate resources in districts with the greatest development pressures	County Administrator, BOS
Trans: 5.B.1	Consider hiring a County Transportation Manager to oversee and coordinate all transportation planning activities in the county	County Administrator, BOS
Utilities		
Utilities: 1.A.1 Nat Res: 5.A.1	Develop a program for the protection of existing and future public water supplies	Service Authority, Community Development

	Task	Responsible
Utilities: 1.B.1 Nat Res: 5.B.2	Study the feasibility of ordinance changes requiring mandatory maintenance/pump out of private sewage systems	Service Authority, Community Development, County Attorney
Utilities: 1.C.1	Complete WWTP expansion projects and any other expansion or renovation projects related to Chesapeake Bay Act compliance	Service Authority
Utilities: 3.A	Update the plan for the efficient provision of solid waste services	County Administrator, Service Authority
Utilities: 3.A.2	Study the feasibility of establishing a solid waste collection program for residents of the USA and CDA	County Administrator
Utilities: 3.A.5	Develop an educational program regarding the proper disposal of household hazardous waste materials	County Administrator
Utilities: 5.A	Develop a coordinated GIS database for the mapping of all applicable utility system locations	County Administrator, Service Authority, GIS

VII. Annual Reviews and Annual Scorecard

A. Annual Plan Review

Recognizing the dynamic nature of growth pressures and development patterns, the county will formally review the Comprehensive Plan on an annual basis in order to monitor the progress, appropriateness, and effectiveness of its policies. The annual review should be coordinated with the completion of the Annual Scorecard discussed below and the trends identified by the Annual Scorecard should be used to guide any amendments to the Plan.

In addition to the annual review and possible Plan amendments initiated by the county, the county will also entertain proposed Plan amendments from the private sector, also on an annual basis. (The Board of Supervisors may initiate amendments to the Plan at any time, in accord with State Code provisions for public notice, public hearing, and Planning Commission action.)

Plan amendment applications will be accepted during the course of each calendar year and reviewed and acted upon in conjunction with the county's annual Plan review process. An appropriate fee will be assessed to the applicant for a Plan amendment submission in order to cover the administrative costs of the county's review. Plan amendments are subject to the same public notification requirements set forth in the State Code for other Comprehensive Plan actions. The county will develop specific criteria for submission and evaluation of Plan amendment proposals in order to ensure an orderly and efficient process. Such Plan amendments are a discretionary process on the part of the county, not required by State Code.

Plan amendments may involve either general or specific elements of the Comprehensive Plan. However, in general, the Plan should only be amended in cases where the proposed change exceeds the inherent flexibility of the Plan, or in which the change serves to clarify a provision within the Plan. No Plan amendment should be accepted or approved which does not clearly support the overall goals of the Plan.

Examples of Plan amendments that may be proposed include:

- A major adjustment to the boundaries of a designated Policy Area
- A major change to the boundaries of the Future Land Use categories
- Changes to or clarifications of the Policy Area definitions
- Changes to specific policies for a resource (such as agriculture or housing)

Changes made to items such as the Implementation Strategy, the Annual Scorecard, or the Capital Improvements Program need not be a part of the annual review process, as these are implementation items that are necessarily flexible.

B. Annual Scorecard

The Annual Scorecard is designed to aid elected and appointed officials, as well as staff, and county residents, in determining whether the vision of this Plan is being

implemented. The Annual Scorecard presents a multitude of county data that can be tracked annually to determine what trends are present. The trends that are identified by these statistics, when viewed together in a single report, can give county officials the information they need to stay ahead of emerging issues and assess whether adopted policy and ordinance changes are having the desired effect.

The Annual Scorecard (**Table 6**) is divided into 15 sections, directly corresponding to the sections of the Goals, Objectives, and Policies, with the addition of one section on general indicators that should be tracked. Each section includes a set of topics and a list of indicators. It is anticipated that a single document will be created and presented to the Board of Supervisors, on an annual basis, that includes all of these indicators in their present state as well as each indicator's historical trends. It is hoped that links between different statistics from different topic areas can be identified in such a document that would not have been identified otherwise.

