

## CHAPTER SIX: UTILITIES AND COMMUNITY FACILITIES

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Public utilities and community facilities comprise the framework for servicing existing development and growth in Clay County. This chapter describes local utilities and community facilities including water, sewer, municipal buildings, libraries, police and fire services, schools, and parks.

### WATER SUPPLY AND WASTEWATER

Virtually all water consumed in Clay County comes from groundwater through the Clay County Water and Sewer district or from the private well systems. Only a small number of residents along Highway 175 near the Towns County, GA border receive water from the Towns County Water and Sewer System. The next sections provide detail related to Clay County's public water and wastewater systems and private well and onsite wastewater systems.

#### *Clay County Water and Sewer District Water Supply*

The Clay County Water and Sewer District (CCWSD) supplies public water and wastewater services to approximately 790 residential and businesses customers. There were approximately 100 dormant accounts when the CCWSD director provided data for this report<sup>23</sup>. To supplement income from users for larger capital projects, the District seeks out grant funding and the county sometimes provides funding for upfront costs for capital projects with the understanding that the CCWSD will reimburse the county. CCWSD rates are higher than the state average; however, according to the CCWSD director, rates for water and sewer districts are generally higher than systems that operate as enterprise funds. The District has a \$400,000 operating budget, about half of which is allocated to labor costs for the District's the 4.5 employees. The District has a Water and Sewer Main Line Extension Policy that requires developers to pay an impact fee to cover the cost of the extension. In the past three years, the system has grown by 10% due to developer extensions. The District collected around \$200,000 in impact fees between 2006 and 2009 that funded a third water storage tank and replacement of a sewage pump station.

#### *Water Supply and Treatment*

CCWSD does not have a surface water source to supply the system—it draws its public water supply from a system of wells located on leased TVA property near the dam at Lake Chatuge. The water supply system is made up of three wells, three storage tanks (two store 200,000 gallons each and one store 250,000 gallons), a 400,000 gallon per day (gpd) filter plant, and 25 miles of mains. CCWSD customers consume about half of the system's supply each day--approximately 175,000-200,000 gpd.

**Water Source.** The current wells are high yield and shallow. They pump about 500 gallons per minute (gpm) and are approximately 150 feet deep. Water in the area where the wells are located is high in iron. This high level of iron is problematic for the water system. During the filtration process, the iron leaves deposits on the filter pumps, which resultantly decreases pump life--i.e. as iron builds up, the pumps have diminished pumping capacity. The CCWSD estimates a 25% loss of total water yield due to decreased filter pump life. Additionally, the system uses 20,000 gpd to flush the sand filters in place to prevent iron build-up. The CCWSD needs an additional well to meet near term needs. Unfortunately, there is not room on the existing property for an additional well. Therefore, the District would like to identify a well site that can support a well that pumps at least 200 gpm. However, any well with a 200-gpm flow is most likely to be in an area with high iron and therefore needs to be located near the current filtration plant to filter iron from the water.

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<sup>23</sup> Numbers, reported to the Comprehensive Planning Committee by Layton Schuch, are current as of December 2009

**System Risks.** There is danger in having the entire public water supply come from wells located in a single area. For example, a hazardous spill near the well site could contaminate the entire public water supply. There is no back up supply source other than buying water from Towns County (see Interconnection). Another risk is the lack of telemetry on the wells. Telemetry is a data system that measures, monitors, and records well and supply tank data. The data is sent to whomever monitors the system. Without telemetry, a well with a problem may go unnoticed longer than a well with telemetry. The new storage tanks on Cherry Mountain will be equipped with telemetry equipment.

**Surface Water Source:** The CCWSD wants to develop a surface water source for its water supply. All of the possible options to develop such a source are complicated. The original plan was to construct a water intake in Lake Chatuge, however, there are layers of bureaucracy to coordinate for this project to come to fruition—two states and their many regulating bodies and TVA all have to come to agreement. The North Carolina Division of Water Quality requires Georgia to comply with some of NC Division of Water Quality's (NC-DWQ) water quality standards before it is willing to grant a permit. Additionally, before the NC-DWQ will issue a permit, CCWSD needs site control for a filtration plant. TVA is no longer willing to lease land, which means the District needs to purchase lake front property to construct a filtration plant. Assuming an appropriate lot could be located, which is unlikely given the limited availability of undeveloped lake front land, the cost of lake front property will most likely be prohibitive. The many agencies and regulations involved in the permitting process make the permitting process extremely difficult. An alternative, although it is not the best-case scenario, is to look to identify an intake site along the Hiwassee River. Due to the distance from existing infrastructure, this option could be more costly in the end. The CCWSD has also researched the possibility of building a lake for water supply. This option also creates a conflict similar to that of an intake on Lake Chatuge—a supply lake also interfaces with Georgia's regulations, which are less restrictive than North Carolina's regulations. The Georgia portion of the watershed would need to comply with the state's regulations.

**New Expansion / Interconnection Agreement:** The CCWSD has recently (September 2010) installed a 12-inch water line along Highway 69 that runs for 3.7 miles from South Cherry Road to McDonald Road and along McDonald Road to connect with the Towns County system. The CCWSD has secured approximately 40 new customers with this new extension. Most importantly, this extension brought water to the Clay County Industrial Park. The District also installed a 200,000-gallon storage tank and a booster pump off Highway 69 on Cherry Mountain, bringing the District's total storage capacity to 650,000 gallons. Another element to this project is an interconnection and water purchase agreement between CCWSD and Towns County Water and Sewer District. The agreement will allow CCWSD to purchase water from the Towns County District (and visa versa) in the event of a water supply emergency or system failure such as contamination or extreme drought conditions. The Interconnection Agreement states a five year agreed upon water purchase rate.

**Water Supply for a Large Fire:** The CCWSD reports that there is adequate water supply to combat a large fire. The water filtration plant can process 500 gpm and the water storage tanks are usually  $\frac{3}{4}$  full and never below a  $\frac{1}{4}$  full. The storage capacity combined with the pumping ability. Enough water could be quickly pumped to fill the storage tanks to combat a large fire.

**Master Planning:** McGill Engineering and the CCWSD completed water and wastewater master plan in 2001. The CCCP recommends the CCWSD complete an updated master plan for two reasons. First, the 2001 master plan predicted a customer base of 693 customers by 2020, however, as reported above, there are currently around 750 customers. The CCWSD reached its 2020 customer projection ten years ahead of schedule. A second reason for updating the plan follows a second recommendation detailed later in this document—Clay County and the CCWSD should begin a formal capital planning process that is integrated with the annual budgeting cycle. An updated master plan allows the county to better plan for future public water and wastewater capital projects.

The CCCP also recommends that the CCWSD, through the master planning process, closely evaluate the county's water supplies sources (the groundwater aquifers) to determine the impact that the county and other neighboring groundwater users are having on these supplies. This element of the study will ensure that an adequate supply of raw water is available to meet future needs.

### *Wastewater Treatment Facilities*

The CCWSD wastewater system includes six pump stations, a 300,000 gpd treatment plant, and 28 miles of sewer mains. The District's wastewater treatment system has the capacity to process 300,000-450,000 gpd, however, the system only processes about half of the total capacity on a daily basis. At the time of this report, CCWSD had allocated all of the system's processing capacity to existing and planned developments—many of which will likely remain undeveloped due to the housing bust. Even though the system operates at about half of its processing capability and the planned developments that will likely remain undeveloped will not use the wastewater system as planned, the NC-DWQ considers the CCWSD's wastewater treatment system to be at maximum capacity. Therefore, the NC-DWQ placed a moratorium on new sewer lines until the CCWSD expands treatment capacity at the wastewater treatment plant. The moratorium does allow new customers to connect to existing lines. The CCWSD has the plans and permits to expand the wastewater treatment plant to process an additional 175,000 gpd. The District has received \$500,000 from the NC Rural Center, and it is seeking grant funds to secure the remaining \$1.2 million needed to complete the project. The CCWSD should know by early 2011 if they will receive funding from the US Department of Agriculture/Rural Development.

