partially within a Community Development Area and partially within an Urban Service Area, a conservative approach was taken that assigned the more intense use, in this case the Urban Service Area, to the segment. The existing AADT data was then factored by the annual traffic growth rate to arrive at the projected AADT for 2025.

## 5. Step 3: Identify future network constraints

#### **Level of Service Analysis**

Based on the 2025 traffic projections and the FDOT "Generalized Level of Service Tables," a level of service was assigned to each roadway. The level of service ranges from an "A" under the best conditions, where travel is free-flow, to an "F" under the worst conditions, where travel is highly congested. The volume-to-capacity ratio was also calculated for existing and 2025 AADT data, which is a measure of the amount of traffic volume as related to the capacity of the roadway segment at a level of service of "D." A segment with a volume-to-capacity ratio over 1.0 indicates that the segment is failing the adopted level of service. The 2025 roadway levels of service are shown in **Map 33**.

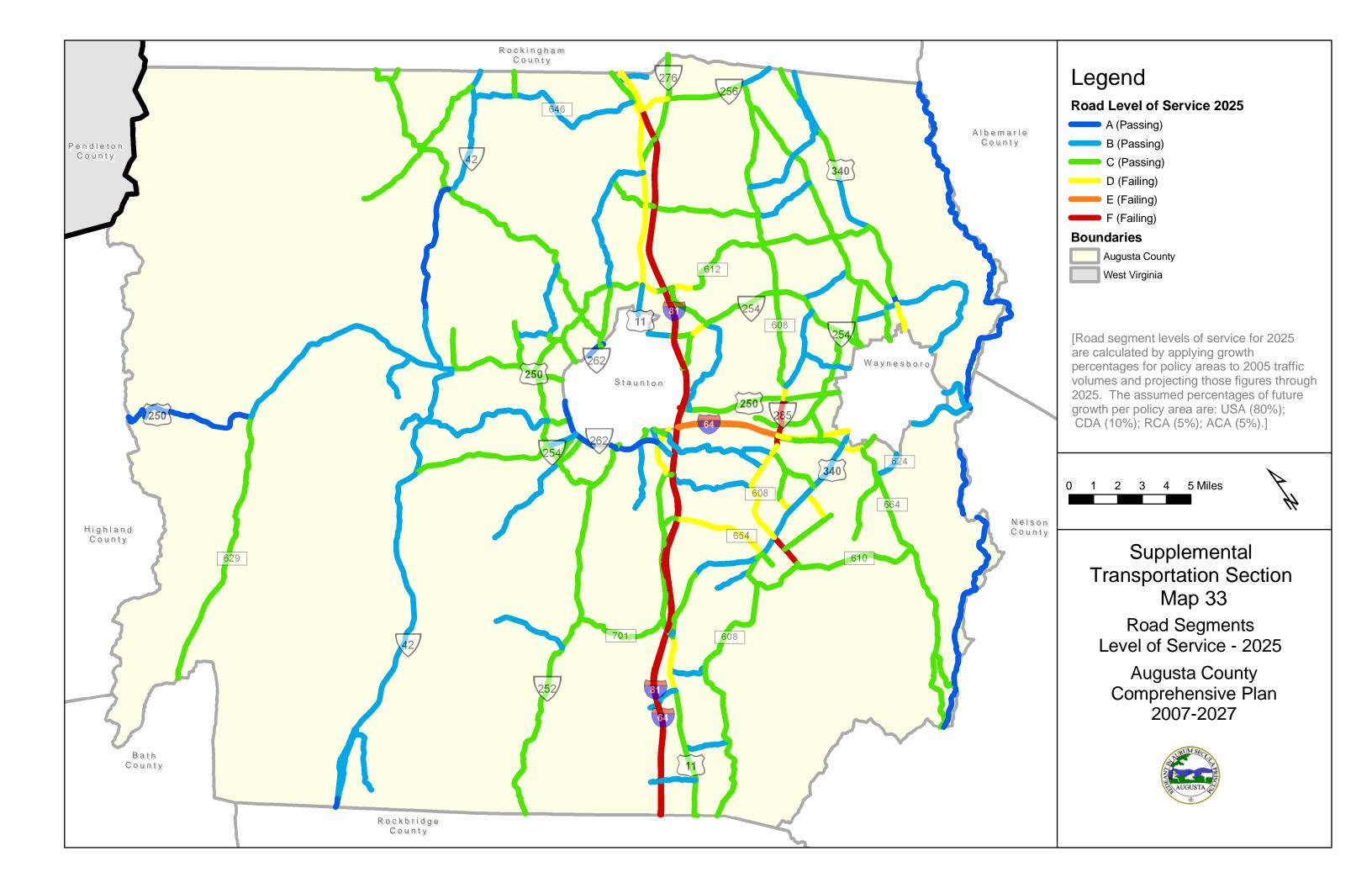
## **Identify Network Constraints**

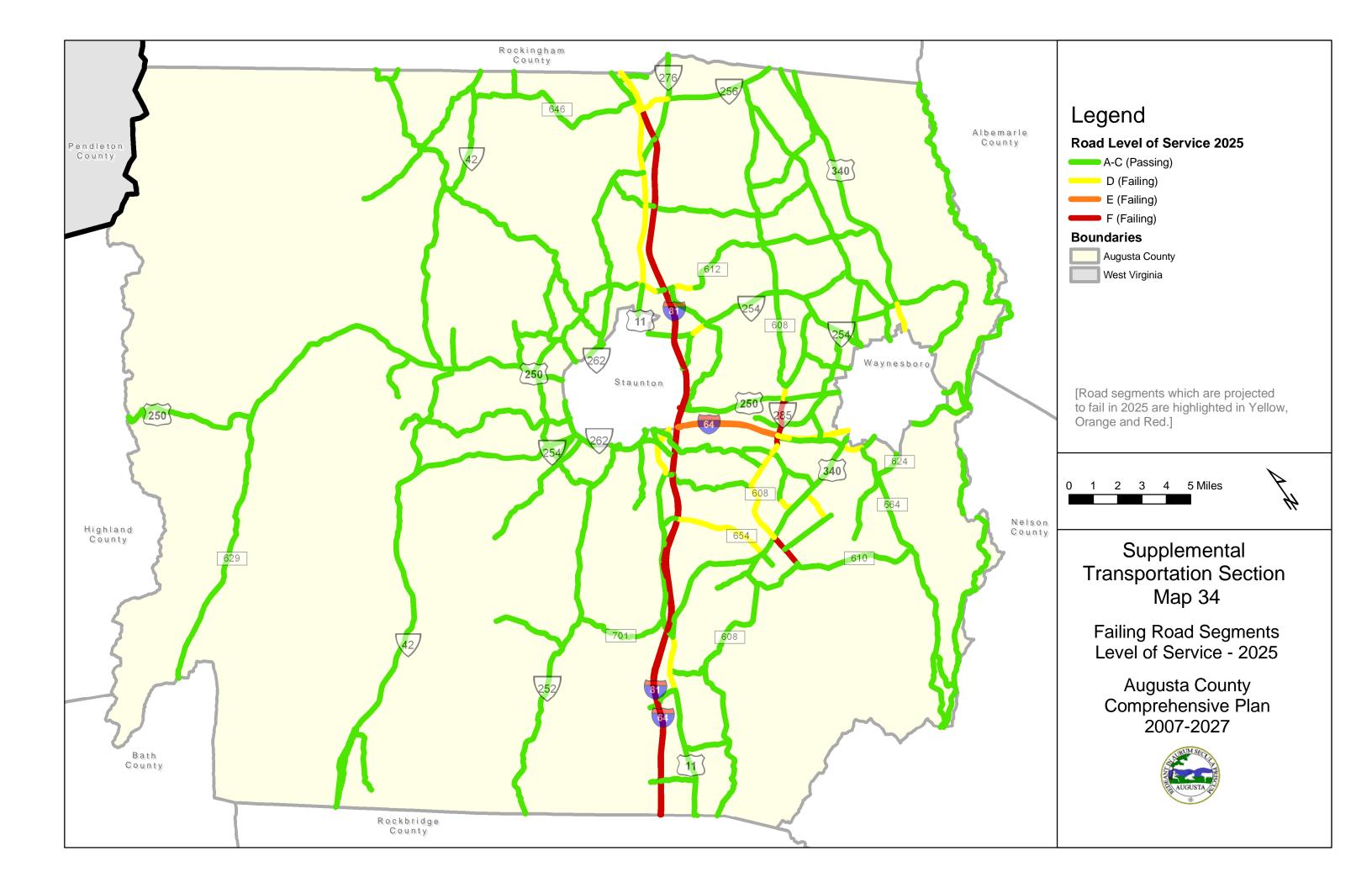
Map 34 isolates the failing roadway segments where the LOS is "D" or worse. Traffic conditions on the segments failing based on 2005 conditions are projected to further deteriorate by 2025, with most segments of Interstate 81 reaching an LOS of "F." Additional segments in the Route 11 corridor and in 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 Thoroughfare Plan will provide recommendations for mitigating the projected failing segments.