Table 6. Annual Scorecard

Topic	Indicator(s)
General	
Parcel counts and sizes	<ul style="list-style-type: none"> ▪ Total number of parcels by size – countywide, by Planning Policy Area, by zoning district ▪ Number of developed and undeveloped parcels – countywide, by Planning Policy Area, by zoning district
Land Use and Development	
Building permits	<ul style="list-style-type: none"> ▪ New residential, business, and industrial building permits – countywide, by Planning Policy Area, by zoning district ▪ Dwelling unit density – countywide, by Planning Policy Area, by zoning district
Minor subdivisions	<ul style="list-style-type: none"> ▪ Total number of parcels created through minor subdivision process by size – countywide, by Planning Policy Area, by zoning district ▪ Percentage of the total number of minor subdivisions created through Family Member Exception, including to whom they are being granted ▪ Percentage of Boundary Line Adjustments resulting in new developable lots
Major subdivisions	<ul style="list-style-type: none"> ▪ Total number of parcels created through major subdivision process – countywide, by Planning Policy Area, by zoning district ▪ Percentage of the total number of parcels created through major subdivision process
Rezoning	<ul style="list-style-type: none"> ▪ Total acres requested, approved, and denied for rezoning – countywide, by Planning Policy Area, by zoning district ▪ Total number of residential development rights created by rezonings, including proffers – countywide, by Planning Policy Area, by zoning district
Agriculture	
Ag/Forestral Districts	<ul style="list-style-type: none"> ▪ Total number of parcels and acres enrolled in Ag/Forestral District program
Conservation easements	<ul style="list-style-type: none"> ▪ Total number of parcels and acres protected by conservation easement – countywide, by Planning Policy Area, by zoning district ▪ Total number of development rights extinguished by easement ▪ Breakdown of conservation easements by length of contract and easement holder
Purchase of development rights	<ul style="list-style-type: none"> ▪ Total number of parcels and acres in purchase of development rights program – countywide, by Planning Policy Area, by zoning district ▪ Total number of development rights extinguished by easement ▪ Total county cost per acre purchased and total value of easements held
Land Use Taxation	<ul style="list-style-type: none"> ▪ Total number of parcels and acres enrolled in land use tax program – countywide, by Planning Policy Area, by zoning district ▪ Total amount of property tax revenue deferred by way of land use tax program
Farm/forest management strategies	<ul style="list-style-type: none"> ▪ Utilization of best management practices ▪ Total acres of farm/forest management plans developed ▪ Total acres of nutrient management plans developed

Topic	Indicator(s)
Education	
Enrollment	<ul style="list-style-type: none"> ▪ Total number of students enrolled in each grade level – countywide and at each public school ▪ Total number of teachers and pupil-teacher ratio by grade level – countywide and at each public school ▪ Pupil-classroom ratio in each grade level – countywide and at each public school
Academic achievement	<ul style="list-style-type: none"> ▪ Total number and percentage of students graduating – countywide and from each high school ▪ Total number and percentage of students continuing education – countywide and from each high school ▪ Standardized test scores at each testing level – countywide and at each school
Economic Development	
Employment	<ul style="list-style-type: none"> ▪ Total employment – by industry sector ▪ Unemployment rates ▪ Average wage levels – by industry sector
Economic impact statistics	<ul style="list-style-type: none"> ▪ Total acres available for business and industrial uses – countywide, by zoning district, and by future land use classification ▪ Total taxable retail sales, by industry sector ▪ Total business licenses issued ▪ Total amount of county taxes collected
Special use permits	<ul style="list-style-type: none"> ▪ Total number of special use permits requested, approved, and denied – countywide, by Planning Policy Area, by zoning district, by type of permit
Home occupation permits	<ul style="list-style-type: none"> ▪ Total number of home occupation permits requested – countywide, by Planning Policy Area, by zoning district
Historic Resources	
Inventory of historic sites	<ul style="list-style-type: none"> ▪ Total number and acres of state and federal sites identified as historic sites or as part of a historic district ▪ Total number and acres of protected sites
Housing	
Housing cost	<ul style="list-style-type: none"> ▪ Median home values and median contract rent ▪ Percentage of households paying over 35% for housing
Housing inventory	<ul style="list-style-type: none"> ▪ Total number of residential units by type – countywide, by Planning Policy Area, and by zoning district ▪ Total number of senior care and age restricted housing units ▪ Total number of building permits issued for new dwellings by value – countywide, by Planning Policy Area, and by zoning district
Human Services	
Program participation	<ul style="list-style-type: none"> ▪ Enrollment in applicable social services, health department and related programs
Library	
Collection sizes	<ul style="list-style-type: none"> ▪ Total collection size by type of collection – countywide and by branch
Usage statistics	<ul style="list-style-type: none"> ▪ Total number of materials borrowed by type – countywide and by branch ▪ Total number of users of library computers for internet access
Parks and Recreation	
Program participation	<ul style="list-style-type: none"> ▪ Enrollment in recreation programs ▪ Total usage of parks and recreation facilities
Facility availability	<ul style="list-style-type: none"> ▪ Available recreation space per capita