In general, the CCWSD's wastewater system is safe and efficient. The District has not had a Notice of Violation (NOV) in the last five years. Systems receive NOVs when they violate a rule or there is a problem with the system. However, wastewater overflows are a possibility because the older pump stations do not have back-up generators to power the stations in the event of a power failure. The newest station at The Ridges subdivision is the only one with a back-up power source. The CCWSD has one portable generator and Blue Ridge Mountain Electric Membership Corporation has a hotline the CCWSD can call to get power restored quickly. Ideally, two of the stations would be up-fitted with generators--the Riverside pump station, which supplies about 90% of CCWSD customers, and the Ingles pump station, which supplies the business district.

CCWSD has two unfunded collection system needs. The first project is to extend a gravity sewer line down Highway 69 to the Clay County Industrial Park. The most recent cost estimate for this project is \$2.4 million. The second project will rehabilitate old sewer lines in Hayesville, at an estimated cost of \$1 million.

→ Add Map

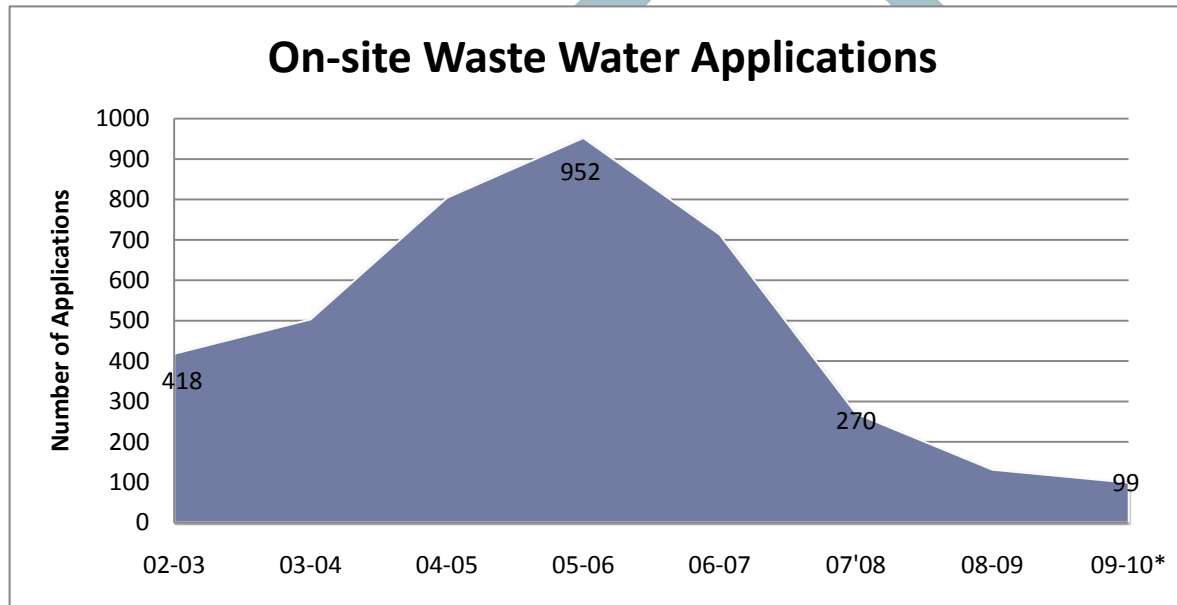
### **ON-SITE WASTEWATER TREATMENT AND PRIVATE WELLS**

Clay County businesses and households that do not receive public water and wastewater from the CCWSD obtain water and wastewater treatment from private wells and on-site wastewater systems (i.e. septic systems). The high level of dependence on well and on-site wastewater systems is rare in North Carolina. While this structure seems to work for Clay County, it is not without problems and concerns.

New regulations regarding well construction, implemented in January 2008, require environmental health inspectors to visit each well site on four separate occasions. There is a visit to inspect the site before issuance of a construction permit, a visit at grouting, and a visit at completion, just before the well owner receives a Certificate of Completion. Finally, inspectors are required to test water from the new well after 30 days of use.

See Session Law 2006-202<sup>24</sup> and the applicable NC Administrative Code<sup>25</sup> for more information. The area’s well drillers are concerned about the new inspection process, as are the environmental health inspectors. One inspector shared that if business picks up even to a 1/3 of what it was during the most recent building boom, environmental health staff will not be able to keep up with the demand. Additionally, since the building bust, fees from Clay County’s Well Program do not cover the program’s operating budget. The Clay County Board of Health makes rules and sets fees for the well program. In order to account for the new level of inspection demand and to ensure that fees cover the actual cost of the inspection, the Board of Health raised some of its inspection fees in July 2010. Chart \_\_\_ details the number of on-site wastewater applications applied for between fiscal year 2003 and fiscal year 2010.

**Chart 11: On-site Wastewater Permits**



**Source: Clay County Environmental Health Supervisor**

*\* 09-10 is through May 2010.*

*Note: The numbers presented in this chart represent the number of permits applied for. The numbers do not reflect the number of on-site wastewater*

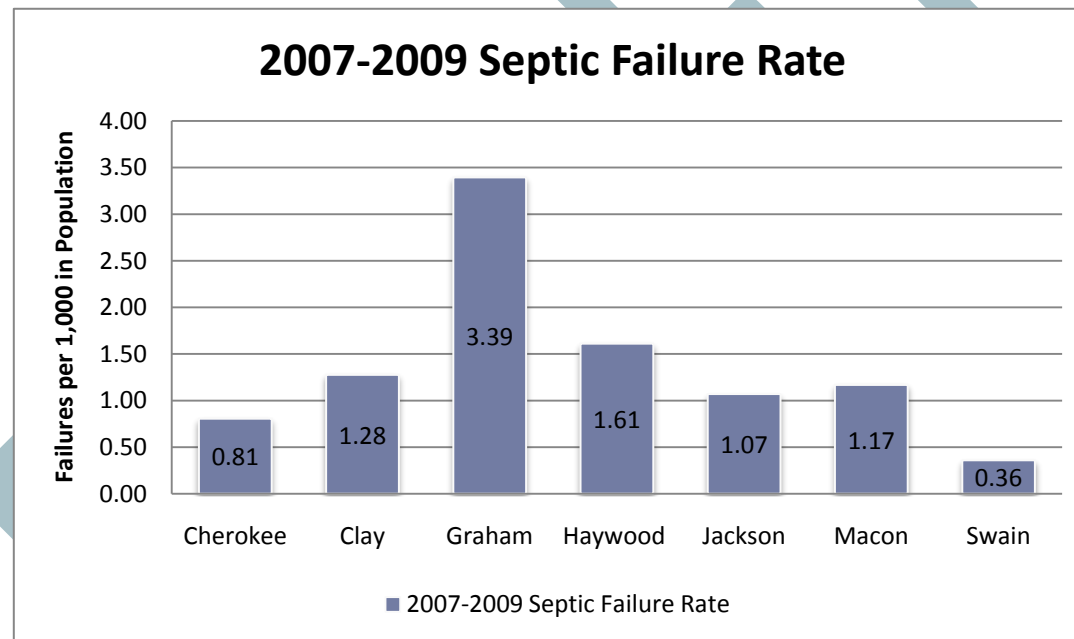
<sup>24</sup> <http://www.ncga.state.nc.us/EnactedLegislation/SessionLaws/HTML/2005-2006/SL2006-202.html>

<sup>25</sup> [http://www.deh.enr.state.nc.us/osww\\_new/new1/images/wells/Well\\_Rules\\_031108.pdf](http://www.deh.enr.state.nc.us/osww_new/new1/images/wells/Well_Rules_031108.pdf)

systems installed during the year.