## I. Community Facilities, Services, and Utilities

#### 1. Administrative Facilities

The county administrative offices are located in the Augusta County Government Center on Route 11 in Verona. The Government Center consists of several refurbished buildings on a seven-acre campus formerly owned by a trucking company. Rehabilitated in 1990, these buildings provide approximately 175,000 square feet of office space to various county departments and other state and federal agencies. The county also owns several other major properties throughout the county, including a 385-acre regional landfill, 520 acres of undeveloped land west of Verona (Berry Farm), 285 acres of vacant business and industrial land adjacent to the Government Center, as well as numerous rights-of-way, community center properties, and container sites generally leased to civic organizations.





## 2. Education

The Augusta County Public School System provides facilities and programs organized into three levels: elementary (K-5), middle (6-8), and high school (9-12). The current system includes 12 elementary schools, three middle schools, Map 35 illustrates the location of these facilities and five high schools. throughout the county. The cities of Staunton and Waynesboro operate independent school systems; however, the three school systems jointly operate many programs such as Head Start, a regional technical center (i.e. vocational studies), a governor's school for the arts and humanities, and a governor's school for math, science, and technology. The county school system also works in cooperation with the Parks and Recreation Department to provide shared recreational facilities enjoyed by students and the community as a whole. In addition, local civic associations are allowed to use school facilities for a small charge. Private, for-profit interests are only allowed to use the facilities when over 50 percent of the participants reside in Augusta County. During the 2004 -2005 school year, the school system supported 1,070 events on school property, primarily for the county Parks and Recreation Department.

Total student enrollment and overall capacities for existing county school facilities reported in the 2003-2004 school year are shown in **Table 37**. Statistics maintained by the county School Board indicate that the high school graduation rate for this same period was approximately 78%, and 66.8% of these graduating students continue on to two-year or four-year colleges or universities.

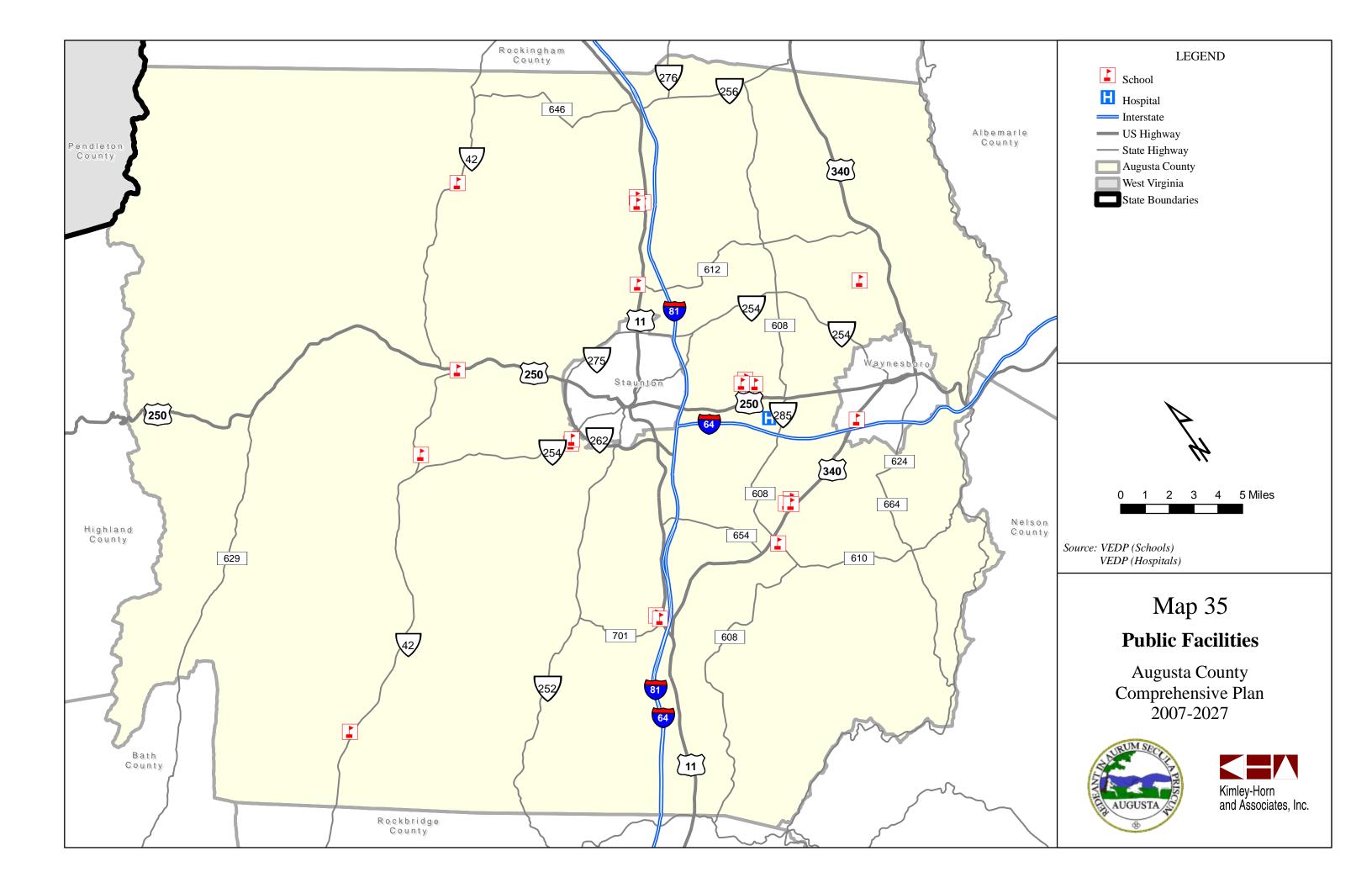
Table 37. Total Enrollment and School Facility Capacities in Augusta County, 2004-2005 School Year

Level	Student Enrollment	Available Capacity
<b>Elementary School</b>	4,640	6,120
Middle School	2,659	2,480
High School	3,444	3,860
Total	10,743	12,460

Source: Virginia Department of Education, 2004.

Augusta County has invested significantly in its school system since the early 1990s and it is now one of the real assets in the community. Rapid population growth is generally concentrated in the eastern portions of the county (i.e. east of Interstate 81) in conformance with recommendations from the existing Comprehensive Plan.

This development concentration places continuing pressure on the school system to expand facilities in these urban centers to maintain adequate capacity, particularly in Verona, Fishersville, and Stuarts Draft. Surplus school capacity sufficient to alleviate a portion of these demands does exist in the western portions of the county; however, it is agreed by county staff and elected officials that transporting students between these schools and population centers is too expensive and time consuming to be a viable option. A fourth middle school



(scheduled to open in August 2006) and renovations to two existing high schools are planned to draw down deficiencies in the eastern portion of the county. **Tables 38, 39, and 40** summarize the enrollment and available capacity for individual schools within the county school system. The next priority for county officials following these improvements will be to target older schools within the county (circa 1970s) for modernization.

Table 38. School Enrollment and Facility Capacities for Augusta County Elementary Schools, 2004–2005 School Year

	Rated Capacity	2004 – 2005 Enrollment	Available Capacity	Year Built	Year Renovated
<b>Beverley Manor</b>	520	329	191	1961	1974
Craigsville	360	150	210	1931	1999
<b>Stuarts Draft</b>	750	567	183	1995	
Hugh K. Cassell	500	442	58	1973	1993
Ladd	420	329	91	1965	1976
Guy K. Stump	480	334	146	1955	1999
Churchville	540	305	235	2000	
North River	440	278	162	1930	1999
Verona	420	385	35	1967	1976
E. G. Clymore	750	693	57	1995	
Riverheads	600	519	81	1970	1993
Wilson	340	309	31	1958	1993
Total	6,120	4,640	1,480		

Source: School Superintendent, Augusta County Schools, 2004. Virginia Department of Education, 2004.

Note: Craigsville and North River were substantially renovated and can be considered essentially rebuilt.

Table 39. School Enrollment and Facility Capacities for Augusta County Middle Schools, 2004–2005 School Year

	Rated Capacity	2004–2005 Enrollment	Available Capacity	Year Built	Year Renovated
<b>Beverley Manor</b>	800	842	-42	1988	1993
Stuarts Draft	960	909	51	1978	1993
S. Gordon Stewart	720	908	-188	1980	
Total	2,480	2,659	-179		
Wilson*	520	N/A	N/A	2006	

<sup>\*</sup> Wilson Middle School is scheduled to open in August of 2006.

Source: School Superintendent, Augusta County Schools, 2004. Virginia Department of Education, 2004.