Topic	Indicator(s)
Public Safety	
Crime and law enforcement	<ul style="list-style-type: none"> ▪ Total crimes reported by classification ▪ Total arrests made
Fire and rescue	<ul style="list-style-type: none"> ▪ Total number of emergency calls by type and station ▪ Volunteer participation statistics
Utilities	
Water and wastewater connections	<ul style="list-style-type: none"> ▪ Total number of public water and sewer connections – countywide, by Planning Policy Area, and by zoning district ▪ Breakdown of new dwellings by type of water and wastewater system; countywide, by Planning Policy Area, by zoning district
Water and wastewater usage	<ul style="list-style-type: none"> ▪ Total usage of public water service ▪ Total available public water capacity ▪ Total usage of public wastewater service ▪ Total available public wastewater capacity
Solid waste collection	<ul style="list-style-type: none"> ▪ Available landfill capacity ▪ Total tonnage of solid waste collected by collection site

VIII. Capital Improvements Plan

A. Overview

The county's policies for capital investments are interdependent with the policies for land use and growth management. The Comprehensive Plan sets the framework for linking capital improvements with land use decisions. A CIP offers a systematic approach to planning and financing capital improvements. Although capital improvement programming cannot totally eliminate inefficiencies and the element of chance, a well-prepared CIP can offer advantages such as:

- Anticipating future capital facility needs
- Correlating projects to community goals, financial capabilities and anticipated growth
- Eliminating duplication and poorly planned expenditures
- Encouraging cooperation with other governmental units
- Establishing work schedules and cost estimates
- Facilitating federal and state grants
- Facilitating private sector improvements consistent with the Comprehensive Plan
- Developing public support for capital expenditures

The following are general guidelines for the county's annual updates of its five-year Capital Improvements Program (CIP) and a preliminary forecast of long term costs for capital facilities, based upon the 20-year growth forecast and existing and/or expected levels of service.

The following policies provide a framework for linking the CIP with the Comprehensive Plan.

- The county will expect to fund its capital improvements from a variety of sources. To fund the capital budget, year-end fund balances and reassessment revenues are supplemented by designated revenues, i.e., one-third of consumer utility taxes, one-third of BPOL license taxes, 90% of meal taxes, a portion of lodging taxes, rental income, and the 1997 NADA tangible personal property adjustment. Additionally, with school projects, the goal is to position the county to receive the best possible financing package, i.e., VPSA, VPSA loan subsidy, literary loan, etc.
- The county will expect that during the 20-year planning horizon outlined in this Plan, capital expenditures will be allocated to the various geographic areas in the county generally in proportion to the rate of population growth in each of those areas. However, the county will attempt to balance the provision of facilities and services to meet existing needs and deficiencies with the provision of facilities and services to serve new development.

B. Capital Facility Cost Forecasts

Overall Assumptions

- The population of the county is projected to increase by 17,700 people between 2007 and 2027.
- Future Levels of Service are based on either state or national standards, or local demand estimates derived from current service levels.
- Capital needs included in the Plan are generally based on resources available and do not necessarily represent all of the projects that will be needed to accommodate county residents in the future.
- Capital needs will be refined by the strategic plans recommended in the Plan for economic development, education, stormwater management, and the master water and sewer plan.
- Cost figures are generally rounded to either the nearest half million or the nearest 100,000, depending upon the level of information available.
- All costs are shown at current dollar value and reflect only the actual cost of acquisition and/or construction, not operating/maintenance nor financing.

Summary of Total Capital Needs and Costs for 2007 – 2027

<u>Facility</u>	<u>2007-12 Cost</u>	<u>2012-27 Cost</u>	<u>Total</u>
A) Schools	\$20.6m	\$39.0m	\$59.6m
B) Public Utilities	\$86.0m	N/A*	\$86.0m*
C) Detention	\$ 3.2m	\$ 6.0m	\$ 9.2m
D) Courts	\$ 1.0m	\$33.4m	\$34.4m
E) Emergency Services	\$ 8.0m	\$36.5m	\$44.5m
F) Government Administration	\$ -0-	\$ -0-	\$ -0-
G) Libraries	\$ 2.9m	\$ 1.0m	\$ 3.9m
H) Parks and Recreation	\$11.9m	\$ 8.7m	\$20.6m
I) Solid Waste Management	\$ 6.3m	\$15.1m	\$21.4m
J) Stormwater Management	\$ 1.0m	\$25.0m	\$26.0m
K) Transportation	\$21.3m	\$63.8m	\$85.1m
L) Sinking Funds	<u>\$18.9m</u>	<u>\$56.6m</u>	<u>\$75.5m</u>
TOTAL	\$181.1m	\$285.1m*	\$466.2m*

N/A: Not Available

* Service Authority costs based on their 2007-2011 CIP. 2012-2027 costs will be determined when the Master Water and Sewer Plan is revised following adoption of the Comprehensive Plan.