Around 90% of the residences in Clay County have on-site wastewater treatment systems and about half of the systems in Clay County are 20 years old or older. On average, the lifespan of an on-site wastewater treatment system is 20-30 years; but it is important to note that a number of factors determine the life of a system. The potential for system failure is a concern given that half of Clay's systems are 20 years or older. Fortunately, many residences in Clay County are part-time homes, therefore prolonging the life of the septic systems and keeping the County's overall rate of on-site wastewater system failures low. For example, Chatuge Shores is an older subdivision, and it has about two failures per year. Chart 11 details Clay County's septic system failure rate compared to other counties in the region.

**Chart 12: Septic Failure Rates**



Source: Kay Arrington, Program Improvement Team, On-site Wastewater Protection Section, Department of Environmental Health, NC Department of Environment and Natural Resources

SOLID WASTE DISPOSAL AND RECYCLING

Clay County residents living outside of the Town of Hayesville must transport their solid waste to the Clay County Convenience Center on Hinton Center Road or pay a private solid waste hauler to pick up and transport their waste. All waste collected in the county is transported to the Pine Bluff Landfill in Ball Ground, Georgia. The Town of Hayesville provides weekly garbage collection services for single-family and multi-family homes with four or fewer units and private haulers collect waste at larger housing developments and non-residential properties.

Solid waste management and recycling were two topics important to a large number of those who participated in the initial community input process and it has long been a topic of community concern, as evidenced by the 2007 survey conducted by the Partners for an Attractive Clay County. The County Commissioners adopted a three-year update to the county's *Ten Year Solid Waste Management Plan* in June 2009 that strengthened the county's overall solid waste and recycling programs. The Clay County Government has also contracted with Greening Clay County to aid the county in meeting some of the *Management Plan's* solid waste and recycling goals. Appendix \_\_\_ summarizes the *Management Plan's* recommendations.

It is important to note that with the new *Management Plan*, Clay County is attempting new strategies, and it is doing what it realistically can given the exorbitant costs of solid waste disposal and recycling. For example, each load of waste hauled to the Ball Ground landfill costs the county \$840 (around \$260,000 per year). Another example is the cost of glass recycling—a service that many citizens want. Clay County has been unable to identify a contractor that is willing to haul recycled glass for a reasonable price. Additionally, in order to recycle glass effectively, the county needs a crushing machine. The cost of such equipment is far beyond the reach of the county's current budget. That said, the CP's solid waste and recycling recommendation is to let those responsible for implementing the *Management Plan* work to meet the goals of the *Plan* over the next three years. Future solid waste and recycling improvements can be noted when the CP is reviewed and updated.

## TECHNOLOGY PLANNING

To increase Clay County's economic competitiveness, the county needs a strong technology-based infrastructure to meet 21<sup>st</sup> century demands. Technology-based infrastructure means that the county has the capacity to provide high-speed telecommunications. It also means that the county is equipped to educate young people and adults for careers of the 21<sup>st</sup> century. Virtual business opportunities, which afford employees and employers with flexibility, is a critical component to strengthening Clay County's economy. With a modern and reliable technology infrastructure, Clay County puts itself in position to attract and retain talent, which in turn facilitates economic development and quality of life.

In Clay County, the subscribers per-mile are so dispersed that broadband backbone providers have difficulty with conventional deployment of state-of-the-art bandwidth, redundancy, and reliability at a reasonable cost. Many residential and commercial customers do not have access to connectivity for high technology home or business uses. In general, counties in North Carolina do not directly provide broadband services. Instead, they work with local, regional, or national providers to build the broadband backbone. In Clay County, Blue Ridge Mountain Electrical Membership Corporation (BRMEMC) is the primary provider of fiber based broadband service. Verizon, who recently sold their regional operations, has been the county's primary DSL provider. Verizon sold its regional operations to Frontier Communications (?) who will assume service on July 1, 2010. Cable internet access is only available only to a minor number of residents. Other providers, such as the Mountain Area Information Network (MAIN) have a dial-up presence in the community. Between BRMEMC's fiber based broadband service and Verizon's DSL service, approximately 70% of Clay County are reported to have access to broadband<sup>26</sup>--this does not mean that 70% take advantage of that access.

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<sup>26</sup> [http://www.e-nc.org/100\\_County\\_Report/Clay.pdf](http://www.e-nc.org/100_County_Report/Clay.pdf)

There exist a large number of gaps in broadband service throughout the county. In the case of DSL, the signals fail to reach certain areas. The gaps of service in the fiber network result from challenges in what is known as the last mile—the lines that run from the main fiber backbone to individual residences. Clay County’s terrain combined with the remote locations of some homes and subdivisions as well as the dispersed settlement pattern makes the extensions from the main fiber backbone to the remote areas costly. The broadband gaps have been a hot topic of discussion in the county. A citizen group, the Clay County Citizens Action Committee, formed to close these gaps. The best role for the Clay County government as it relates to building the area’s technology infrastructure is one of facilitator, cooperator, and participant, particularly when it comes to seeking funding opportunities.

### *Technology Based Education*

Adequate physical infrastructure is just one component of a complete technology-infrastructure. The Clay County School System does an excellent job of equipping students with the skills needed to compete in a technology-based economy. Unfortunately, many of the skilled students do not return to the county after college due to the lack of employment opportunities. The CCCP addresses this challenge is Chapter \_\_\_\_\_. An area of improvement in which the county can play a role through its economic development efforts is to ensure that Clay County’s workforce has strong technology skills. Examples of what the county can do include:

- Support technology-based education, using Tri-County Community College and the surrounding higher education institutions.
- Many higher education institutions are expanding their reach through satellite and/or online programs. Clay County should explore the potential of a higher education center, similar to Western Piedmont Community College’s Foothills Continuing Education Center in Morganton, NC<sup>27</sup>. The Foothills Center offers a number of degree programs that primarily focus on allied health professions. A Clay County Center could be a location from which the nearby institutions teach classes, either in person or remotely. Programs offered should complement, not compete with, Tri-County’s program offerings.