Table 40. School Enrollment and Facility Capacities for Augusta County High Schools, 2004–2005 School Year

	Rated Capacity	2004-2005 Enrollment	Available Capacity	Year Built	Year Renovated
Buffalo Gap	740	560	180	1962	1997
Fort Defiance	960	907	53	1962	1996
Riverheads	600	493	107	1962	1997
Stuarts Draft	780	782	-2	1970	
Wilson Memorial	780	702	78	1970	
Total	3,860	3,444	416		

Source: School Superintendent, Augusta County Schools, 2004. Virginia Department of Education, 2004.

In April 2005, the actual enrollment for the school system was 10,725 students compared to a projected enrollment of 10,797 students. School officials speculate that the slight increase in population represents migration into the county, primarily from places like Charlottesville, Nelson County, and Albemarle County where residents are seeking affordable homes, lower tax rates, and a good school system. Currently, school officials generally receive one call per week from residents in these areas inquiring about the school system in Augusta County. **Table 41** summarizes trends and projected total enrollments for the county school system through the 2008–2009 school year.

Table 41. Trends and Projected Total Enrollment in Augusta County Schools, 1994–2009

School Year	Total Enrollment	Change
1994-1995	10,417	
1995-1996	10,636	219
1996-1997	10,805	169
1997-1998	10,840	35
1998-1999	10,888	48
1999-2000	10,832	-56
2000-2001	10,704	-128
2001-2002	10,696	-8
2002-2003	10,596	-100
2003-2004	10,662	66
2004-2005	10,797	135
2005-2006	10,735	-62
2006-2007	10,623	-114
2007-2008	10,435	-188
2008-2009	10,282	-153

Source: Superintendent, Augusta County Public Schools, 2005.

The school system relies on growth revenues for operating expenses between reassessment years. The County Board of Supervisors typically earmarks 50 percent of annual growth revenues for School District expenditures. In

reassessment years, a portion of the growth revenues is also used for funding capital costs. The operating costs for the school system are generally funded through state (55 percent), county (35 percent), federal (7 percent), and other (3 percent) monies.

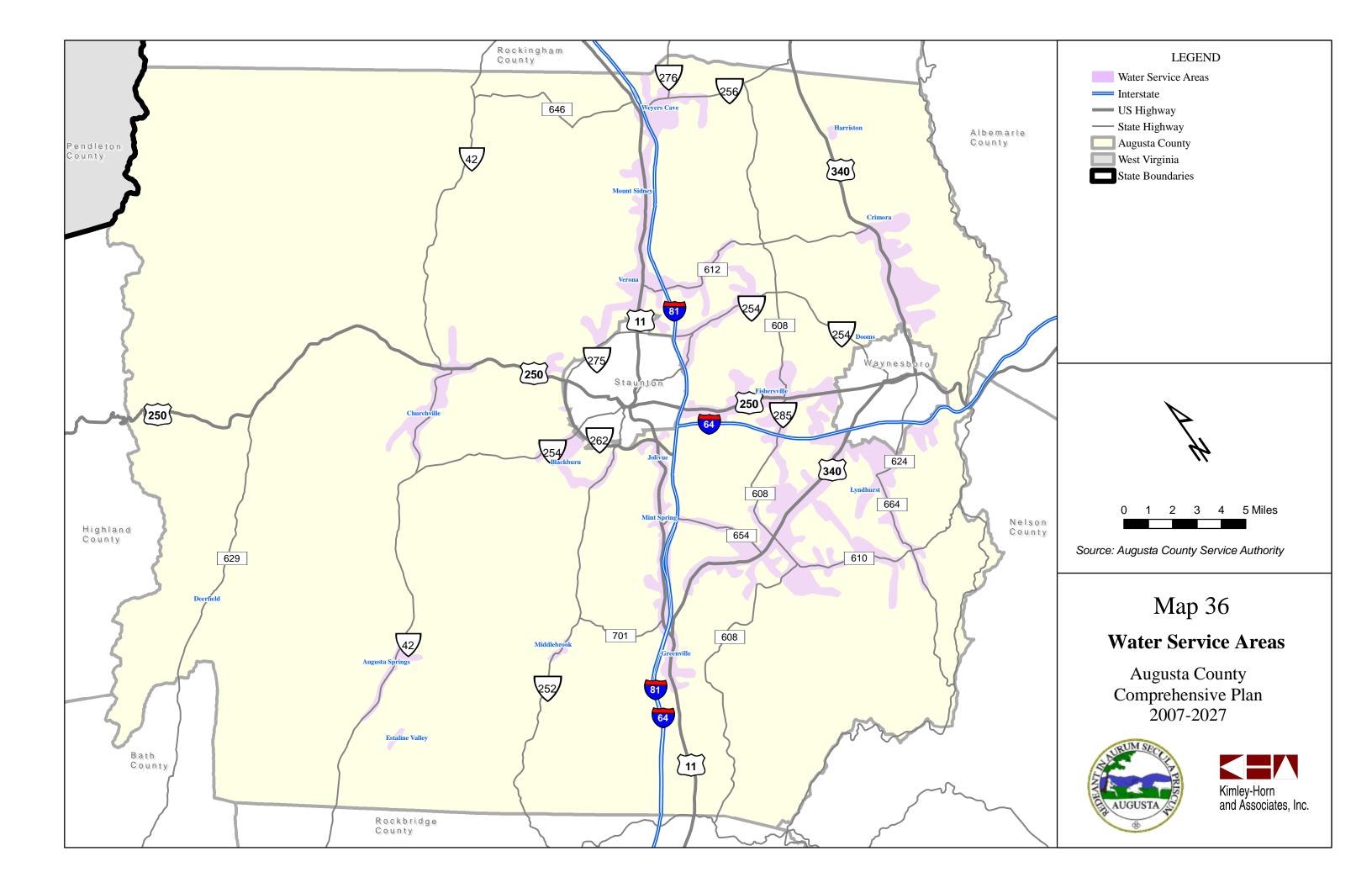
Residents in Augusta County also have access to several public and private institutions of higher learning located within or in close proximity to the county. Public institutions include the University of Virginia, Main Campus (Charlottesville), James Madison University (Harrisonburg), and the Virginia Military Institute (Lexington). Blue Ridge Community College is located near Weyers Cave in Augusta County. This institution is one of twenty-three community colleges in the state university system and serves Augusta, Highland, and Rockingham Counties. It is accredited to award two-year associate degrees, as well as certificates in a number of academic and professional fields. Private institutions include Mary Baldwin College (Staunton), Eastern Mennonite University (Harrisonburg), Bridgewater College (Rockingham County), Washington and Lee University (Lexington), and Southern Virginia University (Buena Vista). One of the goals for the Augusta County School System is to partner with these institutions when planning future programming and facility improvements to the county public school system to ensure the local workforce is adequately prepared for the type of industries that the county is seeking to attract.

## 3. Water and Sewer Service

The Augusta County Service Authority (ACSA) was chartered in March 1966 to centralize the provision of water and sewer service to county residents. Before that time, water and sewer service was provided by separate entities serving small communities that were developing throughout the county. The mission of the ACSA is to provide water and sewer service to Augusta County in a manner consistent with the county's adopted Comprehensive Plan. The ACSA also maintains an independent Water and Sewer Master Plan that is based on the development patterns and policies advocated in the county's adopted Comprehensive Plan. The ACSA employs 97 individuals who report to a Board of Directors that is appointed by the Board of Supervisors. The current system serves approximately 13,650 customers and includes 13,450 water connections and 7,565 sewer connections. The cities of Staunton and Waynesboro and the towns of Craigsville and Grottoes are not included in the ACSA service area as each has its own public water and sewer systems.

#### **Water Service**

The Service Authority operates a partially interconnected system of water supply, treatment, and distribution that serves 12 distinct communities in the county. The water distribution system contains over 353 miles of water mains and approximately 1,700 fire hydrants. **Map 36** illustrates the distribution of public water mains throughout the county.



Water supplies come primarily from 15 wells, four springs, and one reservoir with a collective supply capacity of approximately 6.1 million gallons per day (MGD). In addition to these supplies, an interjurisdictional agreement with the City of Staunton allows the ACSA to purchase up to an additional 3.0 MGD to supplement its system. ACSA distributes approximately 3.1 MGD from its own water facilities and approximately 1.1 MGD under the interjurisdictional agreement with the City of Staunton to serve current demands. Interjurisdictional agreements for water also exist with the City of Waynesboro and the Town of Craigsville. General characteristics of the county's public water system are summarized in **Table 42**.

Table 42. Public Water Supply in Augusta County, 2004

	ACSA	Craigsville	Staunton	Waynesboro
Source	14 Wells	2 Springs	1 Spring	1 Spring
	4 Springs	3 Wells	Middle River	3 Wells
	1 Reservoir		2 Impoundments on	
			North River	
<b>Supply Capacity</b>	9.1MGD*	0.5 MGD	8.2 MGD	5.3 MGD
Treatment Capacity	6.1 MGD	0.5 MGD	8.0 MGD	5.3 MGD
Storage Capacity	10.7 MG	0.35 MG	7.2 MG	3.8 MG
<b>Current Volume of Use</b>	4.2 MGD	0.38 MGD	4.7 MGD**	± 2.9 MGD
Average Available	4.9 MGD	0.12 MGD	4.1 MGD	± 1.4 MGD
Capacity				

MGD = Million Gallons Per Day. MG = Million Gallons.