C. Schools

The Augusta County School Board operates twelve elementary schools, four middle schools and five high schools (21 total). Additionally, Administrative offices, as well as School Maintenance and Bus/Vehicle facilities, are maintained.

Since the 1994 Comprehensive Plan, the School Average Daily Membership (ADM) has fluctuated from a low 10,468 to a high of 11,027. The 2007 ADM estimate is

10,915. During this same period, the county's new housing starts and population has increased without a corresponding increase in ADM.

The following chart reflects by school the year the facility was constructed/renovated as well as the September 2006 ADM and program capacity.

	<u>Const/Renov-Exp.</u>	<u>Sept. ADM</u>	<u>Program Capacity</u>
<u>Elementary</u>			
Beverley Manor	1961/1974	371	520
Hugh Cassell	1973/1993	472	500
Churchville	2000	322	540
Clymore	1995	703	750
Craigsville	1931/1974/1999	152	360
Ladd	1965/1973/1976	319	360
North River	1999/1970 (small wing)	285	440
Riverheads	1970/1974/1993	564	600
Stuarts Draft	1995	620	750
Stump	1955/1968/1979/1999	370	480
Verona	1967/1976	400	420
Wilson	1958/1967/1977/1993	<u>333</u>	<u>340</u>
		4,911	6,060
<u>Middle</u>			
Beverley Manor	1988/1993	806	800
Stewart	1980	670	720
Stuarts Draft	1978/1993	581	960
Wilson	2006	<u>539</u>	<u>520</u>
		2,596	3,000
<u>High School</u>			
Buffalo Gap	1962/1969/1997	601	740
Fort Defiance	1962/1975/1996	899	960
Riverheads	1962/1976/1997	561	600
Stuarts Draft	1970/2007*	789	940
Wilson	1970/2007*	<u>749</u>	<u>900</u>
		3,599	4,140
	Totals:	11,106	13,200

* Reflects projects currently under construction

The School Board's capital program reflects the following projects:

1. Elementary Schools

- Addition to Verona Elementary to relieve overcrowding at Clymore \$ 5.0m
- Addition to Hugh Cassell Elementary \$ 5.0m
- Addition to Wilson Elementary \$10.0m
- Gyms at Riverheads and Stump Elementaries \$ 3.0m

The School Board indicates that the continued use or relocation of Ladd Elementary School will impact the need and scope of improvements to Cassell and Wilson. Much will depend on the impact of future growth in the Fishersville and Stuarts Draft areas as a result of the Comprehensive Plan update. The gyms at Riverheads and Stump Elementaries will address school programming and community recreation needs.

2. Middle Schools

The School Board will continue to analyze programming, transportation and operational efficiencies as it relates to the construction of additional middle schools. Growth anticipated by the Comprehensive Plan will impact the decision on whether to:

- Continue to share a middle school for Buffalo Gap and Riverheads (Beverley Manor – status quo)
- Construct middle school annex(es) to Buffalo Gap and Riverheads High Schools
- Construct stand-alone middle schools
- Expand capacity at existing middle schools

Contributing factors include availability of land and utilization of Beverley Manor Middle School for other purposes.

The cost for two middle schools could range from \$13 million to \$18 million each, while expanding existing middle schools could cost \$5 million.

3. High Schools

Land acquisition is envisioned by the School Board for additional facilities at Fort Defiance (parking and athletic fields) as well as at Buffalo Gap (sewage disposal system, athletic fields and possible middle school). Estimated cost \$400-600,000.

The Comprehensive Plan and growth forecasts in school attendance zones will determine if existing high schools can accommodate growth and whether further evaluation is necessary. There are two scenarios to consider:

- Expansion capacity at schools in Urban Service Areas (Stuarts Draft, Wilson and Fort Defiance)
- Boundary line adjustments to equalize school attendance zones

4. School Support Facilities

School Administrative offices, Maintenance facilities and Bus/Vehicle Garage are currently located in surplus military (WWII) structures. The county's Government Center Master Plan has planned for the eventual relocation of the facilities to Verona. The cost to relocate these facilities could total \$7 million to \$10 million.