## **LAW ENFORCEMENT, FIRE PROTECTION, EMERGENCY MEDICAL SERVICES**

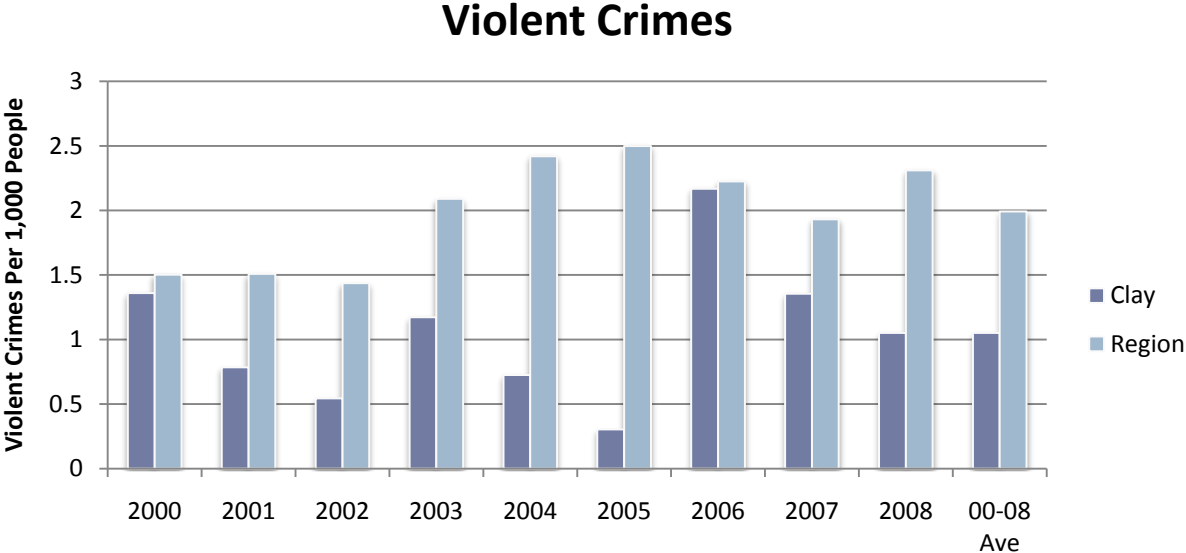
### **LAW ENFORCEMENT**

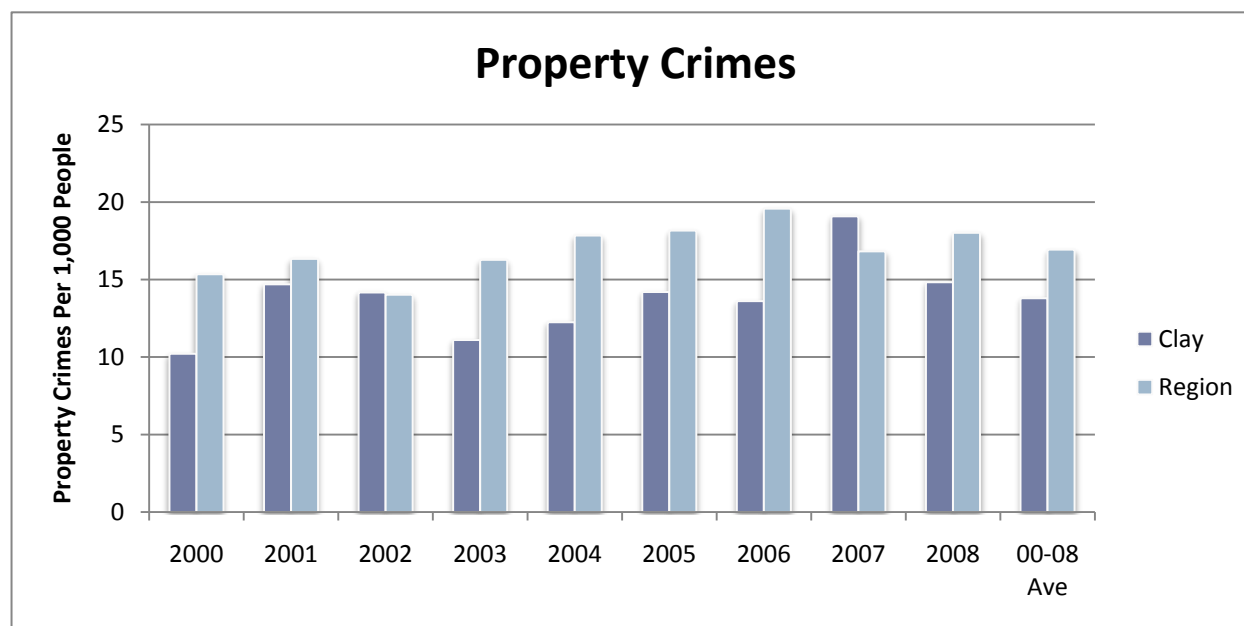
An elected sheriff and about a dozen deputies staff the Clay County Sheriff’s office which is located in the new Courthouse. The Sheriff’s Department also provides police protection for the Town of Hayesville. Clay County is a safe place to live when compared to other counties in the region. From 2000 to 2008, Clay County averaged one violent crime (murder, rape, assault) per 1,000 people in population per year compared to two for the region. For the same time-period, Clay County had an average of 14 property crimes (burglary, larceny, motor vehicle theft) per 1,000 people year where the region had 17. Additionally, Clay County had the lowest violent crime rate in the region for five out of the eight years evaluated and it had the lowest property crime rate for four out of eight years. Charts \_\_\_\_ and \_\_\_\_ illustrate crimes over time.

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<sup>27</sup> <http://www.wpcc.edu/academics.php?cat=18>

Chart 13: Clay County Crime Rates





Source: <http://sbi2.jus.state.nc.us/crp/public/Default.htm>

## FIRE PROTECTION

Residents of Clay County receive fire protection from a one of the seven fire stations across the county. The fire stations, shown on map \_\_\_ include the Brasstown, Shooting Creek, Warne, and Fires Creek Volunteer Fire Departments, and Clay Central's Hayesville, Tusquittee, and Highway 175 (Elf Station?) locations. According to the county's Hazard Mitigation Plan, each station is equipped with pumper and tanker trucks and Brasstown, Shooting Creek, Clay Central (Hayesville), and Warne are equipped with brush trucks. The county also has a dive team and a rescue boat, the capability to conduct swift water rescues and high angle technical rescues. The Shooting Creek and Warne stations are certified for wildland fire suppression. The Hazard Mitigation plan also reports that the county has between 120 and 125 volunteer firefighters, all of which have self-contained breathing apparatus and are trained at Firefighter Levels 1 or 2. The fire stations are funded through \_\_\_ fire tax districts, and receive three cents for every dollar of tax value for real property, except for the Hayesville District which receives \_\_\_ cents for every dollar of tax value. Clay County has interlocal agreements with Towns and Rabun counties in GA, as there are some places in Clay County that are not reachable from the Clay County's transportation network.

During the community input process, community members indicated a need for greater fire protection. Others noted the difficulties of staffing volunteer fire departments and noted that staffing the stations with paid staff is not possible. One of the biggest concerns related to fire safety is

access to properties on subdivision roads that are steep, do not have turnarounds, or cannot support two trucks passing each other. This concern is addressed on page \_\_\_.

### EMERGENCY MEDICAL SERVICES (EMS)

Clay County EMS provides emergency medical services to county residents. The Hazard Mitigation plan reports that the county has three medical vehicles and the service is staffed with eight two-person Emergency Medical Technician (EMT) teams. In most medical emergencies, patients are transported to Murphy Medical Center in Murphy or Chatuge Regional in Hiwassee, GA. Table\_\_ provides a record of EMS responses is below: The same road access concerns that apply to fire personnel apply to EMS personnel. [→get 2009 numbers](#)

**Table 22: Clay County EMS Calls for Response (Reformat for easier read)**

Year	First Quarter: July, August, September	Second Quarter: October, November, December	Third Quarter: January, February, March	Fourth Quarter: April, May, June
2000	222	334	338	311
2001	261	318	345	341
2002	293	281	335	329
2003	267	331	338	289
2004	253	316	335	316
2005	315	351	392	326
2006	350	366	378	296
2007	399	336	424	435
2008	379	381	490	485