Source: Local jurisdictions and Augusta County Service Authority.

Total water capacity maintained by the ACSA is adequate to meet current demands; however, some local communities have expressed their desires for central water service extension, and parts of the system need to be interconnected for resource transfer and emergency purposes. Past patterns of water system development have created a complex network of multiple, distinct systems that raise expectations for inexpensive water service as well as make coordination and interconnection of the whole water system difficult.

Generally, water from the county's wells is clean enough to distribute after disinfection and fluoridation. Because of the limestone baserock, the water tends to be hard, but only two springs and two wells treat for hardness. No sedimentation is done at any of the wells. There are filtration systems for Churchville Wells 1 and 2, the Augusta Springs well, and the Deerfield well. In addition, there is an interim filtration system at the Middlebrook well.

Water pressure in the lines is generally good and a number of booster pumps have been installed to keep pressures adequate throughout the system. Line sizes are generally adequate, although the design and sizing of future line extensions could be more accurate and efficient if long-term future service areas were specifically

<sup>\*</sup> Includes 3.0 MGD that ACSA can purchase from Staunton.

<sup>\*\*</sup> Supply capacity minus current volume of use. Actual capacity will depend on peak flows.

planned. Existing line sizes are not adequate to facilitate transfer of water between some systems for emergency and/or supply purposes. Older pipelines in some areas were never sized to support fire standards currently in place. Water storage capacity is adequate for the present, but continued development will require accompanying increases in storage capacity.

#### **Wastewater Service**

The Service Authority provides wastewater collection, conveyance, and treatment via 193 miles of mains (measuring 8 inches and higher), three major treatment facilities, and five smaller treatment facilities. **Map 37** illustrates the distribution of public sanitary sewer mains throughout the county.

The ACSA also operates the Middle River Regional Wastewater Treatment Plant, jointly owned with the City of Staunton, and other facilities including treatment plants at Hugh Cassell Elementary School and Greenville. Ownership of the Greenville Wastewater Treatment Plant was recently transferred to the ACSA. Interjurisdictional agreements for wastewater treatment also exist with the cities of Staunton and Waynesboro. Together, these plants provide primary and secondary treatment of sanitary waste. The overall treatment capacity for the system is approximately 7.2 million gallons per day (MGD). The ACSA collects approximately 4.8 MGD of sanitary sewer waste within its system. General characteristics of the county's public sewer system are summarized in **Table 43**.

Table 43. Sanitary Sewer Systems in Augusta County, 2004

	ACSA	Craigsville	Staunton	Waynesboro
<b>Number of Facilities</b>	8	1	1 (joint with Augusta)	1
<b>Treatment Capability</b>	Secondary	Secondary	Secondary	Advanced Waste
			BNR	Treatment Design
<b>Design Capability</b>	7.2 MGD**	0.25 MGD	6.8 MGD*	4.0 MGD
<b>Connections Served</b>	3,632	420	8,702	6,600
Average MGD	4.8 MGD	0.03 MGD	4.2 MGD***	0.5 MGD

MGD = Million Gallons Per Day.

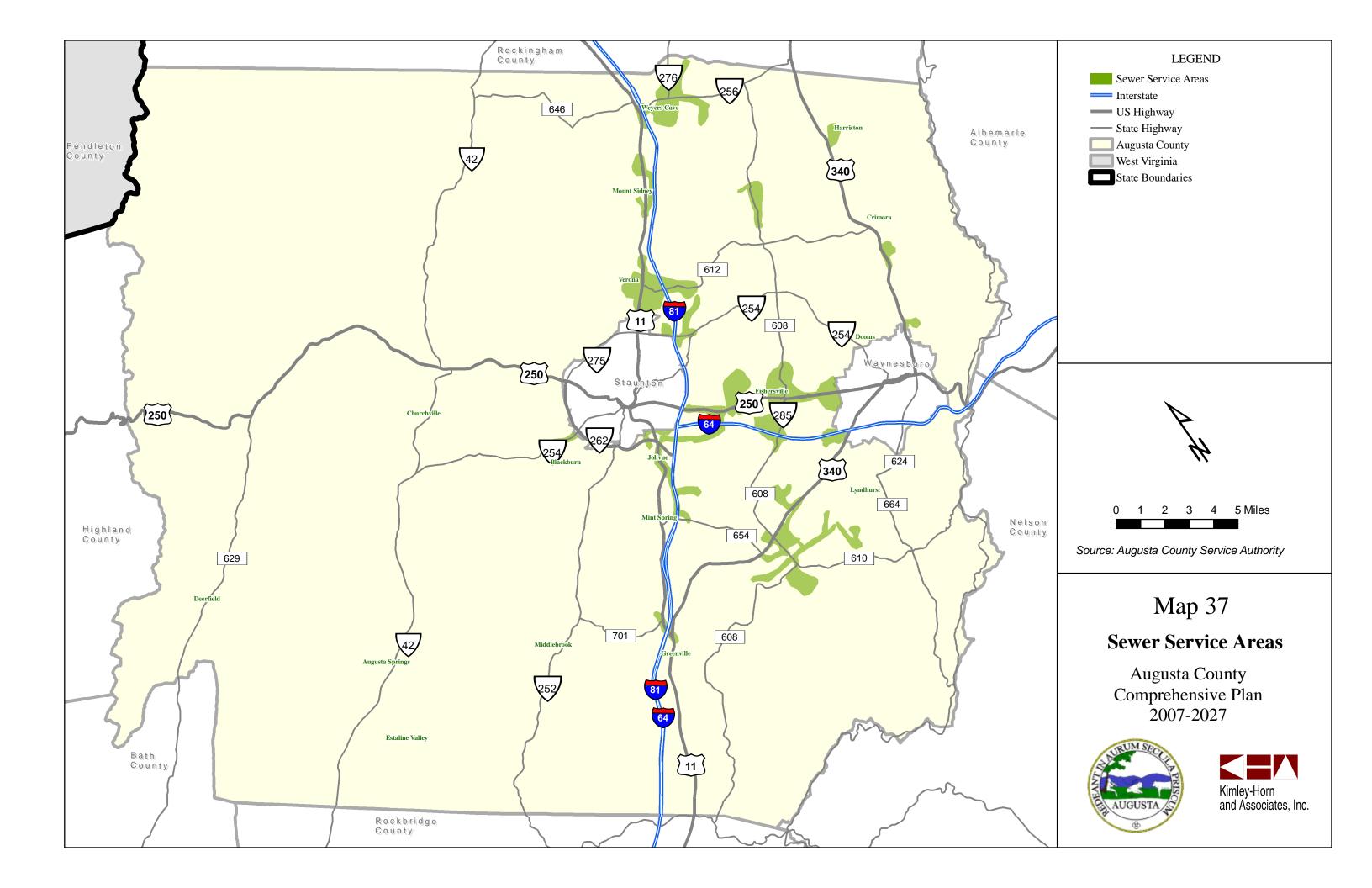
Source: Local jurisdictions and Augusta County Service Authority.

The adequacy of wastewater treatment capacity may become an issue as the Virginia Department of Environmental Quality (DEQ) releases its final rules and regulations for protecting water quality in the Chesapeake Bay Drainage Basin. These requirements will have a significant impact on development because once the capacity limits for wastewater treatment plants are set in 2005 it will be very difficult to raise them. This problem could be compounded for areas such as

<sup>\*</sup>Staunton capacity: 4.9 MGD, ACSA capacity: 1.9 MGD

<sup>\*\*</sup>ACSA design capacity totals include 1.0 MGD capacity owned at Middle River Regional WWTP.

<sup>\*\*\*</sup>Avg. for July 2003: Staunton, 4.202 MGD & ACSA, 0.741 MGD



Augusta County where eight individual wastewater treatment plants are operated and there is no existing infrastructure to interconnect them for sharing available capacities.

In addition to the public systems operated by the ACSA, several private community and individual treatment systems are located in the county. The majority of the small community systems have been inherited by the ACSA; however, a few remain under private control. Those that remain predominantly serve manufactured home parks. Individual treatment systems currently used in the county are traditional septic systems and some alternative systems. There is concern that homeowners using private systems are not maintaining them properly and are potentially contributing to groundwater pollution. The county also does not currently have a mandatory pump-out ordinance. Such an ordinance would require that septic systems be flushed out at prescribed periods and would help to alleviate some of the contamination fears. There is also concern that alternative engineered systems are not properly operated, maintained, or inspected. These factors mean that soils and groundwater near these systems may be more susceptible to contamination.