D. Public Utilities

Public water and sewer service is provided by the Augusta County Service Authority. The Service Authority was established in 1966 by action of the Board of Supervisors and chartered by the State Corporation Commission. The Service Authority Board of Directors, consisting of seven members appointed by the Augusta County Board of Supervisors, is responsible for providing water and sewer service to county residents. The Authority is subject to regulatory directives of both state and federal agencies, including the Safe Drinking Water Act, the Clean Water Act, Homeland Security and initiatives to clean the Chesapeake Bay. Regulatory compliance impacts issues regarding infrastructure, as well as the demand for more advanced levels of treatment for water and wastewater. The Service Authority's 5-year Capital Plan implements these improvements. The Service Authority's current Master Water and Sewer Plan support the following:

- Development of, and adherence to, the Master Plan which supports the county's Comprehensive Plan
- Creation of a Geographical Informational System (GIS) with multiple layers that can guide capital investment decisions in regards to repair and replacement as well as new construction
- Review of site plans and inspection of infrastructure constructed and/or dedicated for compliance with the Authority's Construction Standards Manual
- Use of the Service Authority's rate model that annually examines rates to cover all costs for maintaining infrastructure as well as operating facilities, and
- Data gathering from SCADA systems that allow monitoring of remote locations to protect and maintain public water and sewer infrastructure

The Service Authority's 5-year CIP separates capital needs into three sub areas, i.e., water system, wastewater system and planning/operating. Projected costs for the 2007-2011 CIP adopted by the Board in June 2006 are as follows:

Water System Capital Improvements	\$ 9.5m
Wastewater System Capital Improvements	\$74.3m
Planning/Operating Capital Improvements	<u>\$ 2.2m</u>
Total:	\$86.0m

Water system projects include membrane filtration systems at several existing sources required by the Virginia Department of Health, land acquisition and water tank replacements at four to five locations to meet new county fire flow regulations and source water protection land acquisitions as well as the development of supplementary wells. Wastewater projects are related to the new nutrient reduction regulations mandated under the Chesapeake Bay Initiative. Facilities will be brought up to permitted capacities for volume as well as to technology levels for nutrient reduction. Upon adoption of the county's Comprehensive Plan, the Service Authority will undertake Master Planning that includes water and sewer modeling based on

population projections, changes in density and planning policy areas, and other utility goals stated in the county's Plan.

The Service Authority's funding sources include budgeted revenues from rate payers, Virginia Resources Authority (VRA) low interest loans, regulatory agency grants and capital reserves (generated from connection fees and rate payer revenue).

Countywide projects identified in the Comprehensive Plan, as well as economic development initiatives, that benefit businesses and citizens outside the existing customer base typically require supplemental funding from the county in order to provide full funding for the county projects to minimize the impact on Service Authority capital needs.

E. Detention

The county is a member of the Shenandoah Valley Juvenile Detention Home Commission (SVJDHC) and Middle River Regional Jail Authority (MRRJA).

1. SVJDHC

Current facility, occupied in 2003, cost \$10 million and has a rated capacity of 55 beds. Members include cities of Staunton, Harrisonburg, Lexington and Waynesboro, as well as Counties of Augusta, Rockbridge and Rockingham. Average Daily Population is 20 or 36% of capacity. Unused beds are rented to non-member jurisdictions and to the state. Housing pods consist of four 10-bed units and one 15-bed unit. The Master Plan allows for two additional units. The 20-year expansion needs could include an additional 10-bed unit at a cost of \$1.1 million. This expansion would be dependent upon Court-directed post dispositional admissions. The county's admissions currently average 19% of total population. County share of the \$1.1 million expansion is \$209,000.

2. MRRJA

Current facility, occupied in 2006, cost \$59 million and has a rated capacity of 402 beds (double bunking in cell blocks and triple bunking in dormitory work release areas have resulted in a revised capacity of 798). Members include the cities of Staunton and Waynesboro and the County of Augusta. Average Daily Population is 392 or 97.5% of the rated capacity and less than 50% of the revised capacity of 798. Unused beds are currently rented to non-member jurisdictions and to the state.

The Master Plan provides for phased expansions:

- Men's Blocks C & D 94 beds \$ 2.1m by 2012
- Women's Wing 144 beds \$ 4.8m by 2012
- Men's Wing 647 beds \$19.2m by 2027

The county's admissions currently average 35% of total population. Based on current utilization, the county's share of capital projects would be 35%.

F. Courts

Based on current caseloads, court calendars, and future caseload trends projected by the Virginia Supreme Court, it appears that by the year 2027, County Circuit, General District and Juvenile and Domestic Relations (J&D) District Courts will each require two courtrooms. The J&D District Court is shared with the City of Staunton and prior to 2027 a third courtroom may be needed on some days (could be offset by sharing General District Court space).