**Source: Clay County EMS**

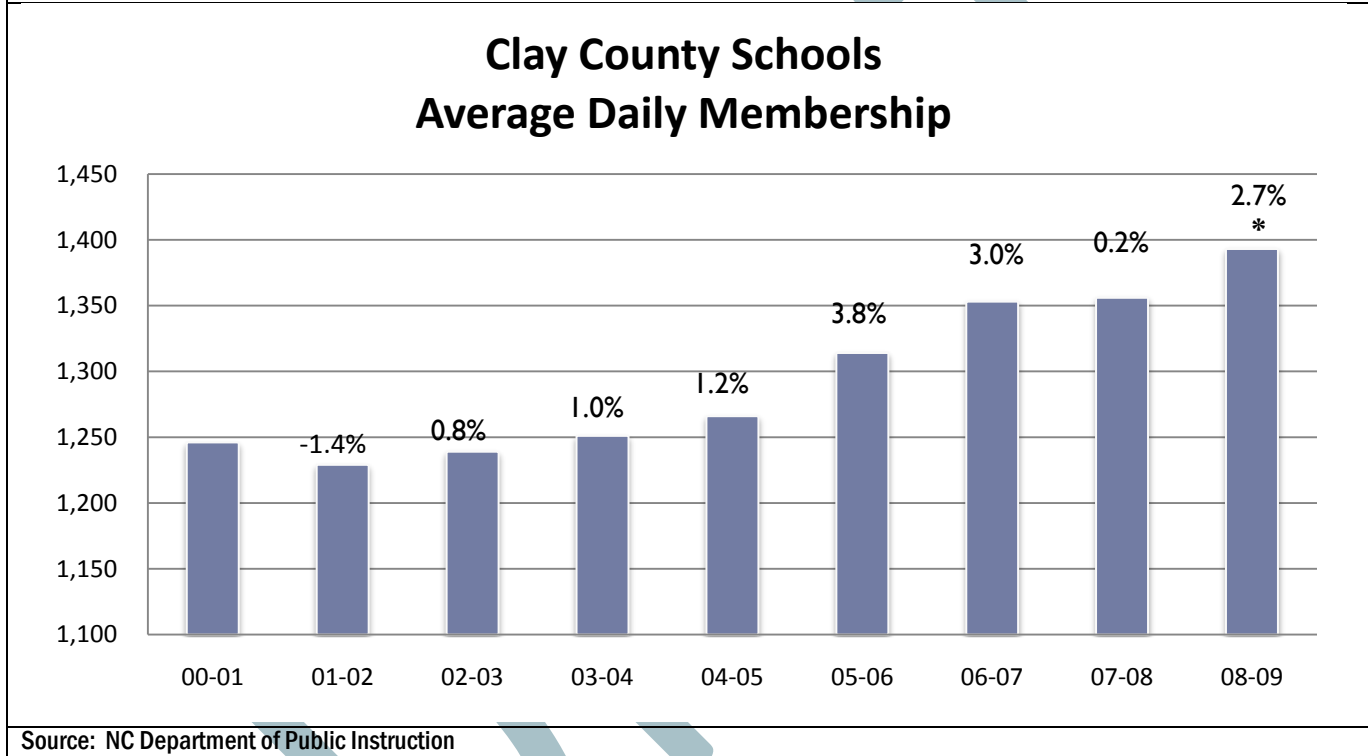
### CLAY COUNTY SCHOOLS

The high-performing Clay County School System serves most pre- and school-aged children in Clay County. The System is comprised of a pre-kindergarten program, and an elementary school, a middle school, and a high school. A defining characteristic of Clay County schools is that all school facilities, excluding the alternative school program, are on a central campus. According to the Clay County Schools website, the system is, “a small, rural school system of approximately 1,250 students. There are three schools in the county located on a single campus. Hayesville Elementary is a K-4 school of approximately 450 students. Hayesville Middle School is a 5-8 school with approximately 400 students and Hayesville High School is a 9-12 school with approximately 400 students. All schools are accredited by the North Carolina State Board of Education and Hayesville High School is accredited by the Southern Association of Colleges and Schools.” Many of those who participated in the community input process praised the quality of Clay County’s School System.

Like the county, the school system has experienced steady growth over the last ten years. Since the 2000-2001 school year, the Average Daily Membership of the System has increased by 1% each year. From the 2000-2001 school year, there was a cumulative increase of 11% by the 2009-2010 school year. From one year to the next, these increases are not overtly noticeable. However, over a ten-year period, the growth is not only

noticeable, but the toll of the slow-but-steady growth has stretched thin the System's resources. In addition to an increase in the number of bodies walking through the doors, state mandates pertaining to class size and mandated programs contribute to overcrowding and diminishing resources. Chart \_\_ highlights school growth. It is important to note that the numbers reported in Chart \_\_ do not account for children enrolled on in the Systems' Pre-K program, which has an annual enrollment of \_\_. Chart \_\_ illustrates that the System will continue to grow at a rapid pace. The NC Prototype School Design Clearinghouse projects the Clay County School System as the eighth fastest growing school system in the state.

**Chart 14: Clay County Schools Average Daily Membership**



<b>School District</b>	<b># Growth</b>	<b>2007-2017 % Growth</b>	<b>NC Rank</b>
Camden County Schools	1,623	81.97%	1
Union County Schools	23,385	63.81%	2
Wake County Schools	69,426	51.53%	3
Cabarrus County Schools	13,491	49.82%	4
Mooresville City Schools	2,682	48.18%	5
Hoke County Schools	3,412	45.69%	6
Charlotte Mecklenburg Schools	53,410	39.85%	7
Clay County Schools	527	36.98%	8
Dare County Schools	1,774	36.52%	9
Elizabeth City/Pasquotank Schools	2,276	36.07%	10

**Source: NC Prototype School Design Clearinghouse**

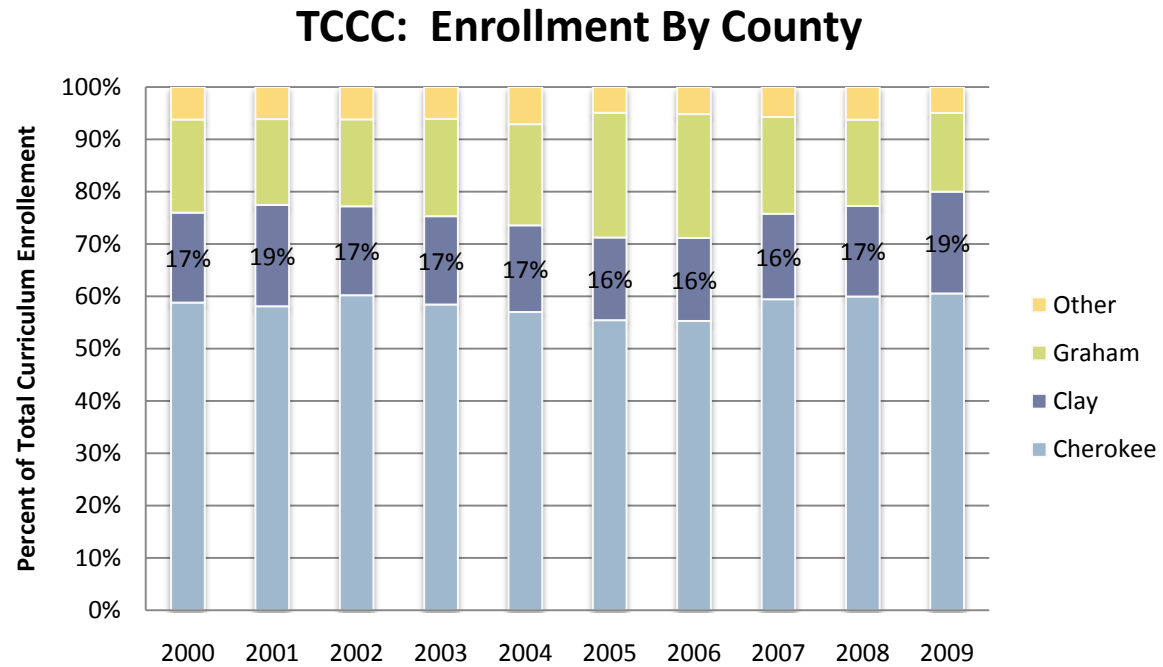
The enrollment growth has strained all school resources, but none more so than space. The Clay County Board of Education has explored many options to house the current and future school population. Based on the Board’s analysis, the best option is to construct an elementary school on purchased land to house the Pre-K program as well as grades K-2. The new school will accommodate the next 20-30 years of school system growth. While some oppose the expansion, many Clay County residents recognized the need for a new school. The sticking point for many is how the Board of Education should fund the \$8-10 million project.