#### **Growth Issues**

There is currently a lack of corridor protection for transmission lines maintained by the ACSA. These transmission lines are vital to creating an efficient, interconnected system. New and proposed transmission lines serving the ACSA may also require protection from the potential of excessive lateral connections that diminish the function of the trunk line. Transmission lines that cross into the Agricultural and Rural Conservation Areas are also a concern in that the presence of water or sewer lines may attract additional development, which would be contrary to the policies of the planning areas.

Current development patterns have indicated that there needs to be better coordination between the Comprehensive Plan and the Service Authority Water and Sewer Master Plan for providing efficient infrastructure to new development. For example, new well and septic systems are allowed to be built, on a limited basis, inside an urban service area which has already been provided with adequate public facilities to meet anticipated demands.

#### 4. Solid Waste Management

Solid waste in Augusta County is deposited in a regional landfill located five miles south of the City of Staunton. The regional landfill is jointly owned by Augusta County and the cities of Staunton and Waynesboro and operated by the Augusta County Service Authority. Refuse is collected at the site six days a week or at one of ten convenience centers located throughout the county. All locations, except Deerfield, provide recycling opportunities for mixed paper/newspaper, cardboard, aluminum/bimetal cans, and glass. Oil, batteries, and antifreeze are accepted daily at the landfill. Household hazardous wastes are collected twice a year at select locations within the county. In 2004, the landfill received

approximately 137,271 tons of waste and is now permitted to receive refuse from contract haulers in Highland County. **Map 38** illustrates the regional landfill and convenience collection centers serving the county in 2005.

Private hauling companies provide refuse collection service on a contract basis to businesses and industries in the county as well as curb-side collection to residential customers in Staunton and Waynesboro. Individuals are free to contract with one of these service providers or take their refuse directly to the county landfill or convenience centers.

According to a DEQ report, *Solid Waste Managed in Virginia during Calendar Year* 2004<sup>30</sup>, from June 2005, the Augusta County Regional Landfill is estimated to have 3.12 years of remaining life based on capacity estimated and reported by the facility.

## 5. Energy and Communication Facilities

Most of Augusta County is served with electricity by Dominion Virginia Power with its local office in Verona. Some portions of the county are served by Shenandoah Valley Electric Cooperative (SVEC) or the Bath-Allegheny-Rockbridge Electric Cooperative (BARC). Both of these cooperatives purchase all, or nearly all, of their electricity from Virginia Power. These companies have adequate electric power for foreseeable growth in Augusta County.

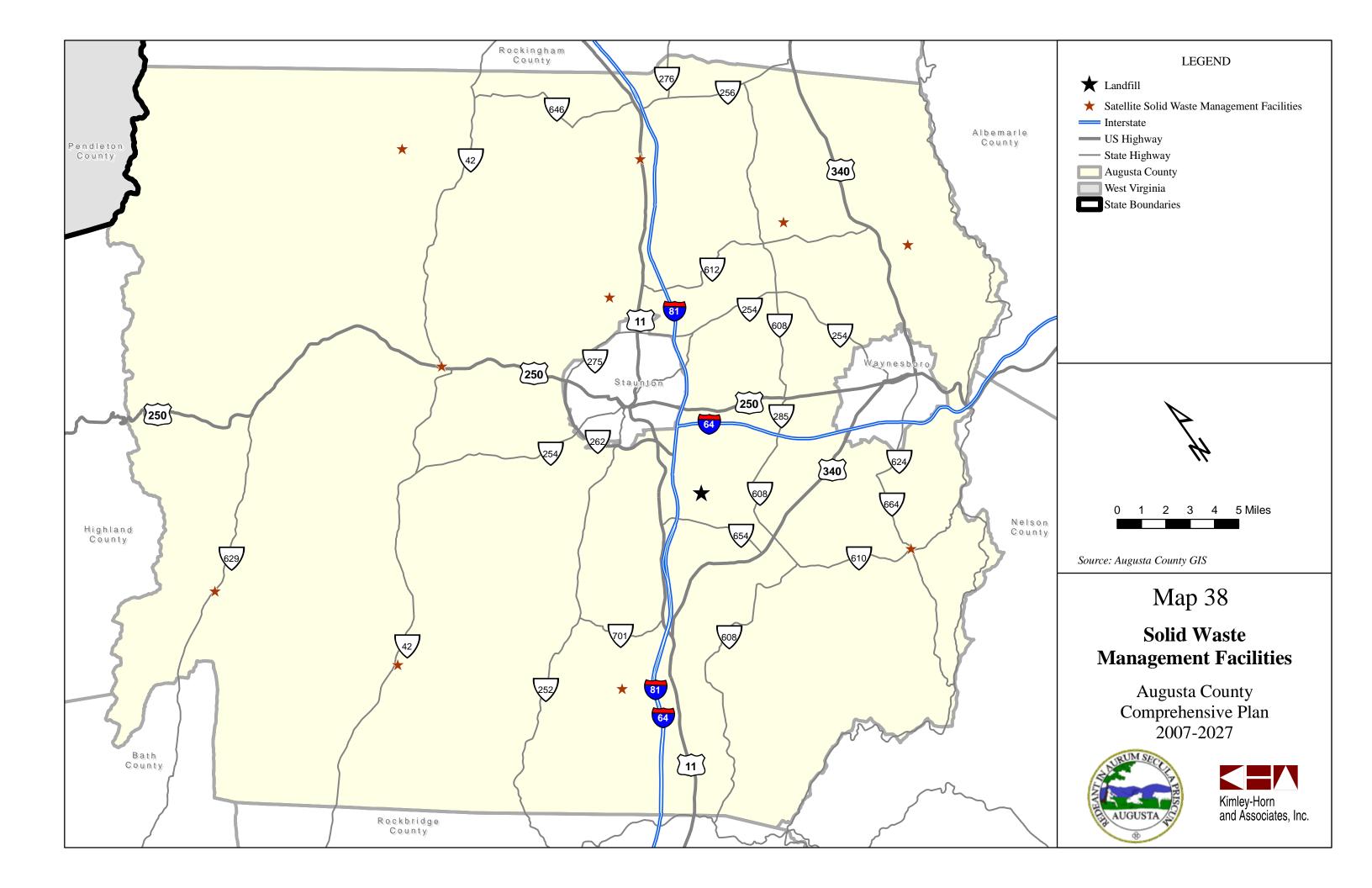
Natural gas is provided to the area by Columbia Gas of Virginia through a 20-inch, high pressure pipeline that crosses the southeastern portion of the county. Distribution lines connect to the main line and serve the areas of Staunton, Verona, Fishersville, Stuarts Draft, and Waynesboro.

Telecommunications and internet services are provided by nTelos and Verizon of Virginia. Cable television and internet services are provided by Adelphia.

#### **6. Police Protection**

In Augusta County, law enforcement is primarily administered by the county Sheriff's Office and the Virginia State Police. State Police are generally focused on highway safety with 17 full-time personnel allocated to Augusta County. The Sheriff's Office is located near the Augusta County Government Center in Verona. It employs 55 law enforcement officers and 66 other staff members, including correctional officers and civilians. The Sheriff's Office responds to approximately 99% of citizen calls related to law enforcement issues in Augusta County and is also responsible for criminal patrol, serving warrants, civil patrol (i.e. courtroom security), and managing the regional jail. Oversight at the jail will cease in February 2006 with the opening of the new Middle River Regional Jail, which will be operated by a regional jail authority. The cities of Staunton and Waynesboro and the Towns of Craigsville and Grottoes each have their own police departments that serve calls for law

<sup>30</sup> http://www.deq.state.va.us/waste/pdf/swreport2004.pdf



enforcement within their city or town limits and provide assistance and share resources with the county.

Historical data provided by the Virginia State Police Department for crime activities inside Augusta County indicate that crimes against the person have increased while crimes against property have decreased in recent years. **Table 44** summarizes available crime statistics.

Table 44. Crimes by Offense in Augusta County, 1997–2002

	1997	1998	1999	2000	2001	2002	Average
CRIMES AGAINST THE PERSON	41	64	46	78	86	75	65
Criminal Homicide	1	2	0	2	3	4	2
Rape	15	12	6	9	9	11	10
Robbery	3	5	2	6	8	6	5
Aggravated Assault	22	45	38	61	66	54	48
CRIMES AGAINST PROPERTY	720	935	1227	959	918	821	930
Burglary	174	185	208	149	127	127	162
Larceny	483	672	949	757	729	634	704
Auto Theft	55	74	65	46	47	51	56
Arson	8	4	5	7	15	9	8

Source: Crime in Virginia, Virginia State Police, 1997-2003.

Existing Sheriff's Office resources are concentrated in the more densely populated areas of the county in order to better serve a majority of the county population. Areas currently requiring the most assistance from the Sheriff's Office include Stuarts Draft, Weyers Cave, and Fishersville. Police substations in Weyers Cave and Stuarts Draft also help respond to citizen requests.