Court facilities recently constructed in Virginia contain an average of 12,000 to 15,000 gross square feet of space per courtroom for a facility which houses the Courts, Court Clerks, Commonwealth's Attorney, Juvenile Probation, law library, required detention holding and security (bailiff) facilities. Thus, in 2027 a facility of between 72,000 and 90,000 square feet would appear to be needed in Augusta County.

While the Master Plan for the Government Center has identified sites for the Courts to be relocated from Staunton to Verona, desire has been expressed to maintain the courts downtown. The short-term strategy is to renovate the current Courts Building to incorporate space vacated by the Sheriff's Office and Jail (\$1 million). The longer term strategy would be to work with Staunton to find suitable space for the J&D District Court and J&D Probation. The 2027 strategy may still be to consolidate some or all of the courts at the Government Center, which would require a referendum of county voters. The estimated cost of a 90,000 square foot Courts facility is \$33.4 million. The cost for a downtown location could be higher due to land costs, site limitations, architectural requirements, parking garage, etc.

G. Emergency Services

Emergency Operations Center – There are two capital projects identified for the county's Emergency Operations Center (EOC). Both projects are anticipated to fall within the 20-year planning period.

- New Center – to accommodate future growth (personnel and technology) the current EOC could be located in the Fire Training Center and built as part of the Public Safety Building that would also include Fire & Rescue administrative offices and Fire/Rescue training classrooms. Estimated cost for equipment only is \$4.5 million (the building costs are included in the Fire Training Center estimate below).
- EOC Radio System Upgrade – The current system was installed in 1998 at a cost of \$2.3 million. The FCC has mandated that all radio stations will have to be converted to “narrowband” by 2013. The estimated cost for this upgrade is \$11.2 million.

Fire and Rescue – The 2000 Fire and Rescue Study was updated in 2005. The study recommended a number of capital projects to enhance the ability of volunteer and paid service providers to meet the needs of the community.

- Fire Training Center – Phase I, construction of a building, is underway at a cost of \$1.6 million. Phase II would include the development, planning, design, and construction of a classroom/office building. The offices would have Fire/Rescue Administration offices and 911 operations center. Estimated cost \$4.8 million.
- Fire Stations – The Master Plan anticipates the need for four new stations (three new and one replacement) over the next twenty years. The estimates include one station in the first 5 years and three in the next fifteen years. The stations involved could be Company 10, and ones north, south, and east of the City of Staunton. The estimated cost per location: \$6 million for a total of \$24 million over the next 20 years.

H. Government Administration

The county’s current square footage in the Government Center totals 112,755. This includes the original square footage of 83,107 and 29,648 added in 2003. It is not envisioned that additional square footage will be needed for General Government purposes prior to 2027. Staffing space needs will be met by other agencies relocating from current space in the Government Center to new facilities. Principally, it is envisioned that School’s Pupil Services will relocate to the proposed School Administration office. This will free up 4,190 square feet in the Government Center. Additionally, space has been earmarked for the Fire & Rescue Administrative offices and the EOC on the grounds of the Fire & Rescue Training Center. This will free up 3,042 square feet and 3,685 square feet respectively in the Government Center. However, as service needs increase, an additional 10,000- 15,000 square feet of office space may be required. The estimated cost: \$1,500,000.

I. Libraries

The Library Board’s Five-Year Plan identifies two capital projects. The first project is the expansion of the Central Library to construct a new Children’s Wing. The recently completed Master Plan provides for the Children’s Wing. The second phase recommends relocating the main entrance to improve Library visibility from Route 250 and improved access to the building for persons with disabilities. Since the opening of the main Library, Library use has increased substantially:

- Collection 239%
- Circulation 163%
- Patron visits 531%
- Patrons 77%

It is envisioned that both phases of the Master Plan will be needed by 2012.

Phase I	\$1,035,887
Phase II	<u>1,821,439</u>
	\$2,857,326

The Library Five-Year Plan also proposes a second Branch Library. The construction estimate for 2012-2027 is \$1 million.

J. Parks and Recreation

The 2003 Parks, Recreation and Open Space Master Plan provided a 20-year blueprint for Augusta County. Successful implementation will be dependent upon continued community support for the operation of recreation programs (Ruritan Clubs and Athletic Associations) and their ability to leverage private sector funding for operating and capital projects.