→Insert most recent school update after Commissioner meeting

**HIGHER EDUCATION**

Yet another location advantage of Clay County is access to two and four year higher education opportunities. Tri-County Community College (TCCC), headquartered in Murphy, serves Clay, Cherokee, and Graham counties. Tri-County offers programs in twenty-three courses of study in addition to career and community education courses and basic skills classes. On average, 17% of Tri-County’s curriculum students are from Clay County.

Chart 15: TCCC Enrollment by County



Source: Tri-County Community College Fact Book

In addition to TCCC, numerous higher education opportunities are within a ninety-minute driving radius; many of the institutions also have satellite locations and/or online courses that make higher education readily available to Clay County residents. A sample of the institutions include: North Georgia Technical College, Young Harris College, Piedmont College, Toccoa Falls College in Georgia, and Western Carolina University and Southwestern Community College in North Carolina. Access to higher education is discussed in more detail in the Economic Development Chapter.

## PARKS AND RECREATION

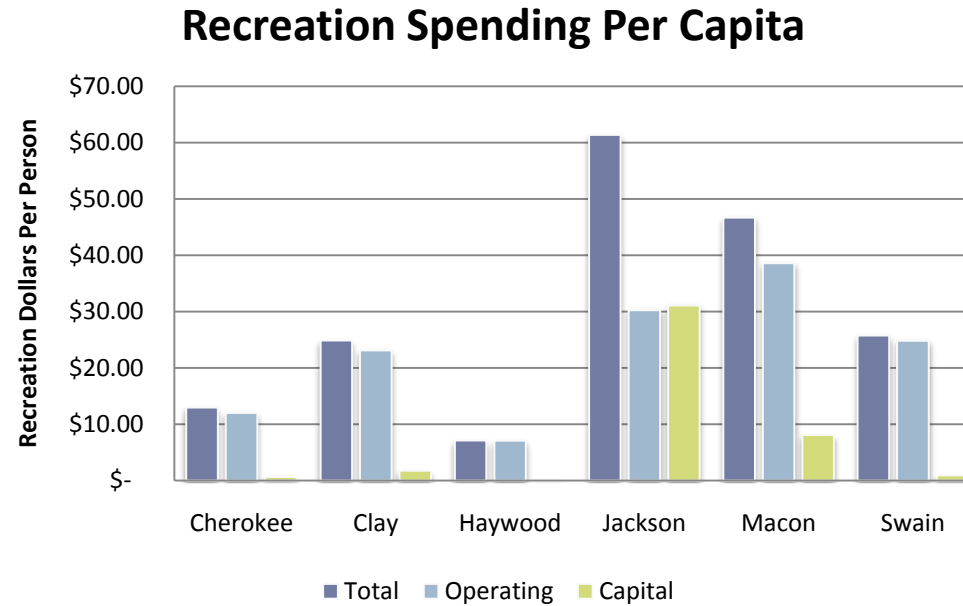
Clay County is rich in recreation resources, particularly opportunities for outdoor recreation and youth sports. This section provides a discussion related the broader role of parks and recreation amenities and an inventory of public parks and recreation resources.

Parks and recreation facilities are important to Clay County citizens--many families with children depend on the youth sports programs and a wide range of citizens take advantage of the recreation center, trails, and parks. However, parks and recreation amenities play a broader role than individual enjoyment and health. For example, parks and recreation resources can:

- Help attract and retain young professionals—refer page \_\_\_ to read more about the connection between young professionals and recreation amenities.
- Attract tourists and new residents—current studies documented that people want to visit and live in places with rich recreation resources, particularly those looking for retirement destinations.
- Double as environmental protection corridors—passive, nature based parks and greenways provide enjoyment while protecting sensitive environmental areas, such as the Hiawassee River and other creeks and streams. These types of recreation amenities are also well suited for land unsuitable for development, such as extensive infrastructure easements.
- Double as an alternative mode of transportation—while many people ride bikes and walk for health and enjoyment, bicycle and pedestrian paths are a means to transport people and goods; easing road congestion and improving air quality.
- Enhance economic development efforts—when companies look to locate to a community, the availability of recreation resources is one of the many determining factors. A community that prioritizes recreation is one that is more attractive to new businesses.

With these benefits in mind, it is in the interest of the county to plan for and invest in additional recreation amenities. A recreation master plan is the best tool to determine the county's future recreation needs and opportunities—its outlines a long range plan to gradually enhance the community's recreation resources. It also considers whether facilities that that community members want, such as an outdoor swimming pool, a skate park, and more community parks are feasible. Clay County will soon begin the NC DOT comprehensive transportation planning process that will likely incorporate bicycle and pedestrian planning and the CP recommends that the tourism leaders conduct a tourism resource inventory that will include recreation resources. A recreation master plan is the complements these efforts.

**Chart 16: Recreation Spending Per Capita**



**Source:** [http://cnr.ncsu.edu/rrs/pdfs/Services\\_studies/2009%20Facilities%20Exec%20Summary%20Final.pdf](http://cnr.ncsu.edu/rrs/pdfs/Services_studies/2009%20Facilities%20Exec%20Summary%20Final.pdf)

#### **PUBLIC RECREATION INVENTORY**

While private recreation opportunities in the region abound, this Plan addresses public recreation facilities owned or managed by the county or and public bodies such as TVA or the US Forest Service.

#### *Clay County Recreation Department Facilities*

Clay County's recreation resources are a combination of facilities owned by the county and facilities leased from other agencies. The county's recreation offerings include:

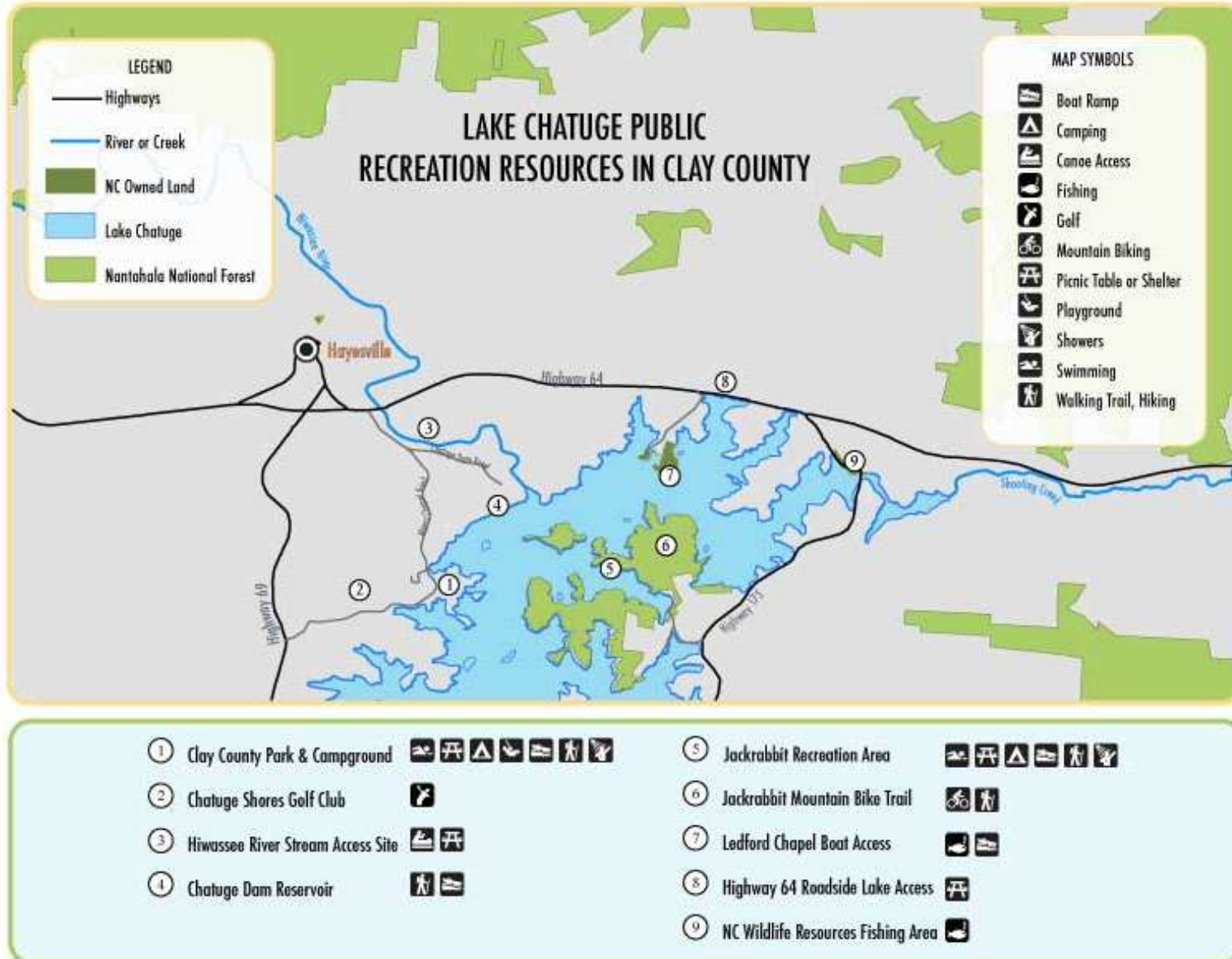
- Clay County Recreation Center:
- Youth Sport Programming
- Playground on the Clay County Schools Campus
- Clay County Recreation Park at Lake Chatuge: This park system consists of the Clay County Recreation Campground, a playground, lake access for swimming, fishing, and boating, and a portion of a walking trail that begins at the Chatuge Dam.

## *Lake Recreation*

Lake Chatuge offers a wide array of recreation opportunities—from boating and skiing to fishing and paddling. A variety of private and public recreation facilities line Lake Chatuge’s shoreline. Following is an inventory of the publically owned resources.

- ***Chatuge Dam Reservoir:*** Amenities at the Chatuge Dam, owned and managed by TVA, include a walking trail and boat access. Just up from the dam is Chatuge Tailwater Stream Access that includes picnic tables and stream access.
- ***Chatuge Shores Golf Course:*** The Clay County Rural Development Authority, whose board members are appointed by the County Commissioners, owns the golf course.
- ***Clay County Park:*** The land on which the Clay County Park sits is owned by TVA and managed by Clay County. Amenities include a campground and RV park, a picnic shelter, lake swimming area, trails, and boat access.
- ***Gibson Cove Recreation Area:*** Gibson Cove Recreation Area, contiguous with the Clay County Park, activities include camping, boat access, and lake swimming.
- ***Jackrabbit Recreation Area:*** The Jackrabbit Mountain Bike Trails have brought a lot of attention Clay County. In addition to the biking trails, which are also frequently being used by hikers; the Jackrabbit Recreation Area offers camping and boating access. The US Forest Service owns and operates Jackrabbit. CCCRA worked closely with the Forest Service to develop the mountain bike trails.
- ***Ledford Chapel Boat Access:*** The Ledford Chapel Boat Access on Ledford Chapel Road and owned and managed by the North Carolina Wildlife Resources Commission, offers boat access.
- ***Highway 175 Designated Fishing Pier:*** The North Carolina Wildlife Resources Commission owns and manages this small fishing pier.

Map \_: Lake Chatuge Public Recreation Resources in Clay County



Sources: [www.tva.gov/river/recreation/pdf/chatuge\\_rec\\_matrix.pdf](http://www.tva.gov/river/recreation/pdf/chatuge_rec_matrix.pdf); Mountain Reservoir Land Management Plan

### *Other Public Recreation Facilities, Existing and Planned:*

- Shallowford Bridge Park and River Access
- Designated trout fishing waters
- Road Cycling
- US Forest Service trails, camping, and recreation activities
- Appalachian Trail
- Planned Hiawassee boat launch just north of Hayesville
- Planned Fires Creek fishing access

→Insert full recreation map

## HEALTH CARE FACILITIES

Access to health care in Clay County is a much-discussed topic. When asked about physical and mental health services, 66% of survey respondents indicated that it was very important or important to increase mental health services and 73% indicated that it was important to increase physical health services. Comments received during the community input process indicate the need for medical specialists and additional medical services tailored to the aging population. On the other hand, the Clay County Partnership for Healthy Carolinians, in their 2008 *Community Health Assessment*, report, “Clay Contains are pretty healthy and pretty happy with their access to essential health services. Even though there is no hospital and few doctors in the county, residents find health care services at the Clay County Health Department, Hayesville doctors, and Murphy Medical Center to be adequate most of the time.” While health care access and healthy lifestyles are important topics, the Comprehensive Planning Committee made the decision not to include health care/health access actions in this plan. The *Community Health Assessment* has a comprehensive and well thought out set of recommendations that adequately address this topic. A summary of their recommendations is included as Appendix \_\_\_\_.

## CHILD CARE FACILITIES

Access to quality and affordable childcare improves the area’s quality of life and it contributes to a healthy economic environment. For many families in Clay County, access to quality child care isn’t a problem, but affording that care is difficult for many. According to a report prepared for the Comprehensive Planning Committee, *Clay County Early Care & Education Report: September 2009*, a community has adequate childcare capacity when the number of available childcare slots is equal to or greater than 50% of the population under five years of age. Clay County’s 2008 five and under population was 517, meaning adequate capacity is 259 childcare slots. The five licensed childcare facilities in Clay County have the licensed capacity to care for 339 children—a number that exceeds 50% of the five and under population. However, Clay County, like most other counties, has a shortage of infant slots.

Even though Clay County appears to have enough childcare, the affordability of those slots is a challenge for many families. The cost of childcare in the county ranged from \$368 to \$900 a month. Approximately 50% of children enrolled in childcare at the time of the study received a childcare subsidy in the form of a voucher, More at Four, Headstart, or free childcare (from Clay County School’s pre-k program). Even though 50% of enrolled children received some form of subsidy, there are many families waiting to receive subsidy.

The Clay County Early Care & Education Report includes a comprehensive set of recommendations to address childcare access and affordability. These recommendations are included as Appendix \_\_\_\_.