In addition to the local jail and law enforcement facilities, the Commonwealth of Virginia operates the Augusta Correctional Center, a medium security prison established in 1986, near the Town of Craigsville and Camp Ten, a minimum security facility, near Greenville.

## 7. Fire and Emergency Medical Services

Augusta County provides fire and emergency medical services through 20 first-response fire companies and 12 first-response rescue squads. Some of these fire companies and rescue squads are located in neighboring Rockingham and Rockbridge Counties and provide primary response to residents of Augusta County under shared service agreements. The county also has shared service agreements with the City of Staunton and the City of Waynesboro. Sixteen of the 20 fire companies serving Augusta County provide "first responder" emergency

medical service to life threatening calls. Dispatching for both fire and emergency medical services is done at the county's Emergency Operations Center (EOC) located at the Government Center in Verona. **Map 39** illustrates the location and services provided by fire and rescue stations with responsibilities to Augusta County.

Augusta County relies upon a primarily volunteer system for providing fire/rescue services. Rosters maintained by the county report that 855 members currently serve in the various stations; however, only about 35 percent of this membership is active at any one time. In addition to volunteer staff, the county has hired 30 career staff to supplement the current system, including a Fire Chief, Deputy Fire Chief, and two training officers for fire and emergency medical services who provide training to both career and volunteer fire fighters and emergency personnel. Career staff is currently assigned to the most urban areas of the county.

Based on 2004 year-end data, there were 8,147 total calls responded to by fire companies in Augusta County. Of those, 2,327 were fire calls, 3,395 were EMS calls, 1,638 were motor vehicle accidents, 206 were public service calls, and 581 were other types of calls. In terms of fire responses, the Augusta County Company in Staunton responded to the most fire calls (470) with the Preston L. Yancey Company in Fishersville responding to the second highest number (273). The least amount of fire calls responded to from inside the county was Deerfield (19). The Augusta County Company also responded to the most calls overall (1,505) followed by Preston L. Yancey (899). Deerfield responded to the least amount of overall calls from inside the county (68). Approximately 7 percent of all calls occurring in 2004 were responded to by companies from outside of the county.

The Rescue Squads serving Augusta County responded to 8,910 calls in 2004. The Staunton/Augusta County Squad responded to the most calls (2,287) with the Stuarts Draft Squad responding to the second highest number (1,824). The least amount of calls responded to from inside the county was Deerfield (118). Rescue Squads from outside of the county responded to 11 percent of the total number of EMS calls in the county in 2004.

**Tables 45 and 46** summarize emergency incidents, by company or rescue squad, for stations currently serving Augusta County.

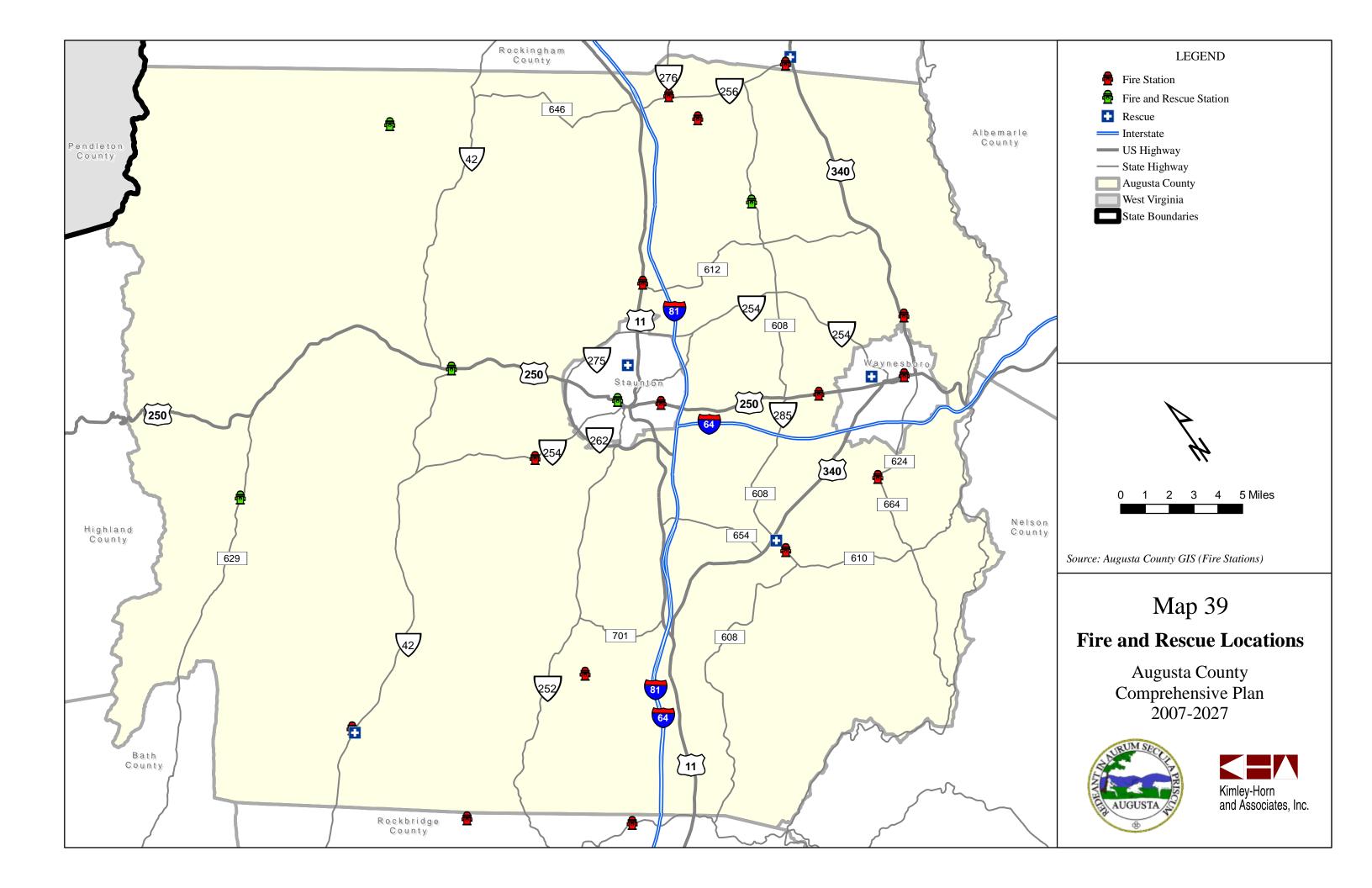


Table 45. Augusta County Fire Department Emergency Incidents, 2004 Year-End Totals

Fire Company	Fire Calls	EMS Calls	Motor Vehicle Accidents	Public Service	Other	Total
1 – Staunton	75	154	16	0	5	250
2 – Deerfield	19	20	14	6	9	68
3 – Middlebrook	59	111	42	2	20	234
4 – Churchville	101	389	77	14	28	609
5 – Weyers Cave	206	174	156	28	49	613
6 – Verona	192	365	193	29	49	828
7 – Stuarts Draft	227	412	181	6	76	902
8 – Craigsville	49	36	15	4	15	119
9 – Dooms	165	296	128	20	62	671
10 – Augusta County	470	565	387	12	71	1,505
11 – Preston L. Yancey	273	409	141	24	52	899
12 – Raphine*	49	75	77	3	14	218
14 – Swoope	94	9	49	18	12	182
15 – Bridgewater*	21	23	26	1	7	78
17 – Cloverhill*	2	11	0	0	4	17
18 – New Hope	85	83	33	6	21	228
19 – Wilson	122	12	39	28	43	244
20 - Grottoes*	76	126	28	3	19	252
21 – Mount Solon	36	122	32	1	19	210
80 – Walkers Creek*	6	3	4	1	6	20
TOTAL	2,327	3,395	1,638	206	581	8,147
PERCENT of Total	29%	42%	20%	3%	7%	100%

Source: Augusta County Fire Department, 2005.

Note: The number of motor vehicle accidents differs from the number of incidents reported in the county in Section 6.0 Transportation due to the variation in reporting sources (VDOT and the Augusta County Fire Department).

<sup>\*</sup> Indicates Companies located outside of Augusta County.

Table 46. Augusta County Rescue Squad Emergency Incidents, 2004 Year End Totals

Rescue Squad	<b>Total EMS Calls</b>
1 – Waynesboro	1,560
2 – Deerfield	118
4 – Churchville	978
5 – Staunton/Augusta	2,278
6 – Stuarts Draft	1,824
7 – Fairfield*	154
15 – Bridgewater*	136
16 – Craigsville/Augusta Springs	410
18 – New Hope	562
20 – Grottoes*	702
21 – Mount Solon	179
TOTAL	8,910

Source: Augusta County Fire Department, 2005.