The following projects are based upon the recommendations of the Master Plan:

1. Major Parks/Open Space

- Acquire 40-50 acres of land in or near Fishersville for a major park. Facilities may include recreation center, playground, group and individual picnic area, athletic fields, parking, restrooms, maintenance building. Projected cost \$2 - 3 million.
- Acquire a minimum of 15-20 acres of land for a park in the Churchville area. Facilities may include group and individual picnic areas, restrooms, parking, athletic fields. Projected cost. \$750,000 - \$1,000,000.
- If Natural Chimneys is transferred to county ownership ongoing capital improvements will need to be made including expansion of water and sewer hookups, new playground, repairs to swimming pool or replacement. Projected cost \$400,000 - \$600,000.
- Acquire additional land near Stuarts Draft Park for possible recreation center and branch library. Projected cost \$2 - \$4 million.
- Construct picnic shelter, basketball courts, walking trail, and public restrooms at Augusta Springs park site. Projected cost \$150,000 - \$200,000.

2. Facilities

- Envisioned for Verona is a full recreation center to include multi-purpose rooms, two full size gyms, elevated walking track and activity rooms. Projected cost \$7.0 million.
- As youth sports programs increase in size and as more adults try to stay active via adult softball, soccer, or other adult leagues, the need will occur to install lights on 6-8 fields over the next 10-15 years. Projected cost \$450,000 to \$600,000.

Schools

As new or renovation construction is considered, recreation space planning, i.e., multi-purpose and meeting rooms should be taken into consideration to accommodate both educational and community recreational functions since schools generally are the community focal point.

3. Funding

- Projected funding for the 2007-2012 CIP is \$11.9m. Projects include improvements to Crimora Park, Fishersville Recreation Center, Stuarts Draft Park, a new Recreation Center for Verona, and land acquisition for future park expansions in Fishersville, west of Route 262, and Verona.
- Projected funding for the 2012-2027 CIP is \$20.6m. Continuation of efforts to develop major parks, community recreation facilities and special recreation facilities as identified in Master Plan.

K. Solid Waste Management

The current landfill opened in 1998. The estimated life cycle is 2027 (based upon a 3.5% growth rate). Members of the Regional Landfill include the cities of Staunton and Waynesboro and the County of Augusta. Highland County is permitted to use the landfill as a non-member jurisdiction (1% of tonnage). Operating and capital obligations are shared by the member jurisdictions based upon tonnage. A five percent (5%) host fee is paid to Augusta County by the two cities (offsetting loss of property tax revenues associated with having the landfill sited in the county, as well as other government services, i.e., roads, trash collection, law enforcement, fire, etc.).

The five-year cost for cell development and capitalized equipment is \$11.2 million. The twenty-year cost is \$29.2 million. The county's share of costs based upon the current formula (tonnage/host fee at 51.5%) would be \$5.8 million (5 years) and \$15.1 million (20 years) respectively.

Within the next five years, it is envisioned that two additional solid waste transfer stations will be needed to address service demands. Estimated cost is 2 @ \$225,000 = \$450,000.

L. Stormwater Management

Analysis of the capital costs of stormwater management (SWM) facilities in Augusta County and throughout the nation shows that the actual costs are highly variable depending upon the specific characteristics of the area served and the design of the system. Costs can range from a few hundred dollars per dwelling unit to several thousand dollars per dwelling unit depending upon the size of the area served, the type of improvements constructed and the density and number of houses served.

It has been the county's policy to require commercial and industrial concerns to provide for their own stormwater management. With residential development, it is preferred that stormwater management systems be maintained by property owners/homeowners associations. The county's policy does allow for residential facilities (serving 25 lots or more) to be built by developer and maintained by the county once 90% of lots are built on. In order to determine the precise needs and priorities for improvements, the county can explore the feasibility of carrying out more detailed studies of countywide stormwater management needs. The cost of a countywide study could exceed \$1 million. The cost to fund regional stormwater detention facilities could exceed \$25 million. The industry standard to maintain stormwater infrastructure averages \$30/acre/year to \$150/acre/year depending upon density. Considering the acreage in Urban Service Areas (41,000 acres plus/minus) the cost would be \$1,230,000 to \$6,150,000 annually. Many communities are enacting stormwater management fees to offset the construction and maintenance costs of these facilities.

M. Transportation

Although transportation facilities are primarily the responsibility of the Virginia Department of Transportation, estimates of future capital costs are included here in order to provide a framework for understanding the magnitude of transportation needs which the county will face as growth continues.

However, accurately estimating future capital costs for transportation improvements is virtually impossible due to four major factors:

- Local road needs will be greatly affected by the traffic levels and patterns generated by through traffic that originates outside the county, yet these traffic impacts are not known; and
- The extent, location and design of road improvements are not known and are also likely to change substantially over the course of time; and
- The extent to which the distributed road network envisioned in the Comp Plan is implemented; and
- The needs for specific improvements to the road network will likely emerge in an unpredictable pattern due to the size of the areas committed for urban development. The actual costs and locations of road improvements can vary greatly over time and space within the designated growth areas. The costs will occur in a somewhat dispersed pattern.