## KEY UTILITIES AND COMMUNITY FACILITIES ISSUES AND OPPORTUNITIES

- Aligning the pace of growth and development with the county's ability to maintain services will be critical to maintaining quality of life in the county.
- Current water and wastewater expansions will greatly enhance the county's economic development efforts and will help concentrate urban growth in urban areas
- Exploring telecommunication and broadband opportunities will ensure the county's ability to compete for economic development opportunities in a global, information-driven economy.
- Clay County has multiple opportunities to bring higher-education resources to its citizens.
- Planning for recreation resources in advance of need and rising land prices would be a proactive step to ensure the county continues to provide parks and recreation amenities.
- Supporting and retaining quality regional health care and childcare is an asset to the county's economy and quality of life.

## UTILITIES AND COMMUNITY FACILITIES STRATEGY PLAN

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The Utilities and Community Facilities Strategy Plan outlines a framework that allows the county to plan for expanding services that are responsive, cost effective, and high quality.

9. **UCF-1 Goal:** Strive to provide high-quality, modern infrastructure to support economic development and an exceptional quality of life for the county.

### Policy Objectives:

**9.1. The Clay County Water and Sewer District (CCWSD) will have the capacity to serve customers in urbanized areas, as defined by the Future Land Use Map.**

- 9.1.1. Complete a new water and sewer master plan that is based on the Comprehensive Plan's future land use map and address the following objectives:
  - 9.1.1.1. Capital Improvement Planning: Incorporate CCWSD mid and long-term needs with the county's Capital Improvement Planning process and annual budget process.
  - 9.1.1.2. Digitize CCWSD data and digitally record new data to incorporate into the county's GIS for long-term decision-making.
- 9.1.2. Increase the number of customers who may currently be added to the CCWSD public water and wastewater systems.
  - 9.1.2.1. Where feasible, recruit those on the more expensive Towns County system to the CCWSD systems. Advertise service availability in newspaper, and direct mailings to property owners who are eligible.
  - 9.1.2.2. Identify incentives to encourage connections to the CCWSD.
- 9.1.3. Maximize existing CCWSD resources
  - 9.1.3.1. Ensure that CCWSD policies are in compliance with the "Drought Bill" (S.L. 2008-143)
  - 9.1.3.2. Include educational materials regarding water conservation methods in water bills.
- 9.1.4. Develop a surface water source.
  - 9.1.4.1. Dedicate resources to work through regulatory/land constraints related to constructing an intake on Lake Chatuge.
- 9.1.5. Complete projects that are in-progress and attend to immediate CCWSD needs.
  - 9.1.5.1. Extend sewer line from Hayesville down Highway 69 to state line.
  - 9.1.5.2. Expand wastewater treatment plant
  - 9.1.5.3. Identify resources for back-up generators at all wastewater pumps, giving priority to the Riverside and Ingles stations.
  - 9.1.5.4. Identify resources to rehab sewer lines in Hayesville.

10. **UCF-2 Goal: Septic systems and wells in Clay County will be installed and maintained in a manner that protects public and environmental health.**

### Policy Objectives:

- 10.1. Incorporate septic system and well planning into land suitability analysis (see Land Stewardship section)

- 10.2. Digitize Clay County's septic system and well data to aid in long-term decision making. Incorporate into GIS; use GPS technology to digitally map septic systems and wells, failures, problematic areas, etc. (GPS = Global Positioning System—a way to digitally record a geographic point or place by latitude and longitude)
- 10.3. Address septic system and well planning in accordance with steep slope considerations.

**11. UCF-3 Goal: Clay County will operate a cost effective solid waste program.**

**Policy Objectives:**

- 11.1. Implement the Clay County Solid Waste Action Plan (Summarized as Appendix \_\_\_)
- 11.2. Use the Clay County Website to educate community members on the costs associated with solid waste and recycling disposal
- 11.3. Publish a report to the community to provide updates on the *Solid Waste Management Plan's* goal progress.

**12. UCF-4 Goal: Clay County will have a modern and responsive technology backbone.**

**Policy Objectives:**

- 12.1. The Clay County Government will support building a broadband network by serving as a facilitator between private and public broadband stakeholders.
  - 12.1.1. Assist private and public stakeholders to prioritize areas with broadband gaps and with plans to fill those gaps.
  - 12.1.2. Assist private and public stakeholders with grant writing and resource identification.
  - 12.1.3. Assist with mapping (or build capacity to assist)
- 12.2. Develop a wireless communications tower ordinance similar to the cellular tower ordinance. Consider using technical assistance from a company familiar with this process.
- 12.3. Ensure that adults in the county have access to technology training.
  - 12.3.1. Incorporate access to technology training with workforce development planning.
  - 12.3.2. Encourage use of and support Clay County Transportation in carrying out transportation to technology training (e.g. Tri-County Community College, regional higher education centers).
  - 12.3.3. Work with regional higher education centers to bring technology training to the county.

**13. UCF-5 Goal: Work in partnership with regional education institutions to enhance access to quality education and post-secondary education for County residents, and ensure that training is well aligned with workforce demands.**

**Policy Objectives**

- 13.1. Construct the new elementary school
  - 13.1.1. Recommended action to be updated as new information is available

- 13.2. Increase the number of Clay County residents attending Tri-County Community College and other higher education institutions.
- 13.2.1. Explore funding opportunities with Clay County Transportation to secure resources to support a school or economic development related transportation program. Focus on evening transportation needs.
- 13.2.2. Assertively build relationships with regional higher education institutions to bring higher education to the county.
- 13.2.2.1. Explore funding opportunities to support a local higher education center.
- 13.2.2.2. Identify and secure a location for a training/teaching facility (e.g. computer lab, video conferencing, teaching space).

**14. UCF-7 Goal: Ensure that all residents and groups are well served with park, recreation, and open space facilities that meet a variety of County goals, including: health improvement, better quality of life, a tool to attract/retain young people, a tool to attract economic development opportunities, and environmental protection.**

**Policy Objectives:**

- 14.1. Develop a recreation master plan that addresses the following goals:
- 14.1.1. Increase the variety of public recreation opportunities (e.g. swimming pool, playgrounds, an event facility); include age appropriate activities (kids, families, young adults seniors).
- 14.1.2. Identify a funding structure that balances affordability with operation costs.
- 14.1.3. Develop a greenway plan that links recreation areas in the county with one another.
- 14.1.4. Identify land acquisition opportunities.
- 14.1.5. Identify entrepreneurial opportunities (e.g. regional baseball tournaments, private events at a facility).
- 14.2. Partner with non-profits and community organizations to leverage dollars for community recreation and cultural projects.
- 14.3. See Natural Resources and Transportation Concept Plans for supporting recommendations.

**15. UCF-8 Goal: Clay County Government integrates planning with county decision making.**

**Policy Objectives:**

- 15.1. Coordinate the provision of public services and facilities with other aspects of planning in the county, in particular coordinate the provision of these with planning for future land use.
- 15.2. Conduct detailed and ongoing studies to support the most efficient and cost effective provision of utilities and community facilities in the county—including wastewater treatment, public water, solid waste, transportation, and public safety.
- 15.3. Work closely with the Sheriff's office, fire departments, and EMS as the county grows and service needs expand. Engourage the use of annual goal setting and reporting.
- 15.4. Plan for capital improvements and needs through a Capital Improvement Planning process that is integrated with the county's annual budgeting process. Things to consider include:
- Ensuring that the county's services, including fire/EMS, sheriff's office, library, parks and recreation, CCWSD, etc., have adequate staffing, facilities, and equipment capacity to accommodate projected future growth, and that the county has the ability to capture the value associated with such growth to pay for required county services.

- Determining long-range facilities, equipment, training, and personnel needs for the sheriff's office, fire and EMS, and parks and recreation facilities.

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