Several infrastructure issues affect the provision of fire-rescue service. Heavy traffic flow significantly impedes fire service delivery, especially in more urban areas. Narrow, gravel roads are inherently dangerous for fire service delivery in more rural areas because they negatively impact handling, stopping distance, and travel speed for responding vehicles. Some older bridges in the county (i.e. trussell systems) are too dangerous for fire trucks (i.e. width and weight issues) and so the closest station may not be able to respond.

The county has not elected to enforce locally the Statewide Fire Prevention Code (SFPC). Nonetheless, the Augusta County Fire Chief reviews site plans, special use permits, and fire flow requirements for new development and performs preincident planning and inspections for existing large public assemblies, schools, and institutions. Augusta County has also recently completed a *Fire/Rescue Emergency Services Master Plan* that sets out a plan for the future provision of regional fire, emergency medical, and related services. Information from the master plan is incorporated into the updated Comprehensive Plan.

#### 8. Libraries

Augusta County and the cities of Staunton and Waynesboro each have their own independent public library systems. Library locations in the Augusta County system include the main library in Fishersville, a branch library in Churchville, and library stations in Craigsville and Deerfield. The Augusta County Library is a department within Augusta County Government and is funded through local tax monies. Each year, the Library Board submits an approved budget to the County Administrator for recommendation and final approval by the Board of Supervisors.

<sup>\*</sup> Indicates Companies located outside of Augusta County.

In April 2003, Augusta County joined the two city library systems to create the "Valley Libraries Connection" whereby all three catalog systems are readily available to the central valley communities, one card is accepted at all three systems, and books can be returned to any location. In addition, the two local colleges (Mary Baldwin and Blue Ridge Community College) have their own libraries that are also made available to the public. Together, these five library systems contain more than one million volumes of materials including hardback and paperback books, microfilm, periodicals, slides, and tapes.

## 9. Parks and Recreation

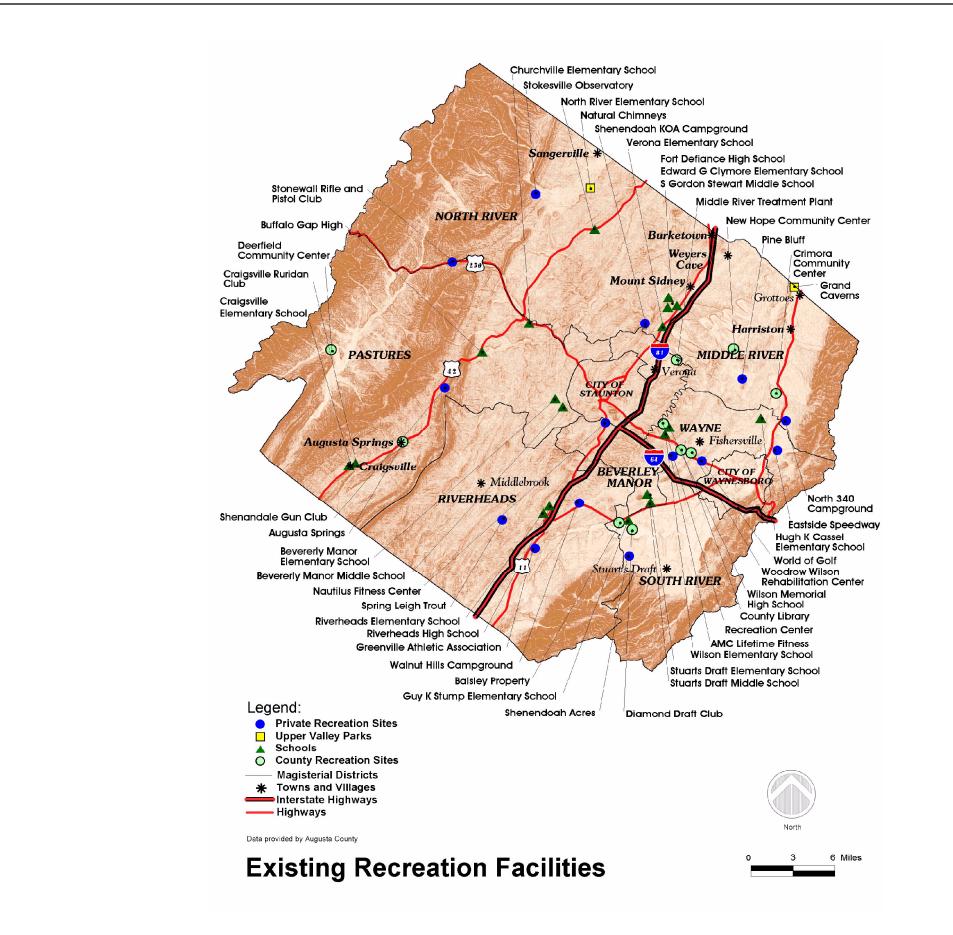
Augusta County has a number of recreational facilities for use by area residents. These facilities are largely categorized into three levels, including public school sites, municipally and state/federally owned sites, and private sites. Most of these recreational sites are located in and around small communities throughout the area, with a quarter located outside the cities of Staunton and Waynesboro. **Table 47** lists these facilities and **Map 40** shows their locations.

One of the major resources of Augusta County is the National Forest lands, owned and managed by the U.S. Forest Service. The George Washington National Forest covers 195,718 acres or approximately one third of the county, divided into three distinct ranger districts. The National Forest lands also contain two Wilderness Areas that provide additional opportunities for no-impact recreation. The National Forest lands are used for public recreation such as hiking, mountain biking, hunting and fishing as well as for timber and wildlife management.

The Shenandoah National Park covers a total of 300 square miles along the Blue Ridge, extending from Front Royal to the north to Waynesboro to the south. The Park comprises roughly 12,000 acres along the eastern edge of Augusta County. An additional area of approximately 17,000 acres surrounding the portion of the Park within Augusta County is eligible to be added to the Park through donations. The Park is available to the public for hiking and camping.

The major water features offering possible recreation opportunities in Augusta County are the North River, Middle River, South River, Christians Creek, Calfpasture River, and Little Calfpasture River. The large bodies of water including lakes, dams, and reservoirs in Augusta County are Braley Pond, Sherando Lake, Elkhorn Lake, Hearthstone Lake, Staunton Dam, Mill Creek, and Coles Run. These bodies of water provide a variety of recreational opportunities including fishing, boating, swimming, picnicking, and trails.

The county has thousands of acres of wildlife management area located in Little North Mountain Wildlife Management Area. Residents enjoy a wide variety of





Source: Comprehensive Parks, Recreation & Open Space Master Plan, Augusta County, VA-Earth Design Associates, November 2003.

# Map 40 Existing Parks & Recreational Facilities

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activities centered on wildlife there including hunting, fishing, nature study, interpretation, and wildlife observation. There are also many opportunities for specialized recreation such as hiking, mountain biking, camping, and rock climbing, as well as good opportunities for greenways and wilderness trails.

Augusta County has a Parks and Recreation Department to manage recreational facilities and programming in the county. The Parks and Recreation Department employs eight full-time employees as well as part-time, seasonal, and contractual employees. The department's major responsibilities include organizing, implementing, and administering recreation programs and maintaining county-operated recreation facilities.

Table 47. Recreational Facilities by Magisterial District in Augusta County, 2003

Facility	Magisterial District	Recreational Amenities
Stuarts Draft High School	Beverley Manor	Auditorium with stage, wrestling annex, music room, gym, lighted football field, asphalt track, lighted baseball field, softball field, and tennis courts
Stuarts Draft Middle School	Beverley Manor	Media center, art room, cafeteria with stage, band room, choral room, gym, and multipurpose activity room
Stuarts Draft Elementary School	Beverley Manor	Media center, art room, cafeteria with stage, gym, soccer practice field, asphalt track, playgrounds, and picnic tables
Old Middle River Treatment Site	Beverley Manor	Passive recreation/open space–31.87 acres
Penny Royale Farm (private)	Beverley Manor	Theater–20 acres
Berry Farm	Beverley Manor	Passive recreation/open space–550 acres
Riverheads High School	Riverheads	Auditorium with stage, music room, gym, auxiliary gym, lighted football field, asphalt track, field house with weight room, baseball field, softball field, and tennis courts
Riverheads Elementary School	Riverheads	Gym, fitness trail, picnic tables, basketball goals on asphalt surface, park benches, and playgrounds
Spottswood/ Raphine Community Center	Riverheads	Ball fields (1 lighted) and gym-6.5 acres
Middlebrook Fire Company	Riverheads	Lighted ballfield
Greenville Athletic Fields	Riverheads	Lighted baseball fields–6 acres
Walnut Hills Campground (private)	Riverheads	Swimming pool, fishing lake, playground, recreation building, and camping sites—43 acres
Springleigh Trout (private)	Riverheads	Fee fishing creek and ponds
Buffalo Gap High School	Pastures	Auditorium with stage, weight room, music room, greenhouse, gym, auxiliary gym, lighted football field, baseball field, softball field, asphalt track, and tennis courts
Beverley Manor Elementary School	Pastures	Cafeteria with stage, gym, playgrounds, basketball goals on asphalt area, benches, nature trail, practice ballfield, and swings
Beverley Manor Middle School	Pastures	Media center, greenhouse, forum, cafeteria with stage, music room, art room, band room, gym, multi-purpose room, soccer practice field, tennis courts, and asphalt track