A further complicating factor in making cost estimates and forecasts is that the future sources, amounts and distribution of funding for improvements are not known and are likely to change substantially over the course of time.

These major unknown factors make the cost estimates for transportation facilities even more uncertain than for most other long term capital costs estimates. Therefore, this analysis is based upon the following set of significant assumptions:

- Because transportation needs – particularly road improvement needs – greatly exceed all expected funding levels, the estimates included here are guided largely by those funding limitations rather than by the actual needs for road improvements described by the policies of the Comprehensive Plan;
- The county will continue to participate in the VDOT revenue sharing program for secondary roads;
- Funding for construction of all new local streets within a new development will be provided by the developers of such projects;
- Improvements and additions to local arterial roads serving the urbanizing areas will require secondary and primary road funding;
- If major improvements to road networks are achieved in the urbanizing areas, the funding for such improvements will come from increases in allocations from the local, state and/or federal governments and from investments by developers through proffer contributions and tax increment financing;

The State Highway System Mileage Table reflects the following:

Interstate	41 miles
Primary	170 miles
Secondary	1,011 miles

Of the Secondary Roads total 718 miles are classified as paved/surface treated and 294 miles as dirt/gravel.

The 2006 Secondary Roads Six-Year Construction Program lists projects totaling \$22 million. This amount has been revised mid-year by the state to \$13.5 million. For comparison purposes, the original FY03-08 Six-Year Plan was \$30.7 million (56% reduction). Additionally, the state’s Revenue Sharing Program has been expanded to include cities and towns without an increase in funding allocation. The new guidelines change funding from providing equal allocations to all participating jurisdictions to funding for the first fifteen jurisdictions, based upon state/local funding leverage.

With regard to the Interstate/Primary Six-Year Plan, two major projects are currently listed – the first being the I-64/285 bridge and approaches (\$24.3 million) and the second being the I-64 off ramp at Route 340 (\$3.3 million).

The county has been active in preparing selective traffic studies to address growth and development issues:

- Stuarts Draft By-Pass 1999
- Route 608/285 Corridor 2000
- Route 636/640 Corridor 2004
- Route 2011/Triangle Drive 2004

The county will continue to evaluate traffic impact studies at the time of rezonings to analyze on and offsite traffic impacts on the county’s road system. Developer proffers

and, when mutually advantageous, Tax Increment Financing (TIF) will be considered to address system deficiencies and needed improvements. The possibility exists to structure “Privilege Fee” arrangements when a developer builds road improvements which may benefit other developable properties.

The funding to address paving of gravel roads can provide insight into the magnitude of costs necessary to funding transportation improvements:

$$294^* \text{ miles} \times \$721,000^{**} = \$211,974,000$$

* Number of gravel miles

** Base estimate per mile for a “regular” project. Cost for Rural Rustic \$125,000 to \$150,000 per mile.

The best estimate for future funding on an annual basis:

	County	State	Total
Revenue Sharing	\$1,000,000	\$1,000,000	\$2,000,000
Secondary Six-Year Plan	<u>-0-</u>	<u>2,250,000</u>	<u>2,250,000</u>
	\$1,000,000	\$3,250,000	\$4,250,000

The 2007-12 estimate would be \$21,250,000. The 2012-27 estimate would be \$63.8m. Without additional state, local and developer funding, construction funding will be inadequate to address transportation needs.

N. Capital Sinking Funds

The board in the CIP has established a number of funds to address ongoing capital replacement/improvements:

▪ Building and Grounds – Roofs, Carpets, Painting, HVAC, Solid Waste Centers	\$400,000/year
▪ Fire & Rescue equipment – Volunteer Grants	\$200,000/year
▪ Fire Vehicle/Equipment – Aerial, Tankers, Pumpers	\$200,000/year
▪ IT/GIS – Computers, Screens, Printers, Software	\$150,000/year
▪ Flood Control Dams – Rehabilitation	\$100,000/year
▪ DSS – Office Building	\$200,000/year
▪ ACSA – Cost Sharing/Development	\$100,000/year
▪ BRCC – Local participation	\$100,000/year
▪ Infrastructure – Magisterial District Projects	\$1,400,000/year
▪ Recreation Matching Grants – Leveraged Rec. Projects	\$200,000/year
▪ Economic Development	\$300,000/year
▪ PDR – Purchase of Development Rights	<u>\$424,000/year</u>
Total	\$3,774,000/year

The 2007-12 projected cost is \$18.9 million. The 2012 to 2027 cost would be \$56.6 million.