Facility	Magisterial District	Recreational Amenities
Churchville Elementary	Pastures	Media center, art room, cafeteria with stage, music room, multi-purpose room, gym,
School		ballfields (1 lighted), gym, and playgrounds
Craigsville Elementary	Pastures	Gym with stage, asphalt track, ballfields (1 lighted), benches, and playgrounds
School		
Deerfield Community	Pastures	Multi-purpose gym, playground, basketball (indoor and outdoor), swings, and climbers–5
Center		acres
Craigsville Ruritan Club	Pastures	Community building and picnic shelter–3 acres
George Washington	Pastures, North River,	Trails, campsites, lakes, and streams–196,057 acres
National Forest	Riverheads	
Little North Mountain	Pastures, Riverheads	33,697 acres
Wildlife Management Area		
Stonewall Rifle and Pistol	Pastures	Trap, pistol, rifle, and silhouette shooting, and muzzle loading
Club (private)		
Shenandale Gun Club	Pastures	Skeet fields, trap field, and sporting days trail
(private)		
North River Elementary	North River	Media center, cafeteria with stage, art room, gym, asphalt track, lighted baseball field,
School		playgrounds, picnic pavilion, picnic tables, and asphalt basketball court
Fort Defiance High School	North River	Art room, lighted football field, band room/choral music room, asphalt track, weight room,
		lighted baseball field, softball field, gym, auxiliary gym, and auditorium with stage
Clymore Elementary	North River	Cafeteria with stage, media center, art room, music room, multi-purpose room, gym,
School		playgrounds, fitness trail, asphalt basketball court, and soccer field
Stewart Middle School	North River	Forum with stage, art room, cafeteria with stage, media center, greenhouse, music room,
		gym, multi-purpose room, baseball fields, fitness trail, and tennis courts
Verona Elementary School	North River	Cafeteria with stage, gym, ballfields, asphalt track, playgrounds, asphalt basketball court,
		swings, and climbers
Sangersville-Towers	North River	Community building, multi-purpose gym, ballfields, and walking trail
Ruritan Hall		
Mt. Sidney Ruritan Park	North River	Picnic shelters, basketball courts, and playground—4 acres
Natural Chimneys	North River	Campsites, pool, picnic area, trails, picnic pavilion, and limestone formation–99 acres
Shenandoah KOA	North River	Campsites, fishing lake, and pool–88 acres
Campground (private)		

Facility	Magisterial District	Recreational Amenities
Stokesville Observatory	North River	Observatory
(private)		
Stump Elementary School	South River	Media center, cafeteria with stage, art room, gym, track, picnic tables, practice
		soccer/football field, nature area, playgrounds, and asphalt basketball court
Draft Diamond Club	South River	Ballfield–5 acres
Ballfield		
Stuarts Draft Park	South River	Ballfields, soccer fields, pool, picnic shelters, tot lot, and walking trail–12.5 acres
Sherando/Lyndhurst	South River	Ballfield and community building
Ruritan		
Schneider Park	South River	Lighted ballfields, playground, horseshoe pits, picnic shelter, and building
Crimora Community	Middle River	Lighted ballfields, gym, and basketball goals–19 acres
Center		
New Hope Community	Middle River	Gym, asphalt basketball courts, lighted ballfield, and playground–7 acres
Center		
Barren Ridge Park	Middle River	Lighted ballfields and community building–15 acres
Weyers Cave Memorial	Middle River	Community center, basketball court, picnic shelter, lighted ballfield, soccer field,
Park		playground, and walking trail–25 acres
Shenandoah National Park	Middle River, Wayne	Trails, picnic areas, campgrounds, lodges/cabins, historic sites, and hiking-12,000 acres
Grand Caverns	Middle River	Pool, tennis courts, picnic pavilions, trails, mini-golf, and caverns–135 acres
North 340 Campground	Middle River	Campsites–40 acres
(private)		
Pine Bluff (private)	Middle River	Pool-12 acres
Wilson Elementary School	Wayne	Gym, benches, picnic tables, exercise course, swings, gazebo, asphalt basketball court,
	•	slide, playgrounds, and asphalt track
Wilson High School	Wayne	Media center, auditorium with stage, music room, lighted football field, lighted baseball
		field, softball fields, soccer/football practice field, weight room, and greenhouse

Source: Augusta County Comprehensive Parks, Recreation & Open Space Master Plan, Earth Design Associates, Inc., November 2003.

#### 10. Health and Social Services

Opened in 1994, the 255-bed Augusta Medical Center serves as the regional hospital for the Augusta-Staunton-Waynesboro area, replacing two previous hospitals located in Staunton and Waynesboro. The medical campus is located in the Fishersville area and boasts the resources of 225 full-time physicians, 1,900 other employees, and 875 volunteers. Services offered at the medical center include behavioral health, birthing center, cancer center, community services, diagnostics, emergency services, pain management center, radiology, rehabilitation services, and surgical services. In 2004, the hospital reported 12,000 admissions, 50,000 emergency visits, and 250,000 outpatient and physical practice visits.

The Shenandoah Valley Social Services Department is located in Verona and serves residents in Augusta County, Staunton, and Waynesboro. Its mission is to promote self reliance and protect citizens through a series of community-based services. Services offered by the Department under its benefits program include food stamps, general relief, auxiliary grants, temporary assistance for needy families, state/local hospitalization, energy assistance program, Medicaid, and family access to medical insurance security. Services offered under the services program include adult services, adult protective services, child protective services, day care services, employment services, foster care and adoption, intake services, volunteer payee services, and guardianship services. Valley Community Services is another agency in addition to the Social Services Department that serves the region by providing mental health care and substance abuse programs.

#### 11. Planning Issues

Based on the available data regarding community facilities and services, the following planning issues have been identified:

- The projected growth in student population may require additional facilities and/or improvements in higher growth areas of the county. How can the county address the need for additional facilities/improvements to existing facilities?
- Public school facilities are currently being used for recreational programs and civic functions. How can the county address the need for additional community facilities in higher density areas in the county?
- New rules and regulations are in place for protecting water quality in the Chesapeake Bay Drainage Basin. How can the county incorporate these rules and regulations in future land use and infrastructure planning?
- The existing water and sewer systems are not protected by land use regulations leaving them vulnerable to encroachment. There is also a disconnect between the county's Comprehensive Plan and the Water and Sewer Master Plan for providing efficient infrastructure to new

development. How can the county provide links between the Comprehensive Plan and water and sewer planning for future land use planning?

As population and densities increase, demands for fire, rescue, and public safety services in the county will increase. How should the county maintain the ability to provide adequate fire, rescue, and public safety services in the county?

# J. Historic Resources<sup>31</sup>

Augusta County has strong ties to the past and many historic resources. The history of Augusta County is important not only on a local level but also on a national level. The county played an important role in the settling of the American Frontier and in the Civil War. Sites related to these events, along with other sites of local interest, make Augusta County a popular destination for heritage tourism and genealogy research.

The county and the cities of Staunton and Waynesboro experienced much activity during the Civil War. The Piedmont Battlefield and resources along the Staunton-to-Parkersburg-Turnpike (McDowell Battlefield Corridor) are two important examples of Civil War resources. In addition, there are many more non-battlefield sites that contribute to the story of how the Civil War affected the county. Currently, the preservation of civil war battlefields in the Shenandoah Valley is coordinated at a regional level through the Shenandoah Valley Battlefields Foundation and the Shenandoah Valley Battlefields National Historic District. 32

## 1. Surveys and Reports

More than 1,400 archaeological and historic architectural sites have been surveyed in Augusta County. The documentation of these surveys and project site files is maintained by the Virginia Department of Historic Resources.

The focus of most of the archaeological surveys has been on sites from the Native American period (c. 10,000 B.C. - 1700 A.D.), early industrial sites (such as pottery kilns), some lime kilns, and some slave quarter sites. archaeological surveying has been conducted in the county, it is by no means complete because not all areas of the county have been surveyed, and many of the sites that have been surveyed have inadequate information.

Three reports have been completed by the Virginia Division of Historic Landmarks. The reports analyzed the architectural survey data, indicated

of only 27 National Heritage Areas in the United States. See www.cr.nps.gov.

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<sup>&</sup>lt;sup>31</sup> Information for this section was provided by the Augusta County Historical Society in a memo from April 2000 titled "Input for the Augusta County Comprehensive Plan Revision", and follow-up data provided by Nancy Sorrells dated September 2005.

The Shenandoah Valley Battlefields National Historic District was created by Congress in 1996. It is one